interesting scientific truth they will be worth ten times the price of the book. All orders for "THE WHEEL" should be addressed to Muun & Co., 37 Park Row, New York.

TO ALL WHOM IT MAY CONCERN.

MESSRS MUNN & Co.:

37 Park Row, New York. GENTLEMEN :--- Whereas you have been in the habit of pub-lishing in the SCIENTIFIC AMERICAN notices of pending applications for the reissue of Letters Patent; and whereas such publication has been declared to be illegal by Mr. Justice Fisher; and whereas we have lately filed in the Patent Office an application for the reissue of a patent owned by us; now you are hereby notified that in case you shall publish notice of our said application or the claims which we have made in the specifications accompanying the same, we shall hold you responsible for all damages that may accrue to us by reason of such publication, whether by delay in the grant of our application, or by the expense to which we may be put in prosecuting our application. THE GROVER & BAKER SEWING MACHINE Co.,

By their Attorney, E. S. RENWICK.

34 Beach St., New York, April 29th, 1868.

What is up now? Is there a Sewing Machine Company endeavoring to get a reïssue of a patent to cover claims which they are ashamed to have the public scrutinize? or what is the matter?

On reading the first lines of the above letter we thought it a hoax, but on approaching the end our eye caught the signature to the document, and we could no longer believe the portentious threat a joke. The public will look with more than ordinary interest for the claims which the parties would restrict us from publishing. We expect some dire misfortune awaits us for not obeying "The Grover and Baker Sewing, Machine Company. by their attorney, E. S. Renwick's " injunction; but the curiosity of our readers must be gratified, and we abide the result for our temerity.

P. S.-Up to the time of going to press we had not received any notice from the Patent Office which we identify as coming within the above injunction. We are looking with impatience, however, to see what it is that calls forth a letter of such threatening import.

East and West.

When we look east or west, our line of vision is of course at right angles to the meridian, and in a plane, which, being vertical, passes through the center of the earth. At the equator, this plane of east and west vision coincides with the latitude, that is, with the plane of the equator, and all countries actually east or west are in the direction which the eye takes in looking east or west. But in all other places the plane of vision deviates from the plane of the latitude, and people who think that the places set down on the map as east or west of them are actually in the direction that they are accustomed to calleast and west, are generally very much deceived. The plane of latitude cuts off a slice of the earth, larger or smaller, according to its distance from the equator, north or south; but the plane of east and west vision, pass ing through the center, divides the earth into equal hemispheres. The plane of latitude is always equidistant from the equator; but the plane of east and west vision cuts the equator at the real horizon both ways, and comes out at the antipodes, as far south of the equator as the latitude is north, and vice versa.

This idea can be realized and made clear by the artificial globe, in the following manner: To find the regions through which the plane of east and west vision for any place passes, bring the place to the brass meridian, and also revolve the meridian till the place touches the wooden horizon. Then the plane of the wooden horizon will be the plane of of east and west vision for the given place. The sun at the time of the equinox, when it stands exactly on the equator, nevertheless rises exactly in our east, though we are forty three degrees north of the equator, and as it ascends toward the tropic, rises apparently far to the north of east, though in reality it never comes north of the equator more than twenty-three and a half degrees. These phenomena show that our plane of east and west vision cuts the tropics and the equator, and, instead of coinciding with our latitude, takes nearly a southeast direction to our antipodes, on the other side of the equator.

These facts, says a writer in The Circular, ought to be considered by the Jews, who are said to pray with their faces to the east, imagining that they are looking toward Jerusalem, Praying in that position from New York, they are really looking over the Desert of Sahara, and Jerusalem is far away from their line of vision to the northeast. Moreover, their line of vision is in the tangent to the curve of the earth, while Jerusalem is nearly a quarter of the way round the globe on the curve itself, and consequently far below the straightforward outlook. The real direction of Jerusalem from New York, as near as we can calculate with our rude appliances, is thirty-five degrees north of the east line, and forty-five degrees below the horizontal line. In other words, a Jew, in order to pray right at Jerusalem from New York, ought to face by compass about N. E. by E., and look at the ground about six feet before him.

our American railways, for two thirds of the gross receipts are absorbed by expenses, and for each dollar of the tax collected by the railway, three and a third must be taken from the public-such taxes carry with them their own condemnation. A tax on premiums of insurance, which compels the poorer classes to pay for the privilege of guarding their houses and furniture against their most dangerous foe, is also objectionable. To avert pauperism we should stimulate rather than discourage insurance.

" It is urged that the Income tax is a tax on capital. If it be so, let it be continued on coupons and on the dividends of factories, railways, banks, and insurance companies; but when it is applied to the irregular incomes of private citizens and uncertain receipts of professions, terminable with life or health, it may well be questioned. The Income tax in 1865, then three times as high as the English Income tax, was levied on four hundred and fifty thousand people, and doubtless as many more were required to make returns to prove they were exempted by poverty from the assessment.

" If we rate the cost to each individual of posting his books and making his computation at ten dollars only, the cost to the public, besides the salaries of assessors and collectors. would exceed nine millions on the tax payers of 1866, and an equal number exonerated. The estimate of Mr. Rollins for the returns the present year is less than twenty-five millions from the Income tax, while the returns from gross receipts of rallways were last year but four millions of dollars. Is it wise to continue taxes so costly to collect?

"But a still stronger objection to the Income tax is the publicity it gives to the private affairs of the citizen. He is obliged to disclose important secrets, often to the injury of his trade and credit, or to the detriment of his family and fortune. No distinction is made between permanent and temporary incomes. With people of limited means, the greenback set aside for a new suit, or to sustain the son in college or the daughter at school, obeys the peremptory call of the collector, and honesty pays what dishonesty evades.

"The operation of the tax is most unequal. Massachusetts, with seven thousand square miles only, contributes more than eight million dollars to the Income tax, while all the Cotton States, with half a million miles of surface, pay but three-fourths of that amount.

" The Income tax is a direct tax on the rents of real estate, and operates as directly and effectually as a tax on the land itself. The constitution provides that all direct taxes shall be levied in equal sums on each Congressional district; but now single districts in New York, Pennsylvania and New England pay more than twenty Southern districts. Such taxes, if continued, may be contested, and large reclamations probably demanded."

Whether an Application for a patent interferes with Another Patent is a Question to be Determined by the Commissioner of Patents.

An interesting question in relation to interfering applications has lately been decided by Judge Fisher, of the United States District Court, Washington, in the case of Marsh vs. Dodge. This case was before the court in February last, on the question of priority of invention of the specific devices by which a self rake is attached to a two-wheeled reaping machine, and was decided in favor of Dodge. Marsh then reconstructed his application and specifications, and began de novo. In the outset, he demanded that a new interference be declared between himself and Dodge, that the question might be tried again. The Commissioner of Patents refused to do this, and from his action the present appeal was taken. The following is Judge Fisher's decision :

The following is Judge Fisher's decision : Appeal by James S. Marsh from the Commissioner of Patents. A motion is made in this case to dismiss the appeal on the ground of a want of jurisdiction in the Judge to whom the appeal is taken from the Commissioner of Patents. The case is either the same which was decided by me on appeal in the month of February last or it is a new case be-tween the same parties. If it be the same case, the former decision has put an end to it, so far as respects any appeal to be had before me or any other Justice of the Supreme Court of the District of Columbia. It it be a new case, then I am cliently of the oblint that there is want of jurisdiction in any Justice of the Supreme Court of the District of Columbia, because it is not one of those cases in which appeals are provided for by the law. Since it does not appear that the appeals are provided for by the law. Since it does not appear that the supter with any other patent, nor is it a case in which either Dodge or Marsh is dissicited with the decision of the Court upon the question of priority of right or invention. Had there been an In-terference declared in this case and a decision of the Court there an appealable, but whether an application for a patent will interfere with another patent or snother application for a patent will interfere with another patent or snother application for a patent will interfere the another patent or snother application for a patent will interfere and the inally determined by the opinion of the Court there iment, a matter to be finally determined by the opinion of the Court appeal in this case is therefore dismissed.

himself The appeal in this case is therefore dismissed.

Spiritualism in the London Polytechnic Institute.

Prof. Pepper has been doing, this last winter, a great work before the thousands who nightly visit the above institution. Besides explaining the latest discoveries in electro-magnetism, light, etc., he discoursed on spiritual manifestations, pointing out the extensive impostures that have been practiced on the public in the name of mesmerism and spiritualism. He illustrates his lectures with startling illusions, such as the floating in the air of hats, tables, and even stout ladies. He does not only every thing that ever spiritualists have pretended to do, but a great deal more; with this difference, however, that he explains how it is done by well known natural and material means, whereas spiritualists pretend that they do it by unknown, supernatural and spiritual powers.

OFFICIAL REPORT OF Patents and Claims Issued by the United States Patent Office. FOR THE WEEK ENDING APRIL 28, 1868.

Reported Officially for the Scientific American.

PATENTS ARE GRANTED FOR SEVENTEEN YEARS, the following being a schedule of tees: -

On filing each Uaveat	
On filing each application for a Patent, except for a design On issuing each original Patent	\$15
On issuing each original Patent	\$20
Un appeal to Commissioner of Patents	
On application for Reissue	
, On application for Extension of Patent	
Ongrantice the Extension	
On filing a Disclaimer	\$10
On filing application for Design (three and a half years)	\$10
On filing application for Design (seven years) On filing application for Design (fourteen years)	\$15
On filmg application for Design (fourteen years)	\$30
In addition to which there are some small revenue-stamp taxes.	Residents

of Canada and Nova Scotia pay \$500 on application.

Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specfying 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.

77.157.—ANIMAL TRAP.—A. J. Adams (assignor to himself and Boyd P. Quincy), Portland. Oregon. I claim the spring. C, and claws, B, in combination with the hinged treadles not the base, $A E_{i}$ all constructed, arranged, and operating substantially as lescribed.

77,158.- LATHE FOR CUTTING IRREGULAR FORMS.- Peleg Barker, Battle Creek, Mich. I claim the sliding adjustable frame, G, containing the holding devices for the uncut timber, arrang-d relatively with the curved knife, C, when con-structed and operating as described.

77,159.—CAR BRAKE.—William T. Batty (assignor to himself and G.iffith Deshart). Canton, Ohio. I claim, Ist, The supporter, P. with axes, b and c, and crank, R, when used in connection with knuckle joint, O, substantially as and for the purpose

in connection with Knuckle joint, O, substantially as and for the purpose herein shown. 2d, The peculiar arrangement and combination of the crank. R, chain, S, pulley, T, fron, W. iron, V and carbody, X, the several parts being arranged as and for the purposes herein specified. 3d, The oeculiar arrangement and combination of the draw bar, K, knuc-kle joint, O, supporter, P, and brake lever, H, the several parts being arrang-ed and combined substantially as and for the purpose specified. 77,160.—CHURN.—Wm. T. Best (assignor to himself and Dan-iel Vanghan), Scranton, Pa. I claim, 1st, The supplementary box, B, having a converging bottom, and heing provided with the slotted substantially as desorbed, and provided with a rim around its lower en if or collecting the butter, said trame being used in the churn, A, and with the staff, L, and its dashers, as and for the purpose septified.

pose specific d. 3d, The gate, d, surrounding the slotted portion of cylinder, C, for regulat-ing the flow of cream to said cylinder, substantially as herein specified. 77,161.—SPRING FOR CHAIRS.—A. M. Blake, Canton, Ohio.

I claim the use of the conical spring, F, in combination with the foot plate, G, plate, E, socket or spindle, D, and chair leg, C, in the manner and for the purpose herein specified.

purpose herein specified. 77,162.—CARRIAGE LOCK.—J. A. Bower, Middlefield, Ohio.

I claim in the brakes for carriages the levers, BB, hinged heads, E E, springs, J J, and rods, G G, as arranged in combination with the thills, A A, in the manner and for the purpose substantially as set forth. 77,163.—MANUFACTURE OF BRICK.—Silas H. Bowman, Half

Moon Bay, Cal. I claim the use of petroleum and peat in the manufacture of bricks, by mixing both or either one of them with a clay of which bricks are to be made, substantially in the manner and for the purposes herein set forth.

77,164.— PIANO FORTE STOOL.—Joshua Briggs, Peterboro,

N.H. L claim constructing the stool with metal legs, c, each having a flange, d, containing a socket, e, to enable the leg to be tastened by and slid from serew, f, which connects it to the seat, and pins, g, to keep the leg in position, sub-stantially as set forth. Also, combining with each leg, as described, the toe piece, i, of wood, citten into a socket, h, in the leg, substantially as and for the purpose set

forth. 77,165.—KEYHOLE GUARD FOR DOOR LOCK.—Asa T. Brooks, (assignor to Russell and Erwin Manufacturing Company), New Britain, Com. I claim the combination and arrangement of the oscillating spring guard or wardbar, A, with the latch and tumblers, substantially as and for the pur-pose described. 77,166.—BOOT AND SHOE CONFORMATEUR.—Lorin Brooks, New York rity.

New York city. I claim the combination with the horizontal scale or size stick, A, of the vertical sliding standard, B, provided with the scale, d, adju-table arm, C, and spring table, D, arranged and operating substantially as and for the pur-noses set forth.

et io poses set 107th. 77,167.—MECHANICAL POWER.—Charles P. Carter, Pough-

(1,101.—MECHANICAL FOWER.—Charles F. Carter, Fough-keepste, N. Y. I claim, ist. The wheel, d, with teeth, formed as shown and described, in combination with pawis, E. E. for imparting motion to flange, f, and arm, J. In the manner shown and described. 2d. The bulk, b, when arranged and combined with shaft, g, and flange, f, and pawls, E. K. substaniially the same as shown, and for the purpose as set

forth. 77.168.—INHALING GASES.—Wm. Z. W. Chapman, New York

city. city. 1 claim, 1st, Placing the gas pipe, a, in said apparatus, at an angle with the her, b, for inhaling through. to obviate the necessity of a valve to prevent hereturn of the exhaled gases into the gas pipe, substantially as herein de-minute the set of the exhaled gases into the gas pipe, substantially as herein de-minute the set of the exhaled gases into the gas pipe, substantially as herein de-the set of the exhaled gases into the gas pipe, substantially as herein de-minute the set of the exhaled gases into the gas pipe, substantially as herein de-the set of the exhaled gases into the gas pipe, substantially as herein de-the set of the exhaled gases into the gas pipe, and the set of the set

The expanding mouth piece, constructed and arranged substantially as

24. The expanding month piece, constructed and arranged substantially as and for the purposes set forta. 33, \star suspending device, employed in combination with the breathing ap-paratus, by which the same is drawn out of the way and supported when re-leased by lie operator, substantially as and for the purposes set forth. 4th, The formation of the joints of the apparatus, by compressing the elas-tic tube between the surfaces of two rigid tubes, as above specified. 5th, The construction and operation of the breathing apparatus, substan-tally as herein described, so as to administer the gas, if required, during an operation, or while the month is open and free therefor, as well as before the patient is rendered mescable, substantially as above, specified. 6th, Affixing a gas inhaler to the nose of a patient by the employment of an apparatus, substantially as and or vise specified. 7th, Affixing the apparatus either to the operating chair or other suitable permanent fixture, so as to relive the operator is free to operate upon the pa-tient without the above as the volid otherwise be required. 7th, Affixing the apparatus either to the operating chair or other suitable permanent fixture, so as to relive the operator or other suitable (ath, Affixing the apparatus either to the operation or other suitable erials, substantially as hereful escribed. 8th, The devices illustrated in figs. 3 and 5, adjustable or otherwise, sub-stantially as there represented, for opening the jaws of the patient, as herein set forth. 9th. The employment of an indicator in combination with a respirator and

Taxation.

From a very able essay from the pen of E. H. Derby, of Boston, on the position and prospects of the United States with respect to finance, currency, and commerce, we extract the following:-

"Mr. Rollins, in his last report, condemns those taxes whose collection is costly, and his objection applies most forcibly to taxes on gross receipts and incomes. On railways the cost of collection from the public ranges from fifty to ninety per cent. It now averages nearly seventy per centon

Solid Back Brushes.

Mr. George L. Cannon, 152 Broadway, New York city, has shown us some specimens of brushes comprising all styles in common use, from the tooth to the blacking brush, which are made wholly by machinery and each bunch of bristles separately secured to the back, which is solid, having no cover or veneer. No glue or pitch is used to secure the bristles, each bunch being held by a staple of wire, the ends of which are crossed and seated in a drilled hole. The crossing of the staple ends firmly locks the bristles so that they cannot be removed. It appears to be a very valuable improvement.

stantially as there represented, for opening the jaws of the patient, as herein set torth. 9th, The employment of an indicator in combination with a respirator and grag receptacle, presenting to the eye of the operator at all times ine state of fine apparatus and the supply and quantity of gas taken, substantially as and for the purposes set forth. 10th, The disphragm, substantially as described, to be placed in the month to cut off communication being the lungs and the external air through the mouth when the month is open. 77,169.—LOOM.—George Cliff, Memphis, Mich. I claim the combination of the top beam, A, the lathe, B, the breast beam, C, the lotch B, the frame, E, the treadle wheel, F, the shuttle thrower, G, the latch, H, the treadles, I, the pulley, J, the yard beam, K, the pins, L, the spring bar, M, the standard, N, the frame, O, the button. P, the cond, Q, the transverse tie, R, the standard, S, the oscillating frame, T, the connection, U, the spring, V, the hanger, W, the graard wheel, X, the dog and spring. Y, the genet wheel, Z, the V, the A, when constructed, ar-ranged and operating substantially as and for the purposes hereinbefore de-scribed and shown.

scribed a 77,170.-DIE FOR MAKING THIMBLES AND FERRULES.—J. H.

(1,10.— D) is the statement of the stat

set forth. 77.171.—DRIVE WELL.—Thomas B. Conklin, Rockford, Ill.

Telaim the pipe, A, with sits, a, and lips, a', in combination with bands, B, and screen, C, arranged as described. 77,172.—UHURN.—George W. Corbit, James M. Orput and

77,172.—UHURN.—George W. Corut, James H. Orput and George M. Case, Maita, III. We clasm, 1st, The combination of the cam, efg, bar, fh, and wheel, 123 4, substantially as described. 2d, The method of connecting and detaching the cog wheel, P, with the other parts by the device substantially as described. 35. The combination of the cam, efg, and wheel, 1234, substantially as

77,173.—Roller for Drawing Machine.—Francis Crague 771/173.— KOLLER FOR DRAWING MACHINE.— FRANCIS Orague George G. Crague, Lewiston, Me., assignors to Wm. N. Higgins, and said Higgins assignor to himself, F. O. Sands, W. M. Emerson and W. T. Mc-Nally. We claim the within described roll for machines for treating cotton and wool, when constructed and operating as and for the purposes set forth. 77,174.—Fraks GATE..—John Curtis, Truro, III. I claim, ist, The combination of the gate, P, with the crane, z, link or hinge g, and screw rod, E. substantially as in the manner and for the purpose here-in above and described.

in shown and described.

