The qualifications for high and responsible positions are as various as the positions themselves; and a man may often possess brilliant talents, and yet lack some apparently minor but all essential endowment or acquirement without which a particular place must be forever inaccessible to him. It may be accuracy, it may be a reputation for probity, tried and tested by service in other subordinate but responsible positions, or judgment matured by experience; whatever it is it must be acquired before he can reasonably expect corre sponding promotion. If a young man feels that he possess es the necessary ability for success in learned professions, yet lacks the courage to endure the self-denial which is usually to be expected at the outset of a career in any of them, he is small potatoes, and will probably go through life with the feeling that he might have made some noise in the world had not cruel destiny been so unfavorable to his youthful as pirations. So if a young man lacks courage to live within his income, and allows himself to become a slave to debt, he is small potatoes, and the chances are much against his ever being anything else. As a straw at the source of a river may change its current, so a single act at the outset of business life may direct its entire course. Only the greatest minds can reclaim a misdirected life, and secure success in spite of the lost opportunities, and accumulated difficulties resulting from it.

We do not believe that men often fail to reach their proper level; and it is fair to infer, that, when a person is found at mature years occupying a very inferior position, that there was something about him that made him small potrtoes. The exceptions to this, if there are any, only prove the rule and it may be said to be as certain as any principle in busi ness can be, that, in any profession, good ability, close application, and patient courageous effort, during the day of small things, will ultimately be rewarded by success.

IMPROVEMENT IN WATER WHEELS.

It is rare that it falls to our lot to notice a patent so simple and so obviously useful that it can be fully described without engravings. In this case, however, we are enabled to do this, as the improvement does not relate to the general structure of water wheels, but only to the prevention of the oxidization of iron wheels, without reference to their form. and also to the reduction of the friction of the water upon the working parts of such wheels. The improvement is the invention of Mr. James P. Collins, of Troy, N. Y., and consists in enameling all portions of any water wheel exposed to the action or force of the water with some suitable material or combination of materials, thereby giving a smooth and glazed surface, over which the water flows with greatly diminished friction, of course adding proportionally to the efficiency of the wheel. It is obvious, also, that all chemical action of the water must be entirely prevented by such a coating. The patent upon this improvement does not limit the inventor to any particular silicious substance or combination of substarces, and he is at liberty to use any materials for the purpose above described that he may find upon experiment to be useful. The inventor does not intend to confine the application of this improvement to the wheels of his own manufacture, but will dispose of rights to manufactur. ers of water wheels throughout the United States. All applications should be made to J. P. Collins, Troy, N. Y.

The New English Ironclad.

The shipwrights at Chatham dockvard, England, commenced laying the blocks and ways for the new armor-clad turret ship Glatton. An exchange says,

"The drawings and plans received at Chatham dockyard from the Admiralty, show the Glatton to be a vessel of 2700 tuns burden, with a length of 245 feet, and a breadth of beam of 49 feet. It is, however, in her armor plating that she will surpass in defensive powers every ship yet constructed ; it being intended to plate her with armor 12 inches in thickness along her most exposed parts, while on her turrets the *Glatton* will carry armor 14 inches in thickness, laid on a 10-inch backing of teak, with the usual inner "skin" plating. Unlike the Monarch-the deck of which is encumbered with a topgallast forecastle-the single turret of the Glatton can be directed towards every point of the compass. Her offensive will, at the same time, be on a par with her defensive powers, it being intended to arm her with a couple of 25-tun gunsthe most formidable armament yet given to a vessel of war.

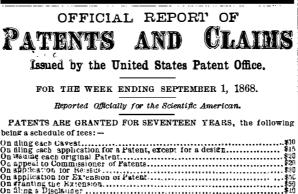
What Breaks Down Young Men,

81,580. — WELL TUBE. — David Baker, Boston, Mass. Icham, 1st, The double strainer. D, with intervening filtering material, ar-ranged aid operating in combusiton with for in continuation of a well-tube, substantially as and for the purposes set forth. 2d, The point. B, coupling, C, tube, A, and strainer, D, all constructed, ar-ranged, and operating substantially as and for the purposes above so tforth. 81,581. — WELL I'UBE. — David Baker, Boston, Mass. I claim, 1st, A conical point, F, formed with perpendicular sades, and with shoulders between the apex being formed with nerpendicular sades, and with shoulders between the apex being formed with nerpendicular sades, and with shoulders between the apex being formed with nerpendicular sades, and the steps and described. 24, the combination of the interior perforated tube, A, and the exterior screen, H, when a chamber is forced betweensaid tube and strainer, substan-tially as and for the purposes set forth. 34, The arrangement of the point, F, in combination with the tube, E, and holes therein, strainer on screen, H, and the chamber or space tormed ween the strainer and tube, arranged and operating substantially as and for the purposes between the forth. 81, 582. — WELL I'UBE.— David Baker, Boston, Mass. It is a commonly received notion that hard study is the unhealthy element of college life. But from tables of the mortality of Harvard University, collected by Professor Pierce from the last triennial catalogue, it is clearly demonstrated that the excess of deaths for the first ten years after graduation is found in that portion of each class inferior in scholarship. Every one who has seen the curriculum knows that where Æschylus and political economy injures one, late hours and rum punches use up a dozen; and that the two little phriposes herein set forth. 582. WELL TUBE. David Baker, Boston, Mass. fingers are heavier than the loins of Euclid. Dissipation is a DI 1000. WELL 10 DE. DAVID DAKET, BOSTON, MIASS. I claim, 1st, The slide, J, whether placed on the inside or outside of a strainer, in a well tube, so arrange d and secured to the point and operating as to leave the woven where as the only tube near the lower part of the well, substantially as and for the purposesheren set forth. 2d, The combination of slide, J, with strainer, K, well tube. I, and coup-ling, L, with screw point, M, made and arranged substantially as and for the purposes here use forth. 81 swift and sure destroyer, and every young man who follows it is, as the early flower, exposed to untimely frost. Those who have been inveigled in the path of vice are named "Le gion," for they are many-enough to convince every novitiate 81,583.-MOP WRINGER.-Myron J. Barcalo, Mount Morris, that he has no security that he shall escape a similar fate. N. Y. I. S. The skeleton frame. B, made up of the boops, bb, aud stan-data as, c cl c2, and having combined therewith the rollers, C D D, and ball or treadle, E, the whole being so arranged as to be applied to the inside of an ordinary pail, as berein set forth. 21, The combination, with the stationary roller, C, of the pressing rollers, D D', mounted upon the rollers, ff, arranged as described, and operating in A few hours of sleep each night, high living, and plenty of " smashes," make war upon every function of the human body. The brains, the heart, the lungs, the liver, the spine, the limbs, the bones, the flesh, every part and faculty, are overthe manner and for the purpose specified tasked, worn, and weakened, by the terrific energy of pas-81,584.-LANTERN.-Lewis F. Betts, Chicago, Ill. Antedated August 20, 1963. — In Alter A. Dewis F. Detts, Ontcago, Int. Antechated August 20, 1963. I claim, ist. Thespring band, E, for securing the upper end of the globe, substantially as specified. 2d, Constructing a lantern base of two or more sections, D, provided with fianches, F, substantially as and for the purposes set forth. sion loosed from restraint, until, like a dilapidated mansion the "earthly house of this tabernacle" falls into ruinous decay. Fast young man, right about!

Scientific American.

Singular Optical Effect of Certain Sounds. A correspondent from Michigan writes, that whenever he hears sounds of a certain bell in his neighborhood, he experiences a sensation of flashes of light, or, rather, shadows, which, upon the ceasing of the sounds, give the effect of flashes of light upon the eye. The phenomena are doubtless to be referred to reflex nervous action. The sense of sight is more liable to such reflex effects than any other, often being affected by disturbances in remote organs, as, for instance, the stomach. Instances are on record where sight was so depraved by disordered digestion, that apparitions of people, distant places, etc., were seen by the patient, these symptoms entirely disappearing upon the removal of the disturbing cause

JAPANESE PAPER .- The Japanese manufacture and use paper to as great an extent as perhaps any other nation. There are very few of their industrial operations that do not involve the use of this material. Both for ornamental and useful purposes it seems to be the sine qua non. Fans, lanterns, umbrellas, pocket handkerchiefs, cloaks, and windows are made of it. The paper strings and hats lately introduced into this country have been in use for centucies in Japan.



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In addition to which there are some small revenue-stamp taxes. Resider	

of Canada and Nova Scotia pay \$500 on application

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

81,572.—FLEXIBLE PIPE-JOINT COUPLING.—Squire Ains-

S1, 9(2, -FLFXIBLE FIPE-JOINT COUPLING, -Square Anneworth, Pittsburg, Pa.I ciaim, iat, A piPe-connection, consisting of a conical recess in the end ofone pipe, at a trustum of a cone at the termination of the end of the other,sala pipes being so held together, by a clamp or other means of sequent, as toprimit the rotary movement of (nw or both of the said pipes without varia-tion from the plane of sala movement, all as and for the purpose heretoforedescribed.

To a striked. The spin of the ifie 34 The chain, G. in combination with the spring coupling, C', substantially as and for the purpose set for the

81.573. -RAILWAY CHAIR.-Samuel T. Alexander, Pitts

burg, Pa. I claim a railroad chair, composed of a bed plate, A, and movable clamp-ng pieces, substantially as and for the purpose set forth.

ing pieces, substantially as and for the purpose set forth. 81,574 — HAND MILL. — Edw n Alsop, new York city. 1 claim the arrangement, berein described, of the vertical shaft, F, remov-able grinding cone, H, tapering cy linder, I, corrugated vertically on its in-sive, hopper, J, scraper, L, cylinder K, with discharge orlide, K, wrought-run trame, A, screw plug, G, shaft, C, hy wheel, B, and bevel gearing, D E, for the purpose set forth.

LUE purpose set forth. L575.—MACHINE FOR MAKING BARRELS.—Saxton J. Ar nold and Amos F. Clark (assignors to Saxon J. Arnold), Raymondsville N. Y.

N.Y. We claim the adjustable flanged cone-shaped hubs, C, when provided with the shuting pins, F, and springs, f, in the flange, E, in combination with the cone-shap-dnuts, G, and screw shatt, A, as bereinshown and described. 81,576. NON-CORROSIVE VALVE SEAT.—E. H. Ashcroft, Bos-

51,017. If UNFORMOSTER (and copper, in any proportions, as set forth, ton, Mass, I claim. 1st, An alloy of nickel and copper, in any proportions, as set forth, for the construction of valves or valve sents for steam, etc. 2d, An alloy of gold or silver, in any desired proportions, for the construc-tion of valves or valve seats for steam, for the purposes of forth. 2d, An alloy of gold or silver, or allon but m allone, for the construction of valves or valve seats for steam, for the purpose set forth.

-MACHINE FOR COVERING CORD.-John Bachelder.

81,577.—MACHINE FOR COVERING COND.—John Bachelder. Norwich Conn
Claim, 1st, The miter gears, a' a c, central shaft, C, supports, A1 A'2, bob-bin gears, rd, covering-cord carriers, F, guide, J, and gears, IL, in combina-rion, a d operature so that each chread of a strand is covered with fulshing material, and the several strands thus covered, twisted; the finishing mate rial being laid in a converse infection to the twist limpartied to the respective strands, a'l surstantially as set forth.
2d The shaft, o, Rears, a' a, shaft, C, sleeve, c', and pinlons, c d, stationary support. A1, geared spool-carrying plates, 41, support, A2. "ear, D, covering-cord carriers, F, and guide, J, combined and operating substantially as and for the purpose set forth.
3d, In combination with the above, the winding-and-twisting flyer, con-structed and operating as described.
81,578.—SHUTTLE FOR LOOM.—Edward Baggett, Fa'l Riv-er, Mass.

er, Mass. I claim the combination, with the spring, A, and shoulder, C, of the spind'e of the secondary spring, B, no. ched, slotted, and shding substantially as and

for the purpose described. 81,579.— MARKING WEATHER-BOARDING.—Joseph W. Bailey,

81,010,— DIARKING IN ACCOUNT NOT A DIARKING IN A DIARKING IN A DIARKING IN A DIARKING OF WEATHER DIARKING IN THE MAINTER AND A DIARKING AND A 81,580.-WELL TUBE.-David Baker, Boston. Mass.

3d, Securing the flanches and forming the carrying-holes for the guard by means of eyelets at d, substantially as described. 4th, The inreckets or ledges, F, for supporting and carrying the guard at a distance from the indiges, F, for supporting and carrying the guard at a distance from the indiges, F, for supporting and carrying the guard at a distance from the indiges, F, for supporting and carrying the guard at a distance from the main portaous of the base, substantially as specified. 5th, The rou or ring, J, for strengthening the hase and supporting the brack is or ledges without materially bose ructing the light, substantially as specified. 6th, the extended guard rods, N, when such extended portion, e, is used for a hook if careb, substantially as described. 8th, Theoremic house in a combination with the books, e, sud bracket, F, for preventing the detachment of the guard, substantially as specified. 8th, Theoremic hore, caubeta, for securing and takinehing the lamp, in com-bination with the pris, c, substantially as specified. 9th, Sith – Can ToP, --Lew is F, Betts, Chicago, III. 1clim, ist, The inclines or cams, a, when huired or thread down so as to form the carm on the edge of the metal of which the breast or permanent por-tion of the top is constructed, and operating substantially as specified. 3d, The handle, f, when proj cline through the removable top or cover, B, so that its ends will form the largs or pins, d, substantially as described. 81,585. — Chiukn DASHER.—A. T. Bleyley, Conception, Mo. 1 claim, as a new article of manufacture, the curun dasher. consisting of the inverted functed shaped tube, AB, dhas-shapen perforated fance, C, and radial wings, D, all constructed and arranged to operate ashereinshown and described, for the gurpose specified. 81,587.—DECOLORIZING TANNIN Liquid.—George Bossiere, Paris, France. 1 claim, ist, The nee of the herein named substance, for decolorizing tan-min places, substantially in the manner described. 36. The method of decolorizing tamm. by mixing with it

81 588.—REFRIGERATOR.—Edwin D. Brainard, Albany, N.Y. and secured to getter by clamps, in the construction of refrigerators, sub-stantially in the manner and for the purposes above described. 81.589.—CHURN. -Victor M. R. Branch, Richm and Va.

1. claim, 1st, The combination of the external dasher, B, when constructed as shown and described, and revolving in opposite directions as specified, and for the purpose set forth. 2d, The combination of the external dasher, B, which dasher, B, with the internal casher, B, hollow spindle, D, and pinion, F, with the dasher, B', spindle, C, and pinion, G, all as and for the purpose specified.

81,590.- APPARATUS FOR CARBURETING AIR AND APPLY-

cib. d.
81,590.—APPARATUS FOR CARBURETING AIR AND APPLY-ING THE SAME.—Arthur Brin, Paris, France.
I claim, 1st, in apparatus, such as described, the combination, with the fluid reservour and carbureting chamber, of an interposed feeding vessel, connected with both the reservoir and the carbureting chamber, in the manner described, and communicating with the latter by means of wicking, which supplies the quantity of fluid required to charge the air in said cham-ber, a set forth.
2d The combination, with the feeding vessel, and trough formed therein for receiving the fluid from the reservoir, of a series of sphons, of gradu-ated length, and racks, and philons, and shaft for elevating or lowering said sphons, and thus requising the fluid view of the liquid to the caroureter, in the mann r showi, and specified.
3d, The employment, in connection with an apparatus such as described, of a blow pipe, to which air from the blower, and carbureted air from the gas generative chamber, are supplied, substantially in the manner described, and thus recomber the connection with a bioger or air supply apparatus, and the one series communicating with a blower or air supply apparatus, and the other with the g s generating chamber of the caroureting appara-tus, substantially as and ior the purpoes herem set forth.
81.591. —Ohgan PIPE.—George H. Brock, Hunt n gton, N. Y. I claim 1st, constructing an organ pipe of a curved plate, A, held between the disks, B, as set forth..
3d, The pushet. D. for guiding the wind from the wind chest against the mouth of a curved organ pipe, as specified.
3d, The pushet. D. for guiding the wind from the wind chest against the mouth of a curved organ pipe, as specified.
3d, The pushet. D. for guiding the wind from the wind chest against the mouth of a curved organ pipe, as specified.
3d, The pushet. D. for guiding the wind from the wind chest against the mouth of a curved organ pipe, as specified.
3d

Watertown, N.Y. I claim the bulletin frame, as constructed of the outer frame, A, and inner frame, d, the latter divided by such strips, a, and provided with panes of glass and removable backs, B, the frame, A, having moldings and fastening devices, adapted to secure the southers, n, all arranged substantially as here in shown and described, for the purpos-as peculid. 81,573.—SAFETY ATIACHMENT FOR EGG-CARRIER.—Abner

H. Bryant, Wimington, Del. I claim the trame, with its cloth bottom arranged and constructed, as hewn, as a slety stackment for the suspension egg carrier bereinbefore

81,594.—HAND SPINNING MACHINE.—J. W. Burkhart, Came-

Tou, Mo. I claim the combination of the pulley, B, tightening pulley, f, provided with its adjustable support, e, pulley, 0, and multiplying wheel, C, and spin-clearin, D, and adjustable support, E, of the same, when constructed and arranged subs antiany as and for the purpose described.

arranged subs antiany as and for the purpose described. 81,595.- SPOKE-TENONING MACHINE.—A. Harvey Calhoun, and Growfe W. Collins, West Lebanon, Pa. We claim the cutters, in, attached to the adjustable straight bars, m, and the curved braces 0, all suspended from the upper cross bar, a, of the saf-fram., and constructed, arranged, and operating as herein shown and de-scribed.

-ANIMAL TRAP.-Alexander Campbell, Oxford, Ind. I claim the la ch. E, and hinged plates, F, baving tongues, a, a laptel to swing with the centrally plyoted platform, A, and arranged with relation to the notche, plate fixed to f ame, D, as herein shown and described. 81,597. – CORN-PLANTER. – S. O. Campbell, Leavenworth,

OI,091.—**OURN-FLANTER.**—**S.** U. Campbell, Leavenworth, Kansas. I claim, lst, The seed boxes, F F, stranged in combination with the shoes. I J, slices, K K, frames, L, and springs, M, with the prejections, mo the whee is, substantially in the manner as and for the purpose set forth. 2d, The clauch, comp. sed of the two notched places, D D, on the axles, C C, and the slicing or adjustable plate, p, privided with the arms, c, and placed on the axle, C, all arranged substantially as and for the purpose spe-clifted.

81,598.--BASE BALL TALLY-BOARD .- Thomas L. Canary,

Brownsburg, Ind. I claim, i.e., I ac use of the Wire pins and variously colored balls, as repre-sented at D D and C, for Keeping game in base ball playing, substantially as described.

described. 21, the use of movable or adjustable pins for Keeping a gime, and the me-toos of clearing the ball, from the pins, subs antially as described. 3d, The arrangement of the pins on the board, substantially as and for the purposes set orth.

3d, The arrangement of the pins on the Doard, substantially as and for the purposes set, orth. 401, The slate, or other marking surface, in combination with the pins and ball, substantially as and for the purposes set forth and described. 81,599.—CHURN.—N. P. Chaney, Potsdam, N. Y. i claim the combination, with the tubular beaters D, of the arm. B, provided with the scrapers, o b, substantially as and for the purpose described. 81,600.—KOLLING-MILL.—Joseph L. Chapman, Philadelphia, Po

81,000.—KOLLING-IMILL.—JOSEPH L. OHAPHAM, I Intractopham, Pa. I claim, Ist, The arrangement of three smooth conical rollers, rotating in different blanes, and operating in the manner described, to form and feed the ron simultaneously, as above specified. 2d, The adjustment of the rollers, C'a', to form rods of different sizes, by means of bail and socket joints at one end, and the set sorews and journal boxes at the other end, substantially in the manner showa and set iorta. 81,601.—INTERFERING STRAP FOR HORSES.—Edwin Chester-ma, Boston, Mass. I claim leather interfering straps. In combination with rubberguards or projections, as here in shown, for the purpose specified.

