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

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 appa ratus 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 wentinto force March 2, 1861, speci-fying size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN. New York.

36,265.—Walter Aitken, of Newark, Ill., for Improved Cur-rent 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 de-scribed.

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 de-lineated and set forth. 36,266.—Albert Albertson, of New York City, for Improve-

So, 200.—Albert Albertson, of New Fork 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 re-eriver, A, the pipes, E and F, and the double-acting pump, P, oper-ating 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, HII, in combination with the vibrating crossbar, K, and connecting rods, N, as arranged with the roller, O, 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 Im-provement 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. e purposes 36.270

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

ers : I claim, first, The expanding chamber, I J K L, loaded lever, M, foat, R, rock shaft, Q, tappet, s. lever, P, rod, E, weight, G, catch, H, and hook, p, or their equivalents, the whole arranged and applied in combination with each other and the valve sind ies, c d, 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 splindles, c d, in such manner that the two valve spindles will occupy the same horizontal line and thereby pro-vide for the two valves being operated simultaneously by a weightact-ing vertically, substantially as and for the purpose herein described. Summer Blodgett of Glover, 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 elastic and one inclassic roller, and with the latter suspended in endless bearing bands supported by pulleys, as specified.
I also claim the combination and arrangement of the tub platform, B, with the roller frame, A, and its rollers, CD, as specified.
I also claim supporting the lower or wooden roller by means of the endless suspension bands and their pulleys, in combination with springs, the whole being arranged and applied to the said roller and the frames and so to operate as specified.
I also claim the arrangement of the adjusting serves and their washers with the springs, forks, andless bands and nulleys, as applied to the lower of therollers, as set forth.
36, 272. Adeline I. Brooke of Philodelphia.

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., for 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 mate-rial, in combination with the tubes, B' and B, constructed and operatsubstantially as described.

ing 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 Improve-ment in Retainers for Tobacco Presses: I slaim 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 iollower, 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 having a nap on its innersurface, substan-tially as here in described.

36,278.—G. H. Corliss, of Providence, R. I., for Improved Steam Boiler: I claim the method of constructing steam boilers by combining cy-lindrical circulating reservoirs with cylindrical tubular generators, ar-ranged 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. by a in a s 36,280.-G. H. Corliss, of Providence, R. I., for Improved Surface Conde

SUITACE CONDENSETS: I claim constructing the tubes or condensing chambers of surface ondensers with restricted apertures, substantially as described and or the purpose specified. I also claim the combination of a receiver, A, with a series of tubes, 3 B, or their equivalents, each of which connects at one extremity rith said receiver and at the other with the open air, substantially as lescribed. I also B B, or

36,281.-G. H. Corliss, of Providence, R. I., for Improve-ment in Steam Generators : 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 haves its measurements and the second state of the purpose set forth. I alsoclaim the combination of a surface condenser, a supplemen-tary generator and coll of steam pipe, substantially as and for the pur-pose described.

10, 202. — 1. M. DAVIS, OI FINIAGEIPHIA, FA., for Improved Refrigerator: I claima refrigerator having its inner walls or lining, A, made of lazed plates, of clay or stoneware, constructed and secured together, ubstantially in the manner described and set forth, for the purposes pecified.

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 Im-provement in Hats: Iclaim a hat manufactured as herein specified, by inverting the sur-faces after they have been shaned between heated disc as an earth

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 Improve-ment in Smut Machines : I claim, first, The rotating concave plate, I, provided with a circular horizontal bottom, j, and vertical spikes, k, in connection with the stationary plate, K, provided with the teeth, l, and a pendent rim, m, arranged as and for the purposes specified. Second, The cylinder, G, formed of the annular rims, ff, 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 birs, M, having beveled toothed surfaces, o o, arranged as herein Third, The combination of the air chambers, d d, blast spouts, N N, and fans, H G, arranged with the cylinder, G, to operate in conjunc-tion 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-This invention consists in the employment of new of 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 and separated from smut and other impurities.]

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

36,287

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 speci-fied.

Both and the same of the cro, E X, substantially as specified.
Third, I claim the elastic material, g, in combination with the crob, 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 ior the purpose herein set forth.
36,288.—W. M. Ellis and J. B. Ellis, of Washington, D. C., for Improvementin Steam Boilers :

TOT IMPTOVEMENTIAL STEAM BOILETS: 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 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 Improve-ment 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 purpose herein set forth. I further claim the spring, D, in combination with the jaws, B C, ar-ranged 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 rigid jaw, and all arranged in

hook is wextending over the face of the rigid is w, 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 diameter 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 Im-provement in Weighing Apparatus: I claim the arrangement of the weighted box, D, containing the plumbing devices, k o 1, in combination with scales marked on the covers, i, and on the arc, d, and with the bent lever, A, all con-structed and operating, substantially as shown and described. [The object of this invention is a weighing apparatus which will

ages of the bent lever balance, and of the steelyard.]

36,291.—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-ined and arranged to operate in the manner and for the purpose set 36.291.

forth

5. Solution of the product of the

orth 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. One, 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, prinom, 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.

W. F. Grapler and A. J. Cutter, of Lewisburg, for Improvement in Car Couplings : n the use of the hinge pin or bolt, A, in movable block, B, 36,293. Pa., We clair