MAY 16, 1868.

2d, The construction and arrangement of the slotted angular bar, Q, me-induc plate, D, and lever, h, when used in combination with a farm gate, and operating substantially in the manner and for the purpose as herein set forth. 77,175.—CUTLERY.—R. E. Curtis, Great Bend, Pa. I claim as a new article of manufacture, knives or torks constructed sub-stantially as described.

stantially as described. 77,176.—CULTIVATOR AND POTATO DIGGER COMBINED.—Mar

tin Darling and Hala Gray, Marathon, N. Y. We claim the frame, A a, oblique cultivator rake, B b, laterally adjustable plows, C C, and adjustables upporting wheels and standards, e f, all combin-ed, constructed, and arranged as herein shown, and for the purposes set

77,177.-MODE OF ROOFING BUILDINGS.-Charles de Hass,

77,177.—MODE OF ROOFING BUILDINGS.—Charles de Hass, washingtop, D. C.
I claim a roof, constructed as herein described.
77,178.—TwEER.—Lewis Donnell, Columbus, Ohio.
I claim a combination of the screw, p, with the revolving top. A, the valve 0, the cylinger, C and J, and the handle or lever, N, constructed and operat-ed substantially as and for the purpose set forth.
77,179.—STOVE DRUM.—Nicholas Downes, Syracuse, N. Y.
I claim the shell, B, flues, d d, pipes, C, e, f, g, I, and damper, h, all con-structed and arranged as herein snown and for the purpose described.
77,180.—RAILWAY RAIL SPLICE.—Robert Elliott, Chester, Pa.
Lolaim ist, The railroad rail binner, compared of the downle flanged plate.

77,180.—RAILWAY RAIL SPLICE.—Robert Elliott, Chester, Pa. 1 claim, 1st. The railroad rail joiner, composed of the double flanged plates, 0 and F. of wrought iron, the boilt, F. burr, g. and guards, G and H. all constructed substantially as set forth.
2d. The guard, H. overlapping a series of two or more projecting bolt heads, f, to prevent the bolts, F, from working out of their places in case of the accelentairemoval of some of the burrs, g.
77,181.—WRIST PIN FOR REAPERS AND MOWERS.—John H. Elward, Chicago, 111. Antedated April 15,1868.
1 claim the combination of the wheel, B, provided with an angular recessed or slotter opening, b, with the wrist pin, C, provided with angles corresponding with the said opening, and a key, a. all arranged and operating substantially as set forth.

stantially as set forth. 77,182.—BEAN POT LIFTER AND CARRIER.—George F. Foss (assignor to himself and Samel C. Hopkins), East Boston, Mass. I claum the bean not carrier, made substantially as described, that is, of the bottom guard, d, the wires, a and b, the connecting piece, e, and the claum screw, i, arranged and combined, as specified. 77,183.—AMALGAMATOR.—Stephen Fountain, Silver City, Ne-vada.

vada. I claim casting the pan with a hub, baying an opening through it for the blat to pass through, and having a double wall around this opening to form a steam chamber for supplying heat to the machine, substantially as de-soribed.

77,184.—REVOLVING MOLD BOARD.—Joseph S. Godfrey, Les lie. Mic

1 claim the combination of the mold boards, A A, with the cutters, B B, the bares. C c, the sharts. D D, and the frame, E, when constructed substantial-y as described for the purpose designed and set forth. 7,185 — MODE OF ATTACHING AXLES TO VEHICLES.—Wm.

Gray and Henry E. Porter, Hebron, Conu. We claim, lat, As a new mode of mabufacture, a device for securing to-gether the forward sale and rocker of a rehicle 2d. The combination of the plate, B, having a round flange, D, plate, F, with a corresponding round flange erecess and plate, G F, which encloses and allows the flange, D, to work closely and freely therein, by means of therees, mental portion, H, of said plate, and the projections, K, for griping the rocker er, A, and axle, E, substantally as and for the purpose described. 77, 186 — Mopp or D PEPEPERTANO THE COPPOSITOR OF CASE HONS

er, A, and axie, E, substantally as and for the purpose described. 77,186.—MoDE oF PREVENTING THE CORROSION OF CAST IRON VESSELS.-Chauncey O. Greene, Toy, N. Y. I claim as a new manufacture the improved article of cast iron vessels, as described herein, and having their interior surtaces prepared or lined by the application thereto of oil and beat, thereby forming a hard, durable lining coat therein, in the manner substantiantially as set forth, and by which said vessels are made non-corrodible, as described. 77,187.— ENAMELING MACHINE.— Henry R. Hall, Philadel-phia.Pa.

77/107.— ENAMELING FRACHINE.— Horry A. Latry, A manage phiappa.
I claim, ist, Making the hoppers and scrapers self-adjustable by the application of springs thereto, substantially as shown and described.
24, Feeding the moldings or other objects to be enameled through the scrapers, by means of endless chains set edgewise, and provided with flat links to prevent indentation of the moldings, substantially as shown and described.

Sorthed. Sd, Making the bed plates, band b2, both or either of them, with their chains or other attached parts, adjustable relatively with the fixed bed plate' b1, its chain and other attached parts, to adapt the machine to the various sizes of moldings or other objects to be enameled, substantially as shown and described.

nd described. 4tb, The endless chains, k k1, their respective ways or lateral bearings, m 1, and the mecha-sism for giving motion to said chains, in combination with wo scrapers or a single scraper, substantially as shown and described for he purpose specified. and 4th

m', and the mecha-ism for giving motion to said chains, in combination with two scrapers or a single scraper, substantially as shown and described for the purpose specified.
77,188.—PLOW.—John S. Hall, Pittsburg, Pa.
I claim a mold board and lard side united in one piece, the former having the share and point attached to it, and the latter having the "renovator" or sole attached to it, and both united to a standard. A. so as to be readily removed when worn out, and replaced by another mold board and land side, in the manner and for the purpose deserbed.

77,189.—CLOTH DRAWERS.—Henry Heath (assignor to Fisk, Clork Flags).

Clark & Flagg), New York city. I claim the combination of a pointed waistband with a cloth leg, construct-ed with a seam at the rear of the knee, substantially as before set forth. Also, the combination of the wrawers leg, constructed with a seam at the rear of the knee and a band at the lower end of the leg, substantially as be-tore efforth.

Tore et forch. Also, the combination of the drawers leg, constructed with a seam at the rear of the knee, with both a pointed wais thand and an an akle band, substan-tially as before set forth. 77,190.—WAGON BRAKE.—Smith S. Henderson, North Co-

77,190.—WAGON BRAKE.—Shiftin S. HERRESON, ROTH OF bocton, N.Y. I claim, 1st. The arrangement and combination of the wagon tongue or pole., bent metal bar, H, chain, F, roller, G. and slide bar, E, to connect with the brake bocks, c c and a a, hinged together with slotted straps, e e, as constructed and secured to the binged brake bar, D, the same being con-nected by levers, d G, with the slide, E, by a plate hinge, f, so as to adjust the pressure of the brakes to the wheels, substantially as and for the purposes

77,191.—CAPSTAN FOR HOISTING MACHINES.—C. S. Houck,

77,191.—CAPSTAN FOR HOISTING INCOMPANY. Greenport, N. Y. I claim, list, The combination of lever, H, connecting bar or leg, C, lever frame, L, Yok; K, side block b, long arm or convecting bar, e, short arm, g, and rod, f, or their equivale.its, when arranged and employed in the man-ner, or substantially in the manner, and for the purpose herein set forth. 2d, The combination and arrangement of the lever frame, L, or its equiva-lent, with the brake blocks, d d, and rim or concle, ss, ss, or substantially as, and for the purpose herein described, when located with respect to shaft, A, and to each other, substantially as described. 7,192.—SAFETY POCKET.—J. C. Iden, Buckingham Town-ship, Pa. I claim the catch, E, in combination with and to e 77,192.

shp, Pa. I claim the catch, E, in combination with the thumb piece, D, spring, C, clavp, A A', with the indentation, G, therein, and hasp. B, substantially as set forth for the purpose specified. 77,193.—HOSPITAL BEDSTEAD.—Anthony Iske (assignor to

77,193.—HOBPITAL DEDSTEAD.—Antholy ISKe (assigned to bimself and Ben]. Mishler), Lancaster, Pa. 1 claim, in combination with my swinging trap, L the sliding table, Q, with with its grooves, q, supported on the cross braces. Lwith the store, i, together with the arrangement of the several rack bars, D K, when held in pryors, and mode of making and connecting the several segments, all stranged and operating in the manner and for the purpose specified and shown. 37,194.—METHOD OF EXPRESSING LIQUIDS FROM SOLIDS.—D.

37, 194. — MENTHOD OF EXPRESSING LIQUIDS FROM SOLIDS. — D. A. James, Cinclinati, Ohio.
18 Jaim, 18t, The method of expressing finids from solids, by the pressure of the waternal toxic actual in a tube or trunk, substantially, as described.
24, The combination of the process described.
24, The combination of the process described.
24, The combination of the process described.
25, The combination of the process described.
26, The combination of the process described.
27, 195. — SAWING MACHENE. — T. Jenkyn, Thetford Center, assignar to Barlett Burr, Fairlee, Vt.
1 claim the construction and arrangement of the reciprocating table, P, hinged tab e. H, tables, Q T V. saw arbors, C D, and cutter heads, U W, all soperating upon the same frame, in the maner and for the purposes heartbe.
27, 196. — CHECK BRACE FOR CARRIAGES. — I. D. Johnson, M.D., binged operatin shown a 37,196.—CHECK BRACE FOR CARRIAGES.—I. D. Johnson, M.D.,

Scientific American.

its equivalent, E, is attached, all made and operating substantially as herein shown and described. 77,202,—PAN FOR CONCENTRATING SULPHURIC ACID.—Paul 'Marcelin and Jos. Stunders, Green Point, N. Y. We claim providing a panfor concentrating sulphuric acid, with a partition or partitions, a, reaching nearly to the bottom of the pan, substantially as and for the purpose herein shown and described. 77,203.—PLOW FRAME.—Seth March, Norfolk, Va. I claim the frame, A, provided with the elongated slots, a', for the adjust-ment of the mold board, and the elongated slots, a', for the adjust-ment of the mold board, and the elongated slot, a', for the adjust-ment of the mold board, and the elongated slot, a', for the adjust-Place of the plut of the Substantially as described. 77,204.—PACKING FOR ENGINES, PUMPS, ETC.—W. H. Miller, Philadelphia, Pa.

77,204.— FACKING FOR LAGINES, FURTS, EIC.— W. II. MAINLY, Philadelphia, Pa. I claim, ist, The use of calcimine, china clay, or white clay, or their equiv-alents, as a substitute for dry powdered scapstone, and other dry powdered substances, in their combination with it brous or other materials in the manu-facture of packing, 2d, The use of calcimine, china clay, white clay, or their equivalents, for the purpose above described, in the manner above described, or any other prac-tical application thereof, whereby said substances become ingredients of packing for the stuffing boxes of engines, pumps, and for the joints of other machinerv. machinery. 77,205.—DRYING APPARATUS.—F. I. Norton (assignor to him-

machinery.
77,205.—DRYING APPARATUS.—F. I. Norton (assignor to him-self and W. H. Cloud). Tremont, Ohio.
1 claim, 1st. An apparatus, substantially as described, for discharging steam into the central opticings of wagon hubs, and other similar perforated articles of wood, for discharging of wagon hubs, and other similar perforated articles.
24, The combination or the steam cold. G. and vertical ejecting pipes, d.
substantially as and for the purpose described.
30, The combination, with a drying chamber, A B, of the steam pipes, C d, substantially as and for the purpose described.
77,206.—GRAIN SEPARATOR.—S. E. Oviatt, Richfield Ohio.
1 claim, 1st. A grain exparating conveyer constructed in sectional carriers, B, provided with Dars, U, and fingers, as or tranged that the axis of the lower end of one carrier: sole ow the axis of the upper end of the next lower car-rier, substantially as and for the purpose set forth.
24, Che carriers esclones, so arranged that the fingers one sectional carrier will interlap with the fingers in the adjoining carrier, as and for the purpose set forth.
36, The carrier sections, so arranged in relation to each other, when provi-ded with bars, D, and fingers, so arranged that the fingers of one sectional carrier substantially as and for the purpose set forth.
77,207.—MOSQUITO.NET FRAME.—G. T. Palmer, Brooklyn, N.
Y. Antedated April 14, '868.
I claim, 1st, A radially tolding mosquito net canopy frame composed of folding arms, et e., disk or support, d, and supporting arm, C, made substan-tially as and for the purpose suown and described.
21, Supporting aradially folding frame is proved thereon, substantially as show.
22, Supporting aradially folding frame is proved thereon, substantially as how the badian data. And supporting arms, C, when the arm, C, extend we the bed and the folding frame is proved thereon, substantially as show.

q. c The rods. ff, suspended from the folding arms of a mosquito-net frame,

3d, The rods. If, suspended from the folding arms of a mosquito-net frame, for the purpose of toking and unfolding the frame, substantially as shown. Ath, Thepins, a'' a'' in combination with a radially folding mosquito-net frame, whether said pins are affixed to the arm soft the frame or fitted in sockets at the ends of the radially folding arms of a mosquito-net canopy frame by supporting braces, pivoted to the upright, c, substantially as shown. 77,208.—ROADWAY PAVEMENT.—J. T. Parson, Washington, D. C. Avtedated Aprills, 1868. I claim a paving block, having an octagonal-shaped end, composed of clay treated as described, and for the purpose set forth. A paving block of octagonal or other form, designed and arranged so as, when laid, to leave small holes at regularly recurring intervals, for the pur-pose set forth.

pose set forth. The herein-described baked or burned clay paving block, as a new article of manufacture. The combination, to form a roadway pavement, of paving blocks, having an octagonal or other form, designed and arranged so as, when laid, to leave small holes at regularly-recurring intervals, and wooden keys, substantially as described.

-STRAW CUTTER -G. W. Parsons, Harrisburgh, Pa. 77,209.-

17,209.—STRAW CUTTER —G. W. Parsons, Harrisburgh, Pa. I Claim, ist, The pinion, O, on the end of the shaft, e, of the driving-gear wheel, in combination with the movable and adjustable brace. N.
2d, The internal gear wheel, H, incombination with the driving-gear wheel, K. whose shaft is supported by a movable and adjustable brace. N.
2d, The internal gear wheel, H, incombination with the driving-gear wheel K. whose shaft is supported by a movable and adjustable brace, as set forth.
3d, The movable and adjustable brace. N, supporting the large gear wheel K. in ombination, P, fitting on and over the pinion, I, on the Knite shatt, D.
4th. The pinion, P, fitting on and over the pinion, O, in combination with the shatt, c. and erring-gear wheel, K. and pinion aresurported by an outsidebrace.
5th, The combination, in a straw cutter. of a feed roller whose shaft moves up and down, with the cortable conterbalances, if F, on the srine of the knite-shatt. D, when combined with a single adjustable rotary knife.
7th. Operating the feed roller, C', of a straw cutter by means of the disks. R, when constructed with cog teeth, if disconnected radially from the hubs thereof, in the manner and for the purpose as described.
8th, The screw nut, T, elastic washer, e, and fixed driving washer, s, with radial risk, in combunation with radial risks on the hub of the fit wheel, substantially as described.
9th, The construction of the lub and fixed driving washer, with holes, h, for the insertion of wooden pins, substantially as described.
9th, The construction of the shaft, with a hole, c', for the insertion of wooden pins, substantially as described.
9th, The construction of the shaft, with a hole, c', for the insertion of a wooden pin, with the slot across the hub of the fit wheel, substantially as described.
9th, The construction of the shaft, with a hole, c', for the insertion of a wooden pin, with the slot across the hub of

-MANUFACTURE OF BALLS, BLOOMS, AND SLABS OF 77.210.

Steam folier, with the chamber, D, and vs nue openings, as, and an arrightmp, fan blower, or equivalent device, substantially as and for the purpose set forth.
Sth, The chamber, D, when divided by a partition plate, d.", and combined with a steam boiler or other heating apparatus, substantially as and for the purpose set forth.
Sth, The connection and arrangement of the perforated pipes, F and I, with the connection and arrangement of the perforated pipes, F and I, with the shell, A, and fine so acces of a steam boiler, or with the chamber, D, or with both, substantially as and for the purpose set forth.
The combination of the air chambers, O O, and pipes, P Q, or their equivalents, whether on the outside of the shell of a boiler or other heating apparatus, or extending through the interior of the same, substantially in the manner and for the purpose set forth.
Sh, The combination of the pipes, P Q, or their equivalents, whether on the outside of the shell of a boiler or other heating apparatus, or extending through the interior of the same, substantially in the manner and for the purpose set forth.
Sh, The combination of the air chambers, O O, and air pipes, P, or their equivalents, with the fus of a steam boiler or other heating apparatus, substantially as and tor the purpose berein set forth.
Sh, The combination of the air chambers, O O, and air pipes, P, or their equivalents, with the flux of a steam boiler or other heating apparatus, substantially as and tor the purpose berein set forth and shown in fig. 18.
Shoth, Heating are by forcing or drawing 't through pipes or channels, along or around the shell, or through the interior of a steam boiler, substantially as set forth.
15th, The pipes, P and Q, suestantially as shown in fig. 12, and for the set forth. 77,210.—MANUFACTURE OF BALLS, BLOOMS, AND SLABS OF Malleable Iron.—John Plaver, Norton, England.
I claim the forming a ball, bloom, or slab of iron or siecl, made malleable by the operation of puddling, by moving the metal out of the iurnace where it has been puddled into a mold or form, in which it is subjected to heavy pressure, substantially as described.
77,211.—CUTTING TOOL FOR PLANING AND MILLING MACHINE.
E T. Prindle, Aurora, Ill.
I claim the cutting tool, composed of the shank, A, cutter, B, with the shoulder, F, and sets screws, D and G, when constructed in the maneer and for the purpose substantially as berein specified.
72 919 — CHIME FOR PLAEN NAVIGATION.—I. A. Putnam.

77,212 — CHUTE FOR RIVER NAVIGATION.—I. A. Putnam, Mexico, Me. Antedated April 18, 1868. I claim the construction of a chute for the passage of boats over the shal-low or rocky parts or rapids of a river, in the manner substantially as speci-fied

77.213.-

ied. 77,213.—SELF-WINDING WATCH.—Ulysse Humbert Ramuz, Chaux De Fonds, Switzerland, assignor to flenry flirsh and Seligman Op-penheimer. I claim, lst, The rack or ratchet, E, operated by the lever, D, and connect-d to the cover, a', and to the works of the watch, substantially as and for

ed to the cover, A', and to the works of the watch, substantially as and for the purposes herein set forth. 2d, in combination with the means, substantially as herein specified, for winding the watch by the motion of the hinge, the independent button, H, shaft, h, and crown wheel, J, arranged and connected with each other, and with the hands, and with meansfor inding the button within the case when not required, substantially as and for the purposes herein set forth. 77,214.—HYDRAULIC ENGINE.—F. Kansom, Buffalo, N. Y. I claim the engine, A, and pump, G, connected to the supply pip⁶. N, by the brances, o and p, so as to optrate in the manner and for the purpose substan-tially as set forth.

