

Jan. 3d an important event occurred—Marcus Julius Cicero was born; for business, and even so far as the entertainment of the general reader is involved, the advent of Marcus might have been supplanted by some event a little nearer the present day. The calendar is a very useful one and will doubtless be extremely popular.

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:—

Saw-mill Carriage.—This invention relates, first, to the employment of a dog constructed in a novel way, and connected with a lever or handle in such a manner that by a very simple adjustment of said lever or handle the log may be set to the saw, and the log-supports also gigger back when necessary to receive a fresh log to be sawed. The invention relates, secondly, to a simple and novel means for adjusting the log, so that the same may be sawed in taper form when required, and also to an improved means for holding the racks of a sliding bar, to which the log-supports are attached, in proper position and in gear with the pinions which operate them. Dennis Lane, of Springfield, Vt., is the inventor of this improvement.

Improvement in Ordnance.—This invention relates to the manufacture of ordnance of a central core or barrel containing the bore and a system of bands, hoops or rings of wrought-iron, surrounding the said core from the breech to within any desirable distance of the muzzle; and it consists in a certain novel construction of and mode of combining the several parts, whereby the fibrous character of the wrought-iron is preserved and the union of the several parts is rendered such that their proper relation will not be disturbed by the firing of the piece, or by the heating and cooling to which it is subject in use, and, in short, to so construct ordnance as to obtain the necessary strength with the least weight of metal. John Ericsson, of New York city, is the inventor of this improvement.

Ash-ejector for Steam Vessels.—The object of this invention is to obtain a simple and efficient means for discharging ashes and other refuse matter from steam vessels, whereby the labor of elevating and discharging the same overboard as now practiced, will be avoided. The invention consists in the employment of a receiver provided with a valve, so arranged as to admit of a communication being formed between the receiver and the water at the exterior of the vessel, and to admit of said communication being cut off when desired; a pump or steam pressure, one or both, being used in connection with the receiver, and all arranged in such a manner as to effect the desired end. Jefferson Brown, of No. 14 Elizabeth street, New York city, and S. R. Brooks, of St. Louis, Mo., are the inventors of this improvement.

Electro-magnetic Pendulum.—The principal object of this invention is to apply to the pendulum power obtained from an electro-magnet, to maintain and also, if desired, to initiate its motion without subjecting it to the direct attraction of the magnet, or in any way attaching to it an armature or fixed magnet, or any piece of metal subject to the attraction of a magnet. The invention consists chiefly in the employment of wedge-shaped pallets in combination with the armature of the electro-magnet, and with one or more impulse bars and springs, whereby the above result is obtained. It also consists in so applying the said pallets in the circuit in which the electro-magnet is placed, that the opening of the circuit to produce the necessary intermissions of the current takes place between the said pallets. James Hamblet, Jr., and B. F. Edwards, of Boston, Mass., are the inventors of this improvement.

Surfacing Fibrous Materials.—This invention relates to the applying of a glazing or size to fibrous substances, such as cotton wadding, &c., in such a manner that a quite thin sizing may be used and applied to the material to be sized, glazed or surfaced, as it is technically termed, and said material dried at the same operation. To this end the invention consists in the use of a smooth or polished metal cylinder, heated by steam or otherwise, over a portion of which the web to be surfaced passes and has a heated pressure roller bearing against it; the metal cylinder

having the glazing or size distributed over its exterior by means of a revolving brush or its equivalent, and at a point sufficiently distant from that where the belt comes in contact with the cylinder, that the glazing may become partially dry before being brought in contact with and applied to the web. The above parts are used in connection with a roller for cleaning the cylinder. William Fuzzard, of Chelsea, Mass., is the inventor of this improvement.

Breech-loading Fire-arm.—This invention consists in a certain novel construction and mode of applying the movable breech-block and certain means of operating the same, whereby the construction of the arm is much simplified and the use of a large number of small pieces, such as screws and pins, which are liable to be lost, is avoided, and the gun is enabled to be taken apart enough to clean all the working parts without the removal of a single screw. It also consists in certain means whereby provision is made for loading at the muzzle, when the supply of ammunition suitable for loading at the breech has been exhausted. And it further consists in certain improved means of withdrawing the discharged metallic shells of the ammunition used for breech loading. W. K. Stevens, of Worcester, Mass., is the inventor of this improvement.

SPECIAL NOTICES.

Joseph P. Pirsson, of New York City, has petitioned for the extension of a patent granted to him April 2, 1850, for an improved surface condenser for steam engines.

It is ordered that the said petition be heard at the Patent Office, Washington, on Monday, March 14, 1864.

Daniel Hicks, of Dimcansville, Pa., has petitioned for the extension of a patent granted to him on April 2, 1850, for an improved attachment of the forge hammer to its helve.

It is ordered that the said petition be heard at the Patent Office, Washington, on Monday, March 14, 1864.

Charles Perley, of New York City, has petitioned for the extension of a patent granted to him April 2, 1850, for improvements in cat head and shank painter stoppers.

It is ordered that the said petition be heard at the Patent Office, Washington, on Monday, March 14, 1864.

All persons interested are required to appear and show cause why said petitions should not be granted. Persons opposing the extensions are required to file their testimony in writing, at least twenty days before the final hearing.

TO OUR READERS.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and enclosing \$1 as fee for copying. We can also furnish a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of \$2. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid has expired.

Models are required to accompany applications for Patents under the new law, the same as formerly, except on design patents, when two good drawings are all that are required to accompany the petition, specification and oath, except the Government fee.

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a bona-fide acknowledgement of our reception of their funds.

Binding the "Scientific American."

It is important that all works of reference should be well bound. THE SCIENTIFIC AMERICAN being the only publication in the country which records the doings of the United States Patent Office, it is preserved by a large class of its patrons, lawyers and others, for reference. Some complaints have been made that our past mode of binding in cloth is not serviceable, and a wish has been expressed that we would adopt the style of binding used on the old series, i. e., heavy board sides covered with marble paper, and morocco back and corners.

Believing that the latter style of binding will better please a large portion of our readers, we commenced on the expiration of Volume VII., to bind the sheets sent to us for the purpose in heavy board sides, covered with marble paper and leather backs and corners.

The price of binding in the above style is 75 cents. We shall be unable hereafter to furnish covers to the trade, but will be happy to receive orders for binding at the publication office, No. 37 Park Row New York.



ISSUED FROM THE UNITED STATES PATENT-OFFICE

FOR THE WEEK ENDING JANUARY 12, 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.

