## RECENT AMERICAN INVENTIONS.

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

Boot and Shoe-Pegging Machine. - This invention re lates to certain improvements in that class of boot and shoe-pegging machines in which the whole work is performed automatically, the boot or shoe sole being fed or presented to the awl and plunger, the holes made in the sole, the pegs driven therein and the pegs cut from the wooden strip and fed to the plunger. All these are arranged in such a manner that the work will be performed and the several parts operated from a single driving shaft, and it is believed by a more simple and efficient arrangement of means than has been hitherto employed for the purpose. The inventor is A. C. Gallahue, of Katonah, N. Y.

Boiler Feeder.—This invention consists in an apparatus composed of a close vessel arranged at a suitable distance above the intended level of the water in the boiler, and connected by two separate pipes with the boiler, and by a third pipe with an elevated reservoir from which it may be filled by gravitation, and having combined with it a novel system of valves and a novel arrangement of levers, weights and expanding chamber, and a float, whereby whenever the water in the boiler gets below a certain desired level the said vessel is caused, without manipulation, to empty itself into the boiler and be refilled from the reservoir or head, and to repeat such process until the water has risen again to the desired level, when the operation of the apparatus ceases. George W. Blake, of New York city, is the patentee of the above invention.

Mounting Ordnance.—This improvement relates principally to the invention which constitutes the subject matter of Letters Patent No. 13,249, dated July 17, 1855, viz., mounting a cannon in a carriage of circular form which is arranged to close the porthole or embrasure through which the piece works, but to turn freely in a horizontal direction, and which has an opening through it of suitable size and form to receive the gun and to allow it the necessary upward and downward movement to give it the desired elevation. The object of that invention was more especially the protection of the men working the gun, and while it failed to afford protection to the gun itself against an enemy's shot, it necessitates the use of a breech-loading gun. The principal objects of this invention are, first, not only to protect the men but to protect the gun from an enemy's cannon balls and other heavy projectiles, at all times except while being pointed or fired, when its muzzle is unavoidably exposed; and, second, to enable a muzzle or breech-loading gun to be used equally well, as may be desired. Charles F. Brown, of Warren, R. I., is the inventor and patentee of this device.

Lamp Wick.—This invention consists of a tubular lamp wick having a nap on the inner side by which the capillary attraction is more perfectly developed, and it is made to constitute a better conductor and facilitate the ascension of the heavier kinds of oil and to serve equally well for the lighter oils and illuminating fluids, forming a perfect feeder for all kinds of illuminating oil and fluids in the market, and preventing explosions by providing for the free escape of any superabundant generation of gases or vapors in the lamp. Joseph H. Connelly and John Cook, of Wheeling, Ohio, are the patentees of this invention.

Cylinder for Polishing Gunpowder.-This invention consists in the arrangement of a valve made of leather fastened upon wood or other suitable rigid material. in such a manner that the leather constituting said valve keeps the form of the cylinder, and it can easily be shut perfectly tight by passing a wedge through a staple projecting from the back of the valve. It consists further in the arrangement of a stationary piece of wood fastened upon the valve and let into the inner surface of the cylinder and held there by screws whether of wood or of metal, in such a manner that the leather constituting the valve is drawn up flat against the inner surface of the cylinder, and consequently causes as little unevenness as possible on said surface, thereby enabling the cylinder to produce a perfectly polished powder which is not cut or bruised. The inventor of this improvement is R. H. Cunningham, of Schaghticoke, N. Y.



ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WEEK ENDING AUGUST 26, 1862.

Reported Officially for the Scientific Americ

• Pamphlets giving full particulars of the mode of applying for patents, under the new law which went into force March 2, 1861, 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.

36,265.—Walter Aitken, of Newark, Ill., for Improved Current Water Wheel:
I claim the arrangement of the horizontal power wheel, A, the floats, a, and the braces, b, as connected with A, in the manner described.

scribed.

Second, I claim the combination and arrangement of thevertical axis, J, the wheel and axle, B c, the ratchet, d, the cogged semicircle. B, or its mechanical equivalent, for imparting motion to B, with the chain or its equivalent, e, for the purpose of elevating the wheel, A, all constructed and operating substantially as and for the purposes delineated and set forth.

36,266.—Albert Albertson, of New York City, for Improve-

ment in Bottle Stoppers:

I claim the application and use of a self-closing stopper for bottles, &c., constructed and operating substantially as described, so as to produce a perfectly tight stopper and which will preserve any liquid or substance from evaporization or injury.

36,267.—R. W. Bender, of Chicago, Ill., for Improvement in Apparatus for Evaporating by Means of Steam:
I claim the application, combination and arrangement of the receiver, A, the pipes, E and F, and the double-acting pump, P, operating as described, for the purposes substantially set forth.