I claim the engine, A, and pump, G, bernard and for the purpose substan-brances, o and p, so as to operate in the manner and for the purpose substan-tially as set forth. 77,215.—TUMBLER HOLDER.—C. Reistle, Brooklyn, N. Y. I claim a tumbler holder, having a handle, b, ring, c c, projection d, and button, e, in substantially the manner described and shown, and for the pur-ductor the substantially the manner described and shown, and for the purpose button. e, in substantially the manner described and shown, and for the purpose the substantial operation of the substantial operation of the purpose substantial operation of the substantial operation operation of the substantial operation o

poses set forth. 77.216 — DISTILLING APPARATUS.— Jane Riley, Cincinnati, O.

Provide the interval of the state of John D. Riley, deceased, assignor to H. G. Dayton, Maysville, Ky. I claim, ist, A condensing apparatus for stills, consisting of the pan, C, and and vessel, D, and receiving the values intrough perfortiated unright pipes, f, that are covered by cooling caps, k, subtantially as herein shown and described. 24, The above, in combination with a doubler, A, made substantially as herein shown and described. 34, The above, in combination with a doubler, A, made substantially as herein shown and described. 34, The attractivity encoded and described. 34, The attractivity encoded and described. 34, The attractivity as a consisting of a pan, from which a series of pipes 11, projects downward, to conduct cooling liquid to the lower part of the condenser substantially as here in shown and described. 4th, The arrangement and combination with each other of the doubler, A, vessel, R, pan, C, pipes, f, condenser, D, having caps, k, and of the distributer E, with its pipes, i, all made and oper atting substantially as here in shown and described.

77,223.-CAR BRAKE AND STARTER.-L. J. Smith, Hamilton,

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77/225.—UAR BRAKE AND STARTER.—L. J. SUMMER, HAMMER, Ohio, and D. S. Knight, New York city.
 We claun, 1st, The slotted and notched or recessed plate, g, when arranged substantially as herein shown and described, for the surpose of throwing the planon, a in or out of gear, and also for raising and lowering the erack frame, H. substantially as and for the purpose herein shown and described.
 A. The plate, g, when connected with or part of the sliding bar, G, in combination with the pawi, a, carrying a iniciton roller, j, and with the clutch, b, and spring, 1, all made and operating substantially as herein shown and described.

bination with the pawl, a carrying a friction roller, j, and with the chica, b, and spring, j, all made and operating substantially as herein shown and de-scribed. 3d, The slottedslidingplate, g, when arranged as described, in combination with the slider, f, fixed frame, E, and rack frame, H, all made and operating substantially as herein shown and described. 4th. The sliding rack trane, A, incombination with the pinion, a, and with the nothed bar, l, and spring pawl, J, all made and operating substantially sherein shown and described. 5th, The device for throwing the spring pawl, J, off the bar, l, consisting of the cam, m, slotted plate, plate, p, and slicing par, K, having two studs, t, and u, all made and operating substantially as and for the purpose herein shown after the advective of the system of the spring pawl, J, off the bar, r, all made and opersting substantially as herein show nand described. 7th, The rack frame, H, when provided with the pin or stud, w, in combi-nation with the sliding bar, M, and crank, e,all made substantially as bereating substantially as herein show nand described. 7th, The rack frame, H, when provided with the pin or stud, w, in combi-nation with the sliding bar, M, and crank, e,all made substantially as describ-ed, and operating so as to automatically throw the clutch off the pinion, a, when the rack frame, H, when provided with a notched bar, l, and when fit-ted around the pinion, a, and axle, B, in combination with the springs, l, or their equivalents, all made and operating substantially as herein shown and described. 9th, A combined railroad car brake and starting apparatus, made and op-

described. 9th, A combined railroad car brake and starting apparatus, made and op-erating substantially as described, and connected with vertical shafts, F F, at the ends of the car, so as to be under complete control of the brakeman, as

the ends of the car, so as to be under complete control to the transman, as set forth. 77,224.—BRICK MACHINE.—Peter J. Smith. Philadelphia, Pa. I claim, 1st, The reciprocating double-acting skeleton clearer, J, arranged and operating substantially as set forth. 2d, The combination, substantially as set forth, of a reciprocating mold, a piston, and an oscillating carrier, with a top pilate, A1, and an inclined planc, a', where by the bricks are compressed during the discharge movement of the mold, as set forth. 3d, The combination, substantially as set forth, of an open-ended box, a reciprocating mold frame, pistons, H, a hopper, E, and a pluger. D, with a reciprocating clearer, which sweeps off the bricks discharged by the molds. 77,225.—MACHINE FOR CUTTING KEY SEATS.—William H. Smith and Rollin S. Edgy, La, Crosse, Wis., assignors to themselves, Seth

177,225.—MACHINE FOR CUTTING KEY SEATS.—William H. Smith and Rollin S. Ediv, La, Crosse, Wis., assignors to themselves, Seth Decan and Henry Merrill. We claim, ist, In combination with the slotted pla, d, the cutting tool, C, having its front edge provided with saw tech, arcamade tapering longitud-inally for the purpose of feeling forward in descending and cutting a Key sear, substantially as described 24, In combination with the reciprocating rackbar, B, the adjustable col-lars, g'g', or their equivalents, arranged with the shifting mechanism to operate in the machine, as described, for shortening or lengthening the movement of the cutting tool, C, as set forth. 34, The guard, U, and spring, U', in combination with the cutting tool, C when arranged as hered a pring, U', in combination with the estifts, B, and phincin, M, ewheel, G, and phinon, I, on the same sleeve, the The coefficient described, and for the purpose set forth. 4 The oce, I, and phinon, F, attached to same sheat, th, rack, B, and phincin, P, all constructed and arranged as described for the purpose of giv-forth, eel processing motion to the cutting tool, C, to cut key seats, as set for the element of the cutting tool, C, courd key seats, as set for the element of the cutting tool, C, to cut key seats, as set for the element of the cutting tool, C, courd key seats, as set for the element of the cutting tool, C, to cut key seats, as set for the element of the cutting tool.

77,226.—Apparatus for Consuming Smoke and Gas, and INCREASING DRAFT IN BOILER FURNACES .- Daniel E. Somes, Washing

ton, D. C. ton, D

Ing appartus, and into unesane or share on a series of a steam, or vapor, or any or all of them, for the purpose and in the manner set forth.
2d, The drawing or forcing, or drawing and forcing, the smoke and other products of combustion from the fire chamber of a steam boiler, furnace, or other theating apparatus, by means of a current or blast of all traversing one or more different shares from such products of combution, for a given distored a steam boiler, furnace, or substantially as and for the purpose set forth.
3d, The grawing orforcing, or drawing and forcing, the products of a steam boiler or the traversity of a fire or pudding or other furnace, or substantially as and for the purpose set forth.
3d, The grawing orforcing, ordrawing and forcing, the products of combustor for a luft from the fire transmitter or pudding or other furnace, or steam boiler or other heating apparatus, by means of a current or blast of a inter or steam or vapor, substantially as set forth.
4th, The combination of the shell A, and the flues and flue spaces of a steam boiler, with the chamber, D, and is flue openings, a' and an air pump, fan blower, or equivalent device, substantially as and for the purpose set forth.

et forth. 13th, The smoke and air tubes, substantially as shown in fig. 12, and for the urpose set forth. 14th, Generating steam, asset forth and for the purposes described.

purpose set forth. 14th, Generating steam, asset forth and for the purposes described. 77,227.—CORN SHELLER.—Joseph Warren, Lodi, Ohio. I claim the case, A, having one of its sides provided with a circular de. pression around the axis of the disk, in combination with the sermental dis-charging tube, J, in the manner and for the purpose spectrac. 77,228.—CHAIR SEAT.—G. A. Watkins, Proctorsville, Vt. Antidated Aprille. 1868.

7,228.—UHAIR DEAT.—U. A. Wathing, interference, Antedated April6,1868. I claima chair or other seat or bottom constructed substantially as de-cribe doff a web of splints, D, secured at their ends by means of a rabbet, a, dare in and around the face of the frame, A, in combination with the strips, beid to their places by a strengthening band or hoop, E, essentially as protocol.

specified. 77,929.—Looking Glass.—Urban A. Woodbury, Morris-

ville, Vt. I claim the shaft or pin, G, with its arm, E, and arm, I, connected to glass, S, and to bar, D, in such a manner that the glass can be revolved or adjusted and held at any desirable angle to the bar, D, and glass, A, as and for the jurpose herein set forth.

77,230 — MODE OF PRODUCING DESIGNS FOR PAPER.—Walter

77,230 — MODE OF PRODUCING DESIGNS FOR PAPER. — Walter Bentley Woodbury, London, Great Britain.
 I claun the peculiar metho', hereinbefore described, of producing trans-parent designs of water marks upon paper from reliefs or intaglios obtained by the aid of photography. and also of producing, by the same means (with the interposition of paper charged with agreasy substance), of designs, either directly upon stone, or which may be transferred on to stone, for printing by the ordinary luboraphic process.
 77,231.—PRODUCTION OF ORNAMENTAL SURFACES FOR JEWERT, BTC.—Walter Bentley Woodbury, London, Great Britain. I claim the production of surfaces to beused to is shere inhefore set forth and described.
 27,292 Dependency Supplements pop. PLANENTAL SURFACES FOR JEWERT, BTC.

GRAPES.-Walter Bentley Woodbury, London, Great Britain. I claim, ist, The method hereinbefore described of improving or adding lotorial effects to the gelatin reliets by painting thereon by hand with a olored solution of gelatine. 24, Froducing such gelatin reliefs entirely by hand, as hereinbefore de-

-PRODUCING SURFACES FOR PRINTING FROM PHOTO-

10rth an 77,232.

signor to Bartlett Burr, Fairlee, Vt.	4th, The arrangement and combination with each other of the doubler, A,	2d, Producing such gelatin reliefs entirely by hand, as hereinbefore de-
* a faim the construction and arrangement of the reciprocating table, P.	vessel, B, pan, C, pipes, f, condenser, D, having caps, k. and of the distributer	scribed; and
hinged tab e. H. tables, QT V. saw arbors, C D, and cutter heads, U W, all	E, with its pipes, I, all made and oper ating substantially as herein shown and	3d, Producing the metallic intaglio from the gelatin reliefs by pressure,
operating upon the same frame, in the manner and for the purposes herein	described.	su hstantialis as herem before described.
shown and described.	77,217MITER BOXClark Robinson, Fox Lake, Wis.	77,223WHIP HOLDERAlva Worden, Ypsilanti, Mich.
37,196.—CHECK BRACE FOR CARRIAGES.—I. D. Johnson, M.D.,	I claim, 1st, The combination of standards, C, cross bars, B, and rod, L, con-	I claimmaking the clasping extension or extensions a part of one of the
Toppett Square, Pa	structed to operate substantially as described	jaws of the whipsocket, and substantially in the manner and for the pur-
T alow the combination of the two braces B B. their attachment 10 the	Od The combination of node M support Q and T blocks D and node T	pose herein described.
the braces A and U. and the	constructed to on enote an hoter fields on tothe	COOL G - CHARTER ON D. Y. C. Y. C. Y. C. Y. C. Y. C. Y.
flor the nate. B. all constructed, arranged, and employed in the manner and	77,218 — BLIND-SLAT FASTENING.—T. F. Rockwell, Yorkville,	77,234.—SURCINGLE.—S. V. R. York, Antwerp, N. Y.
tor the nurness herein snow II allo ussuride.		I claim the combination of the series of rings, numbered 1 to 12, inclusive,
77,197VARIABLE ECCENTRICTimothy Keeler and G. S.	N.Y. Antedated April 15, 1868.	with the surcingle, A and B, long line or rein, D, pastern straps, C and F, and
Avery, Danbury, Conn.		foos strap, E, arranged and applied in the manner and for the purposes
I claim connecting the rod, C, to the eccentric, A, whereby an oscillating	The noises, b, and an obioing side, c, in combination with the bent wire of Fou	shown and described.
motion is imparted to the rod, C. varying from a line at right angles with the	F, and the socket or guide, D, all constructed, arranged, and applied to the window blinc, to operate substantially in the manner as and for the purpose	77985 BIMMING AMMAGINATION SV P. Vork Antwork
eccentric shaft, and without varying the throw of the eccentric, as herein	set forth.	N. Y.
shown and described.		
	77,219.—BRACE FOR BIT.—S. C. Rundlett, Portland, Me.	l claim the combination, with the neck strap, A, provided with the ring,
77,198.—Hog-scalding Tank.—Gideon King, Eminence, Ky.	I claim the arrangement, in the horizontal slot, b, of the slide c, having the	B, of the elastic webbings, b b, cords, E E, and bearing rings, C C', arranged applied, and operating substantially as and for the purposes set forth.
I claim 1st The beyels, R R, and the adjustable sheet iron plates, N N, when	soounder, n, stot, d, eoge, e, rod, i, spiral, K, and adjusting thum b piece, j, as	applied, and operating substantiany as and for the purposes set forth.
applied to the tank of as and for the nurbose described.	, and for the purposes set form.	77,236.—ANIMAL POWER.—Joseph J. Adgate, Liberty, N. Y.
Id. The sheet iron, M, with the angle, DD, when commed to the tank, G, as	77,220.—ATTACHING WHEELS TO AXLES.—George W. Swain,	1 claim. 1st. A machine for utilizing and economizing animal power. com-
and for the nurnose set forth.	Nachua N H	posed of a platform wheel, L, rotating in bearings in a vibrating arm, J, ad-
3d, The crank, T, cog wheels, K, windlass, H, and rack, E, in combination	I claim the combination of the latches. E E', with the hub, A, and ring, H,	justable at any required angle by the supporting attachment, 1, held upon
with the shafts, FF, when arranged, constructed, and attached to the tank,	made substantially as described and for the purpose set forth.	the circular projection, K, substantially as shown and described.
G, as and for the purposes Pecifico.	77.321ROTARY STEAM ENGINE -Peter Shellenback and	2d. The rotating supporting attachment. (, furnished with notches or
4ta, Rope, A', pulleys, j j, pole, w, and pole, v, in combination with shafts.	John Augsburger. Middletown, Ohio, assignors to Peter Shellenback and	2d, The rotating supporting attachment, 1, furnished with notches or teeth, a3, in combination with the circular projection, K, and the notches,
F F, when constructed and operated substantially as and for the purpose de-	James Hudson.	al, on the end piece, A, substantially as snown and described.
scribed.	We claim, 1st, The valves, 11, constructed, arranged, and applied in combi-	3d, The device for tightening the supporting attachment, I, upon the cir-
77,199.—SPIKE MACHINE.—Wm. Koplin, New Castle, Pa.	nation with the nut, A, and its sliding pistone, j, in the manner and for the	cular projection, K, by means of the bolt, e2, and the opposite include taces
I claim, 1st, The cutter, k, moving in the arc of a circle, in combination with	purpose substantially as described.	on the attachment. I, substantially as shown and described.
the receding cutter, h, substantially as and for the Durbose set for th.	2d. The combination, in a rotary steam engine, of the slotted block, B, and	4th, The vibrating arm, J, formed with the projection, c, in combination
2d. The combination and arrangement of the dies, K K', sliding cutter, h,	ings, m, curved al otte d arms, n n. levers, r s, and their connecting mechanism,	with the movable bearing, e1, and the spindle, M, substantially as shown
pivoted stock, s, carrisge, t, arm, u, springs, s' v, lewer, m, and shaft, m', sub-	for reversing the action of the engine, in the manner and for the purpose	and described and for the purposes set forth.
stantially as and for the purposes depended.	specified.	5th, The slots, e and a2, in combination with the bolt, e2, substantially as shown and described and for the purposes set forth.
77,200EQUALIZERAugustus Lafever and R. K. Laraway,	3d, The ar angement of the induction or fice, D, in relation to the exhaust	6th, The manner of joining the end pieces, A and A', with the perch, B, by
Battle Creek, Mich.		mortises or slots, and wedge shaped and dove-tail tenons, substantially as
We claim the combination of a diatt indicator, on the draft pole, with an	described.	shown and described and for the purposes set forth.
equalizer, D, on the doubletree, F, substanually as described.	77,222 BEE HOUSE AND HIVEWm. M. Simpson, Davis-	7th. The double-acting friction brake, G, in combination with the wheel,
	burgh. Mich.	E, substantially as shown and described and for the purposes set forth.
77,201.—FRUIT BAG.—W. I. Ludlow, Cleveland, Ohio.	I claim the construction of a bee house and hives combined, when con-	8th, The crank pin, O. arranged to be adjusted in a radial slot in a wheel,
T claim the bur or vessel A, when provided with a bail. B. and when con-	structed, arranged, and operating substantially as and for the purposes bere-	F, and secured in place by means of nut and washers, operating substantially
Dected at its under side with a rope or cord, C, to which a doublehoox. D, or	inbetore described.	as and for the purpose set forth.

77,237.—Apparatus for Raising Synken Vessels.—George M. Allerton, New York city. I claim, ist, A series of casings, provided with eyes around their edges, to seecured to the vessel by spikes, in combination with separate air bags in roduced within said casings, and capable of inflation, as and for the purposes proved

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specified, An escape air tube, extending below the air bag, substantially as and 2d, An escape air tube, extending below the air bag, substantially as and for the purroses set forth. 3d, A series of air bags, connected to the supply pipe, d, by the tubes, c, in combination with cocks, c d, as and for the purposes set forth.

combination with cocks, c'd', as and for the purposes set forth.
77,238.—ComBINED CORN PLOW, PLANTER, AND CULTIVATOR. —Isaiah B. Arthur, Sidonsburg, Pa.
Iclaim the combination and arrangement of the plow, F, plows, M M R R, beams, J K, rollt, I, lever, I', guards, G G, seed box, C, slide, c, lever, L, shaft. S. and wheel, B, when the said parts are constructed, combined and arranged so as to operate substantially as and for the purpose specified.
77,239.—LARD PRESS.—Solomon S. Avis, Penn's Grove, N. J. I claim the screw, D, cross bar, E, huks, h h', follow block, G, cy finder, I, bamber, m, spout, I, and eye plates, A, all constructed, on bined, and arranged substantially as shown and described and for the general purpose set forth.

