RECENT AMERICAN PATENTS.

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

Mode of Disabling Ordnance.—The object of this invention is to provide for the certain disabling of ordnance, whenever it becomes necessary in war, by destroying the trunnions; and to this end it consists in making cavities in the trunnions for the reception of charges of gunpowder, by the explosion of which the trunnions may be entirely blown off or broken to such an extent as to prevent the possibility of mounting the piece for service. This improvement is the invention of P. B. Lawson, of Cold Spring, N. Y., and Alfred Berney, of Jersey City, N. J.

Shaking Machine for Separating Ores. - The object of this invention is to separate the different substances contained in a certain ore, according to their specific gravity, simply by the motion of the water and without any attention on the part of the operator. The invention consists in the arrangement of a tube extending through the sieve a short distance up into a cylindrical jacket, in combination with said sieve, and with a suitable agitator, in such a manner that the heaviest particles contained in the ore, which precipitate first to the sieve, close up the access to the tube within the cylindrical jacket, and only such particles are allowed to escape through said tube, the specific gravity of which is equal to that of the first sediment. The inventor of this improvement is A. W. Schell, of Clausthal, Hanover, who has assigned it to Geo. Asmus, of Houghton, Mich., who may be addressed in relation to it.

Molds for Castings. - The success of castings depend greatly on the skill of the molder; and in molding the operation of drawing the pattern or lifting it out of the sand constitutes one of the most important and difficult operations. The sand must be moistened in order to give it the required compactness, and even then, if the operation of drawing the pattern is not performed by a skillful and steady hand, the edges of the cavities produced in the sand by the patterns are liable to break off, and a poor casting is the result. The object of this invention is to facilitate the operation of drawing the pattern or patterns, and it consists in the arrangement of movable legs or pins operated by means of a screw and a hinged lever or by other suitable means, in combination with the match-board and flask, in such a manner that by the action of said legs or pins on the flask, the pattern or patterns secured to the matchboard are raised up perfectly steady and drawn from the sand with the greatest ease and facility. John R. Davis, of Racine, Wis., is the inventor of this improvement.

Saw-gummer—The object of this invention is to obtain a device for gumming saws which will admit of a clean, smooth cut of the die without the liability of the saw slipping or springing under the cutting operation, a contingency of frequent occurrence with all saw-gumming devices. To obviate this difficulty the movable die or cutter is fitted within a clamp which is arranged in such a manner as to operate in connection with the movable die and firmly clamp the saw or hold it in proper position while the mov able die is at its work; the clamp, after the cut is made, rising after the die is raised, in order to liberate the saw and admit of its being turned or moved to bring the succeeding space between the teeth in line with the movable and the stationary female die in order to receive the succeeding cut. The inventor of this improvement is T. M. Chapman, of Old Town

Breech-loading Fire-arm.—The invention relates to that class of breech-loading fire-arms in which the breech is opened and closed by a movement of the barrel and stock relatively to each other about an axis parallel with the bore of the barrel. It consists of certain improved means of withdrawing the discharged cartridge cases from the barrel in such firearms; also in a certain mode of providing for the loading of such fire-arms either by hand or from a cartridge magazine in the stock. The inventor of this improvement is R. F. Cook, of Watertown, N. Y.

Pianoforte Action .- This invention relates to the

application, in combination with that kind of pianoforte action known in this country as the French action, of certain novel and simple devices, thereby rendering it perfect as a repeating action without friction. It consists, first, in inserting a spring having a two-fold effect, viz., that of partially raising the hammer when the key is struck, and also of replacing the point of the jack in its normal position on the least upward motion of the playing end of the key, and so providing for a rapid repetition of the stroke by the hammer on the string. Second, the introduction of a regulating screw and button, for the purpose of graduating the power of said spring to the weight of hammer it may have to sustain. Third, the lengthening of the downward projection of the hammer butt, in order to form a connection. horizontally, with the upper end of the spring, and thus giving leverage for the cumulative power of said spring to act on in raising the hammer. Fourth, in the insertion within a cavity provided for it in a hammer butt (of the so-called French action, under the cushion against which the point of the jack falls on returning to its position after each blow of the hammer) of a second cushion, thus giving great elasticity, by which the percussion of the jack against the first cushion is deadened in a greater degree, and the disagreeable thumping, common in the French action, is obviated. T. C. Faulder, of Albany, N. Y., is the inventor of this improvement.



