OFFICIAL REPORT OF PATENTS AND CLAIMS

Issued by the United States Patent Office.

FOR THE WEEK ENDING JUNE 2, 1868.

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78.410.—GOVERNOR VALVE—Robert Andrews and Edward

78,410.—GOVERNOR VALVE — RODert Andrews and Edward Armstrong, Allegheny, Pa. Antedated May 3, 1868. We claim the arrangement of the valve, B. stem, C. spring, D. adjustable Suspension b.r. g, and columns, f, constructed, arranged, and operating sub-stantially as herein described and tor the purpose set forth. 78,411.—CARRIER FOR BRAIDING MACHINE.—Dexter Avery, Washing and Science and

Westield, Mass. I claim the hollow spindle, A, spring, D, and hook rod, C. in combination with the rod, e. sleeve, E, and arm, h, all made and operating substantially as and for the purpose herein shown and described. 78,412.—FILLING FOR BEDS, CUSHIONS, ETC.—Geo. C. Barney,

Chicago, III. Chicago, III. I caim, 1st. As a new article of manufacture, a bed or mattress filled with paper cut b to small pieces, as bereinshown and described. 2d, The use of paper cut into small pieces, for filling beds, mattresses, cushions, etc., as nerein shown and described. 78,413.— LAMP SHADE.—D. W. Bashore, Palmyra, Pa. An-

78,413.— LAMP SHADE.—D. W. DASHOLC, LAIMYLO, LA. Least tedated May 22, 1869.
Iclaim an adjustable shade, or lamp shade, constructed and arranged substantially as described.
2d, in combination with a lamp shade constructed as described, the openings in the same, st or near where it comes in contact with the chimney, substantially as described and for the purposes set forb.
78,414.—CATAMENIAL SACK.—Andrew F. Baum, New York city, assignor to L. H. Rockwell. Anterated May 22, 1869.
I claim an india rubber catamenial sack, formed with rolled edges, a s, substantially as described.

scantially 78,415.--FEATHERING PADDLE WHEEL.—Robert Bell, East

(76,410.— F BATHERING THEFT.
 Saginaw, Mich.
 I claim, 1st, The combination of the circularplate, F, eccentric, E, rim, G eccentric, H, eyes, I, and double buckets, D, all constructed and arranged as described, for the purpose specified.
 2d, Constructing the buckets with two pieces or faces, as, and fitting the same loosely on fixed axles, C, substantially as and for the purpose herein.

same loosely on fixed axles, C, substantially as and for the purpose herein set forth. 3d, The eccentrics, H, of the woulde buckets, D. connected with the feath-ering rim, G, by means of eyes, I, fitted upon the eccentrics, and bolted to the sides of the rim, the latter being firmly secured to the plate, F, as here in described for the purpose specified. 4th, Having the end plates, b, of the bucket slotted from their centers outward, with plates, Ix, bolted to the inner surf ces of the end plates, over the slots, substantially as and for the purpose set forth. 78,416, --THILL AND POLE FOR CARRIAGES.-James W. Bick-nell, New York city. I claim thills, or shafts, or poles of vehicles, made in whole or in part of tubular metal, substantially as herein specified. 78,417.-CULLTIVATOR.-A. R. Blood, A. Hathaway, and V. R. Beach, Independence, Iowa.

18,417.—ULLTIVATOR.—A. K. Blood, A. Hathaway, and V. R. Beach, Independence, Iowa. We claim, 1st, The footpiece, M. arranged as described, for pressing the teeth in the ground, substantially as specified. 2d, The seed box, F. furnished with diamond-shaped holes, in combination with bilde, r. likewise furnished with diamond-shaped holes, and arranged to operate as and for the purpose set forth. 3d, In combination with the above the cam lever, I, footpiece, M, and arrange G, to which are secured the teeth, J J, all arranged as and for the purpose set forth.

78,418.-MACHINE FOR BENDING CIRCLES.-William Boyd

Hartford. N. T. I claim the wheels, H I L, table, A, and jointed lever, C B E, set screws, b b, and circular faces, a a a, all constructed and operating substantially as and for the purpose shown and described. 78,419.—CART BODY.—Wesley Bradley, Vienna, Me. I claim the bent rod, C, provided with the bandle in combination with the pln for fastening, as shown, for the purpose herein described and set forth. 76,420.—TIRE BINDING AND PUNCHING MACHINE.—James M Bray Pennigetonville Pa

M. Bryan, Penningtonville, Pa. I claim, ist, The arrangement berein described and shown of the levers and G. supports, B and D, and stirrups, C and d, for the purposes as se

The arrangement berein described of the rest, E, rollers, FF, adjusta he, d2 and mandrel, D, for the purposes set forth. 21.—MACHINE FOR CLEANING AND RENOVATING FEATH-

for th. 2d, The arrangement berein used. ble die, d2 and mandrel, D, for the purposes settorm. 78,421.—MACHINE FOR CLEANING AND RENOVATING FEATH-res.—Daniel Budd, Valatia, N. Y. I claim, 1st, An apparatus for cleansing and drying feathers, consisting of a feather holding vissel beated hy means of steam admitted either into the vessel or into a jacket or jackets applied thereto, and comidded with beat-ers or agitators for stirring the feathers within said vessel, substantially as and tor the purposes shown and set forth. 2d. The combination with the feather holding vessel of the steam jackets or chambers upon the exterior of the same, one of said chambers being pur-forated so as to allow steam to pass into the interior of said vessel, and the branch pipes and co chor supplying the stam to said chambers, under the arrangement and for operation as set forth. 3d, The combination with the jacketed feather holding vessel, as describ-ed, of the rotary beaters or arms, aud spindle and rank with which they are connected, mount-d in the said vessel, substantially in the manner and for the purposes herein shown and set forth. 79, 492.—RAILROAD RAIL.—A G. Buzby, Philadelphia, Pa.

connected, mount-d in the said vessel, substantially in the manner and fo the purposes herein shown and set forth. 78,422.—RAILROAD RAIL.—A G. Buzby, Philadelphia, Pa. 1 claim a clip compose d of a thin flexible plate of steel or tough iron, ben and applied to a rail or rails, substantially as and for the purpose herein se

78:423.—Machine for Sowing Fertilizers and Seeds.-Daniel Caine, Battle Creek, Mich. I claim the hopper, A. in combination with the stirrer, E. clearer, F. and feeding roller, H. arranged relatively with each other and with an axie, D, and wheels, W, and constructed and operated in the manner and for the pur-goes as set forth.

78,424.—Corn Cultivator.—Alexander Campbell, Oxford,

bucket, A, with a binged front gate, B, and stop, a, attached thereto, and op-erating substantially as berein snown and described. 2d, The clasp, F, for securing the rope, C, to the truck, D, said clasp con-sisting of two plates, c and d, binged and locked together. substantially as here in shown and described. 3d, The adjustable carriage, G, running on the outer edge of the track, E, and holding the dumping bail, H, suspended by a chain or cord, n, the said carriage being free to be moved upward on the track, substantially as and for the purpose berein shown and described. 4th, A coalconvering and dwarping apparatus, consisting of the bucket, A, having the hinged front, B, with the stop, a, or the rope, C, clasp, F, truck, D, c, rriage, G, and bail, H, all combined with each other, and made and op-erating substantially as herein shown a d described. 78,431. — UTERINE SUPPORTER.—S. P. Cole, Janesville, Wis. I claim the uterine supporter, tormed by the combunation of the soft rub-

I claim the uterine supporter formed by the combination of the soft rub-ber cu-hion, A, of elliptical form, the cup, B, soft rubber ring, B, and soft rubber diaphragm, d, substantially as herein shown and described, for the purpose specified. 78,432.—Sand Throwing Machine.—W. H. Cox, Portland

"Me. I claim the sand throwing machine or device, constructed as herein se orth and for the purposes specified.

orth and for the purposes specified. 8,433.—Hor Box.—Wm. B. Crandell, Deansville, N. Y. I claim the hop boxes, a a a, and bottomiess compartment boxes, d d d, upstantially as shown and described, constructed and employed together, U as and for the purpose set forth.

substanti all as and 78,434.-

supstantially as snown and gescribed, constructed and employed together, all as and for the purpose set forth. 78,434.— PRESS FOR FINISHING BRICK.—Lyman B. Critten-den, Pittsburg, Pa. I claim, 1st, in a machine for pressing brick, the construction and use, either singly or in gangs, of a plunger, m, chambered on its un er face, and fitted with a sub plunger, of any elastic or non-elastic material, such sub-plunger being supported by or resting against a spring or a cushion of con sensed air, or other equivalent device, substantiaity as and for the purposes herenbefore set forth. 2d, The use of wedge shaped guides, i, in connection with a cross bar, h, or its equivalent, for regulating the position of the bricks on each platen or tray, F, so that they shall be fed directly under the pressing device, sub-stanually as above set forth. 3d, The bozes, i, and plungers, m, with suitable devices for imparting to them the motions described, in combinatiou with a feeding device, con-structed and operated substantially in the manner and for the purposes here inbeiors set forth. 78, 435 — File E.—C B. Cubhorlay Milwaykoo Wite Antonet.

inbefor: set forth. 78,435.—FILE.—G. B. Cubberley, Milwaukee, Wis. Antedated

May 20, 1868. I claim stocks, A, end blocks, B, side key, C, and teeth, D, in combination substantially as and for the purpose described. 79,436.—HORSESHOE.—J. M. Cuykendall, Metomen, Wis.

'claim, Ist, Inserting the screws, D, in to the side of the shoe, directly be-th the calks, in such a manner that the heads of the screws bind upon calks and secure them ha place, substantially as herens shown and use

scribed. 2d, The groove, c, in the center of the tenon, a', of the toe calk, C, in com bination with the tenon, d. in the groove, b', and with the screw, D, allmade and arranged substantially as and for the purposseherein shown and de 78,461.— TIGHTENING WHEEL TIRES.—Thomas K. Markille, Winchester, Ill. Antedated May 27, 1868.
Iclaim the cap, E, with side walls thickned at e.for the nurpose described the plates, cc the shoe, F, and bolts, d. arranged as described, combined with the thre, B, and felles, A, subsantially as and for the purpose set torth.
78,462.—RAILWAY.—Carlo Margutti, Milan, Italy.
I rlaim, ist, A locomotive, provided with the eccentric segments, F winch act up a corrugated or wave shaped rail, M, in the manner substan-tally as shown and deterined.
21. Operating the eccentric segments, F', by means of the reciprocating bars, D D', and the attached bearings, E, of the same, substantially as shown and described and for the purposes set forth.
34. The combination of the reciprocating bars, D D', with the steam driv-ing cylinders, P, substantially as shown and described and for the purposes set forth.

scribed. 78,437.—FRUIT PRESERVING BOX.—O. E. Doolittle, Boston

^{3d}, The combination of the reciprocating pars, D D, with the steam driving cylinders, P, substantially as shown and described and for the purposes set forth.
^{4th}, The arrangement of the bars, D D', connected together substantially in the manner shown and described, so that the movements of the bars, D D', on one side, and its attachments, will produce a movement in the opposite direction of the other bars. D D', and their attachments, T', will be direction of the other bars. D D', and their attachments, be direction of the other bars. D D', and their attachments, so the other bars. D D', and their attachments, be direction of the other bars. D D', and their attachments, be direction of the other bars. D d', and their attachments, be direction of the other bars. D d', and described.
Sh, The combination of the reversing palleys, F, with the eccentric segments, F', substantially as shown and described and for the purposes set forth.
Th, The slos, a2, in the eccentric segments, F', and pulleys, F, the buttons, e, for holting said segments, F', against the pulleys, F, substantially as shown and described.
Sh, in combination with the eccentric segments, F', the rail, M, constructed and arranged substantially as described for the purposes set forth.
The propulsion of railway cars by means o corrugated or wormshaped rails, M, and a locomotive mechanism in conjunction with said rails rubstantially as shown and described and for the purposes set forth.
To, Mass.
Town the bed formed with a Vishaned groove, and therocker, with its to himself and I. G. Greene, Port Henry, N. Y. I claum, ist, The slide, B. provided with the crimping formers, b', in com ination with the clamping sliding jaws, c c, substantially as and for the arpose described.

introl with the champing stating jaws, oc, substatisty as and for the introde described. 2d, The slide, B, provided with the crimping forms, b', in combination with the clamping sliding jaws, cc, provided with the rudged plates, D, substan-tially as and for the purpose described. 3d, The combination with the plates, cc, slide, B, and crimping forms, of the smoothing rollers, substantially as and for the purpose described.

the smoothing rollers, substantially as and for the partypes distinct. 78,439.—UARRIAGE SPRING.—George Douglass, Bridgeport.

Conn. 1 claim the insertion of india rubber strips, b b, in chambers or recesses, a a in the cast metal socket or seat, A, of the spring, substantially in the man-ner as and for the purpose herein set forth. 78,440.—WASHING MACHINE.—Noah Drew, Howell, Mich.

1 claim a connecting rod constructed in two parts, r1 r2, in combination with the tube, t, spiral or equivalent spring, s, and adjustable plunger heads, p, substantially as and for the purposednere in described. 78,441.—TEMPLE FOR LOOMS.—Warren W. Dutcher, Hope-

78,463.—MOUNTING PICKER STAFFS.— W IIII2IN MASON, I aunton, Mass.
I claim the bed. formed with a V-shaped groove, and the rocker, with its under surface of the corresponding form, in combination with the open hns, by which the rocker is kept in place on the bed, substantially as and for the purpose set forth.
78,4614.—GANG PLOW.—Don Carlos Matteson, Stockton, Cal. I claim. 1st, The bars, E F, attached to the front ends of the beams, A B, with the perforated draft bar, G, attached thereto, substantially as and for the purpose specified.
26, The attaching of the caster wheel, J, to a single arbor, K, provided with a scraper, f, substantially as and for the purpose set forth.
78,465.—GAS MACHINE.—Hiram S. Maxim and John F. Lockwood, New York city. dale, Mass. 1 claim the temple constructed substantially as described, the trough standard and the inner end of the overhanging cap being provided with sockers closed at their outer ends, such sockets being to receive and hold the roller spinal. in place, in manner as set forth. 78,442.—UOMBINED CUL/IIVATOR AND HOE.—Harmon P. Eck-

78,442.— UOMBINED CULIFIVATOR AND HOE.—Harmon P. Eckles, Catskill, N. Y. Iclaim, jes, The fans or paddles, ff, when attached to shafts, K K, and operated substantially as and for the purpose specified. 2d, The combination of the shafts, A and K K, gear wheels, I I, and H H, and fr une, S, when arranged substantially as described, and for the purpose of operating the paddles or plates, ff, as herein specified. 3d, The combination of the shafts, A and K K, gear wheels, I I, and H H, and fr une, S, when arranged substantially as described, and for the purpose of operating the paddles or plates, ff, as herein specified. 3d, The combination of the cultivator frame, L, with its teeth, M M, secur-ed to the frame, C, as described, with the shafts, K K, frame, S, and paddles, ff, for the purpose of cultivating or pulverizing the earth, and ridding or hilling the same at one and the Same time, as set forth. 78,443.—SAW MILL.—Augustus R. Ehlers, Tannersville, Pa. I claim the combination and arrangement of the oscillating shaft, B, for producing a forward and backward movement of the eaw below its upper end, which moves in the same vertical plane, as here in shown and described.—Lucius H. Emmons. Noblesville. Ind. with a scraper, f, substantially as and for the purpose set forth. 78.465.—GAS MACHINE.—Hiram S. Maxim and John F. Lockwood, New York city. We claim, ist, In an apparatus for making carbureted air, controlling the heat used for evaporating the bydrocarbon liquid by the pressure of the contents of the vessel in which the sail liquid is held, as set forth. 2d, 'lonerructing the tank, A, with an i lastic head, side, or bottom, b, by which the position of the valve, B, is controlled, as set forth. 3d, Drawing the air to be carbureted into the pipes through which the hy-drocarbon vapor is conducted by means of the escaping force of the vapor, as set forth. 4th, The manner berein described of beating or boiling hydro-arbon liquid pressure of the vanor so generated, as set forth, each of density of the set forth. 5th, The above, in combination with the elastic head, b, substantially as set forth, for the pippe, j, arranged in the tube, E, for the purpose of causing the esching vapor to draw air into the tube, E, and to have such air car-bried, as set forth. The jet pipe, j, arranged in the tube, E, and to have such air car-bried, as set forth. 3d, Drawing the combination with the gas apparatus, as set forth, as the the draw air into the tube, E, and to have such air car-bried, as set forth. 3d, Drawing the above, in and manuely with a gas apparatus, as set forth, 3d, the above, in combination with the gas apparatus, as set forth, and described and consisting of the tank, A, elastic head, b, wally rod, G valve, B, pipe's, cd and g, dh charge pipes, D and E, jets, hand j burner l, and spashing board, n, all made as set forth. 78,467.—Car A XLE AND WHEEL.—James Montgomery, Cro-20.

shown and described. 78,444.—Mop HEAD.—Lucius H. Emmons, Noblesville, Ind. I claim the plece, A, furnished with the hooks, D, and the plece, E, ar-rangeo in relation thereto, and operated by means of the screw. B, substan-tially as and for the purpose set forth.