77,240.-QUARTZ CRUSHER -Benjamin Babbitt, N. Y. city

I claim, lst, The toggles, C, provided with or connected to the shoes in combination with the slides, E, and rnbber or other springs, F, all ranged to operate in the manner substantially as and for the purpose

iorth. 2d, Thesecuring of the periphery or shell, n, of the roller, J', to its shaft, 2d, Thesecuring of the periphery or shell, n, of the roller, J', to its shaft, 5, by means of the indiarubber heads, rr, expanded by the fixed collars, 0, focse collars, 0, and the nuts, t, or her equivalents, all arranged substan-tially seand for the purpose herein set forti. 3d, The eccentrics, 4d, applied or arranged in relation with the slides, E, of the toggles, substantially as and for the porpose specified. 77,241.—MACHINE FOR MAKING PEGS.—Juan S. L. Babbs (assignor to himself and J. B. Ford). New Albany. Ind.

77,241.—MACHINE FOR MARING PEGS.—Juan S. L. Babbs (assignor to himself and J. B. Ford.), New Albany, Ind. I claim, 1st, The splitting kniffe, 9, and cutting nits, p, on the under side of the movable head, K, in the siding Irame, F, when arranged to operate substantially as spucified. al. The arrangement of the table, M, upon the ways, I, screw, shaft, w, ranchet wheel, L. double pawls, v, levers, R and N, connecting string, parts being constructed to operate substantially as set forth. 77,242.—PLOW LAND cTDE.—Jerume Bacon, Medina, Wis. I claim, 1st, The ears, C, attached to the shoe, B, by which the shoe is secured to the land side, thus relieving the rear of the land side irom all weight and wear, substantially as described. 2d, The solts, d, in the ears, C, by which the shoe is made adjustable, sub-stantially as and for the purpose set forth. 3d, the adjustable shoe, B, applied to a land side, A, in the manner de-scribed, and provided with ears, C, having slots, d, adapted to ft overbolts... e, fixed in the land side, A, substantially as and for the purpose herein set forth.

forth. 77,243.—FLOOR CLAMP.—J. H. Baker, Saratoga Springs, N.Y. I claim the arrangement of the pivoted arm, F, and slotted extension arm, F, both having ratchet teeth, and secured together by a set serew, for forc-ing one board to another, or two or more boards of d ferent widthe, con-structed to operate substantially as herein set forth. 77.244.—HARVESTER RAKE.—C. L. Barritt, Richland, Mich

77.244.—ITARVESTER TARE.—C. D. Darme, inclinance, and include the second second

its return stroke, substantially in the manner as set forth. 77,245.—BirTERS.—John Bender, Lonaconing, Md. I claim a medical compound or composition, formed by com above-mentioned ingredients, st batantially as described. combining th

above-mentioned ingredients, si bitantially as described. 77,246.—Fore-Part IRONS.—James Blease, Richmond, Ind.

Antedated April 25, 1568. I claim adapting the tool, a, to the different thicknesses of the soles by nears of the adjustable lips, substantially as set forth. A lso, adapting the tool, a, to the different purposes herein specified by nears of the detachable lips, as shown and described.

means 0. 77.247. -HAY RAKER AND LOADER.-J. Marcus Boorman,

Scarboro ugh, N.Y. I claim, ist, Soplyoting the apparatus to the vehicle that it may be tilted to bring the driving ginions, m, out of gear with the toothed runs or spur wheels, b, on the rear wheels of the vehicle, substantially as and for the pur-pose specified.

wheels, b, on the rear wheels of the ventcle, subsetuation as and for the per-pose specified. 2d, The attachment of the forks, h, 'ho the endless belt by means of the plates, u, furnished with lips, e'', and the studs or rivets, f'', substantially as and for the purpose specified. 3d. The transverse rod, n. and pins, s', in combination with the series of slates, r, their side frames, a, and the , rame, A, supporting the carrier belts, B, whereby thesiats, r, with their side frames, may be readily detached, sub-stantially as and for the purpose specified. 77.248 — SAFETY TRUCK.—S Y. Bradstreet, Monticello, Iowa. I claim, 1st. The combination of the inclined grooved wheels, C, with the horizontal bracing wheels, F F, substantially as and for the purpose set fort h.______

the in fort h 2d

forth. 2d. The spring, J, in combination with the sliding plats, G, and fixed plate or block, H, substantially as and for the purpose set forth. 3d, An auxiliary truck, provided with inclined wheels. C C, and bracing wheels, F F, and sliding vertically inguides, H H, in the manner and for the purposes indicated. 4th, The combination of the plates, G G, with the wheels, C C F, the spind les, D D, having shoulders, d d, and the nuts, a a, substantially as and for the purpose specified.

th, The combination of the plates, G d, with the wheels, O distribution of the plates, G distribution of the plates of the purpose specified. Sth, The guide blocks, H H, when supported by pivots, M M, working in elongated bearings, in the manner and for the purposes described. 6th, The rubber cushions, e e, when used in combination with the auxiliary safety truck above described, in the manner and for the purposes specified. 77,249.—MACHINE FOR WOOL BURRING.—Louis Brumbach,

77,259.—MACHINE FOR TOOL Determined in the stated and toothed Reading, Pa. I claim the receptacle, G, arranged in respect to the slatted and toothed rollers of a wool-burring machine, as described, and so balanced that it will be raised by a burr carried beneath it, and will fail with its edge in contact with the fleece before the slatted roller strikes the burr, all as and for the purpose described. 77,250.—VEGETABLE SLICER.—Isaac Bullard, Dedham, Mass.

77.250. --VEGETABLE SLICER.-Isaac Bullard, Dednam, Mass, I claim the disk, C, with an opening, F, and cutting plate, a, incombination with the rim, A, and plate, D, and the point, E, and Buife edge, II, ali sub-stantially as and for the purpose shown and described. 77.251.-FARM GATE.-E. P. H. Capron, Springfield, Ohio, I claim, 1st, A gate, consisting of the longitudinal bars, A. cross oars, B C and E, braces, E, F, connecting bar, and ratchets, e, constructed and arranged to operate substantially asherein described. 2d, In a gate, adjustable as described, the use of a pin, f, for the purpose as uperin setforth and in the manner described. 77,252.-WASHING MACHINE.-H. J. Case and F. J. Johnson, Sugar Grove, Pa.

77,252.—WASHING MACHINE.—H. J. Case and F. J. Johnson, Sugar Grove, Pa.
Iclaim an improved washing machine, convisting of a box, A, having monnted therein the grooved roller, B, in combination with the grooved roller, C and D, mounted respective, y in the arms, E and F, hinged interendently of each other and provided with the cross bars, c and d, all constructed and arranged to operate substantially as herein described.
77,253.—DRYER.—Solon L. Cheney, Wooster, Ohio.
I claim, 1st, In an apparatus for drying fruit, the arrangement of the furnace, *D*, beamber, s. drying oven, A, nphe, p, and aperture, s', by which the cold air is caused to traverse the whole length of the furnace, *in contact* with the floor of the drying oven, in order to thoroughly heat it and utilize its beat, substantially in the manner and for the purposes specified.
2d, 1h anapparatus for the yarpose specified, the flange, m, and wall, w in combination with the aperture, r, and damper, ri, substantially as and for the pronces of torh.
3d, The ron-conducting beds, t, when arranged along the bottom of the drying oven, and leaving the space, u, between them, for the purposes specified.

forth. 2d, The detachable spring slip, B, constructed with the toothed lips, b, and arranged within the shell of the clasp substantially as and for the purpose spdcified. pdcified. 77,283.—Shingle Machine.—Smith Head, Halifax, Pa. 77,283.—SHINGLE MACHINE.—Smith Head, Halifax, Pa. 1 claim, ist, The arrangement in a sawing machine, of the four saws, C CI C C3, the two mandrels, a a', each bearing two of the four saws, and the os-ciliating arms, L L', for the purpose of communicating a reciprocating mo-tion to the man drels, a a', each bearing two of the four saws, and the os-ciliating arms, L L', for the purpose of communicating a reciprocating mo-tion to the man drels, when used in connection with two bolk carriages, D D', one on each side of the machine, and the whole being constructed and oper-ating substantially in the manner and for the purposes specified. 2d, The combination of the shaft, F, the branks, G (, the pitman, H t', the arms, 11', moving the carriages, D D', and the oscillating post or shaft, K, having the lateral arms, M M', and the longitudinal arms, L L', all the parts be nacconstructed, combined, and operating together substantially as and for the purposes set forth. 3d. The edgink apparatus above described, consisting of the mandrel, R, working the lateral the auxiliary saws rand r'. when constructed and oper-ated substantially as and for the purpose described. 72 92M — Drut yew _ Fradexic Hawitt Nawark N I 77,256.—WATER WHEEL..-Jacob Clark, Clarksville, Pa. I claim, 1st, The whech aving the shaft, B, the plate, B', and the two series of buckets, the latter constructed in the form described, and arranged one above and one below the plate, B', substantially as specified.
2d, The buckets, c. c. having the curves vand w, in combination with the plate, B', substantially as and for the purpose specified.
77,257.—IKOOFING MACHINE.—Jas. H. Cole, Adrian, Mich. I claim, ist, Supporting and guiding the rolling instrument, A, by means of the ways, F F, substantially as and for the purpose set forth.
2d, The guide, J, when applied at the end of the bed, G, substantially as and for the purpose described.
77,258.—WELDING HOE.—Andrew Coleman, Red Bank, N.J. I claim, ist, A weeding hoe composed of a succession of connected corru-77,303.-MACHINE FOR FACING GRINDSTONES.-Reuben B. Matthews, Fitchburg, Mass. I claim, 1st, Applying the carriage, A, and its above described mechanism to the shaft, a, in such manner as to be enabled to effect its horizontal adjust ment, or angle of departure from a horizontal line, substantially as before de-scribed. scribed. 2d, The combination and arrangement, with the earriage, A, of the tubu-lar screw, k, hollow shaft m, and beveled gear, q, the whole being arranged and operating as before settorth and explained. 3d, in contbination with the carrage, A, screw k, shaft, m, beveled gear, q, and shaft, b, the screw, v, as supported upon the adjustable post, w, and provided with the beveled gear, s, in the manner and operating as before set forth. forth. 77,304.—MATERIAL FOR DENTAL PLATES AND FOR OTHER PURPOSES.—John A. McClelland, Louisville, Ky. I clain, ist, The methods of preparing and working collodion and its com-pounds to form anim proved material, substantially as herein described. 2d. Forming dental plates of the improved material, prepared as herein de-scribed. I claim, 1st, A weeding hoe composed of a succession of connected corru-ations, B B, etc., formed from the same plate of sheet metal, substantially as and for the purpose snown and described. 2d, The points, ● D D. etc., substantially as shown and described, in combi-nation with the corrugations, B B B, etc., all as and for the purpose set forth. 77,284.—PULLEY.—Frederic Hewitt, Newark, N. J. f claim, 1st, The puller constructed with the divided hub and the detacha-ble rim, substantially as herein set forth, for the purpose specified. 2d, The combination of the divided rim, the wrought from arms formed with connecting parts, ax, and the divided hub, substantially as herein set forth, for the purpose specified. 77,259.—Apparatus for Disintegrating Ores.—Jerome B. Cox, San Francisco, Cal. I claim disintegrating or reducing any gold bearing material by means of gitation and friction with water, so as to permit of the separation of the gold rom such disintegrating material, by the ordinary means of sluice box amal-amation etc. 77,305.— Apparatus for Measuring Cloth.— George R. [77,505.— APPARATUS FOR MEASURING CLOTH.— George A. McIntre, Houghton, Mich. Antedated April 16, 1883. I claim, ist, The communation and arrangement of the three rollers, B B C, with the cam, e hinged dog, d, ratchet wheel, r, dial, D, index, f, and mova-ble frame, a, the whole operating substantially in the manner and for the purpose indicates. 24, The C oth measuring instrumentabove described, consisting of the parts referred to in the first clause of this claim, in combination with the shafts, M M', screw, N, guides, G G, and boæd, H, all consaucted, arranged and described substantially as and for the purposes specified. 77,285.-TUBULAR STRUCTURE.-Wm. F. Holske, N. Y. city gamation. etc. I claim, 1st, The rings, A. formed with a groove, a, on cach side, and pro vided with breaks, b. and ears, d', substantially as and for the purpose de scribed. 77,260.—DOUBLE SHOVEL PLOW.—A. J. Craig, Ashmore, Ill. I claim, 1st, Adjustably attaching the plow standards, D, to the rear ends of the beams, A, by means of the scatical cross heads, a', formed upon the said rear ends of the said beams, su bs initially as here in shown and described and for the purpose set for the scribed. 2d, In combination with the above, the staves, B, tongued and grooved, and formed with tenons, substansially as and for the purpose set forth. 3d, The combination of rings, A, staves, B, and tie rods, C, all constructed and arranged substantially as described. aid rear ends of the said beams, su batantally as herein shown and described nd for the purpose set forth. 2d, Adjustably connecting the handles, F, to the beams, A, and plow stand-

ards, D, by means of the uprights, G, constructed and arranged substantially in the manner herein shown and described and for the munose set forth

In the manner here is shown and described and for the purpose set forto. 77,261.—SELF-LUBRICATING BOX FOR SHAFTING.—Wellsly W. Crane, Auburn, N. Y. I claim the combination of the loose, hanging interior bearing, O, slotted in its center, and provided with a depending tube, C, with the clonated re-ceiver E, baving a circumferential groove, and suitable bearings for the jour-nals of the hanger, O, to rest on, the whole constructed and used substan-tially as specified.

7,262.—NAIL MACHINE.—F. Davison, Richmond, Va.

77,262.—NALL MACHINE.—F. Davison, Richmond, Va. I claim, 1st, The rotary wheel or die, in combination with the plunger, or die, J, vibrating cutter, L, and box, M, all arranged to operate in the man ner substantially as and for the purpose specified.
24. The feed tube, Q, lined with a sultable non-conducting material, and ar-ranged to operate in connection with the cutter by means of spring bar, S, ard cam, F, substantially in the manner as and for the purpose set forth.
3d, The combination of the feed tube, K, box, M, cutter, L, wheel, t, plun-ger or die, J, and discharging ledges, f, all arranged for joint operation sub-stantially as and for the purpose specified.
77,263.—TOILET ATTACHMENT FOR BUREAUS.—Henry W. Eastman, Baltimore, Md.

77,263.— FOILET ATTACHMENT FOR LOCAL Eastman, Baltimore, Md. I claim the toilet a ttachment for bureaus above describel, consisting sub-stantially of the noright cabinet, B, providel with horizontal shelves, s, the frame, D, swinzing on side hinges, and the mirror, M, hinged to the frame D, and provided with an adjusting rod or cord, r, the whole together in the manner and for the purposes appointed. 77,264.— REVERSIBLE KNOB LATCH.—Henry H. Ellwell, South Norwalk, Cong.

manner and for the purposes spectrum.
77,264. — REVERSIBLE KNOB LATCH.—Henry H. Ellwell, South Norwaik, Conn.
I claim, 1st, Thehub, D, when adapted to be moved longitudinally with its axis through the lock case, to release the iatch and admit of its being turned, substantially as described. for the purpose specified.
2d, In combination with the sliding hub, D, the flance, i, surrounding the hole for the passape of the hub, upon the jusied of the case, whereby said hub, when operated to release the latch, will not be displaced laterally, as herein shown and described.
3d, The arm, j, of the bar, E, arranged as shown, and in such relation with screw holes, k, as to cause, when the lock is screwed to the door, the arm, j, to bear against the hub, D and prevent the latter from moving longitudi-nally to release the slide catch, as set forth.
77,265.—MILL BUSH.—John M. Evril, Center, Pa.
I claim the box, A, provided with groove J, chambers K, blocks C, wedges e, and bolts, D, all arranged, combined, and used substantially as and for the purposes specified.
77,266.—TICKET HOLDER FOR RAILROAD CARS, ETC.—Oliver G. Fessenden and Seth G. Fessenden, Stamford, Conn.

G. Fessenden and Seth G. Fessenden, Stamford, Conn. We claim, 1st, The ticket holder made substantially as described, and its equivalent, for the purposes specified. 2d, The roller, E, and its equivalents, for the purposes specified. 77,267.—Door Lock.—Wm. D. Field, Providence, R. I.

[77,287.—Door Loors.—Wm. D. Field, Providence, R. I.

Iclain, 1st, Providing the bolt, B, with tongued or grooved edges, subtantially as set forth, and combining it with the guide plates, C. G, as described, so that it will remain on the lock when the inner plate of the same is removed, which and or moving it with the guide plates, C. As described, and the bolt is moved, which is so that it will remain on the lock when the inner plate of the same is removed, which is screwed upon the bolt, so that the tumblers are held in place by the said plate, and can be removed when the same is taken off, substantially as herein shown and described.
3d, The bolt, B, plate, E, oscillating and sliding tumblers, D, spr ings, f, and revolving tube, (4, having a projecting arm., 1, all arranged in combination with each other and with the key, f, having changeable wards, and all made and operating austantially as herein shown and described.
72,268 — CLOPTHER PIN — Perry Finley Memphis Tenn

and operating austantially as herein shown and described. 77,268.—CLOTHES PIN.—Perry Finley, Memphis, Tenn. Iclaim a clothes pin constructed of sheet metal and coated with rubber or guttapercha, in the manner and for the purpose set forth. 77,269.—FERTILIZER ATTACHMENT.—C.C. Foster, Odessa, Del. I claim. 1st, Themode of sowing phosphate, or any like manure, by means of an attachment constructed and operated as above described, or any other substantially the same.

of an attachment constructed and operated as above described, or any other substanially the same. 2d, Wings, W S, combined with pins, P, and shaft, S' H', for the purpose and in the manner above set for the and described. 3d, Rollers, R M, springs, S C P, reversed bearings, R V, the whole cou-bined, constructed, and operated in the manner and for the purpose above set torthand described.