ISSUEDFROMTRE UNITEDSTATES PATENT OFFICE

FOR THE WEEK ENDING MARCH 10, 1863.

Reported Officially for the Scientific American

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

-Reducing Long-staple Fiber.—Stephen M. Allen,

37,846.—Reducing Long-staple Fiber.—Stephen M. Allen, Woburn, Mass.:
I claim, first, The process of treating long-stapled fiber for the purpose of converting the same into a short-stapled fiber by the application to the fiber to be reduced of successive washings in warm water, increasing in temperature as herein described, in combination with the use of alkaline solution, substantially in the manner and for the purposes herein before set forth.

Second, In combination with the treatment of long-stapled fiber by successive washings in warm water and subsequent boiling, I claim themselved for reducing the same mechanically, in the manner and purpose herein described.

37,847.—Stove.—Evans Backus, Coxsackie, N. Y.: I claim the insertion of mica, i, in a movable band or rim, K, or in an equivalent slide, arranged in relation with the openings, d, in the cylinder, E, or body of the stove for the purpose set forth.

This invention consists in a novel application of mica to a stove whereby the former is rendered capable of being adjusted so as to expose the fire when desired, and also capable of being adjusted so as to be free from the fire or not in contact with the fire chamber. The object of this arrangement is to protect the mica from the smoke in building fires, the former discoloring the mica and soon rendering it opaq de and consequently worthless.]

37,848.—Composition for lining Oil Barrels, &c.—Friedrik Becker, Scranton, Pa.: I claim the application of the above-mentioned composition, to prevent barrels, boxes, &c., from leaking, even kerosene oil bar-

37,849.—Securing Shutters and Show-windows.—Friedrik

Becker, Scranton, Pa.:
I claim the mode of securing the shutters by means of the peculiar constructed catches, C, governed by the apparatus as above described and shown in the drawings.

and shown in the drawings.

37,850.—Machine for leathering Tacks.—Lewis G. Bradford & Charles O. Churchill, Plymouth, Mass.:
We claim, first, The application of the regulator or stop motion, M, by the action of which any obstruction to the free movement of the horizontal reciprocating separator, K, is detected and the motion of the separator stopped.

Second, The combination and arrangement of the tack guide substantially as described, by which the tack is taken from the separator and held in a perpendicular position (causing each tack to be centred alike) while being driven through the leather, and a uniform appearance of the washers insured.

Third, The combination with the bottom of the piston, G, of the plate, p, and clastic piece, q, the whole being arranged to operate in connection with the stationary circular cutter, R, in a tack-leathering machine as and for the purposes set forth.

27.851.—Floor-warmer.—Clarissa Britain, 'Saint Joseph.

27.851.—Floor-warmer.—Clarissa Britain, Saint Joseph.

MICH.:
I claim the application to the bottom of a stove of a reflector, A, nstructed and operating in the manner, and for the purpose serified

generated and specified.

[The object of this invention is to use the heat produced at the bottom of a stove for the purpose of heating the floor around or on the sides and in front of the same, therebywarming the feet of the

37,852.—Binding Attachment to Harvesters.—H. M. & W.

W. Burson, Atkinson, Ill.:

We claim, first, The combination of the arm, C, fore-arm, C', andle piece, D, lever, E, with groove, g, acting substantially as and or the purpose set forth.

Second, The combination of the ratchet pulley, N, with the spring atchets, L and M, acting substantially as described.

Third, Extending the arm, C, back of its, bearing, a, and placing hereon the reel, G, and pulley, k, for the purposes here in set forth. Fourth, The combination of the handle-piece, D, slide, F, lever, L, and cord, I, acting substantially as and for the purpose set forth.

37,853.—Device for gumming Saws.—T. M. Chapman, Old Town, Maine:
I claim the male die, C, clamp, I, and female die, e, combined and arranged to operate as and for the purpose herein set forth.
I further claim the combination of the levers, D G, bar H, and screw-rod, P, arranged with or applied to the stock, A, as a particular means for operating the die, C, and clamp, L, as herein described.