36,268.—E. L. Bergstresser, of Berrysburg, Pa., for Improvement in Horscrakes:

I claim the construction and arrangement of the slotted sides, II II, in combination with the vibrating crossbar, K, and connecting rods, N, as arranged with the roller, Q, for the purpose of raising the teeth with greater regularity and facility, as herein described.

36,269.—A. G. Binns, of Goshen Township, Ohio, for Improvement in Churns:

I claim the arrangement and combination of the springs, G, rack, K, and wheel, I, arranged and combined as herein described and for the purposes set forth.

270.—G. W. Blake, of New York City, for Improved Self-Regulating Apparatus for Feeding Steam Boil-

ers:

Claim, first, The expanding chamber, I J K L, loaded lever, M, I claim, first, The expanding chamber, I J K L, loaded lever, M, and hook, p, or their equivalents, the whole arranged and applied in combination with each other and the valve spindles, cd, and with the vessel, A, to operate substantially as herein specified.

Second, The arrangement of the steam and water pipes, C and D, and their valves and valve spindles, cd, in such manner that the two valve spindles will occupy the same horizontal line and thereby provide for the two valves being operated simultaneously by a weightacting vertically, substantially as and for the purpose herein described.

Summer Blodgett of Cllover, Vermont, for Im-

ing vertically, substantially as and for the purpose herein described.

36,271.—Summer Blodgett, of Glover, Vermont, for Improved Winging Machine:

I claim the improved cloth squeezing machine as constructed with one clastic and one inclastic roller, and with the latter suspended in also claim the improved cloth squeezing machine as constructed with one clastic and one inclastic roller, and with the latter suspended in I also claim the combination and arrangement of the tub platform, B, with the roller frame, A, and its rollers, C D, as specified.

I also claim supporting the lower owooden roller by means of the endless suspension bands and their pullers, in combination with springs, the whole being arranged and applied to the said roller and its frame, substantially in manner and so as to operate as specified.

I also claim the arrangement of the adjusting screws and their washers with the springs, forks, endless bands and pulleys, as applied to the lower of the rollers, as set forth.

36,272.—Adeline J. Brooks, of Philadelphia, Pa., for Improvement in Corsets:

I claim a corset comprising the bowed pieces, c' c' c c c c' c' straight pieces, B' B B', within an intermediate zone or band and the gores, A, all combined and arranged substantially as described. 36.273.—C. F. Brown, of Warren, R.I., for Improvement

30,213.—C. F. Brown, of Warren, K. I., 107 improvement in Mounting Ordnance:

I claim combining the gun with the spheroidal, spherical or circular portion, A, of the carriage by means of a vertically moving slide, B, or its equivalent, whereby it is permitted to recoil or move back far enough to bring its muzzle within the said portion of the slide and so permitted to be brough within the vessel in such manner as to enable it to be loaded either at its muzzle or breech substantially as herein specified.

36,274.—John Carton, of Utica, N. Y., for Improvement in Railroad Lamps:

I claim the perforated ring, one or more, or other equivalent material, in combination with the tubes, B' and B, constructed and operatsubstantially as described.

163 substantially as described.

36,275.—S. C. Chamberlin, of Berlin, Mass., for Improved Shoulder Stick, for Finishing Boot and Shoe Soles:

I claim the improved shoulder stick as made with the stationary gage, c, the separate and adjustable polisher or reducer, d, the socket, a, and the slider, f, and its clamp screw, h, applied to the socket, and a cap, b. substantially as specified.

a cap, b. substantially as specified.

36,276.—A. P. Cochran, of Louisville, Ky., for Improvement in Retainers for Tobacco Presses:

I claim my improved retainer for tobacco presses, the said retainer being composed of the base, H, the cap, F, the upwardly tapering and slotted connecting posts, G G', the follower, J, the retaining rod, a, the washer blocks, c c', and the screw nut, b, or the equivalents of said parts when arranged, combined and operating with each other, substantially in the manner and for the purpose herein set forth.

36,277.—J. H. Connelly and John Cook, of Wheeling, Va., for Improvement in Wicks for Lamps:

We claim a tubular wick baving a nap on its innersurface, substantially as herein described.

36,278.—G. H. Corliss, of Providence, R. I., for Improved Steam Boiler:

I claim the method of constructing steam boilers by combining cylindrical circulating reservoirs with cylindrical tubular generators, arranged and connected substantially as and for the purposes specified.

36,279.—G. H. Corliss, of Providence, R. I., for Improved Method of Preventing Steam Boilers from Priming:

I claim the method of preventing the priming of steam boilers by conducting the steam from a common steam chamber to the main pipe, through numerous tubular orifices, arranged substantially as and for the purpose specified.

