

WASHING MACHINE—George W. Wilson and Andrew Johnson, of Walnut Grove, Ill. We claim an improved article of manufacture a washing machine, having upon the central cylinder, C, a plate, g, arms, h, h, curved slats, j, and rod, i, for securing the clothes, and in the upper part of the cover, B, a rubbing device, D, consisting of a slat, m, with slats or corrugations, o, at its sides, and rollers, p, and otherwise constructed as shown and described.

[This invention consists in the employment of a rotating cylinder, stationary rubber, and a cleaner placed within a suitable case or box, and combined and arranged so as to set in a very efficient manner on the clothes, for the purpose of cleansing them without injury.]

VALVE GEAR OF OSCILLATING STEAM ENGINES—Herman Winter of New York City: I claim, first, The method substantially as specified of causing shaft by means of which the valves of an engine are moved to revolve through the agency of a cam, a lever and a crank, and the oscillation of the cylinder to which the shaft is attached, all the parts being substantially as specified, and acting in combination, substantially in the manner specified.

Second, I claim the combination of a toe keyed to some part which actuates a valve or valve, with an adjustable swinging toe and a revolving cam, the combination being substantially as set forth, to serve the purpose described.

WASHING MACHINE—George L. Witsell, of Wilmington, Del.: I do not claim the shape of the tub.

Nor do I claim the corrugated surface. Neither do I claim the passing the clothes between the two surfaces, one being a cylinder, and the other the surface of the tub, for I am aware that the ribbed surfaces have been used long since, and that V. R. Stewart has already (June 28, 1856) patented a machine having a ribbed cylinder revolving in proximity to a concave board, between which the articles in washing pass.

But I claim the combination of the corrugated or fluted conical cylinder, placed vertically with the corrugated or fluted sides of the conical tube, arranged and operated as shown and described, for the purpose specified.

PROCESS FOR DECOMPOSING FATS—Robert A. Wright and Louis J. Fouché, of Paris, France: We do not claim the application of superheated water for decomposing fatty bodies, nor the form of the apparatus divided, which may vary somewhat according to conditions and circumstances.

But we claim producing a continuous automatic circulation of highly heated water in a very finely described state through the bodies under treatment by means of an apparatus constructed and employed substantially as shown and described.

BOOT JACK—William D. Young, of Baltimore, Md.: I claim the construction of a boot jack substantially as set forth, when used in combination with a chair, as described.

CLOTHES FRAME—Daniel C. Colby, of Keene, N. H., assignor to himself and Daniel W. Ransom, of Croydon, N. H.: I claim the arrangement of the levers, D, E and F, as above described, in combination with the pawl, K, and the shaft, G, operating substantially as set forth.

DRAWING FRAMES FOR FIBROUS MATERIALS—Silas C. Durgin, of Holyoke, Mass., assignor to himself and Ammon R. Durgin, of Nashua, N. H.: I claim the arrangement of the conical draft rollers between the gate trumpet and the other reducing rollers, and supporting such trumpet by a mechanism essentially as described, or the equivalents thereof, which will enable the said trumpet to operate both as a gate to the silver and to guide it to the rollers, and to be vibrated with regard to the conical rollers, in manner and for the purpose as explained.

I also claim the combination of mechanism for supporting and vibrating the trumpet, the same consisting of the bent lever, E, the overbalance carrying lever, F, and the stationary stud, and when such combination of mechanism is employed in manner and for the purpose described.

I claim the arrangement of the supporting arm, g, of the weight, h, above the fulcrum of the lever, F, in manner as set forth, with reference to the lateral drag of the silver on the trumpet as specified.

KNITTING MACHINES—Jonathan Fuller and Joseph Bullock, of Cohoes, N. Y., assignors to Wm. Smith, of Albany, N. Y.: We do not claim a slide operating by a bent arm at one end to enter breaches in the fabric, and at the other by moving a ring which is attached to and operates it to shift a couple of needles.

But we claim the apparatus attached to the stop carriage—viz. the combination of the slides, H and G, parol, E, gage, I, and arm, m, operating together upon the breaking of the fabric to uncouple the driving powers by and in combination with the ring, R, pin, J, and spring, d, which release the detent, V, substantially in the manner and for the purposes set forth in the specification.

TELEGRAPHIC MACHINES—David E. Hughes, (assignor to the American Telegraph Company) of New York City: I claim, first, giving to the key, while still pressed by the operator, a second motion at the instant that the circuit is closed or broken, as the case may be, so that an indication of said closing or breaking will be given to the operator, for the purposes set forth.