41,185.—Treating Flax, &c., to produce Short Fiber for Spinning.—S. M. Allen, Woburn, Mass.:

I claim, first, The herein-described process of preparing vegetable long-stapled fiber to be reduced to suitable length for spinning and weaving on short-stapled machinery and for other purposes, by submitting the fiber to the different operations of fermentation, washing, pressing, beating, &c., before drying the same, substantially as herein more fully set forth.

Second, I claim the herein-described process of converting vegetable long-stapled fiber into fiber of suitable length for weaving and spinning on short-stapled machinery, by combining with fermentation, washing and other mechanical and chemical operations before drying, the stranding or reducing of the fiber mechanically after drying the same, substantially as herein set forth.

41,186.—Pump.—M. J. Althouse, Waupan, Wis.:

I claim the barrel, C, the screw bolt, G, and the pin, H, when constructed and applied to a pump stock, B, substantially as shown and described.

41,187.—Horse-rake.—D. W. Amos, Bedford, Pa.:

I claim the combination of the knee-lever or connecting-rod, K, and lifting lever, J, with wipers on one of the wheels, substantially as described, for the purpose of enabling the driver to elevate and hold up the rake teeth without using his hands, as set forth.

I also claim the combination of the rake teeth with the bracket, I, when combined, arranged and operating as set forth.

41,188.—Grain Separator—Myron J. Barcalo, Mount Morris, N. Y.:

I claim, first, The longitudinally and vertically-adjustable separator, C, constructed of wire gauze or partly of wire gauze and partly of a metallic plate, in combination with the sieve of a fanning mill, substantially as described.

Second, The separator, C, constructed with a flat or arched surface and having the edge, c', turned up as described, for the purpose of preventing the grain which is cast upon the separator from falling over that edge.

Third, The sieve, A, and the separator, C, in combination with an adjustable discharging screen, D, which is shorter than the gains in which it moves, or of the same length, constructed and operating in the manner and for the purpose described.

41,189.—Adjusting Logs in Saw Mills.—D. C. Banghman, Adams, Ohio:

I claim, first, The shaft, D, supported beneath the head and tail blocks, A, A', upon levers, e, e', and operating substantially as described.

Second, The combination of pinions, f, f', shaft, D, spur wheels, c, c', and shaft-supporting levers, e, e', all operating substantially as described.

Third, The saw wheel, C, in combination with the shaft, D, and driving pinion, m, operating substantially as described.

Fourth, The combination of the two-pawl levers, g and d, applied and operating substantially as described, for adjusting both ends of the log at one end of the machine, obliquely to the plane of the saw.

Fifth, The vibrating, driving pinion shaft, h', and pinion, h, in combination with the lever, E, and spur wheel, C, for operating the traveling plates, B, B', substantially as described.

Sixth, The pivoted arm, h², in combination with the rods, j, j', and levers, E, H, substantially as and for the purposes described.

Seventh, The combination of the trip-staff, p, catch, s, levers, t, and v, operating substantially as and for the purposes described.

Eighth, Applying a gage wheel, J, or its equivalent to operate in conjunction with a driving pinion, h, and such mechanism as will throw this wheel, J, out of action automatically, when the log has been moved up to the saw the required distance, substantially as described.

41,190.—Clothes-washing Machine.—W. H. Blood, San Francisco, Cal.:

I claim the stationary concave of rollers, C, placed within the ends, box A, in combination with the oscillating rubber, K, attached to elastic plates, h, and connected by pendant bars, J, J, to a rock-shaft, F, the bearings of which rest on spiral springs, D, and the ends or journals of which are connected to a treadle, I, all arranged substantially as and for the purpose herein set forth.

[This invention consists in the employment of a stationary concave of rollers fitted within a proper suds-box and used in connection with an oscillating, yielding or elastic rubber, the same being attached to a rock-shaft, the bearings of which are fitted on springs and therock-shaft with a treadle attachment, all so arranged as to enable clothes to be washed in an expeditious and perfect manner, and without injuring the same by excessive or undue friction.]

41,191.—Sleeve Button.—Seba Bogert, New York City:

I claim the sliding catch, C, guide, D, and spring, h, combined with each other and with the head, A, and the hook, a, and notch, c, on and in the tongue of the button, substantially as herein specified.

[This invention consists in a novel mode of applying a sliding catch, a guide and a spring, in combination with the tongue or shank which passes through the holes in the garment and with the head of the button, whereby the fastening is made very secure strong, and easy of operation.]

41,192.—Refuse Ejector for Steam Engines.—Jefferson Brown, New York City, and Samuel R. Brooks, St. Louis, Mo.:

We claim ejecting or discharging ashes and other refuse matter from steam vessels by means of a receiver provided with a valve, and so arranged as to be capable of being used in connection with pressure exerted by a pump, steam or other suitable agency, as herein set forth.

41,193.—Churn.—Edgar Chipman, New York City:

I claim the agitators, D, one or more, constructed of chambers, f, attached to shafts, e, in combination with the oscillating or rocking cream box, A, substantially as herein specified.

[This invention consists in the employment of a rocking or oscillating cream box provided with weights or counterpoises, and also provided with rotating agitators having cells or chambers.]

41,194.—Washing Machine.—Edgar Chipman, New York City:

I claim the combination of the seat, C, with the rocking box, A, of a washing machine, arranged substantially as shown, to admit of the rocking or oscillating of the box by a slight exertion of the occupant of the seat, as set forth.

I further claim the banging of the pressure roller within curved or segment grooves or bearings, d, in the box, A, substantially as shown, to admit of the self-adjusting relieving movement of said roller, as herein set forth.

[This invention relates to certain improvements in that class of churns and washing machines which are arranged to work or oscillate back and forth, and which are provided with a rotary agitator or pressure.]

41,195.—Sugar Evaporator.—R. S. Cole, Mount Pleasant, Iowa :

I claim the combined arrangement of the fire-place, C, descending or diminishing flue, D, shoulders, a, b, c, depressions, d, e, f, and partitions, g, h, all as herein shown and described and for the purpose explained.

[This invention consists in the arrangement of shoulders facing toward the fire at the bottom of the pan or pans, one at the end of each section, in combination with a descending flue, in such a manner that the fire strikes those parts of the bottom forming the shoulders with increased power and the juice contained in the wells formed by said shoulders in the interior of the pan is heated quicker than the juice in the other parts of the pan, and thereby the scum is thrown up and separated with great facility.]

41,196.—Cow Milkier.—L. O. Colvin, Philadelphia, Pa. :

I claim, first, The elastic bottom, A, applied to the box or suction chamber, A, in connection with the partition, e, in said box or chamber, the plate, E, and the teat tubes, B B' B', all arranged to operate in the manner substantially as and for the purpose herein set forth.