77,270.—RAILROAD CAR HEATING AND VENTILATING APPA

77,270.—RAILROAD CAR HEATING AND VENTILATING APPA-RATUS.—Samuel W. Francis, Newport, R. I.
Iclain the combination with the locomotive of the air tube or conduit communicating with pipes opening into the ears, and a removable heat con-fining jacket surrounding the said conduit, under the arrangement herein shown and described, so that the said conduit and pipes may constitute either a ventilating or a heating and ventilating appa:atus, as herein shown and described.
77,271.—DERRICK.—Charles Fricke, Mobile, Ala.
I claim the arrangement of the shoes or sockets, B.B. on the horizontal beam, A, adjustable legs, C.C., winding dram, H, and cord, N, provided with a ring, and three small cords, g.g.g. at one end thereof, when operated as de-scribed, and adjusted on the joists of a new holding, for the purpose of le-vating the maternal therefor, substantially as herein set forth.
77,272.—PLOW.—William Gallagher, Shullsburg, Wis.
I claim, ist, The combination of the vertical bar, E with the axle, B, and forward end of the plow ceam, F, substantially as herein shown and de-scribed and for the purpose set forth.
2d, The combination of the levers, K, with the plow beams, F, and vertical arms or bars, E, substantially as herein shown and described and for the purpose set forth.
3d, The combination of the braces. O, with the axle. B, and now beams F.

arms or ours, p. substation of the braces, O, with the axie, B, and plow beams F, 3d, The combination of the braces, O, with the axie, B, and plow beams F, anbtantially as herein shown and described and for the purpose set forth. 77,273.—TRESTLE.—James E. Gedney, Petaluma, Cal. I claim, 1st, The lers, B, attached to the beam, A. by means of the plates D bolts, E, and thumb nuts, as here in shown and described and for the purpose

set forth. 2d, The combination of the beam, A, extension legs, C, legs, B, removable plates, D. having sockets, d', and flanges for the passage of the bolts. I J, thumb nuts, KL, and plates, M and N, a berein described, for the purpose specified.

specified. 3d, Securing the extension legs, C, to the legs, B, by means of the bolts, I and J, thumbints, K and L, and plates, M and N, as herein shown and described and for the purpose set forth. 77,274.—CLOTHES LINE HOLDER.—James W. Gladding, Nor-

Varies are crossed, without escandanting communication between the event and the end of the meters, substantially as specified.
2d, The combination with the supply chamber, to which gas is admitted from the measuring compartment, of a water escape pipe or outlet, lower water receiving chamber and valve controling said outlet within the latter compartment, essentially as herein set forth, and wherehy a single water escape bipe, or outlet, lower water receiving chamber and valve controling said outlet within the latter compartment, essentially as herein set forth, and wherehy a single water escape may serve to relieve, both the supply chamber and inlet and outlet pipes, also wherehy the meter is better protected against being tapped of gas drawn from the inlet pine, as specified.
3d, In combination with the several paces or outlets to the water escape pipes, or their equivalents, from the several gas chambers that compose, or mainly so, the body of the meter, a valve or valvular device, arranged to simultaneously control said out; etc., seventially as escribed.
4th, The hollow and perforated water discharging screw, or its equivalent, in combination with the water discharging screw, or its equivalent, and valve or valual device controling the outlets from the several chambers of the meter of an elastic or spring like connection interposed between said screw and valve, essentially as hereins set forth.
77,299.—HORSE HAY FORK.—H. C. Mapes, Rushville, N. Y. Iclaim the cauch est other, and with the bail, d, tines, a, and handle, b, substantially as hereins exited.
77,300.—MAGIC LANTERN.—L. J. Marcy, Newport, R. I. 17,214.—CLOTHES TANE, HOLDER.—James W. Gradding, Normal, II. Iclaim the jaws, A, and the tongue, D, constructed, arranged, and operating substantially as shown and described, for the purposes set forth. 77,275.—MANUFACTURE OF PACKING FOR STEAM ENGINES.— JameseGlanding (assignor to himself, David H. Wilson, and Edward S. Lowry), Philadelphia, Pa. I chain the blocker herein describes of applying lubricating material to packing that is to say introducing the material among the fibrious strands during the plaiting of the latter together, and at the point where they are be-ing united, guarding as specified. ing united, substantially as specified. 77,276.—Spring AND BODY BRACE FOR VEHICLES —Christo

pher C. Gleason, Wauconda, III., assignor to huself and L. M. Kimbali, I claim the levers, a and b, and straps, F.F. arraged as described, in com-bination with perch, A and body, E, the whole arranged and operating a and for the purpose set forth. 77,277.—COTTON BALE TIE.—J. H. Gooch, Cheraw, S. C.

I claim the plate, A, constructed with the depression a, a the bars, ccl c2 the tongues, m n, and the slots, is and C C', the latter slot being constructed with the recesses, e e', having the inclined edges, it', and the whole appara-insoger shing substantially in the manner and for the purposes set for the What the receive c, while the manner and for the purposes set for the 77,278,—FEATURE DUSTER.—M. A. Goodenough, N. Y. city. Iclaim in combination with a feather duster, the elastic Stem, B, arranged substantially as and for the purposes herein shown and described. 77,279,—FOTATO DIGGER.—Alvah Graves, Marcellus Falls,

N.Y. I claim the suspending frame, A, and flexible or swinging connection, c, in combination with the fork, B, substantially as shown, and for the purpose

described. 77.280.—WATER COOLER.—John L. Hadden, Philadelphia.Pa claim a sheet metal watr cooler, having the bottom, B, of its inner cynin, A, made of sheet metal, raised and corrugated substantially as described shown, for the purpose specified. der

77,281.—MACHINE FOR CLEANING EMERY.—J. H. Hawes,

77,301.—STEAM SLIDE VALVE.—Jacob Martin, Cairo, Ill. Iclaim, 1st, The combination of the steam chest, B, exhaust pipe, M, and cylinder, J, substantially as brein set fortb.
2d, The combination of the suspended plate, I, viston, K, piston rod, N, and soring, L, substantially as brein set fortb.
77,302.—WATER WHEEL.—M. H. Matson, Horseheads, N. Y. Iclaim, 1st, The water space of the curb and wheel, each divided into com-partments, 123, etc., by the partitions, b, b'b', when combined with the ec-centric chutes, a a, the whole arranged and operating in the manner and for the purposes herein set forth.
2d, The combination with the above of the series of gates, d, and the ar-rangement of the houp, C, arms, g, and lugs, f, for operating the gates, in the manner and for the purposes specified.
3d, The combination of the convex bearing block, J, bearing, n, with up-turned edges to retain the oil, and the adjusting nut, m, the whole so operat-ing as to suspend the wheel, and allow its vibrationfrom the axial line, as set forth.
4th, The combination of the camping, disks, t, and bolts, u u, with the globe coupling, S, operating in the manner and for the purpose herein set forth.
77,303.—MACHINE FOR FACING GRINDSTONES.—Reuben B. drying oven, and leaving the space, u, between them, for the purpose speci-fed. 4th. The regulator, E, when constructed with the openings, e e, arranged in the manner and for the purposes specified. 77,254.—LAMP BURNER.—George Chinnock, New York city, assignor to City Manufacturing Company, Waterbury, Com. I claim in kerosene and like burners, the detachable annular transparent rim or plate, E, arranged in relation to the cone, C, perforated disk, D, and transparent shell, A', substantially as berein shown and desorribed. 77,255.—MACHINE FOR PLANTING CORN.—D. Chipman and Wm. F. Chipman, Mount Carmel, III. We claim, 1st, The combination of the loose wheels, b, provided with cams bc, ratchet wheel, bi, and spring pawl, bd, arranged and operating substant-tially as and for the purpose set forth. 2d, The combination of the slides, c.2, levers, D. D. and springs, d.4', ar-ranged and operating substantially as a different or standard, a, and or-erating substantially as and for the purpose set forth. 77,256.—W ATER WHEEL.—Jacob Clark, Clarksville, Pa. Lolaim, 1st, The whech aving the shaft, B, the plate, B', and the two series 77,281.—MACHINE FOR CLEANING EMERY.—J. H. Hawes, Boston, and George H. Bliss, West Stockbridge, Mass. We claim, 1st. The combination with the cylinder, A, of the rotating rub-ber, D, of serpel ane form, su bstantially as specified. 2d. The combination of the plate or disk, E, with the cylinder, A, and rub-ber, D, tor operation together as described. 77,282.—MELT CLASP.—Jacob H. Hawes, Boston, and George H. Bliss, West Stockbridge, Mass. Antedated April 25, 1988. We claim, 1st, The clasp constructed with the leaves, a, and internal lips, serving conjointly to hold the ends of the belt, substantially as herein set

4th, The rings, A, when provided with loops, D, substantially as and for 77,286.—APPARATUS FOR DIFFUSING LIQUIDS.—Chas. Hodge

|MAY 16, 1868.

77,286.—APPARATUS FOR DIFFUSING LIQUIDS.—Chas. Hodge Hudson, Roybury, Mass.
Telaim, 18t. in an apparatus for atomizing liquids, the use of a hydrostatic blower, substantially as described, in combination with an adjustable reservoir forsturplying a bead of water which will produce more or less pressure in the air vessel or blower, as may be required.
2d, The combination of the cans, A and B, and tube, D, constructed and operating substantially as described.
3), In an apparatus for applying hydrostatic pressure to produce a current of airto operate an atomizel, a regulating device, substantially as herein described, or all apparatus for applying hydrostatic pressure to produce a current.
4th, In an apparatus for applying hydrostatic pressure to produce a current of airt to operate an atomizer, a regulating stop cock in the tube leading from the air vessel to the atomizer, rescue to produce a current.
4th, In an apparatus for applying hydrostatic pressure to produce a current of air to operate an atomizer, a regulating stop cock in the tube leading from the air vessel to the atomizer, rowary or stop the flow of air substantially as described.
72,827.—SPECTACLES.—Edward Hunter, Philadelphia, Pa. Ichim the nose piece, c, adanted to projections, b, on the frames of the spectacles, for adiusability of the same, substantially in the manner sector.
77,282.—STEERING APPARATUS.—Peter H. Jackson, New

77,288.—STEERING APPARATUS.—Peter H. Jackson, New

York city. I claim the right and left handed screw shaft, c, set in vertical sliding boxes, in combination with the arms, l, that are jointed in pairs to the nuts, m, and extend to thegudg cons, t, of the rudder head, as and for the purposes

m, and extend to the gauge coust, t, or tracer and the specified. 77,289, --VISE. --A biczer Jameson, Trenton, N. J. 77,289, --VISE. --A biczer Jameson, Trenton, N. J. I claim, 1st, The combination of a plate, B, jaws, A A', and screw, F, con-necting the said jaws, the whole being arranged and operating substantially as and for the purpose specified. 2d, The combination of the said sliding jaws, A and A', movable plate, B, and lower permanent plate, D, the whole being constructed and arranged for the lateral and longitudinal adjustment of the jaws, substantially as herein described.

77,290.—CRYSTAL FOUNTAIN.—John C. Johnson, Louisville,

Ky. Antedated April 7, 1963. I claim the crystal fountain above described, having the cylinder, A, sup-ply Dipe, B, Dipes, C D, faucets, E F, valves, G H, and bent pipes, I K, com-municating with the fountain jet, the whole apparatus being constructed, combined and arranged substantially in the manner and for the purpose specified.

Combined and arranged substantially in the manner and for one purpose specified.
 77,291.--TEA AND COFFEE POT.-Amasa C, Kasson (assignor to himself and Nelson C. Gridley), Milwaukee, Wis.
 Iclaim, ist, A tea or coffee pot consisting of an upper chamber for the tea or coffee, and a lower chamber. J. for hot water, with an outer central tube. C, attached, and cover, J., with tube, E, whetle, F, and hood, I, all constructed and arranged substantially as described.
 2d, Jin combination with the bot waterchamber. B, and central tube. C, the cover, D, with hood, I, and tube, E, when constructed and arranged substantially as herein described.
 3d, The cover, O, with the tube, E, and conical deflecting tube or hood, 1, attached substantially as described.
 77,292.-COTTON SCRAPER.-I.J. Kidd, Young's Settlement, Texas.

Texas. I claum the came, C C, in combination with the horizontal bars, H H, beam, L, and plows or scrapers, P P, when constructed, arranged and used substan-tially as and for the purpose specified. 77,293.—COTTON CHOPPER.—I. J. Kidd, Young's Settlement,

Toxas. Joint of Orlor ELL. J. B. Hidd, Founds S Detertion of the second state of the second state of the second state of the state of t

Dar, H. JORTHUIDIAL pieces, g. g., and the plows, L.L., SUBSTAUTIALLY IN THE MAIL-ner set forth.
77,294.—COLLAR MACHINE.—H. F. Knapp, New York city. I claim the knives and cutters, I M K, cutting block, D and cutter, L, ar-ranged to operate together, essentially as berein set forth.
77,395.—BELT COUPLING.—C. W. Theodore Krausch, Phila. delphia, Pa. Antedated April 21, 1868.
I claim, ist, An adjustable belt or band clasp (coupling). by means of which also the degree of tightness of a belt or band clasp (coupling). by means of which also the degree of tightness of a belt or band clasp (coupling).
77,296.—MACHINE FOR TRIMMING TEAZLE.—Elisha Leffing-well. Sembronius, N. Y. Antedated April 16, 1869.

77,296.—MACHINE FOR TRIMMING TEAZLE.—Elisha Leffing-well, Sempronius, N.Y. Antedated April 16, 1863. I claim, 1st, The tubes, J J, constructed substantially as described, and used with the pulleys, K K, and their revolving blades, e e, as and for the purpose set forth. 2d, The cutter bar, o, with its cutters, s s, in combination with the tubes, J J, as and for the purpose set forth. 77,297.—TIRE SHRINKER.—John Macy, Pine, Oregon. I claim the fixed bed, B, provided with the fixed and adjustable clamps, a a', in combination with the sliding plate, C, actuated by the cam lever, D, and the clamps, G C, fitted to the uprights, E E, F , when all said parts are constructed and arranged in the manner substantially as and for the purpose set forth.

set iorth. 77,298.—Gas METER.—James W. Mahlon, Brooklyn, N. Y. Jelain, ist, De combination, with the measuring or working clumbers, of secarate water escapes or outlets and lower receiving chamber or compart-ment, with valve or valves, for operation in such manner as that the several manbers making up the body of the meter may be relieved of water collect-ing in them without disturbance or removal of the meter, and when the valves are closed, without establishing communication between the several chambers to interfere with the operation of the meter, substantially as speci-ded The combination with the contact.

ranged in relation with each other, and with the bail, d, tines, a, and handle, b, substantially as and for the rurpose specified. 77,300.—MAGIC LANTERN.—L, J. Marcy. Newport, R. I. I claim, ist. Forming the box or bocy of a magic lantern, or other lens lan-tern, with a double shell, A D, and double chimney, C E, substantially as shown and described and for the purpose set forth. 2d, The slide plate, K, lever, G, grooves, d and if, and tube plate, Q, all constructed and operating substantially as shown and escribed and for the purpose set forth. 3d, The double cylinder, A D, caps, I and G, chimneys, C E, and lens, J J, all constructed and operating together substantially as shown and described and for the purpose set forth. 4th, The evindrical form of the box or body, A, of a magic or signal lan-tern, when the dameter of the same is just sufficiently large to contain the condensibg lens or bull's eye (or a reasonable approximation thereto), sub-stantially as shown and described, for the Durpose of rendering the said lan-tern more portable, in combination with a sheet metal chimney and condens-ing lens or bull's eye, U A ull as set forth. 77,301.—STRAM SLIDE VALVE.—Jacob Martin, Cairo, III. Lichaim, ist. The combination of the stam chest, B, exhaust pipe, M, and

77,306.-Sprine Brace for Carriages, etc.-L. C. Miller,

77,300.—DPRINT DRACE FOR CONSISTENCE, 2010, 2

I claim the combination of the binged meter pan, K, arm I, weight, J, cock, , pawi, i, ratchet wheel, k, and any suitable registering dials, all construct od and operated substantially as shown and described, and for the purpose set forth.

77,308.— BUILDERS' AND PAINTERS' SCAFFOLD.— Charles

77,308.— BUILDERS' AND FAINTERS COAFFOLD.— CHARLOW Mudge, Ovid, Mich.
Iclaim, 1st, The slide bars, M, the supports, N, standard braces, Z, the plates, C, provided with slots, E, spur hooks, D, vibrating rode and sprintes. P, when arranged and operating in connect on with hanger plates, I^e.
2d, The standards, G, the platform supporters. H, projections, 8, part or clip, X, operated by ropet, R and Q, pulleys, T. and rod, K, when constructed and operating substantially as and/or the purposes settorth.
3e, The combination of the iorgoing named parts with the adjustable hook plates, I, and braces, L, when arranged, constructed and operated substantially as herein shown and ecseribed.
77,309.— CLAMP FOR VEHICLE SEATS.— H. E. Murray, Chester, N. Y.

ter, N. 7. The plate, C, with its rack extension, D, with its pawl, E, the l claim, ist, The plate, C, with its rock extension, D, with its pawl, E, the ever, B, hook, K, and link, H, with its foot catch, I, all constructed and oper-ting legether substantially as shown and described and for the purpose set

forth. 2d, The rubber spring, Q, hollow head, a, and hook, K, in combination with the link, H, lever, B, and pawl, all substantially as and for the purposes set

77,310.—DRAY SADDLE.—John O'Mahony, Savannah, Ga. I claim in a dray saddle the beveled blocks, C. secured to the leather covering, A. in combination with the pade, D. and grooved bar, B. said blocks C, being secured to the pads at their centers, for the purpose of preventing such pade from flucturing upon the back of the animal, under the weight of the dray, as herein shown and described. 77,311.—FoLDING BED.—F. C. Payne, New York city. I claim the bed composed of the central frame, A, and two end frames, B, beveled at their contiguous ends, and connected by the slotted hinges, c d, in such manner that with the mattress attached thereto, they may be brought or folded into rectangular form without outwardly extending or excreased parts, substartially as berein set forth.

77,312.—MACHINE FOR BENDING RINGS.—Wm. H. Peckham,

New York city. I claim, ist. The combination of the revolving axles, B C, adjustable fric-ton rollers D D, upon the concentric bearing plates, d, concentric guides, c, onnecting rods, e, and gear wheels, ff, as herein described for the purposes

specified.
2d, The device herein shown and described of operating the iriction rollers,
2d, The device herein shown and described of operating the iriction rollers,
D consisting of the guides, c. c, slides, d. d, rods, e. e, and wheels, ff, all made and operating substantially as herein shown and described.
3d, Adjusting the friction rollers, D b, around the larger roller, C, and with relation to the upper adjustable roller, B, by means of the curved plates d, operated in concentric guides around the roller, C, by the connecting rod, e, and gear wheels, if, as herein described.
77,313.—EUTON.—F. J. Perkins, Salem, Mass.
Adjust, b, disc, b, formed with the roller, lin, b, in combination with the

1 claim the disk, b, formed with parsilel lips, b', in combination with the pars, d, having parallel straight sides, and each slotted as described, for ap plication to the circumstructurally grooved stem, a, of the button, essentially as boy u and set for it.

-GAS TUM.-Edward L. Perry, New York city. 77,314 claim as a new article of manufacture impervious flexible gas tubin mposed of rubber and paper tubes, substantially as and for the purpo

77,315.—CLOTHES WRINGER.—M. Pierce, Winona, Minn.

77,315.—CLOTHES WRINGER.—M. Pierce, Winona, Minn.
I ctaim, 1st, The yoke frame, G H, appled to the main frame, A, and carrying lowerroller of machine, substantially as described.
2d, Extending the shaft. E, of the upper roller, D, at one side of the wringer, and the shaft. E, of lower roller, D, at the other, so that a crank handle indy be applied to one or both at the same time, substantially as described.
3d, The wooden spring, J, when constructed, arranged and applied substantially as and for the purposes described.
4th, Making the upper roller, D, of larger diameter than the lower roller, when the shafts of both rollers are extended and no popeit directions, so that the power may be applied to the smaller roller, when it is only desired to use one crank, substantially as described and ropesented.
77,316.—ENVELOPE.—Charles R. M. Pohle, Richmond, Va. I claim the manner I connect the different parts and close the whole.
77,316.—DEVICE FOIL PREVENTING HORSES FROM DRAGGHIG

77,317.—DEVICE FOR PREVENTING HORSES FROM DRAGGING

WEIGHTS. ALVALIATE INDUCTION INCLUSING HUNSES FROM DRAGGING WEIGHTS. Alexander Pope, Jr., Dorchester, Mass. I claim, ist, The bar or lever, A B, provided with a cross piece, c, or its quivalent, in combination with cross bar, D, substantially as and for the pur-cess specified.

preses specifical. 2d, The swivelled bar, D, provided with the fastenings, d s, as and for the purpose set forth. 3d, The attachment to a horse's bit of the lever, A B, and swiveled cross bar, D, as and for the purpose described. 77,318.—CHECK REIN SLIDE.—W. B. Potter, Boston, Mass. I claim the check rein slide, constructed as described, as a new article of manufacture.