78,445.—ADJUSTMENT OF GEARING FOR HORSE-POWER.— John S. Everitt, Onkosh, Wis. I claim the clutch, with inclined faces, for the purpose of adjusting the gearing of the horse-power, as set forth.

gearing of the horse-power, as set forth. 78,446.—HAND STAMP.—August Fessler, Vienna, Austria, assignor to Joseph R. Von Wessely, New York City. I claim, 1st. The large air tight tubular reservoir, constructed and ar-ranged as and for the purpose's set forth. 2d. The combination of the open trame, the tubular reservoir, the tubular handle, the yoke, the stamp, and the reversing devices, these parts being ar-ranged as described for joint operation. 78,447.—VENT FOR BARREL.—Richard C. Fleming, Phila-delphia, Pa.

delphis, Fa. I claim 1st, The combination of the screw ring, A, with the tube, C, in bular rod, E, and Dag, D, all made and operating substantially as herein

shown and described. 2d, The bellows, F, in combination with the device set forth in the fore

going clause. 78,448.—MACHINE FOR GRINDING THE CUTTERS OF MOWING

78,448.—MACHINE FOR GRINDING THE CUTTERS OF MOWING MACHINES.—Andrew French, Philadelphia, ra.
Claim, 1st. The swinging or vibrating frame, G. hinged at the end opposite the grindstone or emery wheel, consisting of the post, i, arm, k, and combination with the lowering and raising adjustments, made in the manner and for the purpose described.
3d. The guide plate, B, made in the manner and for the purpose described.
3d. The side. B, and set screw, e, in combination with the guide plate, B, swinging or vibrating frame, G, and siling slot, U, as described, and made in the manner and for the purpose described.
3d. The slide. And set screw, e, in combination with the guide plate, B, swinging or vibrating frame, G, and siling slot, U, as described, and made in the manner and for the purpose described.
3d. The wheels or pulleys, M and N, swinging or vibrating frame, G, siline, D, set screw, e, and emery wheel or grindstone. C, in combination with the guide plate, B, made in the manner and for the purpose described.

2d, The partitioned pipe, G, formed on the double valve case, F, as herein specified.

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specified. 34, Fheprolongation, I, formed on pipe, G, as herein specified. 4th, The valve, g, and stem, e, in commination with the valve, g', and stem, e', bar, D, serew, E, and case. F, substantially as herein specified. 78.455.—PAVEMENT FOR STREETS AND WALKS.—Asa Hoyt,

I claim , 1st, The use of gas house lime in compounding street pavements when mixed and applied, substantially as specified and for the purposes set forth.
 2d, A pavement compounded as specified, that is, of small stone and gravel, coal or plue tar, sand, cement, and gas-house time.
 3d, The use of alum water at the time of laying, as specified.
 78,456.—FURNACE FOR ROASTING ORES.—Edward P. Hudson, New York cuty.
 I claim forcing heated air or oxygen, in addition to the products of combination, through ores, for the purpose of removing sulphur, phosphorus, and similar injurious substances therefront, substantially as heren specified.
 Also, the chamber or reservor, a, below the bortom of the fire chambers of flues, with a passage on passing the roasted ores therefor, through which air is forced and heated by the roasted ores therein, and in turn cools the start is forced and heated by the roasted ores therein, but regulated thereby, before passing through the ores, substantially as her in specified.
 Also, the chamber of reservor, a, below the bortom of the fire chambers, over the fires, so as to be heated thereby, before passing through the ores, substantially as herein specified.
 Also, the arrangement of one fire chamber higher than the other, substantially as herein specified.
 Also, the arrangement of one fire chamber higher than the other, substantially as herein specified.
 Also, the arrangement of and rechamber higher than the other, substantially as and for the purpose berein gheelided.
 Also, the arrangement of an entry the probes and of the purposes as herein described.
 Also, the arrangement of one fire chamber higher than the other, substantially as herein specified.
 Also, the arrangement of and there there there the purposes as herein described and constructed.
 Rato, the arrangement of the stening the plow and cultivator togethe

10:500 - VENEER CUTTING MACHINE. - Edward Jewett, Rindres, N. H. Antedated May 18, 1808. I claim attaching and securing the "bolt" to the carriage. A, by means of dove-tailed ribs, D D, substantially as and for the purpose set for h. The adustable ribs, D D, moving in grooves cut in the carriago. A, and secured by set screws, or their equivalent, substantially as and for the pur-pose set forth. The vertically-adjustable clamping rib (fig. 7), substantially as and for the purpose set forth.

78,459 — LIGHTNING ROD.—George Kirtland (assignor to S.

78,459.—LIGHTNING HOL.—Goods and the second seco

I claim the removable bars, D F, adapted to be substituted, one for the other, in the same finger bar, for reaping or mowing, as herein shown and

constructed, arranged, and operating as set torth. 78,467.—CAR AXLE AND WHEEL.—James Montgomery, Cro-ton, N. Y. Antedated May 16,1868. I claim, 1st, In reversely conical-shaped axles, made up of segmental bars, as described, the insertion, beween the latter, and welding with them at their ends, of I-soaped bars, substantially as specified. 2d. The continuation, with a reversely conical-shaped axle, composed of segmental or separate bars, arranged as specified, of the outer ring and in-terior central brace, B. cast in one piece, and through which the bars are run or passed, as height of the. 3d, The combination, with the axle made of wrought metal, of the wheel hubs or central periods cast thereon, together with their bearings or jour-mais, essentially as specified. 78.468 — Oper Smath aroon. - B. C. Monton, Word Luback, Mo.

78 468 .- ORE SEPARATOR.-R. C. Morton, West Lubeck, Me. I claim, 1st, the series of lever or hinged plungers, C C C C "etc., acting apon the series of cells, D D' D" D", substantially as shown and described in combination with the corresponding compartment tray, H, all as and for the purpose see forth.

-TIGHTENING WHEEL TIRES.-Thomas R. Markillie,

78,424.—CORN CULTIVATOR.—Alexander Campbell, Oxford,	since D. set screw, e. and emery wheel of grandstone, C. III compliantion	in combination with the corresponding compartment tray, H, all as and for
I claim the attaching of the upper ends of the standards, B, to the frame,	with the guide plate, B, made in the manner and for the purpose de- scribed.	the purpose set forth. 2d, The adjustable bars, s, substantially as shown and described, in combi-
A. by pivoting the former in mortises. b, in the latter, in connection with the rode, d, and the adjustable bar, e, attached to the draft pole, all arranged	78,449.—Door Lock.—J. E. A. Gibbs, Steele's Tavern, Va.	nation with the rollers, d, and cams, e, of the shaft, h, all as and for the pur-
substantially as and for the purpose set forth.	I claim, 1st, The combination of the series of guards or wards, N, with the slotted cylinder. E, substantially as herein shown and described and for the	3d, he lever cocks, k, substantially as shown and described, in combina-
78,425.—ROTARY STEAM ENGINE.—Wesley B. Campbell (as- signorto him: elf and Harrison Smith), Abingdon, Iowa.	purpose set forth.	tion with the box, G, slide, E and plungers, all substantially as shown and described and for the purpose set forth.
I claim, 1st, The arrangement of the wheel, B, floats, B', the ends, b, flanges,	2d, Forming the key, K, in such a manner that it may fill up the slot in the cylinder, E, and so that its face may correspond with the face of said cylin	4th, The bar, A, rubber springs, j, plates, f, and lever plungers, all con-
c, side nlates, C, and steam chest, A. whereby to relieve the hub from the pressure of the steam, substantially as set forth.	der, substantially as herein shown and described and for the purpose set	structed and operating substantially as shown and described and for the purpose set forth.
2d, The arrangement of the wheel, B, the valves. F, arms, G, rods, H, and	forth. 3d. The combination of the tumbler, L. with the slotted cylinder, E, and	5th, Tray, H, having partitions, u u u, substantially as shown and de- scribed, in combination with a series of plungers and a series of cells, D D'
came, I, substantially as set forth.	with the guards or wards, N, substantially as herein shown and described and	D"D", all as and for the purpose set forth.
78,426.—STEAM BOILER FURNACE.—N. L. Carpenter, Natch- ez. Miss.	for the purpose set forth. 78,450.—STUMP EXTRACTOR.—Alfred Goodrich, Burnt Prai-	78,469.—STUMP EXTRACTOR.—Crawford Munns, N. Y. city.
I claim, 1st, 1n combination with a steam boiler, the wells or recesses, D, E and F (more or less in number), and the deflecting plates, G, rranged	rie III.	I claim, 1st, The pintle, d, in combination with a stump extractor and its
substantially as and for the purposes herein shown and described.	I claim the construction and arrangement of the pyramidal frame, P, upon the runners, R, shaft, S, ratchet wheels, u w, of unequal diameters, pawi, h,	base or platform, substantially as described for the purpose specified. 2d, The triangular frames, A A, of a stump extractor, arranged substan-
2d, in combination with the wells, D E and F, and plates, G, the perforated air tube, H, substantially as and for the purposes described.	standard, s', pivoted lever, L, and link, i, as berein described for the pur-	tially as shown and described, and secured to the base B, by means of the pintle bolt, d, or its equivalent, for the purpose set forth.
78,427.—Rings for Spinning Machines.—Wm. T. Carroll,	pose specified,	3d, The hinged leaves, B' B', and base, B, in combination with a stump ex-
Medway, Mass.	78,451.—REFLECTING GAS BURNER.—Thomas Grist, Phila-	tractor, all constructed, arranged, and operating substantially as shown and described for the purpose set for th.
I claim the combination as well as arrangement of the flange, c, or the	delphia, Pa. Antedated May 19, 1868. I claim, 1st. The arrangement of the burner, e, on the top of the reflector,	4th. The platform, B, substantially as shown and described, when com
posts, f, and the adjusting screws, e, with the ring, A, and the supporter, B, thereof, to be placed on and within the ring rail, as specified.	F. as and for the purpuse set forth, 2d. The combination of the distributer, B, pipe, E, passing through the re-	bined with the pintle bolt, d, of a stump extracting machine, all as set forth
78,428.—THRUST BEARING.—A. W. Case, South Manchester,	flector, and the burner, e.	78.470.—Machine for Crozing and Chamfering Barrels
Conn.	3d, The periorated washers, h and i, in combination with the pipe, F, the reflector, F, and the openings in the latter,	Charles Murdock, Ellenville, N. Y. Antedated May 18, 1868. I claim, 1st, The combination of the sliding trames, E E, upon each side of
I clam, 1st, An improved thrust bearing, formed by the combination of the wheels, E, one or both, and friction wheel, D, with each other and with	78,452.—GATE.—William C. Hooker, Abington, 111.	the main frame, and bearing the crozing and chamtering cutters, J K, with
the shaft, B, substantially as herein shown and described and for the purpose set for th.	I claim the gate, B B B, swung between the swinging frames. D D, substan-	the barrel holding trame, g, all operating as described, whereby both ends of the farrel are chamfered and crozed at the same time, as herein shown and
2d. The obling device formed by passing a piece of candle wick or other	tially in combination with cords, E E, or their equivalent, the uprights, A A, and weights, J J, all as and for the purpose set forth.	described. 2d, The arrangement of the sliding frames, E E, in which the cutter head
snitable fibrous conductor, through holes in the blocks. U, and along grooves in the under side of the journals of the friction wheels, D, substantially as		shafts are hung and turn, connecting roots, VV, and lever arm, T, in combi-
herein shown and described and for the purpose set forth.	78,453.—WARPING FRAMEC. H. Howard (assignor by mesne assignment to himself and Horace N. Jordan), Lewiston, Me.	nation with the sector shared arm, R, all arranged together and operating as and for the purpose specified.
78,429 - RAILROAD FROG Henry S. Chapin, Delhi, Ohio.	I claim the combination with the stationary guide, guide rolls or rods, o,	31. The arrangement of the sliding sleeve, Y, having wedge shaped arms, of
I claim the chairs, A, constructed substantially as set forth in the described combination, with the sections or pieces of rails, B C D E, arranged as de-	up the slack, substantially as set forth.	the cutter head shafts, connecting levers, W W, lever arm, U, and sector shaped arm, S, all connected together and operating as and for the purpose
scribed and for the purpose set forth.	78.454, -VALVE GEAR FOR STEAM HEATING APPARATUS.	specified. 4th, the barrel holding frame, g, having spring jaws, for grasping and
78,430.— Apparatus for Conveying and Dumping Coal.	Henry Howard, Springfield, Mass.	holding the barrel while being operated upon by the croze and chamter cut-
HERTY C. Clark and Rob rt B. Little, Providence, R I.	I claim, 1st, The double case, F, in combination with valves, g g', substan- tially as herein set forth.	ters, arranged so as to be raised or lowered, substantially in the manner de- scribed and for the purpose specified.
We claim, 1st, The construction of a conveying and dumping apparatus or	viewing we have our out of the test of	

78,471.—Tweer — William H. Myers (assignor to Sylvester

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78,471.—Tweer —William H. Myers (assignor to Sylvester Matthias), Baltimore. Mo.
I claim an escape pipe, D, or its equivalent, independent of the duct which conveys the blast to the fire, descending from the center of the tweer, to conver sway as hes, dust, etc. from bottom of the fire. and to admit a direct draft when the bellows is not in operation, substantially as et forth.
A tweer. constructed with the air chamber, B, outlets, C C, and the escape pipe, B, substantially as hescribed.
78,472.—TAILOR'S SEAT.—Friedrich Neuhaus, Belleville, Ill. I claim, ist, A tailor's seat, provided with a back, B, and an adjustable kneesupport, E, substantially as herein shown and described.
2d. The devices herein shown and describe of attaching the cushion, F, to the sect, A, asild divices consisting of the eye, a, rods, C D and E. all madeasa d cribed. add operatings on as to allow the backward and forward, up and down, and lateral adjustment of the cushion, as kettorth.
78,473.—POTATO DIGGER.—H. B. Norton, Kochester, N. Y. I claim, ist, The combination of the lose frame, C, carrying the operation of the lose frame, C, the operation show here is all or the backward and forward, up and down, and lateral adjustment of the the substant and forward, and appratur, with the axl and driving wheels, when salt irame is capable of being elevated by the joint actiou of the team and operator, as herein set forth.
2d. The combination of the folding bars, LL, with the lever, K, and frame.