36,280.-G. H. Corliss, of Providence, R. I., for Improved Surface

Surface Condensers:

I claim constructing the tubes or condensing chambers of surface condensers with restricted apertures, substantially as described and for the purpose specified.

I also claim the combination of a receiver, A, with a series of tubes, BB, or their equivalents, each of which connects at one extremity with said receiver and at the other with the open air, substantially as described.

36,281.—G. H. Corliss, of Providence, R. I., for Improvement in Steam Generators:

ment in Steam Concrators:

I claim a combination of a surface condenser with a supplementary enerator which takes its heat from the flue leading to the chimney, or the purpose set forth.

generator which takes as accession of the purpose set forth.

I also claim the combination of a surface condenser, a supplementary generator and coil of steam pipe, substantially as and for the purpose described.

Paris of Philadelnhia. Par. for Improved

Refrigerator:

I claim a refrigerator having its inner walls or lining, A, made of glazed plates, of clay or stoneware, constructed and secured together, substantially in the manner described and set forth, for the purposes specified.

36,283.—John Dean, of Worcester, Mass., for Card Hold-

I claim forming a portable frame or porte carte-de-visite from a single sheet of metal, in the manner described herein.

36,284.—W. E. Doubleday, of Brooklyn, N. Y., for Improvement in Hats:

I claim a hat manufactured as herein specified, by inverting the surfaces after they have hear shared between hearted dies as said fourth.

aim a hat manufactured as herein specified, by inverting the sur-after they have been shaped between heated dies, as set forth.

faces after they have been shaped between heated dies, as set forth. 36,285.—Alexander Duncan, of York, Pa., for Improvement in Smut Machines:
I claim, first, The rotating concave plate, I, provided with a circular horizontal bottom, i, and vertical spikes, k, in connection with the stationary plate, K, provided with the teeth, I, and a pendent rim, m, arranged as and for the purposes specified.
Second, The cylinder, 3, formed of the annular rims, f, connected by the vertical rods or beaters, g, and provided internally with the fan, H, in connection with the perforated curb or hollow cylinder, L, and bars, M, having beveled toothed surfaces, o, arranged as herein set forth.
Third, The combination of the air chambers, d d, blast spouts, N N, and fans, H C, arranged with the cylinder, G, to operate in conjunction therewith, as and for the purpose specified.
This invention consists in the employment or use of a rotating con-

This invention consists in the employment or use of a rotating con-

I has invention consists in the employment or nee or a rotating con-cave spike bester, stationary convex toothed plate, vertical beaters, fans and expanding blast spouts, arranged in such a manner that the grain will be subjected to a thorough scouring and perfectly cleansed nd separated from smut and other impurities.]

36,286.—A. K. Eaton, of New York City, for Improvement in the Manufacture of Soap:
I claim the use, as a constituent in soap making, of the refuse liquors which result from the treatment of strawor other vegetable fibres with alkalies, the said refuse liquors containing alkali and more or less stilled and resin.

or less silica and resin.

36,287.—Henry Eddy, of North Bridgewater, Mass., for Improvement in Cribs for Horses:
I claim, first, The metallic collar, A, with or without the flange, t, in combination with the crib, substantially as described and for the purpose herein set forth.

Second, I claim the use of the adjustable regulators of the feed, M N, in combination with the sides of the crib, E X, substantially as specified.

field.

Third, I claim the elastic material, g. in combination with the crib, c. substantially as described and for the purpose herein set forth. Fourth, I claim the manner of connecting and adjusting the plates, B and O, as and for the purpose specified. Fifth, I claim the variable openings, d p, substantially as described and or the purpose herein set forth.

36,288.—W. M. Ellis and J. B. Ellis, of Washington, D. C., for Improvement in Steam Boilers:
We claim, first. Connecting the water legs extending continuously

We claim, first, Connecting the water legs extending continuously rom the front to the rear of the boiler to the shell of the boiler at the point of the working water line of the boiler, substantially as herein sectorth.
Second, Gradually increasing the area of the tubes from the highest to the lowest tubes, as described.

to the lowest tubes, as described.

36,289.—H. V. Faries, of Indianapolis, Ind., for Improvement in Pipe Wrenches:
I claim the jaw, C, of hook form, when attached to the jaw, B, and arranged relatively therewith to operate as and for the jurpose herein set forth.
I further claim the spring, D, in combination with the jaws, B C, arranged as and for the purpose specified.