81,602.—LOCOMOTINE SPARK ARGESTER.—Ira Choate, Exe-ter, N. H. assignor to himself and Dani I Lee, B iston, Mass. I claim, ist, The construction and strangement of the tube. A smoke stack, E. cover, D, and air apertures, a s a s a, substantially as shown and de-

84,603.—VELOCIPEDE.—Andrew Christian, New York city. I claim the operating device of a velocipede, consisting of the bell-crank levers, G H, one having a vertical and the other a b-irizonta 1. wer end, and of the rode, m, ta au crank, b, ail made and operating substantially as before shown and described. shown and describes. 1,604.-CLOTH GUIDING ATTACHMENTFOR SEWING MACHINES. -Jas, Cline (assignor to Join Walls, Eston, Ohio, I claim the revolving holder, D. constructed as described, in combination with pm, B, standard, A, and spring, C, as and ior the purpose described. 81,605.-DISTILLING APPARATUS FOR SPIRITS.-J. C. Cooksen, Lancaster, Pa. 1 claim, 1st, An extra vessel III, with its chamber, A, in combination with the chamber, B, and its perforated bottom, and anapper chamber, C, with its conc head and central pipe, 9, pipes, 7 and 6, issuing from their respective departments, in the manner shown and sheetined for the surpose set forth. 2d, In combination with said extra vessel, III, with its chambers, A B and 2d, in combination with sale extra vessel, 111, with its chambers, A is and C, the sail, D, with its pipe, 10, sleeve, 8, faucet funnel, d, mounted and ar-ranged substantially as shown and described. St. The chamber, F, when combined with the worm of the condensing ves-sel and the extra vessel, 11, by me us of the several pipes, 678 and 5, sub-gtaninally arranged in the manner and for the purpose specified. 81,606. -DRYER. -Cordial Crane, Boston, Mass. Lotism as a new article of mounfacture a clothesed drying closet construct. 51,005. -DRYER. -Cordial Grane, Boston, Mass. I claim, as a new article of manufacture, a clottes-drying closet, constructed with doors and protect racks, and provided with inte passages to receive neated airfrom resister pipe, and with outlets for the secane of heated air saturated with moisture, all substantially as and for the purpose described. 81,607.-SLOTTING AUGER.-Peter cunningham, Eckley Pa. I claim a mortising or slotting auger, having rows of gouge or chisel lios formed on the edge of the twist, substantially as detcribed for the purpose set. 1071. 81,608.—Machine for Grinding Metal Articles.—J. P. 01,000.— DAGUARDEFOR GARMANN FRANK FRANK Curtiss, New Britain, Conn. I claim, 1st, The árrangement of a series of clamping jaws, a, in the holder, A, substantially as and for the purpose set forth. 24, The holder, A, made in two parts, one part being fitted into the Carriage SEPTEMBER 16, 1868.]

C, and retained by the screw spindle, k, while the second part is connected to the first part, so that it can be readily removed, all as and for the pulpose

to the first part, so that it can be reachly removed, and a source of the first part, so that it can be reachly removed, and a source of the s 81.609.—CHIMNEY COWL.—H. S Decker, New York city. I claim the ventilator herein described, having an interior come inclosed within the exterior walls of the ventilator, so as to provide an annular space between its extrior and the interior of the inclosing shell, which may be ex-tended by a cylindrical attachment to the inter come, as represented, the several parts being combined and arranged relatively to each other, and to the passage or public distribution of the inclosing shell, which may be ex-tended by a cylindrical attachment to the inter come, as represented, the several parts being combined and arranged relatively to each other, and to the passage or public distribution of the inter come, as represented, the several parts being combined and arranged relatively to each other, and to the passage or public distribution of the parts, and to set of the wind upon the come, substantially as shown and d. scribed for the purposes set forth.
81,610.—CTeAR TIPE — H. E Dotser, Bethlehem, Pa. I claim a cigar pipe formed of the parts, A B C D and E, arranged substan-tially as shown and described and for the upposes set forth.
81,611.—GRINDSTONE FRAME.—J. W. Douglas (assignor to W. Douglas and B Douglas), Middletown, Conn. I claim, ist. The adjustable supnort or standard, H, with tool rest, J, applied tor, substantially is and tor the purpose genelled. 20, The providing the shaft, E, with a screw thread, g, having a slot or groove, h, made to ngitudinally in th. in comection with the washers, Q, fur-nuts, R R. on the screw thread, g, all arranged substantially as and tor the purpose set forth.
81,612. Bettween Purpose and substantially as and tor the purpose.

Burpose set forth. 81,612.—BALING PRESS.—D. Dunn (assignor to himself and

W. B. Miller), Lewisport, Ky. I claim the detachable platen, G, in combination with the toggles, C C', and side. D. all arranged substantially as and for the purpose specified. 81,613, — MACHINE FOR JOINTING STAVES.—L. B. Ecker, Union

Bridge, Md. J claim the combination of the plane, R. arranged in the adjustable gate or rame, L, as described, with the swinging carriage bed, I, and the stops. O, ubstantially as set for h.

81.614.—CHE.ESE I'RESS.—Jacob Erdle, South Bristol, N. Y. I claim the arrangement and combination of the screw, D, cross bars, E F, ross, as crank shaft, G and weighted lever, H, operating substantially as and for the purpose set forth.

81,615 - CHURN.-John Fassauer, Wheeling, Iowa.

I claim the dasher constructed as described, and consisting of the radial arms, H H c d c' d', and v-rucal connecting slats, e, perforated at f, all ar-raneed upon the verticalshaft, B, to opersteas hereins set forth. 81,616.- HANDLE FOR DENTAL AND SURGICAL INSTRUMENTS.

-H. T. Fogg, San Paulo, Brazil. I claim adju table handles for dental and other surgical instruments, con-tructed substantially in the manner and for the purpose herein shown and

81,617.-FRICTION CLUTCH.-E T. Ford. Stillwater, N Y.

I claim the friction of ultrh, constructed and arranged with the drive where A A, and being composed of the cone, D, with us corresponding bollow sleeve E, the case, 2, n, on its end, and the corresponding cam, 3D, on the drive bulk, C, at resting and relieving the motion or movement of the main axie, B, in its forward and backward motions, in the mainter and for the 'prosedear ribed.

The statistical sector of the statistical s

The upper revolving water-wheel, connected to and supported by the r water wheel and verneal shaft, F, said upper wheelbeing detachable the lower wheel, as is initially as described. 19.—GARDEN IMPL&MENT.—Frank Fuller, New York

81,619.—GARDEN IMPLEMENT.—FTRIK FUHEL, HERRICH, ALCHARDEN IMPLEMENT.—FTRIK FUHEL, HERRICHARDEN, SISS.
Tclaim, ist, A nurversal garden implement, having one extremity provided with a chisel-shaped, bilurcated, or other pruning edge or edges, and the other extremity provided with a torked, spoon-sh-ped, or other digger, dbble, drill, state, and flower and fruit gatherer, the whole constructed substantially as described.
24. Providing said universal garden-implement, or any implement of simulation of the sector designed for similar uses, with one or more pruning loops, b, attanged between the two extremities of said implement, substantially as described.
34. Providing a garden-implement with a shield or protector forsuch portion of the hand as may be most hable to be solled or wight and as may be most hable to be solled or wight, or any other suitable material.

81,620-MACHINE FOR MANUFACTURE OF SCREWED BOOTS

01,020—MACHINE FOR MANUFACTURE OF SCREWED BOOTS. Jose h Gali, San Francesco, cal I claim, ist, Therifo jsw. B, and movable jaw, C, operated from below, attaches p.rpendicularly to the plate, A, and carrying the screw-plate, a b, at their other eux, the whole constructed and operated substantially as and for the pu poss-herein described. 2d, The conter, F, working close to the Sole, together with its operating lever, G, huk, G, and arm, H, constructed and operating substantially as de-genered.

-WAGON AXLE.-G. S. Garth, Mill Hall, Pa. 81.621.

Lokim, ist. An all provided with collars, a b, of anti friction metal, the later (h) being cast on to a dove tailed collar, e, which is thermed on or fitted to the axie, as herein shown and described, when the raised portions of the band, b, and shoul er, f, are enercied by a strengthening built, d, as set for h for the purpose specified. 24, The strengthening band, d, encircling the raised portions of the band, b, and shoulder, f, substantially as shown and described for the purpose specified.

81,622.-COTTON PICKER AND CLEANER.-Samuel H. Gil-

1,0.22.—CULIAN TRANSFERRE

pites of which rin at differential speeds, substantially as and for the purpose described. 2d, The protect oscillaring, tapering, and oblquely set slats, constructed as described. form and inclined chures, when the slats are in one position, and to present in irregrar bottom when the slats are in one position, and to present in irregrar bottom when the slats are in one position, as shown in red in bg, it thesaid slats being connected to reciprocoming bars, all substantial-ly as and for the purpose described. Sd, the contoint gian-blaues st, the extremules of which run with differen-tial peeds, in combination with a trank or tunnel, which is tapering in form and in the bottom formed of vibrating stats, constructed substantially as and for the purpose described. Sl, 0825.—LIFIE BOAT.—John R. Grace, Brooklyn, N. Y. I claim, 1st, The partitioned cylindrical ar: chambers, B B, arranged as de-scribed forming fixed parts of the bottom, C, and exten ing below the same to form one or more k-els, as here in described ior the purpose app cliffed. 2, The described for the purpose provide. Sl, 0925.—LIFIE bottom of the air chambers, E E, and cylindlers, B a, with relation to each other, the walls of the bottom, C, and exten ing below the same to form one dread before the purpose for the purpose specified. 2, The described for the purpose specified.

-DISFILLING APPARATUS FOR SPIRITS.-Duby Green, 81.624

New York city. New York city. I claim, Ist, The bolier, A, of a still, when subdivided into a series of cham-bers, one above the other, these chambers being r spectively connected with eac other by means of the pipes B and C, and provided with slides, en a set forth.

forth. Connecting the valves, g, that are in the discharge pipes, f, of the boil-al by one rod, E. as described for the purpose spec fied. Providing the stirrer with two revolving disks, H H, made as de-

ed. The arrangement and combination of the vessels, G T, Y, which con-he sturrers, H, all made and operating substantially as herein shown tai

tain the strrvers, H, all make and operating substantianty as increasing and described. Sth, Conveying the vapors, from the botter, A, to the stirring apparatus, so that no steam is required in the latter, as specified. Sth, The depolegmator, \bullet when composed of a series of separate parts or vessels, p q r, each having two compariments, w and x, and all connected with each trer by means of pipes, P, all made and operating substantially as heightshown and described. The, the arrangement and combination, in one distilling apparatus of the boiler, A, stirring vessel, G T, surfers, H, rectificators, J L N, dephlegmator Q, and cooler, S, all made and operating substantially as herein shown and described.

81,630 -- COMBINATION PADLOCK .- Joseph L. Hall, Cincin-

81,630 — COMBINATION PADLOCK. — Joseph L Hall, Cincinnati, Ohio.
I claim, ist., The combination of a series of rotating tumblers with a rock ing lock bott, orerate i by the hasp only, and inclosed in a case having no key h le, substantially as described.
24. The combination of a series of rotating tumblers. C', the recking lock bott, D, and the tripping lever, E, or its equivalent, all constructed and arrange to operate substantially as described.
81,631. — CORN HUSERR. — John M Hartnett, Waukegan, as signor to Robert L. Faban, Lake Forcst, 'll.
I claim, s', The hopper or counte, h with the metalextension, m m, as and for the purposes herein specified
31, The hinged door, i i, with the pendant or fastening, q, as and for the purposes herein specified and the role and wood, and the covering with alternaterings of metal and ruber, and of spitted and plan metal, as herein full specified and for the purposes set forth.
81,032. — WAERR WHERL.—Joseph Hathaway, Woodstock, Vt.

Fubber, and o sportex and plan metal, as neten run spectred and or the purposes set forth. 81,632.—WATER WITERL.—Joseph Hathaway, Woodstock, Vt. 1 clam, 1st, the chures, C, in combination with the gates, D, pivoted as shown, and connected to the annular plate, E, all arranged to operate in the mannersubst intally as and for the purpose set forth. 24, The arrangement of the spindle, H, resting on the bridge tree, I, in connection with the tubular part, G, of the wheel shaft, which turnson ff, and resis upon a fixed cone, ax, and the part, G, of the wheel shaft, which rests on the inxed spindle, H, all arranged to operate in the manner substan-tal' cas and for the purpose set forth. 81,633.—TIRE HEATER.—P. P. Hemstreet (assignor to him-self and David Godtner), Calesburg, 11.

or, 0.5, - 11kE THEATER. - 1. 1. Heinstelet (assigned) to him-self and David deather), Galesburg, Ill. I claim, 1st, The outer rm, A, botton, B, lids, Q, chimney, Z, lever, U rods, S band, X, bars, N o, and i nner rim, B, all constructed, arranged and combined as described, and for the purpose set forth. 2d, The dampers, D, rods, T and S", and lever, F, with rods, L and H, and Tm, C, constructed and arranged as described, and comoned with rims, B and A, and bottom, B, substantially as described and for the purpose set forth.

81,634.-RAILWAY SWITCH. -John A. Heyl (assignor to him-

81,834. — KALUWAY SWITCH, -John A. Heyl (assignor to himself, Joseph G. Loring, and John H. Wiggin), Boston, Mass. I claim the arrangement and combination of the arm, h, the orank, g, its shaft, f, pinon, e, all the toothed sector, d, with the lever, K, the switch and either or both pairs elcornecting ross, A B C D, applied to such 1 ver. Also, the combination and arrangement of the study, c c, and the slotted plate. L with either or both sets of connecting rods, A B C D, the 1 ver, K, the two hed sector, c, the pinon, e, the slotted rotach, g, and the single discontent of the study of the torned sector, c, the pinon, e, the switch and the roadbed, substantially as specified.

—Ax.—J. W. Hilton and R. W. Green, Bradford, Pa. 81.635. We claim as a new article of manufacture a chopping ax, having a remov-able edge, when the two parts, A and B, composing said ax, are constructed subsantially as an! for the purpose shown and described, and secured to-gether oy remova'vie dowers, dd, all as set forth. 81,635.- POTATO DIGGER - Henry P. Hinz, Dunton, III. I claim, ist, The combination of the shovel, H, the conveyers, N and P, and the screen, Q, arranged to operate substantially as and for the purposes set forth.

forth. 2d, The combination of the shovel, and the frames, FF, supporting the conveyer, N, when constructed and a arranged in $s_{UU} \circ s_{UU} \circ s_{UU}$ and the frames as to be adjustable vertically, so as to make the show lrun at different depths, as herein model.

justable vertically, so as to muss the snov if an a suffer condepend, as the specified. 3d; In combination with the said shovel, the arrangement of the arms, G G, cross bar, J, arm, K, and lever, L, to operate in the manner specified. 4th, The arrangement of the apron, t, below the conveyor and over the c use, R, for the purposes specified. 5th, The arrangement of the clute, R, with the screen, Q, when used in combination with a conveyer, P, above the same, substantially as specified 6th, In combination with the conveyors, N P and screen. Q, and its side chile, the arrangement of an elevator, U, so as to operate in the manner set forth.

onth, the arrangement of a tinping platform, Z, below and to the rear of 7th. The arrangement of a tinping platform, Z, below and to the rear of the discharge of the elevator, to sustain the sack in the manner described. 8th, providing the said platform with one or ione rollers, to facilitate the removal of the sacks when tuk, substantially as here in set forth. 81,637.—PROCESS OF MAKING VINEGAR.—S R. Holt, Wor

thington, Ohio. The form cider, beer, sorgho juce, should be and saccha I claim making vinegar from cider, beer, sorgho juce, should can saccha fine mix hyres by the beretu devibed process of ac-biying a d clarifying the some, by allowing i the flux or wash to st and upon the pomace, and then flucting or drawing off the same, substantally a set forth. -STEAM GENERATOR.-James Howard and Edward 81.638.

Tenney Bousfield, Bedtord, England, We claim, 1st, The construction and arrrangement of the vertical tubes.

We claim, ist, The construction and arrangement of the vertical tubes, B, and their inner nuces with the horz wital tubes or pipes, C and A, where-by access is gained to the pipes, A, through the feed pipe, as above explained for cleaning ine boiler. Ed, the construction of the horzontal pipes, A, arranged with the feed pipe, having covered openings, while the pipe, and access to the interior of the boiler, for cleaning out the same access to the interior of the scribed, whereby to keep no the circulation of the water in the boiler, and the arrangement of the tubes, as described. Ath, The heating sections, for he ing the feed water arranged in com-bination with the larger boiler sections, substantially as and for the purpose described.

described. 81.639.—FOOL FOR LAYING OFF FURROWS FOR MILLSTONE

81.639. — F'OOL FOR LATING OFF F'URROWS FOR MILLSTONE DRESSING. — John C. Hunt and Joseph Temple, Terre Haut Ind. We claim, ist, The combination of the g saluated slide, D, and furrow marking arm, E, with a Suitable in Gr. (.,which may be secured to t e stoke centrally so as to revolve freely as desir. I. substantially in the manner and for the purposes of torth.
24. The combination of the adjustable bar, F, with the arm, E, slide, D, and holder, C, substantially in the manner and for the purposes described.
34. In combination with the arm E, sheed, D, and holder, C, the annular plate, A, and camplate, B, with the arms, a, and nibs, c, all arranged to operate structure and for the purposes s d, the Tms, a, mbs, c, and springs, s, arranged in the manner and operation as a second ed.

operatulg as seecified. 81.640.—FENCE GATE.—Jasper S. Jewett, Ottawa, Ill.

81,664. EXPANDING MANDREL OR BORING TOOL.—James C. Millerd, Rever P int, R. 1.
1 clain, ist, The combination, in a horing tool, of the boring plates, B B, righe, and let handed servey, a, and block, b, when operating together within a morise or eye in the shank A. all substantially as shaven a differential constraint of the parpose set forth.
2d. The screw, D, arranged to operate in combination with the above claimed parts, substantially as herein described.
81,605.—MACHINE FOR MAKING CANDY TOYS, etc.—Thomas Mulls a differential, thil delphia, Pa.
We claim the derois, AA, with the molds disposed thereon as described, and operating in combination with a pair or die rolls, the described system of endless hash, 1 and N, when arranged and operating in the manner and for the purpose set forth.
81,605.—BRUDGE —Richard Mantgromery and Mary J Mont-I claim the oblique rails, if the top rail, g, the horizontal rails, iii, the rope or chan, L, the Staple, I, and the weight, M, in combination with the post, A, the pulley, K, the casing, N, the spring, O, and the rock suff, Q, substantially as and for the purpose desorbed in the foregoing specification. S1,641.—FABRIC FOR KOOFING AND OTHER PURPOSES.—Hen-

rv W. Johns, New York city, I claim the combination of asbestos with felted or pulped matter, to form roothing and sheathing sheets, all substantially as described. 81 642. -CARRIAGE COUPLING. -Alfred S. Johnson (assignor

81,665.—BRIDGE.—Richard Montgomery and Mary J. Montgomery, New York city.
We chain the combination, substantially as and for the purpose herein set forth, or an intermediate hinding plate, D, with the G ub'y corrugated builts, A, forming the double corrugated builts and columns the rin described. Also, in the construction of bridges, roots, and similar structures, with double corrugated builts and columns, the structures, with double corrugated builts, and solutions, substantiation of Logonal strays and braces with said beams and columns, by passing the stays of braces here were not be plates of the beams and columns, substantially on the manner and for the purpose herein set to.th.
81,657.—ArPARATUS FOR HANDLING STEAMBOAT STAGES.—Fee dinaud Moore and G orze Histe, Florence, Ind., we chaim the rolling currer bearn, D, provided with the rollers, s.s., fail and tackle, F, wheel, E windles, Wend and rope, p, journal, in, p is, a a, and guides, n, or their cquivalents, when die do for the purpose set for the difference in N. St., 658.—STEAM GENERAM GENERAM Constrained in Contraction with the guides C C, in the manner substantially as described, and for the purpose set for N. St., 568.—STEAM GENERAMOR - William Moses, Built 10, N.Y. I claim the equilary strain generating vessel, whe constracted with Constrained to the contract of the constrained of the set of N.Y. to himself and Enock Van Wie), Waupun, Wis. I claim athili coupling, formed of the parts A and B, constructed, arringed and operating substantially as shown and described, for the purpose set for th. 81,643. — APPARATUS FOR CONCENTRATING EXTRACTS. —

Thomas W. Johnson, New York city. I claim the receiver, A, provided with a convex top, B, gutter, C, and cold water pipe, d, in combination with the agit tor, F, and heating chamber, E, substantially is and for the purpose set forth.