C.

rtn. 2d, The combination of the folding bars, L L, with the lever, K, and frame, 3d, The combination of the purpose specified. 3d. The arched axie. B, when employed in combination with the driving beels, A, and endless spron, I, whereby the edge of the wheels may be re-aced to the minimum, and a free passage for vinesisleft over the apron, as rein set forth. 4tb, The shares, D D, set angu larly, and with the land sides inward, in whing the scraper T, whereby the sides of the row are first. 4tb

4to, The shares, D D, set angu larly, and with the land sides inward, in combinat on wich the scraper, H, whereby the sides of the row are first plowed off, and then scooped up, as herein set forth. 5th, Adjusting the shares, D D, centrally, irrespective of the scraper, both at the rop and bottom, by the slots, b b, as herein described. 6th, The construction and arrangement of the bearings, t, rollers, s s', and angular caps, u, as herein specified. 7th, The combination of the inclosed and alternating agitator, W, with the endless apron, I, as berein set forth. 8th, The combination of the side guards, E E, with the endless apron, I, as hereinspecified.

star purpose specified. 9th, The construction and arrangement of the evalues apron, the same con-sisting of the flox ble sides, v, v, the A-shaped or half-circular slats, w, and the star pieces, w, united by rivels, the whole operating in the manner and for the purpose specified. 10th, The combination of the tension rods, e, with the plow standards, a, and en dless apron, I, whereby the blows, scraper, and apron are drawn for-ward at pleasure, to make them taut, as heren set forth. 11th. The combination and arrangement of the offsets or notches, h', and the springs, z, with the curved slots, h, in the manner and for the purpose specified.

specified. 12th, The combination of the door, r, and lever, q, with the open recepta-cle, M, arranged and operating: as h-rein set forth. 13th, The employment of rwo hearing rollers, s, on opposite sides, forsus takining the front end of the apron without a connecting shatt, as herein set forth

78.474.—FRUIT JAR.—H. B. Norton, Rochester, N. Y.

16,474.— FRUIT JAR.—H. B. NOTON, KOCHESTEF, N. Y. I caam in combination with the concentric rims, b⁺, projecting vertically from the cover, B, the externally beveled mouth, d, of the jar, for com pressing thepacking substance against the outer flange, to prevent its enter-ing and commingling with the contents of the jar, ubtantiatly as at forth. 78,475.—RALROAD CAR STOVE.—R. O'Brien, Dalton, Ohio.

(25,470.—KALROAD UAR STOVE.—K. O'BFIEN, Dalton, ODIO, I claim, jat. The combination of the arm, H, and weight, I, with the begindle, D, of the pivoted frame. C, substantially as herein shown and described and for the pivoted frame. C, substantially as herein shown and described and for the pivoted frame. C, substantially as herein shown and described and for the purpose set forth. 3d, An improved railroad car stove formed by the combination of the swinging stove, A, pivoted frame, C, subporting frame, E, weighted arm, H I, and detachable bed plate. M, with each other, said varts being constructed and arranged substantially as herein shown and described and for the pur-pose set forth.

and arranged substantially as herein shown and described and for the pur-pose set forth. 78,476.—EXTENSION STEP LADDER.—G. W. Packer, Toulon, Ill. I claim an extension step ladder consisting of the hinged parts. B C, truss, E, and chains, G, cons ructed and arranged aubis antially as here in described. 78,477.—MANUFACTURE OF PLATES OF COMBINED STEEL AND IRON—James Park, Jr., Pittsburg, Pa. I claim giving a welding heat to tae iron or fibrous metal side only of the ngors, in the manner hereinbefore described, and then uniting these sur-faces by welding these to tae iron or fibrous metal side only of the ngors, in the manner hereinbefore described, and then uniting these sur-faces by welding them together, either with or without an interposed layer of wrongbt iron or other fibrons and maileable metal, substantially as here-inbefore set forth. 78,478.—TABLE AND QUILTING FRAME.—Milton E. Phillips (assignor to himself, Paul Wetzel, and George Wetzel), Lena, 10. I claim the combination, substantially as set forth, with a centrally divided eg, a centrally divided hinged table top, pivited supports, and spring de-tents, of borizontal frame pieces, ratchets, and a horizontal brace, for the purposes specified.

78,479.—NAIL EXTRACTOR.—I. A. Pinnell, Boonville, Mo. I claim the lever handle, A, falorum bar, C, having the curved fulcrum, b the claw levers, D and E, having the claws, a a, all pluoted together, con-structed to operate substantially as shown and described and for the purpose set forch.

set forth. 78,480.—WHEEL.—Henry Poth, Pittsburg, Pa. f claim the hub flanges, a a. provided with corresponding wedge feathers, b b, when a spied to be drawn tegetber by means of the differential screw box, d e, on which the screw case, g, are fitted, the tenons of the spokes be-lag protected by elastic materia, k, all constructed and arranged as and for the purpose described.

WATER INDICATOR .- John C. Raymond and (3,43).—LOW WATER INDICATOR.—John C. Raymond and Francis T. Allyn, Brooklyn, NY, assignors to F. T. Allyn. We claim the stop, q in combination with with the lever, k, rod, o, nut, p, xpanding tube, c, and with the valve stem, i, of the whistle, all as shown and lecrohad

described, 78.482.—HARVESTER.—George Rector, Sodus, Mich.

178,482.—HARVESTER.—George Rector, Sodus, Mich. I claim, 1st, the arrangement of the rock shaft, a, and the two socklebars, d and h, the latter being located in line with the tread of the wheels, and hinged to the acjustable yo.ge, D, substantially as described. 2d, The U-shaped trame, D, with the horizontally projecting arm to which the finger bar is hinged, and having the projecting brace bar, G, arranged to bear against the rear side of the finger bar, eaid frame, D, being adjustable vertically, all constructed and arranged to operate as herein described. 3d, the combination of the driving gear, L, crank shaft, t, with its sliding gear, m, ptiman, n, and rock shaft, a, when said parts are constructed and arranged to operate as and for the purpose set forth. 4th, The combination of the two sickle bars, d and h, pitman, i, and rock shaft, a, provided with its two arms, and crank, r, having a series of holes for adjusting the stroke, as hereinset forth. 78,483.—VALVE FOR STEAM ENGINES.—Alex. K. Rider, Naz-areth, Pa, assignorto himselt, C. H. Delamater, and G. H. Reynolds. I claim the master valves, Di D2, operacid by and controlling in turn the action of the steam in throwing the main valve, G, substantially as and for the purpose, herein set forth. 78,484.—ELEVATOH FOR CULTIVATOR BARS.—J. S. Rowell and Ira Rowell, Beaver Dam, Wia.

15,434 — LLEVATOR FOR CULTIVATOR DARS.—J. S. ROWEII and Ira Rowell, Beaver Dam, Wis. We claim, Ist, The roller stands or bearings constructed and arranged as and for the purpose set forth. 2d, The sheaves, D.D', provided with the inclined catch, d, and lop, c, in combination with the ratchet, b. 3d, Pivoting the Jaw, as described, out of line with the groove in the sheave, so as to form an automatic locking and unlocking device, as set forth. 4th, The combination of the sheaves, D.D', bearings, B.B', and roller, C, as arranged, and operating in the manner and for the purposes set forth. 78, 485 — A pueper purpose Curpton Hops _ J.S. Smolt St. Lo. 78,485.—APPARATUS FOR CURING HOPS.—J. S. Sandt, St. Jo-

10,400.—AFFARATOS FOR CORRECTIONS.—O. C. CARLEY, D. C. Schuler, S. C. Schuler, S. C. Schuler, S. Schuler, Schuler, S. Schuler, S. Schuler, Schuler, S. Schuler, S. Schuler, S. Schuler, Schuler, S. Schuler, Schuler, Schuler, S. Schuler, Schul

Berriss, Sidney, Obio, assignor to Jason McVay and Jason S. Carey. I claim, 1st, The offset, F, adbstantially as shown and described, in combi-nation with rack. D, whee', I, and arm, B, as and for the purpose set forth. 2d, The gage, E, constructed and operaing substantially as and for the purpose shown and described, in combination with the arms, C and B, and wheel, G, all as set forth. fortn. the

-VINE TRELLIS.—Carl Seyler, Cleveland, Ohio. 78.487.claim the plug or shaft, D, studs, a', an i ring, F, asarranged, incombina-with the arms, A, for the purpose and in the manner substantially as set l clai tior

with the vibrating upright shaft, B, lever, D, and stop, C, as shown and described. 3d. The swirel cievis, a, reversible plowshare, A, or cultivator share, E, vi-brating shaft, B, lever.D, and stop, C, notched bar or standard, e, with wheel, key, ', and plates, F, all constructed and arranged in combination with a plow frame, as shown and described. 78,493.—EAR TRUMPET — Thos. H. Stillwell, M.D., New York city. Antedated May 18, 1868. I claim the tubular trumbets, A A, connected by means of a wirerod, B, and having vibrating wires, C, arranged within them, substantially as and for the purpose specified.

1 claim the tubular transfer, A A connersed by means of a withorton, by and having vibrating wires, C, arranged within them, substantially as and for the purpose specified. 78,494.—SUSPENDER.—Wm. P. Towles, Baltimore, Md. I rlaim the combination and arrangement of the adjustable non-elastic ehoulder straps, C, center, A, elastic strap, D, rngs, E, and buttonhole straps B substantially as and for the purpose here is shown and described. 78,495.—TELEGRAPHING.—C. F. Varley, London, England. I el sim, ist, So arranging telegraphic apparatus site work by the variation of the increment and decrement of electric potential, and not by the direct action of the electric current itself, as and for the purpose set torth. 24, The use of an induction coil at the receiving instrument, as and for the pur-poses set torth. 34, The use of a condenser or condensers between the receiving end of the cable and the earth, with or without resisting colls between the cable and the earth, as and for the purpose set forth. 4th, The use of a condenser at the sending end of the cable, withor without resistance colls connecting its two armatures, as and for the purposes set forth.

form. 5th, The use of a condenser at each end of the oable, the cable being con-nected with the ground through a resistance coil and a battery so as to keep the cable always a seatively electrified, as and for the purposes set forth. 78,496,—CAP FOR MARINE STOVE PIPES.—George Warner, cherging of the second sec Cleveland, Obio. 1 d slim the top shield, C, and the two flexible side shields, B B, h combina-tion with the cap, A, as described, and when used in the manner and for the purposes set forth. 78,497.—ELECTRO-PULINICO.

497.—ELECTRO-PLATING FRAME.—William H. Watrous, hartford, Conn.

I chaim the holding frame, A, constructed substantially as and for the pur-78,498. - APPARATUS FOR DISTILLING. - Alexander Webster,

Seneca Falls. N. Y. Seneca Falls. N. Y. I claim the cap, combined with the cylinder, A, and the tube, B, substat-thaily as and for the purposes described, separating the lighter and more re-fined portion of the vapor which rises from a still in the process of distillation from the heavier portions, for the purpose of obtaining two or more qualities of liquor, substantially as described.

78,499.- SELF-BORING STOP COCK.-Alfred Weed, Boston

Mass. I claim a fancet provided with a screw thread, f, on its harrel, for the pur-pose set forth, its entering end provided with a closed boring tool, d, and the blank or smooth surface, o, between the screw thread and the boring tool, in which blank surface are the inlets, c, communicating with the passage through the fancet, and also provided with bandles, e, by which the bories furned, the smooth surface publed into the tap hole, and the fancet turned as it is screwed into the tap hole. 78,500,--RAILWAY SWITCH.--Win. Wharton, Jr., Philadel-

as it is serewed into the tap bôle. 78,500.—RAILWAY SWITCH.—Wm. Wharton, Jr., Philadel-phia, Pa. I claim switch rails arranged to move laterally from a fixed point, in com-bination with a shaft having two or more graduated cranks, or their equiva-lents, for serving the twofold purpose of operating and hierally steadying at different points the said swit charls, substantially as set forth. 78,501.—PLOW.—Wm. Whiteley, Springfield, Ohio. I claim, ist, The construction and use of plows, when the shapes of those parts which cutann invertithe furrow slice are determined and obtained by theherein described rule, substantially as set forth. 2d, The method of obtaining modified forms of the plow sbape, substan-tially as herein described. 3d, fa combination with the draft bolt, J, the slirrup, G, or its equivalent, which surrounds both bolt and beam and binds them firmly together, wich-out performing or otherwise weakening the beam. 4th, in combination with the post to which the mold board is connected, the bolt, J, or its equivalent, for the purpose of connecting the draft rod at a righ point in front of the plow post. 5th, in combination with the post, C, and beam, D, the notched flange, E, for the purpose of shifting the post, O, or its equivalent, the eye bolt, M, and washers, N, substantially as and for the purpose set forth. 7th, incombination with the coulter, Q, or its equivalent, the eye bolt, M, and washers, N, substantially as and for the purpose set forth. 7th, incombination with the coulter, Q, or its equivalent, eccure at osaid projection or its equivalent, in front of the bamping stirrup, in order to equalize the upward pressure, substantially as set forth. 7th. The brace, S, in combination with the post, C, and etirrup, G, substan-tially as and for the purpose set forth. 7th. The stirrup, C constructed with the horizontal portion, b, to enable the beam to be adjusted sideways, as decorribed and for the purpose set forth. 10tb, The store, J, constructed with the horizon

the manner shown. 78,502.—BUTTER WORKER.—Hosea Willard, Vergennes, Vt. I claim the rod or spindle, B, with the wings, C and D, connected therewith, n combination with a tray or trough, and operating substantially as and for be purposes herein Bnown and described. -MACHINE FOR FASTENING LACING HOOKS TO GAI-

TERS.—Lewis S. Wiswell, Utica, N. Y. I claim, 1st, Tbe slides, G and H, constructed substantially as described. 2t, The punch, D. wilb recess for holding the books, constructed substan tially as described, in combination with the said slides. 3d, The arms, L, plo, F3, and spring, L', constructed and operating in com-bination, substantially as described. 4th. The cam, F, lever, C, and punch, D. in combination, substantially as

th. The cam, F, lever, C, and punch, D. in combination, substantially as described. Sth. the agitator, constructed and operating substantially as described. 6th. The ways, K K', constructed and operating substantially as described, in combination with the arms, L. 78,504.—HORSE HAY FORK.—Jonathan Wolfrom, York, Pa. 1 claim the tines, A, and frame, D, substantially as shown and described, in combination with the points, E, middle time, G, latch lever, d, a Bdslot, l, or the equivalent thereof, all as and for the purpose set form. 78,505.—CLASP FOR FASTENING GARMENTS,—Wendell Wright, Bloomfield, N.J. 1 claim the plates, A B B, connected together by joints or hinges, provided with springs, b, the plates, B, being provided with spurs or polats, all con-structed and arranged substantially in the manner a sand for the purpose set forth.

78,506.—NEEDLE FOR KNITTING MACHINES.—Walter Aiken,

Frankyn, N. H. I claim the improved knitting machine needle, made with a series of fiez-ures or crugations, a a a, in is shank, subilantially as represented in fig. 1 of the aforesaid drawings, and as hereinbefore specified. 78,507.—ICE HOUSE FOR BREWERS AND BUTCHERS.—Adam 20,000.—ICE HOUSE FOR BREWERS AND BUTCHERS.—Adam

Balerle, Fredereck Hartmann, and Friedrich Reese, Chicago, 11. We ctaim a building for preserving meats, beer, and similar articles, con-sisting of the ice chämber, B, and cooling wauit, A, provided with one or more ventilators, I, all constructed and arranged substantially as shown and described.