Second, The method described for governing the position of the letters upon the type-wheel with respect to that of the platen or roller over which the paper travels, in order to insure an exact position of my particular letter at the moment of printing the same—viz. by so advancing or retarding the said type-wheel upon its shaft, whenever it has lost or gained in time in regard to the travel of the circuit breaker at the distant station, that the letter indicated will be certain to stand directly over the said platen at the movement the latter brings the platen into contact with said letters.

Thirdly, Effecting the printing of each letter without arresting the motion of the type-wheel, by causing the platen to revolve in the same direction and with the same speed as the type-wheel, while said platen is bringing up and holding the paper in contact, whereby the paper is advanced along with the type or letter from which it is receiving an impression.

Fourth, The device by which the type-wheel is started from its zero, by an operator at a distant station, consisting of the shaft, g, set in motion by the electric current, and acting in combination with the clutch lever, n, and the wheel, E, whereby the type-wheel will be driven up to the time that it becomes engaged with its driving shaft, substantially as set forth.

ELECTRO-BATHING APPARATUS—Wm. W. Karshner, of Cincinnati, O.: I do not wish to be understood as broadly claiming the insulating of a patient for the purpose of electro-medical treatment.

But I claim, first, The suspending non-conductor bands, f, f, f, the conducting foot-plate, h, insulated from the bath-tub by the non-conducting substance, g, all substantially as set forth.

Second, I claim the combined use of the above described non-conducting bands, f, f, f, the conducting foot-piece, h, and the non-conducting substance, g, or their equivalents, for the purpose of administering an electric bath for therapeutic purposes, as described.

REVIVIFICATION OF BONE BLACK—Henry Kattenhorn, of New York City: I claim the method of washing bone black, or animal charcoal, in the purifying of sugar, substantially as described.

KNITTING MACHINES—Chauncey G. Keeny, of Manchester, Conn.: I claim the employment of a card attachment to knitting machines, substantially in the manner and for the purpose as described.

MARINE STEAM ENGINE—Wm. Kennish, Jr., of New York City: I claim the application of an auxiliary pipe to the present discharge pipe of a marine steam engine, in the manner and for the purpose described in the specification.

MACHINE FOR CUTTING AND SETTING SAW TEETH—Columbia G. Loyne, of Lenox, Mass.: I claim the device for punching and shearing metals, as described, arranged in connection with the saw-gummer and saw-set, the whole constructed and operating in the manner set forth.

MACHINERY FOR SCOUTING FLAX—Wm. C. McBride, of Raritan, N. J. Patented in England May 20, 1859: I do not claim either set of feeders, separately, as making part of my present invention, having described a similar arrangement in Letters Patent granted to me by the government of Great Britain in the year 1852.

What I claim is, the mode of operation of the combined rotating blades or beaters, with the interposed stocks, substantially as described.

I also claim combining two scutching machines, substantially as described, or their equivalents thereof, by means of the two feeding wheels, with their bands, arranged substantially as described, for transferring the fibers which have been scutched at one end, that the other end may be properly presented to the second scutcher, as set forth.

I also claim, in combination with the two sets of feeding bands and wheels, or their equivalents, the sustaining and guiding table, substantially as described, by which the upper unscutched ends of the fiber are held up, guided, and properly presented to the second scutcher, as set forth.

MANUFACTURE OF CANDLES—Antonio Meucci (assignor to D. B. Lorraine), of Clifton, N. Y.: I am aware that molds of plaster of Paris, or other porous materials, partially or wholly saturated with grease, have been used in the manufacture of articles of plaster of Paris, and other ornamental objects, and therefore do not claim the invention of such molds, or their employment in other arts.

But I claim the method of forming mold candles in saturated porous malleable molds, substantially as set forth, in contra-distinction to the method in general use of forming them in candle molds of imperious metal.

HEATING APPARATUS—U. D. Mihills, of Hartford, Wis.: I claim a heat controlling cylinder, in which the regulating disks, shaped as described, are connected with a detachable frame, the same being arranged and operated as specified.

WASHING MACHINE—Wm. H. Milhouse, of Sugar Town, Pa.: I claim, first, Securing strips of india-rubber edgewise in slots in the concave, D, and rubber, E, by means of the slots which are bolted in between the successive strips, as fully set forth.

Second, The arrangement of the adjustable frame, F, levers, a and b, swinging rubber, E, pitman, D, and shaft, c, with the concave, when the whole are combined, constructed and operated in the manner and for the purpose set forth.