Breech-loading Fire-arm.—Roswell F. Cook,

37,884.—Breech-loading Fire-arm.—Roswell F. Cook, Watertown, N. Y.:

I claim, first, The lever, k, spring, m, slide, n, and spring, p, the whole applied in combination with each other and with the hooked slide, I i, the chamber piece, B, or barrel, and the breech, B, and operating substantially as and for the purpose herein specified.

Second, In combination with the arrangement of the magazine below the axis about which the barrel and stock move relatively to each other, I claim so constructing the frame, A, B, that at a certain position between that proper for firing, and that proper for loading from the magazine, the rear end of the barrel or chamber is exposed in an open condition, thereby providing for loading by hand, or from the magazine as may be convenient, substantially as herein described.

37,855.—Wagon Body.—N. B. Cooper, Gratis. Ohio: I claim the ends of the wagon body as herein fully set for lescribed, in combination with the frame, D, and the side pie and O, as and for the purpose specified.

-Jointed Scull Propeller .- C. Dann, Rushford,

37,856.—Jointed Scull Propeller.—C. Dann, Rushford, Minn.:
Telaim, first, The arrangement of the jointed blades, A A', in combination with the beams, C, suspended eccentrically from a pivot, c, in the loose ends of oscillating arms, D, all constructed and operating substantially as and for the purpose shown and described. Second, The arrangement of the slots, c', in the beams, C, in combination with the pivot, c, on the oscillating arms, D, and with the sculling blades, A A', constructed and operating substantially in the manner and for the purpose here in specified.

[The object of this invention is an improvement in that class of propellars, in which ancellating blade suspended from rising and

ropellers, in which an oscillating blade, suspended from a rising and fallingrod and operating within a tube or channel or submerged der water, is employed, and which are commonly designated scull propellers.]

37,857.—Mold for Castings.— John R. Davis, Racine, Wis. I claim the application of movable legs, H, operated by means o a screw. D, and hinged lavers, F, or their equivalents, in combination with the match-board or pattern, A, and fask, B, substantially as and for the purpose herein shown and described.

37,858.—Saw Stave-jointer.—William H. Doane, Cincin

nati, Ohio:

I claim, first, Springing or bending the stave in the carriage during any stage of its progress between the saws or at any point on the bedplate, by the actuation of simply a lever connected with bending mechanism, and without adjusting the carriage to a certain position relatively to a bending bar, substantially as set forth.

Second, The cam gear and rack, or their equivalents, arranged to move with the carriage and operating substantially as herein described, for the purpose set forth.

Third, The combination of the curved spring stop, hand lever, sliding rack and be ender, substantially as and for the purpose described. Fourth, Adjusting the pitch of the saws by means of a combination of a horizontal axis, with a vertical sliding post, substantially as and for the purpose described.

Fifth, The combination of the horizontal lever, vertical double highing post and saw arbor frames or yokes substantially as described.

Sixth, The angular slotted spring lever, R, curved stop-plate and vertically acting lever, Q, in combination with the double highing vertical goet for maintaining the desired pitch of the saws substant.

cribed.

Sixth, The angular slotted spring lever, R, curved stop-plate and rerically acting lever, Q, in combination with the double hinging critical post for maintaining the desired pitch of the saws, substanially as described.

37,859.—Pulley Block.—Joseph M. Drake, Amityville,

N. Y.:

I claim as an improved article of manufacture, a pulley block nade with its wheel, B, grooved centrally and provided with balls, C, all as herein shown and described.

This invention relates to a new and improved anti-friction device pplied to the wheel or pulley of the block in such a manner as reatly diminish friction in the rotation of the wheel or pulley on axle and at the same time form a strong and durable bushing for th same.]

37,860.—Piano-forte Action.—T. C. Faulder, Albany, N. Y.:

I claim, first, The spring, b, attached to the jack, and connected with the lower part of the hammer-butt substantially as and for the purpose herein specified.

Second, The regulating screw, d, applied in combination with the jack, and with the spring, b, substantially as and for the purpose herein specified.

herein specified.
Third, Arranging the connection of the spring, b, and the hammerbut between the top of the spring and an elongation of the lower
portion of the hammer but substantially as herein set forth.
Fourth, I claim the second cushion, g, applied at the back of the
cushion, h, within a hole bored fortis reception in the hammer, but
as shown in Figure 2, and herein described for the purpose set forth.