78,508.--Shingle Machine.--David H. Ball, Sinnamahon-

for the purpose hereinset forth. 78,532.—BALANCE.—Louis A. Matos, Philadelphia, Pa. 1 clam the adjusting or sliding balance weight. E. in combination wit the vernier or graduated arc, and the vibra ting weight, which is suspende on an arm which is pivoted to the chord of the arc, substantially as shown and described. 78,533.—SAFETY BRIDLE.—John McKillop (assignor to An

d for the purpose set forth. 5,609.—OYSINE **DREDGE.**—C. T. Belbin, Baltimore, Md. I claim the combination of the two bolts, m and n, with the lng, o, the ds, A and B, and the head, C, when all said parts are combined and arrange seas to operate togethet, substantially in the manner and for the purpose I claim the 78,510.—Device for Operating Water Wheel Gates.

Joseph H. Bodine and Truman A. Hill, Mount Morris, N. Y. We claim the arrangement of the pivoted sector, m, pinion, P, and hand theel, S, and pivoted econecting rod, u, with relation to the circular rega-ergate, G, whereby saidgate is operated horizontally to open and close all he water ways at once, as herein shown and described.

the water wates at once, as herein shown and described. 78,511.—CHURN DASHER.—A. H. Brainerd, Rome, N. Y. Iclaim, 1st. The head, B. plyoied upon the reciprocating staff, A, and pro-vided with spiral flanges, F. substantially as described. 20, In combination with the above, the beveled floats, E E', substantially as and for the purpose specified.

5th. The combination of the pipe, U, with the fire chamber, D, and gene-ating chamber, C, whereby the gases of combuston may be directly ad-nitted into the steam space, substantially asset forth. (8,515.—HARVESTER CUTTER.—Thomas J. Christy, Olney,

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rating chamber (C, whereby the gases of com pussion may be uncount, aumitted into the steam space, substantially as set forth.
78,515.—HARVESTER CUTTER.—Thomas J. Christy, Olney, 11. Antedated May 23, 1868.
I chaim the combination of the chain sections, b, formed with projecting heels, b', for both driving and guiding the blades, a, and links, c, boiled to the sections, b, the planon, d, driving the chain, through the medium of the projecting beels, b'; to roboth driving and guiding the blades, a, and links, c, boiled to the sections, b, the planon, d, driving the chain, through the medium of the projecting beels, b'; to ecentral bar, g, with ledges, g' g', forming guide ways for the heels, b'; the finger beam, e, with upturned finances, e', and the cap plate, f, when the said parts are constructed, arranged, and employed in the manuer and for the purpose specified.
78,516.—HALTER BUCKLE, —Francis Ditton, Auburn, N. Y. I claim, jat, in combination with three tongued buckle, the loop, S, tor securing the ends of the straps, substantially as described.
76,517.—COOKING STOVE.—Wun. Doyle, Albany, N. Y. I claim, lat, The construction and arrangement of extension flue, C, in combination with a rever ible or return flue, F, under the oven of a cooking stove, substantially as elf orth.
3d, The construction and arrangement of front descending flues, A, a, ross or connecting flue, H, extension flue, C, and revertable flue, F, substantially as stown and described.
3th, The arrangement and combination of front descending flues, A, cross or connecting flue, A, and cross flue, H, united by extension flue, C, whe a local controlled by one damper, P, substantially as stown and described.
3th, The construction and arrangement of a front descending and direct flue or flues, A, and cross flue, H, united by extension flue, C, whe are constructed and perturbe flue, F, substantially as sto orth.
3th, The combination with the valve or pision, D, having a

Batimore, Md. Iclaim, 1st, The construction of the angular pins. g g', of the forwardly projecting part, g, and the downwardly projecting part, g', and operated by he hook, , of the lever, F, substantially as herein described and for the pur-

the hook, 1, of the lever, F, substantially as nerein described and for the par-pose specified. 2d. The cam, E, provided with projections, g b i, and bulging part, 1, in combinetion with the lever, F, provided with book, 1, and arm, K, substan-tially as and for the parposes described. 3d, The cam, E, and lever, F, constructed as described, in combination with the book, n, provided with recess, o, and the hollowed recess, m, sub-stantially as and for the parposes set forth. 4th, The cam, E, lever, F, and hook, n constructed as described, in combination nation with the pir, q, provided with a downward projection, q', and secured to the spring, r, and with the hold, p, in the breech, substantially as and for the purposes set forth. 78, 520 — LATHE TOOL HOLDER.— C. H. Fowler, Roxbury,

78,520.— LATHE TOOL HOLDER.— C. H. Fowler, Roxbury,

Mass. I claim as an improved tool holding device for metal-'urning latbes, etc., the combination and arrangement of the bar, a screw sleeve or hollow nut. C, and double tapering tube, G, the whole being arranged and operating as herein shown and described. 78,521.—DOOR AND WINDOW CATCH.—S. W. Gear, White-stone N X

berein shown and described.
75,521.—DOOR AND WINDOW CATCH.—S. W. Gear, Whitestone, N. Y.
I claim the two springs, b c, constructed to lock one within the other, as shown and described, and ar anged in relation with each other upon the goor and frame, substantially as and for the purpose specified.
78,522.—ATTACHMENT TO COOKING STOVE Finte CHAMBER.—Job Harrison (assignor to himself, George W. Esterly, and C. C. Lewis), while water, wis.
I claim, let, So applying the arch, D, to the fire chamber of the stove that the air chambers, as t, are formed, one between the arch and oven, and the other both back of and above.
24, The arch, D, or its equivalent. constructed substantially as described, and applice to a stove for the purpose set forth..
78,523.—CLOTH AND CLOTHES FIN.—Richmond Hathaway, Chicopee, Mass, assignor to bimself and Levi O. Allen, Gardiner, Me.
1 claim as an article of manufacture, the clothes pin constructed as described, viz., with the central coll, a, the lewers, d, d, the central depressions to admit the line, and the pointed and ring laws, all asset forth.
78,524.—FILTER.—Lawrence Holms, Paterson, N. J.
1 claim the arrangement of the vive, G H, passages, c d e f, openings, a b a'D', water spaces, l k, and filtering beds, m x, as and for the purpose set effed.

78,525 — BARBERS' CHAIR. — Charles Kaestner (assignor to himself and Jacob Becker), Chicago, Ill. I claim a reversible bollow spring seat, provided with the looking bolts, d, levers, G, and bandle, D, when constructed and arranged to operate sub-stantially as described...

stantially as described... 78,526.—CHURN.—Joseph Kepler, Crawfordsville, Ind. I claim the device of a single concave breast, with metal points, the con-vex-concave bottom, B, descending from the elvated breast C, th rough the openings, F F, figs. I and 2, in combination with perforated top, M, in fig. 4, dash, fig. 3, and seroil top, fig. 6, enclosed in a box, substantially as hereinset forth...

78,527.—Arch of Furnace for Evaporating Kettle, etc. Emil Laass, Syracuse, N. Y. I claim the arch made in section, A A, jointed at the crown by the cylindri-cal keystone, B, and reating at the spring loosely upon the ways, a a, the whole so arranged that the arch, or either section thereof, can be adjusted bodily in or out, without elevating, and can be readily taken apart, as here-in set forth. in set forth. 78,528.— LAMP CHIMNEY CLEANER.—James Lee, New York

city. Antedated May 22, 1868. I claim the samp chimney cleaner constructed as described, consisting of the elastic disks, B, secured to the end of the haadle A, at right; angles to its axis, by means of the screw, C, and provided with the first, angles to its axis, by means of the screw, C, and provided with the first, angles to its axis, by means of the screw, C, and provided with the first, angles to its axis, by means of the screw, C, and provided with the first, angles to its axis, by means of the screw, C, and provided with the first, angles to its axis, by means of the screw, C, and provided with the first, angles to its axis, by means of the screw, the screw of the

10,020.—BHAFT COUPLING.—J. F. Light, Worcester, Mass. I claim, ist, The combination of the ends of the shafts, when shaped or cut away and applied to each other, substantially as shown in figs. 2 and 3 of the drawines, so as to prevent the independent longitudinal movemen' of the one shaft with respect to the other, with holding nutsforencirling and coup-ling said shafts in the manner berein shown and specified. 2d, The combination with the clasps, B B, of the guide pieces or pins, 22, or either, substantially as and for the purposes set forth. 78,530.—SOAP.—O. E. Loomis, Ellenburg, N. Y. Iclaim as oap compounded of the ingredients and in the manner herein set forth.

78,531.—SEAT FOR HARVESTER.—W.J. Ludlow, Cleveland, O.

I claim a seat for hurvesters, mowing macfines, and horse rakes, suspend-ed soas to swing laterally, constructed and arranged substantially as and for the purpose herein set forth. 78,532.—BALANCE.—Louis A. Matos, Philadelphia, Pa.

2d, The combination of the spring, f, with the two lever jaws, A, of the choking apparatus, substantially as and for the purpose specified.

78,534.— GALVANIC SPECTACLE.—Judah Moses, Hartford, Conn. I claim the combination with the temples or front of a pair of spectacles, of an electric battery or batteries, so arranged and connected therewith that an electrical current may be caused to pass through the same, substantially as and for the purposes he rein specified.

78,535.-BUTTON.-Charles Mudler, Cleveland, Ohio. Ante-

78.488.—FLOATING WATER POWER.—Allert B. Shepard.	78,512.— MACHINE FOR SHAVING SCREWS.—James Burns,	dated May 22, 1868.
Sand Bank. N. Y.	New York city, assignor to himself, Richard McCullough, and John Fan-	I claim the button constructed of two plates or disks, A B, having a rigid connection by means of the shank or pin. C, and the lower disk being shoul-
I claim the arrangement upon the floats, A A A, of the wheels, C, keyed	ning.	dered or grooved out so as to form a circular depression, in which the thread
upon the shaft, D, having the gear wheel, E, the shaft. F, having the beveled	I claim, 1st. In combination with the stationary tool, b, and spring guide,	used in sewing on the button is buried below the plane of said disk, the
pinion, G, and pulley, K, the binged frame, H, supporting the pulley shaft, g,	Y.the torked lever, U, cam, M, and griping holders, R R, for taking the	whole combined in the manner as and for the purpose set forth, as a new ar-
and attached to the shore by the shaft, H', as herein described, for the pur-	screw blank from the spring guide, holding, bringing inp, and rotating the same against the stationary toolduring the operation of sbaving the blank-	ticle of manufacture.
pos- specified.	head, and discharging the blank without the aid of a punch, for either feed	78,536.—REED MUSICAL INSTRUMENT.—E. P. Needham, New
78,489. FLIER FOR SPINNING MACHINES.—Harvey Silver,	or discharge of the screw blank, substantially as described.	York city.
Lowell, Mass. Antedated May 23, 1868.	2d, The combination of the oscillating and reciprocating griping holdercar-	I claim the flexible front, c, of the exhaust chamber, A, in combination
I claim, 1st, The spring portion, shown and described, when combined with the saddle and constructed and arranged for the removal and replacing of the	riage, J, cams, K K' N, and spring, O, arranged substantially as and for the	with the movable reed boards, whereby the requisite movement of the said
guide pin, e, for the purpose and substantially as described.	purposes set forth and described.	reed boards is allowed, substantially as herein set fortb.
2d, The guide pin, e, when constructed as described, and applied to the	78,513.—CORK EXTRACTOR.—Elijah Button, Annapolis, Md	78,537.—RAILWAY TRACK SCRAPER.—S.A.Otis, Boston, Mass.
spring portion and the saddle, c, as and for the purpose described.	I claim the cork extractor consisting of springs having their lower ends	I claim, 1st, The combination and arrangement of the shoes, B B, sleeves, Q
3d, The communation of the saddle, spring portion, and pin with the flier	adapted to turn on the ring, h, all operating as described, whereby the cork	O. rod. M. and fork. O. O. substantially as described and for the purpose set
arm or arms, for the purpose and substantially as described,	16 caged length wise in the bottle, without turning the latter upside down, as l	forth.
78,490.—HARVESTER.—Lorenzo D. Snook, Barrington, N.Y.	herein shown and described.	2d, The combination with the lever, G, in a track-scraping machine, of the
I claim, 1st, The construction and arrangement of the lever, provide d with	78,514.—PRESERVING WOOD.—James Calkins, New York city.	foot lever, G' G'', substantially as described and for the purpose set forth. 3d. The combination and arrangement of the lever, L, the link, E, and the
the anti-friction wheels and arm, with the plate, F, and forked wedge shaped		rocker shaft, D, made substantially as described and for the purpose set
lever, G, when applied and actuated as and for the purpose set forth.	compustion generated as described, admitted together into the treating	forth.
2d, The laterally adjustable coupling, R, is combination with the connec-	chamber, for the drying of wood and other materials, substantially as set	
tion, H, when made and used as and for the purpose specified.	forth.	78,538.—SEED Sowing Machine.—John B. Perkins and Ai
3d, The hook, L, when made and applied to keep the cutter bar in place, substantially as specified.	2d, The process of preparing and treating wood or other material by	Colburn, Hollis, N. H.
	means of steam and of superheated steam and carbonic oxide. or the gases of combustion, and subsequently treating with the hot oleaginous vapors	We claim, 1st, The vibrating plow beam, C, held by the spring, E, in com-
78,491.—Self-Fastening Buckle.—William W. Spencer,	under pressure while in a highly heated condition from the previous treat-	bination with the cover er, V, ar ranged substantially as described and for the purpose set forth.
Pittsburg. Pa.	ment. substantially as described.	2d, The agitator, K', arranged and operated substantially as described and
I claim a buckle provided at each end with two transverse bars, c c, ar-	3d, The described apparatus, consisting essentially of the generator, A,	for the purpose set forth.
ranged as described, for facilitating the casting process, in combination with transverse bars, F and G, as and for the purpose set forth.	and its appurtenances, the treating chamber or chambers, Y and K2, tanks, M	78,539.—LAMP BURNER.—Wm. Robinson, Brooklyn, N. Y.
	and L, with their several systems of pipes and cocks, arranged, combined, and operating substantially in the manner and for the purposes set forth.	I claim. 1st. The trough f. arranged in relation with the openings, b. at the
78,492.—Plow.—C. Ph. Steinmetz, Madison, Wis.	4th. In combination with the treating chamber or chambers and the gene-	sides of the wick tube, substantially as and for the Durpose specified.
I claim, 1st, The swivel clevis, a, as constructed, arranged, and fully de-	rator, the water gage or regulator contained within the dome, M2, or its	2d, The annular trough, D, made detachable, and constructed with the in-
scribed and shown.		ternal flange, whereby it may be fitted between the burner and the lamp
and The combination of the reversible plowshare, A, or cultivator sbare, E,	crating substantially as set forth.	substantially as and for the purpose specified.

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

regulating the flow of oil or grease, essentially as herein set forth. 78,541 — FEED REGULATOR FOR MILLS.—John Ross, Brook-hrn, N.Y. Antedated May 25,1868. I claim the use of the feed regulator, A B and J to close partially or wholly the throat of a conical mill, in the manner described. 2d, The combination of the cone J, with its wings, I, to direct the grain into the throat of the mill. 78,542.—PLOW CLEVIS.—Roger Sandiford, Joliet, Ill. I claim, ist. The double segmental clevis, a, when constructed operating.