[This invention consists in having a jaw of hook form connected by a pivotto a rigid or stationary jaw at the end of a handle or lever, the hook jaw extending over the face of the pirid jaw and all arranged in

hook is wextending over the face of the rigid law, and all arranged in such a manner that the implement, when applied to its work, will grasp the article to be turned firmly, and adjust itself to its size or di-

ameter without any special manipulation on the part of the operator, and at the same time, by the ordinary manipulation of the implement, release itself at each backward turn in order to admit of a fresh hold or grip being taken.]

36,290.—W. O. C. Fritschler, of Brooklyn, N. Y., for Improvement in Weighing Apparatus:

I claim the arrangement of the weighted box, D, containing the plumbing devices, kol, in combination with scales marked on the covers, il, and on the hear, d, and with the bent lever, A, all constructed and operating, substantially as shown and described.

[The object of this invention is a weighing apparatus which will pperate without weight or spring, and which will combine the advan-ages of the bent lever balance, and of the steelyard.]

6,291.—J. S. Gage, of Dowagiac, Mich., for Improve-ment in Seed Coverers for Grain Drills: I claim the coverers, A, open space, B, and projection, C, when com-led and arranged to operate in the manner and for the purpose set

of the state of th

. urth, The arrangement of the two frames, J M, as shown. One, nnected with the weight, L, and the other, M, pivoted to J, and

Fourth, The arrangement of the two frames, J. M., as shown. Une, J. connected with the weight, L., and the other, M. pivoted to J., and used with or without the spring, R. for the purpose of keeping the boot or shoe property presented to the awl and plunger, and thereby obviating the necessity of guiding the shoe by hand.

Fifth, The combination of the two slotted levers, E. E', and the awl and plunger bars, F. F', box, I, and guide box, D'.

Sixth, The double-jointed feeding pawl, Z., operated from the shaft, B', as shown, when used in combination with the ratchet, X., pinion, W, and rack, P., on block, O, placed in the frame, M, and arranged substantially as shown, to properly feed the boot or shoe to the awl and plunger, and also to adjust its operations to the various sizes of the shoes pegged.

16.293.—W. F. Grapler and A. J. Cutter, of Lewisburg, Pa., for Improvement in Car Couplings:
We claim the use of the hinge pin or bolt, A, in movable block, B,

mbination with the spring cap, C, to throw it back into position, to

ver, D, when the same is used in combination with said bolt, A, and movable block, B, as set forth and described.

hinge pin or boit, A, and movable block, B, as set forth and described.

36,294.—Robert Hamilton, of Franklin, Ind., for Improved Portable Sugar Evaporator:

I claim giving such a shape to the furnace box, B, that it can be combined with the head of the evaporating pan, A, by means of the finance, F, and in such a manner that the said fiange will prevent the incandescent fuel from being brought into direct contact with the said pan, whilst it will also prevent the flame from passing directly into the flues, g, g, all substantially as herein set forth.

When the evaporating pan, A, is supplied with the fiange, F, and with the flues, g, g, I also claim combining the dampers, I and m, with the furnace box, B, substantially in the manner and for the purpose herein set forth.

the furnace oox, b, substantially in the manner and for the purpose herein set forth.

36,295.—W. W. Hanes, of Covington, Ky., for Improvement in Explosive Projectiles for Ordnance:
I claim, first, Constructing projectiles for ordnance with an outside shell consisting of two parts screwed together, for the purpose and in the manner set forth.

Second, I also claim an independent inside shell or charge chamber, with two or more nipples and percussion caps attached, for the purpose of securing greater safety in charging, and certainty of fire when in use, substantially as described.

Third, I further claim the cushion, C, fur the purpose and in the manner specified.

Fourth, I claim the projections or ribs, E E, with their corresponding grooves, for the purpose herein set forth.

Fifth, I claim the combination of an outside shell made in two parts, A A, with an independent charge chamber, B, containing two or more nipples and percussion caps, with the projections or ribs, B E, and cushion, C, substantially as described.

36,296.—G. L. Harris, of Mobile, Ala., and Samuel Harris, of Springfield, Mass., for Improvement in Sifting Ma-

chines:
e claim the inclined sifter, A, in combination with the triangular
E, and double-inclined agitator, k, in the manner and for the
lose substantially as described.

97.—J. K. Harris, of Allensville, Ind., for Improve ment in Baling Presses:

ment in Baling Presses:
I claim, first, The levers, J J, and arms, N N, in connection with a follower and beater, B, arranged to operate as and for the purpose herein set forth.
Second, The slides, O O, connected with the arms, N N, of the levers, J J, in connection with the sliding bars, dd, en the follower, B, all arranged substantially as and for the purpose herein set forth.