BED BOTTOM—B. F. S. Monroe, of Utica, N. Y.: I claim the two frames, A, C, with the springs, B, secured between them, the frames being connected by the cross bands, F, covered or enclosed by any suitable fabric, E, and the upper frame supporting the seat or mattress, the whole being arranged substantially as and for the purpose set forth.

[The object of this invention is to allow the outermost rows of springs in a bed bottom, chairseat or other article in which they may be placed, equal freedom of movement with the innermost springs without lateral play, so that each spring will be permitted to bear its proportion of weight, and while being kept in proper position allowed to yield or give to the full extent of its movement, thereby rendering the article in which they are placed far more elastic, durable, and altogether more desirable in ever respect than those hitherto constructed.]

PUMPS—Walter Peck, of Rockford, Ill.: I am aware that hollow plungers have been made and do not wish to be understood as laying any claim thereto.

But what I claim is the combined arrangement of the stationary standard, c, vibrating lever, a, and lifting spring, b, with the plunger, A, as specified, for the purposes set forth.

I also claim the combined arrangement of the hollow plunger, A, having a cylinder, C, and spout, f, and attached directly to the handle, with the stationary chamber, D, and steadying springs, B, as specified.

COMBINED PUNCH AND AWE—F. P. Pfeleghar, of Whitneysville, Conn.: I do not claim a plurality of cutter tubes, d, of different sizes attached to a rotating head, b, for the purpose of punching holes of different sizes, for such device, or its equivalent, has been previously used.

But I claim the rotating hollow head, b, provided with a series of cutter tubes, d, of different sizes, in combination with the awl, h, attached to or forming a part of the bent bar or rod, E, which, as well as the head, b, is attached to the jaw, c, and provided with a spring plate or stop, m, the whole being arranged substantially as and for the purpose set forth.

[Where belts are used, as in mills, machine shops, &c., it is often necessary to sew together their ends when they become broken or separated while driving the machinery. This invention facilitates this, and is also applicable for other purposes where leather or any fabric is punched, and laces passed through for the purpose of holding the ends together. The invention consists in combining a rotating punch stock with an awl in such a manner as to perform the desired work.]

TWISTING FIBROUS SUBSTANCES—George W. Pittman, of Bushy Park, N. Y.: I claim the application of the flyer, B, or its equivalent, substantially as described, in combination with the rollers, D, D', and spool, F, or other equivalent means of holding the sliver, and taking up the twist produced by the flyer, whereby the same operation is made to spin the sliver into yarn, and twist the same with one or more other yarns, simultaneously as set forth.

[This invention consists in a certain mode of applying a flyer, or its equivalent, in combination with other mechanism, whereby it is made to spin a sliver or roving, and by the same operation to twist the yarn thus produced a long with one or more yarns or threads which have been previously spun, and by that means saving half the mechanism commonly employed and half the time usually occupied in the spinning operation for the manufacture of twist. The invention is applicable either in the production of strands for rope or for cotton, woolen or silk twist for all purposes.]

RAZOR STROPE—Michael Posz, of Shelbyville, Ind.: I claim, as a new article of manufacture, the self-lubricating razor strop, when constructed in the manner described.

BELT TRUSSE—H. H. Reynolds, of Buffalo, N. Y.: I claim the combination of the T-spring, E, with the conical spring, H, pad, B, belt, A, and perineal strap, C, the whole being arranged substantially as shown.

STROPS—Philip Shreiner, of Columbia, Pa.: I claim the air-supplying tubes and air-heating cylinders, when combined with a stove, the heat of which is unobstructed by outside casings.

PHOTOGRAPHIC PLATE VICE—M. M. Rison, of Paris, Tenn.: I do not claim the use of an adjustable jaw and a clamping jaw, the former stopped by a pawl working in a ratchet in the bed-piece, and the latter operated by an eccentric attached to the bed-piece.

But I claim, as an improved article of manufacture, a photographic vice, having its eccentric lever, E, provided with a groove, g, a clamping jaw, D, provided with a catch, f, to engage a jaw, C, provided with a spring pawl, which engages a rack, e, and otherwise constructed as shown and described.

[This invention consists in the application of a grooved or hooked eccentric lever to operate upon one jaw of a photographic plate vice, in combination with a spring pawl attached to the other jaw to operate in a toothed ratchet on the bed-piece, for the purpose of permitting the adjustment of the vice to the plates of different sizes, and the speedy clamping and release of the plates.]