78,542.—PLOW CLEVIS.—Roger Sandiford, Joliet, Ill. Iclaim, 1st, The double segmental clevis, a, when constructed, operating, and arranged substantially as and for the purposes set forth. 2d, The transverse oscillating clevis, e, when constructed and arranged as and for the purposes described. 3d, The combination and arrangement of the segmental clevis, a, and transverse oscillating clevis, e, when arranged, constructed, and operating as and for the purposes set forth. 78,543.—ComPosiTION FOR DEPILATING HIDES.—Peter G. Schlosser, Middletown, assignor to himself and A. P. Bar, Baltimore.Md. I claim, 1st, the composition, substantially as above described, for depilat-ing dry blees.

schlosser, Middletown, assignor to himself and A. P. Baer, Baltimore. Md. I claim, ist, the composition, substantially as above described, for depilat-ing dry bles. 2d, The composition, substantially as above described, for depilating green hides.

78,544.—Composition for Covering Roofs, Pavements,

78,544.—COMPOSITION FOR COVERING ROOFS, PAVEMENTS, WALES, ETC.—John See, Philadelphia, Pa. I claim a composition of ingredients herein named, substantially as and for the purposes as specified.
78,545.—PROCESS OF TREATING PETROLEUM FOR THE MANU-FACTURE OF LUBRICATING OILS.—Gideon O. Spence (assignor to himself, A. R. Williams, and J.S. Lathorp), fitusville, Fa. I claim, 1st, The use of the first chemical ingredient herein specified, in the manufacture of lubricating oil from petroleum or coal oil, or their products, for the purpose specified.
2d, The use of the second chemical ingredient herein specified, in the manufacture of lubricating oil from petroleum or coal oil, or their products, for the purpose specified.

The the term the second chemical ingredient herein specified, in the mann-the purpose specified. The third chemical ingredient herein specified, in the mann-fort no of lubricating oil from petroleum and coal oil, or their products, for the purpose specified. The third chemical ingredient herein specified, in the mann-fact ne of lubricating oil from petroleum and coal oil, or their products, for the purpose specified. The there is the there is specified, in the mann-fact ne of lubricating oil from petroleum or coal oil, or their products, tor the purpose specified. The there is the there is specified, in the mann-facture of lubricating oil from petroleum or coal oil, or their products, tor the purpose specified. The second and third chemical ingredients herein specified in combination, in the manufacture of lubricating oil from petroleum or coal oil, or their products, substantially as and for the purpose specified. The the manufacture of lubricating oil from petroleum or coal oil, or their products, substantially as and for the purpose specified. 78,546. — FISHERMAN'S NIPPER.—Eli F. Stacy, Gloucester, Mass.

Mass. I Cisim, as a new article of manufacture, a moulded elastic gum "nipper, s described, and for the purpose set forth. 78.547 -TELEGRAPH APPARATUS.—Joseph B. Stearns, Bos

78.547.—TELEGRAPH APPARATUS.—Joseph B. Stearns, Boston, Mass.
Iclaim, let. In an electro magnet coil, constructed of two opposing or neutralizing conductors, making each of the conductors of the same length, and giving them each an equal number of turns, as and for the purpose set forth.
2d, A k^{py} or other circnit breaker, the back stop of which is connected with the ground by a wire, in which is placed a rheostat or other resistance, and for the purpose set forth.
3d, Combining an electro-magnet constructed as described, or in any other manner, to produce either complete or partial neuralization of its cores, and for the purpose celectro.
4th, Combining an electro-magnet constructed as described, or in any other manner by which either a complete or partial neuralization of its cores.

its equivalent, and the ground, in rougo a recease of outer researce, at may for the purpose described. Ath, Combining an electro-magnet constructed as described, or in any other manner by which either a complete or partial neutralization of its cores is produced, with a key or circuit breaker having no connection between its back stop and the ground, as specified. 5th, in combination with an electro-magnet constructed substantially as described, the key, A, the key or circuit breaker, C, local battery, B, and rheostat, F, all constructed and operating substantially as and for the pur-noss set forth.

pusc set forth. 78,548 — TELEGRAPH APPARATUS.—J.B.Stearns, Boston, Mass. I claim, 1st, Tbe combination of a relay consisting of two electro-magnets, so arranged as to act upon the same armature post, in opposite directions, with a key that shall close one circuit before or at the same time that it opens another, when the same are constructed and made to operate substantially

ber, when the same are constructed and mean or optimized as described, , The combination of the relay constructed substantially as described, sonn or key, S, and theostat, B, when the whole are connected and made perate substantially in the manner and for the purpose et torth. , in combination with the rheostat, B', the double relay, when the latter constructed as to effect the finer adjustments of the forces acting upon

is so constructed as to effect the finer adjustments of the forcesacting upon the armature or armatures, as set forth. 4th, So arranging the several parts of the apparatus that the resistance of-fered to the current from the battery at either end of the line is always the same, whatever may be the position of the key at the opposite end. 5th, in combination with the key, S, constructed as described, the rheostat R', incerted between the key and the ground, substantially as and for the pur-nose described.

78,549.—FRUIT DRYER.—Alden S. Stevens, Attica, N. Y.

- I claim the combination of the hollow cylinder, A, open at both ends, and provided with outling teeth, al, at its upper edge, with the conducting bag, f, attached to its lower edge, and manipulating rod or pole, C, connected to its side, as and for the purpose set forth.

78,500.—Ax HANDLE.—Benj. D. Stevens, Decorah, Iowa

Antedated May 16, 1868. I claim, 1st, In serting india rubber or similar elastic substance in the eye of ares, hammers, and analogous tools, when placed in the position for the pur-pose substantially as described. 20, The wedge, C, when consuracted and used as and [for the purpose set

torth. 78,551.—LIQUID METER.—James Sutherland, Brooklyn, N.Y. (O)001.—LIQUID METRR.—JAMMes SULMETIANG, BFOOKIYU, N.Y. Iclaim, Ist A liquid meter composed oi two or more cylinders fitted with independent vistors, when these latter are controlled by valves operated so that either one piston or connected pair or set of pistons is or are made to actuate the valve which controls the other piston or connected pair or set of pistons, substantially as specified. 2d, The combination of the cylinders, C C' and D D', with their pistons and valves, so arranged and opersting as that either one set of pistors to said cylinders are reversed in their action by the motion of the valves which con-trol them, when the other set of pistons are midway of their stroke, or there-abouts, essentially as herein set forth.

abouts, essentially as herein set forth. 3d, The combination of the cylinders, C C' and D D', with their pistons yokes, H H', tappets, L L', arms, M M', and valves, J J', for operation to gether, and in connection with suitable inlet and outlet passages, sub-tan-tially as shown and described. gether, a tially as a 78,552.-As shown and described. 52.—WAGON FOR ADVERTISING.—George W. Thompson,

78,552.—WAGON FOR ADVERTISING.—George w. Inompoon, New York city. Antedated May 25, 1868. I claim, 1st, The employment of the vertically arranged revolving drum of advertisements or sigos, substantially as and for the purposed herein shown. 2d, The arrangement of the pulley, J, with the guide pulleys, L L, and the pulley, I, for transmitting motion to the axle, F, substantially as and for the pulley. I. purpose state 78,553.—T -TURN TABLE.—James K. Thompson (assignor to

10,505.— IURN TABLE.— James K. Holmpson (assignor to himself and Wm. B. Howard), Chicago, Ill. I claim the bearing frame, G. consisting of bearing circle, H. cross beams, k, and tru sed bearing beams, M. M. each of the above said parts con-structed as described, and the waole arranged and operating substantially as and in the manner herein set forth and specified. 78,554.—MACHINE FOR MAKING TREENAIL.—Nathaniel L.

78,554.—MACHINE FOR MAKING IREENAIL.—INALIMATICE L. Tominson, New York city. I claim the combination of the slotted slide, b, holding the adjustable knife a, the movable gage rest, g, its connecting rods, i k, sliding screw, h, the two screw wheels, c and s, with the gaze disk, k, constructed and arranged sub-stantially as hereinbefore described. 78,555.—SAUSAGE STUFFER.—John P. Troxell (assignor to him eif and Samuel H. Davis), Hancock, Md. I claim the single discharge opening for the cylnders, A. A, valve, E, and hollow journals, a, combined and operating substantially as and for the nurnose set forth.

78,556.—VALVE AND STEAM PASSAGE.—George Verry (as-

and is attachable to and detachable from the shoe, substantially as shown and described. 78,561.—Hoe.—Isaac N. Wood, Fall River, Mass.

78,561.—HOE.—Isaac N. Wood, Fall River, Mass. I claim the improved boe as made with the short, open, tabular blade, combined or provided with an angular nose, arranged with respect to such blade and its shank, substantially as specified. 78,562.—MANUFACTURE OF TABLE WARE.—Howell W. Wright (assignor to Reed & Barton), Taunton, Mass. I claim, 1st, The within-described alloy of nickel and copper, or any other substantially the same, all as and for the purposes set torth. 2d, The improved table ware, made substantially as described. 78,563.—CARRIAGE SEAT.—John H. Adams, Portland, Me. I claim, 1st, The swinzing ninged or pivoted bar, b, either with or without the studs, h, in combination with the projection, e, the said bar, b, being fatached, as set forth, and the prolection, e, to be carriage seat, as and for the purposes described. 2d, The clamp, 1, in combination with ti "projection, e, on the seat, as and for the purpos.: described, the said clamp, 1, being secured as here in set forth.

forth. 78,564.—CONSTRUCTION OF SHEET METAL CONDUCTOR PIPE. —William Austin (assignor to himself and William Opdyke), Philadel-phia, Pa. 1 claim a water conductor or pipe, made of corrugated sheets of metal, so

pina, Fa. 1 claim a water conductor or pipe, made of corrugated sheets of metal, so as to yield to the internal pressure caused by the freezing of the water there-in, substantially as described. 78,565.—VISE.—Quimby S. Backus, Winchendon, Mass

76,000.— VISE.—Quimby S. Backus, Winchendon, Mass I claim the method of protecting the screw shafts of vises with the section-al tubes, h i and k, arranged and operating substantially as described. 78,566.—HAY LOADER.—Addison Barker, Camanche, Iowa. I claim the drum, F. arranged outside of the wheel, G, in combination with the subcaves, C and O, and stop, L, for taking in the sluck of the rope, B, essentially as shown and described.

-Toy.—John H. Barnes, Troy, N. Y. 78.567. I claim the combination, in a toy whistle, of the flanges, a' and a", with a cord and ring fastened by a loop, or equivalent, substantially as described and for the purpose specified.

and for the purpose specified. 78,568.—HARNESS BUCKLE.—Alma Bedford, Coldwater, Mich. I claim a barness buckle, provided with the cross bar. E, and loop, 0, when constructed as herein described, as a new article of manufacture. 78,569.—COMPOSITION FOR DESTROYING INSECTS IN FRUIT

78,569.—COMPOSITION FOR DESTROYING INSECTS IN FRUIT TREES.—Benjamin Best, Dayton, Ohio.
Iclaimthe mode of protecting trees, by the application of the hereinbefore described composition to bands of fibrons material surrounding the trees, substantially as described.
78,570.—CAR SEAT AND CHAIR.—William N. Bragg (assignor to himself, W. H. Trainbam and J. B. Winston), Richmond, Va.
Iclam, 1st. The combination of the arm, A, with the bars, AI and A2, and rock shaft, a3, and the bell crank, Cl and rock, ot operate the bawl, C, sub-stantially as and for the purpose specified.
2d, The combination of the above parts, A AI A2 a3 Cl crand C, with the hook, b, of the leg, with the notched plates, dl, for the purpose specified and as substantially described.
78,571.—SHAFT COUPLING.—Levi Bronson (assignor to him-self and James Brayley), Buffalo, N. Y.

self and James Brayley, Burlalo, N. Y. I claim the guard flanges, C C, of the ring, A, in combination with the forked shafting, E, healless bolts, D D, held by keys. p, the whole ar-ranged as described and operating in the manner and for the purpose set forth.

forth. 78,572.—MODE OF CONSTRUCTING IRON POSTS FOR RAIL FENORS.—Henry S.Brocks and Jacob S. Lehmen, Martickylle, Pa. We claim the intervening rail supports, c, with their perforated fanges, x, in combination with the two round from succes. A Y, top and bottom plates, d d', and bed plate, B, all arranged and applied in the manner and for the purpose specified. 78,573.—TELEGRAPHIC REPEATER.—W. G. Bronson, Wells-

16,010.— IELEGRAPHIC KEPEATER.— W. G. Bronson, Wells-ville, Ohio. I claum, 1st, So combining the local circuit, influencing and operating a registering, repeating, or sgrand instrument in an electro-magnetic telegraph system, with a rec-iving or relay instrument on a main circuit. is all system as that sain local circuit shall stad open when the main circuit is close, and vice versa, all substantially in the manner and for the purpose herein set forts.

vice versa, all substantially in the manner and for the purpose herein set forta. 2d, An electro-magnetic telegraph relay or receiving instrument, so con-structed as toat the contact of the armature lever with a suitable connecting conducting point to close a local circuit, shall be broken, and the local cir-cuit thereby opened when the receiving magnet becomes excited, all sub-stantially in the manner and for the purpose herein set forth. 3d, The combination and arrangement of the armature lever of a tele-graphi: repeating instrument with the wires of the local circuit, and a con-pecting and connecting post in said circuit, so as that the local circuit shall be closed through said lever and post when the magnet attracting said lever is inactive, all substantially in the manner and tor the purpose hereins eter (orth, and substantially in the manner and tor the purpose hereins eter (orth, ath so combining the connecting device in a repeating instrument where

be closed through said lever and post when the magnet stratcting said lever is inactive, all substantially in the manner and tor the purpose hereins set forth. 4tb, So combining the connecting device in a repeating instrument, where-by the main circuit is closed, with an insulated pin upon the armature lever thereof, as thatsaid main circerrishal#Bopened when the magnet of the in-strument is excited, all substantially in the manner and for the purpose herein set forth. 5th, The improved connecting and conducting post, M, in my repeating in-strument, when constructed with a horizontal arm, s, carrying an adjusting screw and connecting pin, r, and combined with an elastic metallic strip, p. from a second coad L fag post, L, to open and close an electrical circuit, all substantially in the manner and for the purpose herein set iorth. 6th. The telegraphic switch. P, constructed of an insulated pivoted plate, provided with metallic strips, each so disposed thereon as that, by a proper siltinment thereof, a connection may be formed thereity between any two obtached pins or points beneath the plate communicating with the wires of electro-magnetic batteries, to be broken by turning the plate upon its pivot, so as to change the alignment, all substantially in the manner and for the purpose herein set forth. 78,574.—PADDLE WHEEL.—JAmes Burson, Yates, Ill. An-iedated May 23, 1868. I claim, 1st, The plates or carriers, h, for holding the gnide rods, DF, in for angular positions, in combination with the ways, L N U w and J K M, 30, The combination of four guoerods to either bucket with separate ralis or tracks to either pair of suid rods, for operation together, substantially as and for the purpose bere properse herein set forth. 78,575.—CLOTHES DRYER.—J. M, Butters, North Fryeburg, Me.