[This invention consists in combining a follower with a system of evers, all constructed and arranged in such a manner that the follower may be made to serve the double purpose of a follower and a beater, the follower in the last-named capacity filling the press bo beater, the follower in the inst-named capacity ining the press of and compacting the material to be compressed therein, so as to be in proper condition for the subsequent pressing operation of the follower.

36,298.—S. H. Hartman, of Pittsburgh, Pa., for Improve-ment in Machines for Punching Linch-Pin Holes and Cutting Off the Journals of Axles for Wagons, &c.: I claim the combination of the clamps, the cutter and the punches, for holding, cutting off, and punching the linch-pin holes in the jour-nals of wagon and other similar axies, the mechanism being construct-ed and operating substantially as herein described.

ea and operating substantially as herein described.

36,299.—S. H. Hartman, of Pittsburgh, Pa., for Improvement in Slide Valves for Steam Engines:

I claim, in combination with a valve open through the center, or with a lid made in two pieces, a groove or recess in one piece containing rubber packing, and a tongue or shoulder in or on the other piece, to bear against said rubber packing, for the purpose of making the sides of the valve work steam tight, or nearly so, on opposite sides of the chest, as set forth.

the chest, as set forth.

36,300.—Josiah Hayden, of Haydenville, Mass., for Improvement in Water Elevators:

I claim, first, The curves, cdc, in combination with the straight rods, a, and hooks, b, embracing the curves, cc, of another link, as and for the purpose specified.

Second, I claim the windlass wheel, W, in combination with a flat chain, constructed as herein described and for the purpose set forth.

36,301.—William Larrabee, of Clermont, Iowa, for Improvement in Grain Winnowers:

I claim the upright suction blast spout, A, in combination with the valves, F H, arranged as shown, and the fan, D, as and for the purpose herein set forth.

I further claim the supplemental vaves, K K, adjustable hopper, M, and draught passagr. e, when arranged and combined with the valves, F H, as and for the purpose herein set forth.

[This invention consists in the employment or use of an uprigh spout, having a fan connected with it at its upper end, so as to cause its upper end, so as to cause or produce a suction blast therein; in connection with a series o valves arranged in such a manner with the spout as to produce latera draught entrances, and insure a perfect separation of all light impurities from the grain, and also the perfect separation of wheat from

oats, &c., &c.]
36,302.—Francis Murray, of Baltimore, Md., for Improvement in Stamp Heads for Crushing Ores:
I claim, first, In a stamp head, the working face of which is cast in a chill, and is capable at pleasure of being attached to or removed from an upper or main section, so constructing the same, by casting it around and upon a wrough thron shank, that said shads shall serve as a coupling to unite the shoe to the upper section of the stamp head, and also be capable of being used thereafter to cast a new working face or shoe upen, substantially as described.

We remove that the metallic buffer or its equivalent, substantially in the manner and for the purpose described.

36.303.—H. W. Putnam. of Cleveland. Ohio, for Improved

36,303 .- H. W. Putnam, of Cleveland, Ohio, for Improved

b,303.— H. W. Punam, of Cleveland, Onlo, for Improved Mangle:
I claim the frame work, A F G H, in combination with the rollers, 8 B', inger gear, I, I cot plece, K. claw and set screw, L, when these arts are constructed, arranged and operated, substantially as and for he purpose set forth.
6,304.—E. A. L. Roberts, of New York City, for Improved Thermometrical Steam Gage:
I claim a metallic gage, consisting of one or more fusible metals, in ombination with the indicator or indicators, b b, or their equivalent, os as to indicate by their passition or motion and either with or without

so as to indicate by their position or motion, and either with or without an alarm, the temperature of a steam vessel, the whole constructed substantially as and for the purpose set forth.

36,305.—Harry Seymour, of Dartmoor, Great Britain, for Improved Artificial Fuel:
I claim the composition for an artificial fuel, made of the ingredients and in the manner and proportions herein set forth.

[This invention consists in the employment or use of petroleum in its natural or in a refined state, or of coal oil or allied manufactured substances, in combination with certain mineral substances, such as silica, alumina, lime, and oxygenated manganese, which are mixed with refusevegetable matter, such as peat, earth, saw dust, tanner bark, green roots, &c., for the purpose of obtaining a fuel which can be used everywhere in place of wood or coal. Mr. Seymour's address is 48 St. Francis Xavier street, Montreal, C. E.]

36,306.—Aaron Smith, of Brooklyn (E. D.), N. Y., for Improved Gas Regulator:
I claim combining the throttle or other balanced valve, E. and floating inverted cup, D, by the arrangement of passages, Cckk, and crank connections, h h k k, substantially as herein described.

