The Public Clocks of New York.

Mr. D. W. Bradley, City Timekeeper, lately read an interesting paper upon Tower Clocks, before the American Institute, in which were the following remarks:-

" With all due deference to the philosopher who said that time is money, I would observe that time is improvement, progress, science, art; and on the other hand it is idleness, dissipation, poverty, decay, ruin. As for its being money, let me remark that I have been experimenting with it these thirty years, and have never succeeded in making it yield more than enough to keep soul and body together. We visit St.! Paul's. The bell was new a year ago. The old one got cracked, and they set a man to boring the crack out. He worked a week or two, and nearly froze to death, and when he finished his work it was found that the crack was larger than construction is probably not excelled by any in this country, ever before. So they put in a new bell. The frame of the clock stands five feet long, two feet three inches wide, and four feet high. The pendulum is of wood, 13 feet long, giving 32 beats, and the ball weighs 75 pounds.

St. John's clock was built by Henry Harris, London, in 1812. It is nearly similar to St. Paul's, but is better finished, and has the worst escapement I ever saw.

The clock of the Dutch Reformed Church, Fifth avenue and Twenty ninth street, and that of St. Mark's, were made by Stokell. They are both like the clock of St. Paul's, though smaller and better. Stokell made some of the best

regulators in this country. "Trinity clock is the heaviest in America. The frame stands 9 feet long, 5 high, and 3 wide. The barrels are 20 inches, turning three times in 24 hours. The winding wheels are driven by a pinion and arbor. On the latter is placed a jack, or a whee!, a pinion, and a crank; 850 turns of the crank are required to draw up each of the weights. It takes 700 feet of 3-inch rope for the three cords; and the winding up of the weights consumes more than an hour of time, and requires the labor of two men. The pendulum is 18 feet long, and makes 25 beats. I cannot think that Mr. Rogers had a correct notion of what he was going to do when he began the building of this clock. At first it would not run 7 days, and he was obliged to put in new main wheels. The clock was at last finished, and an agreement was made with the sexton's son that he should receive 25 cents whenever it stopped, provided he at once notified the timekeeper; but as it stopped every day, and frequently three or four times a day, the expense of feeing the informer became irksome to bear, and the cumbrous timepiece was placed in new hands. By this time it had gained a poor reputation, which clings to it even in our day. The weights are 800, 1,200, and 1,500 pounds respectively, and drop 50 feet. A large box is placed at the bottom of the well, which holds about a bale of cotton waste to check the fall of a weight in case of accident. Two years ago I wound it up on Saturday, and on Sunday morning the chiming cord broke, letting the 1,500 pound weight fall a distance of 50 feet, causing much damage. The cotton box was strongly braced on all sides, but the force of the blow burst it open. The contents were well scattered, otherwise the organ bellows, just in line below, would have contracted under a pressure somewhat greater than that which the "blower" was accustomed to exert upon them. A much better clock could be built of the metal contained in the frame and main wheels of Trinity's. None of these clocks keep accurate time. Trinity does best, the clock of the Dutch Reformed Church next. During the late heavy snow storm the north window in the clock-room of St. Paul's was blown open. The snow came in, partially covered the movement, and drifted down into the box to the depth of several inches, nearly covering the ball; yet the old pendulum waded through it with the glee of a school-boy, and stowed the snow on this side and that, and pelted it with such pertinacity that by the next morning the clock was 15 minutes ahead of time. The first warm day that fellowed, it fainted, and stopped running. There was an old German clock on the Post Office, but it was removed a long time ago. It had but one hand. Old St. George's clock is about 50 years old. It is smaller than the others, but has gained a reputation for accuracy. Twenty years ago a person who had not St. George's time was supposed, like a busy man, to have no time at all. As it is soon to be pulled down no care is taken of its inside, and the figures on the dial are grown so rusty that the time can only be guessed at. At the City Hall we find a good clock. The pendulum, 15 feet long, vibrates in 2 seconds. The ball weighs 300 pounds. To counteract the effect of heat and cold the compensation principle has been applied to this pendulum. The contraction of the iron rods which would draw up the ball is opposed by the greater contraction of the brass bar on which the ball rests, thus letting it down. When the rods expand the greater expansion of the brass bar lets it down-only it don't-that is, not yet. I regulated it from June 1866, to February 1867, without moving the hands, but after the latter date, for three or four months, I set it every week although the variations never exceeded 30 seconds. The pendulum has not lost one vibration in more than two years. The new clock of St. George's, Sixteenth street, has never been excelled in finish. The frame is 8 feet long, 3 wide and 7 high. The main time wheel is 3 feet in diameter, has 180 teeth, turns once in 12 hours, has the figures on its face, and a pointer marking the hour. The second wheel is 27 inches, has 300 teeth, revolves every hour, and has the minutes on its face. The third wheel turns once in three minutes, and has the seconds pointed off on it. The pendulum is 35 feet long, and vibrates in three seconds, and the ball, weighing 390 pounds, is four feet in length by seven inches diameter. Two pinions and three wheels constitute all the machinary of this clock. Trinity's has five pinions

and ten wheels. A duplicate of this clock is now being put

Brick Church and that in St. Therese are small but good ones, if attended to. They are cared for by the sextons, and get no care at all. A gentleman from Pennsylvania was lately telling me about his wonderful one, which did not vary 15 seconds in a year. On questioning him as to the observations he was in the habit of taking, he remarked that he took observations every day, by a noon-mark cut in the floor of his back porch. The clock of the Third-avenue Railroad depot is a fine instrument. It is exposed to a greater range of heat and cold than any other clock in the city, yet keeps excellent time.

[We gave a detailed description of the "new clock of St. George's, Sixteenth street," on page 80, Vol. XV., Scientific AMERICAN. The finish of that clock and the beauty of its whether of domestic or foreign manufacture.-EDs.

OFFICIAL REPORT OF

PATENTS AND CLAIMS

Issued by the United States Patent Office

FOR THE WEEK ENDING JANUARY 14, 1868. Reported Officially for the Scientific American.

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

VF Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying size of model required, and much when information useful to Inventors, may be had gratis by addressing MUNN & CO.. Publishers of the Scientific American. New York.

73,220.—HOLDER FOR DRYING GLUE.—William Adamson

75,220.—HOLDER PA.
Philadelphia Pa.
I claim the within-described holder on which to dry glue, the said holder consisting of cords, wires, strips or sheets of suitable material saturated or coated with paralluc, or its equivalent, for the purpose specified.
73,221.—CONNECTING THE TUBES WITH THE HEADS OF SUR-

FACE CONDENSERS.—Horatio Allen, New York city.
I claim, 1st, Making one of the tube heads of greater thickness than the other, in the manner and for the purpose herein described.
2d, Also cutting and bending into bell-mouth form tongues in the ends of the tabes, for the purpose and substantially in the manner herein described.
73,222.—Horse Hay Fork.—D. W. Amos, Broad Top City,

Pa.
1 claim, 1st, The combination substantially as described of pivoted tines, A, link rods, C, and a spreading link, D, with a tripping latch and hoisting chain, B, for the purpose set forth.

2d, The arrangement as described of the link rods, C, below the joint of the tines, whereby the fork is opened by its own weight in descending.

73,923.—Horse Hay Fork.—Lewis Atwater, Ithaca, N. Y.

73, 23.—HORSE HAY FORK.—LeWis Attwater, Ithaca, N. Y. I claim, 1st, The tines, C.D. constructed in the form of hooks at their upper ends and branching below the said hooks to a broad bearing support near their center and to doubleprongs at their lower ends, all in one piece, substantially as set forth.

2d, The combination of the levers, F.G. and bail, A, all constructed and operating substantially as and for the purposes set forth.

3d, The combination of the tines, C.D., levers, F.G., and bail, A, arranged and operating substantially as set forth.

73,224.—C.ULTIVATOR.—A. Bennett, Rockford, Ill. Antedated January 4, 1868.

73,224. -CULTIVATOR.—A. Behllett, Rockford, A. January 4, 1868.
I claim, 1st. The hitching fron, a. incombination with the plow beams. C C, and the front cross beam, D, arranged and operating substantially as and for the parposes acres in described.
2d. Also the chain, h, with the stirrup, m, at one end, connected with the plow beams. C C, at the other end and passing over the rear cross beam, E. to raise the beams and shovels, as described.
3d. Also the upright hand levers, e.e. hinged or pivoted to the plow beams, C C, and passing through the staples, g g, on the cross beam, E. to which they are secured by pins, k k, arranged and operating as and for the purposes described.

are scurred by pins, k.k., arranged and operating as and for the purposes described.

4th, Also the movable foot piece or steps, f, on the levers, e.e., held in place by inctelies in the sides of the levers, as and for the purpose specified.

5th, Also the adjustable braces, p.p., and slotted botts, r. arranged in relation with the beams, C, and standard, d, to regulate the pitch of the shovels, as here is shown and described.

73,225.—SHEEP WASH.—E. B. Booth, St. Louis, Mo.

I claim a sheepwash composed of the ingredients above named, or their equivalents.

equivalents. 73.226.—Saw.—E. M. Boynton, Grand Rapids, Mich.

73,226.—SAW.—E. M. Boynton, Grand Rapids, Mich. I claim as an improvement in the construction of saws providing them with the gaging and clearing teeth, B. consisting of the inclined points, c, and the horizontal face or bearing, e, with a shoulder between the point and the bearing, e, substantially as shown and described.
73,227.—SAW TANG.—E. M. Boynton, Grand Rapids, Mich. I claim the detachable saw tang consisting of the socket, A, with the arm, B, having the groove, n, formed in its under side in combination with the slotted bott, D, and the thumb nut, E, substantially as described.
73,228.—Shoe Holder.—A. N. Breneman, Lancaster, Pa. I claim the arrangement of the toe and heel pleces, A B, when connected by a hince, C, in combination with the sliding wedge and band, D E, or its equivalent, for separating the parts below, substantially in themanner and for the purpose specified.

for the purpose specified. 73,229.—SPIROMETER.—G. W. Brown, Rockford, Ill.

73,229.—SPIROMETER.—G. W. Brown, Rockford, Ill.
I claim, 1st. The arrangement of spirometers and index. H. and shield. I, in the manner specified and for the purpose as described herein.
2d. The metal tube, B., which rises through the water in the reservoir, A. 3d. The arrangement of the guides, E. E., and eyes, F. F., with spirometer, for the use and in the manner herein described and set forth.
73,230.—STRAP HOLDER.—H. W. Burgess. Ithaca, N. Y.
I claim, 1st. The construction of the strap holder when the said surfaces of the movable piece or part, B, and of the bed or opposing piece or part, A, are made to be a part or section of the volute curve, F, safigured and described.
2d, The giving by the above-named volute-shaped surfaces an adaptation to varied thickness of straps and a parallelism to each other of the said surfaces thereby safely and surely holding the varied straps placed between the grasping surfaces, saherein described.
3d, The combination of the bed piece, A, movable piece or part, B, voluteshaped surfaces, F, handle, G, and hinge, D, the same making a strap holder, as set forth as an article of manufacture.

as set forth as an article of manufacture.

73,231.—Shovel Plow.—H.C.Chandler, Eric Township, Ind.

Iclaim, 1st, The notched beam at D, for the purpose of adjusting the bandles to the desired hight, by a boltp assing through them and the notch.

2d, The double slotted weage, F, and method of application at the point G, under the beam between the standards, B, to adjust them as to width, and the slotted rods, E E securing a forward or backward movement of the standards, B B, and the shovels attached thereto, and fastened to the beam in the slots by a bolt or other similar device.

73,232.—BALANCED FEED WATER VALVE.—Geo. E. Chenoweth, Baltimore, Md.

weth, Baltimore, Md.

I claim, in combination with the valve, valve-stem, and passages, an elastic, impermeable diaphragm, and air chamber underneath it, for the purpose of holding the valve in a balanced condition in any of the positions of the valve, substantially as herein described and represented.

73,233.—Apparatus for Determining Deviation of Locco-

MOTIVE CHARK PINS FOR TRUE CENTER.—Chas. J. Clifford, New Hampton, N.J.

I claim the instrument for ascertaining, without quartering or centering, whether or not crank pins on locomotive driving wheels are bent or sprung, constructed with the arms, a, feet, b, brace, c, adjusting screws and spring, marking point, fig. 2, all arranged and combined substantially as shown and specified.

specified. 73,234.—Pole Attachment.—Geo. N. Compton, Canton, O. 73,334.—POLE ATTACHMENT.—Geo. N. Compton, Canton, O. I claim, 1st. The combination of the part. I, with the pins, a a, and the ring, G, the whole forming the ring pieces, L G, shown in fig. 6, in the maner and for the purpose herein specified.

24. The clevis, F, composed of the two U's, united by a hollow neck, and cast either in a single piece or in two pieces, which are connected by a bolt or rivet, in the manner and for the purpose herein specified.

3d. The tongue shield, S, with pins, a a, thereon, constructed and arranged in the manner and for the purposes herein specified.

73,235.—CORSET.—Clara Z. Cummings, Buffalo, N. Y. Antedated Dec. 28, 1867.

up in the new arsenal at Rock Island. The clocks in the Learning aportion of its back formed of clastic goods, B.

and provided with elastic buckle straps, C and D, for the purposes and substantially as described. 73,236.—Cart Harness.— P. K. Curll, Elk Ridge Landing,

Md.

I claim a cartharness saddle, provided with the lever, D, pivoted in the upper end of a bolt, C, said bolt being arranged to turn loosely in the crosspiece, A, all constructed and arranged to operate substantially as shown and leacthed.

73,237.—Loom.—John Deakin, Gloucester, N. J., assignor to

73,237.—Loom.—John Deakin, Gloucester, N. J., assignor to himself and D. and C. Keily, Philadelphia, Pa.

I claim the combination and arrangement of the heddle levers, pattern chain, and adjustable cams, with levers, E H., or their equivalents, the whole being constructed and operating substantially as specified.
73,238.—CIRCULAR SAW.—Henry Disston, Philadelphia, Pa. I claim a circular saw, every tooth of which has its back edge so formed in the arc of a circle, having a center eccentric with the center of rotation of the saw, that the sharpening of each tooth may be effected by reducing the front edge in a spiral course, as herein set forth.
73,239.—SAW GUMMING MACHINE.—Thos. S. Disston (assignor to Henry Disston), Philadelphia, Pa.

10,505.—SAW GUMMING MIACHINE.—I nos. S. Dissoling assignor to Henry Disston), Philadelphia, Pa. I claim, 1st, The rotary cutter, G, arranged to revolve in disks, adapted to and admitting of being turned in a suitable frame secured to the saw, all substantially as described for the purpose specified.

2d. The combination of the rotary cutter, G, its bearing blocks, D D, adapted to the movabledisks, B, all substantially as and for the purpose herein set forth.

The rod, J, rendered adjustable on the machine, and having a notched adapted to the point of one of the teeth of the saw, as set forth for the one, awapted to the point of one of the teeth of the saw, as set forth for the purpose described.

4th, The recesses, k k, in the disks, B, for the reception of the forked end of the lever, H.

73,240.—REGULATOR FOR TIME PIECES.—Samuel F. Estell,

Richmond, Ind.

I claim the combination of the regulating lever, C, having a slotted end, in combination with screw, F, and nut, E, substantially as described, and for

the purpose set forth.