Second, The chamber, C, provided with the elastic plunger or piston, D, arranged relatively with the valve, G, as shown, so as to perform the double function of a plunger and valve, substantially as set forth.

Third, The combination and arrangement of the box, A, chamber, C, and tube, G, with the valve, I, and teat-tube, B B' B', to form a new and improved device for the purpose specified.

[This invention relates to certain improvements in a cow-milking device for which Letters Patent were granted to this inventor on May 22d and 29th, 1860, and Feb. 17th, 1863. The object of the present invention is to reduce the milking device to the simplest possible form, render it capable of being operated with greater facility than heretofore, and also capable of having, when necessary and desired, two of the teat tubes cut off from the suction chamber, so as to have only two of the teat tubes operative.]

41,197.—Packing for Journal Boxes.—Jonathan Conk, Red Bank, N. J. :

I claim a packing, for the purpose specified, composed of the lostera marina (grass wrack), sea-weed, grass, or other sea grass, dried or cured, and saturated with any suitable lubricating substance.

[This invention is designed as a substitute for cotton waste and other similar fibrous materials which have hitherto been used as a packing for the journal boxes of railroad car axles, the shafting of machinery and for other purposes where packing is applied in machinery.]

41,198.—Stove.—Charles Crozart Converse, Dubuque, Iowa :

I claim the arrangement of the toothed grate, D, rod, E, and treadle, F, with the hinged grate, A, and stove bottom, B, in the manner and for the purpose herein shown and described.

[This invention consists in the employment of a swinging toothed grate placed underneath the grate proper of the stove or furnace and arranged in relation therewith that the toothed grate, when not in use, may be sufficiently far below the grate proper as to allow a free passage of air to the fire, and also allow ashes and cinders to escape casually through said grate proper, the bottom grate at the same time being capable of being raised when necessary so as to rake the fire to admit of the escape of ashes therefrom, and also clean the grate proper of cinders or clinkers, which may be wedged or caught between its bars.]

41,199.—Grain Drill.—T. R. Cornick, Independence, Iowa :

I claim the arrangement of the suspended scattering board, S, with the seed box, E, beams, K, stocks, M, braces, h, and shovels, N, all as herein shown and described.

[This invention relates to an improvement in the means employed for distributing the seed, and also in a novel and improved arrangement of the seed-covering device, whereby it is believed that several advantages are obtained over the ordinary seeding machines in common use.]

41,200.—Stove for heating Soldering Irons.—Isaac Cressman, Philadelphia, Pa. :

I claim, first, The construction and arrangement of a pot or furnace for heating soldering iron by means of lighting gas mixed with atmospheric air, substantially as herein shown and described.

Second, The combination with a pot or its equivalent, gas burner and air chamber under the arrangement described, of a wire-gauze covering and grate, the two having interposed pumice stone, as herein shown and described.

Third, Combining the pot and gas-heating contrivances, with a reservoirary shell to concentrate the heat upon the iron, substantially as herein shown and described.

41,201.—Hinge.—John J. Crooke, New York City :

I claim the hinge above described, constructed by driving in a portion of the ends of the parts, B, E, around the axis, and riveting or welding the ends of the axis, C, within the outer ends of the parts, B, E, of the joint, as hereinbefore set forth.

41,202.—Closing Fruit Jars, &c.—R. M. Dolbey, Springfield, Ohio :

I claim the combination of clamp, C, slide, h, or its equivalent, and eccentric, k, when arranged to act on cover, B, or its equivalent, substantially as and for the purpose set forth.

41,203.—Molds for Casting Steel.—John Deere, Moline, Ill. :

I claim, for casting plow plates or other articles of steel, the use of molds prepared as herein set forth, that is to say, the body of the mold formed of dry sand or loam, and its internal surface coated with plumbago, both of which substances, previous to being used, to be moistened with an aqueous solution of the clay, and the mold when so made to be thoroughly baked and dried in an oven or furnace, all substantially as and for the purpose herein described.

[The claim expresses fully the character of this invention which, it is believed, is a valuable one.]

41,204.—Skate Fastening.—John Doyle, of Hoboken, N. J. :

I claim the heel plate, B, attached to or cast with the block, C, which is secured to the runner, A, in combination with the slotted plate, H, secured to the sole, d, of the boot or shoe, and the adjustable bar, D, provided with the screw, G, or its equivalent, and operated by the cam, E, all arranged substantially as and for the purpose set forth.

[This invention relates to a new and improved heel-fastening for skates, and it consists in the employment of a heel plate and an adjustable bar, the latter being operated by a cam and the former secured to the runner of the skate in connection with a hook or screw attached to the adjustable bar, and a slotted plate attached to the sole of the boot or shoe.]

41,205.—Piston for Steam Engines.—Henry D. Dunbar, Hartland 4-corners, Vt. :

I claim, first, a combined cut and uncut packing ring or rings with the outside or wearing surface broader than the inside or steam surface, which the steam, gas, air or water acts upon to expand, substantially as and for the purpose described.

I also claim the combination of the projecting and cut-away portion of the rings, a, c, for the purpose of breaking the joint in the expanding ring, the two rings being united and operating together, substantially as herein described and represented.

41,206.—Operating Heavy Ordnance.—James B. Eads, St. Louis, Mo. :

I claim, first, the use of a lever, E, secured to the gun and held by a slide or other device at one end, in such a manner as to direct the muzzle of the gun to the port-hole, while the breech of the gun is raised or lowered.

Second, The mechanical devices substantially as described, for the purposes before mentioned.

41,207.—Turret and Pilot House for Ships-of-war or other Structures.—James B. Eads, St. Louis, Mo. :

I claim placing a pilot-house or "look-out" on a turret or other revolving iron-clad or shielded protector, in such manner that the turret may revolve freely, while the pilot-house remains stationary, and without using a central column or support to hold the latter from turning, substantially as and for the purpose described.

I also claim the mechanism connecting the pilot-house or look-out with the turret or gun protector, so that the occupant of the house or "look-out" may transmit his power to the tiller ropes, or to the bell or bells for signaling to the engineer or other officer in charge, substantially as herein described.

41,208.—Construction of Ordnance.—John Ericsson, New York City :

I claim, first, In a piece of ordnance composed of a central core or barrel and series of surrounding hoops or bands, fitting the trunnion band upon the exterior of hoops, j, j', and between the faces of other hoops, j, j', of larger external diameter, when the said hoops all constitute one longitudinal series, and the interior diameter of those j, j' are like those of j, j' smaller than the interior diameter of the trunnion band, substantially as herein described.