81,644. -TINNERS' FIRE POT.-Charles W. Johnston.-Ne-

ponset, ill, I claim the arrangement of the draft tube, R, and the tool holding tubes, O, in a fire Pot, A constructed and operating substantially in the manner and for the purpose herein set forth. 81,645. - LiamP. - Anson Judson, Brooklyn, N. Y.

81.645.

I claim the surgitary stam generating vescel, when constracted with contracted shacks, and induction and eduction ordices, and applied to the crown sheet and sugges of a boiler, substantially as herein set forth. \$1,669 - DRAFT EQUALIZER.—George A. Mosher, Cham-01,009 - DRAFT EQUALIZES, Group It mostles, or an option, or an option of the series of holes, b, acase id for the passage of a pin, a whereby said cle is-s are pivoted to the cross pice.s, C, of the centrally pivoted double tree, A, so as to be longitudin high adjustable thereon, as set torth. 81,670. - MANUFACTURE OF GUNPOWDER AND BLASTING

81,645. -Lamp, —Anson Judson, Brooklyn, N. Y. I claim, 1st, The combination of the shell, B. of the burner, the ribs, F.F. and the screw. G, or its equivalent, substantially as and for the purpose hereinbelore set forth. 20, The combination of the ratchet sheft, C, wheels, d, and tube, e, sub-stantially as and to the effect hereinbefore set forth. 3d, The combination of the torse, H, shell, B, and adjusting screws, D D, substantially as and to the effect hereinbefore set forth. 4th, The combination of the burner, B, projections, c. G, fange, a, notches, b, and right and left inclines fan ig, is such a manner that by unserting the projections, c. c, through the notches, b, and turning the burner in either alrection, satis burner may be secured to the lamp cap, substantially as set *j*.th. 5th, The come or reflector, made of cast iron, with an enameled surface, as

bin, life cone or reaction, make of cast list, and the with the wick tube, and is thereins force set forth. 6th, life formation of the burner, B, in one place with the wick tube, and is the man or hereinbetore described, by which the wheels for elevaning the work are received into the lower end of the wirks tube, and all connection between the fountain and the inter or of the burner, except turough the length of the wick tube, is cut of, substantially as hereinbeit re set for the between the fountain and the inter or of the burner, except through the length of the wick tube, is cut of, substantially as herember reset for th. 81,646. - MACHINE FOR GRINDING REAPER KNIVES. - Frede-

81.649.-STEAM AND FIRE REGULATOR.-Abraham Kipp, Jr.,

187

Sing Sinz, N.Y. 1 el*in the slide value, F, in connection with the elistic disks DDK, com partments, CC, in chan ber, A, arm, E, and beam, M, and the l-ver, or it equivalent, all arriviged to op rate in connection with a file damper, substan i divin the manner as and for the purpose set fordi. 81,630 —H AMES FASTENEC, –John Koch and David Sea-there Calculate Onio

chust, Colu ubana, Onio. We claim the pawl, D, when its tooth, a, is held against the retchet bar, C, yr ans of the conjepting, D, which is protected from i jury by being con-called in a recess in the pawl bround the pivot, d, as herein shown and de

81,651. -Hold Back. - Lois Kruse, Sabula, Iowa.

1 chin the application, to the longues of wagons and other vehicles, of the spring latch, arr mged as here ubefore set forth, which will secure the neck yok in its place, and which may be the removed when desired. \$1,652.—Tool. For SLITTING BOARDS.—John Langham, Jr.,

Philadelphia, Ps. I claum the c mbination of the sluding stock, C, provided with a cutter, with the ways, A, and supporting pieces, B, substantially as and for the pur-pose describe l.

Note the ways, A, and supporting pieces, it, substantianly as an it for the purpose discribel. 81,653.- APPAR vitt's FOR EXTINGUISHING FIRES.- Rufus Laphan, Boston, Mass. Antesiated Argust 20,188. I chim, 1 t. A placed reservoir, containing a.u. bolding a chemical fire ex-tinguishing areat, or maternals for readily gener due such, when provided with pipes leading to one ormore buildings, for the nurpowers specified. 2d. The application of pipes to connect said reservoir with one or more buildings and the various rooms of buildings, for the purposes set forth. 3d. The auxility y gas gener ting reforts, S, one or more, used in connection with the placed reservoir, R, for the purposes specified. 81,654.-PROCKSS OF TREATING PETROLEUM TO REMOVE THEMORE VOLATULE PORTIONS.-Robert G, Lofus, Chelsea, assigned to bin-

81,654.—PROCESS OF TREATING PETROLEUM TO REMOVE THE MORE VOLATILE PORTIONS.—Robert G. Loftus, Chelsea, assignor to himself and Alo zo Parrar & Co., Botton, Mass.
I claim the separa ion of the petroleum into fine streams, and causing the same to pass through the atmosphere, so as to enable the latter to vaporize and dissipate the inflammable elements thereof.
81,655.—BORING MACHINE.—Chas. R Loug, Louisville. Ky. I claim, lst, The arrangement of the sliding heds, 3 B, adjusted with relation to the fixed central shaft, b, and its publy, irom one sate rends of the frame, A, by means of the servex, m, constructed to operate as hereindescribed, for the purpose specified.
2d. the staff, p. constructed and operating substantially as shown and described, in combination with the apron, M, of a boring machine, all as and for the purpose se, forth.
81,656.—HAND LOOM.—Edwin Lowe, Burrows, Ind.

81,656.

-HAND LOOM.-Edwin Lowe, Burrows, Ind.

I claim the arrangement, with relation to the treadles, D, and levers, D, of the tappet shatts, B E, connected by geaning, the pawls, as', and rods, C C', connected to the av, A, all constructed to operate as herein shown and de-scribed, for the purpose set forth 81 657

icrobed, for the purpose set forth 81,657 — ADHESIVE PLASTER.—J. Lynch, Columbia, S. C. 1 claim the springs or st ys, C, or their equivilents, in combination with an adnessive plaster, substantially as and for the purposes herein shown and de-

orbed. Sorbed. 24, Attaching one ormore springs or flexible stays, rods, or bars to adhesive lasters, for the purposes described. 31.658.—UULINARY VESSEL—A. F. Marston, Clinton, La.

1 claim the art averagenet, within the vessel, A, upon the p-rforated octom, B, thereof, of the vessels, C whose covers, D, are form d with tubes, E, hav-ing perforated upperends, whereby a communication is formed b-tween the said vessels and the removable stemer, G, supported u on its interculture, h, said st aner having partitions and a perforated bottom, all as herein shown and described for the purpose set forth. 81 659.—SofA B, DSIEAD.—M. K. Maximilian, New York city.

I claim a sola bed-read, composed of the two part, A B, having their up-holstered parts, a c, connected together by webbing, d, and having arms, C C, constructed as shown, attached to A, and connected to B, when desired, in the manner s.t forth. 81,600 - CORN PLOW - Alex. McCreight, Tranquility Ohio.

I claim, 1st, The drag bars, B Bi, arranged a described, when operate hy leans of a fixed and movable attach ment, substantially in the manner set

10 a last a last

tantially as described. 3a, the drag bars, B BI, as described, as in combination with levers, D, and ross bars, C, subst nitually as and for the purpose set torth. 11,661. - HANGING CIRCULAR SAW. — William McDonald,

Calias, Me. Calias, Me. I claim the fixed collar, B, provided with the series of puis, a, a capted to pass bir ugit ht saw, σ , and into the lose collar, D, saw aw and coll r, D, being channed firmly to the fixed collar by the screw nut, E, as herein shown and described.

and described. In Mary to have a solution of the boost of the Markov a S1,652. -GATE.-J. H. McKnight, Oakwood, Mich. I claim, Ist, The sate, O, formed by the combination of the horizontal bars of and with the site post, B, sind g i.e. C, heins, constructed and on rated substantially as herein show a and discribed, and the prove for a set of the levers, F, and c ord or chain, G, with the wordshe i prove i get, C, substantially as herein shown and discribed, and for the purpose set forth. Sate results and and for the purpose set for the shown and described, and for the purpose set for the shown and described, and for the purpose set for the shown and described, and for the purpose set for the shown and described, and for the purpose set for the shown and described, and for the purpose set for the shown and described, and for the purpose set for the shown and described, and for the purpose set for the shown and described, and for the purpose set for the shown and described.

set forth. **S1**,603.—SHELLAC VARNISH.—George S. Meikle, Sterling, Ill. 1 chaim a virai-h formed of gun she llac comoined with the mgredients herein named, and substantially as described. **S1**,664. EXPINDING MANDREL OR BORING TOOL.—James C.

81,665.—BRIDGE.—Richard Montgomery and Mary J. Mont-

81,070. — MANUFACTURE OF GUNPOWDER AND BLASTING Powper, Gustav Adolph Neumeyer, Altenburg, SaxeAltenburg (as-sig or to Angust Klein, Leipzig), Gernany. Antedated August 25, 1868.
 I claum an explosive powder, for blasting and for freatmis, when inded of the ugreenents and in the manner and proportions here: in set forth.
 81,671. — FUNNACE FOR SMELTING ORES OF GOLD, SILVER, etc.—Eugene W. Nohl (assignor to Charles M. Gray), Chicago, III. 1 chaim, ist, The construction and arraing ment of the sine-ting chamber, w br the cupel and diving flue, for heating the same, substantially as speci-fied.

81,661.

boiler, A, stirring vessel, G T, stirrers, H, rectificators, J J. N, dephlegr, ator	length of the wick tube, is cut of, substantially as herember is set for th.	w th the cupel and diving flue, for heating the same, subs autially as speci-
O, and cooler, S, all made and operating substantially as herein shown and	81,646.—MACHINE FOR GRINDING REAPER KNIVES.—Frede-	fied.
desc:10 ed.	rek Judson Castleton, N. Y.	2.1, The opening, K, through the top of the furnic , and above the gas flue
81,625.—COMBINED LATCH AND LOCK.—S. A. Green, Lexing-	I claim, 1st, The sight carriage, U, so arranged as to have the slide	or passing, for the pulpose of admitting, and mixing with the burning pro- ducis, atmospheric air to intensity the combistion, and direct the flame on
ton. Ind.	brought to the grindstone adjustable vertically, substantially as herein set	the or- bea or table, and into the cupel, substantially as and for the purpose
I claim the two bolts, C, and D, the V-shaped tumbler-bar, with its projec	torth and specified.	described.
tions p and d, the pivot bar, D, springs, E and H, and the arm, F, all con-	2d, The stop, P, arranged and connected with plate, O, substantially as	3d, The flues underneath the ore bed or table and the cupel, as and for the
structed and operating substantially as shown and described, incombination	above described, and for the purpose specified	purpose described.
with the lack, m, and pinion, k, branches, ff and g g, all as set forth.	3d, In combination with the above, the bar, Q, guiderods, & K', stand ird, B, arm, C, screw, H, and set screw, I, the whole arranged and operating sub-	81,672 DOOR BELLOliver B. Oakley and Hiram Rose-
81,626-BRUSH HOLDER AND MOP HEADHenry P. Gregg,	stantially as set forth.	krans, San Francisco, Cal.
C ⁱ cinnati, Ohio.	4th, A yielding support for the knives, so constructed as to compensate for	We claim the hammer bar, G, the cam, F, and the two arms, a and b, to-
I claim, 1st, The hook-bolt, E, operated by the thumb nut, F, with the	irregularities in the surface of the knives when passing under the stone,	gether with the knob, f, operating by horizontal or straight pull, either near
head, A, and spur, G, for the purpose of holding a brush, substantially as de-	substanially as described.	the bell gong or at a distance, substantial y is and for the purpose herein de-
scribed. 2d, The hook bolt, E, in combination with the bent wire, D, and head, A,	81,647.—THRESHING MACHINE.—Daniel Kane, Tivoli, Iowa.	scribed.
for the purpose of bolding a mop, as set forth.	I claim, 1st, The combination of two fanning devices with a screening	S1,673.—CIRCULAR SAW MILL.—John Orm, Paducah, Ky.
3d Combining a brush holder and mon head of the hook bolt. E. thumb	shoe. F a grain elevating helt, and a strike carrier, said fanning device being	I claim adjustably connecting one or more of the truck frames, D, to the
nut, F, wire, D, spur, G, and head, A, substantially as and for the purposeset	a ranged in the minner described, so as to operate substantially as and for i	toothed rack, F, by means of the coupling, G, as herein shown and described
torub		for the pulpose set forth.
81,627.—SEEDING MACHINE.—Joseph Haas, El Paso, Ill.	gu, in combination with a threshing drum, an elevating grain belt and a	81,674. — WASHING MACHINE. — Joseph Osterhout, Rock
I claim, 1st, The placing of the seed how. E, upon the frame, A, behind the	straw carrier, ar ingel as described, the revolving beater, i. a d the tos fug and guarning blades, H, all bong arranged over faming devices and a screen-	I land, Ill.
wheels, B, when the lower part of said frame is supported by a Caster wheel,	ing shoe, substantially as described.	I claim the holders, J J, secured to the inner s des of the suds box, and ap-
C. applied to a bar. D secured to the under side of the frame. A, and all ar	So, The reversible or thigher bottom, N, to the laterally discharging clean	plied to the oand or apron, 1 substantially as and for the purpose specified.
ranged substantially in the manner as and for the purpose set torth	gram trougn, M. substat. ball of a sand for the purposes a scrib d.	81,675.—WHIP SOCKET.—Louis J. Parsons (as-ignor to him-
2d, the arrangue tof the lever, J, and spring, K, and the connecing rod,	4in, The arrangement of the puney, j, with shat, E, and g aring, Im. be-	self, John & Linton, and O. E. Lriton), New Badiora, Mas
H, ubstantially as shown and described, for the purpose of disconnecting the	neath the feeding boar, H2, so that the cylinder is driven by a belt or ther	I di um, ist, Uniting cheedges of a leather whip socket by means of a metal
rod, H, from the crank pulley, when necessary or desired.		fastening, sub-tautially is a d for the purpose de-ci med
81,628.—HARVESTER RAKE.—John C. Hall, Monroe, Wis.	h reladese like.	2.1 The bottom of the waip socket, con tracted and us to 1 to the (ubular
I claim, 1st, The rake staff, constructed in two parts, G and H, carrying the	5th, the rolling drums, al al, for the upper part of the straw carrier, ap- mied to study upper adjustablesides, a a, in combination with retaining racks,	por ion of the same, substantially as and for the purpose set ribed.
rake, and proted directly to the reel shaft, K, substantially in the manner and for the purposes set for th.	S', and pawls. Y, substantially as an ifor the purposes described.	81,676.—BALL ALLEY.—James Dillon Fatrick San Francis-
2d. The join ted air m, N, when its outer end is rigidly fixed to the rake staff	6th. Providing for regulating the tension of the grain best, G, by means of	c., Cal. Amedared August 25, 1868.
H, for the purposes et forth	admanable bearing brocks, i, of drum shart, h, and bot s, p', sa a blocks being	I chain, 1st, The springs, II, attached to the spring board, I, the holes, E, in the puis through which the cords pass, and the weights, J.J. in combination
81,629,-SAFLTY HARNESS SADDLE TREEJohn S. Hall,	constructed and applied to bars, A3, subscantially as described.	with the conds, substantially as described.
Putsburg, Pa,	81.648.—PUMP.—William H. Keep, Stockton, Cal.	2d, Constructing the ways, CC, so that the balls that roll from the sides of
I claim the keeper, C, when arranged and operated substantially in the	I claim the bail, J, in combination with the ring, I, the valve seat, H, the	the alley will not come in contact with those that are inrown against the
manner and for the purpose described.	frame, P, the ring, G, and the valve seat, F, as and for the purpose set forth.	bank or end of the alley, substantially as herein set forth.

81.677.—CAR AND TRACK FOR ELEVATING ON INCLINED

PLANES.-John W. Pearce, Snisun, Cal. I clam, in combination with the double-inclined track of the described construction, a store or freight truck, having one axle shorter than the other, toad apt it to run on said track, and keep a horizontal position while passing up or down the same, substantially as described. 81,678.—WHEEL FOR ANIMAL CAGE.—George R. Peckham,

Worcester, Mass. I claim a wheel for animal traps or cages, with the bars, y, formed by cut ing slots, x, in a sheet of m etal, as described and for the purposes set for th. -BOILER FEEDER.—William Crellin Fickersgill 81.679.

Providence, R. I. 1 claim the combination of the float, B, rod, C lever, D. with the steam alve, F, steam cylinder, G, and cocks, H and I, substantially as and for the purposes set forth. Descently Diameter Recording N. Y.

purposes set forth. 81,580.-QUARTZ MILL.-Roswell Plummer, Brooklyn, N. Y

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I claim the within described mill for grinding quartz, consisting of the re-versible metallic disks, C D and E F, constructed, arranged, and operating as and for the purpose set forth. 81,881.--PUMP.--John Poppe, Greenpoint, N. Y. I claim the combination of the inclined arm, C, with the valve, H, wheel, B, and valve plate, L, substantially as herein shown and described and for the purpose set forth. 81,682. -IRON PIER.-William B. Porter, Plattsmouth, New

braska. I claim an iron pier composed of a series of tubes encompassed or enclosed y ashell filled with concrete, and all secured together in the manner sub-tantially as herein shown and described.

81,683.-KNITTING MACHINE.-E. K. Pray, Holderness.

81,083.—KNITTING BIACHINE.—L. R. 11ay, Honorhoss. N.H. I claim, 1st, The ring, A, constructed with that part to which the cames are secured, detachable, substantially as and for the purpose set for th. 2d, The comb nation with the ring. A, baying the detachable part, B, of the segment, C, substantially as and for the purpose described. 81,684.—EYELET.—George W. Prentice, Providence, R. I. Antedated August 15,1868. I claim the article of an eyelet, of the composition of material herein set forth, as a new manufacture, Claim L. H. Preston Manlins N.

1 of a finite a revice of an eyelet, of the composition of material merein set forth, as a new manufacture; 81,685.—HARVESTER KAKE.—K. H. C. Preston, Manlius, N. Y., assignor to himself, Stephen Cheney, and M. B. Snook. I claim, ist, The combination of the crank arms, d. of the beaters, F, the spiral springs, or revolving wheel, D, concheal roller, G, and arm, g', all con-structed, arranged, and operating as described for the purpose spessfield. 24, The arm, g', attached to the inner end of the rake, E, in combination with the projection, h, attached to the arm, g, all arranged ubstantially as described, for the purpose of keeping said rake down or near the platform, while traveling over the same. 81,686.—HARVESTER.—K. H. C. Preston, Manlius, N. Y., as-aurnor to himself, Stephen Cheney, and M. B. Snook.

81,686.—HARVESTER.—K. H. C. Preston, Manlius, N. Y., assignor to bimself, Stephen Cheney, and M. B. Snook.
Iclaim, ist, Thejoint, L. when the screw bolts, caarying the boxes, n n, are provided with eyes, m m, to receive the journals of the cross-head, E, npon the connectuped, K, os beren described, for the purplet each described. A the projections, f, on the pa wis, F, on the wheels, B, in connection with the tested, G, substantially as andforthe purpose set forth.
81,687.—BookCASE BEDSTEAD.—Eliza Putnam, Boston, Mass. I claim the combination, with a case and bedstead, of a removable dividing pieze, k, substantially as andfor the purposes described.
81,488.—WASHIGN MACHINE.—William Ross and James M. Adamson, Day's Store, Pa.