73,241.—AMAIGAMATOR.—A. L. Fleury, New York city.
I claim the herein described amalgamator, constructed and operating cubstantially in the manner set forth.

73,242.—BUCKLE.—George L. Gerard (assignor to himself and David Forbes), New Haven, Conn. Antedated Dec. 28, 1867.

I claim the combination of the central bar, f, and bars, h and l, and the ribs, r and s, the whole constructed and arranged so as to operate in the manner specified.

specified.

73,243.— MACHINE FOR SCOLLOPING LEATHER.— Andrew Goodyear, Albion, Mich.

I claim, 1st, A cutting-edged disk. A, with radial corrugations or other ornamental shaped indentations formed around it on both its faces next the periphery, substantially in the manner and for the purpose herein described. 2d, Thenes of one or more revolving cutting disks, A, with faces shaped adially in ornamental forms, in combination with an adjustable bed roller, B, and levers, L and M, mounted in a suit oble frame and arranged, adjusted, energed, and operated substantially as and for the purposes set forth.

73,244.—NECK TIE FASTENING.—Robert A. Goodyear, New Haven. Conn. Antedated Dec. 28, 1867.

Haven-Conn. Antedated Dec. 28, 1867.

I claim the spring clasp, c, formed as shown at 1.1. for grasping the button, and so bent at or near the hinge, b, of the plate, a, that a spring is produced for keeping the plate, a, toward the clasp, as and for the purposes set forth.

73,245.—ANTI-FRICTION BEARING FOR MACHINERY.—John Harden Chicago.

Harden, Chicago, Ill.
I claim the glass bearings, B, in combination with the working parts of nachinery, A, flexible seat, d, arranged as set forth and for the purposes nectified.

73.246.—Composition for Preserving Wood, Metal, CANVAS, ETC.—Louis Harmyer, Cincinnati, Ohio.

I claim the compositionitself, and the manner and process of compounding ind using the same, substantially as herein set forth.

73,247.—Automatic Alarm for Grist Mills.—M. W. Hel-

73,247.—AUTOMATIC ALARM FOR GRIST MILLS.—M. W. Helton and J. H. Redfield, Bloomington, Ind.
We claim, 1st, The apparatas substantially as described, and which is constructed so that when applied to mill machinery and properly adjusted thereto, it will automatically give an alarm at the proper time for changing the sacks, for the purpose set forth.

2d, In combination with alarm mechanism and devices which will automatically sound the alarm, and then be disengagedfrom the main driving power, substantially as shown and set forth, means, substantially as described, by which the machine can be adjusted and set to sound the alarm at any given time, for the purposes set forth.

3d, The adjustable index wheel, K, with its stop, i, and nawl, m, or their respective equivalents, in combination with the hand or arm, L, upon the shaft, h, and an alarm mechanism. operating substantially as described.

4th, The vibrating lever, D, and catch, H, in combination with the trippling wheel, E, worm-wheel shaft, C, and driving shaft, B, operating substantially as described.

5th, The pawl and clamp, m s, or their equivalents, applied to the wheel K, wheel, E. worm wheel shaft, C, and driving shart, F, and driving shart, F, as described.

5th, The pawl and clamp, ms, or their equivalents, applied to the wheel K, for holding this wheel firmly in place when properly adjusted, substantially as described.

of individual to the water many appears and the state of the sast described.

6th, Sustaining the worm-wheel shaft, C, at one end, by means of a lever, D. in combination with a catch, H, and also with means for tripping this catch, when said shaft, C, has made a given number of revolutions, substantially as described.

taily as described.

73.248. —HORSE RAKE.—Benj. F. Horton, Ithaca, N. Y.

1 claim, 1st. The arrangement of the teeth, and the knobs projecting from the lower sides of the thimbles, B, substantially as described.

2d, The combination and arrangement of the described levers and rods, F G H 1 and J, substantially as set torth.

3d, The combination of the hand lever, J, rod, I, pivoted lever, H, rod, G, lever, F, and lifting bar, E, when all are constructed and operated substantially as described.

tially as described. 73,249.—Soda Fountain.—John S. Hull, Cincinnati, Ohio.

I claim the soda fountain, G, tubes, H I and J, and cooler, E, combined and arranged for ejecting the water by compressed air forced into the water fountain, substantially as described.

73,250.—Steam Generator Water Gage.—John S. Hun-

ter, flartford, Conn.
I claim the arrangement of the three-way cocks, b and c, with their respective outlets, G, in combination with the tube, E, the connections, D, so as to operate substantially in the manner and for the purpose herein set forth.

73,251.—MACHINE FOR HUSKING CORN.—H. W. Knowlton,

73,251.—MACHINE FOR TIURING CORN.—11. W. KHOWROH, Saratoga Springs. N. Y. Antedated Jan, 1.1868.

1 claim the combination of the rollers. D, with the elastic aprons, K, on the rollers, I L, substantially as and for the purpose set forth.

73,252.—Generating Illuminating Gas.—Ferdinand King (assignor to himself and Charles W. Neudecher), Richmond, Va.

1 claim, 1st, The method herein described of generating or producing illuminations.

1 claim. 1st, The method herein described of generating or producing illuminating gas.

2d. Also the compound oil berein described, for the purpose set forth.

73,253.—Pump.—James McBride. Flint, Mich.

I claim an inclosed anaular space around the pump cylinder, deriving a supply of air from the well, substantially as and for the purpose described.

73,254.—Animal Trap.—Oliver Metcalf, Salem, Ind.

I claim, 1st, The combination of a creth, a, upon a hinged door, A', with the latch rods, f, upon the revolving patrorms. C, substantially as described.

2d. The hinged platform, d, held up by a spring, g, and combined with the revolving platform, C, and apron. b, substantially as described.

3d. Connecting the platform, C, to the spring shaft, c, by means of a removable key rod, h, applied substantially as described.

73,255.—PEN.—Wm. A. Morse. Philadelphia.

I claim a fountain union pen, made of two parts, a c and F, the same being adjustable, and connected, substantially as described and shown, for the purpose specified.

73,356.—HAND Loom.—Jas. E. Nute and Geo. H. Hathorn,

Lincoln, Me.

Lincoln, Me.

Lincoln, Me.

A. Carlon, St., The combination with the loom frame of the pivoted arms and the pivoted arms and the pivoted arms are series devices, substantially as described.

A. Combining with the treadles, H, the adjustable devices, herein described, for holding the shed pen till the reed beats up the thread, or which will allow the shed to close when the shuttle passes, when constructed and arranged to operate by means and in manner substantially as described and specified.

specified.

3d, The combination with the loom frame of the shaft, f, and spooling mechanism, substantially as described, so that the motor which drives the loom shall simultaneously operate the spooler, substantially as described.

4th, The spooler, as constructed, with the sliding serrated bar, s', slide, r', actuated by cam, z, or its equivalent, and withthe pawl, t', and eye, P', arbor Y', and support, w, or their equivalents, for suspending the bobbin, all constructed and arranged to operate in manner substantially as and for the purposes specified.

73,257.—Fence.—E F. Olds, Brighton, and Warren Clark,

Green Oak, Mich.
We claim the special arrangement of the braces, C, in combination with the posts, B, when the said braces are connected to the post and to each other in manner and for the purpose substantially as described.

73,258.—Brick Machine.—S. J. Parker, Ithaca, N. Y I claim, 1st, The perpendicular adjustable cam, C. in connection with the plungers and movable wheel, arranged and operating together as shown and described.

described.

24. So arranging the mold wheel, A, feed plate, E' E'', and contracted feed pipe, G'G''G'', in connection with each other, that nearly the entire surface of each brick shall be subjected to the smoothing contact of metal, as described.

surface of each brick shall be subjected to the smoothing contact of metal, as described.

3d, The arrangement of the adjustable auxiliary cam, N, in connection with the main cam, C, as and for the purposes described.

4th, The cutting wheel, X, arranged in connection with the feed pipe, G", and feed plate, E" as set forth.

5th, The secondary feed pipe, Z, and fits side grooves, in connection with the feed pipe, G, and feed plate, E", substantially as described.

6th, The combination of the wivel, A, on the horizontal shaft, L, adjustable cam, C, feed plates, E' E' and E", when substantially made, and operating as described.

7th, The combination of the wheel, A, on its shaft, L, adjustable cam, C, auxiliary cam, N, cam surface T a, plate, E', and table, H, arranged and operating substantially as described.

8th, The feed plate, E' E' E", when made adjustable, and arranged with reference to the mold wheel, A, substantially as shown and described.

73,259.—APPARATUS FOR THE MANUFACTURE OF STAKUS.—

John A. Owens, Little Falls, N. Y., sasignor to himself and Henry I

Petrie. Petrie.
1. Claim, Ist. The tank, A. with the shaft and arms, Al. constructed and operating as described, and for the uses and purposes mentioned.
2d, The screen, C. constructed of the sleves, C1 and C2, and the incline

plane, C3, substantially as described, and for the uses and purposes men-

sioned.

34. Forming the front end of the sieves, Cl and C2, with the angle, C3, substantially as described, and for the uses and purposes mentioned.

4th, Forming the end of the seves, Cl and C2, with a curve, substantially as described, and for the uses and purposes mentioned.

73,230.—FENCE.—M. D. Pratt, Copley, Ohio. I claim the combination and relative arrangement of the stakebraces, C, and snort braces, D, with the rails, A, and posts, BB, in the manner berein shown and specified, the said stake braces being placed in the hollow of the angles of the fence, and alternating from side to side, as and for the purposes described. 73,261.—Temporary Binder.—N. M. Shafer, New York city.

Antedated January 2, 1868.

Antedated January 2, 1868.

I claim, 1st, The series of clamps, A A, intersected by the steel bars, E, hinging on the wi.e. B.

2d, The movable slide, C C, and the lug or key, d, for securing the same.

3d, The back, to be used in the manner as set forth and described, in combination with the other parts.

73,262.—COMBINED LUBRICATOR AND WATER CONDUCTOR.—

73,262.—COMBINED LUBRICATOR AND WATER CONDUCTOR.—T. A. Shock, U. S. N., Boston, Mass.
I claim the combined lubricator and water conductor, constructed substantially as and for the purpose described.
73,263.—HAY CRANE.—Matthew Simms and Jas. V. Chambers, Wheeling, W. Va.
We claim, 1st, The application and arrangement of the guys, C. C. c, in their connection with thering, b, and collar, a, and pin, c, in combination with the movable post, A, arm, A, brace, C', and lever, D, when used substantially in the manner and for the purpose as he rein set ferth.

2d, The arrangement of the nulleys, F F F, in combination with the post, A, and arm, B, when used substantially in the manner and for the purpose as herein set forth.

herein set forth.

73,264.—PLow.—Stephen T. Skinner, Jacksonville, Mo. 1 claim, 1st, My forward upright frame, F, with swing bar, G, and flat chains, H, for the use and purpose as specified and herein set forth.

2d, The attaching of my pole to the center, or near the left side of my machine, for the use and purpose as specified and herein set forth.

3d, My triple whiffletree with the triple link, x, as represented in fig, III, for the use and purpose as specified and herein set forth.

4th, My crank axles, as made, attached, and operated on my machine, for the use and purpose as specified and herein set forth.

5th, My compound regulating shaft, X, with the revolving sockets, ji, spring lever, K, and circle, L, for the use and purposes as specified and herein fully set forth.

set forth.

6th, The combination of my crank axles, compound regulating shaft, X and spring lever, for the use and purpose a specified and herein set forth.

7th, My double crank shaft, M, with lever, N, and sings, Y Y, for the use and purpose as specified and herein set forth.

73,265. —WAGON BRAKE. — James Harvey Smiley, Carolina N, Y

73,265.—WAGON BRAKE.— James Harvey Shinley, Caloline, N.Y.
I claim, 1st, The extension of the rear axle braces, M and N, behind the rear axle, and susrension on the extremities thereof of the brake bar and brake, as described.
2d, The construction of the metallic braces, S, from beneath the rear axle braces, in front of the hind axle, to the under side of the axle, and thence to the end of the braces. M and N, where they support these braces, and give bearings for the brakes and bar, as set forth.
3d, Constructing the joint between the tongue and reach by the loop on the end of the tongue rod and playing in the solt, D a, of the plate, D, when arranged substandally as described.
4th, Constructing the tongue rod or bar, bythe long part under the tongue, held by the loop near the yoke pin, and extending thence to the rear end of the tongue, where it makes the loop, C a, and thence is continued, over the loop of the tongue, to the evener of the whiffletrees, and thus binding the lower part of the bar to the upper and the tongue, by the evener bolt in the slot in the tongue, for the purpose of actuating the brake by the yoke pin, and releasing the brake by the whiffletrees, in the manner substantially as set forth.

Sch. The combination of the forward and broad end of the plate, D, with

and releasing the orake by the winnessees, in the highest forth.

5th, The combination of the forward and broad end of the plate, D, with the slot, D a, for the tongue and reach joint, and the slot for the king bolt, and connecting with the reach rod in the rear of the plate, as described.

6th, The combination of the bolt, E, in the holes, E E a E b, wi this bolt and holes, F, for the purpose of lengthening the reach, as described.

7th, The combined whole, made substantially as described, for the purposes set forth.

123.2666—HA D LOOM.—Oliver Strong, Green Centre, Ind.

poses set forth.
'73,266.—HA D LOOM.—Oliver Strong, Green Centre, Ind. 15,200.—HA D LOOM.—Oliver Strong, Green Centre, Ind.
1 claim the tappet wheel, E lever, F, pawl, G, and ratchet or cloth beam, the wrighted lever and arm, the same being combined in themanner and constructed as and/or the purposes substantially as etforth.
73,267.—ROVING FRAME.—William H. Thompson, Biddeford, Me.
I claim the combination of a series of flexible metallic bands with the transverse rail, E, substantially as herein described, and for the purpose specified.

73,268.—Spring Bed Bottom.—J. D. Tifft, Cuyahoga Falls,

one.

I claim the combination of sections, B' C', and independent frame, D, operated by the cord and pulley, and hinged to section, C', all in the manner as and forthe purpose set torth.

73,269.—MACHINE FOR POLISHING THREAD.—William W.

Trapp (assignor to TobiasKohn), Hartford, Conn.
I claim the guides around which the threads pass, arranged substantial as described, in combination with the reciprocating rubors, so that each thread in its travel shall present two parts moying in opposite directions to the catton of the rubors, substantially as and for the purpose described.
73,270.—Machine for Twisting Wax Ends.—Francis K.

Way, Springfield, Ohio.

I claim the arbors. D. provided with the spring clips for holding the threads, and pulleys for imparting motion, in combination with the driving pulley, C, all mounted in the frame, B, and arranged to operate substantially as and for the purpose herein set forth.

73,271.—FRUIT JAR.—E. B. Whitmore, Rochester, N. Y.

I claim the double bowed bail, C, provided with the fing er places, h h, and spring bends, ikk, constructed and arranged substantially as and for the purposes set forth. 73,272.—Machine for Filling Paint Cans.—John Wilcox

'33,2'2.—MACHINE FOR FILLING PAINT CANS.—John Wilcox, Springfield, Mass.

I claim, ist, The adjustable wing, q, when constructed and arranged substantially as described, and for the purpose specified.