Second, The construction of a piece of ordnance of a central core or barrel, A, provided with a solid flange, a, around its rear end and fitted with a series of plate iron hoops or rings, j, j', two forged bands, k, l, and a trunnion ring, n, the whole combined and secured by a nut, m, or its equivalent, substantially as herein specified.

41,209.—Eye Protector.—Dennis Everett, Attleborough, Mass. :

I claim, first, Forming the setting for the glass of an eye protector out of the same wire gauze of which the body is composed, substantially as described.

Second, Finishing the rim or setting for the glass of an eye protector with fusible metal, applied in the manner substantially as described.

41,210.—Sawing Machine.—R. Fanning, Clarksfield, Ohio :

I claim the self-adjusting frame, A B B', beam, B'', and spike, F, in combination with the spring, N, and saw, K, the several parts being constructed, arranged and operated as and for the purpose set forth.

41,211.—Lock.—Philo S. Felter, Cincinnati, N. Y. :

I claim the use of a vibrating bar, G, in combination with the bar, H, the notched disks, C, and the spindle, I, all arranged and applied to the lock to operate in the manner and for the purpose herein set forth.

[This invention relates to a new and improved guard attachment for locks, whereby the key-hole of a lock may be obstructed by a plate arranged in such a manner as to effectually prevent the insertion of a key for the purpose of opening the lock, and also prevent impressions being taken to form a key for the purpose. The plate being also arranged in such a manner that it may be adjusted or moved free from the key-hole by a proper or authorized person.]

41,212.—Freight Car.—Charles R. Foote & James Orton, Williamstown, Mass. :

I claim, first, A car body of cylindrical or an approximate form, with wheels fitted on its periphery and arranged to rotate with its center of gravity substantially as herein set forth.

Second, The frame, D, in combination with the car body, A, the journals of the latter being fitted in bearings in the former, substantially as described.

Third, The oblong bearings, c, c, in the frame, D, in combination with the shoes, E, placed on said frame and all arranged to operate as and for the purpose set forth.

[This invention relates to a new and improved freight car designed more especially for transporting or carrying coal-oil and other liquids, grain in bulk, &c. The invention consists in constructing the body of the car of cylindrical or an approximate form and encompassing the same with bands provided with flanges to serve as wheels. The body of the car is provided with an axle the journals of which are fitted in oblong bearings in a frame and arranged in connection with self-acting brakes, all being combined in such a manner that the body of the car will rotate as it is drawn along, and it is believed several advantages are obtained over the ordinary freight cars in use.]

41,213.—Hooks for Garments.—Maltby Fowler, North Branford, Conn. :

I claim a hook having the two portions, a, a, of the wire which form its back united by the whitening metal or alloy, substantially as and for the purpose herein specified.

[This invention consists in uniting the two portions of the wire of which the back of the hook is formed, by means of the coating of tin or other metal or alloy which is used for what is called the whitening of the hook, whereby the back is materially strengthened.]

41,214.—Machine for Surface-sizing Fibrous Materials.—Wm. Fuzzard, Chelsea, Mass. :

I claim the employment or use of a heated metallic cylinder, B, or one having a metallic exterior or periphery, in connection with a heated pressure cylinder, C, one or more, and a polishing roller, G, or its equivalent arranged as shown for the purpose of surface-sizing and drying simultaneously or at one operation fibrous materials, as set forth.

I further claim the distributing or throwing of the glazing or sizing upon or against the cylinder, B, or the web, E, by means of a rapidly revolving brush roller, J, or its equivalent running in contact with a roller, I, partially submerged in the glazing, whereby the glazing is thrown against the cylinder or web in a fine mist, as set forth.

41,215.—Grain Cradle.—A. P. Grover, Eureka, Wis. :

I claim, first, A metallic cradle finger when made nearly tubular, the back of the finger being left open in the manner and for the purposes substantially as set forth.

Second, I also claim the arrangement and combination of yoke, E, with the fingers, stirrups and brace-rods, substantially in the manner and for the purposes specified.

41,216.—Sheep Rack.—Robert Hale, Fitchburg, Mass. :

I claim the employment or use in a sheep-rack of pivoted feeders, arranged in such a manner as to form a hopper when the rack is in use and admit of being adjusted so as to prevent the animals having access to the rack while the latter is being cleaned or while it is being supplied with feed, substantially as herein set forth.

[This invention relates to an improvement in a sheep rack for which Letters Patent were granted to James P. Eaton, bearing date March 17, 1863. The invention consists in a peculiar arrangement in what are termed the "feeders," whereby the same when adjusted to admit of the cribs or troughs being cleaned out or supplied with feed, will prevent the sheep having access to the cribs or troughs.]

41,217.—Electro-magnetic Pendulums.—James Hamblet, Jr., & B. F. Edmands, Boston, Mass. :

We claim, first, The employment of wedge-shaped pallets, e, f, applied in combination with the armature of the electro-magnet and with one or more impulse bars and springs, to operate substantially as and for the purpose herein specified.

Second, So applying the said pallets in the circuit in which the electro-magnet is placed, that the breaking of the circuit to produce the necessary intermissions in the current takes place between the said pallets.

41,218.—Knitted Fabric.—George Shaw Harwood, New London, Mass. :

I claim as a new article of manufacture the knit broadcloth, fulled and finished as herein described.

41,219.—Hooks for Cam-rods of Steam Engines.—B. A. Haycock, Richland, Iowa :

I claim the combination of the adjustable bar, B, and adjusting wedge, D, with the hook-bar, A, substantially as and for the purpose herein shown and described.

[This invention relates to novel and simple means to compensate for the wear of the hooks of cam-rods of steam engines and other machinery, such for instance as the hooks of pitman or connecting rods, shake rods, &c., where a rod is connected to a crank or lever.]

41,220.—Explosive Shells for Ordnance.—Henry Helm, Salina, Kansas :

I claim, first, The use in shells for ordnance of friction primers the head of which project from the surface of the shell, so that on the impact of the shell the wire of the primer will be drawn sufficiently to explode it, substantially as described.

Second, Also in combination therewith the use of an adjustable time fuse, for regulating the interval between the impact and explosion, substantially as described.

41,221.—Journal Box.—G. G. Hunt, Bridgeport, Mass. :

I claim the employment of a box, A, having hollow sides and hollow bottom, in combination with the axle, C, and wick, G, all in the manner herein shown and described, for the purpose set forth.