Adamson, Day's Store, Pa. We claim, lst, A washing machine, for washing clothing, composed of the tub, A, and rubber, & and a clamp, C. forholding the clothing, opersted by a handle upon the swife, said clothing being held down upon the rubber, B, by a treadle, G, substantially as shown and described, and for the purposes set forth.

by a treater of succession of two parts or jaws, connected to the arm, 2d, The clamp, C. composed of two parts or jaws, connected to the arm, D, by a universal joint, substantially as shown and described, and for the p-proses set forth. 3d. The arm, D, and connecting rod, F, and upright, E, and trea ile, G, in combination with each other and with the clamp, C, and washing tab, A, and rubber, B, substantially as shown and described, and for the purposes . —CAR COUPLING.—Alfred Sanders, Penn Yan, N. Y.

S1,059.—CAR COUPLING.—Allred Sanders, Penn Yan, N. Y. I claim the combination of the side lugs, i, oblong openings, k k and pins, l, with the springlever, C, and cam rod, d g h, the whole so arranged as to form a double fastening, and allow the strain to be transferred from the pin to the lever, as herein set forth.
S1,690.—COUNTER AND SHANK FOR BOOTS AND SHOES.— Michael £. Savoy, Corinth, N. Y. Antedated August 29, 1868.
I claim the curved metallic shank, A, and counter. B, when the latter s provided with the adjustable arms, a, forsecuring said counter at its forward end to the shank, . constructed and agranged as herain shown and described, when stamped from one piece of metal.
S1,691.—SOFA AND BED.—William H. Schwalbe, New York city.

city, I claim the combination and arrangement of screw bolts, K, back, I, arms I, bed, A C D, and foot board, L, as herein represented and described.

H, bed, A C D, and foot board, L, as herein represented and described. 81,692.—SHEET-METAL CAN.—Conrad Seimel, Greenpoint, N. Y. assignor to Chas. Prat. New York city. I claim the quare or rectangular sheet-metal can, constructed, as describ-ed, of the two pieces, A A, bent to have the sides, a a, at right angles to each other, and having formed at the angles the semi-cylindrical projections, b, the ends of said parts, a a, being rolled to form projections, c. happing within and over each other, as herein described for the purpose specified. 81,693.—PROTECTING PLANTS, ETC.—James Shepard, Bris-tol. Conn.

81,693.—PROTEC'I'NG PLANTS, ETC.—James Guepard, Line-tol, Conn. I claim, as a new article of manufacture, a plant protector, when construct-ed and arranged specially as and for the purpose described. 81,694.—RATCHERT DRILL.—Charles Sinclair, New York city. I claim, 1st, The combination of the spindle, A. retaining handle, D, and operating handle, E, with the pawl, G, and ratchet wheel. F, and with the ratchet wheel or disk, C, having informal gear, with the pluched, the toothed wheel, I, having ratchet teeth formed on its inner edge, as set forth. 2d, The combination of the drill spindle A, pinlon, I, and spring bolt, J, when constructed and arranged as described, as an adjunct to the other mechanism for communicating rotary motion to the urill, substantially as described.

81,695.—Hot-AIR REGISTER ATTACHMENT.—Hector Sinclair.

81,695.—HOT-AIR REGISTER ATTACHMENT.—Hector Sinclair, New York city.
Iclaim, ist An attachment for hot-air registers, provided with a hollow dust-separating mechanism, substantially as and for the purpose described.
24. The combination, with a hot-air register, of the casing F, fam blower, D, and dustpan, E, substantially as and for the purpose described.
36. The combination, with the hot-air register, of the casing F, reservoir, C, and fan blower, D, substantially as and for the purpose described.
36. The combination with a hot-air register, of an blower, dust receptacle, and water reservoir, substantially as described, for the purpose specified.
81,696.—SELF-ACTING WAGON BRAKE.—T. Smith, California, Mo. Antedated Aur. 29 1888.

OL,090.—DELF-ACTING WAGON DRAKE.—I. Out(1), Call OTHIA, Mo. Antedated Aug.29, 1668. I claim the self-acting wagon brake, combosed of the block, e, pivoted to the adjustable slide, G, which is itself directly attached to the spring, E, and operated by the rods, h and I, and yoke, J, when the parts referred to are constructed as described, and combined and arranged in the manner and for the purposes specified.

-Compound 'fool for Cutting and Shearing Bolts. 81.697.-T. Smith, California, Mo. Ang. 21, 1888. I claim the improved bolt cutting and shearing tool herein described. 81,698.—Composition for PAVEMENTS.—H. F. Snow and J.

H. Davis. Dover. N. H. We claim the combination of wood sawdust. or comminuted wood or bark, ith the tarry residuum, and a mineral matter or matters and an acid, as

specified. 81,699.-SLEIGH.-L. A. Spickler, Clear Spring, Md. I claim, in a sleigh, adapted to be drawn by power applied in tront, local ing the point of attachment of the shafts behind the upparned part, D. upon the rave, C. of bifurcated iron, A, as herein shown and described for the pur

81,700.-GANG PLOW.-P. H. Standish, Marnez, Cal., assign

81,700.—GANG PLOW.—I'. H. Standish, Marnez, Cal., assignor to thimself and Oliver C. Coffin. I claim, 1st. The wheel, E, lever, M, with pawl, I. and foot pawl, N, and manner of arrangement thereof. 2d. The tongue adjusting rod, J, clevis, R, plate, Pl, as arranged and secured to the bod er beam, B. 3d, The construction and arrangement of the bed, B, and the manner of at-ching the standards thereto, in combination with the tongue adjusting rod, J, clevis, R, and plate, Pl, as shown and described. 4th, The crank-shaped standards, with slotted end and set screw, substan-

tion with each other, and with the nozzle and bottom of an oll can, substan-tially as and for the purposes berein set forth. 2d, The adjusting screw, b, and nut, c, in combination with the spring, E, and the cylinder or chamber, a, substantially as and for the purpose herein specified.

81,706.—HORSE HAY RAKE.—Benj. C. Taylor, Dayton, Ohio. 1 claim the pieces, E &, and their arrangement with reference to the bars, A and B the spring, F, and bolts, C C, in the manner substantially as de-scribed, and for the purposes specified. 81,707.—REVERSING CUTTING MACHINE.—S. D. Tripp, Lynn,

81,707.—REVERSING CUTTING MACHINE.—S. D. Tripp, Lynn, Mass. Antedated August 21,1868.
1 claim, 1st. The means employed for operating the cutter sbaft, B, to wit, the bars, g h, pivoted gnide, L, and the pivoted bar, M, on plate, H, in con-nection with the cross head, G, on the journal of shaft. E, provided with the pinroge set forth.
20, Attaching of the plate, H, to the framiner, A, in such manner as to ad-mit of the same having a reciprocating movement imparted to it. substan-tially as shown and described.
81,708.—SAW SET.—John Uhl, Brooklyn, N. Y.
1 claim the construction and arrangement of block, A, swinging table, B, sorew, G, adjustable plate, D, anvil, E, punch, d, holding device, e, spring, f, substantially as here in described and for the purpose specified.
81,709.—BLEACHING AND DYEING FEATBERS.— Adolphe Pierre Viol and Céssire Pierre Duflo, Jr., Paris, France.
We claim the with described process of treating black, gray, brown, or otherwise tawny-colored teathers, by first subjecting black, gray, brown, or otherwise tawny-colored reathers, by first subjecting black, gray, brown, or otherwise tawny-colored reathers, by first subjecting black process exit.
81,710.—LAMP CHIMNEY CLEANER — N A Vurgason Brook-

81,710.—LAMP CHIMNEY CLEANER.—N. A. Vurgason, Brook-

lyn, N. Y. I claim a lamp chimney cleaner, having four brushes, B B C C, affixed on the bars. bo, in combination with the staff, A, and spring band, a, of rubber or other suitable material, all substantially as and for the purpose shown

81,711.-MEDICAL COMPOUND FOR TREATING HORSES, CAT-

81,711.—MEDICAL COMPOUND FOR TREATING HORSES, CATTLE, FRO.-Garrett Van Wagenen, Rache, Wis.
I claim the remedial compound, composed of the above mentioned ingredients, and prepared in the manner described.
81,712.—CAR SEAT.—F. F. Wagner, Harrisburg, Pa.
I claim. ist, Providing the projecting lugs, 1, on the axles or pins, B, by which the swinging arms, C D, are pivoted to the seat frame for the purpose of elevating the front end of the seat, so as to have the seat inclined backward in whatever position the arms may stand, as specified.
2d, The pin, or bolt, a, for locking the swingting arms, C D, in any desired position, when said pin is fitted into one of the toothed wheels or segments by which the arms are connected for the purpose of having them move simultaneously, asset forth.

multaneously, as set forth. 81,713.—PAPER RESERVOIR FOR COMPRESSED AIR.—C. W.

81,713.—PAPER RESERVOIR FOR COMPRESSED AIR.—C. W. Wailey, New Orleans, La., assignor to New Orleans Pneumatic Propelling Company.
I claim the paper air tank, A, when closed at the extremities with metallic heads, B, and otherwise constructed in the manner and by the use of the means herein described for the purpose set forth.
81,714.—STOVE PIPE DRUM.—George S. Walker, Erie, Pa. I claim the arangement, within the drum, H, and with relation to each other, of the curved fireplates, FF, to direct the products of combustion in the described manner herein set forth and shown.
81,715.—HAT.—M. S. Watkins, Mansfield, Texas.
I claim as a new article of manufacture, a hatformed with radial indentations in the crown and rim, as described, and provided with a lining, perforated opposite the said indentations, the metallic band of the lining being being the first of the bar as and of the burges being at the front of the hat, as and of the subsciences of the subsciences. R, and hingedlid, O, in combination

81,716.—CHURN.—JOSEPh Watts, Brazil, Ind.
81,716.—CHURN.—JOSEPh Watts, Brazil, Ind.
I claim, 1st, The suspended screen, R, and hinred lid, O. In combination with the body, A, of the churn, and with the revolving paddles, L, substantially as herein shown and described, and for the purpose set forth.
2d, The combination of the crank shaft, C, arms, J, and paddles, L, with each other, and with the body, A. and screen, R, of the churn, said parts being constructed and arranged substantially as herein shown and described, and for the purpose set forth.
81,717.—BELT PUNCH.—David M. Weston, Boston, Mass., assignor to Greene, Tweed & Co., Brooklyn, N.Y.
I claim the belt-punch, having its lower law, A, slotted at C, for the passage of the cuuter, B, of the upper law, and provided with the gage, D, carrying the slotted guard, E, all operating as described, the laws being opened by tatension of the cruber spring, F, held in sockets or recesses of the handles, as herein stort and shown.
81,718.—TUMBLER BRUSH.—Gerhart Wiesler, Chicago, Ill.
81,718.—TUMBLER BRUSH.—Gerhart Wiesler, Chicago, Ill.
81,718.—TUMBLER TRANG.—Gerhart Wiesler, Chicago, N.Y.

D, and the dylindrical filter or plug, C, arranged within the bore, as and for the purposes specified. B1,719,--STRENCH TRAP.-F. H. Williams, Syracuse, N. Y. I claim, 1st. A valve chamber, N, which is constructed with a tubular valve seat, B, and a pipe-connecting collar, C, substantially as and for the purposes described. 2d, The construction of valve chamber, N, of sections, A A, one of which has an internally and externally projecting collar, B, and the other an exter-nally projecting collar, C, substantially as and for the purposes described. 3d, Valve, I, applied to the inner end of collar, B, and the due to its seat by a spring, g, which rests upon a bridge, applied to the upper end of said coll ar, in combination with the Chamber, N, substantially as described. 4th, The inverted cup, f, applied over the upper end of valve stem, e.so as to protect the spring, g, substantially as described. 5th A crowning or convex valve, I, which is suspended by a spring, R, and applied to a collar, B, of the chamber, N, substantially as described. 81, 720.-ADJUSTABLE MEASURING RULE.-Isaac Williams, Westfield, Ind.

81,720.—ADJUSTABLE FIEADOMING THE WestBeld, Ind. WestBeld, Ind. I claim the combination of the pivoted adjustable brace, J, slotted at, i, with the graduted part, B, and its slotted extension, G, and with the gradu-ati part, A, a ult its slotted extension, D, all constructed as described, for the purpose specified. 81,721.—PAINT COMPOUND.—Henry F. Wilson, (assignor to Jacob J. Kanm), Fort Wayne, Ind. I claim the combination of the above specified ingredients, as and for the purpose specified. Description of the above specified ingredients, as and for the purpose specified.

rpose specified. ,722.---MacHINE FOR CARVING WOOD.--Hanson H. Adams,

81,722. -- MACHNE FOR CARVING WOOD.—Hanson H. Adams, Newburyport, Mass.
1 Claim, 184, The Combination, with the vertical adjustable form, j, of the vibrating forms or supports, n. and laterallysliding or adjustable cutter head and its cutters, under the arrangementandforthe operation as herein shown and specified.
2d, The combination, with the frame, l laterally adjusting cutter head, and vibrating truss frames, by which the cutter head is supported, of the lever, z, and spring, o'. or its equivalent, constructed and arranged to operate sub-stantially as and for the pur possestforth.
81,723.—LIQUID SAFE.—Garret D. Anderson, Montrose, N.Y.
1 claim, 1st, An oil or liquid tank, constructed without any ioint at either or all of the points lettered, h i k l, in the drawing, substantially as inclined surfaces, and for the purpose set forth.
2d, An oil or liquid tank, provided with a bottom composed of two inclined surfaces, and for the purpose therein set forth.
3d, The combination, with a tank constructed in either of the above speci-fied ways, of an enclosing case, of wood or other material, substantially as herein specified.
41, The combination, with said tank for containg oil or other inflammable liquid, os some suitable fire proof material, substantially as and for the pur-poses herein specified.
81, 724.—GANG PLOW.—James H. Andrews, Benicia, Cal. I claim, 1st. Proving the pole, C, to the hounds, D D, by therod, R, and when the rear end of the puble to the arm. G ot the shaft F. or and wall as the operation.

S1,724.—GANG PLOW.—James H. Andrews, Benicia, Cal.
I claim, 1st. Pivoting the pole, C, to the hounds, D D, by the rod, R, and linking the rear end of the pole to the arm. G, of the shaft, F, or equivalent device for raising and lowering the plows without lifting other parts of the irame, hubstantsilly as described.
2d, The double jointed frame, L having an apron, J, attached and arranged to operate in the manner substantially as and for the purpose set forth.
3e, The manner of connecting the plows to the frame by the clips, M M, slots, N N, with bolts and nuts, substantially as described.
81,725.—GRINDING MILL,—George N. Annan, Buffalo, N. Y.
I claim the combination of the blocks. c c, pressing inward upon the four corners of the bed, and the screws, if and g g, pressing inward upon the four corners of the bed thus opposing each other, the whole arranged as desorbed, and operating in the manner and for the purpose specified.
Also connecting the heads, D, to the ends of the case, by the locks. c 1, in sadditon to the ordinary screws, whereaby the greatstrain is removed irom the screws, as herem set forth.
81,726.—HAY FORK.—Charles S. Ambruster, (assignor to Initial the for raising and lowering the plows without lifting other parts of the set can be applied and regulated, substantially in the manner de-treme, substantially as described.
 At the double jointed frame, and the clips, M M, solve, N, with bots and for the purpose set forth.
 At the clips of the set can be applied and regulated, substantially in the manner de-correct of the bed trained to the purpose set forth.
 At the clips of the set can be applied and regulated, substantially in the manner de-correct of the bed trained to the purpose set forth.
 At the clips of the set can be applied and regulated, substantially in the manner de-correct of the bed trained to the purpose set forth.
 At the combination of the blocks. c., pressing outward upon the four corners of the bed thus opposing each other, the whole arranged as described.
 At the combination of the blocks. c., pressing low and the case, by the locks. c. in the screws, as herein set forth.
 At the manner set constant of the blocks. c. in the screws, as herein set forth.
 At the combination of the blocks. C. At the clips of the case, by the locks. c. in the screws, as herein set forth.
 At the combination of the blocks. C. At the clips of the case, by the locks. c. in the screws, as herein set forth.
 At the dot and charles H. Richman), Woodstown, N. J. I claim, it, The combination of the blocks. c. stop.m., spring. a trigger o, and the rope or chain, r, substantially as and for the purpose specified.

spindle, its step, and cap, the whole being substantially in manner and for the purpose or objects as specified.

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spindle, its step, and cap, the whole being substantially in manner and for the purpose or objects as specified. 81,733.—GAB BURNER.—Arthur Barbarin, New Orleans, La. I claim, ist, the method, herein described, of letting on the gas to the birner or shutting off therefrom, by the employment, in connection with the pipe or conduit tor supplying gas to one or more burners, of a reservoir of quicksilver, glycerin, olls or other non-freezing liquid in which the end of sud conduit is immersed, the pressure of the gas in sud conduit being regu-lated in the manner specified, so that so long as the pressure does not exceed a certain limit, the gas will be retained in its conduit by the resistance of the said quid, without the use of stop cocks or other means or inarily employed. but whenever the pressure is increased so as to exceed the said limit, the gas will overcome the resistence of the liquid, and pass from its conduit to the burner, as set forth. 3d, The use and application, for the purpose specified in the preceeding clause, of naphtha or other bydrocarbon liquid substantially in the manner described, so that the said liquid shall not only constitute the gas induction the gas conduit, but shall also carburet the gas when the latter is forced through it by the presence of the gas in said conduit. 3d, The combination, with a reservoir containing quicksilver or other suit-able liquid, and carrying the gas burner, of the bene end of the gas induction nips, held within the reservoir, and arranged as described, so as to be ad-stid logid operating in connection with the pressure of gas in said pide, to said logid operating in connection with the pressure of gas is regulated by means of quicksilver, oils, or other liquid, in connection with the pres-sure of gas in the gas conduit, as described, of a gas igniting device, composed of spongy or finely divided platium, arranged above the orifice of the burner so as to be brought h. contact with the gas issuing thereform, as and tor the purpose set fourt. 81,734.—SELF-L

New Orleans, La. I claim a gaslighting device, consisting of spongy or finely divided platium, combined with fine projecting platium wire and fine projecting wire points or ends in the manner herein specified, the said device being applied to a gas burner, and arrraged to operate in connection therewith, submantially as shown and set forth.