2d, Also, the movable collar, M, in combination with the wing, q, shaft, J, and tube, a, substantially as described, and for the purpose specified, 3d, Also, the angle-box, D, when recessed as described, in combination with the tube, a, and cylinder, E, substantially as described, and for the purpose set forth.

4th, Also, the cylinder, E, when constructed with a shoulder and side aperture as described, in combination with the angle box, D, packings, cc', nut, e, and check nut. e', substantially as specified and for the ourpose set forth.

ture as described, in combination with the angle box, D, packings, cc', nur, e, and check nnt, e', subscantially as specified, and for the purpose set forth.

5th, Also, the packings, cc', when constructed and arranged in the manner described, ind tor the purpose specified.

6th, Also, the rest, G, constructed and arranged as described, and for the purpose set forth.

7th, Also, the stops, i', in combination with the slotted rest, G, rod, h, and pin, s, as and for the purpose specified.

8th. Also, the rod, h, when provided with a pin, s, in combination with the rest, G, plunger, H, and cylinder, E, substantially as described, and for the purpose specified.

73,273.—WEIGH G SCALE.—J. D. Willoughby, Shippensburg, Pa. Antedated, December 28, 1867.
I claim the spring, 1, or its equivalent, in combination with the scales, for he purpose set forth. 73,274.—Scaffolding Bracket.—John S. Wilson, Indian

apolis, Ind.

I claim the bracket for scaffolding, composed of the elements, A B C, and D, constructed and arranged substantially as and for the purpose set forth.

73,275.—FRICTION MATCHES.—Benjamin F. Woodside, Mc-

73,275.—FRICTION MATCHES.—Denjamin F. Woodlag, and Donald, Tenn.

I claim, 1st, A twine or cord, coated at intervals with igniting composition as a series of friction matches, substantially as above described.

2d, Also, such twine, in combination with a spool, or wound into a ball, substantially as specified.

3d, Also, the case, D, in combination with the continuous match, substantially as specified.

4th, Also a twine, or other suitable material, when waxed, and forming a continuous fiexible taper, substantially as set forth.

73,276.—RAILROAD SNOW PLOW.—John Resco Adams,

Cisco, Cal.

1 claim, 1st, the dash board or share, G. and the false bottom or slide, F, operated by the hand-wheel, g, and cord or chain, g', substantially as and for the purpose specified.

2d. The bonnet or gate, E, for retaining the load upon the incline, and the

2d. The bonnet or sate, E, for retaining the load upon the incline, and the hand-wneel and pins, b, pawl d, and cord or chain, b', for rasing or lowering said bonnet, substanti 11y as described; and 34. The side pieces, B and D', movable in the ways, 1 it' 1', substantially as and for the purpose de scribed.

4th, The platform, C, upon which the hand-wheels are placed, as described.

73,277.—GATE.—Ralph Adams, Ottawa, Ill.

1 claim, 1st, The levers, L, and rods, R, in combination with the rack, E, substantially as shown, for the purpose of opening agate, all asset for th.

2d, The pawl. v, in combination with the levers, L, substantially as shown and for the purpose specuficia.

3d, The pawl. v, in combination with the levers, I, and rotch, f, for the purpose of holeing a gate open, substantially as shown.

73,278.—LAMP.—John Allen, New York City. Antedated Jannary 4, 1893.

January 4, 1868.
I claim the combination of the conical holder of the non-conducting material compartment, C, with the wick tube, E, when constructed as herein described for the purposes set forth,

nal compartment, C., with the wirest time, S., when constructed as herein described, for the purposes set forth,

73,279.—BIT-STOCK.—Charles A. Amidon, Greenfield, Mass.

1 claim, in combination with the jaws, G. G., or their equivalents, constructed to move away from or toward each other in the manner described, so that they may conform to the taper of the bit shank, the screw thimble. F. or its capitale tt, to incre the saie jaws upon said shank, as and for the purpose set forth.

Thu jaws, G. G., constructed with the groove, formed substantially as set forth, so as to enclose the taper sides and the shoulders of the shank, as and for the purpose described.

The cavity D. formed with a beyelled orifice, as shown, in combination with the laws, G. G. constructed with correspondingly beveiled ends, as and for the purpose shown and described.

73,280 — EXHAUSTING VENTILATOR AND CHIMNEY COWL.—
James W. C. Anderson, (assignor to Henry Demarest,) New York, City.

James W. C. Anderson, (assignor to Henry Demarest,) New York, City. I claim, ist, The collar or water stop, a arranged relatively to the cone, B, and body, A, substantially as and for the purpose within setforth. 2d, Also, the within described construction and arrangement of the body, A, incline, B, connection, C and holes, D and E, as and for the purposes Perein specified.

73.281.—Machine for Making Cheese.—B. Armstrong,

Huntsburg, Ohio.

I claim, 1st. the cylinder, E, provided with cutters, I, in combination with the mouth, K', and case, D, as and for the purpose substantially as set forth. 2d, The stell or case, D, and projection, X. constructed and arranged in relation to the cylinder, E, and cutters, substantially as and for the purpose set forth. 3d. The ring, G. in combination with the cylinder, E, and case D, as and for the nurnose set forth.

3d, The ring, G, in combination with the cylinder, E, and case D, as and for the purpose set for th, 73,282—RAILROAD RAIL.—Peter Ashcroft, Richmond Road, Dalston, and George Frederick Lee Meakin, London, England, We claim a compound steel and wrought from rail, in which the adjacent (or bearing) vertical surface of the steel and iron portions are formed with angular interlocking ribs and grooves, and the unjer faces of the iron plates and lower faces of rail head form taper bearings, all substantially as described.

73,283.—Air Condensing Apparatus.—H. J. Bailey, Pitts

13,283.—AIR CONDENSING APPARATUS.—H. J. Bailey, Pittsburg, Pa.

I claim, 1st, the combination, with a vessel for receiving and retaining air under pressure, of two vessels for receiving air and water alternately, cooperative by means of cyinders, pistons, and pipes, for the purpose of condensing air, substantially as described.

2d, In combination with the apparatus above named, an eight way cook or valve, and a three way cock or v.ive, substantially as shown and described.

3d. A condensing apparatus, to which air or water may be applied, for working the valves and thereby rendering the operation of the same self-acting or automatic, in the manner described.

73,284.—INKSTAND.—N. Gray Bartlett, Keokuk, Iowa.

1 claim the overflow chamber, D, in combination with a fountain inkstand, substantially ashereinshown and described.

73,285.—EYE GLASS AND SPECTACLE.—J. J. Bausch, Rochester, N. Y.

ter, N. Y.
I claim the combination of the connecting spring, C, guards, D, and plates.
E, adjustably attached to the bows, B, substantially as described and for the purpose specified.
73,286.—HARNESS ATTACHMENT.—W. W. Beebee, Dubuque,

Iowa.
I claim an attachment for harnesses, substantially as and for the purpose described.
73,287.—WATER PROOF OR DAMP PROOF PAPER.—Samuel described.

73,287.—WATER PROOF OR DAMP PROOF PAPER.—Samuel C. Bishop, (assignor to Bishop Gutta-Percha Company.) New York City. I claim a damp proof paper, prepared with valata or balata gum or milk, in any way, substantially as herein specified.

73,288.—WATER PROOF CLOTH.—Samuel C. Bishop, (assignor to the Bishop Gutta-Perch Company.) New York City. I claim a water proof cloth prepared with valata or balata gum, or milk applied to or used in connection with cotton in any suitable way, substantially as specified.

tially as specified.
73,289.—Piffer.—James Bounds, Bridgeport, Conn.
Iclaim the adjustable jaw. d. dog, g.s hanks, AB, and link, e, the whole
being constructed and combined substantially as herein set forth and describ d. 73,290.—Instrument for Drawing Ellipses.— Franklin

73,290.—INSTRUMENT FOR DRAWING ELLIPSES.— FREIRIN Bowly, Winchester, Va.

I claim the combination and arrangement of the slotted handle, A, the marking bar, B, the sliding rods, C D, and the connecting rod, E, constructed and operating substantially as and for the purpose herein described.

73,291.—CULTIVATOR.—Jesse C. Boyd, Milroy, Ind., assignor to himself, C.P. Wilson, and L. L. Boblet.

I claim the arrangement of the beams, D, with their attachment directly to the axle, A, by means of shifting clevises, with handle, H, bar, I, and bars, F, and G, the several parts being constructed and operating substantially as and for the purpose specified.

and G, the several parts being constructed and operating substantially as and for the purpose specified.

73,292.—REFRIEDEMATING AND CONDENSING APPARATUS FOR PRESERVING ANIMAL AND VEGETABLE SUBSTANCES.—Edwin D. Brainard, Albany, N. Y.

I claim, lat, the combination of the drip gutters and condensing and refrigerating troughs or condensers, forming the ceiling of a chamber, constructed and arranged substantially as described, and operating as and for the purposes herein set forth.

2d, The method of forming the condensing troughs, by uniting the sides to a cap with closed duable seams, substantially as described.

73,293.—SHAFT COUPLING.—James Brayley, Buffalo, N. Y.

I claim providing the guard ring, A, with concealed recesses, gh, on its interior surface, or receiving the ends of the loose pins, ee, in combination with the holes f, and openings, if, of the forked heads, B, constructed and arranged substantially as and for the purposes set forth.

73,294.—APPARATUS FOR RAISING SUNKEN VESSELS.—John Burger, (assignor to himself and Albert Manvil,) Edizabethport, N. J.

10,544.—AFFARATUS FOR KAISING SUNKEN VESSEIS.—JOHN BURger, (assignor to himself and Albert Manvil,) Elizabethport, N. J. Antedated January 4, 1868.

I claim, 1st, the envelope. C. constructed and applied to the hull of a ves sel. substantially as and for the purpose specified.

2d. The construction of the binding cable, D, in two or more sections, of India rubber or like elastic material, substantially as and for the purpose specified.

3d. The frame, B. arranged upon the hull of the vessel and in combination. specineu.

3q, The frame, B, arranged upon the hull of the vessel, and in combination with the envelope, C, surrounding the same, substantially as and for the pur-

you specified, 4th, The supplemental sheet or wing, E, arranged in relation with the en-velope, C, and the hull of the vessel, substantially as and for the purpose

4th, The supplemental sheet or wing, g, arranged in relation who selope, C, and the hull of the vessel, substantially as and for the purpose specified.

5th, The anchors, G, straining cables, F, and pulleys, h, arranged in relation with each other, and with the kull of the vessel, the envelope, C, and binding cable, substantially as and for the purpose specified.

73,295.—CAR-TRUCK.—Henry T. Carter, St. Louis, Mo. I claim, 1st, a car truck, constructed as described, with braces or bars, B B, having slotted extremittes connected by pins or bolts, substantially as and for the purpose set forth.

2d, In combination with the above, the sliding bar, H, rofs, d d' and e, and their connections, substantially as described.

73,296.—Postage Stamp.—Samuel Carusi, Washington, D.C. I claim constructing a postage stamp, as described, with a blank space up-I claim constructing a postage stamp, as described, with a blange for the purposes set forth.

on its face, for the purposes set forth. 73,297.—Hings.—Samuel A. Chapman, Waterbury, Conn.

Tolam, 1st an iron hinge wrapped or covered on its edges and faces with sheet brass, substantially as described 2d, In Iron hinge sencased by sheet brass wrappers, burring or sinking said wrappers into the serew holes of the hinge, for the double purpose of preventing exposure of the iron, and of bolding or securing the wrappers, essentially as specified.

73,298.—Tween Iron.—Robert W. Clark, Pittsburg, Pa.

10,200.—1 WEEK IRUN.—ROUGET W. CHAFK, PITTSDUTE, Pa. 1 claim, 1st, the combination of the air chamber, A. removable top, B, and keys, C C, when the same are constructed and arranged substantially as described.

2d, The combination of the air chamber, A, turning valve, E, and removable top, B, when the same are connected and arranged substantially as described.

73,299.—SEAMING AND BAG CUTTING MACHINE.—John Collins, Jr., and Nicholas H. Nixon. Richmond, Ind., assignors to N. R. Nixon. Thomas Nixon and Allan T. Be mett.
We claim, 1st, the combination of the betts, F. F. G. G. H. H., and I, and their supporting rollers, as and for the purposes shown and described.
21. The cutters, K. K., arranzed and operating between the belts, substantially in the manner and for the purpose specified.
32. Also, a series of Enlives or cutters in combination with alternate double belts, substantially in the manner described, for the purpose of cutting rags into strips of any desirable width, to be woven into carpets.

73,300.—FRUIT Box.—Ira Copeland, North Bridgewater,

As, 5,00.— FRUIT DOX.— IR COPERIUM, NOTH DIMERWARE, Mass.

I claim a box, in which the cover is secured to the body by means of one or more elastic media, arranged so as to operate substantially as described. Also, providing a cover, when secured as described, with cross pieces on its outer surface, so that said cross pieces serve to keep apart the bottoms and tops of adjacent boxes when packed in crates, and thus permit circulation of air between the boxes, and also serve as feet for the boxes to resupon when the cover is secured beneath the box, as in filling, or when used as a show box, and prevent injury to any marksor labels which are upon the outer surface of the cover.

Also, in combination with a box in which the cover is secured as described, and with such cover, the dowel or steady pins and holes, substantially as and for the purpose specified.

Also, in combination with a box in which the cover is secured as described, and with such cover, the dowel or steady pins and holes, substantially as and boxes substantially as described, cross bars, or slats, or strips of wood, or other suntable material, which serveto reduce the length and cost of the elastics.

elastics. 73,301.—Low Water Detector for Boilers.—C. F. Cosfeldt, Jr., Philadelphia, Pa. Telaim. 1st, the arrangement of the levers, G H, and valve, D,

I claim, 1st, the arrangement of the levers, G H, and valve, D, constructed substantia lyas herein setforth.

2d, The combination of the set screw, i, with the levers, G H, and valve, D substantially as herein described.

73,302.—Device for Straining Wire Fences.—F. H. Crandall, Ontario, N. Y.

I claim the threaded bolt, C. constructed, arranged and applied substantially in the manner and for the purposes herein set forth.

Gustavus Cuppers, New York city.
I claim, I, The combination and arrangement of the shaft, a, of the spring power mechanism, with the crank shaft and connecting rods for operating the needle arm, shaft for operating the feed and hook, and brake for regulating the movement of the said parts, in the manner herein shown and set forth. 73,303.—Mechanism for Operating Sewing Machines.—

torth.

2d, The employment, in connection with the needle bar, of the movable weight or counterpoise, applied to the said bar, substantially in the manner and for the purposes described.

3d, The friction brake, constructed as herein described, and applied to the shaft for actuating the feeder and shuttle, substantially as shown and set torth.

73,304.—Device for Holding Boots and Shoes.—Henry T.

75,304.—DEVICE FOR HOLDING BOOTS AND SHOES.—Hellry I. Dillon, Big Itak, Va. I claim, ist. The standard, A, provided with two shanks, d d', the levers, R and O, and the hinges, h, supported by the brace, N, by means of the collar, c, as constructed, and for the purpose specified.

2d, The standard, A, in combination with the ratchet, M, and the adjustable standard, B, as and for the purpose set forth.