WAGON BRAKE—Daniel Robinson, of Lenox, Pa.: I claim the combination and arrangement of the sliding frame, F, curved bars, C, attached to the rock-shafts, D, D', and passing through the traverse bars, d, of the frame, F, and the shoes, E, attached to the ends of the rock-shafts, the several parts being fitted in the truck, or bed, A, substantially as and for the purpose set forth.

[Shoes are attached to rock-shafts which are fitted in the bed or track of the vehicle, and having curved bars attached to these rock-shafts, the bars passing through a sliding frame fitted in the bed or truck, and having the draft pole attached to it. The brake is operated by the momentum of the vehicle when the speed of the same is checked, or by gravity alone when descending a hill. It is applicable to all wheel vehicles.]

MACHINE FOR SPLITTING WOOD—P. P. Ruger, of New York City: I claim the spring or yielding guide for relieving the cross bars, e, in the manner specified and for the purposes set forth.

I also claim the guide plate, x, with the uprights, y, constructed and arranged in combination with the wood splitters, as specified.

BALL FURNITURE CASTERS—B. A. Russell, of Deep River, Conn.: I claim a new article of manufacture, in my improved furniture caster, when composed of cylinder or casing, A, either with or without the radial set screws, G, or ribs, G', in combination with the plate, D, and ball, F, when constructed, arranged and operated in the manner and for the purposes set forth.

BREECH-LOADING FIREARMS—Christian Sharpe, of Philadelphia: I claim, first, Forming on the outer end of the sliding bush, G, as the sole bearing point against the breech, an annular inclined projection with a sharp annular edge, h, coinciding with the smallest portion of the bore of the said bush, as and for the purpose set forth.

Second, The annular termination, e, of the sliding bush fitting into an annular recess, d, formed in the barrel and overlapped by the sharp-edged annular projection, substantially as set forth and for the purpose specified.

Third, The convex base, n, as fitted into a concave socket in the breech, so as to form a self-adjusting base for the end of the barrel.

BREECH-LOADING REPEATING FIREARMS—Christian Sharpe, of Philadelphia, Pa.: I do not desire to confine myself to the use of a barrel block with four bores, or to the precise devices described, for altering the position of the projection, e, inasmuch as a barrel block, with more or less than four bores, may be used in connection with my improvement, and as different devices for changing the position of the said projection.

But I claim first, Exploding, in succession, a number of cartridges of the class described by means of a projection caused to revolve by the movements of the hammer, when the said cartridges are so arranged, in respect to the said projection, that the latter shall strike the edge only of each cartridge in succession, as set forth.

Second, The catches, t, t, so arranged on the stock, in respect to the bores of the barrel block, that on moving the latter from the breech, they may be the means of withdrawing the whole of the cartridges simultaneously from their respective bores, as set forth.

BOOT HEELS—Stillman Thorp, of Portland, Me., and Wesley Thorp, of Turner, Me.: We do not claim an elastic metallic spring or plate applied in the shank of a boot, nor do we claim a rotary heel-piece applied separately from the metallic shank piece, as we are aware that both are new.

But we claim the combination of the metallic plate spring or shank-stiffener, and the rotary heel-piece, connected together and applied to the heel and shank of a boot or shoe, substantially as specified.

WASHING MACHINE—Wm. B. Twiford, of Chincoteague, Va.: I claim the opposing incline planes, e, e, on the one end of the ends of the sliding roller frame, in combination with fixed concave projections or ledges, c, c, on the sides of the tub or box, and with grooves, B, of greater width than the diameter of the journals of the roller, in the sides of the box, substantially as and for the purposes set forth.

LAMPS—Hezekiah Knowles, of New London, Conn., assignor to Fellows, Hoffman & Co., of New York City: I do not claim, separately, either of the deflectors described, nor the introduction of a current of air at the base of the chimney and between it and the upper deflector.

But I claim the lower or diaphragm reflector surrounding the neck tube, or near its upper edge, substantially as and for the purpose specified, in combination with the upper deflector and the chimney, having suitable openings for the supply of a draught of air to the inside and to feed the flame outside of the upper deflector, substantially as and for the purpose specified.

HARVESTERS—Geo. W. Richardson and Robt. Glover, of Grayville, Ill., assignors to themselves, J. B. Williams and Wm. A. Horral, of White county, Ill.: We claim, first, The jointed spring arm, a', arranged and operating in the manner and for the purposes set forth, in combination with the spring catch, i, operating so as to catch and hold the arm, a', when it has gathered the grain, and detain it in this position until the bundle is ready to be deposited free from the platform, p.