37,861.—Straw-cutter.—Wm. B. Frederick, Pontiac, Mich.:
I claim the arrange ment together of the apron, f, knife, F, gate, D, box, A. treadle, E, weight, G', spring, J, pulley, I, and connecting cord, H, all in the manner herein shown and described.
I also claim the combination of the weight, G, with the spring, J, for the purpose described.

[This invention relates to an improvement in that class of straw, hay and stalk cutters in which a reciprocating knife is used and arranged to operate over the mouth of the feed-box. The invention consists in applying a weight and spring to the knife-frame, whereby the knife-frame is counterpoised and an impetus given it at the commencement of its upward movement, thereby greatly facilitating the operation of the knife and admitting of the machine being operted with ease by the foot of the operator.]

37.862 .- Railroad Car Spring .- Perry G. Gardiner, New

37,862.—Railroad Car Spring.—Perry G. Gardiner, New York City:
I claim, first, The manner of applying the wool (or other fibrous materials), within a spiral or circular steel-spring, so as to hold the wool in a columnar formed and compressed to a sufficient degree of compactness to act as a spring itself and also add and strengthen the spiral spring at the same time and hold it in a straight line.

Second, I claim the peculiar construction of the followers, b' b', in being composed of a wooden plug within the hollow cylinder, thereby producing lightness and economy.

Third, I claim in combination with the other parts of the spring, the manner of giving a progressive or increased elastic resistance according to the increase of the load, by making the columns constituting the springs of different hights as described.

37,863.—Door Bell.—Melvin A. Genung, Gransville, Ohio: I claim the combination of the chains, X. brackets, D, springs, F and G, and supporting hinge, S, when all arearranged as and for the purpose specified.

37,864.—Folding Chair.—Henry S. Golightly and Charles
B. Twitchell, New Haven, Conn.:
I claim the combination and arrangement described of the legs,
AA, back or arms, BB, legs, CC, and seat bars, S, when the same
operate to fold and lock in the manner substantially as herein specified.

37,865.—Wrench.—G. W. Griswold, Logansport, Ind. I claim making the notches or openings of a bar wrench of sizes or capacities, so that, by turning it over, it will present ferent areas of openings, substantially as herein represented.

7,866.—Caoutchouc or India-rubber.—Liver as Hull, Charlestown, Mass.:
I claim the improved product, manufacture or composition hereinbove explained, it consisting of caoutchouc, as described, combined ith or having applied to it the carbon spirits and chloride of sulphur weans or in manner substantially as specified.

37,867.—Lamp.—Carl A. Kleeman, Erfurt, Prussia:
I claim the notch, i, in the cylinder, f, for the purposes and a specified.

I claim the notch, i, in the cylinder, ., ...
Specified.
I claim the interior air-tube, k, of the burner, formed of thin sheet
metal. with the screw thread made by bending said sheet metal, as

specined.

I also claim the arrangement of the wick tube, o, cylinder, p, and cup, 3, at the upper end of said cylinder, p, to return any overflow of oil to the inside of the cylinder, h, as specified.

37,868.—Lamp and Lantern Burner.—C. W. T. Krausch, Chicago, Ill.:

I claim heating and supplying air to the flame of a lamp or lantern in a space included within a spiral coil, substantially as and for the purpose described.

37.869.—Grain-dryer.—C. W. T. Krausch, Chicago, Ill.: 37,869.—Grain-dryer.—U. W. T. Krausch, Uhicago, Ill.: felaim the combination of an agitating cleaning and conducting device or devices, with the carrier belt or belts of a grain-dryer, substantially as and for the purpose set forth. Second, The arrangement of mechanism for vibrating a series of agitating and cleaning sieve shutes, arranged at opposite ends of a series of endless grain-carriers or belts of a grain-dryer, substantially as described.

series of encless grain-carriers or robels of a grain-dryer, substantially as described.

Third, Producing a circulation of air through the chambers of a grain-dryer, and expelling the same therefrom, for the purposes set forth, by means of one or more fans, applied with respect to the endless grain-carriers, the air-heating chambers, and the drying chamber, and operating substantially as described.

Fourth, The arrangement of the fire-furnace, hot-air chambers, e.e., alignstable valve or valves, if, and drying chamber, B, or their equivalents, substantially as and for the purposes set forth.

Fifth, The valves, ij', in combination with the fan cases and the drying chamber and its valves, if, substantially as and for the purposes set forth.