81,735.—APPARATUS FOR LIGHTING GAS.—Arthur Barbarin,

81,735.—ÅPPARATUS FOR LIGHTING GAS.—Arthur Barbarin, New Orleans, La.
Iclaim, Iat The application and use of clock work, or equivalent mecha-ism, in combination with the armature of an electro-maxinet. to let on or shut off the gas, and control at the same time the operation of the illuminat-ice agent, substantially as described.
2d, The combination of the rotary valves for supplying ras to the burners, and the mechanism for operating and stopping the same, with the armature of an electro magnet, under such an arrangement that the motion of the said armature towards its magnet shall leave the said valvea free to revolve, "substantially as set forth."
3d, The arrangement relatively to each other of the valves for supporting the hydrogen gas shall be supplied to its burners before the opening of the valve drough which the illuminating gas passes, substantially as shown and de-scribed.

l hydrogen gas shall be supplied to its burners before the opening of the wave through which the illuminating gas passes, substantially as shown and de-ecribed. Atu, The method of transmitting a current of electricity from a main bat-tery to the magnets of one or more valve-operating apparatus, by means of a apparatus atraneed and operating so as to effect the momentary closing of the circuit between the said battery and magnets, substantially as shown, and ior the purposes described. 5th, The circuit-closing apparatus herein described, the same consisting of the combination of a revolving needle, and its actuating and stopping me-chanism, with the armature of an electro-magnet, the whole being con-structed and artinged so that the momentary passage of a current of elec-tricity through the said magnetishall so more its armature as to effect the revolution of the needle, substantially as set ofth. 6th, The combination, with the said circuit closing needle, of a 'plate or disk in and to which are secured the insulated wires of one or more appara-tins for operating the valves which supply the gas ito the burners, substanti-ally as and lor the purposes described. The method of closing the circuit of the local battery, by which the circuit closing apparatus is actuated, by connecting the same with the ope-rative works of a clock or other time piece, under the arranegment herein described, so that sail circuit may be closed at any desired honr. Sth, The constituction and arranegement of the mechanism of closing and breaking the circuit between the operative works of the clock and the bat-tary comparatus the magnet of the circuit closing apparatus. The combination, with the operative mechanism of a clock or other timepiece. of the gas lighting and circuit closing apparatus shear-tally as shown and described. 9th, The combination, with the operative mechanism of a clock or other timepiece. of the gas lighting and circuit closing apparatus therein described, be whole being courstructed and arranged so as to ca

Ignifold of any number of gas jets at any desired nour, substantially as set forth.
 S1,736.—PROCESS AND MATERIAL FOR CARBURETING GASES. —John Alien Bassett, Salem, Mass.
 I claim 1st, The combination of absorbent materials having different capillary powers, for the numpose of holding hydrodarbon-liquids in suspension in carbon izing air and gases.
 Sd, Carbureting air or gases by the combined capillary materials described and shown.
 Sd, Carbureting air or gases by the combined capillary materials described and shown.
 Sd, The apparatus shown and described charged with the materials specified, and used for the purpose set forth.
 S1, 737.—SHAFT FOR VEHICLES.—Agustus Bean, Fairview, Pa.

81,/37,—DHAFT FOR VEHICLES. Against Louis, Latter, Pa. I claim, 1st, The shaft, H. provided with a curved extension, 1, sliding un-der the bed of a cart in the guard, J. on the inner side of one of the short shafts, O, and held in position by means of a spring, K, substantially as and for the purposes herein set forth. 2d, The shaft, F, hinged to one of the short shafts, C, and connected, by means of a cross-bar, G, to the shaft, H, substantially as and for the pur-poses berein set forth. The combination of the shafts, F and H, when constructed and attached to a cart in the manner described, and operating substantially as and for the purposes herein set forth.

10 a var in a set forth. 81,738.—MACHINE FOR PRESSING BRICK.—Cornelius Berrian, Clinton city, Iowa. I claim the combination and arrangement of cap. B, shafts, N and K, pi-man, F, rods, S, arm. L, and travelling fulerum, J. when constructed, a ranged and operating substantially as and for the purpose here in set forth. 81,739.—TEASLING MACHINE.—Edwin Birkenshaw, Ashue-ber M.

81,739.— IEASDING HAUTINE.—EGWIN DIRECISIAW, ASHUC-lot, N.H. I claim the spring, D, and books, C C, for holding or attaching the gig-slats B, the teasing-rig cylinder, A, when constructed and arranged substantial-ly as herein specified. 81,740.—FIBER AND GUM FABRIC.—Adolphus F. Boshop, John H, Alken, Norwalk, Conn., and John M. Pendleton, New York city. We claim the within described compound of fiber and rubber cement, formed in the proper shapes, and vulcanized, as and for the purposes herein set forth.

81,741.—CAR COUPLING.—Thomas H. Bomar, Atlanta, Ga. 81,742.—CHARCOAL FURNACE.—C. W. Briggs, Springfield,

Mass. I claim, 1st, A charcoal furnace surrounded by the fange, F, and having a smoke flue, C', opening beneath the flange, and an air flue formed by the plate, B, prolonged as described, for the purpose of delivering the air supply scribed.

at a point near the line of the diameter of the furnace, substantially as de-scribed. 2d, in combination with the plate, C, forming the smoke flue, the flanged vessel, A, having the side, G, below the flange flattened, substantially as and for the purpose set forth. 81,743.—APPARATUS FOR RENDERING LARD, TALLOW, ETC. Amos Broadnax, Mont Clair, N. J. I claim, 1st, Rendering fat or other oleaginous matter by putting it a rotating or tumbing chamber, combined in or with a stationary Gnamber, to which the heat can be applied and regulated, substantially in the manner de-scribed.

4th. The crank-shaped standards, with slotted end and set screw, substan-	trigger, 0, and the rope or chain, r, substantially as and for the purpose des-	above the surface of the rendered fat,
tially as set forth.	crived.	6th, Removing fat by forcing hot air out of a chamber in which the temper-
81,701-SULKY PLOWA. R. Stanley and H. W. Ensign,	2d, The combination of the tripping attachment, above described, with the	thre can be regulated into a digester, by means of a pump, substantially as
	arms, a a. shanks, s s, tines, t t, block, 1, and connecting cords, chains, or	described.
Shullsburg, Wis.	rods, e e', substantially as and for the purpose specified.	7th, Rendering fat or other oleaginous matter by drawing a current of hot
We claim, 1st, The pivoted plow beam, N. spring catch, O, and eccentric, H,	81,727.—PAPER CLASP.—J. C. Arms, Northampton, Mass.	air into the digester. or upon the fat, out of a chamber in which the temper-
arranged to operate in the manner substantially as and for the purpose set		ature can be regulated, by means of a partial or complete vacuum created in
torth.		the digester through the agency of a condenser and pump, or in any of the
2d, The combination of the lever, G, attached to the eccentric. H, the shaft,		well known methods of creating a complete or partial vacuum, substantially
F, pinion, E', rack, D, and spring catch, O, fitting over the end of the plow	81,728.—CORK EXTRACTOR. — Jacob Autenrieth, Philadel-	as described.
F, pinion, E', rack, D, and spring catch, O, fitting over the end of the plow beam, N, substantially as described for the purposes specified.	phia. Pa.	Sth, Separating the offensive gases from the condense-water, and destroy-
81,702VEGETABLE FIBER AS A SUBSTITUTE FOR HAIR	I claim the application to a cork of an endless flat strin or loop of	ing the same by passing said condense water, whether out of an open or
Werner Staufen. Paris, France.	non-elastic material, in the manner and for the purpose herein described and	aurice condensor through a basic condense which whether out of an open of
	non-elastic material, in the manner and for the put pose neren described and	ratus, by which the gas is driven out of the water, as it flows from the con-
I claim the manufacture, substantially as above set forth, of a species of	of Coo Devented.	dense into the the gas is driven out of the water, as it nows from the con-
vegetable hair from the horous material which grows through and proceeds	81,729.—BRAKE FOR MECHINERY.—D. S. Baker, West Bloom-	denser, into the fire, or is otherwise disposed of, substantially in the manner described.
from the bark situated near the foot of the palm known as the Levistonia Chi-	field, N. Y.	described,
nensis, Roxd., of Latana Chinensis, Tacq.		81,744.—Rendering and Refining Lard, Oils, etc.—Amos
81,703VENTILATING-SASH ADJUSTERW. C. Stickney and	and described.	01,144.—ItENDERING AND ITEFINING LARD, OILS, ETC.—Allos
		Broadnax, Mont Clair, N. J.
J. McGee, Steubenville, Ohio.	81,730.—PLOW.—John Ball, Canton, Ohio.	I claim, 1st, The use of steam heater in combination with a steam boiler or
We claim the combination of the three-armed plate, C, and sliding rod, E,		generator, and a rendering digester or distiller, and in which the tempera-
with the coiled spring, G, friction block, H, and thimble, F, substantially as	ating substantially as and for the purposes herein set forth.	ture can be regulated, for the purpose of rendering fat or distilling oil by
herein shown and described.	2d, The corrugated beam, D, in combination with the corrugated handles,	superheated steam or air, substantially as described.
01 CO4 WARD WARDER Druck Goth salard Old Hill	E E, when arranged so as to be adjustable, substantially as and for the pur-	2d. Rendering, refining, or distilling fat or other oleaginous matter by
81,704.—WATER WHEEL.—Brush Sutherland, Chicago, Ill.	poses herein set forth.	steam or air. superheated in a separate superheater, on its way from the
1 claim, 1st, The combination of a stop-water, c, with the flange of the wheel	$\mathbf{D} = \mathbf{D} = $	boiler or generator to the digester containing the fat or oil.
and the gate, C, arranged to operate in the manner and for the purposes shown	81,731.—CLEVIS FOR PLOW.—John Ball, Canton, Ohio.	3d, Superheating steam or air in a magazine or chamber, C, and carrying
and describes.	L claim, 1st, The clevis, C, constructed as described, in combination with	said steam or air over into the digester or distiller by a blast or current of
2d, The dome, G, provided with a vertical rim, H, and supporting arms, I,	the adjustable loops, D D, for the purpose of raising or lowering the front	steam or air, substantially as described.
arranged in relation to the flange, F, substantially as described and for the		
purposes set forth.	2d, The levers BB, pivoted to the sides of the plow beam, A, and their	81,745.—BAILING PRESS.—Charles Brown, Buffalo, N. Y.,
3d, The combination of an adjustable stop water, h, with the rim, H, and	lower ends pivoted to the rear ends of the clevis, C, in combination with the	and David L. Miller. Madison. N. J.
the flange of the wheel, in the manner and for the purposes specified.	rod, F, and spring, G, constructed as described, and operating substantially	We claim, 1st, The arrangement of the covering plates, J, connected to the
	l as and tor the nurnages herein set forth	follower, and moving therewith, substantially as herein described.
81,705.—OILER FOR MACHINERY.—Newton Tallman, West		2d, The arrangement of the removable side. K, of the part, B, of the press
New Brighton, N.Y.	81,732.—SPINDLE STEP.—Joseph B. Bancroft, Milford, Mass.	box suspended and moving upon the hinged hars. K1 K1, substantially as and
I claim, 1st, The perforated inner chamber, a, and spring, F, in combina	I claim the arrangement and combination of the ring or flange, D, with the	for the purpose set forth.
	- (• -

3d, The combination and arrangement of the friction brakes, I, with the worm shaft, G, and worm wheels, F F, and eccentric rock shaft, H, and its 30, 100 contact worm wheels, F F, and contact is connections, substantially as described. 4th the binged partition, L, arranged in the part, B, of the press box, as

-Door HOLDER.-George C. Bunsen, Belleville, Ill. 81,746. I claim the combination and arrangement of the spring dog or lever, H with the case, F, for operating as a door or window holder, substantially as described.

described. 81,747.—BEEHIVE.—Henry Burton, Richview, Ill. I claim the hive, B, suspended within, but not in contact with, the base, A, upon legs, B1, which support it above the bench, sald parts being respectively constructed and arranged in relation to one another substantially as and for the nurnose set forth. the purpose set forth. 81,748.—JOURNAL BOX.—Alonzo B. Caldwell (assignor to

binself and Jacob Pinkerton, Syracuse, N. Y.
I claim, 1st, The knobs or hooks, h, or their equivalent, as a part of the bronze metal frame, B, substantially as and for the puposes described.
24. The flanges, ff f, upon the ends of the arms, b bb, when made and applied in the manner and for the purposes described.
3d, The cast iron shell, A, when cast around the heads of the knobs or hooks h, upon the bronze metal frame, B, in the manner and for the purpose as above described.

above rescribed. 4th, The shoulders, ss, upon the bronze frame, B, in combination with the knobs or hooks, b, and holes, a s, in the cast ir on frame, A, when used to hold more securely together and strengthen the bronze metal and cast ir on box, in the manyer described.

box, in the man-er described. Sth. A journal box composed of the bronze metal and cast from box, in the man-er described. Sth. A journal box composed of the bronze metal portion, B, when made with the flanges, ft, and shoulders, ss, combined with the cast iron frame, A, made as aforesaid, with the soft metal portions, m m m, filled in, substantially n the manner and for the purposes described. 81,749.—LAMP.—James Calkins, New York city. i claim 1st, The divided chamber, consisting of the reservoir, A. and con-sumption chamber, D, in combination with the duct or coll, C, and water chamber, B, arranged and operating substantially as and for the purposes set forth. 2d, The intervening air-space, G, between the chambers, A and D, as and for the purposes set forth.

81.750.—DEVICE FOR OPERATING WAGON-BRAKES.—Dennis

W. Carkhuif, Lambertville, N. J. J. Claim a slotted lever, ratchet, pawl, spring, and guard, when made and pplied in the form and manner, and for the purposes herein described and

. —Lard Presser and Sausage Stuffer.—Joseph B. 81,751

81,751.— LARD PRESSER AND SAUSAGE STUFFER.— Gooperation of a performation of the seal of t

S1, 722.—EVAPORATOR.—IS. F. Caun man, Minicrstown, Fa. Iciam the fumace, A, provided with double dampers, c. and dampers, g e m, in combination with small side, furnace, D. boiler, F, and pan, H, and the lids, K, the several parts being constructed, arranged, and used as and for the purpose specified. 2d, The arrangement of the track, d car, E, and windlass, h, with the grate of the larger furnace, A, with the side furnace, D, when operated and used as and for the purpose set forth.

used as and for the purpose set forth. 81,753.—Rope MAKING MACHINE.—Charles Clark, Dayton,

Ky. I claim the arrangement of the hollow journaled revolving frame, E. I claim the arrangement of the hollow journaled revolving frame, E. Fravitating friction bars. H H, hangers, G, eyes, L, and orifices, K, triplet, W, positively rotated delivery rollers. N N', for the purpose set forth. 31,754.—WITP HANGER.—Pindar F. Cooley, Pittsfield,

Mass. I claim, 1st, The notch, n, with the upper curviform-surface line, g, sub-stantially as and for the purpose set forth and described. 2d. The rim, A, constructed circular, square, oval, or any other form, pro-vided with the notches, nn n, as described, and the supporting rods, o o o, or their equivalents, and all in combination with the swivel, C, as and for the purpose set forth and described. 81,755.—COMPOUND FOR EMBALMING DEAD BODIES.—Elliott H, Grane Burr Oas, Mich.

81,755.—COMPOUND FOR EMBALMING DEAD BODIES.—Elliott H. Grane,Burr Oas, Mich. I claim the discovery, application, and use of an embalining and mummi-fying compound for the preservation of the dead, and tor taxidermic pur-poses, as prepared, compounded, and applied, substantially in the manner specified and described. Also, the application of this compound, in dry powder, to the mouth, throat, and other natural apertures of the subject, substantially asspecified and described. 81,756.—TRAVELLING TRUNK.—Geert De Bretton, (assignor himself and Joshna E. Vose). New Orleans La.

himself and Josua E. Vose). New Orleans. La. I claim, ist, The combination of part, D, with the trunk body proper, when these parts are united, constructed, and arranged so as to be convert-ible into a system of shelves, substantially as herein described for the par-nose set for the

1016 into a system of subtractionary as account of the extra cover, A. when 2d The above combination in combination with the extra cover, A. when the several parts are united, constructed, and arranged for conjoint opera-tion, subtantially as described for the purpose set forth. 30. The hasp, J, and metallic straps, C, when severally constructed as de-scribed, in combination with a trunk provided with a part, D, and an extra cover. A, substantially as herein described for the purpose set forth. 81.757.—A UTOMATIC CRADLE.—Sylvanus G. Delano, Grand Unone Wich

Blanc, Mich. claim, ist, The adjusting plates, C, in connection with the cradle body and frame, B, substantially as bereindescribed.

2d, The pivoted plate, E, in connection with the vibrating lever, G, when stached and operating substantially as and for the purposes set forth. 3d, The combination of the above named parts with any suitable clock movement, when arranged, constructed, and operating substantially as de-serined, and for the purposes designated.

WHEEL FOR CARRIAGE.-W. H. De Valin, Sacra 81.758

81,758. — WHEEL FOR CARNIAGE. — W. H. De Valin, Sacramento, Cal.
1 claim, 1st, Using the rim or tire to the hub or axle by means of a series of straps or flat bars of wrought fron. each bent at the middle, where it is stracked to the rim, and having its diverging ends extending thence to the bub or axle, to which they are unled in the manner set forth.
2d, The combination, with the elongated hub, and the axle upon which it is mounted, of the rim or tire, and a series of wrought iron straps of flatbars, for steadying and bracing the said rim, and for holding the same to the bub, the whole being arranged in the manner set forth.
81,759. — COAL MINING APPARATUS. — George Edmund Donlistion using mechanism, with an air cylinder, to apply the pressure, the combination and arrangement of the said traveling carriage, that carries the mining mechanism, with an air cylinder, to apply the pressure set forth.
81,760.—COAL MINING APPARATUS.—George Edmund Donsinston and arrangement of the said traveling carriage, that carries the mining mechanism, with an air cylinder, to apply the pressure set forth.

760.-COAL MINING APPARATUS.-George Edmund Don

isthorpe, Leeds, England. Patented in England, May 22, 1861. I claim the combining with a carrage (capable of being moved by mechan-ism slowly along the face of the coal or mineral), a cutting tool, which is a supported and gaided that a reciprociting to cand from motion may be impart at the power of the workman, substantially as berein described. supp

y the power of the workman, substantially as berein described. – MACHINE FOR TURNING RODS.— Frank Douglas, 81,761.

Col, 101.— MACHINE FOR TURNING RODS.— Frank Douglas, Norwich, Con. I claim, Ist, The arrangement of the inclined cross cutting knife, e, with the knives, e'', in a tubular cutter head, when constructed and operating sub-stantially as and for the purpose above described.
2d, The guide, F, when constructed with the lock, o, and the notch-es, n n, and operating in connection with the lock, o, and the tubular cutter head, substantially as and for the purpose set forth.
3d, The arrangement of the grooved rollers, R R', at the rear end of the cutter spindle, substantially as described.

81,762.-REVOLVING FURNACE FOR ROASTING ORES.-Fred

erick Ernst, San Francisco, Cal. I claim, 1st, The hearth, D, revolving between the inner and outer walls. B C, of the furnace, with the circular rack, F, and flange, G, operating in the grooves of the rollers, H H, substantially as described. 2d, The discharging apparatus, operating traversely across the furnace, above the rotating hearth, and consisting of the scrapers, N, N, attached to the endless chain, N', operated by the wheels, substantially as described. 9d, The construction of the hearth. D, with the circular f ange, E E as as to

81,765.—POTATO DIGGER.—Elias T. Ford, Stillwater, N. Y. $c_2, c_3, c_4, \ldots, c_1$ or a construction of the sector of the dividers of the dividers of the dividers of the sector of the dividers of the

described. ^{2d}, The pole section, Br, binged to the lngs, r r, underneath, and in rear of the axic, B, in combination with the dividers, E E, the lngs, r r, to be aquast-able, in the manner and for the purpose specified. ^{3d}, The vine cutter, o o, with Knives, S. plane or sickle edge, as hinged with swivel, U, underneath the pole sections, Br, substantially as and for the purpose specified.

purpose specified. 81,766.—RECIPROCATING STEAM ENGINE.—Alexander Caesar,

51,700.—ItelFrAOLATING DIEAM INAURE.—REAGINET CARACTER STREAM IN A STREAM I

engines arranged to project from the shart in the manner herein described.
81,767.—APPARATUS FOR AMALGAMATING GOLD AND SILVER.
Willard M. Fuller, Chicago, III. Antedated August 28, 1868.
I ciaim, ist, Discharging C: tailings of an amaigsmator through a conduit or onliet, the mouth of which is immersed in liquid, so that it will close such conduit against the admission of air, and at th: same time afford a free and uninterrupted passage for the tailings, substantially as specified.
24. The steam jacket, D, in combination with the kettleor vessel, C, and shell or case, B, substantially as described.
3d. The sholl or case, B, when provided with pipes, E, L, and A, so that it can be operated interchangeably, either by water or by exhausting the sir, substantially as specified.
4th, Placing the kettle, C, within an air tight case, B, so as to leave an annular space or flues between them, and connecting such space or flues with a 'scharge pipe, E, placed below, substantially as specified.
81,768.—CARRIAGE SHACKLE.—W m. F. Gilbert, Derby, Conn. I claim the combination of the sleeve or bearing, D, aranged between the theek, A and B, and secured by the bolt, E, with the head. G. of the thill ron, the whole constructed so as to be united substantially as described, and consisting of the pivoted handle, G, screw, E, and fixed arm, D, all operating as set forth.
81,770.—FLOUR DREDGE.—E. A. Goodes (assignor to himself

as set forth. 81,770.—FLOUR DREDGE.—E. A. Goodes (assignor to himself

E.L. Miller, and W.H. Mortord), Polladelphia Pa. I claim the flour dredge, BC, so constructed that its perforations may be entirely closed, or a greater or less number be uncovered, substantially as shown and described for the purpose set forth. 81,771c—FENCE-POST DRIVER.—William S. Graves, Oberlin, 81.