[This invention consists in the employment or use of a journal-box with hollow sides and bottom whereby an oil fountain is produced, from where the oil is carried up to the axle by means of one or more wicks, said wicks being actuated upon by weights or springs in such a manner that they are always held in close contact with the axle, and that they carry up the requisite supply of oil without allowing any waste.]

41,222.—Windlass.—Peter H. Jackson, New York City :

I claim the combination of the chain wheels, g, g, ratchet wheels, d, d, pawl levers, f, f, walking beam or break, k, and chain connection, m, for raising a double or single purchase, as and for the purposes specified.

41,223.—Butter Worker.—Nelson Johnson, Gullford, N. Y. :

I claim the bi-conical fluted roller, c, placed within a traveling or sliding frame, B, attached to or connected with the tray, A, as shown, in combination with the concave bottom of the tray formed of two longitudinal inclined planes, a, parallel with the two conical surfaces of the roller, substantially as and for the purpose herein set forth.

[This invention consists in the employment or use of an inclined tray provided with a concave bottom formed of two inclined planes; in connection with a tramper of bi-conical form, fluted longitudinally and fitted in a traveling or sliding frame, all being arranged in such a manner that the butter may be worked very expeditiously and thoroughly.]

41,224.—Saw-Mill Carriage.—Dennis Lane, Plainfield, Vt. :

I claim the dog, J, fitted in the lever, L, and connected with the lever or handle, O, substantially as shown, so that by turning said handle or throwing the same upward one end of the dog may be disengaged from its ratchet and the opposite end engaged with it, for the purpose herein set forth.

I also claim adjusting the log so that the same may be sawed more or less taper by means of the upright plate or bar, T, racks, f, and segments, S, S, arranged with the arm, U, pawl, V, and rack, W, substantially as described.

I further claim providing the bearings of the shaft, F, with lips, a, arranged so as to project over the racks, D, D, substantially as and for the purpose specified.

41,225.—Grate.—D. Lister, Glasgow, Great Britain :

I claim the construction of a grate of a hopper shape with a closed bottom and with apertures in its standing sides, substantially as and for the purpose herein specified.

[This invention was illustrated in No. 3, of the present volume.]

41,226.—Adjustable Candlestick for Tents, Shops, &c.—Alfred E. Lyman, Williamsburgh, Mass. :

I claim the candlestick or holder as herein described, as a new article of manufacture, substantially as specified.

41,227.—Machine for raising a Nap on Cloth.—Edwin T. Marble, Worcester, Mass. :

I claim the combination and arrangement of the two main draft and delivery rollers, F, G, the two cloth stretchers, H, H, the tilting rack, D, and the napping drum, A, the whole being arranged to operate substantially as specified.

I also claim the combination of the two friction apparatuses and the two positive connection apparatuses hereinbefore described or their mechanical equivalents, with the driving gearing or mechanism of the main draft and delivery rollers, F, G.

I also claim in combination with mechanism for driving the rollers, F, G, a means or mechanism substantially as described (viz, the gear, I, or its equivalent), by which that one of the two which may be delivering the cloth or drawing it forward may be revolved sufficiently faster than its mate to prevent the cloth from becoming slack.

I also claim the improved tilting rack constructed of the main and supplementary rack, to operate substantially as described.

I also claim the mechanism of the tilting rack, D, with the hand lever, E, by mechanism or means whereby by driving a movement of the said lever the rack may be tilted in manner as described.

I also claim the combination of the reversing mechanism of the stretching rollers, H, H, with the said rollers, the rollers, F, G, the drum, A, and the tilting rack.

I also claim the application of the roller carriages, d', d', to their respective racks, B, B, so as to project or lap underneath said racks, and the same operating to keep each of the carriages in connection with its rail.

41,228.—Refrigerating Dish Cover.—Obadiah Marland, Boston, Mass. :

I claim the within-described refrigerating dish cover with its reservoir or receptacle, B, for containing ice, arranged and operating substantially as described for the purpose set forth.

41,229.—Steam Engine.—George T. May, Tompkinsville, N. Y. Ante-dated Dec. 30, 1863 :

I claim, first, The reservoir, G, in connection with a modulator cylinder, F, substantially as specified.

Second, The combination of a modulator cylinder, F, reservoir, G, piston-rod, H, piston, I, steamports, 1, 2 and 3, 3 and 4, steam-chest, B, and valve boxes, C and D, substantially as and for the purpose set forth.

Third, The same in combination with a crank, K, shaft, J, and gearing, O, or equivalent connection with the main shaft of the engine, substantially as and for the purpose set forth.

Fourth, The art or method of modulating the mechanical effect throughout the revolution of an engine, by means of the reaction obtained from a volume of steam or other elastic fluid, cut off at the appropriate moments of time from the boiler pressure (if steam, or equivalent, if other fluid), and submitted to the process of alternate compression and attenuation under a piston operated from the engine; said process of compression and attenuation being effected within a combined modulator-cylinder and reservoir, substantially as described.

41,230.—Rim for Tables.—Elisha Mets, Rochester, N. Y. :

I claim as a new article of manufacture the bent rim, A, adapted especially to tables, constructed and arranged substantially as herein set forth.

41,231.—Cord-Tightener for Curtains.—John O. Montigani, Albany, N. Y. :

I claim the india-rubber spring band, d, extending from the fixed stud, e, to the strap or shell carrying the cord pulley or eye, for the purposes and as specified.

41,232.—Grain Separator.—Harrison Ogborn & John W. Free, Greens Fork, Ind. :

We claim, first, The adjustable guide ribs, G, constructed and operated substantially as and for the purpose herein set forth.

Second, The suspending straps, I, attached to the under side of the front end of the shoe, C, substantially as described.

Third, The combination of straps, I, shoe, C, and guide ribs, G, as and for the purpose set forth.

Fourth, We claim the rocking lever, E, constructed as described in combination with the straps, I, and shoe, C.

41,233.—Saddle Bag and Medicine Case.—Hyla H. Peacock, Philadelphia, Pa. Antedated Dec. 20, 1863:
I claim, first, The combination of the within-described cases with the strap, A, each case being composed of the two portions, B and B, hinged together and arranged to open, substantially as set forth for the purpose specified.
Second, The metal clasps, a, arranged within a case for the reception and retention of bottles, substantially as and for the purpose described.