Totaim the holiow heao, E. and its bristles, made of india rubber, and combined with the handle, A, having a tenon on its end, all constructed and used substantially as specified.
78,600.—APPARATUE FOR GENERATING GAS.—R. J. Malcolm, Chichnati, Obio.
1 claim, ist, Carbureting air by reversing the vessels or chambers, x and z. substantially as described.
2d, The combination of vessels or chambers, x and z. so that as the compound vessel is revolved or reversed, air is drawn in and forced out alternately, as described.
3d, The valves, if 'g g' h h' i i', in combination with their respective pipes when used as set form.
4th, The floats, d', and cross bar, C', or its equivalent, as specified.
5th, The combination of the cylinder, A, trame, B, and floats, d d', when operating as and tor the purpose specified.
78,601.—COMPOSITION TILE OR SLAB FOR FLOORS, ETC.—I. March, Jr., Milton, Pa.
1 claim ta composition the or slab for pavements, etc., consisting of the composition surrounding and supported or strengthened by an interfor plat, orm or tramework, substantially as described.
78,602.—PUMP,—C. S. McMahan, Centerville, Ind.
1 claim the piston, P, in combinstion with valves, C and d, when the latter are provided with holisting appendages, as described, and the whole arranged and operating substantially as described.
78,603. — BRENCH LOADING FIRE - ARM. — Samuel Norris, Springfield, Mass., and Wilbelm Mauser and Paul Mauser, Oberndorf, Wurtemburg, assignors to Samuel Norris.
We claim, let, The combination of a main spring, k, forme i substantially as here of described, with the handle of the breech block, C, and arranged to proper the firing plock, C, handle, j, spring, k, and catch. m, of a breech-loading func, constructed, combined, and operating the breech.
80, 604. — WEIGHING SCOP.—J. K. O'Ncell, Kline'ston, N. Y. I claim, ist, the hollow handle, B, to the scoop, tor the purpose of receiving t

Me. I claim the combination of the bars, D D', with brackets, A and A', pivots, d, and projections, a a, and back, B, the whole constructed as described and operating as set forth. 78,576.—Dre FOR MAKING AXLE NUTS.—A. B. Candee, Ham-

den, and L. S. Taylor, Southington, Conn., assignors to Ætna Nut Com-

we claim the combination of the cut-off block, K, griping dies, F and H, die, L, and punch, a, all constructed, arra ged, and operating in the man-ner substantially as described. 78,577.—SPOOL GUARD.—W. C. Cleveland, Cambridge, Mass.

I claim the spool guard, C, provided with projections, as so constructed as to clamp the spool between them, and to serve as arles for the spool to rotate upon, substantially as herein set fortb.

rotate upon, substantially as herein set fortb. 78.578.—GAS BURNER.—Seth L. Colc, Brooklyn, N. Y. I clam adjusting the cap, A, upon the jet or burner by means of the cogged ber, c, and ratchet wheel, d, or a section thereot, or by any device that will cause the cap to move up or down, by simply turning the stop cock, B, which regulates the flow of gas to the j-t or hurner, for the purpose sub-stantially as described and shown in the drawings.

78,579.—THILL COUPLING FOR CARRIAGES.—Monroe M. Copp. Albion, N. Y.

COPP. Abion. N. Y. 1 Claum the convex-field cap, C, provided with the square sponder, b, and screw nut, k, said bead being recessed to receive one half of the draw bolt, h, and form, with the recess of the bar. A, a complete eve, and a shield to exclude dust from the same, in combination with the forked thill from, B, and lack, A, arranged and operating substantially as and for the purposes set forth.

78,580.—Foot Light for Theaters.—Coleman Defries,

London, Great Britain. I claim the exclusive use of an improved foot light, constructed and ar-ranged substantially as here in described, and shown on the accompanying sheet of drawing, whether the mechanism for raising and lowering colored mediums be or be not applied thereto. 78,581.—MANUFACTURE OF TOE CALK AND BLANK FOR THE

coop, in relation to the Damagu December 2010 and the second seco pring itself, as 6(n. The com

78,585.—DIE FOR CUTTING THE TEETH OF METALLIC COMBS.

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Caleb Foster (assignor to Files Flown), Wappinger's Falls, N. T. I claim the combination of the male and female dnes, A B. follower or plan ger, D. spring, E. or its equivaent, and the cutting I ps, b, on the male dne, all arranged for joint operation substantially in the manner as and for the purpose specified.

all arranged for joint operation substantially in the manner as and nor the purpose specified. 78,586. — BREAD KNIFE.—John Frisch, Albany, N. Y. I claim. 1st, The employment of roller, H, when arranged to regulate the thickness of the slice, and also to yield to the pressure of the kn.fe, substan-tially as and for the purposes described. 2d, In combination with the above, spring, m, bars, B C, slides, g g, and roller, h, all arranged substantially in the manner and for the purpose set forth.

78,587.—CULINARY VESSEL. — Chauncey W. Fuller, Earl-

ville, III. I claim in combination with the boiler, A, diaphragm, B, and cover, D, the vessels, C C, and perforated plate, E, when so constructed a. d arranged that the drib from the condensed steam shall fall outside of and not into the ves-sels, substantially as described. 78,588.—COOKING APPARATUS.—J. M. Gale and I. M. Avery, New York any ille. Ill

substantially as described.
78,588.—Cooking APPARATUS.—J. M. Gale and I. M. Avery, New York city.
We claim. ist, The construction of the diaphragm. C, consisting of the con-cave and conical disks, cf.alternately perforated, and connected as described substantially as set forth.
20, The combination of the removable diaphragm or diaphragms. C, with the cylinder, ., and lugs, i, substantially as and for the purposes set forth 78,589.—CHURN.—A. E Gillillan, Matian, Iowa.
Iclaim the dashers, E E, and adjustable slotted board, B, as constructed in combination with arms if g g, and crank shaft, D, when all are arranged and operated as and for the purpose set forth.
78,590.—WAGON SEAT.—Lewis Graham, Plymouth, Ill.
I claim the levers, B B, slotted and hinged at their inner ends to the wafon seat. A. with the stationary headed boits. E E, and tubular rubber springs, D oranged and used as and for the purposes set forth.
78,591.—COMBINED SQUARE AND CALIPER.—C. W. Guerrant, Leakville, N.C.
I claim the combination of the bars, A and B, and slotted arm, C, arranged and operating as described for the ruposes set forth.
78,592.—CEMENT FOR FASTENING DOOR KNOBS, AND FOR other Purposes.—N. B. Hall and Herbett Jones, (assignors to Thomas Kennedy), Brantord. Conn.
we claim the cement, produced by the combination of materials and in the proportions herein tully setforth and described.
78,593.—WASHING MACHINE.—Sa ford V. Hall, McGraw-ville, N. Y.
I claim the springs, g E, the grooved side gages, h, and the cap

78,593. — WASHING MACHINE. — Dallord J. Land ville, N. Y. I claim the spiral springs, g g. the grooved side ga2cs, h h, and the cap piece, f, in combination with the fluted roller, e, and rub board, a, all con-structed and operated substantially as described. 78,594 — LUBRICATOR. — Timothy Holland and J. T. Cody,

(78,594 — LUBRICATOR. — HIDOLHY HOHAHU AHU, J. I. COUY, Chelmati, Onio, We claim the combination and arrangement, substantially as described, of the globe, A. a, socket, B, hubdar stem, C C I D, chamber, H h, and valve F G r, as and for the purpose set forth. 78,595. — OVER SHOE. — H. L. Hotchkiss (assignor to L. Can-den C C) New Haren Court

dee & Co.,) New Haven, Conn. Iclaim the *pplication of the binding, a, to the shoe, and so as to protect he edge of the fabric, in the manner and for the purpose substantially as pecifical.

specified. 78,596.—STILL FOR SPIRITS.—Gottlob Kaiser (assignor to him-

78,596.—STILL FOR SPIRITS.—Gottlob Kaiser (assignor to himself and Vosenark & Steins). New York city. I claim, list, The within-described combination of two stills with the mash heater, and recider, and column, and derecator, and a condenser, connected and arranged for joint operation, substantially as and for the purposes berein set forth. 2d. in connection with the above, introducing themash into the mash heater gradually or by small increments so as to maintain a uniform or nearly uniform temperature in the heating vessel, substantially as and for the purpose here in specified. 3d, In a mash heating vessel, B, constructed and arranged substantially as here is specified, the within described provision for agicaring the contents, by the injection of start in to the same, in the manner and with the advantage here in set orth. 4th, Cooling the dephlegmator with water from the condenser, by means of connections and cocks, arranged as shown, so that the cold water is economized, and the cooling of the dephlegmator is gradual and uniform, all as and for the purposes herein set forth. 78,597.—SHOE FOR SEPARATOR.—Michael Laufenburge Two

10 refe purposes herein set forth. 78,597.—SHOE FOR SEPARATOR.—Michael Laufenburge, Two ,097.—CHUE FOR DEFARATION. Rocks, Cal. Claim the combination of the screw. I with the two inclined sieves. C and vibrating in alternation, substantially in the manner and for the purposes rein described.

(78), 1970.— TATE.—JOHH LEC, LEADERL, d' d'. and hinged fulcrum, b, at-27, 1983. I claim, 1st, The blocks or revolving fulcra, d' d'. and hinged fulcrum, b, at-tached to top rail, B, of gate, and hand levers, d d, when used in combination with the same, constructed and operating as described and for the purposes set forth.

with the same, constructed and operating as described and to the performance set forth. Set forth. 2d, The fliding latch, F, and inclined blane, l, and rope, a, for locking and unlocking the gate, constructed as described, and operating as set forth. 3d, The weight box attached to ran, R, and operating in slot, f, on pivot boil, e constructed as described and operating as set forth. 4th, The sliding pivot and gnide blocks, i, for keeping the gate in a vertical line while being operated, constructed as described and for the purposes set for h.

line while being operated, constructed as described and for the pripers of for h. 5th, The levers, a' a', with slots, m, and concave or convex ends, and con-vex or concave in post, A, to correspond, constructed and operating as de-scribed and for the purposes s t forth. 78,599.—TOOTH BRUSH.—Thos. Maitland, Williamsport, Pa. I claim the bollow heao, B. and its bristles, made of india rubber, and com-bined with the handle. A, having a tenon on its end, all constructed and used substantially as specified. 70,600 ADDIATUS FOR GENERATING GAS.—R. J. Malcolm,

-GATE.-John Lee, Massillon, Ohio. Antedated May

I herein (78,598

purpose set fortb.	sheet of drawing, whether the mechanism for raising and lowering colored	
78,556.—VALVE AND STEAM PASSAGE.—George Verry (as-	mediums be or be not applied thereto.	6(n, The combination and arrangement of the weighing rack, t, swivel shaft
signor to himselt and O. G. Graves). Norwich, Conn.	78,581.—MANUFACTURE OF TOE CALK AND BLANK FOR THE	r, pin, s, and the balance spring, substantially as and for the purpose herein
I claim, 1st, The arrangement of the receiving and exhaust ports B B'C C',	SAMEThomas Dooley, South Boston, Mass.	set forth.
and cut-off plugs, E E, substantially as herein described.	I claim a calk or calk blank having a relative disposition of iron and steel,	7th, The elastic washer, n, around the index pivot, and pressing upon the
2d, The recessess, A A', in combination with the ports, B B' C C', substan-	produced and shaped substantially as described.	index, substantially as and for the purpose herein specified.
tially as and for the purpose described.	78.582.—SIDE GEAR FOR THRASHING MACHINE.—John	7th. The elastic washer, n. around the index pivot, and pressing upon the
		index, substantially as and for the purpose berein specified.
78,557.—TIDE MOTOR.—Wm. W. Virdin, Baltimore, Md.	Duchesne, Lacon, Ill,	8th, The combination of the adjustable dial and adjustable index to be used
I claim, 1st, A floating vessel or buoy, R. constructed with water passages	I claim, 1st, The swiveling post,k, for the purpose of rendering the con-	together for making double or successive adjustments, as specified.
through it, and provided with a cut-off, B', and a water wheel, D, said buoy	nection between a horse-power and separator adjustable, substantially as	78,605.—MANUFACTURING FRUIT CAN BODIES.—Jacob Pfau,
being arranged in a suitable passage way for water, in such manner that	described.	Cincinnati, Ohio.
the wheel will be caused to turn both by the ebband flow of the tide, sub-	2d, The combination of the swiveling post, k.springarm, m, and notched	I claim. 1st. The mode of manufacture of a creased and open mouthed fruit
stantially as described.	foot plate, h, as and for the purpose set forth.	can body in one piece, substantially as described.
2d. The buoy, B B', constructed with b'ilkhead apartments, substantially	3d, The combination of the swiveling post, k, with the gearing, licd	2d, An open mouled and creased fruit can, whose body and the shoulder
in the manner and for the purposes described.	and shaft, e, as and for the purpose set forth. 4th, The cap, n, in combination with the gearing, c d, as and for the pur-	for receiving the wax are formed of one piece, in the manner set forth.
3d. The chamber or chambers, J', in combination with a boy, B, having an	Dose set forth.	78,606 — REFRIGERATOR.— Enoch Piper, Camden, Me.
aperture or apertures. ii, and constructed substantially as described, for the	5th, The slutted case, o, in combination with the gearing, 1 i, and swivel-	
purpose of receiving water to be ruised by the elevator, J, substantially as	ling post, k, as and for the purpose set forth.	I claim, 1st, A retrigeratory apparatus, one or more of the inner walls of which are deep, narrow vessels of this metal, to receive the freezing mixture,
describe d.		sub-tanially as described.
4th. The endless chain of double chambered buckets, in combination with		2d, The employment, in a retrigeratory apparatus, of one or more recep-
a perforated drum, G h i, substantially in the manner and for the purposes	I claim. 1st, The wheels, f f' and N, blocks, e e' e'' e''', shafts, d d', and	tacles, B D, for the freezing mixture, constructed of thin metal, in the form
described.	frame, D, with their connecting chords, x x', and elastic bands, 1 1' 1" 1", of	and proportions substantially as shown and described, to serve as partitions
78,558.—CIDER AND WINE MILL.—James Walton, Sunfish,	a street scraping machine, all arranged relatively to each other and the rest	between the sides, as constructed.
	of the machine, substantially as and for the purpose shown and specified.	3d, The combination of the snelves, F F, open at the sides and top, and hav-
Obio.	21. The lever, 0, with its arm, v, link, s, frame, D, and cam, r, of a street-	ing a bar across the top, substantially as described, with a refrigeratory cham-
I claim the arrangement of the hoppers, P Q, grinding rolls, B B', apron, F,	scraping machine, all arranged relative iv to each other and the remaining parts of the machine, substantially as and for the purpose shown and speci-	ber, C, formed substantially as described.
rolls, G G' G'' I l', incline, M, concaves, N and O, and receiver, R, substan-	fed.	78,607.—LAMP BURNER.—A. H. Platt, Philadelphia, Pa.
tially as and for the purpose set forth.	3d, The combination of the scrapers, 1234 etc., and h h', with the frames,	I claim the combination and arrangement of the concentric wick tubes or
78,559.—APPARATUS FOR DYEING.—Miles Waterhouse, Pas-	DE and F, all constructed, arranged, and operating substantially as and for	plates, 2, 3, with open spaces, b b, therein, the movable wich regulator, 4, per-
saic. N. J.	the purpose shown and specified.	forsted plate, k, and apron, a substantially as and for the purposes herein
I claim the combination and arrangement of the several parts, substan-	4th, A street-scraping machine, combining the devices above mentioned,	anecified.
tially as and for the purposes shown and described.	when constructed, arranged, and operating substantially as and for the pur-	
	poseshown and specified.	78,608.—HANGER FOR SHAFTING.—John Richards, Cincin-
78,560.—Ice Creeper.—William C. Wells, Philadelphia, Pa.		nati, Ohio.
Iclaim a " creeper " composed of a piece of leather or other soft material,	10,004.—UHIMNEY ULASP.—U. F. ESPICK, Plymouth, Ind.	I clann, 1st, The stem, C, formed to receive the lugs, d, substantially as
with metal "spure" fastened thereon, by means of metal "washers," and by	I claim the sections, A and B, constructed substantially in the manner	shown.
	specified, of any required size, and bound together around the upper end of	2d, The combination of the adjusting screws, h h, and eye bolt, E, when
arate from the shoe, and is intended to be worn beneath the sole of the shoe,	a chimney, as and for the purpose set forth.	used substantially as herein shown and for the purposes specified.