Ohio. I claim segments! stay, D, and slotted rail, E, as arranged, in combination with the ways or guides, b, and frame, C, for the purpose specified. 81,772.—POTATO DIGGER AND SEPARATOR.—William Green, Holly, Mich. Antedated Aug. 28, 1868. I claim, ist, Simultan cousty a djusting the plow, and putting the apparatus into or out of gear with its driving wheels, by means of the sliding irame, E e', and azle, D, when operating together for that purpose, substantially as described.

described. 2d, The conveyer, G, In combination with the shovel, E, substantially as and for the purpose set forth. 3d, The use of the two rollers, H H', for the purpose of detaching and sepa-rating the potatoes from the vines, substantially as described. 4th, The combination of the conveyer, G, cords, I I, and rollers, H H', sub-stantially as and for the purpose set forth.

stantially as and for the purpose set forth. 81,773.—MACHINE FOR STRETCHING HAT BODIES.—W. C. Griswold, Brooklyn, N. Y. I claim the combination of the tip stretching mechanism, consisting of the spokes, c', and star, m, with the brim-stretching mechanism, consisting of the inclined stationary arms, d', and the expansible or spreading arms, i, all con-structed, arranged, and operating substantially as herein specified. 81,774.—MACHINE FOR POLISHING WOOD.—Stinson Haga-man, Weissport, Pa.

man, Weissport, Pa. I claim the loose sleeve, i. set screw, j, nut, k, and slide, l, in combination with the shaft, E, and treadle, M, operating substantially as described, and

with the shaft, E, and treacle, M, operating for the purpose specified. 81.775.—MAKING IRON.—Alexander Hamar, New York city.

1 (1), — If ARING IRON.—Alexander Hamai, New Fork City. I elaim, 1st, The method, herein described, of introducing steam, super-heated steam, or hydrogen, into the boshes of a blast furnace above the ordi-nary blast tweers, for the purpose set forth. 2d, The method, herein described of introducing steam, superheated steam, or hydrogen, into the stack of a blast furnace, for the purposes to forth.

lorth. 3d, The method, herein described of producing iron suitable for conversion into steel by the use of anthracite and a hot blast, in combination with the introduction of hydrogen or superheated steam into the furnace at different elevations.

be combination, substantially as set forth, with a blast furnace, of arranged at different levels in the boshes and stack, for the purpose set forth

set form. Sth The combination, substantially as set forth, with the furnace, of the jet pipes sintuding into the interior of the boshes and stack, as and for the pur-pose set forth.

of the shoe, in a line with or even with the outer edge of said top face, sub-stantially as described. 2d, in combination with the clips arranged as above claimed, one or more spurson the top of the shoe, substantially as described. 3d, The shoe, as above described provided with nail holes, as a means of fastening it on, if the clips, er some of them, get broken off. 81,797.—CONSTRUCTION OR ARCHES, TUNNELS, &c.—George T. Lape. Summit N. Y. I claim, ist, The construction of sections or voussoirs, with horizontal dove-tailed tongues and grooves along their abutting ends, substantially as and for the purpose specified. 2d, in combination with said dove-tailed tongues and grooves, constructing said youssoirs or sections with rebates along their abutting sides, so that they will lap over each other at their joins or points of contact. 3d, The construction of sewers, aqueduces, and arches for bridges, cul-verts, tunnels, &c. by combining and abutting or each other a series of sections or voussoirs, substantially as and for the purposes herein set forth. 81,776.—PLANING MACHINE.—S. M. Hamilton, Baltimore, Marylan the vertically moving guide, H, constructed and arranged substan-the manner and for the purpose shown and described. I cla

tially in the manner and for the purpose shown and described. 81,777.—HEEL PLATE FOR BOOTS AND SHOES.—W. E. Ham-

61, 111.—HEEL PLATE FOR BOOTS AND SHOES.—W. E. Ham-lin, Jr., Providence, R. I. I claim the improved heel plate for boots and shoes, consisting of a plate made in two parts, A and B, constructed and fitted to each other so as to ac-commodate heels of different sizes, in the way substantially as described. 81, 778.—SUBMERGED ROTARY PUMP.—D. D. Hardy (assignor to T. H. Foulds). Cincinnati, Obio. I claim a pump, consisting of the case, F, with the pistons, G, inclosed there-in, connected by the pipe, C, with the hydrant, B, and operated by the rod, H, all substantially as described.

81,779.—Locking Latch.—J. Hardy, 2d, Andover, and B. B.

51,719.—LOCKING LATCH.—J. HATUY, 20, Allover, and B. B. Floyd, Lawrence, Mass. We claim a latch provided with the eccentric button, F, when arranged within the space, b, as illustrated, and operated either by removable key or retained knob, J, substantially in the manner and for the purposes specified. 81,780.—GRINDING MILL.—Edward Harrison, New Haven, Operation 1999.

Con. I claim, lst, The husk or runner case, A, constructed in one and the same plece, with discharge spout, B, frame, C, connections, D, bearings, E and F', sockets, H H, substantially as set torth. 2d, Fitting hopper, N, into sockets, H, in the manner described, when said sockets are a part of one of the busks of the mill. 3d, The rocker, F, plyvoted to the husk, and so as to be operated by an ec-centric or casm, S, on the pulley or shalt, substantially as and for the purpose specified. 4th, A double-faced stove, provided on its edge with a central flange, L, when the surfaces of the said flange bear the relative position to the face of the stone as described, so as to be set and adjusted to present either face of

when the surfaces of the said hange bear the relative position to the face of the stone as described, so as to be set and adjusted to present either face of the stone subsantially as and for the purposs specified. Sth, in combination with the subject matter of the above fourth clause, the runner plate or bed-stone husk, constructed so as to receive the stone, sub-stantially as and for the purpose gpecified. 81,781.—TUBULAR AIR HEATER.—B. R. Hawley, Normal,

81,781.—TUBULAR AIR HEATER.—B. R. Hawley, Normal, Illinois. I claim the diaphragm, B3, when perforated at b2, and otherwise arranged, as herein show and described. 81,782.—MITER BOX.—W. H. Herbert, Blissfield, Mich. I claim, 1st, The oscillating bar, R, when constructed and operating sub-stantially as and forthe purpose herein as to forth. 2d, An adjustable mitre box, consisting of the two quadrants, D and Lframe, C, set screws, G M and P, the road, J, guards, K, saw guides. N, and oscillat-ing bar, R, when arranged and operating sub-stantally as herein described. 81,783.—DEVICE FOR BINDING LOADS OF HAY UPON WAGONS. —I. W. Hodges. Plymouth. 10.

S1,753.—DEVICE FOR DINDING LOADS OF HAT OF M AGONG. -J. W. Hodges, Plymouth, Ill. I claim the combination of the two upright rack bars, B B, the horizontal beam, G, its pawis, g g, with the lever, D, its fulcrum, b, with the rack, A, all constructed and operating as herein set forth. S1,784.—VENTILATOR FOR HAT.—W. M. Irvine and A. H. Venter Wasterwalls

Moses, Montgomery, Ala, We claim. 1st, A band or ring so constructed and arranged on the inside of a hat that it may be adjusted to different-sized heads, substantially as de-

set forth. 4th, The arrangement of the ring, b, at the upper ends of the levers, A, carrying the pusher block, B, and toggle brace, g g', substantially as and for the purpose specified. William R Malone scribed. 2d, The band, A, constructed in either one or more parts, and furnished with

rim, and the notched impulse rollers, D and D', above and below.co: structed and operating substantially as and for the purpose herein described. 24. The detent lever, F, with the adjustable would be a screw, cc', or its equivalent, locking each tooth of the escape wheel twice at each revolu-tion, either by spring or gravitation, substantially as herein described. 3d. The point, d, on the arm, G, and the point, e, on the roller, D, for unlock-ing, substantially as herein described. 81, 790. — SEEDING MACHINE.—G. King and L. T. Shope, Frederick City, Md.

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S1,790.—SEEDING MACHINE.—G. King and L. T. Shope, Frederick City, Md.
We claim binging the lower section of the seed spouts, P V, to the tubes or sponts, R M, as and for the purpess specified.
S1,791.—HAY HAKE.— Watson King, Springfield, III. I claim, I-t, The rotating of the axle, A, by means of the gearing, C B and D, herein described, whether spur or beveled, as applied to hay rakes.
2d, The lover, B C, as shown in 62. 2, as applied to hay rakes.
3d, The collar, F, in combination with the geared lever, B and C, as herein arranged and described.

3d, The collar, F, in combination with the geared lever, B and C, as herein arranged and described.
4th, The tooth, as constructed in fig. 4, in combination with the adjustable brace, L, and nut, M.
5th, The adjustable brace, L, as herein arranged and described.
81,792.—CAM FOR OPERATING SHUTTLE BOX.—C. H. Knowlton, Camden, N. J., assignor to Furbush & Gage, Philadelphia, Pa. I claim, jst, In a drop-box loom, the within described system of ratchet wheels and cams adapted to each other, carried by one spinalle, and arranged to be operated and to operate substantially as and for the purpose herein set forth.
2d, The friction clamme T is combination with the set of 2d, The friction clamps, T, in combination with the cams which operate the

drop boxes of looms. 81,793.—BURNING KILN.—Balthasar Kreischer, New York

city. city. I claim, 1st, The arrangement of passages, E F, controlled by dampers, m, substantially as herein described, for carrying off the gases and products of combustion, through the door ways, C, of the kilns, and openings, efd, con-trolled by dampers, g and J, communicating with an adjoining kiln or lower from D as remained

trolled by dampers, g and J, communicating with an adjoining kills or lower flue, D, as required 2d, The top B use, F F, in combination with the hollow doorways, C, and con necting tubes or passages, E, essentially as here in described. 3d, The double arch, G, to the killns, in combination with the openings or tubes, H, and chamber or passages, p, made in the side walks of the whole structure or fire-end of either killn, and connecting with the grate or fireplace as here in set forth. 4th, The bottom flue, D arranged below the floor of the killns, and trans-versely to them, in combination with the branches running to or from each killn, in direction of the length thereof, and connecting, by suitable opuings, the killns at their ends or doorways. G, with either smoke stack, and controlled by suitable dampers, substantially as and for the purposes specified. 81 794. — MACHETME FOR SPEARATING ORES. — S R. Krom. New 81,794.—MACHINE FOR SEPARATING ORES.—S R. Krom, New

51,194.— MACHENE FOR SEPARATING URES.— 5 R. K.rom, New York city. Antedated Aug. 5,1868. I claim.ist. Introducing the material upon the bed, I, in a thin stratum, close to the surface of the bed, substantially in the manner and for the purpose herein set forth. 2d, Trayersing the material across the perforated bed. I, transversely to the length of the machine, that is to say, extending the bed, I, longitudinally of the length of the framework, A. and causing the material to traverse across its narrowest dimensions, substantially as and for the purpose herein set forth.

the length of the framework, A, and causing the material to traverse across the length of the framework, A, and causing the material to traverse across the narrowest dimensions, substantially as and for the purpose herein set of the discharge passage, J, for the purpose herein set forth. Ath, The trip wheel, C, and lever, F G, or their respective equivalents, ar-ranged, ritizitively to the bellows, D, and to the purforated bed, 1, and its con-nectively to the bellows, D, and to the purformated bed, 1, and its con-nectively to the bellows, D, and to the purformated bed, 1, and its con-nectively to the bellows, D, and to the purpose here in section and the means for the purpose bere in specified, mounting the bellows, D, on a rocking shart, Sing d operating its specified, mounting the bellows, D, on a rocking shart, Sing d operating its base adjustable vibrating motion, substantially as and for the purposes here in specified. The nearboxing the the thickness and velocity of the strata on the ore bed, 1, substantially as and for the purposes here in specified. The nonbination, the ore bed, I, with its feeding and discharging devices, the adjustable oscilating bellows, D, the trip wheel, C, and its connections, and the means, H 11 H2, or their equivalents, for varying the rate of dis-charge through the passage, S, all arranged for joint operation, substantially as and for the purposes herein a frame work, A, so that they may operate by a direct connection throng the rocking shart, S, with the bellows, D, and that the closed end of the fram frame work, A, so that the purposes herein set forth. 81,795.—PLANE FOR CUTTING BLIND SLATS.—Carl Kupfer, (assignor to himself and Kund J. Fleischer). Madison, Wis. 1 claim, ist, The bit, A, when constructed with sarepened upper and lower edges, 1 and 2, leaving two lips, 3 and 4, satd hips to be at right angies with the upper and lower cutting edges, substantially as and for the purposes set forth. 2d. The combination of the bit, A, as described and claimed, with the

the upper and lower cutring edg (a), substantially as and for the purposes set forth. 2d. The combination of the bit, A, as described and claimed, with the plane stock, for the use and purposes specified. 81,796.—HORSE SHOE.—Henjamin Ladd, Ottumwa, Iowa. i claim ist, Making the inside face of the clip, where it joins the top face of the shoe, in a line with or even with the outer edge of said top face, sub-stantially as described. - where the other of the shoe substantially as described, one or more - where the other shoe substantially as described.

81,798.—ANIMAL TRAP.—H. S. Lesher, Galesburg, Ill.

01, 40.—ANIMAL IKAP.—I. O. LESLET, GRIESOURG, III. I claim, Ist, The tilting platform, g, so arranged in combination with the trigger, i, and spring, m, that when the animal presses the platform down, it is retained in position to prevent lis escape. 2d, The hinged plate, K, so arranged in combination with spring, m, trig-ger, i, and tilding platform, g, that when the animal seeks escape over the plate, E, the tilting platform will beliberated, thus allowing it to fall to its original position.

brighalposition. 81,799.—SULKY PLOW.—J. B. Lewis and J. E. Udall, Con-

Cord, 11, We claim, 1st, The flanges, G, eccentrics, I, wrist pins, J, and pins, L, when constructed, arranged, and operating substantially as herein described, and for the purposes sec forth.
2d, The combination lever, M, when constructed, arranged, and operating substantially as herein described, if the purpose specified.
3d, The combination and arrangement of the above-named parts with the frame, A, axie, B, boit, H, seat, C, traction wheels, K, plew beam, D, plow, E, and quadrant, N, substantially as and for the purpose specified.
81,800, — WAGON BODIES. — Thomas E. Lewis, Pennyille, Ind.

I claim a wagon body constructed and operating substantially in the manner described. 81,801.-WELL TUBE.-Lorenzo Lovejoy, Malden, Mass.

Iclaim the combination, with a well tube, of a series of curved or bent per-forated tubes, when constructed, applied, and operating substantially as and for the purpose set forth.

for the purpose set forth. 81,802.—RESERVOIR FOR COOKING STOVE.—Albert Lyman,

Troy, N. T. I claim a metallic reservoir, constructed in the manner described, in com-ination with shding covers, all arranged and for the purposes substantially set for the

as set forth. 81,803.—FLOORING CLAMP.—Donald D. Mackay, Whitestone,

N.Y. I bound the bound of the problem of the probl

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set forth.

zu, the unscharging apparatus, operating traversely across the furnace,	scribed.	the purpose specified.
above the rotating hearth, and consisting of the scrapers, N N, attached to	2d. The band. A.constructed in either one or more parts and furnished with	
the endless chain, N', operated by the wheels, substantially as described.		CLICCH CHILDRE TON I CHILDREN IN HEATONG
	tubes, e and a, slots, C, and tube, E, all arranged in the manner and for the	Mason, W. Va.
setain the ore upon the surface of the hearth and the surrer. M. or its equiv-	purposes set forth. 81,785.—APPARATUS FOR EXTRACTING WORT AND SIMILAR	I claud the valve seat for check valves provided with the conical form from
alent, to turn the one as the bearth revolves, the whole constructed and	81.785 — Apparatus for Extracting Wort and Similar	A to B, and the taper prolongation provided with the opening in the side and
Operated substantially as described.	LIQUIDSF. Jacoby, St. Louis, Mo.	with the stem and valve, constructed and arranged substantially as and for
4th, The dampers, U U', and sliding plate, S, arranged to be operated sub-	Liguids F. Jacoby, St. Louis, Mo.	
stantially as and for the purposes described.	I claim, 1st, The application of a partial vacuum in the sub-compartment of	the purpose specified.
	a mash tu b. to cause the wort to accumulate more quickly, and to cause its	81,805.—HINGE.—Thomas D. McCall and Samuel Bushnell,
5th, in revolving furnaces, carrying the ore in one direction on the hearth,	extraction more thoroughly out of mash, substantially as set for the	Walton, N.Y.
while the heat, flame, and gases pass in an opposite direction, substantially as		We claim the clasp hinges, ss and n n, with their joints, a, and the revolv-
described.	centrating head, C, and the drain pipes, B, and mash tub, A, substantially as	ing cylinder, e with its grooves, g g, when constructed, combined, and ar-
01 CO Denver Pressen Nalary D. Frankt (and	and for the purpose set forth.	ranged in themanner and to operate substantially as described.
81,763.—ROTARY STEAM ENGINE.—Nelson B. Fassett (assign-		
or to himself and William Humphrey), Adrian, Mich.	81,786.—WHIP HOLDER.—Albert W. Johnson, New York	181,806.—PUMP.—Theodore J. McGowan, Cincinnati, Ohio.
I claim, 1st, The two steam backers, S and S', in combination with their re-	olty	I claim the "vacuum" chambers, b b', when cast or otherwise formed upon
spective radial pistons, P and P', constructed and operating in the manner	I claim, 1st, A holder for whips, etc., composed of jaws, B, in combination	the valve chest, substantially as herein described for the purpose specified.
substantially as set forth and described.	with a rest, M, or their respective equivalents, connected together so as to be	the varye caese, substantianty as acreat described for the purpose specificat
2d, The circular disks, j and k, in Combination with the radial wings, a, b,	with a lost, m, of the first espective equivalents, connected together so as to be	81,807.—CULTIVATOR.—D. McNeeley and C. J. Cady, Spur-
c, and d, shaft, T, and rings, 1 and 1', constructed in the manner set forth and	operated and to operate substantially in the manner described.	
described.	2d, the jaws, B, sleeves, E F, center-shaft, G, spring, O, and rest, M, when	geon.Ind.
	all constructed and arranged together for operation substantially as de-	We claim, 1st, The combination of the draft beam, A, with plates, J J,
3d, The combination of the convex faced bar, f, and concave faced bar, f',	scribed.	slots and set screws, s s', and wheel. D, substantially as described.
for packing against the concave case, B', and rotary piston, R, respectively	91 797 H. Same M. Same Crasser Level T. Level Mer	2d, The arrangement of the beam, A, handles, B B, wheel, D, plows, E E E,
in the manner set forth and described.	81,787.—HARNESS MAKERS' CLAMP.—Jesse F. Johnson, Mon-	standards, C C1C2, cross beam, L, bruces, K o o'o", and attachable and de-
4th, The combination of the slot wheel, L, with the crank arm, K, friction	rovia. Ind.	tachable rake. F. substantially as shown and described.
roller, Z, and stop wheel, M, constructed in the manner set forth and de-	I claim, 1st, The guide plates, C, attached to the jaws, A A', substantially	
scribed.	as and for the purpose set forth.	81,808. MOTH FLY TRAP FOR BEE HIVES. James D.
_5th, The steam ohannel, m and m' or m", in combination with rotary piston	2d, The holding bar, E, jever, G H e, and elastic strap, I, arranged substan-	Meador, Independence, Mo.
R, and center piece, G, respectively, as set forth and described.	tially as and for the purpose set forth.	I claim the tongued floor, B, in combination with an illuminating floor, D
		all claim the tongued noor, b, in combination with an intumnating noor, b
81,764.—VISE.—Isaac Fisher, St. Louis, Mo.	3d, The channeling tool, L, constructed and applied substantially as set	all arranged and employed as herein described and set forth.
	forth.	Also, the several parts, A a B b D, and the covered way, c, when constructed
1 claim the combination of the steel facings, b b, with jaws, a a, of a vise,	91 799 HADNESS W & Lordon Now Orleans La	and combined as herein shown and described.
and the soft metal clamps, x x, substantially as shown and described.	81,788.—HARNESS.—W. A. Jordan, New Orleans, La.	91 900 How Arp Furny on Mantin Motorlf Grand Danida
Also, the combination of the rectangular facings, c c, with the vise jaws,	I claim a metallic connecting termination or tip for certain parts of harness,	81,809.—Hot AIR FURNACE.—Martin Metcalf, Grand Rapids,
a a, by means of the removable blocks, d d, fig. 2, substantially in the man-	as herein indicated, when the same consists of the self-fastening, annular	Mich.
ner and for the purpose herein set for th.	tapering socket clamp. A, and a projecting loop. B, and is otherwise con-	I claim, 1st, The pipes, R, or their equivalents, when arranged with a
Also, the arrangement of the pivot connection of the triangular block, j.	structed substantially as herein described for the purpose set forth.	drum, D, and extending downward as described, and for the purpose speci-
with the removable block, d, when the said blocks are combined with one of		fied.
the jaws, a, of my improved vise, substantially as and for the purpose herein	181.789.—ESCAPEMENT.—W. C. Kellum, San Francisco, Cal. 1	2d, The combination of a case, A, provided with passages, x, and a box, B
set forth.	Join 1st The assans wheal C having assans that aither on the side or	zu, ing compination of a case, A, provided with passages, X, and a box, B
	I claim, 1st, The escape wheel, C, having escape teeth either on the side or	provided with a projecting nange, i, and slots, x, with the pipes, K, and the

drum, D. when constructed and arranged substantially as and for the pur pose herein set forth.