This invention consists in a certain arrangement of the passage rovided between a throttle or other balanced valve, employed to regu late the flow of gas and the interior of an inverted cup, within which t he pressure of the gas acts with a tendency to close the valvé, and arment of the connections between the said valve and cun

by a regulator of very simple construction is obtained, and which is

36,307.—C. W. Smith, of Evans, N. Y., for Improved Washing Machine:
I claim the combination of the dasher, F, the bar, B, the standards, C E, and the lever, D, arranged to be used in connection with an ordinary wash tub, substantially as described.

36,308.—P. A. Stecher, of New York City, for Improved Lamp Shade Holder:
I claim a lamp shade holder, A, constructed and applied, substantially as herein shown and described.

(The object of this invention is to produce a simple and cheap device for supporting shades on lamp chimneys. The invention consists in a holder made of a series of radial braces, the ends of which are bent in opposite directions, and which are connected and held in place by two or more rings, in such a manner that the same, when applied to a lamp chimney, rests with the upper ends of its braces on the bulb and its lower ends support the shade.]

36,309.—Alois Schweizer and George Jansen, of Cleveland, Ohio, for Improved Scrubbing Brush:
We claim, as a new article of manufacture, a combined floor scrubber and wiper, when the several parts are constructed and arranged, substantially in the manner and for the purpose herein described.

substantially in the manner and for the purpose herein described.

36,310.—R. M. Stivers and G. W. V. Smith, of New York City, for Improvement in The "Fifth Wheel" of Carriages:

We claim the combination of the stay rod or spring brace, G, with the perch, A, front axie, C, and parts, a and b, the whole constructed and arranged in relation to each other, as and for the purpose set forth.

36,311.—A. E. Teal and William Ransom, of Cicero, Ind. for Improvement in Smut and Grain Cleaning Ma

to improvement in smut and oran oraning machines:
We claim, first, The valves, l, placed within cylinders, N, on the souts, K, and regulated by springs and nuts, as shown, or their juivalents, in connection with the valves, L M, and discharge openies, A', for the purpose specified.

Second, The tubular perforated shafts, J D, of the beater. I, and fan, when said beater and fan are arranged in connection with the sucon spouts, K K, and blass spout, E, to operate as set forth.

The object of this invention is to obtain a simple and efficient ma chine by which smut may be thoroughly broken and separated from the grain, and the latter deprived of all light impurities, and also separated from any chess which may be in it.]

36,312.—Eli Thayer, of Worcester, Mass., for Improvement

36,312.—Eil Thayer, of Worcester, Mass., for Improvement in Plane Angulometers:

I claim the pendulum moving upon three or more bearings in the same plane, and carrying upon its top a graduated arc, and its combination with the spherical surface, and the opening therein, substantially as set forth and described in the accompanying specifications and drawings, and for the purpose indicated.

36,313.-W. H. Towers, of New York City, for Improve-

ment in Pins:

I claim a pin for securing clothing and other objects, made with a light spherical or oval enlargement near the point, in the manner and or the purpose described.

36,314.—J. F. Townsend, of Cambridgeport, Mass., for

Improvement in Spermatorrheal Rings:

I claim the instrument composed of the two bows, A. B. made with a rest, b, and jointed together as described, the band, C, adjusting screw, e, set screw, a', and nuts, gf, the whole combined as herein set forth.

set forth.

36,315.—W. F. Warburton, of Philadelphia, Pa., for Improvement in Army and Navy Caps:

I claim the loose fold, b, with its elastic loops or their equivalents, in combination with the detachable cape, G, the whole being arranged substantially as set forth for the purpose specified.

ranged substantially as set forth for the purpose specified.

36,316.—J. R. Whittemore, of Chicopee Falls, Mass., for Improvement in Hay or Feed Cutters:

I claim, first, The combination of the hopper, B, legs, C C, and fanged mouth piece, A, constructed as herein described, whereby the mouth piece serves as a support for B and C, substantially in the manner and for the purpose as herein set forth.

Scond, The combination of the cutter lever, E, bolt, h, and wedge, o, when constructed and operating substantially in the manner and for the purpose herein described.

the purpose herein described.

36,317.—Jacob Wister, of Greencastle, Pa., for Improvement in Flour Bolts:

I claim the use of the slide rods or braces, D, extending from rib to rib, and carrying sliding balls or knockers, E, thus bracing the ribs, and at the same time bringing the action of the knockers chiefly upon the ribs and bolting cloth, substantially in the manner and for the

36,318.—G. W. Woodworth, of Cleveland, Ohio, for Improvement in Water Elevators:
I claim the combination of the flat places, A, and inverted arch or section of a circle, B, with the bars forming the perimeter which connects the forks, as above described.

nects the forks, as above described.