77,319.—GATHERING TURPENTINE.—A. Pudigon, Charleston,

S.C. I claim the V-shaped sheet metal gutter, h, substantially as shown and de

scribed. 77,320.—Toy.—Joshua Pusey, Philadelphia, Pa. I claim a toy arranged, constructed and operating in the manner as abov set forth and described. 77,320.—Toy.—Joshua Pusey, Philadelphia, Pa. - PLATFORM BRIDGE FOR RAILROAD CARS .- Amo

Rank, Salem, Ohio. claim a bridge or footing, C, constructed with recesses, c c, or their equi-ent in its adde edges and adapted to be applied between railwaycars which coupled together, substantially as described. Coupled together, substantially as described. 77,322.-MECHANICAL MOVEMENT.-Granvil Rich, Smithville,

Mo. Mo. I claim, 1st, The combination of the lever, I, rope or strap, K, wheel, C, rope or strap, L, and wheel, E, all as shown and described. 2d, The combination of the wheel, E, constructed with the hub, c, on one side, and having on the other side a pawl, G, and spring, b, with the ratchet wheel, F, all as shown and described. 3d, The combination of the wheel, E, constructed with the hub, c, pawl, G, and springs, d and b, all as shown and described. 77,323.—COMPOUND FOR TEMPERING CAST-STEEL.—Granvil Rich, Smithville, Mo, I claim, 1st, The compound, as described, and for the purposes specified. 2d, The process of tempering steel by the use of said compound, as de-scribed.

77,324.—HELIOMETER,—Conrad Friedrich L. Risch, Hun-

tingburg.Ind. leialm, ist. A beliometer, constructed and arranged to operate in the manner herein shown and escribed.

2d, The arrangement of the northern and southern polar surfaces on op once sides of the revolving cube, C, substantially as herein shown and de

scribed. 3d, The revolving dial-plates, h, when arranged within the stationary dial-plates, d and e, and when arranged within the circle on which the degrees of longitude are marked, substantially as and for the purpose herein shown and described.

ibed. semi-cylindrical sun dial, D, when arranged as set forth, and when with a gnomon, i, substantially as and for the purpose herein showr ribec

provided with a finomon, i, substantially as and for the purpose herein shown and described. 5th, The semi-cylindrical sun-dial, D, when arranged as set forth, in combi-nation with the double Polar euraces of the revolving cube, C, on pon which the dials for the northern and southern hemispheres are respectively ar-ranged, substantially as and for the purpose herein shown and described. 6th, The triangular plate, E, provided with a hand or pointer, K. when con-nected with the revolving cube, and when combined with the semi-ann far arc, c, substantially as and for the purpose herein shown and described. 7th, The flanke around the plate, E, when provided with a bole at m, for a ray of high to fail upon the opposite arcs, substantially as and for the pur-pose herein shown and described. 8th, The curved block, I, when attached to the revolving plate, E, and when combined with the arc, c, and when graduated, substantially as and for the purpose here in shown and described. 9th, The plate, when arranged in combination with the cube, C, and arc, c, all made and operating substantially as set forth, 10th, The arrangement of the hour lines, latitude lines, and diagonal lines, on the plate, F, as set forth.

tric, F, by means of the rod, f, and lever, H, all constructed and arranged as described, and for the purpose specified.
77,330.—STONE-DRILLING MACHINE.—A. M. Southard and w. J. Hobson, Savannah, Mo.
1 claim, ist, The arrangement of the cans V, upon the slotted brace, W, by the bans e. J. asset forth.
2d, The slotted plates, x' x', when constructed and used n combination with bars, L' and clear theneck of the panor nozzle of the valve stem, to break the allow a free extifor the sugar, substantially as described.
3d, The slotted plates, x' x', when constructed and used n combination with bars, L' and clear theneck of the structure in the check substantially as described.
77,331.—PIPE COUPLING FOR RAILROAD CAR HEATER.—Thomas S. Speakman, Camden, N.J.
1 claim, ist, A pipe, F, having a bell mouth at one end, arranged beagath a car as described, and adapted for the reception of a flexible the, G, which a car as described, and adapted for the reception of a flexible the, G, which a reservoir, B, communicating with the tubes, H and G, and having
2d, The reservoir, B, communicating with the tubes, H and G, and having

with the bars, L , for the purposes described. 77,331.—PIPE COUPLING FOR RAILROAD CAR HEATER.— Thomas S. Speakman, Canden, N.J. I claim, 1st, A pipe, F, baring a bell mouth at one end, arranged beaeath a car as described, and a dapter for the reception of a flexible tube, G, which communicates with a reservoir beneath another car, and slides in the pipe, F, all as set forth. 2d, The reservoir, B, communicating with the tubes, H and G, and having a recess for the reception of a coupling-pin, D, substantially as specified. 77,332.—FILE HANDLE.—H. C. Storrs, New York city.

I claim the internally and externally threaded nut, 0, in combination with the chambered handle, A, for holding the shank, c, of the tool, B, substan-ingly as specified

is spe 77.333. -Combined Screen and Shovel.-Augustus Thay-

77,353.—COMBINED SCREEN AND SHOVEL.—Augustus Thayer, Albary, N. Y.
I ciaim, 1st, A combined scoop and screen, provided with a removable bottom or slide, and a removable or sliding screen, arranged in the manner substantially as shown and described.
2d, The fap or door, C, arranged with a spring to operate in the manner substantially as and/or the purpose specified.
3d, The combination of the screen and removable bottom with the flap or door, C, all constructed, arranged, and applied to operate in the manner substantially as and for the purpose set forth.
77,384.—FOLDING BEDSTEAD OR CRIB.—R. S. Titcomb, Glovarement of the substantial of Network (Streen and Streen).

7(3534.— r ULDIANG DEDUCTION Content of the plates, F, attached to the bars, D, of ergville, N. Y. I claim, 1st, The combination of the plates, F, attached to the bars, D, of the bed irame, with the plates, E, secured to the posts, A, substantially as herein shown and described, and for the purpose set forth. 2d, The combination of the plates, F, attached to the bars, D, of the bed frame, with the plates, G, secured to the stationary part, C, of the end boards, substantially as and for the purpose specified.

ubstantially as and for the purpose specified. 7,335.—OPERATING THE HARNESS IN LOOMS.—Frederick

Traub, Philadelphia, Pa. I claim, in the combination with the frame, B F, the upper and lower se-ries of levers, and the mechanism for operating the same, arranged as here in set forth and described. 77,336.—STEAM PUMPING FNGINE.—Joshua' Lufts, Athens, O.

17,330.—STEAM FUMPING FNGINE.—JUSING I UI IS, ALINEIS, O. I claim the provision, in a steam cylinder, of the hollow piston and rod, F and B, communicating with the feed water of the boller, ih the described combination, with a stationary plug, C, substantially as set forth, 77,337.—FELLYDOWEL PIN.—E. D. Tyler, Gibson, Pa. I claim a tubular metal felly dowel pin, employed substantially as herein described.

77,338.—SUPPORT FOR PASSENGERS IN CARS.—Henry S. Vrooman, Boston, Mas. I claim a double-actingficxible passenger support in horse railroad cars, constructed substantially as and for the purpose herein shown and de-

erriped. 77,339. - BED BOTTOM. - Charles Walker, Chester, Vt.

I claim the spring bed butom, constructed as described, and conststlur of the transverse supports, C, spring cross slats, D, blocks, E, springs, B F, slotted slats, A, and loose cross bars, G, provided with pms, H, all construct ed, arranged and operating substantially as and for she purposes specified, 77,340.—WASHING MACHINE, J, T. Wheeler, St. Charles, III. Learn a washing machine, consisting of the box, A, lever, F, gear wheels, C and D, and stirrer, E, provided with the spreading pins, e, when construct-ed and arranged as herein described and for the purpose set forth. 77,341.—ANIMAL TRAP.—W. J. Woodside, Zanesville, Ohio.

fig. . 2d,

scrib

77.368. Middlet

77.369.lisle, Pa,

77,341.—ANIMAL TRAP.—W. J. WOODSIDE, ZähleSVIIIE, Ohio. Iclaim, 1st, The combination of the perforated plate, D. knives, L. sliding block, J. connecting rod, I, crank, H, and shaft, E, with each other, whether sais shaft is operated by a weight or ppr.ug, substantially as herein shown and described and for the purpose set forth. 2d, The combination of the batt hook, N, short shaft, o, crank, P, and trigger bar. Q, with each other and with the cam, M, upon the shaft, E, for the purpose of tripping the trap, substantially as herein shown and de-scriber. 3d, Thecombination of the bent or hook lever, R, with the cam, M, and

, Thecombination of the bent or hook lever, R, with the cam, M, and fer bar, Q, for the purpose of setting the trap, substantially as herein wn and described. trigg

shown and described. 77,342.—SUGAR PAN DERRICK.—David Young, East Tops-

(1,342.—SUGAR PAN DERRICK.—David Young, East Topsham, Vt. Iclaim, jet, The steadying staff, G, and frame, ab b, substantially as shown and described, in combination with the cord, I, and derrick, A B D, all as and for the purpose set torth. 20, The block, E, bearing the pulley, e. and held between the arms, B, of the derrick, when said block is slotted for the passage of the vertical bar, G, which steadies the pan as it is elevated by the cord, I, as herein shown and described.

and described. 34, The arrangement of the steadying bar, G, frame, a b b, pulley, e, slotted block. E, arms. B, and elevating cord, I, with relation to the derrick, A D, whereby a series of pansin a row is elevated in a veritaal line without re-moving the derrick, as herein shown and described. 77,343.—MEDICAL COMPOUND.—Robert Alexander, Eugene

City, Oregon. 1 claim the combination of the foregoing mixtures of medicines, to be used for the cure of cancer in the human system.

1 claim the couplination of the foregoins mixtures of medicine, if for the cure of cancer in the human system.
77,344.—ATTACHING DOOR KNOBS TO SPINDLES.—William H. Andrews (assignor to Burton Mallory), New, Haven, Conn.
1 claim forming upon one angle of the spindle a flat sufface parallel with the axis of the spindle, combined with a set server wintheneck of the knob, so as to secure the knob to the spindle, substantially as set forth.
77,345.—WAGON BRAKE.—David M. Bailey, Carlisle, Pa.
1 claim the manner of securing rubber blocks to a bar in a wagon brake, unbetantially as specified.

I claim the manner of securing rubber blocks to a bar in a wagon brake, substantially as specified. 77,346.—WRINGING MACHINE.—Selden A. Bailey (assignor

77,346.— WRINGING MACHINE.—Selden A. Bailey (assignor to bailey Washing and Wringing Machine Company), woonsocket, E. I. I claim, let, Flanged teeth, with their extremities enlarged and nearly circular in form, and with shanks diminishing toward the hub, substantially as shown and described. 24. A gear having a separate flange on each tooth, as and for the purpose set forth. 35. The collars, D, constructed to admit and retain the stiffening rods of the rolls, substantially as described. 40. Hu, the stiffening rods, d, so fitted and held in the collars as to allow end play, substantially as and for the purpose set set torth.

play, substantially as and for the purpose set set tortu. 77,347.-- NUT MACHINE.-- Albort B. Bean (assignor to himself

and W. Scranton), New Haven, Con. I claim the arrangement of spring or springs, f.upon the face of the cam, is as to yield at the point of pressure, and relieve the strain upon the machine

substantially as here a set forth. 77,348—JIB BOOM.—William E. Beman, Portland, Me. Iclaim the jib boom, a, when hinged to the bowsprit, in the manner here in set forth and for the parpose specified. 77,349.—SPIT FOR ROASTING MEATS.—Elijah W. Bigelow,

Worcester, Mass. 1 claim, 1st, The frame, A, with standards, C C', constructed as described, so as to receive the dripping pan, B, and support the spit, D, for the purpose set for the spit, D, provided with the rectangular portion, h, in combination with the spit, D, provided with the rectangular portion, h, in combination with the spit, D, and the proper visco of the spit experimental portion.

2d, The spit, D. provided with the rectangular portion, h, in combination with the siot i, of proper size to fit said rectangular portion, as set forth. 3d, The detachable standards, C (°, constructed as described, in combi-nation with the lugs, a a, as and for the purpose set forth. 77,350.—SLED KNEE.—John W. Blake (assignor to Amaziah T. Howes), Jefferson, Wis. I claim the metallic sled knee, consisting of the upright, A, and brace or braces B, with their extensions, a b and x, each made and arranged as de-scribed, and combined with plates, D and E, in the manue herein shown and specified, the whole arranged and operating as and for the purpose set torth.

77,351.—Corn Planter.—John M. Blessing, Jeffersonville

Obio. Claim the arrangement of a reciprocating feed bar, J, having the boss, a combination with the rollers, I 1' G G', and openings, h, as and for purposes set forth.

1, in combination with the rollers, 1 P G G, and openings, h, as and for the purposes set forth. 77,352.—CHURN.—Caleb H. Bradley, Coatesville, Pa. I claim the construction of flues or passages of escape for the air from the buckets or chambers, with the projecting eovering for the mouth of the flues, as and for the purposes herein described and set forth. 77,353.—REEL_Jarius Brown (assignor to himself and Theodore B. Hubbard), Portland, Mich. L claim the combination of the adjustable sleeves. H and J. arms. L. bars.

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I claim, ist, in combination with the shipper lever, the swing latch, t, ar-ranged to hold the lever in position, ubbeautially as set forth. 2d, in combination with a swing latch for holding the shipper lever, the for K, x, rack gear, w, and segment gear, v, operating together, substantially as described.

as described. Sa, Combining the shipper lever latch mechanism with the hand lever, z, at the opposite end of the loom, substantially as and for the purpose set forth. 4th, the shipper fork mounted on the rocking arm, and connected, sub stantially as described, with the shipper lever. 77,362.-DRYER.-L. J. Crow and G. Sanderson, Fredericks-

4th. The shipper fork, mounted on the rocking arm, and connected, sub stantally as described, with the shipper lever.
77,362.—DRYER.—L. J. Crow and G. Sanderson, Fredericks-burgh, Ohio.
We claim the metallic furnace, B, when made cylindrical on its upper face and tapering from its month to the smoke pipe, C, and arranced under the box, A, with its drawers and ventilating openings, whereby the flow of heat to the frailing distributed, in the manner as specified.
77,363.—KNITTING MACHINE.—J. Dalton, Brooklyn, N. Y. I claim, its, The point slides, C C, arranged in a tilting frame, C and reciprocated toward and from the needles by the direct action of the lacquard plates, substantially as and for the purpose described.
2d, The spiral stop, A, with its ratchet gear or equivalent, operating with the thread guide and needles, as described, in combination with lacquard plates, substantially as and for the purpose described.
3d, The ratchet can, D, in combination with the spring guide, F, stationary pawl, G, and pawl, H, substantially as and for the purpose herein set forth.
3d, The enspended reciprocating pawl, H, in combination with the ratchet can, D, in combination with the thread guide, M, and its ratchet wheel, I, substantially as and for the purpose herein set forth.
3d, The enspended reciprocating pawl, H, the spiral ratchet, all substant ally as herein described.
3d, The perpendicular slide bar, J, operated by the shoe, K, and cam, L, or their equivalents, and acting in combination with the thread guide, in combination with the thread guide, M, and moving, by means of its pawl, H, the spiral ratchet, all substant ally as herein described.
3d, The ended neinzontal lever, which acts directly on the upright slide thread guide, attached to the regular thread guide, in combination with the horizontal lever, which acts directly on the uppice.
3d, The astant described.
3d, The substantilly as and for the yurpose

fig. 3. ^{2d}, Leaving the end of the wire, A, in such position that by pressure it will turn the point of the hook, C, either up or down, causing it to hook the fish either in the upper or lower jaw, thus overcoming the difficulty of the old style hook, which often slips flatwise from the mouth of the ish without hookirg, constructed substantially as and for the purpose shown and de-wrthed

77.366.—Ice BREAKER.—Andrew Flannigain, Trappe, Md. I claim projecting finger beams, D D, combined with the front edge, w, of an inclined frame, A, on either side thereof, and with cutting blades arranged at their intersection with said frame, and operaling to cut the lee on the up-per and lower sides thereof, all substantially as and for the purpose herein act for the substantially as and for the purpose herein

77,367.—DOUBLE SLIDING OR TURNING GATE.—R. Fleming, Victory, N. Y. I claim, let, In combination with said gate, and as a component part thereof, the pulleys, O and T, and the pulley, Q, in the stand, R, as above set forth.

set forth. 2d, The five posts, in combination with the cords, W, and cords, A' and B, when all are constructed in the manner and used as and for the purpose

Middletown, Ohio. I claim the construction, combination, and arrangement of the frame, A B, extended rails, C, pulley-supporter, E, with the adjustable platform, I, and windlass, H, in the manner and for the purpose described. 77,369.—EXPANDING MANDREL.—Martin Gardner, Sr., Car-

lisic, Pa. I claim, in combination with the mandrel for chucking wheels, pulleys, wa hers, and other articles, the arrangement of the radial "gibe" and their inclined planes, the longitudinally moving screw cylader and its inclined planes, and the screw, D, all constructed and arranged as described.

pranes, and the screw, D, and constructed and arranged as described. 77,370.—PNEUMATIC TOOTH BURR AND DRILL.—George F. Green, Kalamazoo, Mich. I claim, 1st, The combination of a rotary engine, operated by means of com-pressed air, with a burr and drill, in the mannerand for the purposes set forth and described. 2d, The mode of attaching the burr or drill to the holder, in combination with an engine, as set forth and described, in the manner and for the purpose specified.

a chight, assertoriand described, in the mainer and for the physic specifica.
 3d, The mode of attaching the burr or drill holder to the shaft of the engine, in the mainer and for the purpose specified.
 4th, The combination of burrs or drills, rotating in one direction, with an engine, as set forth and described, in the manner and for the purpose specified.
 77,371.—PORTABLE FENCE.— C. S. S. Griffling, Unionville, other is the state of the set of the s

Ohio. I claim, 1st, The post for a portable fence, composed of the pieces, A B C and D, arranged in relation to one another substantially as and for the purpose set forth.

set forth. 2d, The post, when constructed with side braces, B B, of unequal length, and an inclined sill piece, A, substantially as set forth. 77,372.—ANIMAL TRAP.—Benj. F. Hancock, Monroe, Wis. I claim the door, F, rod or trigger, h, spring, m, platform, G, androds, d and c, all constructed, arranged, and operated, substantially as and for the parpose described.