3d, 'he standard, A, when used in combination with the standard, C, and its ratchet, I, as is herein fully set forth.

73,305.—Sash Stop.—Bartlett Doe, Boston, Mass.

I claim, in combination, the hollow cylindrical bolt and the outside lever, when arranged in connection with a helical spring, substantially as and for the purpose specified.

(A) A combination of the embedded skeleton frame, A, provided with the flanges on the ring, c, fixed screw, e, and ribber, g, construct ed and arranged substantially as set forth.

Also, the bent wire link, b, when applied to the hollow bolt and lever, substantially as set forth.

73,305.—ORE CONCENTRATOR.—Henry Donnelly, Virginia Cty, Nevada.

A, substantially as and for the purpose described.

Cty, New York.

Cty, C, and the spring, d, together with the arms, a a' b b', loosely attached to the shaft, B, for the purpose of reversing and locking the tables, substantially as herein specified. substantially as herein specified.
73,307.—Seeding Machine.—P. A. Downer and A. P. Stuart,

(3,307.—DEEDING MACHINE.—T. A. DOWNER ARE I. Sections, Monmount Township, Iowa.
We claim, 1st, In a speciar machine, having a revolving cylinder, the combination of the sliding head, E, disk, et, slide, g, lever, h, and standard, L, ill arranged and operating substantially as and for the purpose described.
2n, The cleats, d', constructed and applied substantially as and for the purpose specified.

pose specified.
73,308.—FREIGHT CAR.—S. W. Downey, Fiedmont, W. Va.
Iclaim the construction and arrangement of the hinged top or roof. in
combination with the car, A a, and rail or rod, C, when the same are constructed and arranged substantially as described, and for the purpose specified.

73,309—Fire Proof Safe.—Ebenezer D. Draper, Hopedale,

73,309—FIRE PROOF SAFE.—Ebenezer D. Draper, Hopedale, and Edward W. Glover, Medford, Mass.
We claim the combination and arrangement of a heat non-conductor, c. of mics or its equivalent, with each or either of the metallic jambs or sides of the door frame, and the filling thereof, the whole being substantially as and for the purpose specified.
Also, the combination and arrangement of one or more strata of fusible metally in manner and for the purpose specified.
Also, the combination and arrangement of mica, or its equivalent, or of mica and fusible metal, with the sides of the burgiar proof and the next adjacent internal surfaces of thesafe, the whole being substantially as specified.

73.310.—Carpet Stretcher.—A. L. Dunbar, Sheldon, Ill. I claim the carpet sterecher, constructed as described, consisting of the cettons, B, of equal length, pivoted together, said stretcher provided at each nd with a toothed head, whereby the carpet can be stretched to be nailed own upon two sides of the room at once, without removing the stretcher, sherein shown and described.

as here in shown and described.
73,311—SAFETY PLUG FOR BOILERS.—Theodor G. Eiswald, Providence, R. I.
I claim fusible plugs, constructed substantially as shown and described.
73,312.—GATE.—Lewis Essig, Canton, Ohio.
I claim, 1st, The opening and closing of any farm or other gate, A, by means of the windlasses, b, and ropes, H, Hi and H2, substantially as shown and described.
2d. The windlasses b and the ropes or chains H. H. and W.

I claim, 1st, The opening and closing of any farm or other gate, A, by means of the windlasses, b, and ropes, H, H1 and H2, substantially as shown and described.

2d, The windlasses, b, and the ropes or chains, H, H1 and H2, and the pulleys, E and E. in combination with each other, and in combination with the posts, G, and the post, B, and any gate, A, substantially as shown and described, and for the purposes set forth.

3d, The slotted cap, e, in combination with the gate, A, substantially as shown and idescribed, and for the purposes set forth.

73,313.—PORTABLE SHADE AND SEAT.—Dana Estes, Newton, assignor to himself and Casper W. Roeth, Boston, Mass. Antedated Jan. 3, 1868.

I claim the combination of the adjustable rail, C, and the posts, B B, provided with notches, a, as set forth, with the settee or seat, A, and the awning, D, applied therto, by means and so as to operate as specified.

73,314.—HARVESTER —D. S. Fisher, Cedar Spring, Iud.

I claim, 1st, The combination of the caster wheel, C, pivoted adjustable standard, a, pivoted arm, b, pivoted bar, d, and periorared horizontal segment plates, D, whereby the rear end of the frame and cutters is raised and lowered, and the lirection of the harvester changed, as herein shown and described, wherein described, for the purpose specified.

2d, The combination of the projection, ax, grooved wheel, I, spring, m, lever, T, pendent arm, U, crans, mx, shaft, V, rod, p, arm, q, rod, W, and finger, n, as herein described, for the purpose specified.

3d, The tecombination of the pivoted shaft, M, frame, L, and lever, Q, with the vibrating arm, N, having the pivoted head, O, and rollers, P, the lever, K, and connecting rods, J, all constructed and arranged as described, wie-chy the vibrating arm is thrown in and out of gear with the driving wheel, B, as herein shown and described, for the purpose specified.

78,315.—BAGAGE CHECK.—Edward Flather, Bridgeport, Ct. I claim the indicator arm, C, revolving on the set screw or rivet, D, and their equivalents, in combination

I claim the indicator arm, C, revolving on the set screw or rivet, D, and their equivalents, in combination with the disk, A B, substantially as herein setforth and described.
73,316.—Pump.—Robert M. Fryer, New York city, assignor

73,316.—PUMP.—ROBERT M. FTYET, New YORK CITY, assignor to Universal Pump and Manutacturing Company.

1 claim, 1st, The vertical chambers, P.P., with conteat tops, U.V. and diaphragm chambers, F.F., in combination with a horizontal cylinder, A, arranged as describes, and operating in the manner setforth.

24. The arrangement of the valve chambers, Y. T and K, in their relative positions one to the other, to operate substantially as specified.

73,317.—THILL COUPLING.—W. W. Goff, Avoca, N. Y.

1 claim the bolt, A, shiding hook, B, and India rubber ring or spring, when combined substantially as and for the purposes set forth.

73,318.—METHOD OF STOPPING CREVASSES.—Louis A. Gossin.

Parish Lafourche, La.

Parish Latourche, La.

I claim the construction and arrangement of the boat, A, and piles, F, in the manner and for the purpose substantially as herein set forth.

73,319.—POTATO DIGGER.—John H. Gray and Charles W, Calhoun, Florence Township, Michigan. We claim the construction of the machine, with theinner frame, b b, hinged to the front end, with the scoop attached, in combination with the other devices, as shown and described.

vices, as shown and described.
73,320.—ELASTIC COUPLING FOR SEEDING MACHINES, ETC.—
A. P. Green, Stueben, Ohio.
I claim, 1st, The shank, C, provided with shouldered collars, D, in combination with the ring, E, elastic filling or ball, F, in the manner and for the purpose set forth.
2d, The thimble or sleeve, G, arms, H, in combination with the ring, I, washer, J, and elastic filling, F', in the manner and for the purpose substantially as set forth.

railly as set forth.

73,321.—BARREL HEADING, CIRCLING, AND BEVELING MACHINE.—Remig Grotz, Chicago, Ill.

I claim, 1st, The frames, J, with their clamping devices mounted on the central pivot. D, and the operating devices, so arranged that as one is moved to the saw the other shall move from it, substantially as described.

2d, The pivoted sleeve, D, provited with the slotted arms, F, for supporting and adjusting the frames, I, as described.

3d, The adjustable locking levels, p, arranged to operate as described, for the purpose of holding the frames in position, as set forth.

4th, The elamps, M, havin, the adjustable segments, O, with the springs, k, applied to plates, P, in combinalion with the square mandrel, h, with the spring, i, and cam lever, N, applied thereto, all mounted on the arm, I, of the swinging frames, J, when arranged to operate substantially as described.

73,322.—Sclution for Treating Vegetable. Fiber for

swinging frames, J, when arranged to operate substantially as described.
73,322.—Sclution for Treating Vegetable Fiber for
THE MANUFACTURE OF VEGETABLE PARCHMENT.—Stuart Gwynn, New
York city.
I climite mode of producing the fluids numbered (1) one and (2) two,
substantially as described, to be used consecutively in transforming cellulose
into vegetable membrane."

Also, fluid number one, produced substantially as described, as a "new composition of matter."

composition of matter."

Also, fluid number two, produced substantially as described, as a "new composition of matter."

Also, the use of these fluids, produced substantially as described, in combination with machinery and apparatus, hereafter to be patented, for manufacturing cellulose, in the form of "vegetable felts," into a "new composition of matter," to be patented under the name of "vegetable membrane?"

78,323.—CORN SHELLER.—J. R. Hamilton, Portland, Oregon.

70,525.—CORN SHELLER.—J. R. Hamilton, Fortland, Oregon.
I claim, ist, The apparatus, as constructed, with a series of rowers, as a a rranged in a circle, also the scrapers. If f, in the rear of the rowers, substantially as and for the purpose herein set forth.

24. The rowers, as arranged alternately, the one forward of another, the same being pressed by springs toward the center, so as to act as a wedge, parallel with, between, and under the rows of corn.

3d. The slising plunger, H, to push ears of corn between and through bars a a a, a, with the rowers or points, b o, attached either vertically or horizon tally, as and for the purposes herein set forth.

73.334 — LAMP CHIMNEY CLEANER — Jonathan R. Hamilton

tally, as and for the purposes herein set forth. 73,324.—LAMP CHIMNEY CLEANER.—Jonathan R. Hamilton

73,324.—JAMP CHIMNEY CLEANER.—Consistent in Portland, Oregon.
I claim, 1st, The scrubbers or wibers, A A' and C C, when constructed and applied so as to operate substantially in the manner as and for the purposes herein set forth.
Also, the wiper, as constructed, in combination with the gear mechanism for operating the same, as specified.
73,325.—WINDOW SASH FASTENER.—John W. Hansel, Peo-

ria, ill.

I claim the combination of the weight, A, on the bolt, B, with the arm, C, on the lever, D, operating together substantially as and for the purpose heren specified.

I claim the combination of the weight, A, on the Dott, B, with the arm, on the lever, D, operating together substantially as and for the purpose herein specified.

Also, one or more spurs, ss, on the upper edge of the bolt, B, in combination with its mortises in the window frame, with the said weighted bolt and the fluted lever, D, operating substantially as described.

73,326—STEAM COMPRESSER FOR VULCANIZING FLASKS.—Geo. E. Hayes (assignor to Buffalo Dental Manufacturing Company), Buffalo, N. Y.

I claim, 1st, The process, substantially as herein described, of closing the flasks under pressure of steam or vapor, during the operation of vulcanizing the rubber in the molds, by means of a steam ram or compresser connected with the flasks by a clamp or otherwise, and having the heat necessary to effect vulcanization transmitted through it in such manner as that the steam which is thus derived from a vessel that is distinct from the vulcanizer, though arranged within the latter, operates to close the flasks in a dvance of outside steam pressure on the latter, and while the rubber is at a comparatively low temperature, and plastic, essentially as herein set forth.

2d. The steam compresser composed of cylinders, A and B, in combination with a suitable clamp for holding theflask sections in connection therewith, substantially as specified.

73,327.—Churn.—A. J. Heavner, Time, III.

I claim, 1st. The double dasher consisting of the parts, D E, constructed and arranged substantially as described to work one within and through the other, as specified.

73,328.—Boor Heel.—Gottlieb Henning and Herman P.

Wille, Buffalo, N. Y.

Wellaim aboot heel consisting of the embedded skeleton frame, A, pro-

73,329.—Wagon Jack.—Nicholas W. Hess and Jacob H.

73,329.—WAGON GAOL.—TABLEAN
Fry, Fort Wayne, Ind.
We claim the lever, A, the concavo-convex or crescent-shaped step or link,
B, in combination with the convex surface of the stud or litter, C, the same
being constructed in the manner and for the purpose described.
73,330.—IMPLEMENT FOR DRAWING NAILS.—Henry W. Holly,

Norwith, Conn.
I claim the jaws, A A, constructed to open and close as described and with their upper ends or arms having converging sides, g, forming an opening, f, between them so that by lifting on the same through a lever inserted as specified to extract the nail the grip of the nippers is tightened on the latter, in the manner substantially as set forth.

73,331.—IMPLEMENT FOR DYERS AND BLEACHERS.—H. W.

the manner substantially as set forth.

73,331.—IMPLEMEN'T FOR DYERS AND BLEACHERS.—H. W. Holly, Norwich, Conn.

I claim the forked implement having the extremities of its tines knobbed or enlarged, substantially as herein set forth for the purpose specified.

73,332.—DRY GAS METICR.—T. C. Hopper, Philadelphia, Pa. Iclaim, 1st, Producing both of the channels, a' a'', on the same side of the partition, A, substantially as and for the purposes described.

2d, Inthe valve sett, B', the annular channels, a' a'', in combination with the closed gener and narrow faced dividing partitions, b' b'', of the four openings which are surrounded by the said annular channel, bd, substantially as and for the purposes described.

8d, Casting theseast, B', of the valve and the projecting portion, b'', thereof in one piece so that both of the channels, a' a'', can thereby be produced exclusively on one side of the partition, A, substantially as described and for the purposes specified.

4th, in the rotary disk, B, of a gas meter the outlet, 3, in combination with the space above the faces, 2, and the annular channel, 4, arranged substantially in the manner described and shown for the purposes specified.

5th, Passing the spindle, C, loosely through the rotary disk, B, and riving it a bearing in the seat, D', substantially as and for the purpose described.

6th, Giving rotary motion to the disk, B, uron the seat, B', by means of the cross bar, c', raved in the spindle, C, in combination with the studs. c'', fixed in the said disk, B, when the spindle, C, not the subsective cover, E, in the position shown as below the worm wheel for the purpose of admitting of the "repacking" as occasion may require without removing the king post, G, as described.

73,333.—CUPOLA FURNACE.—John Howarth, Salem, Mass. I claim in combination with a cupola, blast or other furnace (in which combined air and steam are used as describes) the superheater chamber lo

73,333.—CUPOLA FURNACE.—John Howarth, Salem, Mass-I claim in combination with a cupola, blast or other furnace (in which combined air and steam are used as described) the superheater chamber lo-cated directly over the furnace, substantially as described. Also the superheater base, f, and its supright return bends, g, combined and arranged together and relatively to the furnace and air blast, substantially as shown and described.

73,334.—Locking Knob Latch.—W. L. Imlay, Philadelphia,

Pa.
I claim, 1st, Constructing the key bolt, B, with a projection, F, for the purpose of locking and unlocking the knob latch, A, by means of its described action in the slot of the knob latch, as set forth.

2d, The constructing and arranging of the knob latch, A, with the surface, a for the action of the key), and the slot in its immost end for the purpose of civing the knob latch a dead latch action and for the purpose of conjoined locking with the key bolt. B, thus making the latch, A, subserve any one or all of the three uses, as follows: of a simple knob latch, a dead or night latch and an additional security to the key bolt, B, as set forth.

73,335.—Hydrocarbon Burner.—W. L. Imlay, Philadelphii. Pa.

73,535.—HYDROCARBON DURNER.— W. L. Land, F. Pa. phi:, Pa. I claim, Ist, The construction of the vapor and gas chamber, B, with two walls the outer one of any suitable form and the inner one cone shaped or inclined in ward, and operating substantially as set forth.