36,319.—Edwin Bailey (assignor to himself and Henry Mc Shane), of Baltimore, Md., for Improvement in Cut Offs for Hydrants:

I claim the combination of the spring cut off, d, with the series of openings or perforations, a, for the purpose of gradually sbutting off the through flow of water, to prevent jarring and breaking of pipes, substantially as described.

substantially as described.

36,320.—R. H. Cunningham (assignor to W. P. Bliss), of Schaghticoke, N. Y., for Improvement in Cylinders for Polishing Gun powder:

I claim, first. The arrangement and combination of the piece of leather, b, with the block of wood or metal, c, and strip, d, each being shaped to correspond to the inner surface of the cylinder, substantially as and for the purpose described.

Second, The arrangement of the stationary strip, d, let into the inner surface of the cylinder, in combination with the valve, B, as and for the purpose shown and specified.

321.—Samuel Mason (assignor to the Northfield Knife Company), of Northfield, Conn., for Improvement in Pocket Knives: claim, as an improved article of manufacture, a pocket knife havahandle of malleable cast iron with a rough or corrugated extern, in imitation of buckhorn, as herein set forth.

[This invention consists in constructing the handle of the knife of malleable cast iron, and with a corrugated external surface in imita-tion of buckhorn, whereby a much more durable knife is obtained than any hitherto constructed, and one which may be manufactured

at a less cost.]
36,322.—William Peters (assignor to himself and Alfred Buck), of Baltimore, Md., for Improvement in Covering Steam Boilers:
I claim covering steam boilers, pipes, cylinders, &c., with the sheets, plates, &c., of the composition herein named.

ates, &c., of the composition herein named.

3,323.—C. D. Spears, of Lisbon, Maine, assignor to himself and F. Buckman, of Bowdoinham, Maine, for Improvement in Water Wheels:

daim, first, The penstock, A, and the scroll, B, the latter being aced within the former and constructed of segments, b, arranged centrically with the wheel, C, as shown in combination with the elect, C, and central discharge opening, f, all arranged as and for purpose set forth.

Second, The buckets, e, attached to the arms, d, of the wheel, C, in oblique position, as shown and described, when said wheel thus instructed is used in combination with the scroll, B, penstock, A, d central discharge opening, f, as herein specified.

This invention relates to an improved water wheel of that class

which are placed on vertical shafts within a scroll or case fitted, and commonly termed horizontal wheels. The invention consists in the employment of a scroll or case provided with a plurality of water inductive passages, and fitted within a penstock; in connection with a wheel provided with oblique buckets and a central discharge opening. whereby it is believed that the water is made to act in a very advanageous manner upon the wheel, and a good percentage of the power thereof obtained.1

36,324.—J. M. Stiven (assignor to himself, M. Tuomey and John Elder, Jr.), of New York City, for Improved Boiler Feeders:

I claim the float, f, provided with the pipe, g, in combination with the supply pipe, e, and valve, i, the parts being fitted and acting in the manner and for the purposes specified.

36,325.—E. A. Turpin, of New York City, for Improvement in Breech Loading Ordnance:
I claim closing the breech of a piece of ordnance or other form of frearm by means of an axial plug, having a smooth cylindrical surface, and a conical end fitting a corresponding seat in the breech of the gun, the said plug being adapted to be turned upon its seat and held firmly in contact therewith by means of a tapering key or wedge, C, passing transversely through the breech and plug, all as herein shown and described for the purposes set forth.

(The peculiarity of this invention consists in fitting the breech plug.) [The peculiarity of this invention consists in fitting the br

in the breech of the gun, so that it may be turned around as it is in-serted, so as to grind out any refuse left on the seat, and thus secure a close adaptation of the breech plug to the seat.]

36,326.—Isaac Winslow, of Philadelphia, Pa., assignor to J. W. Jones, of Portland, Maine, for Improvement in Preserving Vegetables in Hermetically Sealed Cons.

Cans:

I calim preventing the bursting of hermetically sealed cans or other vessels, while they are exposed to heats for cooking or preserving their contents, by means of puncturing such cans or vessels when first heated, or otherwise giving vent to the contained air soon after heating, the cans or vessels being thereafter immediately resealed and the heat continued, substantially in the manner and for the purposes set forth.

36,327.—Stuart Perry, of Newport, N. Y., assignor to C. H. A. Carter, of New York City, for Improvement in

Circuit Horse-powers:
I claim the combination of friction wheels and idlers, substantially in the manner and for the purpose herein described.
I also claim in combination with the friction wheels and idlers, the elastic pad, f, and nut, e, for regulating the pressure between the rolling contact surfaces, substantially as and for the purpose set

RE-ISSUES

RE-ISSUES.