¹¹¹ Outset upter, arrangeu, and operates, substantially as and for the propose described.
 ¹¹² 77,373.—ROTARY ENGINE.—Dexter D. Hardy, Cincinnati, Ohio, assignor to Henry J. Behrene, Henry C. Dart, and Edward Dart, New York, N. Y.
 I claim, 1st, The concentric fixed hubs, recessed substantially as described, in combination with the two geared shafts, their attached pistons, and the cylinder or case, substantially as set forth.
 ¹²³ 24, ¹²⁴ Distant de the face of the disk of the the piston or pistons of one shaft work against the face of the disk of the other shaft, substantially as herein described.

77.374.—FLOUR PACKER.—Silas Hewitt, Seneca Falls Village,

77,374.—FLOUR FACKER.—Shas new nt, Schecka Fans v mage, N. Y.
I claim the combination of the weighing receiver, T. provided with its binged bottom, the vertical shaft, E. follower, D. and cam, G. all constructed, arranged, and operated substantially as and for the purpose herein set torth.
77,375.—RAFTER HOOK FOR HOISTING APPARATUS.—David Hicks and SidneyDoty, Pontiac, assignors to themselves, Jerome B. Sweetland, Charles E. Adams, Samuel N. Bronson, and Alouzo Barbour, Oakland, Mich.
We claim the combination of the hooks, A and B, with the lever, D, the latter constructed as described, and pivoted between the plate, C, and lower

ter constructed as described, and proved between the plate C, and lower end of the hook, A, in such a manner that is outer end is extended up the side of the hook, B, and made to forces aid hook against and penetrate the

rafter as specified. 77,376.—MILKING STOOL AND PAIL HOLDER.—L. B. Hoit, Cedar Falls, Iowa. I claim, as a new article of manufacture, a combined milking stool and pail I claim, as a new article of manufacture, a combined milking stool and pail

77,377.-RACK FOR HATS AND DISHES. - W. W. Horton,

-MACHINE FOR SLAUGHTERING HOGS.-J. J. Fouts,

9th, The plate, when arranged in combination with the cube, C, and arc, c,	the buckets or chambers, with the projecting covering for the mouth of	11,511RACK FOR HATS AND DISHES W. W. HOROI,
all made and operating substantially as herein shown and described.	the flues, as and for the purposes herein described and set forth.	Katonah, N. Y.
10th. The arrangement of the hour lines, latitude lines, and diagonal lines,		I claim the combination of the feet, A, standards, B, slotted at E, and an
on the plate, F, as set forth.		expansion frame, composed of divisions, D, jointed to each other, and having
11th, Theplate, F, when arranged as set forth, and in combination with	Theodore B. Hubbard), Portland, Mich.	parallelrods, 12, as specified.
the stationary day and night divider, n, on the arc, c, made as described.	I claim the combination of the adjustable sleeves, H and J, arms, L, bars,	77,378VIALW. Storer How, Cincinnati, Ohio. Antedat-
12th, The plate, F, when alranged as described, in combination with the	M, braces, N, bar, D, having a screw thread. E, and being hinged at C.	ed April 22, 1868.
	with the holder, A, wheel, F, and spring, G, all constructed and arranged	I claim providing the neck of a bottle, vial.or jar with one or more aper-
tially as herein shown and described.	substantially as and for the purposes described.	tures, d d', which are so located as to be closed when the cork or stopple is
13th. The plates, E and F, in combination with the sun-dials on the revolv-	77,354.—ADJUSTABLE HARROW.—J. C. Center, Bath, Ill.	completely inserted, and to be opened when the said stopple is partially with-
ing cube, C, made as described.	I claim, 1st, The harrow, consisting of one or two draft beams, A A',	drawn, as and for the purpose herein described and set forth.
	and frame beams, B B' and C C', hinged together as described, and ar-	
77,325.—HEATER RANGE.—Abraham K. Sanders, Brooklyn,	ranged and operating substantially as set forth.	77,379. — MANUFACTURE OF SADIRONS. — A. Y. Hubbell,
assignor to himself and .John H. Burtis, New York city.	2d, The hinges, D D' and G G', constructed as described, in combination	Elmira. N. Y.
I claim, 1st, The arrangement of the flues, o o, and dampers, 7, at the sides	and connection with the parts of the harrow, substantially as herein de-	I claim casting the top or hollow parts with rivets, upon which is cast the
of the range. in the air-spaces, d, in combination with the flues, g, to the	scribed and specified.	lower part of the iron, the interveiling space or chamber being either sup-
ovens, h h, as and for the purposes specified.	77.355.—MOP WRINGER.—B. B. Choate, Springfield, Vt.	plied with a filling or a vacuum, created substantially for the purpose de-
2d, The heating chamber, k. provided with the plates, 8 and 9, in combina-	I claim the bars. A and B, pivoted together and curved as represented	scribed.
tion with the flues, o o i and p, and ovens, h h, the parts being arranged and	bar A, being provided with the hooks, a d, and the two used in combina-	77,380. — SADIRON HOLDER. — Josiah Humphrey Washing-
operating in the manner and for the purposes set forth.	tion with the rollers C and D, and a mop pail, as and for the purpose set	
77,326.—WASHER.—Thomas Shaw, Philadelphia, Pa.	forth.	ton, D. C.
I claim the washer, d, constructed as described.		I claim the combination of the three pieces. A B A, lined with paste board,
77,327.—BOILER UPON STOVEPIPE.—Morrill A. Shepard,	77,356.—STARCHING APPARATUS.—W. B. Coates, Philadel-	or some other non-conductor of heat, punctured and made rough on their
Bridgeport. Ill.	phia, Pa., assignor to David Lyman, Midelefield, Conn.	under surface, and rive ed to a covering of cloth or other cheap material, for
I claim, 1st, The cone-shaped pipe, A, connected with the vessel, S, as	I claim the starching device herein described. consisting of a rigid vessel,	the purpose of holding and handling 'lat-trous, tailors' trons, and for use about stoves, ranges, furnaces, forges, &c., the whole being constructed sub-
shown and described.	A, closing means, B, and a strainer, C, constructed and adapted to operate	stantially in the manner and for the purpose described.
2d, The inverted cone-shape pipe, B, attached to the pipe, A, for the pur-	substantially in the manner and for the purpose herein specified.	stantiany in the manner and for the purpose described.
pose setforth, as specified and described.	77.357.—TENONING CHISEL.—Andrew J. Cochran, Indian-	77,381,—MANUFACTURE OF CARBONATE OF SODA AND POT-
	apolis, Ind.	ASH-A. G. Hunter, Flint, Wales
77,328.—WHISTLE.—Patrick Slevin, John Slevin, and Fran-	I claim the combination of the bits, B B, with the stock, A C, key, D, and	I claim the process of converting the sulphate of soda or sulphate of potash
c:s Slevin, New York city.	right and lefts crews, when constructed and arranged to operate substantial-	into the corresponding carbonate by double decomposition with bicarbonate
We claim the combination of the bow-shaped holder and reed, substantial-	ly as described.	of lime, substantially as described herein.
ly as and for the purpos e described.	77,358.—Dust PAN.—D. C. Colby(assignor to Josiah Humph-	
77,329.—EXCAVATING VEHICLE.—James P. Smith, Cherry	erv). Washington, D. C.	77,382.—CARRIAGE POLE SUPPORT.—Hosea B. Hurd (assign-
Hill, Pa.	I claim a dust pan, provided with the part, B, so arranged as to serve for	or to himself. John N. Hurd, and Samuel Hurd), Aurora, 111.
I claim, 1st, The combination of the shovels, D, provided with friction	the incline on which to receive the dust, and also as cover to the box part. A,	I Tolaim the combination and arrangement of the tube. D. Spring, C. Dar, F
rolls, with the eccentric, F, and wheel, P. said eccentric being adjusted by	for the purposes specified and set forth.	spring, d, shoulder, h, and lip, g, with the axle, B, and pole, A, in the manne
means of a rod, a, and lever, H, all const ructed, arranged, and operating as	77,359.—VALVE FOR SUGAR PAN.—Lewis Colwell, New York	hereinset forth.
and for the purpose herein shown and described.	11,000. YALIN FOR BUGAR I AN. HOWIS CONVENTION	77,383.—BREAD CUTTER.—George L. Jones, Chicopee, Mass
2d, The hollow band, C, provided with a scraper, K, in combination with	City.	
the wheel, B, when said band is adjustable simultaneously with the eccen-	I claim, 1st, In combination with a sugar pan, a valve, inclosed in a globu-	• • • • • • • • • • • • • • • • • • •

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eccentricguide, C, and projecting plate, D, substantially as and forthe pur-pose described. 2d, in combination with the device above claimed, the reversible gage, consisting of the piece, G, and pins, i, arranged as described. 77,384.—FLOOD GATE.—H. A. Kephart, Fletcher, Ohio. I claim the binged posts, A A, in combination with the sliding gate, B c, and the valve, C, in the manner and for the purpose set forth. 77,385.—IMPLEMENT FOR EXTRACTING HEDGE PLANTS AND WERK _ LENDEL & LENDEL EXTRACTING HEDGE PLANTS AND

WEEDS.-James L. Knick, Loxington, 11. I claure, ist, Au instrument which is adapted for the extraction of plants and weeds, consisting of handle portions, a a and jaws, b b, united together by a spring strap, g, and provided with a slotted strap, d, and spring, e, sub-stantially as described.

stantially as described. 2d. In such an instrument, the elastic lining, g'g', applied to the jaws, b b, substantially as described. 77,386.—CLOPHES WRINGER. -A. F. Lapham, New York,

and Frank E Pratt, Mott Haven, N. Y., assignors to Malcom C. Turner, We claim a clothes wring er, composed of the compressing bars, A & Jink C, with its thumb nut, as prinzes, BE, and rollers, D D, all constructed, ar ranged, and operating in the manner and for the purposes herein specified. 77,387.—VALVE FOR GAS ENGINE.—William H. Laubach Philadelphia, Pa. I claim the devices herein described, consisting of the stiding sleeve, m provided with the away & constructed as described the laws respectively.

roviged with the cavices herein described, consisting of the sliding sleeve, m. proviged with the cames, k. constructed as described, the lever, n. shaft, l. i valve, d', and stem, d''', with its tooth, k', for rezulating the flow of a com-blued current of gas and air, alternately with air alone, into the cylinder of a gasepgine, in such a maaner that the former current shall continue to flow until the closing of the induction port and the moment of the ignition of said gas, substantially as described. 77,388.—MANUFACTURE OF GLUE.—John A. Lighthall and Rem en Lighthall Rockiew N.

77,388.—MANUFACTURE OF GLUE.—John A. Lighthall and Bene nLighthall, Brooklyn, N.Y.
We claim, 1st, The combination of the series of plates with the elt and driving pulleys, as and for the our pose set forth.
24, In combination with the series of plates, attached to the belt, as before named, the arrangement for blowing a blast of cold air on the said plates attached by have been dipped into the reservoir, for purpose of preventing the drip from the same, so that the gine attached to the plates shall be preserved of an equal and unitorm thickness.
3d, In combination with the series of places, attached to the belt, as before named, the arrangement for blowing a blast of hot air on the said plates on the descending side of the apparatus, for the double purpose of removing from the glue attached to said plates, as set forth.
77,389.—VENTILATING SHOW CASE.—William Henry Lockwood, Brooklyn, N.Y.

with ventuating slots of wails, A A, and vertical partitions, C C, substantially as herein described and specificul.
77.390.—VIBZ.—Austin 1). Mason (assignor to himself and Riceard B, Robbins), Adrian, Mich.
Iclaim, 1st, The adjustable ring, C, constructed with oblique faces, x y, and a handle, h, for turning it on its axis, to adaptit to impart any desired to set to the face plate. D, with the adjustable ring, C, the washer plate, B, and the face plate. D, with its spherical bilge, D, all constructed in the manner set forth and described.
77,391.—MOP WRINGER.—John M. May, Janesville, and Winslow M. Colton, Stoughton, Wis.

Winslow M. Colton, Stoughton, Wis. We claim the combination of the base, B, and lever, E, with rollers, C D, thumb screws, F, substantially as and thepurp

and thumb screws, F, substantially as and for the purpose specified. 77,392.—SIGMAL BOX.—William McKee, Neponset, III. I elain, 1st. The combination of a box, N, tube, C. O, provided with ways, H, blocks, F F, with Ups, ef, cords and pulleys, II, arranged and operating as and 50° the perpose specified. 20. The combination of the box, M, tube, C, block, E, cord and pulley, I, and the ventilator or draught inducer for the lantern, arranged as described, and for the purposes specified. 3d, Frovidme the tube, C, with a glass, or its equivalent, O, when used in combination with the block, E, and lantern, in the manner and for the pur-poses set forth and shown. 4th, The combination of the box, M, tubes, CD, guides, H, blocks, E F, with their lips, e f, cords and pulleys, II, ventilator, L, and glass, O, all ar-ranged and operating in the manner and for the purpose specified and set forthe purpose specified. forth. 77,393.—SHIELD FOR NIPPLE.—Thomas McLaughlin, Mill-

ville, N.J. I claim the shield or covering, A, with the small holes, B, in combination with the car, C, constructed and arranged as and for the purpose set forth. 77,394.—COMM HARVESTER.—George Meader, Prairie Center,

11,594.—COEN HARCHSTER, Greefge Meader, Frame Celler, ill. Autedated April 19,1868.
I claim, 1st, i be combination of gatherers, J, cutters, n, and bickers, I, arranged and operating substantially as and for the purposes set forth.
20, The communication of said gathering arms, J, with arock shart, L, or its equivalent, for rendering said gathers adjustable, aubstantially as described and set forth, and for the purpose of adapting the machine to corn of different burges. ent hights. 34. Providing said gatherers with the partitions, m, substantially as and for

the purposes set forth. 4th, Providing said gathering fingers, J, with the depressions, c, in the man per specified.

ecified. The arrangement of the cutters, n, immediately behind the shoulders, al for the purposes set forth. In com bination with said gatherers, J, and pickers, I, the adjustable g plates or wheels, M, arranged and operating substantially in the r and for the purposes set forth. husking

77.395.—FORWARD GEAR FOR CARRIAGES. — John J. D.

Meincke, Milwaukee, Wis. I claim draught irons, C., and bottom and top pieces, D and E. in combin-ation with king bolt, F, substantially as described. 77,396.-- APPARATUS FOR TEMPERING SAW PLATES AND SIM-

and William Johnson (assignors to Henry Hale & Co.), New Haven, Conn. We claim the arrangement of the two parts, D and D, hnzed to and com-bined with the holder, A, the whole constructed in the manner substantially

as herein 77.398. -CAR COUPLING.—Thomas M. Moore, Newton, N. J

I claim the arrangement of the notched plate, d, on the rear of the head, m in combination with the sliding box, j, w:11: its projections, c c, and interior pivoted plate, f, and spring, k, all constructed and operating substantially as 77,399. PACKING FOR CARRIAGE SHACKLE.-F. B. Morse

77,399. PACKING FOR CARRIAGE SHACKLE.—F. B. Morse, New Haven, Conn.
Iclaim the packing herein described, as an article of manufacture, and con-sisting of block, E, with the projections, F, and inp.f, as set forth.
77,400.—FRUIT GATHERE.—H. Walker Neal, Sidney, Ohio.
Iclaim, 1st, The slide, D, attached to the basket of the fruit gatherer, and working up and down upon the guide, E.
2d, The combination of the cord, h, and multiplying pully, G, for the pur-pose of rapidly elevating the basket.
3d, The combination of the cords, f and h, basket, C, and hook, B, arranged and operating as described, for the purpose set forth.
77,401.—QuARTZ STAMP MILL.—P. M. Papin, St. Louis, Mo.
I claim, 1st, Thestamp, B, its serrated shoe, B2, and the spring pawl, d, when arranged and operating as described and set forth.
2d, The tamping boxes, E E', when constructed with the floor of one higher than th stof the other, and arranged as herein described and shown.
3d, The riftion brake, H, when applied to the rod, B or Bl, as and for the purpose set forth.
77,462.—APPARATCS FOR DISCHARGING BILGE WATER.—