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drum, D. when constructed and arranged substantially as and for the pur pose herein set forth. S1,810. - CHUBN.-John L. Middleton, Zanesville, Ohio. I caum the oburn, A, havmar an opening, G1 constructed as described, in combination with the m-tablic lid, G, locking bur, H, screw, g. and handle, knob. or button, gt, substantially as and for the purpose set worth. S1,811.-Saw.-Warren P. Miller, New York city. I claim, list, The shoulder, d, on tooth, b, and rest, c, on saw-plate, A, when constructed are arranged to operate in the manner and for the purpose sub-stantially as de cribed. 2d, A derschable saw-tooth, in which is combined a circular shank adapted to s circular recess in the saw plate, and having shoulder, d, adapted to abut against rest, c, on the saw plate, as described. 81,812.-taw.-Warren P. Miller, New York city. I claim a saw, with the teeth, c, in pairs on base, e, hiving parallel sides, and deep spaces, d, between the pairs of teeth, constructed are arlanged to operate in the manner and for the purpose described. 81,813.-SLIDING GATE.-GCUTGE Motter, Jr., Henry, Ill. I claim, 1st, Thegate constructed with the triangular brace of its rear end, and having the rollers, d al arranged to operate substantially as herein setforth. 2d, hereinder, day, apheels o as to bear upon opposite sides of the rail, a', and being held thereonby the projections, e, in combination with the posts, A, and A', with the roller, C, al arranged to operate substantially as herein setforth. rein set forth. the stationary hooks, F and G, constructed and applied as shown and as he 2d,

scribed. 814. — WINE COOLER.— Julius Nuellens, Torquay, and Matthias Neuhaus, London, England. Patented in England, May 29, 1969 81.814

We claim, 1st. Constructing or providing portable coolers or cooling appa-ratus with a water tight cover, substantially in the manner and for the pur-

rating with a water tight cover, successfully in the series of divisions, c, form-pose herein described and shown. 2d, The combination, within the case, a, of the series of divisions, c, form-ing spartments and otherwise supporting the ring, b, substantially as and for

ing spartments and otherwise supporting the ring, optimized and overlapping the purpose described. 3d, The elastic danbragm, g, with central opening, h, and overlapping edges, m combination with the plate, i, and suitable fastening devices on said plate a d the case, a, substantially as and for the purpose described.

city:
I claim. Ist, As a new article of manufacture, the water proof mixture, compounded and prepared substantially as before set forth.
2d, The manufacture of water preof fabrics, by applying the water proof mixture before described upon textile fabrics, by applying the water proof before set forth.
81,816.—WINDMILL.—Walter Peck (assignor to William Jobes, Seth H Hils, and Amelia (Deck), Rockford, Ill.
I claim, 1st, A bounding piece, arranged to operate for controlling the speed of a windmill, substantially as described.
2d, The combination of a bounding piece, for controlling the speed of a windmill, substantially as described.

white a work of the subscription of the shaft, n, and held by the ratchet 3d. The collar, m, when supported by the shaft, n, and held by the ratchet and pawin, n', and operated by bulley and cord, or band, and when in com-bination with the weighted lever K, all as and for the purpose set forth. 4tt. The ratchet on arrs, q, in combination with its spring pawi, when the pawimoves in guides, and is held by the drop catch, s, substantially as and or the purpose at forth.

- purpose st forth. In combination with the latch, connected as described, the sliding t, with itspin, I', moved and operated substantially as and for the purpiecet for

pose set forth. 81,817.—BRIDGE – Andrew J. Post, Hudson City, N. J.

81,817.—BRIDGE.—Andrew J. Post, Hudson City, N. J. Leaim the cashings, M m, fitted in the top chord, as specified, and extend-ing up to the upper surface thereof, having inclined surfaces forming fau-bearings for the uts on the dagonal use, and recesses at the base acapted to receive the round ends of the struts, B, all constructed, combined, and ar-ranged sub-statishiv as and for the purposes herein set forth. 81,818.—Eavies TROUGH.—John Heinig, Fond Du Lac, Wis, I claim the construction of a baneer, for the purpose described, when con-structs of one piece of metal, bent in such form as to conform to the shape of the eavest prough, and product with bolt and nut, G, substantially as herein described and set forth.

-MECHANICAL MOVEMENT.-Ed. O. Rood, Lodi, Ill. I claim the vibrating lever or bar, H. or its equivalent, applied to a rock shatt. F, m the mainer described, and employed m conjunction with two circular series of teach or projections, e, substantially as and for the purpose

Strong between the strong of the strong stro 01,031.--SRWING MACHINE.-A. S. Rowley, Hudson, N. Y. Iclaim, 1st, The combination and arrangement of the two cams, C.C., the rods, c.d.e, and series of hooks, b b, etc., substatially as and for the pur-pose set for h 2d, The combination and arrangement of the angular box or hopper, E, the spiked, toothed, or corragated cylinder, F. endlers, apron, ", and holding and feeding fingers, ss s, etc., substantially as and for the purpose herein set for h. purpose set to th. 81,821.--SEWING MACHINE.-A. S. Rowley, Hudson, N. Y.

n. 1 n combination with the above, a sewing mechanism substantially as

and for the purp se described. 81,822--1NJECTOR FOR STEAM GENERATORS.—Samuel Rue,

Jr, Paol, assign or to himself, Samuel Mc. Cambridge, and Eoward G. Martin, P. Hadelphia, Ps. I claim, Pt. Hadelphia, Ps. H claim, Pt. The arrangement of the adjustable intermediate pipe, H with the plugs, D as d D, when said parts are movided with the valves, L and L, and the valve seats, a and a, substantially in the manner hereinbetore described.

and L, and the varve seats, a and a, substantially in the manner heremote-fore described. 2d, it arrangement of the a justable pipe, H, being smaller at its re-ceivink can than the front end of the steam pipe, whereby to increase the pressure upon the warer through the former, substantially as specified. 3a, The dimnisized bore of the pipe. H, for th cing a greater pressure at ts receiving than at its olscharging end, while boller, substantially as described. 4 h. The combination of the size H boller, substantially as described. 51, 22, -BELTING. - Thomas Standring, Fort Richmond, N. Y. Ant-dated July 6, 1868. I chim, as new article of manufacture, ine belting, consisting of the sold sheet of steel, a champed between the leather pars, a e, by the central rivers, K, and preventer four lossening by being commended to such pars, as berom shown and described.

snown and described. - MEAT CHOPPING MACHINE.—Sigmund Rutschman 81,824

Priadelphia, Pa. I claim the combination, with the cross-head and sliding boxes of a meat-chooping machine, of flaires, as, permainenty secured to the cross-head and of the puss, fit has read through the said flanges and the sliding boxes, substantially as and for the purpose herein specified. 81,825.—REEL.—Albert H. Saunders, Nashna, N. H.

I claim the reel, made with the hub in two parts, a' b', connected by a pring, as described, and having a pair of arms extensing from each of the

spring, as drescribed, and having a pair of arms extensing from each of the satu parts, a'b'. Also, th. reel, as made with the self-adjusting radial arms, and with the h'bformed in two varts, a'b', connected by a spring, and having a pair of such arms extended from each of the parts, a'b', as specified. 81,826.—WARP DKESSER.—BCR jamil Saunders, Nashua, N. H, assignor the himself and Albert II. Saunders. I claim, in a dresser-frame, the combination of the counterbalance with the brush-frame, its operative cranks and pulleys, as described. 81,627.—WATER COOLER AND KEFRIGERATOR.—Charles C. Savery Phylodelpais Pa

Savery, Philadelphia, Pa. 1 claim the combination and arrangement of the enameled ice and water tank i. C C P and ta lid, L, with the enameled arr chamber, C" C", and its coor, D, co s ructed substantially as herein specified. 81,828. CARKIAGE WHEEL.—George Seymour, Whitney's Point N X

81,828. CARRIAGE WHEEL—George Seymour, Whitney's Point, N.Y. I claim the combination and a trangement of the stationary key. D, with the wheel turning the axie hox, E, adjustable thimble not. F, and movable rings, B B, all being constructed substantially as herein described and rep-re-ented, for the purpose set torth. 81,829.—ANIMAL TRAP.—Jeremiah Sherman, New Oxford, New

Pa. I claim the combination of the bridge-ways, m, in the side boards, b, the included side boards, c. and overlap ang boards, h, with the passage, A* pivoted gates, C, and cage, A, all arranged substantially as shown and depivoted scribed

81,830 .- FEEDING NAIL PLATE .- Winslow Sherman, New York, and Jacob Russell, Brooklyn, assignors to Jacob Russell, Henry T. McCoul, James L. Romer, and Thomas T. Buckley, Brooklyn, N. Y. nation with the drag bar, D D. shoe, T, and the finger bar, G, substantially as and for the purpose berein specified. Also, the spring, u, in combination with the lever, R. vibratory arm, S, slicing pinion, i, and the fince nucle wheels, m, or their equivalents. substantially as and for the purpose berein specified. Also, the spring, u, applied to the coupling bar, substantially as and for the purpose specified. Also, the spring, u, applied to the coupling bar, substantially as and for the purpose specified. Also, the spring, u, applied to the coupling bar, substantially as and for the purpose specified. Also, the approximation of the pulley of the pulley block. B, and two indrical rollers, c c c c and c' c' c' d, and finge, F, all constructed and sh wen described. 3d, The arrangement in the eye of the pulley. B, of two or more

81,833. - ENDLESS PLATFORM FOR CHURN POWER.-A. B.

81,833. - ExpLESS FLATFORM FOR CHURN FOWER. - A. B. Smith, Rochester, Pa. I claim the metallic braces, or cleats, C. C. applied to the endless platform, subs anially as and for the purpose specified 81,834. - BRAID. - J Hunt Smith, Norwich, Conn., and Wil-liam Shedlock, and Alfred Sbedlock, New York city, We claim the new and improved manufacture herein described of a tri-radi-ate braid, or braid compresed of three radial members, united to each other by interlocking or incribraiding the threads of the different members with each other, substantially as herein described. - Thomas W. F. Smitten 51,835. - BRFAGT, PLN FASTENING - Thomas W. F. Smitten 81,835-BREAST-PIN FASTENING.-Thomas W. F. Smitten,

OI,000—Diffusion a subset of the second se

81.836.—FENCE.- Jacob Southwick, Brant, N. Y.

Weater, iso-FENCE.- Jacob Southwick, Brant, N. Y. 1 Claim aportable board fence, when constructed as described, the fence posts, A. A. being formed of two pices, locked together near the top, and apreading a the bottom, and thepanels each consisting of boards, 6 B, con-fined together by strips, CC, and hung on the fence posts, A. A, the whole being secured by pins, a a, and stakes, E E, substantially as herein set forth. 81,837.-HEAD BLOCK.-E. H. Stearns, Erie, Pa. I claim, 1st, In head blocks for saw mills, the employment of springs, so applied that when the knees are released from the setting mechanism, the springs will automatically bring back the knees to the required position for the next advancing movement, substantially as set forth. 2d, The segment bars, L, constructed, arraiged, and applied in the manner shown, or in any equivalent way, for the purpose of limiting the backward movement of the knees, as set fortb. 3d, The elastic stops, P, upon the knees of the head block, in combination with the segment bars, L, constructed, arraiged, and applied in the purpose speci-fied.

Ath,'fheflanges, f, f r the purpose of carrying and adjusting the dogs, when disengaged from the log or remnant thereof, substantially as de-

81,838.— OMPOSITION FOR ROOFING. — Benjamin Stevens,

Wheeling, W. Va. Antedated August 3, 1868. I claim the compound of coal tar and purverized slag, as and for the pur-

1 of described.
81,839,—GARDEN HOE.—Luther Streeter (assignor to himself and Ransom Snepard) Chicopee, Mass.
1 claim, in combination with the blade, A P, of a field hoe, which is more or less curved in the direction of its length, the forked shank terminating in a sligle socket or is of for the hindle, and applied to the blade as set forth, the whole constructed and arranged substantially as described.
81,840.— WATER-HEATER FOR STEAM-GENERATORS.— James W Sutton. Detroit. Mich.

W. Sutton, Detroit, Mich. I claim, 1st, The airspace within the jacket, G, when connected with the annuar air space, F, and operating substantially as and for the purposes bereins, tforth. 2d, The combination of the above-named parts, with the boiler, A, water pipes. L check valves, M, three-way cocks, N, stationary connections, O, and escape pipe, P, when arranged, constructed, and operating substantially as and for the purposes herein specified.

Solution and an angle of objective in the mainer and of the purposes set forth. 2d, The ventilators, c c, substantially as and for the purposes set forth. 81,843.—TIGHTENING BAND FOR V #ss Ls. -John Tingley, Puladelphia, Pa., assignor to himself and Samuel L. Davis, Camden, N.J. I ciaim, 1st, The plate, G, of a shape to fit the side of the vessel, ha ving a projection, r, and secured to one end of a band, a screw rod #theother end of which p sees through the projection, f, as and for the purpose described. 2d. The said band, with screw rod at one end and projection at the other, uncombination with a handled nut, E, arranged to conform, or nearly con-form, to the shape of the vessel to which the band is applied, as set forth. 3d. The slots, m, in the band, D, for the purpose specified. 81.444 —SMOULING PUPE — (Tharlow Toulhard Pulashi N V

3d. The slots, m, in the bano, D, for the purpose specified. The start of the slots, m, in the bano, D, for the purpose specified. The start of the slots, m, in the process of manufacture, is successively baked, saturated with unctions matter, and carbonized, substantially in the manner and for the purpose berein set forth. 81,845. — MACHINE FOR COVERING CORD. — John Turner, Norwich, Conn An edated Augur 25, 1868. I claim the covering bobbin. F, arraoged and operating in combination with the twisting splidle, C, and yarn bobbin, D, substantially as shown and described

81,846 — Spring SEAT FOR VEHICLES — Oliver Vanorman,

81,846 — SPRING SEAT FOR VEHICLES — Oliver Vanorman, Bipon, Wis.
1 cl.im the arrangement of the detachable seat, consisting of the elevated levers or bars. B B, with hooks and eves, i.e., or equivalent devices, to the parallel bars, D D, substantially as described.
Also, the arrangement of the elevat. d seat bars, B B, which hooks and eves, i.e., or equivalent devices, to the parallel bars or invers. D D.
81,847. — W as H BOILER — James Varley, Hudson City, N. J.
1 claim, 1st The central jointed tube, C, perforated upper chamber. D, and false bottom, B, in combination with each other and with a wash boiler, substantially as heren described.
20, The telescopic or singing iont, a, in combination with the central joint-ed tube, C, or removal of the cover substantially as herein set forth.
31, The combination of the lips, p, and notches, e, e, for locking in place

ed tube, C, for aginstment of the upper chamber, D, or removal of the cover substantially as herein set forth. 3d, The combination of the lips, p, and notches, e, e, for locking in place the faile b tom of the wash 'older, substantial'y as specified. 81.848.--SASH FASTENING — Felix Wakier, Memphis, Tenn. I claim the eccentric uplex balance wheels, a, protect to the sash upon the same pivot, in combination with the curved keeper, e, constructed and operating as described for the purpose specified. 81.849.--EYEGLASS.--Edwin Want (assignor to himself and J E. Spenceri, New Mayen, Conn. I claim in combination with the bows of eye-flasses, constructed and ar-ranged upon their string, E, substantially in the ma ner described, the ap-pication of plates, H, at the point of atrachment of the bows to the spring F, in the manner and for the purpose specified. 81850.-SLIDING SISH.-Gardner Warren, Boston, assignor to Wm. M Byrnes, Charlestown, Mass.

to Wm. M. Byrnes, Charlestown, Mass. I claim the metallic spring, D. with the flagge, a, when constructed and applied substantially as described and for the purpose set forth. 81,851.—BLEACHING SOAP.—Alexander Watt, Wandsworth,

England. lclaim a s a scap containing a soluble chloride or hypochloride, mixed and ded with a previously made scap in a melted state, m the manner

81,852.—Die for Stamping Wooden Boxes.—Wm. Weeks,

Albany, N Y. I claim the combination of sleeve, D, rods, F, punch, E, and collar, C, with a die, A, and plunger. G, constructed substantially as and for the purposes berein shown and described.

81,853.—Hor AIR ENGINE.—Francis H. Wenham, London,

England, assignor to Andrew Sharks. I cain, 1st, The cylinder, a, constructed as herein set forth, whereby a ortion of au admit d unto the cylinder is retained and compressed above he piston au each upward stroke of the same, substantially as set forth. 2d, The arrangement of the furnace, g, with the hopper, i, and grate, h, constructed with reference to the cylinder, a, substantially as herein set orth.

Philadelphis, Pa. 3,192.—PATTERN FOR KNITTED FABRIC.—Joseph D. McKee,

phia, 1 3,191.--

Olycouter of the set of the se

REISSUES.