Sixth, The air-chambers, k k' 1, in combination with the fan cases and the drying chamber, substantially as described.

Seventh, The combination of the scource with the drying apparatus substantially as described.

Eighth, The combination of the scource with the grain-dryer, substantially as described, whereby the grain is dried, agitated, dusted, scoured, separated and cooled, as set for it.

37,870.—Chambered Trunnion for disabling Ordnance.—
Peter B. Lawson, Cold Spring, N. Y., and Alfred Berney, Jersey City, N. J.:
I claim providing oavities in the trunnions of ordnance for the reception of charges of gunpowder by the explosion of which the trunnions may be broken off or destroyed, substantially as herein specified.

37,871.-Coal Sonttle.-William Miller, New York City: I claim the application of a corrugated cast-fron bottom, D, to a cuttle, A, as and for the purpose herein shown and described.

[This invention consists in the application to a coal scuttle of a

rugated cast-iron bottom in such a manner that, by its corrugated shape, said bottom, however thin it may be made, will preserve considerable strength and durability, much superior in this respect to the ordinary plain or concave cast-iron bottom.]

37,872.—Mast Hoop.—David R. Procter, Gloucester

Mass.:
I claim a mast hoop having the ends that abut against each other closed and held firmly together by the wedge-shaped brace or tie secured to the hoop by the two iron rings or bands, I.V.
In combination with the above, I also claim the attached concave piece, K, that holds the leach tope and prevents the friction of the opposite side of the hoop upon the mast.

37,873.—Hay Press.—William Ridonour, Springfield, Ohio: I claim, first, The end-discharging-horizontal trunk, B, made widest horizontally, and having its band grooves in vertical planes longitudinal of said trunk, the whole being combined and operating substantially as set forth.

inal of said trunk, the whole being combined and operating substantially as set forth.

Second, The end-discharging-horizontal trunk, B, whose sides, b b',
toward its discharging end, are disconnected from the frame, and are
confined by cams, I I', for the pressing of the bale, and are adapted
to spread for the release of the bale substantially as set forth.

Third, Constructing the follower of an end-discharging horizontal
hay or cotton press with side wings, H H', which project forward and
embrace the hay or cotton on two opposite sides during the advance
of the follower, in the manner set forth.

Fourth, The rear upper door, C, hinged at back, and having the
sliding panel, c, adapted to close the rear end of the trunk until the
passage of the follower, as herein explained.

Fifth, The provision, in an end-discharging-horizontal press, of an
expelling block or blocks, X, attachable to the front of the follower
and operating as described.

Sixth, The described arrangement of pressing and retracting windlasses, X, and P, sweet, TQ Q, gearing S S', treadle, P', cords, O and
X, pulleyy, I, tugale, M, and follower, G, as and for the object stated.

37,874.—Curry-comb.—John W. Rockwell, Ridgefield,

Conn.:

I claim the combination of a card and curry-comb by fastening the card and the bars of the comb to either side of a wood or metal stock, or back, being either flat or triangular.

I claim the mode of fastening the bars of the comb, the stock and the card together by extending the ends of the bars of the comb over the ends of the stock and bending them on to the ends of the card, thereby securing all together and saving the labor and expense of riveting.

the ends of the stock and bending them on to the ends of the card, thereby securing all together and saving the labor and expense of riveting.

Second, I claim providing the blank, D, with the points, ii, as herein described and for the purpose set forth.

Third, I claim attaching the blank, D, to the block H, by means of the points, ii, in the manner above set forth.

Fourth, I also claim an adjustable handle held in its socket by set screw or spring, or by a joint, or any device by which, in using a flat stock or back, the handle can be adjusted for using either comb or card, as desired.

37,875.—Fire Alarm and Heat Detector.—Alexander Ross, Brooklyn, N. Y.:
I claim the combination with the compound strip of an index movable on a scale to complete the circuit at any degree of heat corresponding with the point on the scale at which the index may have been set, and for the purpose described.

[This invention consists in the application of a compound strip of two or more different metals, or other suitable materials, to com plete or close the electric circuit by the increase or decrease of heat, and in combination with a movable index on a suitable scale to close the electric circuit at any degree of heat corresponding with the point on the scale at which the index may have been set, in such a manner that, by inserting into the electric circuit an alarm bell, or other suitable device, the alarm is sounded automatically at any increase or decrease of the temperature beyond the desired limits.]