36, Therriction brake, H, when applies to the rod, B of BI, as and for the perpose set forth.
77,402, — APPARATCS FOR DISCHARGING BILGE WATER.— Phinese Pardee, New Hayen, Conn.
I claim the combination of the flexible tabe, B, and its open month, C, together constituting a portable apparatus, and constructed and arranged so that the said tabe will lead from the bold of the vessel out through any convenient point above the water line to the said oute mouth, so as to suppend the said mouth from the vessel, and so that the visel passing through the water, or the water passing through the vessel, and or the said mouth from the vessel, and so that the visel passing through the said mouth from the vessel, and so that the visel passing through the said mouth from the vessel, and so that the said mouth, and taberein set for than dacescribed.
77,403.— REGISTER.—H. H. Phinney, Cambridgeport, Mass. I chim the sectional frame, b, made in parts connected together and to the register plate, a substantially as described.
Also, in combination with the slide, r, the spring, w, inserted beneath and bearing agains the biate, and as an stan artension, v, from the slide, substantially as described.
77.404.—READY SOLDER.—D. H. Priest. Watertown, Mass. Griffith Lichtenthaler, of Limestoneville, Pa., having petitioned for the expositions, substantially as herein described. 77,430.--MACHINE FOR ATTACHING LABELS TO NEWSPAPERS, pro.-John F. Zacharias, Lesshurg, Va. Antedated April 11, 1568. 1 claim, lat. The combination of the sliding gate, L, and the scissors, M M, of an automatic labeling machine, with the eccentric, J, the transmitting de-vices, P and T, giving prop.-: periods of rest to the carrying bands, C' C', all arrange find cavibulitially as set forth. acting motion non the filterium pin, P', for the purpose of transmitting a rotary motion from one crauk to another, in combination with the other devices of the machine, substantially as set forth. 34, the combination with the said devices, or their equivalents, for trans-mitting rotary motion, of the auxiliary also; V, in, the connecting rod, T, for permitting a rest for the carrying bands, C' C', at every revolution of the roler, B, as and for the purpose et fouth. 77 481 --Churlew -Charles H. Elliott. York, Pa. ension of a patent granted to him the 25th day of July, 1854, tor an improvement in cultivators, for seven years from the expiration of said patent, which takes place on the 25th day of July, 1868, it is ordered that the said petition be heard at the Patent Office on Monday, the 6th day of July next. Edward W. Brown, formerly of Fall River, Mass., having petitioned for the extension of a patent granted to him the 25th day of July, 1854, and re. issued the 14th day of March, 1865, for an improvement in looms, for seven years from the expiration of said patent, which takes place on the 25th day of July, 1868, it is ordered that the said petition be heard at the Patent Office on stantially as set forth. 77,404.—READY SOLDER.—D. H. Priest, Watertown, Mass. I claim the above described composition for soldering metals, prepared and compounded substantially as described, and in about the proportions spec-Monday, the 6th day of July next. 77.431.--CHURN.-Charles H. Elliott. York, Pa.
I claim, 1st, Communicating avertical reciprocating motion to the dash rod, N, at the same time giving to this rod right and left rotary motions, by means of a vertically moving saw, C, a spirally grooved portion, f, and fixed put adjustable teeth, e., arranged and applied withm a frame, and driven from a start, E, substantially as described.
2i, The movable head piece, D, arranged over the churn vessel, and provided with adjustable to the dials, J, J, in combination with sash. C, and a spirally grooved portion, f, on the dash rod, substantially as described.
3d, The churn vessel, K', seated into a fixed basering, L, in combination with the movable head piece, D, and the means substantially as described for operating the dash rod. Applied with perforated or imperforated radial wings, g or h, constructed and applied substantially as described.
5th, The rotary wings. L ambed to work i construct com ifled Putting up the above claimed composition in bettles having solder wire ound around them, convenient for use and transportation, substantially as NEW PUBLICATIONS. -CANAL LOCK GATE STEP.-Homer Rextord, Sandy 77,405.-Hill, N. Y. I claim the construction and arrangement of the stee, B. with its pivot, A. and feather, F. when combined with the metallic box, C. constructen with its annular slot, D. in the manner and for the purposes herein described. 77,406. - LIFTING JACK. - Ezra S. Kobertson and Austin B. THE RAILROADS OF THE UNITED STATES. By Henry M. Flint. John E. Potter & Co., publishers, 614 and 617 Sampson street, Philadelphia. The work hearing this title is devoted to a compilation of statistics respect Collins, Mount Liberty, Ohio. We claim the combination and arrangement of the lifting bolt, B, having a groove, d, and pulley, c, with the standard, A, lever, F, curved wedge, C, and thumb screw, E, the whole when constructed and operating in the manner and for the purpose as here in shown and described. ing the railways of our country, giving also a history of the leading roads, with statements of their progress and present condition, and showing their 5th, The rotary wings, i, applied to rods, i, projecting radially from the dash rod, substantially as described. wonderful power in developing the resources of the country. The work 2441 Iortne purpose as nevel shown and described. 77,407.—MOWING MACHINE.—H. J. Ruggles, Poultney, Vt. I claim the combination and arrangement of the swinging frame, E, adjust-ing rings, t t, or their equivalents, on the sides of the frame, the draught chains, s, s, and the sliding draft hook, L, substantially as and for the purposes berein specified. abounds in interesting facts and figures, and will prove of great sarvice not 77,432.—CONSTRUCTION OF SAFES.—Obadiah Marland, Boston, Mass. only to railroad men but to all others requiring a convenient book of referton, Mass. I claim safe or bank vanit, the boundaries of which are made $u\,p$ of or are protected by entire compound plates, each of which is constituted of plates ence. The concluding chapters are devoted to a brief but comprehensive synopsis of the railroad laws of the United States.

Also, the suspending hook, T, arranged and operating substantially as here-

In specified. 77,408.—REFLECTOR.—William G. Schmidlin and Jeremiah W. Driscoll, New York, N. Y. We claim the concave dome reflectors, introduced in the sections or sides of the concal polygonal reflector, as and for the purposes set forth. 77,409.—WROUGHT IRON ROOF TRUSS.—George H. Sellers, Proprior to the Design of the concept of the section of

Phenixvile, Pa. I claim, ist, A bulb beam, A. or rafter, having a bulb, b, below, instead of a flarge, for the purpose of uniting the struts and the rods thereto, without de-flecting them from a straight line, substantially as desoribed. 2d, Securing the purlines to the raiter, by means of notches in each at the points where they meet, and thus makes firm and simple union between them without the use of bolts, or rivets, or other fastenings, and allowing room for expansion or contraction without separating, substantially as de-soribed.

Sorried. 3d, A skew back, made of angle brackets, d, bolted or riveted on each eide of the web of the beam, as and for the purpose herein described and repre-

77,410.—CORN SHELLER.—John H. Sharp, Wortsville, N. J.

I claim the employment of a series of yielding bars, C C, suspended over the inclined roller, B, by means of springs, d d, and rod, e, when all are ar-ranged as and for vie purpose described. 77.411.—Lock NUT FOR AXLE AND SKEIN BOXES.—Joseph ranged as 77,411.-

R. Smith, Betnel, Conn., assignor to himself and W. S. Shaw, Bufalo, N. Y. I claim, ist, The internal lip on the nut and the external lip on the axle or skrin hox to secure the nut on the axle or box, as set forth. 2d, The combination of the key, F, with the spring catch and the interven-ing lips of the nut and axle.

ing lips of the nut and axle. 77,412.—HAND TRUCK AND SACK HOLDER.—Gideon Smoker and Jonas Smoker, Smithville, Ohio, We claim the combination of tre hand truck, A, with slidingplatform, D, arranged to slide in grooves in the sides of the truck frame, said platform being provided with springs, C C, and rods, F F, upon which are spiral springs, e, all arranged as and for the purpose set for the. 77,413.—WASHING MACHINE.—Otip W. Stanford and Selden S, scould Lebano, Ohio

S, Scoville, Lebanon, Ohio. We claim, ist, A wushing machine, consisting of the yielding bed or frame, I. rollers, G, batters, J J, stema, J J, rock shaft, K k K, and link, L, the hole being combined and operating substantially as herein described and

g I. rollers, G, batters, J J, steins, J J, rock shart, K k K, and link, L, the whole being combined and operating substantially as herein described and set forth, 2d, The devices, J J' j f K k k' and L, when attached to the sliding lid, N, and adapted to be operated in either of the chambers, C D or E, as explained. 3d, the devices, P Q V, for enabling the shitting of the lid, N, and forse-curing it at any desired position, for the purpose described, 4th, In combination with the sliding lid, N, and its described accessories, J J' j' K k k' and L, the chambers, C D E and F, for the object explained. 5 th, In a washing machine constructed substantially as above set for th, the shiftable wringer rest, T U u, as described and set forth. 77,414.--STEAM GENERATOR.-J. Sutliff, East Boston, Mass. I claim the hollow steam bridge wall, C, the sides braced by the hollow bolts, g g, and connected to the boller pipes, f and d, constructed and ar-ranzed gubst antially as and for the purpose set for th. 77,415.-TABLE FAN AND CASTER STAND.--Noah H. Tilman and David G. Good, Arcanum, Obio. We claim the arrangement of the frame, E, outside of the box, D, and the stationary caster stand, B, said frame being perforated as described, whereby the fans, F F, may be adjusted to operate as herein specified. 77,416.-COMB CLEANER.--Edwin J. Toof, Fort Madison, lowa. Antedated April 17, 1868. I claim the arrangement of converging elastic strips, a, with a head, A, whether said head be provided with a brush, B, or not, as and for the pur-poses specified.

whether said head be provided with a brush, B, or not, as and for the pur-poses specified. 77,417.-WASHING MACHINE.-N. Trow bridge, Tully, N. Y. I claim, 1st, The combination of the barrel, A, and recircocating pounder, B, constructed with wedge formed projections, Bl, and an inclined projection, B, substantially as and for the purpose set forth. 2d, The combination of the barrel, A, the pounder, B, the shank, C, rod, D, and crank, K, pringlug, E2, plain, F, spur wheel, G, and lever, H, all ar-ranged to more all statementally as set forth. 77,418 - ROOFING CEMENT.- Newton Trowbridge and Ed-ward Richardson, Tully, N. Y. We claim the composition, compounded from the ingredients, and in the manner substantially as and for the purpose set forth. 77,419 - GRAIN SEPARATOR -J, S. Upton, Battle Creek, Mich. I claim, 1st, The screens, D D'D', combined with the cylinder, B, and op-erating in the manner set forth, for separating the grain from the st. raw, sub-stantially as specified. 2d. The vibrating spont, C, in combination with a threshing cylinder, and the series of screens, D D'D', when used substantially as and for the purpose set forth. 27 409 A DETENDED.

77 420. -ARTIFICIAL SLATE SURFACE.-Oscar A. Wagner,

Davenport, Iowa. I claim a composition of matter for forming an imitation of the surface of slate, compounded from the ingredients named, substantially in the manner

slate, compounded from the ingredients named, substantial, in the matter set forth.
77,421.—BOOT AND SHOE STUD.—H. S. Walcott, Boston, Mass., assignor to Boston Shoe Stud and Button Company.
I claim a shoe stud formed of a solid pieceof metal and having a head and ashoulder or flange, with a groove between them of sufficient size to permit the head to move freely therefn, and having a tubular stem, by which it can be secured to the shoe, as herein shown an i described.
77,422.—PEN HOLDER.—Albin Warth, Stapleton, N. Y. An-todated April 1988.

to fit the V-shaped or triangular socket of a pen or brush, substantially as and forthe purpose described. 77,423.—TRUNK.—Rebecca Weaver, Washington, D. C. I claim, 1st, A rolling trunk constructed as herein described, as and for the purposes specified. 2d. The construction of the tills, B B, having rims, d d, with hinged or other props, f f, as that they may be set up or collapsed at pleasure. 3d, The jack-up cleats, C, in combination with the tills, B, and the cylindri-cal or rolling trunk, A, substantially as and for the purposes herein set forth. 4th, The manner of constructing the cover or lid, D, and cp. F, for pro-tecting the lock and securing the trunk water tight, substantially as herein set forth.

set forth. Sth, The manner of constructing the cover or iid, K K, with the binged bolts and overlapping cap, substantially as and for the purposes herein set

orth. 6th, Placing drawers, H, within the cylinder, A, to be drawn out at the nd, thus giving double security to the contents when closed, as herein de

scribed, "TAG FASTENING.—Wm. N. Weeden, Boston, Mass. I claim the improved anchor as made with the hook, e, the encompassing fanges, d d, and the angularly formed barb, f. 77,425.—LAST HOLDER OR JACK.—George M. Wells (assignor to Moses D. Wells), Chicago, II. I claim the rotary block or ball, A, as constructed, with a shank recess socket, and combined with a carrier, B, formed to receive such ball, as set forth.

806ket, Bld combined with a carrier, b, tornwetter forth. Also the carrier, B, as cast with an opening through its bottom, and in one plece, on therotary block or bull, provided with a snank socket, as set forth. Also the carrier, B, as cast in one piece, upon the rotary block or ball, and with an opening through its bottom, and a fastening flauge projecting from its sidee, all as specified. 77 496 - Or pure — Ralph C. Whitehouse, Boothbay, Me. 77,426.—CLEVIS.—Ralph C. Whitehouse, Boothbay, Me.

I claim the combination of the clevis box, a, having its pivoted clevis, b, old back, e, either with or without the helix, f, and to be attached as and or the purposes set forth.

for the purposes selionen. 77,427.--INSTRUMENT FOR DRAWING NAILS.-Edward P.

Whitner, Stanford, Con. I claim, ist. The combination of the claw head, A, and shoe, B, construct-ed and operater (substantial) as and for the purpose herein specified. 2d, A spring, C, in combination with the claw head, A, and shoe, B, substan-tially as and for the purpose specified. 77.428.--BELLOWS FOR REED MUSICAL INSTRUMENTS.--A.W.

17.428.--BELLOWS FOR REED MUSICAL INSTRUMENTS.—A. W. Wilcox, New Haven, Conn.
I claim, ist, The arrangement of the valve chamber, within the reservoir, B, by the construction of the wall, E, therein, with the openings, e, and valves, d, thereon, substantially in the manner and for the purpose described.
24. The construction of a recess in the floor, G, of the exhaust, ben each the openings, f, substantially in the manner and for the purpose described.
77,429.—MUCILAGE BRUSH.—G. D. Wilcox, Providence, R. I. Iclaim the improved instrument for spreading mucilage or adhesive compositions, substantially as herein described.
27.420. M. (DUPLINGE DESCRIPTION of the structure of the structur

layers of iron and steel welded together, the steel layer or layers of each la-minated platebeing hardened, substantially as shown and described. Also, the formation of the joints at the corners of the safe and at the edges of the door, so that the bottom of each section or joint is covered by steel, substantially as shown and described. Also, the botts, k, made of alternate tubes of iron and steel, drawn and welded together, substantially as set forth. Also, inserting the bolts, m, into holes prepared, substantially as described, for their reception, and then changing the form of the bolts by pressure or percussion, so that thereby and with the conjointed actio v of a spreader, p, the bolts, m, will hold in their sockets, substantially as described.

|MAY 16, 1868.

REISSUES.

2,922.—PATTERN FOR CUTTING BOOTS.—Elias Shopbell, Ash-

2,922.—P'ATTERN FOR CUTTING BOOTS.—Elias Shopbell, Ash-land, Ohio. Dated Jan. 27, 1853. I claim, 1st, The plate, A, in combination with the pairs of plates, B P', C C and D D', or their equivalents, with their respective slots and angles, produc-ing the simultaneous movement of the several pairs of plates, and the conse-quent unequal enlargement and contraction of the pattern tor boot fronts, substantially as herein set forth. 2d, Stationary and adjustable plates, so constructed and arranged in rela-tion to each other and the slots as to produce a simultaneous contraction and expansion of said plates, according to any required size of boot fronts and backs, substantially as set forth.

PENDING APPLICATIONS FOR REISSUES.

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

63,378.-BROADCAST SOWERS.-F. G. and E. A. Floyd, Ma-

63,378.—BROADCAST SOWERS.—F. G. and E. A. Floyd, Manobi Dated April 2, 1867. Application for reissue received and filed April 12, 1867. Application for reissue received and filed April 12, 1867. Application for reissue received and filed April 12, 1867. Application for reissue received and filed April 12, 1867. Application for reissue received and filed April 12, 1867. Application for the purpose set forth.
2d, The disk, C, with projection, c, in combination with shaft, is, the former being attracted to the leader in the manner described.
3d, The shaft, B, with gear wheel, b, shaft, D, with gear wheel, d, and standard, E, the whole heing combined and operated as set forth.
4th, The slide, F, constructed as described, in combination with pin, f, and beis, f, as and for the purpose set forth.
5d, The revolving disk, C, provided with radia' flanges, C', having their ontenders beyond, the periphery of the sits and curved in the manner shows and apple the frame, A, hopper, G, slide, F, and revolving disk, C, hopper, G, shaft, B, with wheel, b, shaft, D, with wheel, d, disk, C, slide, F, hopper, G, and bag, H, the whole being combined and operated in the analysis of torth.

49,203. -MACHINE FOR REFITTING STOP VALVES.-Charles

49,205. —MACHINE FOR KEFITTING STOP VALVES. —Uharles S. and Charles F. Hall, Brooklyn, N. T. Dated Aug.1, 1865. Application for reissue receive: and filed April 11, 1868. We cleft, ist, The concave mill, B, either provided with or not, an internal yielding center, c. and arranged in suitable bearings, a. in combination with the adjustable center, C, constructed and operating substantially as and for the purpose described. 3d, A portable apparatus for refitting the values and water cocks, substantially as and for the purpose described. 74 589. DURYON CO.

74,582.-DEVICE TO PREVENT HOGS FROM ROOTING.-Geo.

14,352.—DEVICE TO FREVENT HOUS FROM ROUTING.—GEO, O, and Win, L. Nixon, Sandyville, Ohio. Dated Feb. 18, 1868. Applica-tion for reissue received and filed April 11, 1868. We claim the within described device consisting of the plate, A, arms, C C, with holes, JD A, and Wire, B, the several parts being arranged and used sub-stantially in the manner and for the purpose herein specified.

64,231.—SKIRT HOOPS.—E. Wooster & Co. and F. Hull & Co. (assigneds of John R. Lattia), Birmingham, Com. Dated April 30, 1867. Apolication for reissue received and filed April 3, 1868. We claim as the invention of John R. Lattin, the bottom hoop for hoop skirts formed by combining one or more springs in a single cover, the upper edge of which is formed as described, so as to be secured to the tapes of a skirt as and for the purpose set forth.

Sairt as and for the purpose scriptur.
68,239.—STEAM DRYING APPARATUS.—William Ryner, Phil-adelphia, Pa., and John C. Hopewell, Flemington, N.J., assignces of Wm. Rvner, Philadelphia, Fa., Dated Aug. 27, 1867. Application for relissue received and filer April 14, 1818.
We claim as the invention of Wm. Ryner, a drying kiln in which are an up-per and lower scripts of piles for the passage of superheated steam to that for the introduction of the same into the kiln, so that the material to be irled (situated between the two sets of piles) may be subjected to the combined action of the heat from the said pipes and that of the superheated steam, as set forth.

IF NOTE.-The above claims for Reissue are now pending before the Pat-

ent Office, and will not be officially passed upon until the expiration of 30

days from the date of fling the application. All persons who desire to

oppose the grant of any of these claims should make immediate appli-

EXTENSION NOTICES. PollyHunt, of Jersey City, N. J., administratrix, and George W. Hunt, of

lewburgh, N. Y., administrator of the estate of Walter Hunt, deceased, having petitioned for the extension of a patent granted to the said Walter

Hunt the 25th day of July, 1854, and reissued in four divisions of the dates and numbers respectively as follows: Nov. 29, 1864, numbered 1.828; Feb. 7,

1865, numbered 1,867; April 4, 1865, numbered 1,926; April 4, 1865, numbered

1,927; said last number (1,927) being again reissued in two divisions the 10th day of July, 1866, and numbered respectively 2,306 and 2,307. for an improvement in shirt collars, for seven years from the expiration of said patent.

which takes place on the 25th day of July, 1868, it is ordered that the said

petition be heard at the Patent Office on Monday, the 6th day of July next.

machines, for seven years from the expiration of said patent, which takes

place on the 1st day of August, 1868, it is ordered that the said petition be

Hymen L. Lipman, of Philadelphia, Pa., having petitioned for the exten-

sion of a patent granted to him the 25th day of July, 1854, for an improvement in evelet machines, for seven years from the expi ation of said patent. which takes place on the25th day of July, 1868, it is ordered that the said petition be heard at the Patent Office on Monday, the6th day of July next.

Charles A. Wakefield, of Pittsfield, Mass, having petitioned for the extension of a patent granted to him the 25th day of July, 1854, for an improvement in seed planters, for seven years from the expiration of said patent which takes place on the 35th day of July, 1868, it is ordered that the said

petition be heard at the Patent Office on Monday the 6th day of July next.

heard at the Patent Office on Monday, the 13th day of July next.

Horace Woodman, of Biddeford, Me., having petitioned for the extension of a patent granted to him the 1st day of August, 1854, and reissued the 8th day of December, 1857, for an improvement in cleaning top cards of carding

MUNN & CO., Solicitors of Patents, 31 Park Row, N.Y.

cation.