79,942.—ANILINE DYE.—Dated July 14, 1868; reissue 3,103. Benot Bloch, Soultz, France. I clam a dye composed of the ingredients herein named, and treated in the manner substantially as set for the. 70,523.—APPARATUS FOR RAISING AND SECURING THE LEGS

op Horses to SHOE THEM.—Dated Nov. 5, 1867; reissue 3,104.—J. P. Cham-pion, Phelps, N. Y. I Claim the lever apparatus for raising and securing horses' legs, employed i connection with a suitable frame, arranged and applied substantially as rein shown and described.

in connection with a suitable frame, arranged and applied substantially as herein shown and described.
42,199.—CARRIAGE CIRCLE COUPLING.—Dated April 5, 1864; reissue3,105.—Geo. G. Larkin, West Amesbury, Mass. Iclaim, ist, The lower circle, J J K, tormed with depressed rear portion, in combination with au upper circle, L, constructed and applied substantially as herein set forth.
d. In combination with the lower circle, J J K, and upper circle, L, thus constructed and combined, the stop, M, for the purpose specified.
10,742.—ENEMA SYRINGE.—Dated April 4, 1854; extended seven years; reissue 3,06.—Works Mattson, N w York city.
1 claim, 1st, the combination of the thumb or finger rest, d, with the barrel and pitcho., for the purpose set forth.
2d, The combination of the elastic or floating diskor valve, b', with its seat and chamber, arranged and operating substantially as described.
3d, Placing the ejection or outlet valve of a syrines at or near the extremity of the dis harge r injecting tups of a synines at or near the extremity of the dis harge r injecting ubs most distant from the pump barrel, or his equivale w, for the purpose set forth.
78,113.—FURNACE FOR ROASTING ORES.—Dated May 19, 1368; revene 3,107,—Charles Metinger, Cornwai, Pa.

(15,113.— FURNACE FOR KOASTING URES.— Dated May 19, 1368; renseue 3,107.—Charles Mellinger, Cornwal, Pa. I claim, lst, la combination with a desulphurizing turnace or oven for preparing iron ore for smelting, the sliding door or damper, B, arranged and operated substantially as desorbed.
24. In combination with a desulphurizing furnace, for the purposes mentioned, the frated or perforated arch, F, substantially as desorbed.
3d, The combination of the arch, F, substantially as desorbed.
3d, The combination of the arch, F, substantially as desorbed.
3d, La d thedamper, B, substantially as and for the purposes desorbed.
4th, A blast furnace, so constructed that the surplus heat or gas escaping from the same is utilized, thereby desulphurizing, reparing, or coasting the ore, preparatory to smelting, substantially a. berein set forth.
36,987.—STEAM ENGINE PACKING.— Dated November 25, 1862. reliseus 3.06.—William Harley Willer, Philadelnhi, Pa., assignee of

36,987.—STEAM ENGINE PACKING.— Dated November 25, 1862; reissue 3,108.—William Hartley Miller, Philadelphia, Pa., assignee of James L. Bates, Providence, R. I. I claim, 1st' The use of a braidet or woven fibrouscovering, in combination with a filling for packing. for the purposes above described. 2d, The use of the fillet or strip of cork, A, or other filling, in combination with the covering. b, or its equivalent, emboscantially as shown and described. 3d, The construction of packing, substantially as beerin aet torth 4th, The construction of fibrous braid coverings for packing, substantially as shown. 64,817.—MACHINE FOR GRINDING 'CHE CUTTERS OF MOWING MACHINES.—Dated May 14, 1867; reissue 3,109-Henry Whitall, Wood-

association and the second s

set form. 4tb. A rotary and traversing grinding wheel, supported on a shaft, arranged angularly in the sliding frame, the position of the shaft in the frame being such tbat when the said sliding frame traverses parallel with the edge of the cut let, the mandrel will be parallel with the cutter bar, substantially as and

such toat when the said splining frame traverses parallel with the edge of the cuter, the mandrel will be parallel with the cuter bar, substantially as and for the purpose described. 5th, A rutary grinding wheel, supported on a traversing frame, and ar-ranged to be adjusted in a nonzontal plane, parallel with the faces of the cut-blades, sub-tantially as and for the purpose described. 6th, The combination of the poss, B and B', provide t with the sleeves. C and C', of the bent frame, D. jointed to the sleeves and the oscillating frame, E, substantially as and for the purpose described. 7th, The combination, with the bent frame, D, of the oscillating frame, E, pivotei th eret, and provided with means for adjustment, substantially as and for the purpos. described. 8th, The combination, with the sliding and oscillating frame, of the driving shaft, grinder carrying shaft, grinding wreed, and their operating mechan-ism, substantially as and for the purpose described. 9th The combination, with the machine, substantially as described, of the clamp. P, when arranged for joint action with the same, substantially as and for the purpose set forth. 10th, A grinding m chanism, substantially such as described, operating to grive the cuters while in the machine. 8(881.—PLANING MACHINE.—Dated April 13, 1852; extended

grivia the cutters while in the machine. 8,881.— PLANING MACHINE.—Dated April 13, 1852; extended seven years; reissur 2,676, dated July 9, 1867; reissue 3,110.—James A. Woodbury, Boston, assignee of J el Whitney, Winch ester, Mass. I claim, 1st, The method of connecting the movable feed roll to the sta-

I claim, ist, The method of connecting the morable feed roll to the sta-torary roll, when moving lowards and from the same, in a constant plane, perpendicular to the loard, by a duplicate system of similar gears at either end of the same, substantia ly as described. 2., The arrangment of mechanism by which the upper feed rollis allowed to yield to an inequalities in the board, and at the same time is drawn down upon its surface to which it has yielded in proportion to the resistance to us progress, substantialy as described. 3d, in combination with a pair of feed rolls geared and driven from both of their ends, and the duplicate sets of interm diate easr working in and with them, the connecting of said intrimediate or driving gears ny substan-tial shafts extending clear across from one set to the opposite set, by which the iftung and driving are done at both ences of the rolls, and the twisting, bending or straining of journals or bearing avoided, substantially as described.

scrived. 4th, The arrangement of the gears, D, loosely, so as to turnupon their movable but non-rotating connecting shaft, I, so that sad shaft and gears. may be free to accommodate themselves to the yielding feedroll, and avoid the necessity of movibale journ. I noves or bearings, substantially as repre-sented, and for the purpose described. 29. 29. Duration Low Dotted.

s-nted, and for the purpose described.

DESIGNS.

3.187.—CORSET.—Luman L. Chapman, Fulladelphia, Pa. 3,187.—CARPET PATTERN—Hugh Christie, Morrisania, N. Y. 3,188.—COOK STOVE PLATRS.—John D. Flansburgh, Phila-delphia, assignor to Thomas, Roberts, Stevenson & Co., Bucks County, Pa., antedated August 11, 1868.
3,189.—BASE OF A MORTISING MACHINE.—D. L. Gibbs, Wor-control Marg.

cester, Mass. 3,190 — PLATES FOR PORTABLE RANGES. -- John Martino, Jacob Beesley, and John Currie (assignors to Abbott & Noble), Philadel-

-Pattern for Knitted Fabric.--Joseph D. McKee,

3 186.--Corset.-Luman L. Chapman, Philadelphia, Pa

or, soch - reeding mail I Late winstow Sherman, new	constructed with reference to the cylinder, a, substantially as herein set	3,192.—PATTERN FOR KNITTED FABRIC.—Joseph D. McKee,
York, and Jacob Russell, Brooklyn, assignors to Jacob Russell, Henry T. McCoup, James L. Romer, and Thomas T. Buckley, Brooklyn, N. Y.		Philadelphia. Pa.
We claim, 1st, the arrangem nt of the feed plate or frame, λ , bars, B,	3d, The fire clay disk, o, constructed and fitted in the furnace substantially	3,193.—Cook Stove Plates.—John R. Rose, and Edward
socket pins, a a, or their equivalents, and the frame of the muchine, in the		
manner and so as to admit of the fred plate being swung to one side and	81,854.—PLANING MACHINE,—Alonzo Whitcomb, Worces-	L. Calely, Philadelphia, assignors to Thomas, Roberts, Stevenson & Co.,
out of the way of the machine without actaching it therefrom, substant.ally	ter.Mass.	Bucks County, Pa., antedated August 11, 1868.
as specified.	I claim the combination of the unrights, B, cross head, C, and the pivo ted	
2d, The combination, with the frame of the machine and the feed plate or	levers. D. arranged to operate substantially as described, for the purpose of	
frame, A, of the bar or bars, B, removable socket pins, a a, and horizontally	readily adjusting the cross head of a planer and securing the same in posi-	Inventions Patented in England by Americans.
and vertically-adjustable brackets. C C, all for operation together and in	tion.	
connection with adjusting screws, or their equivalents, to facilitate the ad- justment of the feed plate or frame in various directions, and to admit of	81 855 Box Opener John Willard Norwich Conn	[Compled from the" Journal of the Commissioners of Patents."]
its being sound to one side or back, essentially asherein set forth.		PROVISIONAL PROTECTION FOR SIX MONTHS.
3d, The combination, with the feed plate or frame, A, and horizontally os-	I claim the combination of the chisel point, A, the tubular handle, B, and the weighted rod. C, constructed and arranged to operate substantially as	
cillating bed, C, of the nati-place adjusting levers, K R, stops, 5 S', and	set fort), as an article of manufacture.	2,312 MODE OF, AND APPARATUS FOR TREATING FLAX L. McDonald
springs, in m', operating automatically to insure uniformity in the sizes of		fills, New flaven, Conn. July 23, 1863.
the beads to the cut blanks. substantially as specified.	81,856.—FRUIT JAR.—E R. Williams, Rochester, N. Y.	2,324-ROLLERS FOR SLIDING DOORSR. G. Hatfield, NewYork city. July
4th, The combination, with the bed plate or frame, A. and cutters, S.S. of	1 claim the construction of the stopper, B, with a groove, a, extending part	24, 1868.
the spring clamp, T, and pin, X, on the cross rocking beam, H, operating to	way around, and graduating into an incline, b, when employed in connection	2,342POBTABLE RAILWAYJas. K. Glenn, New York city. July 25, 18-6
hold the mail plate during the intermissions to its teed, and to rel. X hold	with the elastic band, i, in the manner and for the purpose specified.	2.345BELL PULL FOR DOOR BELLSSterling Bonsall and Louis Hille-
thereof whilst being fed, essentially as specified.	81.857.—HAND PLOW.—W. B. Winton, Marion, Iowa.	brind, Phi adelphia, Pa. July 25, 1868.
81,831.—FLOUR BOLT H. N. Shultz, Sabillasville, Md.	I claim the curved serviced spring metal bor or plate, D, in combination	•
l claim the combination of the cam whiel, B, upon the end of the flour	with the pivoted plow beam, C, substantially as and for the purpose set	2.346STEAM BOILERS, AND MEANS FOR MAINTAINING THE PROPER WATER
bolt, with the lever, C, and adjustable stop, m, operating as described, where-	forth.	LEVEL IN THE SAME Robert Wilde, Philadelphia, Pa. July 25, 1868.
by, as the bolt rotat's forward, the stop holds the lever firmly in place, and		2.355 -PROPELLEB FOR STEAM VESSELSRobert funter, New York city.
as it rotates backward a allows the lever to swing out of the way, substan-	81,858LUBRICATOR FOR AXLESJohnWorden.Normal,Ill.	July 27, 1868.
tially as described, for the purpose specified.	l' claim the circumferential reservoir, C, connected with the perforated	2,367.—PREPARATION OF EGGS.—Chas. A.La Mont, New York cty. July
81,832 — HARVESTER.—A. B. Smith, Rochester, Pa.	skein, B, and the axie, A, with its longitudinal groove, x, to operate substan-	28. 1858.
I claim the construction of the drag bar of two light bars, D D, connected	tially as specified.	2,376SUBSTITUTE FOR LINSEED OILRobert E. Ferguson and Benbow
by polts, $a \rightarrow c$, which also serve as pivot connections respectively with the	81.859CUTTER HEAD-Edward S. Wright (assignor to	B. Ferguson, Chicago, 111. July 29, 1868.
frame. A, "false shoe," E, an i shoe, T, substantially as and for purpose here-	Samuel L-ggett), New York city.	2.377BREECH-LOADING AND OTHER FIRE-ARMSSamuel Remington. Ilion.
in sp Cified.	1 claim the construction of the weiges, B B1 and B2, as described, that is,	N.Y. July 9, 1868,
A iso, prvoting the drag-bar to the shoe, T, forward of the finger bar, G, the	with the elong ted slots, c. or recesses in the inner surfaces of the outer	
forward end of the shoe being adjustable in hight by the screw, i, or its	ones, and the projections b, upon the outer surfaces of the inner one, for the	2,378 SEWING MACHINES, AND MEANS FOR HEATING THE THREAD,-Dan-
equivalent, while the rear end has a free sliding movement on the "false		iel Mills, New York city. July 29, 1868.
shoe," E, under the keeper, w, substantially as herein set forth. Also, the "false shoe," E, constructed and arranged as set forth, in combi-	them from falling out of the cutter head when the center one is driven back	2,392PILE OR PORTABLE BATTERY FOR GENERATING ELECTE ICITYAl-
A 190, THE TABE SHOE, IS, CONSULAVED AND ALTAILED AS BELIOTUN, IN COMPL-	for the purpose of releasing the knives.	fred C. Garratt, Boston, Mass. July 30, 1868.

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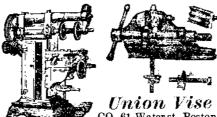
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CO., 61 Water st., Boston, Mass. Heavy and Pipe, warrant-ed for Heavy Work. New Style Wood and Covered Screw, Milling Machines, simple, great capacity, two sizes, 2300 and 950 jbs. G. H. NOTT, Fresident. A. H. BRAINARD, Superintendent. 10 52

U. S. PATENT OFFICE. WAS BINGTON, D. C., Angue: 27, 1883. Emeline M. Woodruff (late Emeline M Steaman), of Elizabeth, N. J., excentrix of the estate of Geo. W. Sted-man, deceased, having petitioned for an extension of the patent gravited to said Geo. W. Stedman the 12th day of December. 1854 and reissned the 26th day of April, 1859, for an improvement in Sewime MacDines, "in k ordered that said petition be heard at the office on the 23d day of Novemik-freext. Arvy person may oppose this extension. Ol-jections, depositions, and other papers, should be filed i. this office twenty days glore the day of hearing. 12 3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE, WAEHINGTON, D. C., Sept. 2, 1868 Birdsill Holly, of Lockport, N. Y., having petuloued for an extension of the pattent granted to hum on the 6th day of February, 1855, for an improvement in "Elliptical Ru-tary Pumps." It is ordered that said petition beliestd at this effice on the 11th day of January 1.ext. Any person may oppose this extension. On glections, depositions, and other papers, should be filed in this office ewenty days he fore the day of hearing... 12 3 ELISHA FOOTE, Commissioner of Patents.

U.S. PATENT OFFICE, WASHINGTON, D.C., Aug. 28, 1868. [Aaron H. Allen, of Boston Mass., naving petition.d for an extension of the patent grantifed to hum on the 5th day of December, 18-, for an improvement in "Sease for Public Buildings.' it is ordered that said petition be heard at this office on the 23d day of November next. Any person may oppose this extension. Ohjections, depo sitions, and other papers, so ould be filed in this office twenty days before the day of hearing. 12.3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE, WASHINGTON, D. C., Auz 28, [383,] John Pepper, of Gil'ord, N. H., having pentioned for an exension of the patent granted to bim or the 5th day of Dec.mber, 1854, and reisurd on the 27th day of October, 1963, for an improvement in "Circular Kultung Machines," it is ordered that said petition beheard at this office on the 23d day of November next. Any person may oppose this extension. Objections, depositions, and other papers should be filed in this office twenty days before the day 12 3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE { Washington, D. C., Sept 4tu, 1868, Samuel N. Miller, of Dedham, Miase, having netitioned for the extension of the patent granted hum on the 29th day of June, 1852, for an improvement n^{*}. Combined An-chor," this application having been authorized by Act of Congress, approved Jniy 20, 1868, it is ordered that said petition be heard at this office on the 23d day of Novem her next

bernext Any person may oppose this extension. Objections, depositions, and other papers, should be filed in this office twenty lays before the day of hearing. 12 3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE. Washington. D. C., eept. ist, 1868. } Cyrenus Wheeler, Jr., of Auhnrn, N. Y., having pe-tition-d for the ext nsion of a patc-nt granted him on the 5th day of December, 1854: reiseued Jac. 3. 1860, in seven divisions, numbered 875, 876, 877, 878, 889, 881, ad re-issue numbered 875, 876, 877, 878, 889, 881, ad re-hered 2,610, for an improvement in "Grann and Grass Harvesters," it is ordered that said peri, ion be heard at this office on the 236 dry of November next. Anv person may opp se this extension. Objections, dep-ositions; and other papers, should be field in this office twenty days before the day of bearing. 12 3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE. } Washington, D. C., Sept. 1st, 1968.] Cyrenus Wheeler, Jr, of Aubura. N. Y., having pe-titioned for the extension of a patent gravated him the 6th day of Feb. 1855; re saued June 5, 1860; numbered 253; Jor and again reissurd May 28, 1867; and numbered 253; Jor an improvement in "Grain and Grass Harvesters," it is ordered that saud petition be heard at this office on the 23d day of November next. Any person may oppose this extension. Objections, dep-ositions, and other papers, should be filed in this office tworthy days before the day of hearing. 12 3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE, WASHINGTON, D. C., Aug. 21, 1868. 5 Whitten E. Kidd, of New York city, having pertion

U. S. PATENT OFFICE, WABHINGTON, D. C. AUZ. 15, 1868. Charles Parbam. of Poila. elpbia, Pa. havize petiioned for an extension of the patent granted him on the 21st day of November, 1854, and reissued on the 3d day of No-vember, 1863, for an improvement in "Sew mg Machines," it is ordered that said petitien be heard at this office on the 2d oay of November, next. Any personmay oppose this extension. Objections, depositions, and other papers, should be filed in this office (wenty days before the day of hearing. 11.3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE, WASHINGTON, D. C., AUZ. 20, 1868 George W. Lee, of Winchest.r, O.10, having petitioned for an extension of the patest granted him on the 21st day of November, 1854, for an impurovement in "Seed Plant-ers," it is ordered that said petition be heard at this office on the 9th day of November next. Any person may oppose this extension. Objections, depositions, and other papers, should be filed in tuis office twenty days before the day of bearing. 11 3 ELISHA FOOTE, Commissioner of Patents.

U. S. PATENT OFFICE, WASHINGTON, D C., Aug. 12, 1859.] Eliza Mascher, of Philadeiphia, Pa., administratrix of the estate of Jobn F. Mascher, deceased, having petitioned for an extension of the patent granted the said John F. Mascher the 8th day of March. 1853/for an improv ment in "Daguerreotype Cases" (this application having been an-thorized by act of Congress, approved July 27, 1869.) it is ordered that the said petition be beard at this office on the 2d day of November next. Any person may oppose this extension. Objections, depositions, and other papers should be uled in this office twenty days before the day of bearing. 11.3 ELISHA FOO1'E, Commissioner of Patents.

U. S. PATENT OFFICE, WASHINGTON, D. C. Aug 12, 1863, Jobn Cram, of Boston, Mass, having petitioned for an extension of the patent granted him on the 28th day of November 1854, for an unprovement in "Towel Stard or Clothes Horse" It is ordered that said perition be heav-at this office on the 9th day of November next. Any per-son may oppose this extension. Objections, depositions, and other papers, should be filed in this officetwenty days before the day of hearing. 10 3 ELISHA FOOTE comment

ELISHA FOOTE, Commissioner of Patents. 10 3

U. S. PATENT OFFICE, WASHINGTON, D. C., AUE. 15, 1568 (JacobSwartz, of Philaedphia, Pa., baving petitioned for an extension of the patent granted him on the 14th day of November, 1854, relessued on the 5th 4ay of June, 1860, and again relssued in three divisions, numbered 1,313, 1,314, and 1.315, on the 3d day of June, 1862, for an im-provement in "Harvesters," it is ordered that this pe-tition be heard at this office on the 2d day of November next. Any person may oppose this extension Oiler-tions, depositions, and other papers, should be filed at this office twenty data before the day of hearing. 10 3 ELISHA FOOTE, Contrains, one of Pattents.

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eright patents on this machine. We caution the sublic against purchasing such. All communications must be addressed to COMBINA. TION MOLDING AND PLANING MACHINE CO., P.O. Box 5,230, New York city. Our machives we warrant. Send for descriptive pam-phlet. Agents solicited.

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