3d, The cylindrical screw piece, o, for adjusting the box, when formed to receive the bot, E, in the manner and for the purposes described. 4th, The screws, h b, in combination with the sterm piece, C, for adjusting the box. S, as here in shown and for the purposes specified. 5th, The sterm piece, C, screw piece, 0, eye bolt, E, and screws. b h, com-bing and operating substantially in the manner and for the purpose speci-

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fied. 78,609.—CARRIAGE TIIILL.—Benjamin Robinson, Thomas

78,609.—CARRIAGE THILL.—Benjamin Kooinson, Thomaston, Me.
1 claim the arrangement of the cap, e, upon the projection, a, the said cap being secured by boits, 1 and 2, in conjunction with the rubber plece.f, the rigid boitof the shatt, the sides, 3, of the torked end of the shatt, the projection, b, and etther with the elastic strip for the two purposes, or rendering the shaft holder adjustance and us bast self-supporting, is described.
78,610.—COMPOSITION FOR PREPARING PAPER FOR TRANSFERENCE STAMPS AND OTHER PRINTED MATTER.—Max Rosentbal, Philadelphia, Pa.
1 claim a chemical compound, composed of the ingredients mixed in the proportions and quantities, and applied to unsized paper, as herein described and for the purposes set forth.
78,611.—HoE.—C. W. Saladee, Newark, Ohio, and J. S. Hall, Pittsburgh, Pa.

78,611.—HoE.—C. W. Saladee, Newark, Ohio, and J. S. Hall, Pittsburgh, Pa.
We claim the lips, w x and y, when formed substantially as described, as part of the boe blade, in combination with the brace, B, substantially as and for the purposes set forth.
78,612.—GRATER AND SLICER.—C. W. Saladee, Newark, Ohio, and J. S. Hall, Pittsburgh, Pa.
We claim, ist, The frame, A, rable, B, and crank, D, substantially as described, in combination with the grater, G, substantially as and for the purposes set forth.
2d, The frame, A, table, B, and crank, D, substantially as described,

torth. 2d. The frame, A, table, B, and crank, D, substantially as described, in combination with the slicer, S, substantially as and for the purposes set for h.

forth. The hollow plug, e. in combination with the holder, E. in the manner and for the purpose substantially as shown and described. 78,613.—COMPOSITION FOR FILLING THE PORES OF WOOD FOR

VARMINING-Jacob Sheller, Wilmington, Del. I claun the combination of the within-famed ingredients, when mixed in the several quantities and proportions as herein described and for the pur-pose set forth. pose set forth. 78.614.—COTTON-SEED PLANTER.—Bryan Smith, Falkland,

78.614.—COTTON-SEED FLANTER.—Dryan Chinan, Fainland, N.C.
1 claim, ist, The cylinder, B, constructed with arms, C, and pins, E, substantially as and for the purposes set forth.
2d, In combination with the cylinder, B, the coverer, K, constructed and operating substantially as specified.
3d, A cotton planter, laving cylinder, B, cover, K, and plow, G, constructed and operating substantially as and for the purposes described.
78, 615.—PRUNING SHEARS AND KNIFE.—John Spear and J. A. Hull, Carbondale, Ill.
We claim, ist, The shears, consisting of the double curved blade, C, the blade. B, with the projecting thrust cutting edge or chisel, G, and the curved edge, D, arranged as described.
3g and 4, constructed and operating substantially as specified.
78, 615.—CUTTFR H&AD FOR PLANING MACHINES.—Albert T. Stearns, Dorchester, Mass.

(5) 010.—(1) TTFR HEAD FOR PLANING MACHINES.—AIDETT 1. Stearns, Dorobester, Mass. I claim the combination of the slotted screw bolt with the cutter head and ide cutters, constructed and arranged substantially as set forth. Also, the cutter-head, constructed with the side cutters, arranged relative-y to the center cutters, substantially in the manner and for the purpose set orth.

forth. 78,617.—EAVES TROUGH.—Wm. Stine, Elmore, Ohio. 1 claim, 1st, The construction and arrangement of the bars, e and f, and cross bar, a, for holding an eaves trough, substantially as described. 2d, in combination with the above, the wire, b h, as and for the purpose set

forth. 78.618.—Mop W BINGFR.—D. J. Stone, Warwick, R. I. Iclaim, 1st, The combination of the rolls, apron, and rod for operating the same, when arranged as herein set forth and for the purpose specified. 2d, The combination of the rolls, C F, and plates, x, as herein set forth and for the purpose specified. 78.619.—ELECTRO MAGNETIC ENGINE I C. St

78,619.—ELECTRO MAGNETIC ENGINE.—L. O. DUGLE, IVER Tork city. I claim, ist, in the employment of a series of rotary magnets, arranged in pairs, and so connected that the magnetization of one set of magnets is effect-ed before the demagnetiz (ion or the other, substantially as and for the pur-pose as described, in combination with a series of skallonary magnets, when arranged and op-rating in the manner substantially as hereinbefore described. At the rotately energizing and demagnetizing the electro magnets, without breaking the connection between the poles of the battery, in the manner hereinbefore described. 30, Conveying the induced or secondary current from the magnets as they are demagnetized, along with the current running to supply another set of magnets, substantially in the manner berein described for the purpose set forth.

for ib. 4th, The employment of a series of adjustable conductors, substantially as described, where by the speed and draft of the engine may be governed at pleasure, as bereinbefore set for th. 5th, The combination of the disks, a and b, and the conductors, efg and b, when arranged and operating substantially as described. 78,620.—BENCH HOOK FOR CARPENTERS' BENCH.—Samuel

Swan, New York city. 1 claim the bed plate, E, constructed substantially as described and fitted with a hinged tongue, actuated by a spring, as set forth, 78,621.— BEEHIVE.— Homer Tuller, Ash Grove, Ill. 1. The total of the set of the set

claim, ist, The box, or hive, A, constructed substantially as describ en used in combination with the honey boxes, B, as and for the purpo specified. 2d, The honey boxes, B, having the top side made of glass, and a series of slats at the bottom and one end, hisged in the manner substantially as and for the purpose set forth.

for the purpose set forth. 78,622.-MODE OF CONSTRUCTING LOOSE PRAIRIE FENCES.

78,022.— MODE OF CONSTRUCTING LOOSE I MININE I MODE I MININE I MODE I LIAM CONSTRUCTING A MODE I MININE I MADE AND A MADE

78,623.—MACHINE FOR GRINDING THE CUTTERS OF MOWING MACHINES-Smith D. Wackman, Auburn, N. Y.
Iclaim, lat, The comoination, substantially as set forth, with a grindstone, of an oscillating adjustable clamping trame, suspended from overbanging arms, for the purposes set forth.
2d, The combination, substantially as set forth, with the frame, A, of the vertical detachable turning posts, G, the overhanging slotted brackets, H, the journals, the swiveling suspension rods, and the clamp bar, for the purposes secified.
3d, The combination, substantially as set forth, of a supporting frame, as bed plate turning on a pivot on sold frame, a grindstone mounted on and surpice, dedocable ded plate, an adjustable overhead supporting frame, and a supper, dedocable dual, for the purposes specified.
78,624.—GRINDIG MILL.—A. H. Wagner, Staunton, Va. I claim the spider, V, the rollers, U W, the inclines, X, the rod, Y, and nut, a, when arranged and operating in the manner and for the purpose specified.

ut, a, w pecified.

78.625.—WATER ELEVATOR.—Alvah Walker, Oswego, N. Y.

specified.
Specified.
78,625.—WATER ELEVATOR.—Alvah Walker, Oswego, N. Y.
1 claim the curb C. pulley, G. pulley or pulleys, H, and cord, F. arrarged horizontally, with the fastening, I, all combined and arranged substantially as and for the purposes described and shown.
78,626.—CULTIVATOR.—William Walton, East Palestine, O. I claim attaching the baadles, D, directiv to the wings, B, and providing an adjoitable brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public brace in the curved bars, H. in the manner and for the purpose public, I, and the loose cone pulley, E. when combined and arranged substantially as shown and described.
2d, The parallel counter shaft, B. B', fixed pulley, G, loose pulley, F. sliding feather, a, collar, b, shifting lever, K, and the loose cone pulley, E. when combined and arranged substantially as shown and described.
3d, The parallel counter shafting, B. B', loose pulley, F, fixed pulley, G, sliding feather, a, loose one pulley, E. and the fixed pulley, C, pulley, C, pulley, C, pulley, C, pulley, G, loose cound and arranged and arranged substantially as shown and described.
3d, The parallel counter shafting, B. B', loose pulley, F, fixed pulley, G, sliding feather, a, loose pulley, E, attrict counter shafting. B B' pulley, C, pulley,

S. Meeker, New Haven, Conn. We claim the lever, K, constru icted so as to receive the cord. and perm

tendency of the magnetic bars to move in either direction, and will open the circuits in such manner in its upper and lower positions as will give motion to the magnetic bars, but in diverse directions, the upper position in one direction, and the lower position in the opposite direction, substantially as described and for the purpose set forth. Sth, In combination with the cylinder, the device, consisting of the sliding bar, o, and the spring, q, for moving the circuit cylinder to and holding it in any position needful to stop the enfine or running it in either direction, as described.

any position needful to stop the enfine or running it in either direction, as described. 3th, Making each alternais hellx, of those formed of the same strip of metal, coil around in a diverse duction from the of here, in such manner that when an electric current passing through allne of helices, so formed of the same strip of metal, produces a north polarity in one end of a magnetic bar, placed in any one of said helices, a south polarity will be produced in the same end of a magnetic bar placed in either of the adjoining belices of the same ine, the electric current flowing in the same direction through all the helices in the same column, substantially as and for the purpose described. 10th, Such an arrangement of the columns of helices on the opposite sides of the rout of the engine, through all now in diverse direction-magnetic bain passes, the electric current shall flow in diverse directions, giving north polarity to the upper end of the magnetic bars in noe, while it gives south polarity to the upper end of the magnetic bars in the other, and vice versa, all substantially as described and for the purpose storthan. 78,630.—RAILWAY RAIL CHAIR. — William Wickersham, Bos-ton, Mass.

ton, Mass. I claim, ist, In a railway rail chair, the screw cylinders, a a, when con-structed to work or operate automatically, substantially for the purpose set forth.

Torth. 2d. In combination with the screw cylinders, the springs, d d, as described, and for the purpose setforth. 3d. The construction of the screw cylinders, a' a', with the spaces, f, and wedge, g, in combination with the chair, substantially as described and for the purpose set forth.

the purpose set forth. 4th, In combination with the screw cylinders, the metallic strips, ii, as described and for the purpose set forth. 78,631.—(HERDING AND SECURING CATTLE.—Jesse Wilkin-son (assignor to Horace Ballard Wilkinson), Urbana, Ill I claim the combination of the windlass for stretching the rope, D, the said rope, the post, C, and trusses B B, resting upon the ground, together with the traversing block and pully, E, and adjustable stops, G, substantially as and tor the purpose set forth. 78,632.—(HERDING AND SECURING CATTLE.—Jesse Wilkin-son (assignor to Horace Ballard Wilkinson), Urbana, Ill I claim the combination of the windlass for stretching the rope, D, the said rope, the post, C, and trusses B B, resting upon the ground, together with the traversing block and pully, E, and adjustable stops, G, substantially as and tor the purpose set forth. 78,632.—BRICK MACHINE.—C. A. Winn, Lock Haven, Pa.

I claim, lat, A complete and portable brick machine, composed of the steam boiler, A, cyhnder, C, clap mill, D, constructed as de cribed, com bined and arranged in one portable apparatus in the manner and for the purpose herein set forth.

herein set forth. 2d, The formation of the annular chamber, e, of the clay mill, D, with the elevated chambers, g g, the spiral steam tube, G, as connected with the boller, and arranged in the annular chamber E, and the stationary perfora-ted steam pipes. H, passing directly from the boller through the clay mill, horizontally, all combined in the manner and for the purpose herein set forth and described. ana desc 78,633.-

-FLOOD FENCE.-Valentine Wood, Richmond, Ind. I claim the fence panel, A, the lower bar, B, of which is pivoted to posts , and which is supported in an inclined position by braces. D, wher ranged in relation to the embankment, E to operate substantially as de

78,634.-BRICK MACHINE.-Charles D. Wrightington, Fair

78,634.—BRICK MACHINE.—Charles D. Wrightington, Fair Haven, and Benjamin P. Rider, Chelsea, Mass. We claim the secondary motion fivento the screws by the cam ledge, H, and the arm, K, in addition to the primary motion for feeding down the clay into the forming tube by the gear wheels, for the purpose of smoothing the clav and finishing out the filling of the tube, substinutially as described. Also, in combination with the mold wheel, P, and pressing followers, 910 11 12, the rising and failing table, Y, under themolding wheel, and the delivering apparatus, 8 th u, when arranged and timed in their motions and periods of ress, to operate together substantially as described. 78,635.—PAVEMENT.—Arcalous Wyckoff, Elmira, N. Y. I claim, ist. A pavement, formed of blocks of wood of irregular forms and uniform length, resting upon a plank floor, and having the intermediate spaces flued with a florous material and gravel or sand and coal tar, sub-stantially as set forth.

spaces filed with a norous material and gravel or sand and coaltar, sub-stantially as set forth. 2d, The arrangement and method of forming foundations between the blocks of wooden pavements, by forming a base of saw dust, tan bark, or analogous fibrous material, and placing thereupon gravel or sand, to fill up such spaces, in the manner and for the purpose herein described Could be an an or the manner and for the purpose herein described with the spaces. 78,636.—AFFARATUS FOR EXTINGUISHING FIRES.—William

^{135,036.—AFFARATUS FOR EXTINGUISHING FIRES.—William Mullally, Boston, Mass. I claim, lst, An appartille for extinguishing fires, composed of the vessel, A, the foraminous #Nell, e, or is equivalent, and the escape cock, f, the vessel A, being provided witt a fulling aperture, and the whole being constructed, adjusted, and operating essentially in manner and for the purpose as here is shown and described. 2d, the employment of the foraminous shelf or its equivalent, as before set forth and explained.}

REISSUES.

KEISSUES. 2,956.—MACHINE FOR PUNCHING LEATHER.—James M. Bent, Wayland, Mass. PatentedOctober 16, 1866. I claim, 1st, The combination of a die with a punch, substantially as and for the purposes described. 2d, The punch and die, when made to revolve in combination, substantially as described. 3d, The mechánically revolving punch, substantially as described.

escribed. , The mechánically revolving punch, substantially as described. h, In combination with a cutting punch, a clearing pin, substantially as ribed.

as described.
3d, The mechanically revolving punch, substantially as described.
3d, The mechanically revolving punch, aclearing pin, substantially as described.
3th, So constructing the parts so as to cause the die to start itself to different or varying tolcknesses of leather, substantially as described.
2,957... MOP HEAD.—Colby Brothers and Company, Waterbury, Vt., assignees, by mesne assignments, of Harvey Murch, Division A. Patented June 14,1853.
I claim, ist, The combination of a socketed cross head with a binder, having studential on of asocketed cross bead with a binder, having studential of a socketed cross bead with a binder, having the two ends thereof united directly to each other, and a single fastening for holding the whole binder of arcss bead with a handle and a binder, having the two ends thereof united to or with the handle itself, is such position as to clamp rags, etc., the combination of a sceketed cross head with a handle and a binder, having the two ends thereof united to or with the handle itself, the combination of a cross bead with a handle and a binder, having the two ends thereof united to revise head with a handle and a binder, having the two ends thereof united to revise head with a handle tader, the combination of a cross bead with a handle and a binder, having the woole thereof united to revise head with a standle and a binder, having the woole thereof united to revise head with a handle tader, the woole storeof united box of a cross bead with a handle and a binder, having the woole binder inferely to the statially such as efforts.
2,958.—Moor HEAD.—Colby Brothers and Company, Water-bit and the statial of the woole bit and the statial or a store and thereof. Dipplichtable, and will give him all the directions needfulto protect his rights.
 Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN, have been activelyengaged in the business of obtaining patents for over twenty years-mearly a quarter of a century. Over Filty Thousand inventors have bad benefit from our counsels. More than one third of all patents granted are obtained by this firm.
 Those who have usade inventions and desire to consult with us are cordially invited to do so. We shall be nappy to see them in person, at our office or to advise them by letter. In all cases they may expect from us an honest opinion. For such consultations, opinion, and advice, we make no charge. A pen-and-ink sketch, and a description of the invention sbould be seen together with teamps tor return postage. Write plainly, do not use pencil nor pale ink; be orfef.
 All business committed to our care, and all consultations, are kept by us secret and strictly confidentiat. Address MUNN & CO., S7 Park kow, New York.

head, the combination being substantially such as set orthanding to tobs 2,958.—Mop HEAD.—Colby Brothers and Company, Water-borr, Vt. assignees, by mesne assignments, of Harvey Murch. Division B. Extended seven years. Patented June 14,155. I claim, ist, The combination with a cross head and binder of a ratchet fastening, the combination being substantially as described. 2d, The combination of a ratchet fastening, bandle, binder, and cross head the combination being substantially such as set torth. 2,959.—EYELETING MACHINE.—William N. Ely, Stratford, Conn. assignee, by mesne assignments, of Luther Hall. Dated May 14, 1867. Division A.