2d. The construction of the blast-equalizing chamber, E, larger than the flow pipe, D, and with the inclined apertures or escape, F, arranged just beneath or just withing he lower part of the generator, as set forth.

3d. An apparatus for burning by drocarbons constructed and made of the pipe, A, trom the reservoir, the chamber, B, flame blast aperture, G, tube, D, receiver, E, and escape apertures, F, operating substantially as set torth.

73,338.—SEEDER AND CULTIVATOR COMBINED.—A. Ingalls, Independence, Iowa.

Independence, Iowa. I claim, 1st, The slide, G, as arranged in combination with the lever, H, and adjusting rod, I, for the purpose and in the manner asset forth.

2d, fhe graduating scale, F, in combination with the adjusting rod, I, for the purpose and in the manner asset forth.

3. The foot board, Q, and swing bar, O, as arranged in combination with the cultivators. N, for the purpose specified.

the cultivators, N, for the purpose specified. 73,337.—CARD AND CRIBBAGE BOARD.—R. S. Jennings, Phil-

73,338.—Swage for Saw Teeth.—Nelson Johnson, Jasper

N.Y. I ctaim, 1st, The provision of notches or teeth, a, on the swage stock to old the notched or serrated saw tooth agianst displacement, substantially hold the notched or serrated saw tooth agranst displacement, substantial, as described.

"dd, The adjustable swaze pin or die, B, or its described equivalent, whereby the swage is made to accommodate or acapt itself to irregularities or variations in the saw teeth, substantially as described.

3d, A reversible supporting die or swage pin, B, having a convex or oval face in order to either spread the tooth sideways or draw the same endways, substantially as described.

4th, The die or stamping device, C, in combination with the spring holder, Cl, and adjusting screw, C2, substantially as and for the purpose set forth-73,339.—MACHINE FOR POINTING PICKETS—W. W. Johnson, Nashville. Tenn

Nashville, Tenn I claim the swinging arm, D. provided with the eccentric lever, F. and the holding claimp, E., when constructed and arranged to operate the picket against the knife, a, substantially as and for the purpose herein described. 73,340.—AXLE FOR WAGONS.—Daniel Jones, San Francisco,

Cal.
I claim the countersunk collar, C, either in combination with the strap. D or, where used alone, constructed and arranged substantially as and for the purpose described.
73,341.—SAW FRAME.—Moses J. Jones, Fredonia, N. Y. I claim the sawframe, AB, constructed as described and used for the purposes set forth.

73,342.—Expanding Wheel Hub.—A. I. Judge, Baltimore

Md.
101aim, 1st, An adjustable base with an inclined face against which the ends of the several spekes of the whee lbear so arranged that the spokes may be simult aneously more or less extenced through the hub by changing the position of the inclined base, embrantially as and for the purpose set for the 2d, Also in combination with a chambered hub the conical adjusting screws, A. substantially as and for the purpose set forth.

adjusting screws, A. substantially as and for the purpose set forth.
73,343.—Shingle Machine.—Edmund Keith, Buffalo, N. Y claim, 1st, The sliding bar, P. and frame, Q. provided with inclined arms arranged and operating the pivoted tilting frame, N. substantially as

qq, arranges and operating the pivoted tilting frame, N, substantially as set forth.

2d, Also the concentrically grooved wheel, H, in combination with the bar. P, grooves, ut, dog, c', with projections, d', and pin' v, all constructed and operating substantially as described.

3d, Also the sliding spring law or clamp, F, in combination with the lever, E, and eccentric, G, for alternately operating to release and hold the bolts, all constructed and arranged substantially as set forth.

73,344.—CLAMP FOR FILING SAWS.—Christian Kendig, Safe Harbor, Pa. Antedated January 2, 1868.

I claim the bed pieces, A and A', when provided with the screws, e e, the face blocs, B, provided with the screw, f, the jaws, C C', and the clamps, D D', arranged substantially as described and set forth.

73,345.—STREAM OR RIVER FENCE.—H. A. Kephart, Fletcher, Ohio.

er, Ohio. specified. 73.346.—Scaffold for Building.—James Lamb, Aurora

10,040.—SUAFFOLD FOR BUILDING.—James Lamb, Aurora, and Francis Livings, East Enterprise, Ind.
We claim the horizontal bar, B, notched near its inner end, provided with diagonal braces, D D, and vertical bars, If, botted together as described between which are passed to shore timbers, C, connecting into the notch in bar, B, for supporting one end of the platform, A, all constructed and used as specified.

as specimen.
73.347.—Coffee Mill.—W. J. Lane (assignor to himself and

(3,541.—COFFEE MILL.—W. J. Lane (assignor to littlise and J. G. Lane) Washington, N. Y. I claim the external shell or cone, D, of a coffee mill of the class described when provided with the endent flange, a surrounding the conical grinder, E, for the purpose of giving a downward direction to the ground coffee and preventing it from being scattered about in the mill, as herein shown and fescribed.

73,348.—Threshing Machine and Grain Separator.-

73,348.—THRESHING MACHINE AND GRAIN SEPARATOR.—
Levi B. Lathrop, San José, Cal.
f claim, 1st, The evice for imparting the pecuhar motion as herein described to the screen, E. said device consisting of the inclined guides, C. arm, G. and crank shaft, H. or their respective equivalents.
2d. Providing a screen, E. with alternated opressions and elevations similar to waves, substantially as and for the purposes herein shown and described.
3d. The packing, e. when arranged as the sides of the frame of the screen, substantially as and for the purposes herein shown and described.
ith, Fassing the grain by any suitable conveyor directly under the end of a suction pipe, as set forth.
5th, The screen, E when arranged and operated as set forth in combination with the suction tube, I, the same being arranged substantially as described.

tion with the suction those, there exists being a result of the purpose of separating grain from straw or for separating it from chaff or for simply conveying light articles, substansially as described.

73,349—FASTENING FOR WIRE FENCES.—W. E. Lockwood,

Philadelphia, Pa. I claim the pulley, D, its many-sided projection, d, when the said pulley is arranged to turn in the brackets, B and B', or their equivalent, and is confined by a key, E, all substantially as and for the purpose herein set forth.

73,350.—Apparatus for Drying Envelopes.—William F.

Lockwood, Philadelphia, Pa.

I claim, 1st, Twosts of endless tapes or bands in combination with a rain of pulleys, arranged substantially as described for the purpose specified. 2d, The combination of the narrow pulleys, C C', with the broader pulleys, D, and the two sets of bands, for the purpose specified. 73,351.—Cartridge Extractor.—Horace Lord, Hartford,

Conn.

I claim discharging or throwing out the empty cartridge (after it has been extracted from the charge chamber) by means of a vibratory or lifting lever ar hammer arranged to strike the case, substantially as described.

73,352.—BERRY BOX.—Truman Mabbett, Jr., Vineland, N. J. I claim a box for berries and other small fruit, constructed of two upright end pieces, AA, and a body B, of semicircular form in its transverse section, and secured to the end pieces as shown, the body and end pieces being perforated or not, as desired, substantially as herein shown and described.
73,353.—LET-OFF FOR LOOMS.—J. A. Marden, Chelsea, Mass. I claim, 1st. The combination of parts, D F and E, with parts, C and H, constructed, arranged, and operating substantially as described.
2d, The double friction brake, e e', operating upon the periphery of the wheel, C, and actuated by means of spring, H, and the whip roll and lever, D F, and yarn. G, substantially as described.
3d, The above in combination with a take-up mechanism, substantially as described. 73,352.—BERRY Box.—Truman Mabbett, Jr., Vineland, N. J.

F, and yarn. G, substantially as described.

73,354.—MILL SHAPE OR MOLD FOR MANUFACTURING TOBACO.—Grandison F. Marks, Petersburg, Va.
I claim the iron plate, A, or other metal, of suitable the kness, and securing the same to the followers or sinkers, B B, and the plates, e e e, with strong rive s, C C C, for the construction of mill shapes or molds for manufacturing tobacco, substantially as herein set forth.

73,355.—REFLECTOR.—W m. M. Marshall, Philadelphia, Pa.
I claim. let. The flexible base, B, of pasteboard, papier maché, wood, or sheet metal, in combination with the silvered strips of glass, A A, the metal frame, C C, and the curved wire mesh work, D D D, and the metal clasps, F F F and H H, substantially as described.

2d, The wire frame, C C, the curved wire mesh work, D D D, and the metal clasps, F F F F and most mill as described.

2d, The wire frame, C C, the curved wire mesh work, A and the base, B when arranged together so as to form a reflector or section of a reflector, substantially as described and for the purpose set forth.

73,356.—GRAIN TESTER.—B. Martim, Prairie du Chien, Wis. I claim lst. The grain tester, with the scale, c c', graduated 6i degrees downward, as described, and with a straight edge, r r', upon one side, for the purpose of leveling the grain in the bucket, P, as herein shown and described.

2d, The combination of the spring, L, rod, m, and bucket, P, with the index finger, H, and scale, c c', as herein described and for the purpose specified.

73,357.—Breech-Loading Fire-arm.—James E. McBeth (assignor to him self and Sheldon Sturgeon), New Orleans, La.
I claim the close hinged box, D. in which are completely incased the lock and cock, and which is held in position by means of the spring dor, I, as and for the purpose specified.

for the purposes specified.

73,358.—LOCK CATCH AND STOPPER.—Edgar P. McCeney,
Washington county, D. C.

I claim so combining and arranging a bent lever, b, a slide bolt, c, with a
frame, a, in the manner substantially as and for the purposes set forth. n the manner substantially as and for the purposes set forth.

ELASTIC PRENTING APPARATUS.—James McDermott,

72,359.—ELASTIC PRINTING APPARATUS.—James INCDERMOUL, Frederick, Md.
I claim, 1st, The arrangement of the frame, A, movable bottom, B, set set ews. H, vokes, E, and adjustable types, substantially as described. 2d, the concave roller, i, shaft, K, reciprocating frame, J, guide grooves, Ok, lugs, J, frame, A, and inking apparatus, m m'n, when combined and arranged in the manner described.
73,360.—WINDLASS.—Wm. G. McIvor, Liverpool. England.
I claim the application of strings to a windlass to operate in themanner substantially as and for the purp os especified.
73,361.—Ash Sifter.—Joseph A. Miller, New York city.
I claim the combination in a box or case. of the upper and lower chambers A B.grate, C D, the one portion, D, of which inclines upward, and sluce or grate, for cleansize ashes or cinders by a water process, essentially as herein set forth. 73,362.—Apparatus for Singeing Cotton Cloth.—Joseph

A. Miller, New York city.

I claim, 1st, In combination with a rotating singeing body, or surface, the reflector, E, substantially as described.

2d, The combination of a damper, F, with a rotating singeing body or surface, essentially as specified,

2d. The combination of a damper, F, with a rotating singular race, essentially as specified,
73,863.—Steam Generator.—J. A. Miller, Providence, R. I. I claim, 1st, The combination of the fire dome, F, with the fire chamber, C, and tubes, G J, arranged and operating essentially as hereinset forth.

2d. The arrangement of the valves, H, within the smoke box, for controlling the central or fire dome flues, substantially as shown and described.
72,364.—Steam Generator.—J. A. Miller, Providence, R. I. I claim, 1st, The combination of the tubes, C and E, with the shelds, D, crownsheets, C, and lower sheets, d, substantially as specified.
2d. The combination of the shields, D, with the sediment tubes, E, and outer tubes, C, essentially as herein set forth.
72,365.—Combined Drill, Roller, and Cultivator.—T.S. —Combined Drill, Roller, and Cultivator.—T.S.

onter tubes, C, essentially as herein sectoria.

73,365.—COMBINED DRILL, ROLLER, AND CULTIVATOR.—T.S.

Mills, Kendallsville, Ind.

I claim, 1st, Constructing theframe of the machine of two parts, A A, connected by joints, a, and each part provided with a roller, B, when said parts, thus constructed and arranged, are used in combination with a seed dropping apparatus for planting seed either in hills or drills.

2d, The Operating of the toothed wheels, G, from one of the rollers, B, through the medium of the gearing, J M, pitman, I, connected with bar, K, and with crank pulley, H, on one of the shafes, F, of the wheels, G, all arranged substantially as and for the purpose setforth.

3d, The har, O, attached centrally and longitudinally to the frame at its rear end, and provided at its front end with a caster wheel, P. In connection with the wheel K, and strap, I, or their equivalents, for raising and lowering the front part of the machine, as set forth.

4th, Operating the seed distributing wheels, U, through the medium of the toothed segment, W, at the lower gnd of the benchever, X, and the pinion Y, on one of the shifts, F, substantially as and for the purpose specified.

73,366.—STAMP MILL.—Geo. R. Mitchell, Nevatda, Uolorado. I claim, 1st, The bearing, D, having the lower portion enlarged, forming a water chamber, a, substantially as described.

2d, In combination with the above and with the stem, B, of stamp, a, the watersupply pipe, H, tube. F, stop cock, G, and flexible hose, E, substantially as described.

73,367.—MANUFACTURE OF ARGANO GAS BURNERS.—George Mooney (assignor to himself, Job Arnold, and James Shaw, Jr.), Provi-

Mooney assignor to himself, Job Arnold, and James Shaw, Jr.), Providence 1t. I. claim, 1st, Forming an argand gas burner of one piece of metal, substantly as described.

d. Forming the gas jet apertures through the top or rim of the burner tially as described.

2d. Form ing the gas jet apertures through the top or rim of the burner without drilling, and substantially as described.

3d. The screw, f. forming an adjustable check, in combination with an argand burner, for the purpose of producing a still light, as herein shown and dear thed.

described.

73,368.—Horse Collar.—Thomas Moore, New York city.

I claim forming a horse collar with one outside and one inside leather piece joined together at the sides, with two seams only, and bent around continuously at the bottom, so asto make a collar with a whole throat, having no cross seam, arranged substantially as herein described.

73,369.—Eye Medicine.—D. R. Morgan, San Francisco, Cal.

I claim the above described composition fortreating the eyes, made of the ingredients enumerated, mixed or compounded in about the proportions specified.

specined. 73.370.—Совк Ехтвастов.—Jas. Morton, Philadelphia, Pa

I claim a double lever cork extractor consisting of the bars, A C and D, all made and operating substantially as herein shown and described.
73,371.—SPINNING MACHINE.—Robt. Moxley, Muscatine, O.

I claim, ist, The combination and arrangement of the shaft, a'', belts, a a' shatts, F F', brake, T, treadles for tightening the belts, a a', belt, c, and carriage, C, all the said partisbeing constructed and operating together substantially in the manner and for the burposes specified.

2d The arrangement of the said parts with the belts, b and d, wheel, D, apront, J failer, I, sitce, L, sets crew, I, inclines, g g, and gate, G, the whole constituting a combined nand roll and twisting machine, substantially as described

constituting a combined naturous and wassing machine, occasional, as scribed.

3d, The adjustable apparatus for indicating the twist, consisting of the slide of, belt. u, knot. o', lever, v, and bell, W, all arranged and operating substantially as and for the purpose set forth.

73,372.—LAMP.—George Neilson, Boston, Mass.

1 claim in combination with the tops of lamps for using burning fluids, an annular cork packing, made, arranged, located, and held in position in the lamp, in the manner and for the purpose heren described and represented.