Second, The raker, a' a', in combination with the rod, r, crank, c, rest, n', and retracting weight, w, arranged and operating to produce the reciprocating movements for gathering and delivering the gavel in the manner described.

Third, In combination with the arm, a', the connecting rod, m, and bent lever, l, operated through the medium of rod, n, pin, n', and rest, n'', by the driving wheel, c, substantially in the manner and for the purposes set forth.

RECLINING CHAIRS—Augustus Eliars, of Boston, Mass. Patented May 11, 1858: I claim, first, The general arrangement of devices described for actuating and sustaining both the back and foot-rest, the same consisting of the arms, ff, attached to the back in a projection thereof, and having a shaft which travels in grooves, formed in the supporting frame-work of the chair and the arms, the whole being combined with the foot-rest and frame as set forth.

Second, I claim the combination of device described, whereby the back can be placed and held in any desired position and at same time the proper length of arms retained, the same consisting of the hinged rails, p, p, sliding arms, s, s, locked upon said rails in any desirable manner, and mortises to receive the said rails as set forth.

Thirdly, I claim the foot-rest, constructed and arranged substantially as described, when combined with a spring or weight, or its equivalent, to operate as set forth.

forth, so that the said foot-rest may be raised or lowered at will, to adapt itself to the length of the limb of the occupant, substantially as described.

Fourth, In combination with a reclining chair, constructed as described, I claim the peculiar joint between the back and arms, consisting of the arm, g', attached to the back, and turning upon a pivot in the groove or mortised sliding arm, whereby a very long arm may be obtained, as set forth.

HULLS OF STEAM VESSELS—Ross & Thos. Winans, of Baltimore, Md. Patented Oct. 26, 1858: We claim constructing the hull in the form of a spindle, substantially as described.

INVENTIONS EXAMINED at the Patent Office, and advice given as to the patentability of inventions, before the expense of an application is incurred. This service is carefully performed by Editors of this Journal, through their Branch Office at Washington, for the small fee of \$5. A sketch and description of the invention only are wanted to enable them to make the examination. Address MUNN & COMPANY, No. 37 Park-row, New York.

The Time to cut Timber.

MESSRS. EDITORS—In a recent number of the SCIENTIFIC AMERICAN, under the head of "Useful Information about Timber," I find a statement in direct opposition to the theory received among wood-cutters, in regard to the best time for felling timber. It is there stated that this is when the wood contains the least sap, in whatever part of the year this may take place. The result of my observations is that the month of August is the best period to cut timber for mechanical purposes, just when the leaf is full or has attained its growth, at which time the tree has certainly the greatest amount of sap in it. I have found that the timber cut at this period is perfectly solid, sap wood and all, and that it is also free from worms. Timber cut upon the same ground during other months of the year is quite porous, and has the sap wood entirely eaten off, when undergoing the same process in drying. I was led to believe that the abundance of sap in August closed the pores of the wood and solidified the timber. If my philosophy is wrong, there are quite a number of your patrons in this place interested in the subject, and who wish to hear more about it.

THOMAS HARPER.

Alleghany City, Pa., Jan., 1859.

[There seems to be a misapprehension of the idea expressed on page 154 of the present volume of the SCIENTIFIC AMERICAN, in regard to the best period for cutting timber. It is there stated that in New England, August is held to be the best month of the year, as at that period the sap is exhausted in forming the leaves and the new wood and the trunk are then much drier. This language is in accordance with the opinions of our correspondent. In reference to the term least sap, perhaps the matter would be rendered more clear to have said the least free sap. In the month of August, according to our correspondent, the sap becomes solid and fills up all the pores of the wood, consequently it is not free—not exactly sap at that period. In other States, further south, July is the month most favorable for cutting timber.

Winans' Steamer Again.

Life Illustrated publishes our remarks on this subject on page 137, this volume of the SCIENTIFIC AMERICAN, and, among other observations, says:—"We do not think that the device proposed for propelling the steamer will answer the purpose as well as some others that might be employed; and we believe we could give graver reasons for our opinions than any of those stated in the above (our) article." Surely, in the language of the "immortal poet," here is "wisdom, gravity, and profound conceit, as who should say 'I am Sir Oracle, and when I ope my mouth let no other dog bark.'" We respectfully call for these "graver reasons," for we hold it to be one of the common courtesies of life not to call in question the opinions of another upon a disputed point without at least showing the courage to express our own.

NEW OFFICE OF THE SCIENTIFIC AMERICAN.—Having removed our quarters, our friends are requested to address us as follows: MUNN & CO., No. 37 Park-row (Park Building), New York City.