1,331.—Chauncey Thomas and D. P. Nichols, of Roxbury, Mass., assignees of Chauncey Thomas, aforesaid. Letters Patent No. 18,254, Dated September 22, 1857, for Improvement in Carriage Props:

We claim the improved carriage props as constructed with a screw or a loose shoulder cap, D. combined with a joint bar standard, A, and arranged between the leather, L, and the joint bars, G. H, all placed on the standard, or the latter passing through them and secured in position by the nut, I, substantially as described.

1,332.—D. G. Littlefield, of Albany, N. Y. (Letters Patent No. 133, Whole No. 1,237, Dated January 24, 1854. Reissued November 19, 1861,) for Improvement in

Stoves:

I claim the illuminated exterior wall or cylinder, M, with openings, f, therein glazed with isinglass or any transparent substance, or any equivalent therefor, in combination with a coal supply chamber and an intermediate chamber, G, wherein gas is consumed, at, or around the fire pot, or any appendage thereof, substantially as and for the purpose herein described and set forth.

3.—D. G. Littlefield, of Albany, N. Y. (Letters Patent No. 133, Whole No. 1,237, Dated January 24, 1854. Reissued November 19, 1861,) for Improvement in

Stoves:

I claim the employment of a fire pot having a vertical fire grate around the same, forming a downward continuation of a coal supply pot, in combination with a gas consuming chamber between the outer case and the connected fire and coal supply pot, substantially as and for the purposes as herein described and set forth.

1,334.—D. J. Littlefield, of Albany, N. Y. (Letters Patent No. 132, Whole No. 1,236, Dated January 24, 1854. Reissued November 19, 1861,) for Improvement in

Stoves:

I claim an organization which will permit the gases of the supply coal, and the gases of the incandescent coal to burn laterally below, and outside of the coal supply chamber, and entirely down to the grate, and thereafter circulate the spent gases or a portion of them over the top of the coal supply chamber; and finally discharge them through a fine leading outside the room in which the stove is situated.

No. 132, Whole No. 1,236, Dated January 24, 1854. Reissued November 19, 1861,) for Improvement in

Stoves:

I claim the combination of the fire pot, E, with the coal supervisions, F, immersed within the outer cylinder, F, which forms chambers, G and G', substantially as and for the purpose herein seribed.

1,336.—Lewis Moore, of Ypsilanti, 'Mich. (formerly of Bart, Pa.) Letters Patent 224, Dated July 2, 1850. Reissued October 12, 1852, for Improvement in Seed

Bart, Pa.) Letters Patent 224, Dated July 2, 1850. Reissued October 12, 1852, for Improvement in Seed Planters:

I claim, first, A seeding slide having apertures with sides oblique to the sides of corresponding apertures in the hopper bottom or plate, u, when combined with any suitable device to impart a reciprocating motion to the said slide, substantially as described.

Second, In combination with a hopper or seed box having a number of apertures for the discharge of seed, I claim aperforated seeding slide having a reciprocating motion transverse to the motion of the machine, and adjustable in extent for the purpose of varying the quantity of seed sown.

Third, The combination of the perforated vibrating lever, p, and pivoted rod, m, with a cam, f, and seeding slide, j, to vary the motion of the said slide, substantially as and for the purposes explained.

Fourth, Raising or lowering the drill teeth or hoes simultaneously by means of chains, a, 'or their equivalent, statched to the rear edge of a flat bar or board, X, hinged by its front edge to the frame, and provided with a lever, y, projecting backward from it, all substantially as herein shown and described.

Fifth, The combination of the hook or catch, b', flat bar or board, X, and lever, y, all constructed, arranged and employed in the manner and for the purposes set forth.

Sixth, Supporting the hopper or seed box upon the frame of the machine by means of brackets, the 2d, straddling the beam, 22, so as so secure the hopper in position without fastenings, and permit its ready removal.

Seventh, Suspending the seeding slide beneath the hopper by means of loops, w, placed beneath the apertures, h i, in the hopper bottom, substantially as and for the purposes set forth.

ly removal. eventh, Suspending the seeding slide beneath the hopper by mean**s** lops, w, placed beneath the apertures, hi, in the hopper bottom, stantially as and for the purposes set forth.

DESIGN.
3.—Salathiel Ellis, of Mautorville, Minn., for Design for a Medallion of President Lincoln.

THE TUTTLE COMET.—The comet now visible was discovered by H. P. Tuttle, of the Cambridge Observatory, and has, consequently received his name. It has not been observed before. It passed its perihelion on the 22d of August, and is now becoming more dim, as it sweeps away into the cold and darkness of space.