73,373.—APPLE SLICER.—H. Norton and J. S. B. Norton, Fermington Mc.

Farmington, Me: OLICER.—H. Norton and J. S. B. Norton, We claim the combination as well asthe arrangement of the corer, K, with the kn ives, L L' and H H'H", substantially as described and for the purpose set forth.

73,374.—Loom.—Benjamin Oldfield and Edwin Oldfield, Newark, N. J. Autedated Jan. 4, 1868.
We claim, 1st. The combination of a brake, c2 or d, with the tension spring c, reel. R. and shuttle, S, substantially as and for the purpose set forth. 2d, The spring catch or bridge piece, d, in combination with the shuttle, S, and reel, R, constructed and operating substantially as and for the purpose described.

lescribed.

3d, The loose peg, f, in combination with the shuttle carriers, C, guide bars, b, cams, g, and shuttle, S, constructed and operating substantially as and for the purpose set forth.

4th, The arrangement of slide bars, D, moving on the top of the batten, in straight line, without rise and fall, having uprights attached thereto with oles in to receive a loose peg or stud capable of carrying a shuttle, each seg or stud receiving motion by a cam or its equivalent, substantially as and or the jurpose set forth.

5th, The arrangement of cms, F, attached to or formed by the cog wheels 2, in combination withstops, k, on the slide bars, D, substantially as and for

for the purpose set forth,

5th, The arrangement of come, F, attached to or formed by the cog wheels
E, in combination withstops, k, on the slide bars, D, substantially as and for
the purpose described.

6ts, The arrangement of a cam, n, and eccentric, t, attached to and operated by the shalf that carries the shuttle actuating devices, and in combination therewith, the spring stop, s, bar, E', and bet shipper, H, constructed
and operating substantially as and for the purposes est forth.

7th, The arrangement of a brake, G, in combination with the stop motion
and shuttlemotion, constructed and o erating substantially as and for the
purpose described.

8th, Operating the barness backed and a set of the company of the barness backed and a set of the company of the barness backed and a set of the company of the barness backed and a set of the company of the barness backed and a set of the company of the comp

and shuttlemotion, constructed and o erating substantially as and to the purpose described.

Stb. Operating the harness by chains and chain wheels, N, and levers, L M, substantially as and for the purpose set forth.

9th, A harness motion composed of loose arms, I, each of which is pivoted at one end to a lever, M, and at the opposite end to a circular or segmental chain wheel, N, substantially as and for the purpose described.

10th, The vibrators, J, in combination with the rose, I, carrying the hooks P, and with the intervening hinge, O, and pattern chain, Q, constructed and operating substantially as and for the purpose set forth.

11th, The arrangement of slastic springs or cushions under the pins or studs of the pattern chain, I combination with the Theeded shanks of said pins or studs and with suitable ridges or cavifice on the inner suffaces of the several leaves of the pattern chain, substantially as and for the purpose described.

73,375.—Combining Copper and Cast Steel.—James Park, Jr., Pittsburg, Pa.

Iclaim combining copper and cast steel by heating the copper to a good red heat, and teeming or pouring thereon liqu'd mosten cast steel, substantially as and for the purposes hereinbefore described.

73,376—KEEL AND BILGE BLOCK.—J. T. Parlour, Brooklyn, N. Y., assignor to himself and William Beard.
I claim, 1st, The combination, with the blocks, B C D, and side pieces, E F, of the chains, G K, pulloys, M I L, ratchet wheel, Q, and pawl, R, all constructed, arranged, and operating substantially as described.
2d, The side strips to the supporting oreap piece of a bilge or keel block, substantially as and for the purpose specified.
73,377.—FINISH FOR FAINTED SURFACES.—H. T. Payne and Wm. Ayres, San Francisco, Cal. We claim a finisher for paint, consisting of crude galens, prepared and applied substantially as and for the purpose specified.
73,378.—CASE FOR UMBRELLA.—S. H. Pearce, Boston, Mass. I claim an numbrella-case composed of enamelled cloth, the parts of which

73,378.—CASE FOR UMBRELLA.—S. H. Pearce, Boston, Mass. I claim an umbrella-case composed of enamelled cloth, the parts of which are secured together by cement, substantially as described.
73,379.—MECHANICAL TOY.—H. G. Pearson, New York City. I claim, 1st, A mechanical toy, the positive motions of whose parts are derived from a crank or cranks on the axis or revolving hoop.
2d. Also, the combination, with such a crank or cranks, of a system or systems of connecting links, substantially as shown and described.
3d. Also, in combination, a revolving hoop, carrying a suspended image or toy, which does not revolve, but whose members are given positive and determined movements, substantially as described.
4th, Also, the combination, with the rooling hoop of a mechanical toy, of a radial arm, projecting from the hoop toward its center, as and for the purpose set forth.
5th, Also, the combination, with such a hoop and radial arm, of a jointed image.

pose set forth.

sth, Also, the combination, with such a hoop and radial arm, of a jointed image

73,380.—Dropping Platfferm for Harvester.—G. M. Peters, Lancaster, Ohio.

I claim, 1st, A slatted dropping platform adapted to turn upon a pivot located at its inner front corner, and to tilt or drop upon a hinge or fulcrum supports arranged in a line parallel with the finger par, substantially as described.

2d. The semicircular plate, E. provided with the incline or offset, e'in combination with the quadrant plate, or its equivalent, attached to the platform, and operating substantially as described.

3d. The slatted platform, pivoted at its inner front corner, in combination with the plates. E and F, or toeir equivalents, substantially as described.

4th, The dropping platform, pivoted at its inner front corner, in combination with the forked lever, J, and cam wheel, K, substantially as described.

5th, The combination of the turning and dropping platform, with the cut-off of very J, and cam wheel, K, substantially as described.

5th, The combination of the turning and dropping platform, with the cut-off of very J, and cam wheel, K, substantially as described.

5th, The combination of the turning and dropping platform, with the cut-off is operated by the same lever which throws into gear the mechanism operating the platform, as set forth.

73,381.—VALVE FOR STEAM ENGINE.—Wm. G. Pike, Philadelphia, Pa.

delphia, Pa.

I claim, 1st, The steam supply chest and supply-valves. B, and their stem E, in combination with the two exhaust valve boxes, N.N., exhaust pipes, O O1, terminating in a single pipe, O2, exhaust valves, J.J., and the ir stem, all arranged and operating in the manner and for the purpose substantially asset forth.

arranged and operating in the manner and for the purpose substantially as set forth.

2d, Also, arranging the exhaust valves, J.J., below the exhaust valve box covers, K.K., so that said valves move upon and against the underside of said covers, substantially as set forth.

73,382.—SEPARATOR.—J. F. Pool, Monroe, Wis.

I claim, 1-t., The thumb screws, P and W, when operating to adjust the screens, m and n, in the manner described.

2d, The screw, X, in connection with a roller, y, for regulating the hopperscreen and hop ier, as herein set forth.

3d, The bar, F, furnished with plates, g and e, in combination withshaft, H, plate, K, and hooks, s, the whole constructed substantially as set forth.

73,383.—Boxed Hone.—Joseph Potter and Oliff Abell, Whitehall, N. Y.

We claim, as a new article of manufacture, the circular hone encased in circular wooden box, having wooden cover. C, in such a manner as to protect the hone and keep its upper surface level, or from having depressions formed therein by the action of the tool being ground, as herein shown and described. described. 73,384.—Animal Trap.—Samuel Reed, Whitestown, Pa.

Taylor of the hinged vestibule, A, and trap, B, constructed and arranged substantially as and for the nurpose herein specified.

73,385.—CAR COUPLING.—Horace Resley, Cumberland, Md. I claim, ist, The links or bars, A, with shouldered head and beyelfed ends, and suspended by a flexible connection, so that they can rock or turn in the line of their length when they are to connect or sisconnect the train, substantially as described.

2d, Also, in combination with the link or bar, A, constructed and operating as above described, the box, B, with shoulders, c c, and rounded end, j, as and for the purpose herein described and represented.

73,386.—CRUTCH.—J. C. Rhodes, Stillwader, Minn.

I claim the handle, G, in combination with the rod, A, spur, B, and the devices for projecting and retracting said spur, substantially as set forth, 73,387.—ROOFING SCAFFOLD.—Peter Richmond, Aberdeen, assignor to himself and Jacob Lamb, Aurora, Ind.

I claim the side pieces, AA, platform, B, plates, II, and the frame, CC, or scantling, H, for forming a scaffold, the several parts being constructed and used substantially as and for the purpose set forth.

73,388.—HARVESTER RAKE.—Samuel C. Ridgaway, Baltimore, Md.

I claim, ist, Operating a harvester rake by means of a cam of suitable form, in combination with portain garm and lever or their conventers substants of the propose that a present of the conventers abstanting contribution with the protain garm and lever or their conventers substants.

more, Md.

I claim, ist, Operating a harvester rake by means of a cam of suitable form, a combination with a rotating arm and lever, or their equivalents, substantally as described.

in combination with a rotating arm and lever, or their equivalence, with the tailly as described.

2d. The combination of the rotating arm, a, rod, D, and rake, R, with the cam, B, when constructed and arranged to operate substantially as and for the purpose set forth.

73,389.—HARNESS PAD.—H. R. Ridgley, Mansfield, Ohio.

10.000.—11AKNESS FAD.—II. IS. KIUGIEV, Mansheld, Unio. I claim, as an improved article of manufacture, a harness-pad and iron, constructed as described, consisting of the solid flanged iron, m. having the crupper loop cast upon and with it, and the continuous pad, d. withits upper surface, m', formed of soleleather, covering and receiving the burrs, e, as herein described, for the purpose specified.
73,390.—Convertable Fork and Hook.—Lyman Riggs, Lausing, Mich.
I claim, 1st, The pin, F, constructed and operating substantially as and for the purposes set forth.

23. The constructed and operating substantially asspecified.

3. 301.—Chain Inclinometer.—Hermann Schussler, San

Francisco, Cal.

Francisco, Cal.

Iclaim achain inclinometer having the level, I, and scale, A A, together with the handle, III, for ascertaining the correct horizontal distance when measuring, the whole constructed and operated substantially as and for the purpose herein described. 73,392.—Cultivator.—J. B. Sexton (assignor to himself and

73,392.—CULTIVATOR.—I. B. Sexton (assignor to himself and John L. Andrew). Pella lowa. I claim, 1st. The adjustable fron bars, G. constructed substantially as herein shown and described, and adjustably attached to the end bars, a2, of the frame, A, as and for the purposes set forth.

2d. The beams, H, constructed substantially as herein shown and described, that is tosay, curved outward at their forward ends, and strengthened at their rear ends by the cross bars, J, as and for the purpose set forth.

3d, Th. curved adjustable bar or yoke, L, curved edgewise, and adjustably bolted to the cross bars J, substantially as herein shown and described and for the purpose set forth.

73,393 — SEED DRILL AND ROLLER.—S. Shirley, Guilford, II. Llaim, 1st. The wheels A1 with attachment A2 in combination with frame.

73,393 — SEED DRILL AND ROLLER.—S. Shirley, Guilford, Ill. Iclaim, 1st, The wheels, A1, with attachment, A2, in combination with frame A, when arranged as described.

2. The frame, 0, cutter, E, hopper, 0, drill point, 01, rods, s s', when combined and arranged as and for the purpose explained.

3d. The roller, T, with the V-shaped projection, having a triangular section cut out, as shown, as and for the purpose explained.

73,394.—Coal Box.—S. A. Simison (assignor to himself and Bovd D. Simison) Earlville, Ill.

I claim the hopper, B, and drawer, E, in combination with slide, C, and scuttle, G, the last two constructed and operating substantially by means as described, or other equivalent means, and the whole arranged substantially as described, forming a coal box of any desirable shape and size, for purpose herein set forth and specified. 73,395.—Movable Barrel, Stand.—P. J. Skinner, Oswego,

I claim the combination of the barrel stand with the rollers, D, and upright, 3, as and for the purpose specified

B, as and for the purpose specified.

73,396.—CHANGE GATE FOR RAILHOAD CARS.—J. B. Slawson, New York city.

I claim, 1st, A self-closing oscillating gate, B, when arranged in the door or front wall of a railroad car, omnibus, or other public vehicle, substantially as and for the purpose herein shown and described.

2d, A self-closing gate, B, when arranged as described, and when combined with a bell, I, so that whenever the gate is opened the bell will be struck, as set forth.

with a bell, I, so that whenever the gate is opened the bell will be struck, as setforth.

3d, The arrangement of the headed pin, E, and spring, h, in combination with the oscillaing, self-closi, gate, B, all made and operating substantially as and for the purpose herein shown and 'escribed.

73,397.—STORE TRUCK.—A. V. Smith, San Francisco, Cal. I claim, 1st, The roller. B, brake bar, E, brakes, Cc, holder, D D, metal arm H, and springs, c c, when applied to store trucks, substantially as described, for the purpose specified.

2d, The cross bar, I, handles, a a, straps, b b, ring, b', when arranged and operated substantially as described for the purposes specified.

73,398.—DEVICE FOR RAISING CASKS AND BARRELS.—Rob't Smith, Brooklyn, N, Y.

I claim, 1st, A device for transporting barrels, casks, etc, which is made and operating substantially as herelu shown and described.

2d. The wheels, B, when arranged in rows, the axles in one row not being in line with those in the other rows on the same side of the trame, A, substantially as and for the purpose herein shown and described.

3d. The frame, A, when provided with slotted upper bars, d, and blocks, g, in combination with the frame, C, and rollers, e and f, all made and operating substantially as and for the purpose herein shown and described.

4th, The device for changing the respective positions of the frames, A and, C, consisting of the lever, E, connecting rod, G, cross bar k, ears, i, and pin, m, all made, operating, and secured, substantially in the manner herein shown and described.

5th, The rollers, D D, on the frame, C, in combination with the frame, A, and rollers, B, as set forth.

and described.

5th, The rollers, D.D., on the frame, C., in combination with the frame, A., and rollers, B., as set forth.

73,399.—LET-OFF MECHANISM FOR LOOM.—T. S. Smith, Boston, and A.B. Ely, Newton, Mass., assignors to William F. Ely, Stratford, Cohn.

ford, Colla.

We claim, let, The arm, J, in combination with arm, I, and whip roll, F, when J is made adjustable in I, and the parts are severally arranged, substantially as described.

2d. The whip roll, F, and arm, I, having an adjustable arm, J, in combination with the single detent lever or pawl, K k, and escapement wheel, E, when severally constructed and arranged for operation, substantially as described.

The lever, Gg, with or without adjustable fulcrum, and having an adjustable weight. L, as set forth, in combination with rocking shaft roll. F, all ar-

able weight; I, as set forth, in combination with rocking-shaft roll, F, all arranges substantially as described.

4th, The combination of lever, G g, weight, L, arm, a, levers, F I J K, and escapement wheel, E, all arranged and operating substantially as and for the purposes set forth.

5th, The rod, o, and brake, p P, arranged in combination with and in relation to the yarn beam and whip roll, substantially as and for the purposes described.

tion to the yarn beam and whip roll, substantially as and for the purposes described.

6th, The rod, o, and brake, p.P. in combination with a ler-off mechanism operated by the strain of the yarn, substantially as described.