41,234.—Machine to Print Addresses on Newspapers.—Milo Peck and Charles Peck, New Haven, and Robert W. Wright, Orange, Conn.:
First, We claim the type or address blocks with beveled edges or the equivalent therefor, so arranged that when set up in a galley the blocks themselves constitute a ratchet by which the galley may be fed forward at regular intervals.
Second, We also claim the arrangement of wooden type or address blocks in columns or galleys, in such manner that while one side of the column forms a continuous ratchet of which each block is a tooth, as described, the other side of the blocks may form an irregular ratchet, operating only when a block containing a particular name or address is reached at any interval, substantially as described.
Third, We claim the binder, Fig. 6, in combination with the address blocks and galley, when used in the manner and for the purpose set forth.
Fourth, We claim the movable shield, p, in combination with the dog, k, the type or name blocks and the galley or their equivalents, as herein set forth.
Fifth, We claim the feed lever, a, with the platen arm, d, the feed slide, h, and the dog, k, in combination with the wooden type blocks, when the blocks are so arranged in galleys as to form a ratchet moving at regulated intervals, substantially as described.

41,235.—Cable Stopper.—G. S. Perkins, Essex, Mass.:
I claim the cable stopper composed of a lever, A, furnished with a pair of claws, b, b, as described, and to be applied in connection with the cable and with a shackle or its equivalent, substantially as herein specified.
Second, The prongs, c, and pin, d, in combination with the prongs, b, b, of the lever, A, substantially as and for the purpose herein set forth.

[This invention consists in a cable stopper of improved construction, whereby greater facility is afforded for slipping the cable and a vessel is enabled to get under way more expeditiously.]

41,236.—Sash-supporter and Lock.—Washburn Race, Lockport, N. Y.:
I claim as a new article of manufacture the combined sash-supporter and lock, C, consisting of the enlarged eccentric or stop, c, and the arms, d, d', the same being situated at the top of the lower sash, B, and arranged relatively with it, as herein set forth.

41,237.—Artificial Leg.—John Reichenbach, Pittsburg, Pa.:
I claim, first, Forming the ankle joint by means of a hook and eye, or ring, attached to the foot, the other to the end of the leg, forming an universal joint, in combination with springs of india-rubber or other elastic material placed in the cavity of the foot for the purpose of allowing the requisite motion of the foot with sufficient elasticity of tread, substantially as described.
Second, The mode of regulating the length of the leg from the knee to the sole of the foot by means of the hook and eye bolts, c and k, furnished with screw nuts, n, n', in combination with the india-rubber springs, l, substantially as described.
Third, So constructing the ankle joint, substantially as described, as that when the leg has been turned on its axis in the foot the foot shall be automatic fly restored to its normal position in relation to the leg, when raised from the ground, by means of the combination of the hook and eye joint and india-rubber springs.

41,238.—Artificial Leg.—John Reichenbach, Pittsburg, Pa.:
I claim, first, Constructing the knee of two hemispherical pieces, one attached to the thigh piece and the other to the leg piece, each working in a socket in that portion of the leg to which it is not attached and connected together by a center or joint pin, substantially as described.
Second, The use of a grooved pulley or disk, turning on the center or joint pin of the knee, for guiding the extensor cord, in its passage over the cap of the knee, substantially as and for the purpose hereinbefore specified.
Third, The combination of the hemispherical joint pieces, g, g', one attached to the thigh and the other to the leg, each working in a cup-shaped socket in that portion of the leg to which it is not attached with the hinge pieces, d, d', and hinge pin, e, either with or without the disk or pulley for the extensor cord the whole being constructed and arranged substantially as hereinbefore described.
Fourth, Also the use of an extensor cord attached to the leg piece below the knee, and extending over the pulley, f, over the cap of the knee, and thence passing up through the thigh, and having its origin in or being attached to a strap passed around the waist of the wearer and otherwise firmly secured to his body, so that by flexing the stump of the thigh outward from the body the extensor cord is sufficiently loosened to allow of the flexures of the knee joint, and by straightening the stump of the thigh or bringing it into a line with the body the cord may be drawn tight, thereby straightening out the leg at the knee joint, substantially as described.

41,239.—Machine for Cutting Tags on Shoe Laces.—F. J. Seymour, Wolcottville, Conn.:
I claim, first, The notched cutters, h and i, receiving the double-tagged braid on a diagonal position, and compressing and separating such double tags, substantially as specified.
Second, I claim the yielding cone, n, in combination with the cutters that separate the double-tagged braid, substantially as specified.
Third, I claim the guide hole, f, in combination with the presser or clamp, g, for the purpose and as specified.

41,240.—Blacksmith's Trolley.—William Sharp, Millport, N. Y.:
I claim the combination and arrangement of the partially-rotating disk, B, and stationary bed plate, C, provided with the unvarying opening, e, and variable openings, g, f, or their equivalents, with the blast pipe, A, and blast chamber, g, f, substantially in the manner and for the purposes shown and described.

41,241.—Sizing and Water-proofing Paper, &c.—J. N. Sigel, Alexandria, Va.:
I claim the process above described for treating fibrous materials to render them water-proof and increase their strength and durability.
[This process consists in the application to paper or other fibrous material of a solution made from any suitable resinous gum which has previously been purified to remove its oily or viscid property.]

41,242.—Breech-loading Fire-arm.—W. X. Stevens, Worcester, Mass.:
I claim, first, Operating a breech block, C, working transversely to the bore of the piece by means of a sliding rod, I, or its equivalent working longitudinally within the breech frame and combined with the said block by means of a stud and inclined groove, or other devices having a similar wedgelike action, substantially as herein specified.
Second, So constructing such sliding rod, I, or equivalent, and applying it in combination with the breech block, C, as to enable it to enter a notch in the said block, and so serve the additional purpose of securing the said block in position for firing, substantially as herein described.
Third, The combination with each other and with the sliding rod, I, or its equivalent of the spring locking pin, b, and the elbow lever, J, substantially as and for the purpose herein described.
Fourth, So applying a movable stop pin, k, or its equivalent that it serves as the same time to stop the opening movement of the breech, and as the means of preventing the withdrawal of the said block from the frame, and by a suitable movement will permit such withdrawal, substantially as herein described.
Fifth, The loose nipple, N, having a movement endwise to enable it to be suitably operated by the hammer to produce the explosion of a fixed ammunition cartridge, and yet capable of conveying fire to a charge from an ordinary cap, substantially as herein described.

41,243.—Fastening for Surgical Instruments.—George Tieman, Brooklyn, N. Y.:
I claim the turning fastener or button, applied to surgical and other instruments to retain them in position when opened out of a handle, as and for the purposes specified.

41,244.—Coal Scuttle.—W. B. Treadwell, Albany, N. Y.:
I claim, first, A coal scuttle or bucket constructed with an oval in-

stead of elliptical bottom plate, a, an extended and contracted channel mouth, A, and a semicircular back, substantially as described.