I claim, lst, A movable head or carrier, in combination with the punch and set, or ther of them, constructed, arranged, and operating substantially as described.

as described. 2d, A bead or carrier, so constructed and operated as to allow the punch and set to be alternately depressed by the same lever, substantially as de-scribed.

and get to be attributed upressed by the same tever, substantially agge-scribed. 3d, So constructing the mechanism that the punching table and setting bed shall reciprocate laterally, and aiternately occupy the same place, sub-stantially as and for the purposes described. 4th, The reciprocating punching table, in combination with a stationary work supporting table, when constructed, arranged, and operated as de-scribed, so as to be moved to and from the punch, and under the material, substantially as set forth. 5tb, The striking lever, so constructed and arranged as to cause the set to pick up the evelet while the punch is making the hole for its reception, sub-stantially as described. 6tb, The setting die, so constructed and operating as to pick up the evelets from the chute, and present them to the place of insertion, substantially as

from the chute, and present them to the place of insertion, substantially as described. 7th, The reciprocating setting bed, constructed, arranged, and operating automatically, substantially as described. 8th, Feeding the material forward by means of the setting bed or holding point, substantially as described. 9,960.—EYELETING MACHINE.—William N. Ely, Stratford, Conn., assignce, by mean assignments, of Luther Hall. Patented May 14, 1867. Division B. I claim 1st, A feeding instrument, which engages with the work feeds for-ward, disencages, retracts, and engages azil, in combination with a punch

ment presented is patentable. **Ca. vests.**—A Cavest gives a limited but jmmediate protection, and is par-ticularly useful where the invection is not fully completed, or the model is not ready of influer that is wanted for experiment or shufty. After a Quesat bas been flicd, the Farms Office will not suffice a patent for the same invection to any other person, without giving notice to the Cavestor, who is then al-lowed three months time to file in an application, for a patent. A Cavest, to be of any value, should contain a clear and concise description of the inven-tor, so far as it has beer completed, liberation by Gravings when the ob-lect admits. In order to file a Cavest but the method is a my to send us a wordg. Address MUNN & CO., 37 star Row, New York: The concerted as desired. Readed on a payment of sile a poter along a period as desired. Readed on a payment of sile a poter sile and on a period as desired.

4tb, The combination of movable carrier, D, punca, E, and sliding plate, Q, 400, The combination of movable carrier, D, pu ach, E, set, F, sliding plate substartiallysa described. 5th, The combination of mbvable carrier, D, pu ach, E, set, F, sliding plate Q, and bed, S, substantially as described. 6th, The movable carrier, D, constructed, arranged, and operated, substan-tially as described. 7th, The combination of levers, V and T, and pin, S, substantially as and for the purposes described.

 $|J_{UNE}| 20, 1868$

thally as described.
The new combination of levers, V and T, and pin, S, substantially as and for the purposes described.
Sth, The combination of plates, Q and L, arranged and operated substantially se described.
Sth, The combination of levers, V and T, pin, S, and screw, w, substantially as and for the purpose described.
Junt, The combination of levers, T, block, Π, lever, V, and eccentric wheel, X, constructed, arranged, and operating substantially as described.
Junt, The combination of levers, T, block, Π, lever, V, and eccentric wheel, X, constructed, arranged, and operating substantially as described.
Junt, The combination of presser foot, N, spring, O, with both punch, E, and set, F, or either of them, and table, A, substantially as described.
Junt, S, Canton, Ohio. Patented October 4, 1853. Extended seven years.
I claim, 1st, A frame or carriage, beneath a grindsione or polishing wheel, supported at one end by any utilable device, and a therent, for purpose described.
Junt, ist, A frame or carriage, beneath a grindsione or polishing wheel, supported at one end by any utilable device, and a the other by the bands of the operator; said frame being capable of a lateral, long/tudindi, and oscillating adjustment during the proces of granding. for the purpose described, a cord or orope, or 1b equivalent, the relation of the weight of the frame la the hands of the operator, as herein set forth.
2,964.—LUBRICATING DEVICE.—Barton H. Jenks, Bridesburg,

2,964.—LUBRICATING DEVICE.—Barton H. Jenks, Bridesburg,

2,502.—LUBRICATING DEVICE.—Barton H. Jenks, Bridesburg, assignce of Mathew Senior, Frankford, Pa. Patented March 17, 1868. I claim.ist,Lubricating a slaft which is required to receive endwise motion also motion about its axis by means substantially as described. 2d, The device for Jubricating the feathered shaft, CD, from cach side of the feather, through holes in the tubular journal, B, and the hole, f, in the bollow cap, g, ashereing d sectived. 3d, The combination of the lubricating device with a shaft which moves longitudinally independent of its sleeve, and turns with said sleeve, substan-tially as described.

-WELL TUBE.-F. A. Mack, Niles, Mich. Patented Sept. 11, 1866. I claim a well tube in which the openings or inclusions, e.e., are cut or formed from the inside, so as to leave a diminishing external projection from the in-side, in the manner and for the purpose substantially as specified. 2,766.—MACHINE FOR GRINDING SCALE PIVOTS.—Frederick

2,766.—MACHINE FOR GRINDING SCALE PIVOTS.—Frederick Meyer, Newark, N. J. Patented May 14, 1867.
I claim, ist, The combination of the two adjustable revolving grinding wheels, G. with the reciprocating carrier. E. provided with head blocks, in notched rests, pland claiming device, M. for holding the scale beam, arranged subsemutally as described, wherehv the knite deges or pivots of scale beams are ground to great sceuracy of adjustment, as set forth.
2d, The construction and arrangement of the longitudinally sliding carriage G, reciprocating carriage, B, and carriage, E, as berein set forth for the pur-pose specified; and 3d, Adjusting the scale pivots to be ground upon both sides by me us of the set screws or pins, k 1, secured to the arm, 1, of the sliding carriage, E, and har, H, upon the frame, A, substantially as herein set forth.
2,767.—MODEOF ATTACHING URNAMENTAL HEADS TO NAILS. Turner, Seymour, & Judi (assignees of F. J. Seymour), Wolcottville, Conn. Patented June 26, 1866.
We claim an orasmental picture.nall head, made with a sbeet metal body

Conn. Patented June 26, 1866. We claim an ornamental picture-nail head, made with a sheet metal body or back, having within it a screw thread for the nail, substantially as speci-fied.

DESIGNS.

3,061.—FLOOR-CLOTH PATTERN.—Hugh Christie, Morrisania, assignor to D. Powers & Sons, Lansing burg, N.Y.

3,062.-KNITTED FABRICS.-J. P. Delahenty, Cohoes, N. Y.

3,065.—STREET-LAMP POST.—R. H. Smith, Pittsburgh, Pa.

3,066 .- PERFUME BOTTLE. - Henry Whitney, East Cam-

3,067. - TOILET BOTTLE. - Henry Whitney, East Cam-

3,068.—LAMP FOOT. — Henry Whitney, East Cambridge, Mass.

The First Inquiry that presents itself to an who has rude any improve-ment or discovery is: "Can i obtain a Pat-ent?" A positive answer easi only be had by presenting a romplete application for a ratent to the Convolutioner of Pitents. An application consists of a Model, Draw-ings, Petition, Oath, and full Spreifleation. Various official rules and formalities must also be observed. The efforts of the in-ventor to do all this business hitwelf are generally without success. After a season of real perplexity and delay, be is have all the work done over again. The bost plan is to solid; proper advice at the beginning.

beginning. If the partnes consulted are honorable men, the inventor may safely con-fide bis ideas to them : they will advise whether the improvement is proba-bly patentable, and will give him all the directions needful to protect his

Preliminary Examination.—In order to obtain a Preliminary Examination, make out a written description of the invention in your own words, and a rough peet of the row of the invention in your own words, and a rough of the YN & CO., 37 Park Row, and in due time you will receive an acknowledgement thereof, followed by a written report in regard to the patentability of your improvement. The Prehimary Examination consists of a special search, which we make with great care, among the models and patentable.

Foreign Patents .- American inventors should bear in mind that, as a

ATENTS.

The First Inquiry that presents itself to one who has made any irresents

3,063.—BURIAL CASKET.—J. M. Hall, Philadelphia, Pa. 3.064.-B.-CLOCK CASE.-G. B. Owen, Winsted, Conn.

bridge, Mass

bridge. M

as the case may be, substantially as herein set forth. 78,629.—ELECTRO-MAGNETIC ENGINE. — William Wickers- ham, Boston, Mass, I claim, ist, In electro magnetic engines, the arrangement of the magnetic bars in an endies chain, having alternate magnetic bars and links of non- magnetic metal, the chain being so a rranged in the engine that all the mag- netic bars can pass successively through the same helix or column of helices substantially as described, and for the purpose set forth. 2d, in electro-magnetic engines, the arrangement of two chain gears on parallel shafts, of suitable form and distance apart to receive the electro- marnetic chain, all arranged in such manner that the gears and chain can re- volve together, substantially as described. 3d, In electro-magnetic engines, the arrangement of two or any desirable number of chain gears on the same shaft, with the corresponding number of electro-magnetic engines, the substantially as described, and for the purpose set forth. 4th, In electro-magnetic engines, out of a thin ribbon shabed strip of metal, the formator, of two or more helice, s, as described, and so arranging them in the puelle, in columns or otherwise, that each shall receive a differ- ent series of magnetic bars through it ad so further arranging them that when the curve it is closed through non-helix, is shall be closed through all when the curve is closed through one helix, is shall be closed through all	3d, The spring presser foot, in combination with the feeding mechanism, arranged and operating with an eyeleting mechanism, substantially as de- scribed. 4th, An adjustable work feeding mechanism, in combination with the mechanism for punching and eyeleting, substantially as described. 5th, Funching the holes, supplying, inserting, and setting the eyelets, adjustably spacing the distances, holding and feeding forward the work, by means of devices so combined as to effect this object automatically, substan- tually as described. 2,961. — LYELETING MACHINE.—William N. Ely, Stratford, Conn. assignce, by mesne assignments, of Luther Hall. Patented May 14,1867. Division, C. I claim, ist. A hopper for holding the eyelets, in combination with agitating devices, substantially as described, and a chute, provided with an enlarged force and for the source and substantially as and for the purposes set for A hopper and chute, constructed and arranged substantially as de- scribed, so that the eyelets shall be deliver-d from the hopper, flaring end down, and presented to the set, flaring each up, substantially set forth, in the presented to the set, flaring each up, substantially set forth, in the presented to the set, flaring each up, substantially set forth, in the presented to the set, flaring each up, substantially set forth, in the presented to the set, flaring each up, substantially set forth, in the presented to the set, flaring each up, substantially set forth, in the substantial set of the set, flaring each up, substantially set forth, in the substantial set of the set, flaring each up, substantially set forth, in the substantial set of the set, flaring each up, substantial set of the set, flaring each up, substantial set forth, in the substantial set of the set, flaring each up, substantial set of the set.	Patents are granted for Seventeen Years, the following being a schedule of fees:
magnetic chain, all arranged in such manner that the gears and chain can re-	tuily as described.	Rints on Selling Patents, Rules and Proceedings at the Patent Office, the Pat- ent Laws, etc., see our instruction Book. Sent free by mail on application.
3d, In electro-magnetic engines, the arrangement of two or any desirable number of chain gears on the same shaft, with the corresponding number of	Conn., assignee, by mesne assignments, of Luther Hall. Patented May	them to their triends.
ing their power to the same shaits, substantially as described, and for the	devices substantially as described, and a chute provided with an enlarged	MUNN & CO.,
4th, In electro-magnetic engines, out of a thin ribbon shaped strip of	receptacle or dish at its lower end, substantially as and for the purposes set fortb.	Office in Washington, corner of F and 7th streets.
them in the engine, in columns or otherwise, that each shall receive a differ-	scribed, so that the evelets shall be delivered from the hopper, flaring end	Potents are granted for Seventeen Vears, the following being a
	3d A hopper and chute set, nating the tail up, substantially set forth.	schedule of fees:
5th, The circuit cylinder, with its spiral conductors so formed and in such	2,962.—EYELETING MACHINE.—William N. Ely, Stratford,	On filing each Ceveat
connection with the helices, that it shall continue the same relation between	2,000. HIELSING MACHINE. WITHAM IN HIY, Suation,	0 n 188 u ng each oi 1 gin a' Patent
the closed circuits and the position of the magnetic bar, or as near as may be, as it advances through the column of helices.	Conn. assignee, by mesne assignments, of Luther Hall. Patented May 14, 1867. Division D	On appeal to Comn. 1881 oner of Patents
the closed circuits and the position of the magnetic bar, or as near as may be, as it advances through the column of helices. P-6th, Such disposition of these spiral conductors around said circuit cylinder that none of them will perform the same innction for each magnetic bar as if	Con , assignce, by mesne assignments, of Luther Hall. Patented May 14,1897. Division D L claim 1st. The combination of movable carrier, D, with both punch E.	On aspect to Commissioner of Patents
the closed circuits and the position of the magnetic bar, or as near as may be, as it advances through the column of helices. r-6th, Such disposition of these spiral conductors around said circuit cylinder that one of theim will perform the same function to reach magnetic bar as it enters a column of belices, or for all the magnetic bars of a series which enter a series of said columns at the same time, substantially as described and	Conn, assignce, by mesne assignments, of Luther Hall. Patented May 14, 1867. Division D I claim, ist. The combination of movable carrier, D, with both punch, E, and set, F, or either of them with lever, K, constructed, arranged, and ope- rating substantially as described. 2d. The combination of movable carrier. D, with both punch, E, and set, F.	On appeal to Commissioner of Patents
the closed circuits and the position of the magnetic bar, or as near as may be, as it advances through the column of helices. refith, Such disposition of these spiral conductors around said circuit cylinder that one of them will perform the same function for each magnetic bar as it enters a column of belices, or for all the magnetic bars of a series which	Con , assignce, by mesue assignments, of Luther Hall. Patented May 14, 1867. Division D I claim, 1st. The combination of movable carrier, D, with both punch, E, and set, F, or either of them with lever, K, constructed, arranged, and ope- rating substantially as described. 2d, The combination of movable carrier, D, with both punch, E, and set, F, or either of them. lever, K, and cam, L, constructed, arranged, and operating substantially as described.	On aspect to Commissioner of Patents