7th, The mechanism for throwing back the rod, n, or rod, o, to free the yarn beam, substantially as described.

73,400.—WATER WHEEL.—William Snodgrass, Cold Spring,

Wis.

1 claim the float, D, with its valves a' and c, the scroll, B, and the segment f, with the sliding piece. g, the spring, h, and screw, i, when arranged and combined substantially as described, and for the purposes set forth.

73,401.—MRCHANICAL MOVEMENT.—E. Soper, N. Y. city.

1 claim a crank, when composed of the gene wheely, Band D, or their equivalents, and of the plates, C, and pin, a, a' made substantially as described, and operating so that the velocity of the shart is increased without increasing the number of revolutions of the crank.

73,402.—Combined Cathleter AND Syringe.—Dr. N. B. Sorloborger, Northampton. Mass.

10,402.—COMPLIABLE STATES Soraborger, Northampton. Mass.

I claim the slide or collar on the body to a syringe, in combination with a collar in the discharge tube, when the two are connected together and archive states of the state of the purpose described.

ranged for operation substantially as and for the purpose described.

Also, the loops applied to the cylinder of a syringe for receiving fastening straps, substantially as described.

73,403.—Horse Hay Fork.—Isaac C. Spear, New Wilming-

ton, Pa.

I claim, in connection with the curved lines of a hay elevator, a locking device, consisting of arms, b.c., link, d, and detaching lever, f, or its mechanical equivalent, constructed and arranged substantially as and for the purposes hereinbefore set forth.

Received Reston Mass ereinbefore set forth. .—Wash Board.—Edgar M. Stevens, Boston, Mass.

"I claim a corrugated wash board, when made of India-rubber mixed with fibrousmaterial, and shaped and vuicanized in the mold, substantially as described. 73,405.—Skate.—W. X. Stevens, Waterford, N. Y.

I claim 1st, Forming the sole and blade of a skate from one continuous piece or sheet of metal by first slitting or cutting, and then bending the said metal sheet, substantially in the manner and for the purposes herein shown and described.

metal sheet, substantially in the manner and for the purposes herein shown and described.

2d, A combined skate sole and blade, formed from a continuous sheet of metal as described, and corrugated or indented at the angle formed by the sole, with the blade, so as to form braces for stiffening the said parts, substantially as shown and set forth.

3d, The combination with a skate of ordinary or suitable construction, of theh erein described spring clutch for grasping the boot sole, the same being pivoted to the forward part of the skate, so as to extend diagonally across the sole of the same, under the arrangement and for operation as shown and set forth.

set forth.

4th, The combination with a skate of ordinary or suitable construction, having a stationary jaw or equivalent bearing for the rear of the bootheel of the pivoted catch and adjustable set screw, for holding the said boot heel to the skate under the arrangement and for operation as herein shown and set

73,406.—Check-Rein Hook.—F. U. Stokes, Cincinnati, Ohio. Antedated January 2, 1863.

I claim the grop piece, G, secured to the point of the check hook, as shown te, for the purpose of closing the check hook and preventing the rein get-

ting out. 73,407.—Annealing Furnace.—W. R.Thomas, Catasauqua

Pa. I claim the rings, E, placed between and supporting the car wheels, and fitting study within the furnace, A, whereov the heat is prevented from reaching the chilled tread of the wheel, while the center is being annealed by intense heat, the whole supported upon the offset, s, in the farmace, as herein set forth for the purpose specified.

73,408.—Machine For Softening Leather and Hides.—

15,405.—MACHINE FOR SOFTENING LEATHER AND INDES.—
Jonathan Tidd, Woburn, Mass.
I claim, 1st, A leather softening machine, constructed and arranged to operate substantially as described for the purpose specified.
2d. The perforated bed, B, or its equivalent, and the pins, c, or their equivalents, with the yielding cross head, G, and the supporting beam, K, for the purpose and substantially as described.
3d. The shaft, H, wheels or cranks, I, pitmen k and rods m, combined with the cross head, G, in the manner and for the purpose substantially as described.

with the cross head, G, in the manner and for the purpose substantially as described.

4th, The nuts, d and e, and springs, g, combined with the rods, m, and the cross head, G, for the purpose and abstantially as described.

73,409.—LAMP.—Howard Tilden, Boston, Mass.

I claim, 1st, The openings, ii, in the flange, C, arranged in relation to the cap, B, in the manner and for the purposes specified.

2d, The ring, D, when provided with the sustaining wires, e e, and combined with the base, A, substantially as and to operate as set forth.

3d, The base, A, the ring, D, and the cap, B, when arranged with relation to each other substantially as described.

4th, The ring, J, arranged upon and used to lift the cap, B, by, as described and set forth.

72,410.—Sausage Stuffer.—John P. Troxell, Hancock, Md.

Iclaim the sausare stuffing machine herein described, consisting of the higher devinders, C.C. rack bars, H.P. provided with alsks, I.I. situated as described, and open ted by wheels. E.F. G. W. so that while one cylinder is filling the other cylinder may be filled with meat, and prepared to fill its casing as soon as the 'rst cylinder has done its work, and vice versa, subcasing as soon as the 'rst cylinder has done its work, and vice versa, substantially as described. 73,411.—Machine for Sizing Hat Bodies.—Henry Warner,

Newark, N. J.

I claim, let, The combination of the reciprocating rocking platen or board, C, blaten or board, D, and connecting rods, zy, with the crank shaft, B, as and forthe purpose described.

2d, Theinjectors, G and H, and the distributor, w, when used in combination with the boards, C and D, substantially as shown.

3d, The expressing rollers, F, and the weights, L, when combined with the described sizing machine, in the manner and for the purpose specified.

73,412.—Crank Planer.—William H. Warren, Worcester

73,412.—URANK FLANER.—William H. Warren, Worcester, Mass.

1 claim, 1st, The combination, with a crank planer or like machine, of mechanism substantially as herein described, for regulating the throw of the crank without stopping or interrupting the continuous operation of the machine, as shown and set forth.

2d, The combination, with gear, F. and face plate, E, of the tubular shaft, g, central shaft, 3. serew shaft, 8, and gears, 4 h 6, and 7, substantially as and for the purpose's set forth.

3d, The combination with the shaft 2, and gear, 1, of the loose gear, 5, and pulley, 12, or its uncoharical equivalent, operating substantially in the manner and for the purpose's herein shown and described.

4th, The combination, with gears, 1 and 5. and pulley, 12, mounted on the shaft, 2, as described, or gears, 4 and h, and their respective shafts, arranged for operation substantially as and for the purposes hereir, snown and specified.

5th. The combination, with the friction pulley, 12, and beyeled pin, 13, of the lever, H, and shoulder, 15, substantially as and for the purposes set forth. -Mode of Straining Wood Saws.—Joseph R. Web

73,415.—MODE OF STRAIGHTS WOOD SALES ster, Boston, Mass.

1 claim, in combination with a hand sawframe, the lever, i, and mechanism by which it is connected with the frame, and is operated to strain the saw blane, substantially as set ierth.

73,414.—Tube Well.—Rollin C. Welch and Joseph B. Mil-

char, DCC, substantially as and for the purpose specified.

73,417.—CIDER MILL.—W. N. Whiteley, Jerome Fassler, and O.S. Kelly, Springfield, Ohlo.
We ciaim, 1st, Constructing the grinding box in two parts, substantially as set forth, and attaching the bearings of the crushing rollers to the upper part, as and for the purpose set forth.

2d, Mounting the journals of the grinding rollers, VV. in boxes, which are attached to the lower side of the sidewise projecting flange, by screw bolts, and so that the said boxes may be slightly adjustable as to their distance from each other, as set forth and described.

3d, The construction of the press frame with the press beam, L, the stay rods, JJ, the frontposts, AA, the girder, B, the tierods, HH, and the angle irons, II, as set forth.

4th, The two ribbedcrushing vollers, SS, and the two grinding rollers, VV, directly beneath them, and running at different speeds, combined and arranged in a metallic grinding box constructed in two parts, and the bearings of one set of rollers conjected to one of said parts, and the bearings of the other set connected to the other of said parts.

78,418.—ANIMAL TRAP.—James P. Wigal, Henderson, Ky. I claim, 1st, the combination of the ooil spring, H, crank, G, lever catches, I an dJ, spiral spring, L, or its equivalent, connecting rods, E and F, and arm, D, with each other and with the wings, B and C, substantially as herein shown and deserted, and for the purpose set tortin. 2d, The combination of the pivoted platform, M, arm, N, connecting rod or wire, O, elbow lever, P, and bar, R, with each other and with the lever catch. J, for the purpose of springing the trap, substantially as herein shown nd described.

satch. J. for the purpose of springing the trap, substantially as herein shown and described.

3d. The comb nation of the arm, T. and connecting rod or wire, U., with the drop gate, S. and lever catch, I, for the purpose of resetting the trap, substantially as herein shown and described.

4th, The combination of the curved arm, W., with the wing, B. and drop gate, Y, substantially as herein shown and described, and for the purpose set

73,419.—Manufacture of Pens.—Edwin Wiley, Brooklyn,

73,420.—WORM FENCE AND PEN.—John Will, Bryan, Ohio. I claim, 1st, the worm fence, constructed as described, whereby pens or yards can be formed by interlocking from either side, as herein shown and described.

Yaris can be formed by interlocking from either side, as herein shown and described.

21. The sections, provided with notches at one end in the under part of each board, and, at the other end, in the top part of each board, the notches in the under side of one section engaging with the upper notches of the other section, and held in postulon by means of the cleats upon each side of the boards, near each end, all constructed and arranged as herein set forth, for the purpose specified.

73.421.—VENEER—John B. Wilson, New York, N. Y.
I claim the veneer produced by a corrugated or zigzag cut, substantially in the manner as described.

73.422.—FIFE COUPLING.—Lewis Wilson, Ovid, N. Y.
I claim the double convex metal ring. b. interposed between the ends of

73,422.—PIPE COUPLING.—Lewis Wilson, Ovid, N. Y. Claim the double convex metal ring, b, interposed between the ends of the pipes, A. A, and fitted into recesses, c., formed therein, and retained in position by external pressure, applied through screw bots, a a, or their equivalents, substantially in the manner and for the purpose described.
73,423.—WOOD TURNING LATHE.—E. K. Wisell, Warren, O. I claim the reciprocating and vibrating frame, H. pivoted to the adjustable rod, K, and carrying the adjustable live and doad centers, M.M., arranged concentrically with the axis of the revolving cutter-head, B, and operating substantially as and for the purpose described.
73,424.—HARVESTER.—William F. Good win, East New York, assignor to Samuel Johnston, Syracuse, N. Y.

73,424.—11ARVESTER.—William F. GOOdwin, East New York, assignor to Samuel Johnston, Syracuse, N. Y. Iclain, 1st, The arrangement of pinions, H. H', and the transmitting wheels on arms, F. F., on and around the axle and within the drum, E, where by the required number of revolutions is obtained, substantially as described.

2d, The spur and bevel pinions, H. H' and I, mounted on the tubular sleeve or axle, and operated by means of the drum and transmitting wheels, substantially as described.

3d, The secondary gram, F', carrying the transmitting wheel gearing with the drum and secondary pinion, H', for the purpose set forth.

73,425.—Constructing Artesian Wells.—N. W. Green, Contland N. Y.

Cortland, N.Y.

The herein described process of sinking wells, where no rock is to be penetrated, v.z., by driving or forcing down a rod to and into the water under ground, and withdrawing it, and inserting a tube in its place to draw the water through, substantially as herein described.

73,426.—COMEINED TROUGH AND DOUBLE RACK FOR FEEDING SHEEP, CATTLE AND HORSES.—James Douglass McBride, Mansfield, Ohio.

Ohio.

I claim, ist. The box trough, A. constructed substantially as a escribed, and provided with the rack. I and the subplementary troughs formed by the hinged boards, B. B. as and for the purpose herein set forth.

2d. The rack, composed of the bars, D. D. and D. and bars, E. forming a double rack, and hinged coverfor the box, A, when used in combination with the said box, substantially as set forth.

3d. The graduating end bars, P.P. used in combination with the bar, D. for enlarging or contracting the upper and lower racks, as and for the purpose set forth.

REISSUES.

2,830.—CAR STARTING APPARATUS.—Joseph Steger, New York city. Dated July 9, 1867.

1 claim. 1st, The multiplying gear, consisting of the traction bar, T, lever requivalent, L, pivoted pawl, R. ratchet wheel, W, spiral spring, S, and pring, PS, constructed and operating substantially as and for the purpose pecufical.

2d, The gearing device, consisting of the spring, PS, provided with a foot putton and the pawl, R, suspended from said spring, substantially as and for the purpose set forth. the purpose set forth. 2,831.—Nursing Bottle.—Milo S. Burr, Boston, Mass., as-

2,001.—INURSING BOTTLE.—MINO S. Buth, Boston, Mass., assignee by mesne assignment of Francis J. La Forme.

I claim my said improved nursing bottle, having its body, A. composed of glass or other suitable material, and provided with an elastic nipple, or mouth piece, f, and a flexible or pendulous tube, C, applied thereto, substantially in manner and so as to operate as and for the purpose set forth.

Also, in a nursing bottle, otherwise Properly organized, the use or application of a flexible or pendulous tube, substantially as and for the purpose set forth.

forth. A heriote of pendudus cube, substantiarly as and of the purpose set forth.

Also, the application of a gravitating tip or tube, e, to the lower end of the flexible tube, c, substantially as an I for the purpose set forth.

2,832.— HEATING APPARATUS.— Thomas S. Clogston, Boston, Mass. Dated Dec. 13, 1864.

I claim the application and use, for heating purposes, of one or more tubes having a corrugated or annular ribbed surface, in combination with a boller or other suitable steam generator, and pipes for conducting the steam or hot water from said generator to the corrugated tubes, essentially as herein shown and described.

-Pegging Machine.—Wm. N. Ely, Stratford, Conn.

2,833.—PEGGING MACHINE.—Wm. N. Ely, Stratford, Conn., assignee of Edgar M. Stevens. Dated May 23, 1377.
I claim, ist, The combination of a vibrating moving awl with a sliding or vertically moving, or a swinging head, substantially as described.
24. The combination of a feeding awl, with a sliding and swinging head, or with a sliding head, or with a sliding and driving the awl bar and peg driving bar, or either of them, positively and directly, by means substantially as described.
3d, Raising and driving the awl bar and peg driving bar, or either of them, positively and directly, by means substantially as described, in combination with a isterally moving or feeding awl.
4th, So constructing the parts that the awl bar, moving up and down perpendicularly to its carriage, shall also move laterally, substantially as and for the pnrposes described.
5th, In combination with the foregoing, the laterally and vertically moving peg driving bar, subsantially as and for the pnrposes described.
5th, In combination with the foregoing, the laterally and vertically moving peg driving bar, subsantially as and for the pnrposes described.
5th, In combination and arranging the knife in relation to the driver and peg tube, substantially as described.
7th. Cutting the peg from the strip, substantially as described.
7th. Cutting the peg from the strip, substantially as described.
7th. Dated Jan. 11, 1858. Reissue 524, dated Feb. 9, 1858; extended seven years.

years. I claim the loop bolt, provided with the groove, b, and the hook or loop, e, in combination with the set-ring, also provided with a groove, b', all constructed and arranged substantially as and for the purpose set forth. 2,835.—Steam Boiler Furnace.—John T. Hancock, Bos-

ton, Mass. Dated March 1, 1884.