6.—Die for turning Flanges.—Amos W. Sangster, Buffalo, N. Y.:
aim the dies, B and G, constructed and operated as and for the see set forth.

purpose set form.

37,877.—Lining Lead Pipes with Tin.—W. A. Shaw, New York City:

I claim the manufacture of lead pipe with a lining of tin by forcing an ingot of tin and an ingot of lead, while over a core, out of a cylinder through a dieby hydraulic pressure, as specified.

37,878.—Excavating and Ditching Machine.—B. F. Stowell, Quincy, Ill.:

I claim the employment or use of an abjustable yoke, M, applied to the end of the swinging or adjustable frame L, and provided with a

wheel, N, in combination with the side cutter, B, cutter, G, and end-less aprons, H K, the latter being placed in the swinging or adjustable frames, F L, and all arranged substantially as and for the purpose set forth.

(This invention relates to an improved arrangement pertaining to the discharging apron, whereby the same is allowed to adjust itself to buit the varying hight of the embankment or deposit made by the machine. The invention also relates to the employment of a side cutter applied to the machine and arranged in a novel way.]

37,879.—Fid.—Samuel H. Sugett, Eden, Maine:
I claim a fid made in two pieces or sections, so as to hold a thimble between said sections while a cringle is being driven over or on to the thimble, and over or on to the thimble, and then capable of removal therefrom, substantially as described.

from, substantially as described.

37,880.—Spur.—Tappen Townsend, Brooklyn, N. Y.:
I claim, first, The use of the socket, g, as described, and capable of
receiving the dove-tails on the ends of the branches, f, in combination
with the conical screw, or its equivalent, which perfects the joint,
while it causes the clamping of the sides of the heel.

Second, I further claim the flanged heel-plate moved by the screw,
c. in combination with the tlanges, i, the three flanges preventing in
their use the depression of the spur.

Third, I further claim the heel-plate, e, with its screw, in combination with the flat hooks, f, on the ends of the branches, by the joint
functions of which the spur is clamped on and to theheel in the direction of its length.

Fourth, I further claim the combination of the conical screw-nut,
d, or its equivalent, the heel-plate, e, flanged at its lower edge with
its screw, and the flanges, i, as affording a practicable method of
attaching spurs.

Fitth, I further claim the combination of d e and I i with the socket
g, and branches, f, substantially as described.

37,881.—Harvester.—Jesse Urmy, Wilmington, Del.: I claim, first, The raking attachment, or its equivalent, as a sul tute for one or the bars of an ordinary reel, when such attachmen capable of slicing in and out, and also of swinging around in the of a horizontal circle, substantially as and for the purpose set for Second, The loop-pivot, N, on one of the arms of the reel, for purpose set forth.

purpose set forth.

Third, The manner, substantially as described, of fitting the red standards, C C', to the platform, draft frame and adjusting lever, H, for the nurpose set forth.

dards, C.C., to the platform, grant range the purpose set forth.

ourth, The spring rod, R, and eye-bracket, T, in combination with the attachment, M2, which operates substantially as described for

a rake a ttachment? M2, which operates substantially as described for the purpose set forth. Fitth, The trip, W2, constructed and applied and operating substantially as and for the purpose set forth.

Sixth, The manner of combining the slide, O, and rake bar, M2, so that they move in and out together while the rake bar can turn independent of the slide, substantially as and for the purpose set forth.

Seventh, Providing the holes, V2, in the cam, reel, arm and rake attachment, in combination with having the rake teeth and friction roller, Q, removable, for the purpose set forth in the manner described.

roller, Q, removable, for the purpose set forth in the manner described.

Eighth, The manner, substantially as described, of fitting the cam, L, and the reel shaft bearing for operation together, with a view of having them adjustable, as set forth.

Ninth, In combination with the nests of pulleys for operating the rake reel at varying speeds, I claim the chain-tightener, applied and operating substantially as described.

Tenth, The single bar grain guard, applied on the front end of the draft frame, through the agency of a swivel-slotted device, J, substantially as and for the purpose set forth.

Eleventh, So applying the grain side wheel to a lever-hanger, which is connected to the seel standards and to the draft frame, substantially as described, that both the platform, with the cutting apparatus, and the reel, with the rake attachment, are elevated by the lever, H, substantially as set forth.