Second, I claim in combination the oval flange base, C, oval bottom plate, A, and oval body, A' a' b', as presented in figures 1 and 2 for the purposes described.

Third, Inclining the oval bottom plate, a, backward from the base of the channel, b, in combination with a longitudinally-extended and laterally-contracted mouth, A, substantially as described.

Fourth, I claim in the two side fenders, D, D, so applied to the scuttle mouth as to admit of the use of a poker when necessary to prevent said mouth from choking up with coal in emptying the scuttle, substantially as described.

Fifth, A coal scuttle constructed in all particulars substantially as herein described.

41,245.—Directing Guns by Adjustable Ports.—Richard Trussell, Brooklyn, N. Y.:
I claim, first, The combination of the port slide, b, applied outside of the apparatus and the self-closing port stopper opening outward by the running out of the gun, substantially as herein described.
Second, Elevating and depressing the gun by applying the necessary power to raise and lower the port slide by means of racks and pinions or their equivalents, substantially as herein specified.

41,246.—Leather and Rubber Soling.—G. F. Udell and Henry Mayell, Albany, N. Y.:
We claim the combination of leather in sides or large sheets with india-rubber soling, as described in the above specification, being a new and useful article of manufacture.

41,247.—Lock.—Rodolphus L. Webb, West Meriden, Conn.:
I claim, first, A tumbler, d, fitted loosely between the latch plates in combination with a swivel spindle latch, e, g, substantially as and for the purposes described.
Second, I claim the arrangement of the spindle, e, spring, h, studs, f, yoke, e, and tumbler, d, operating substantially as and for the purpose described.

41,248.—Machine for Dressing Barrel Heads.—Peter Welch, Oswego, N. Y.:
I claim, first, The combination and arrangement in the manner described of the foot rod, O', lever, P', shaft, J', and clamp, D', for the purpose specified.
Second, The mode specified of throwing the feed into and out of gear by the combination of the clutch, I, J, fork, P', rod, Q, and fork, E, constructed, operated and operating substantially in the manner described.
Third, The adjustable gages, C' D', attached in the manner set forth to the rod, O', and arranged and operated substantially as specified.

41,249.—Machine for Chamfering and Crozing Barrels.—Peter Welch, Oswego, N. Y.:
I claim the new and improved mode of imparting the feed motion to the crozing and other tools, as hereinbefore set forth, the same consisting in the combination of the stationary wheel, P, with the wheel, R, shaft, S, worm, T, feed wheel, U, pins, f, g, and slides, V and W, constructed, arranged and operating substantially in the manner described.

41,250.—Burning, Roasting and Smelting Ores.—J. D. Whelpley, and J. J. Storer, Boston, Mass.:
We claim, first, The heating and immediate quenching in water of finely-pulverized ores, substantially as described.
Second, The perpendicular, expanding flues, C, substantially as and for the purposes described.
Third, The horizontal, or nearly horizontal, flue, D, in combination with the flue, C, substantially as and for the purpose set forth.
Fourth, The combination of two or more furnaces with a perpendicular, expanding flue, substantially as set forth and for the purpose described.
Fifth, The auxiliary chimneys, K, K', over the furnace fires, for the relief of the fires during the process of kindling and extinguishing, substantially as described.
Sixth, The side openings in the perpendicular flue, at graduated distances, with brick or iron removable stopper, substantially as set forth, for the purpose of inspection and the admission of atmospheric air.
Seventh, The pouring of the material to be burned or roasted into the side hopper or air feed hole of a fan blower for induction into the furnace, in combination with the second blower, substantially as and for the purpose described.
Eighth, The projection of a perpendicular blast from a fan blower down through the top of the furnace and perpendicular expanding flue, carrying the material to be burned or roasted, substantially as described.
Ninth, The combination of two blowers, one at the head or above, and the other below in the horizontal flue, to produce a balanced blast, substantially as described.
Tenth, The use of a water bath, or wet hearth, commencing at the bottom of the perpendicular flue and extending along the horizontal flue, substantially as and for the purpose described.
Eleventh, The use of the spray chamber, G, and feeding the same with water by an induction pipe or sluice from the top or side, substantially as and for the purpose described.
Twelfth, Connecting the pool of water in the spray chamber, by a circuit or canal, with the water external to the furnace, for the purpose of making a continual circulation, substantially as described.
Thirteenth, Supporting the drop chimney, C, and horizontal flue, D, on rollers and arches, in a tank or trough, so that the surface of the water therein may in effect form a bottom to said chimney and flue and allow the deposits to be raked out under said arches, without opening the furnace or affecting the draft, substantially as described.

41,251.—Machine for Making Horse-shoe Nails.—Amos Whittemore, Cambridgeport, Mass.:
I claim, first, A reciprocating furnace, in combination with nippers, operating substantially as and for the purpose described.
Second, Applying the thrusting nippers which hold the rod during its forward movement to a reciprocating furnace, in combination with nippers applied to the frame of the machine, substantially as and for the purposes described.
Third, A reciprocating nail rod heating furnace, substantially as described.

41,252.—Nut and Washer Machine.—J. T. Wood and E. C. Smith, Pittsburg, Pa.:
We claim, first, Rolling and partially perforating the nut blanks on both faces, before the nuts are severed from the bar, and preventing the bar from spreading laterally during the perforation, by means of a pair of rollers, one having a projecting belt fitting into a groove in the other, and finished with short punches or bosses, substantially as described.
Second, Also the use, in combination with the rollers constructed as above described, of the round punch, i, and dies, h and k, and die block, c', for the purpose of making finished nuts, substantially as hereinbefore described.

41,253.—Apparatus for Evaporating and Refining Sugar.—J. E. Youngman, Rockford, Ill.:
First, I claim the furnaces, A, B, C and C', arranged as and for the purpose set forth.
Second, I claim the arrangement of the dampers, a, a', and b, b', in combination with the furnaces, A, B, C and C', for the purpose herein specified.
Third, I claim the dampers, c, d and e, in combination with the flues, E and F, when arranged and operated as described.
Fourth, I claim the perforated spouts, K and N, in connection with the spouts, K' and N', for the objects and purposes set forth.
Fifth, I claim the bordered heaters, Nos. 5 and 6, for the purpose described.
Sixth, I claim the reservoir, J, for receiving the fluid part of the scum, as specified.