I claim the method of supplying air and steam to ignited fuel in furnaces, by commingling and then introducing them into an enclosed space under the grate bar, by means substantially as above described. HAND STAMP.—B. B. Hill, Chicopee, Mass. Patented

November 6, 1866. The employment of an indicator index or calendar, R R', to represent the period of time, in combination with stamp-canceling wheels. I J. arranged and operating substantially as described. 24, Also, the wheel case, G, stud or axis pin, a, with the ribbon cylinder when made in one piece of metal, substantially as and for the purpose decapted.

scribed.

3d. Also, the calendar wheels, R.R., arranged upon the same axie with the wheels, I.J. in combination with the hand stamp, arranged and operating substantially as described.

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

5th, Also, in a hand stamp, the comployment of the flanch, K, on the chase, L, in combination with the case, G, and bed, C, for the purpose of easily and quickly attaching and etaching said chase on or off of subcase.

2,837.—STRAW CUTTER.—Franklin Benjamin Hunt, Richmond, Ind. Patented January 5, 1864. Reissue 2,368, dated October 2, 1866. Islam let. The bar x cast in one piece with the heavings, b, b, of cutter.

mond, Ind. Patented January 5. 1864. Reissue 2,368, dated October 2, 1866.

I claim, 1st, The bar, x, cast in one piece, with the bearings, b b, of cutter shart, c, and extending across from one to the other, substantially as shown, 2d, Also, connecting the feed rollers, G and H, by means of the pinions, a', b', a', and e', the pinions, b' and d', being p'acet on strus on the swinging plate, c', attached to the shaft, n, the pinions, d'and e', being kept in gear by the link, f, or its equivalent.

3d, Also, the swinging plate, c', connected to the shaft, n, and carrying the pinions, b' and d', substantially as and for the purpuse shown and set forth. 4th, Also, inonating the upper feed roller, H, in a frame, with sling extending below the lowerfeed roller, and acced upon by a spring, or its equivalent, substantially as shown and for the purpuse set forth. 5th, Also, the hooked slings, q, q, in combination with the vielding feed roller, H, and spring, I, or itsequivalent, whereby the said feed roller, H, is limited in its upward movements, as set forth.

6th, Also, the hubs or bearings, u'u', attached to the slings, q, and surrounding the shatt, p, of the feed roller, H, said hubs moving in slots, b b, in plates, w, and relieving the shaft from iriction against the plates, as set forth.

in plates, w, and relieving the shaft from friction against the plates, as set forth.

7th, Also, the guide board or plate, u, connected to and moving with the frame, t, of the upper feed roller, H, and extending downward at the back of the said roller to near a level with its axis, substantially as and for the purposes extforth.

8th, I claim the slots, v v, in the plates, w, when made eccentric with shaft, C, in combination with pinions, a, b, d, and e, said pinions connecting feed rollers. H and G, so that the adjustable roller can move up and down concentric with shaft, C, and the pinious remain for gear, substantially as set forth.

9th, Also, in combination with the bar, x, and adjustable bar, E, a revolving knife. D, with its axis placed above the plane of the adjustable cutter bar, E, to act with a slanting and shearing cut, substantially as set forth.

2,838.—STRAW CUTTER.—Franklin B. Hunt, Richmond, Ind., assignee by mesne assignments of himself. Patented December 27, 101aim, 1st, Combining in one piece the bed piece, R, upon which the adjustable to r, f, rests, and the side pieces, VV, substantially as shown and described.

justable bar, T. rests, and the side pieces, V.V., substantially as shown and described.

2d. The adjustable bar, T. against which the knife cuts, when secured, by vertical bolls, U. to an immovable bearing within the limits of the width of the cutting knife, as shown.

3d, The plate, Y. for the purpose of covering the joint between the adjustable bar, T. against which the knife cuts, and the best piece, R. in manner substantially as set forth.

4th. The link bearings, M., attached to the shatt, D, and carrying the feed roll, Q. in combination with the springs, W. in such manner that, as the roll rises, it shortens the operative length of the springs, and the reby gives the greatest pressure to the roll when most needed, in manner substantially as shown.

5th. Attaching the fly wheel of a feed cutter to its shaft in such manner as to constitute a yielding device between said wheel and the cutting knife, for the purpose described.

6th. Attaching the knife cylinder of a feed cutter to its shaft in manner shown, or in an equivalent way, to constitute a yielding device between the knife and other parts of the machine, for the purpose hereinshown and set forth.

2,839.—Fire Annihilator.—Chas. T. Jerome, Minneapolis,

2,000.—FIRE ANNIHILATOR.—Chas. T. Jerome, Munneapolis, Minn. Patented July 9, 1867.

I claim, 18t. The application of a quick match, or its equivalent, which will take fire at a low temperature, to an apparatus for extinguishing fires by an injection upon the same of a gaseous or a liquid non-supporer of combustion, substantially as described.

22. Preparing the ends of the quick matches with a composition composed of the within described ingredients mixed together in about the proportious set forth.

set forth.

2.840.—CLOTHES WRINGER.—C. H. Knox, Mount Pleasant,
Lowa. Patented July 2, 1887.

1 claim, 1st, The double cog wheel, P, and doubleptation, S, substantially as
set forth.

2d, The combination of cog wheel, P, and pinion, S, with rollers, D D, substantially as and for the purpose set forth.

3d, Thearrangement and combination of lever, M, hinged to box, A, roller
L, rolls, K, levers, I, and plate, C, arranged to operate upper roller, D, as set
forth.

2,841.—Machine for Making Drain Pipe.—Bradford S.

2,841.—MACHINE FOR MAKING DRAIN PIPE.—Bradford S. Pierce. New Beators, Mass., and Mason R. Pierce. Woodstock, N.Y. Patented April 19, 1859. Reissue 1,897. Dated Feb. 28, 1865.

We claim, 1st, A moid consisting of a case capable of being properly secured around the material while the pipe is being no ded, and of being freed from the pipe when the moiding is completed, in combination with a core, and also with a core socket, having a provision for freeing the socket, or pipe, or both, from the core, the whole operating substantially as set forth.

23, A noid in which the core socket is made separate and distinct from the other parts, and so formed, and so combined with such other parts, that its capable of being connected with them when the moid is readyfor use, and of being continuously kept connected with them during the entire process of moiding and sinishing the pipe, substantially as and for the purpose described.

3d, The arrangement of the mixing apparatus and of the core relieving devives above the platform, which conveys the molds in the manner and for the purpose substantially as specified.

vives above the platform, which conveys the molds in the manner and for the purpose substantially as specified.
4th. The combination of the corescoke, with the revolving disk, which receives the core and the mold, when the disk contains a provision for enabling the socket or pipe, or both, to be freed from the core, the whole operating substantially as described.
2,842.—Hoop Skirt.—Wm. T. Ryerson, Philadelphia, Pa.

2,842.—HOOP SKIRT.—WM. T. Kyetzon, thiladelphia, ra. Patented Aug. 27,1837.

I claim a skeleton skirt provided with buckles, or their equivalent, ear the waist band, for adjusting the vertical tapes or connections at the sides of the skirt, to accommodate the size and shape of the hips, or vary the length of the skirt, substantially as set forth.

2,843.—WEAVING.—William Smith, New York city. Dated April 5,1853. Extended seven years. Reissue 2,656. Dated June 18, 1867. I claim the process herein specified of weaving consisting in the use of stationary warps in combination with moving warps and filling that inclose such stationary warps. substantially as set forth.

stationary warps in combination with moving warps and alling that inclose such stationary warps, substantially as set forth.

2,844.—Weaving.—William Smith, New York city. Dated April 5,1853. Extended seven years. Reissue 2,656. Dated June 18, 1867. I claim the heddle, or its equivalent, for supporting the stationary central warps in combination with mechanism, substantially as set forth for performing the weaving.

2,845.—Centrifugal Machine for Draining Sugar and Other Substances.—David M. Weston, Boston, Mass. Dated April 9, 1867.

1967. It is, In the construction of centrifugal machines for separating liquids from other substances suspending such machines at the top by flexible connections, operating substantially as described.

24. The combination of the spindle, D, and its accessories with the socket, B, and its india-rubber bushing, C, or other equivalent spring connection to form a flexible and elastic bearing for the shaft, E, by which the cylinder may be suspended, substantially as described.

3d. The employment in a centrifugal machine of a hollow shaft and a spindle or axie on which it runsto support the cylinder or basket, substantially as described.

3d. The employment in a centrifugal machine of a hollow shaft and a spindle or axle on which it runsto support the cylinder or basket, substantially as described.

4th, So forming and arranging the driving pulley, F, upon the shaft, E, that it shall surround the spring-bearing, substantially in the manner and for the purpose described.

5th, The construction of the openings, I, in the bottom of the cylinder in such machines and the valve, J, for the purpose of closing the same, substantially as described.

6th, The combination of the cylinder, G, the hollow shaft, E, the driving pulley, F, the spindle, D, its elastic bushing, C, and socket, B, to form the operative part of a centrifugal machine, substantially as described.

2,845.—TRINITERS CHASE.—Richard Yeomans, Cincinnati, Ohio. Dated October 24, 1865.

10 Claim the transverse notches or grooves in combination with the projecting transverse obtuse edges specifically as set forth, for the purposes designed.

DESIGNS

-Снаге.—Levi Heywood (assignor to Heywood, Broth-

ers & Co.), Gardner, Mass.

2,859.—FLOOR OIL CLOTH PATTERN.—John T. Webster, New York city, assignor to Edward Harvey, Brooklyn, N. Y.

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 grunt of any of these reissues should immediately address Munn & Co., & Park Row, N. Y.

47,753. — PLOW CASTING. — Francis F. Smith, Collinsville, Conn. Dated May 16th, 1865. Application for relssue received and filed January 2d, 1868. I claim, as a new article of manufacture, plow plates made of scemic steel, faced with cast steel.

9,540.—OPERATING THE TREADLISS OF LOOMS.—Robert M. Andrews Stefford Conn. Dated January 18th 1979. Patended Vision.

faced with cast steel.

9,540.—OPERATING THE TREADLES OF LOOMS.—Robert M.
Andrews, Stafford, Conn. Dated January 18th, 1853. Extended January 17th, 1867. Application for reissue received and filed January 8th, 1868. I claim operating each treadile by means of a mover having two outward watting cam surfaces of unequal lengths combined in one piece, and producing the movements and retentions substantially as herein set forth.

It also claim such a relative form and arrangement of the treadles and the movers and cams, that the cams can be reversed upon the shaft, and thereby cause a reversal of the movements and retentions of the said treadles, substantially as herein set forth.

It also claim, in a cam loom, having upright treadles or harness levers, actuated by a single set of cam wheels arranging the fulcrum shaft of the harness levers directly over or within the vertical plane of the cam wheels, substantially as described.

55,789.—GFARCNG.—Metropolitan Washing Machine Company, Middlefeld, Conn., assignees of S. Wand, J. F. Palmer, Auburn, N. T. Dated May 8th, 1866. Application for reissue received and filed January 8d, 1868.

I claim, 1st, Forming upon either or both faces of a disk or circular plate, cogs or teeth, so as to project from the faces of said disk in contradistinction to forming said teeth upon a hub so as to project radially therefrom, substantially as and for the purposes herein shown and described.

2d. The combination of toothed or cog wheels of ordinary or suitable construction, when used in pairs upon the same shaft, with a plate or plates or the wheels on the one shaft shall be field in place by the plate or plates of the wheels on the other shaft, and thus prevent the lateral play of the one shaft with respect to the other as efforth.

3d, In a machine having shafts arra-ged to operate, at varying distances from each other as described, the combination with a circular plate or plates of the shafts have engaged to a certain extent or depth the said plate or plates of the shafts have engage when the gear wheels of the shafts have engaged to a certain extent or lepth the said plate or plates and hub shall come in contact and prevent the urther and undue penetration of the teeth of said gears, substantially as and or the purposes specified. 36,044.—AUTOMATIC APPARATUS FOR LIGHTING AND EXTIN-

66,044.—AUTOMATIC APPARATUS FOR LIGHTING AND EXTINGUISHING GAS.—E.P. Russell and P. Tremain (assignees of E. P. Russell), Manlius, N. Y. Dated June 25th, 1867. Application for reissue received and filed January 4th, 1868.

I claim, 1st, The screws, F.F., the bolts, J.J., the disk, H., and the arms, H., each separately and in combination with each other, made and operated substantially as and or the purposes set forth.

2d. The combination and arrangement substantially as described, of the main spring, K. gas cock, N., and arms, H., for the purposes set forth.

3d. The step shaft, E. and thumb screw, I. each separately and in combination with the bollow shaft, F. and the hands, D. D., arranged and operated substantially as and for the purposes described.

4th, I claim the springs, i j. separately and also in combination with the bollos, J., when made and operated as above described.

70,272.—Mode of Lighting Street Gas Burners.—E. P. Russell, and Poter Tremain (assignees of E. P. Russell), Manlins, N. Y.

70,272.—Mode of Lighting Street Gas Burners.—E. P. Russell, and Porter Tremain (assignees of E. P. Russell), Manitus, N. Y. Dated et. 29th, 1867. Application for reissue received and filed January 4th, 1868.

I claim a smallsupplemental burner, A, to be kept burning constantly, and the pipe leading thereto when operating in connection with a main burner, substantially as and for the purposes set forth.

I also claim the same parts, in combination with a main pipe and burner, to be used in connection with any kind of automatic a quaratus for lighting and extinguishing gas, substantially as above described.

13,197.—MACHINE FOR MITERING PRINTERS RULES.—R. Hoe & Co. (assignees of William McDonald), New York city. Dated July 34, 1855. Application for reissue received and filed January 6th, 1868, I claim the combination with a movable cutter of a sector, guide, plate, a rule bolding bed and adjusting mechanism, constructed and operating substantially as described and for the purposes specified.

NOTE.--The aboveclaims for Reissue are now pending before the Patent Office and will not be officially passed upon until the expiration or 30 days from the date of filling the application. All persons who desire to oppose the Grantof any of these claims should make immediate application.

MUNN & CO., Societors of Patents, 37 Park Row, N. Y.

Inventions Patented in England by Americans. [Condensed from the "Journal of the Commissioners of Patents."]

PROVISIONAL PROTECTION FOR SIX MONTHS.

3,451.—LIGHTING, HEATING, AND COOKING APPARATUS.—Zoeth Durfee, Philadelphia, Pa. Dec. 4, 1867.
3,484.—OPERATING CHAIR FOR DENTISTS.—James B. Morrison, St. Louis, Mc. Dec. 7, 1867. Philadelphia, Pa. Dec. 4, 1867.
3,484.—OPERATING CHAIR FOR DENTISTS.—James B. Morrison, St. Louis,
Mo. Dec. 7, 1867.
3,494.—Weighing Apparatus.—Joseph A. Munn, New York City. Dec. 7,
1867.
3,500.—Machine For Excavating Difches and Drains.—Henry C. Ingraham, Technisch, Mich. Dec. 9, 1867.