37,882.—Gun Carriage.—Maximilian Wappich, Sacramen-

87,882.—Gun Carriage.—Maximilian Wappich, Sacramento, Cal.:
I claim, first, Elevating and depressing guns by their trunnions, hrough the agency of a folding and expanding carriage, or its equivilent, substantially as and for the purpose set forth.
Second, The construction of the cheek plates of a gun carriage so hat they operate as levers, substantially as set forth.
Third, The application of the screw or screws, S, in the manner and or the purpose substantially as set forth.
Fourth, The training of the gun horizontally by a combination of sircular and straight movements, substantially as and for the purpose set forth.
Fifth, Adapting a gun which requires elevation and depression and norizontal training, for use, in connection with a porthole which is n size very little greater than the muzzle of the gun, substantially as each forth. 37,883.—Rat Trap.—I. M. Watson, Grand Rapids, Mich.: I claim the reacting spring, G, in combination with the guides, b and d, operated in the manner and for the purpose herein fully set forth and described.

forth and described.

37,884.—Self-inking Stamp.—J. D. Billings (assignor to himself and G. R. Weed), Rutland, Vt.:

I claim the slide, B, having the stamp, D, and apron, E, attached and operated through the medium of the wheel, F, rack, C, and groove rod, G, provided with the spring, O, in combination with the roller, L, and the pressure pad, K, operated from the rod, G, by means of the lever, H, all arranged as shown, or in an equivalent way, for the purpose herein set forth.

[This invention consists in having the stamp or the raised surface which is to be printed from, attached to a slide which has an ink aproneonnected to it, the slide being provided with a rack into which a toothed wheel, operated by a grooved plunger rod, works. the above named parts being arranged in connection with an ink roller and a pressure pad, in such a manner that the stamp or raised surface to be printed from will be properly inked and the impression given by a simple blow of the hand on the plunger rod.]

37,885.—Machine for sawing Barrel-heads, Shingles, &c.
J. B. Dougherty (assignor to himself and Mary Ann
Lawler), Rochester, N. Y.:
I claim, first, The combination of the rack and pinions, PTRR,
and movable bar, N. with the frame carrying the bolt, the whole operating in the manner and for the purpose substantially as described.

cribed.

Second, I claim the arrangement of the rods, 11, and bar, N, as lerein described, whereby the latter may be adjusted so as to grasp bolt of any shape.

Third, I claim the combination of the bent lever, K, with the frame, V, said frame being made to rock on the shatt, I, so as to allow a olt to be entirely cut into shingles, in the manner set forth. Fourth, I claim the combination of the rod, H, with the frame, C, and shaft, B, said rod being so arranged as to allow the weight esting upon the rollers, r r, to be accurately adjusted.

37,886.—Apparatus for holding and supporting Boots and Shoes for use with Machines for screwing on Soles and Heels.—Eugene Lemercier, Paris, France, assignor to Amasa B. Howe, New York City:

I claim, first, The combination of the movable, vertical and beakshaped anvils or supports, so that either may be moved into or out of action, as the case may require, substantially as and for the purpose set forth.

Second, Arranging the anvil, d, on a frame or arm, g, that turns around the axis of the other anvil, a, so that the face of either of the anvils, that is, for the time being in use, shall be in the line of the axis of the screw that is being fed in, substantially as described.

37,887.—I.amp.—John J. Miller (assignor to himself and Ernst Prussing), Chicago, Ill.:

I claim the combination of the perforated supporting cone, G', with the perforated conical deflector, G, the latter converging upward in straight lines at an angle of 45°, or thereabout, with the perpendicular, and this I claim either with or without the coronal flange, H, and the spring clasp or socket, F, by which the cap may be adjusted vertically upon the wick tube.

[In this invention the cone or deflector is formed into a perforated retort, within which gas is generated from oil introduced either with or without a wick, and producing a brilliant flame without the use of a chimney.]

37,888.—Shaking Machine for separating Ores.—Aug-Wilh. Schell, Clausthal, Hanover, assignor to Geo.

Asmus, Houghton, Mich.:
I claim the employment or use of the tube, a, and cylindrical jacket, b, in combination with the sleve, A, of a shaking machine constructed and operating substantially as and for the purpose herein shown and described.

shown and described.