41,254.—Loom.—Caspar Zwicky, Pittsburg, Penn.:
I claim the arrangement of the cams, a, b, on the shaft, B, and of the cams, J, K, upon the shaft, G, said shaft, B, having two revolutions to one of the shaft, G, and the cams of both shafts acting upon the rocking shafts, g, h, to work alternately and move out of action alternately the picker staves, substantially as described.

41,255.—Collar for Lamp.—J. C. Beers (assignor to himself and P. C. Skidmore), of Brooklyn, N. Y.:
I claim the combination of the part, C, with the ferrule, by direct attachment, which allows the lamp to be opened sufficiently to fill it, substantially as and for the purpose set forth.

41,256.—Heater.—Henry L. Budd (assignor to himself and George H. Thorp), of New York city:
I claim, first, The case, f, at the rear of the fire-pot, in combination with the dampers, g and h, and pipe, i, as and for the purpose specified.
Second, I claim the plate, p, across the opening, o, of the vessel, m, through which the air circulates, and is, by said plate, divided and

caused to enter the room or pass away by the hot air flue, as specified.

Third, I claim the half covers, q and r, united together and acting as specified, in combination with the plate, p, to direct the heated air as set forth.

41,257.—Tire-Upsetting Machine.—L. A. Dole (assignor to himself and A. B. Silver), of Salem, Ohio:
I claim, first, Making the wrought-metal key retainers of the tire-upsetting machine, with a contracted slotted portion, a, terminating in an enlarged eye, b, for the purposes described.
Second, The use of transfer c wedge keys with V edges, in combination with the wrought-metal loops, A, applied to the anvils, B, substantially as described.

41,258.—Plane for Jointing Table Leaves.—T. P. Gran-ger (assignor to himself and Josiah Best), of Peca-tonica, Illinois:
I claim the herein-described series of planes for setting table joints, the same being constructed and used in the manner and for the purpose herein set forth.

41,259.—Composition for Percussion Caps, &c.—Heinrich Hochstatter, of Lauzen, Hesse Darmstadt, assignor to William Lange and Ferdinand W. Sennwald, of St. Louis, Mo.:
I claim the application of chloride of lead, compounded as described herein, as an explosive mass for the ignition of gunpowder.

41,260.—Hat.—Frank Howard, of Boston, Mass., assignor to Vyse & Sons, of New York city:
I claim a hat brim prepared and constructed substantially as herein described.

41,261.—Hat.—Robert B. Hurd, of Paterson, N. J., and William Halladay of Brooklyn, N. Y., assignors to themselves and John S. Giles, of New York city:
We claim a hat composed of buckram, covered with plush felt, the whole combined and constructed substantially as herein described.

41,262.—Device for Shrinking Tires.—Joseph Olmstead (assignor to T. P. Dinsmore), of Chicago, Ill.:
I claim the arrangements of the brackets, e, e', projecting from the ends of the eccentric, D, in combination with the wrist pin, d, pitmans, E, E', and hand lever, F, constructed and operating as and for the purpose shown and described.
[This invention is intended as an improvement on that class of tire-brinkers in which the bar of iron to be shrunk, after having been heated, is secured on two blocks, one stationary and the other movable, and by forcing the movable toward the stationary block, the operation of shrinking is effected.]

41,263.—Corn Planter.—William F. Osgood (assignor to Orin F. Osgood), of Lowell, Mass.:
I claim the arrangement of the spring bar, F, constructed as shown, with the wheel, c, rollers, l, and slides, E, H, in the manner herein described.
[This invention relates to a new and improved seeding machine for planting seed in either hills or drills. The object of the invention is to obtain a simple machine for the purpose specified, which may, by a very simple adjustment be made to plant the seed in either hills or drills, and also be very readily adapted for planting different kinds of seed or seed of different sizes.]

41,264.—Washing Machine.—D'Arcy Porter (assignor to himself and J. H. Woodman), of Cleveland, Ohio:
I claim the flexible series of rubbers, F, when constructed and arranged as described, in combination with the springs, K, and fitted roller, G, the several parts operating substantially as and for the purpose herein set forth.

41,265.—Sugar Mill.—Luther E. Porter, of Lake Mills, Wis., assignor to E. W. Skinner, of Madison, Wis.:
First, I claim the combination and arrangement of the roller, A, the adjustable journal box, D, with a lever or combination of levers operating substantially as and for the purposes herein specified and shown.
Second, I claim, in combination with said adjustable box and levers, the employment of the sliding fulcrum, G, arranged and operating as and for the purposes herein shown and described.

41,266.—Apple-Parer.—E. L. Pratt (assignor to George R. Carter) of Boston, Mass., and D. H. Goodell, of Antrim, N. H.:
I claim the manner of operating the fork and knife of the apple-paring machine, by applying them to radial arms, d, h, made to revolve around and to operate in conjunction with a wheel or ring, a, substantially as and for the purpose set forth.
I also claim so applying the mechanism which operates the knife that while the apple is rotating on its fork, the progressive movement of the parer can be arrested in the manner specified.

41,267.—Buckle.—John Stevens (assignor to himself, Achille F. Migeon and Franklin Farrel), of New York city:
I claim first, The tongue, a, formed as a bent lever by locating the fulcrum, c, above the strap, so that the tongue, a, shall clamp the strap as specified.
Second, I claim forming the buckle to tongue or frame of sheet metal, bent up and united by the fulcrum or cross pin, as specified.

REISSUES.

1,603.—Method of Fitting the Heaving Socket and Head of Windlass.—Charles Perley, of New York city. Patented Nov. 13, 1849, and extended:
I claim, first, A windlass head fitted at the inner end upon a polygonal boss that is attached to the shaft or spindle, whereby the head can be easily removed as set forth.
Second, I claim a hand spike heaver fitted to take the teeth at the inner or larger end of the windlass head, substantially as and for the purposes specified.

1,604.—Ship's Capstan and Windlass.—Joseph P. Manton, William H. Reynolds, Francis W. Reynolds, and William H. Taylor, of Providence, R. I., assignees by mesne assignments of James Emerson, of Worcester, Mass. Patented June 17, 1856:
We claim, first, The combination, substantially as described, of a friction brake with the independent chain wheel or "wild cat" of a ship's windlass or capstan, for the purpose of controlling the paying out of the cable of the vessel directly from the chain locker.
Second, The double or divided windlass or capstan, arranged for operation in the manner specified, and consisting of an upper hand operative portion of the body or capstan proper, G, and under loose portion of said body, H, the former being capable of working independently of the latter or in connection with it, at pleasure, substantially as herein described.

DESIGN.

1,883.—Design for a Bottle.—George Scott, of New York city.

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