37,889.—Applying Cars to Railroad Tracks of Different Gages.—C. D. Tisdale (assignor to himself and B. W. Tisdale), East Boston, Mass.:

1 alaim the wheel-changing rails, C C, and the locking mechanism or their equivalents, in combination with the two tracks, A A B B, of different gages and with the wheels applied to the axles of the carriage, substantially as specified; and in combination therewith claim the guard rails, D D, for the purpose and to operate as described.

Islain the guard rates, B. B., to not pay pay to the serioled.

I also claim the combination of the switch, E. E., and the extra proad gage, track rail, F, with the wheel-changing rails and locking mechanism and the two tracks, A. B. B., of different gages, combined with wheels applied to the axles of the carriage, in manner and total to operate therewith substantially as specified.

I also claim the peculiar wheel-locking mechanism, the same consisting of the two yokes, G. G, and the wheel tubes made and applied to the axles, substantially in manner and so as to operate therewith as hereinbefore specified.

37,890.—Bending and setting Tire.—I. C. Singer, Ebens-

31,590.—Denumb and burg, Pa.:

I claim the arrangement and combination of the rack plates, B. the movable upright, I, the fluted roller, J, the portable rollers, E with movable collars, G, as operated by gear wheels, M and N, and gaged by figures, as described and for the purposes herein set forth.

RE-ISSUES.

1,428.—Metallic Cartridge for Breech-loading Fire-arms.

(Div. A.)—The Burnside Rifle Co., Providence, R. I., assigness of Ambrose E. Burnside. Patented March 5, 1856:

assignces of Ambrose E. Burnside. Patented March 5, 1856:

I claim a metallic cartridge case so constructed as to pack the joint between the movable cartridge block and the barrel, as set forth.

I also claim a conical cartridge case, operating as described, for the purpose of facilitating its withdrawal from the cartridge chamber after the discharge of the gun.

I also claim the enlargement upon the forward end of the cartridge case, operating as described.

1,429.—Breech-loading Fire-arm. (Div. B.)—The Burnside Rifle Co., Providence, R. I., assignces of Ambrose E. Burnside. Patented March 5, 1856:

I claim the movable cartridge block so arranged that it may be brought up to abut against the end of the gun barrel, with the orifice of its chamber coincident with that in the rear of the barrel, and carried away from the barrel for the purpose of loading, substantially as set forth.

And I also claim, in combination with the movable cartridge block abutting against the end of the barrel, enlarging the ends of the barrel and the cartridge chamber, as described, for the purpose set forth.

And also claim the conical cartridge chamber, operating as set

forth. And I also claim the conical cartridge chamber, operating as set forth, for the purpose described.

I also claim the sliding breech pin operating as set forth, for the purpose described.

I also claim the projection in the rear of the breech pin for the purpose of starting the pin forward as the cartridge block is with

1,430.—Silicated Soap.—G. E. Vanderburgh, New York City. Patented March 5, 1861:

I claim the use of a dissolved alkaline silicate as an ingredient in and component of soap, but this I only claim when the dissolved alkaline silicate thus employed contains, by chemical analysis, less than one-thirdas much soda, or less than one half as much potashor silica.

1,732.—Pump.—B. C. Cromwell (assignor to himself, S. D. Greenleaf, C. F. Douglass and R. C. Douglass), Skowhegan, Maine.

1,733.—Pump.—B. C. Cromwell (assignor to himself, S. D. Greenleaf, C. F. Douglass and R. C. Douglass), Skowhegan, Maine.

EXTENSIONS.

Method of manufacturing Drop Shot.—David Smith, New York City. Patented May 22, 1849:
I claim the application of au ascending artificial ourrent of air to cool the descending metal in the manufacture of drop shot.1

Loom for weaving Brussels Carpets, &c.—Erastus Bigelow, Mass. Patented March 10, 1849. Re-issued Oct. 9th, 1849; again re-issued May 5, 1857:
First, I claim, in combination with the pile wire or wires forweaving piled fabrics, a grooved receptacle or trough for holding said pile wire or wires in position whilst being pushed into the shed of the warp, substantially as specified.
Second, I claim pushing said pile wire or wires into the shed of the warp, by a driver or pusher, substantially as specified.
Third, I claim guiding and supporting the pile wires as they are inserted into the shed of the warp, by a guide or guides, through, over or on which said wires slide, substantially as specified.

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