



[Reported officially for the Scientific American.]  
**LIST OF PATENT CLAIMS**  
 Issued from the United States Patent Office  
 FOR THE WEEK ENDING AUGUST 11, 1857.

**MOWING MACHINE**—Wm. Bacheller, of West Newbury, Mass.: I am aware that the thill frames and cutter frames have been variously connected, and in many instances by flexible joints, but not in the peculiar manner described.

I claim the combination of the thill frame, I, with the cutter frame, F, when said frames are constructed and used in combination with the supporting wheels, B, B, and operating wheels, C, C, in the manner and for the purposes set forth.

**AUTOMATIC LUBRICATOR FOR R. R. CAR AXLES**—Wm. Baker, of Utica, N. Y.: I am aware that machines have been constructed to lubricate car journals, by conveying the oil, or other lubricating material, from a reservoir below the journal, by means of capillary attraction, by the use of cotton wicking, cotton cloth, cotton waste, coarse wool, or other porous or spongy substance applied between the oil and the journal, and also by the action of various mechanical agencies and constructions placed under and around the journal, and depending for their action upon motion to be communicated to them by the revolving action of the journal.

I do not, therefore, claim any such agency, and whatever contrivances may have been constructed, by the use of bobs or pendulums to convey the oil to the journal, and moved in any manner by the motion of the cars.

But I claim the mode described of conveying and applying the lubricating material to the journals of railroad cars and locomotives, by ejecting the same from the reservoir to the journal by the use of the piston, as described, which is moved directly by the jar or concussion when the car or locomotive is in motion, without the aid of capillary attraction, or the use of any absorbent whatever, or any mechanical agency to be propelled by the revolving action of the journal, the same being arranged and operating substantially as set forth.

**ROTARY VENEER MACHINE**—Gilbert Bishop, of New York City: I claim, first, The revolving disk and knife placed eccentrically to the disk upon the under surface or upon the edge of the disk, and having a curved edge for cutting the log in the line or direction of the edge of the knife.

Second, The vibrating of the log, by means of the log box, arms, cams and toes, connected with the rotation of the shaft of the disk, as described, so as to present the whole top surface of the log to the edge of the knife as it passes, and by a continuously varying line of cut or stroke.

Third, I claim the manner of constructing the log box with the movable bottom, composed of the cell and clamp pieces for holding, shifting and adjusting the boxes described.

Fourth, I claim the combination of the log box and feed apparatus operating together, as described.

**DREDGING MACHINE**—Asa Blood, Sen., of Norfolk, Va.: I claim, first, The dog, E, in combination with the beam, A, and rod, a, operating as described, for the purpose of holding the dredge open in descending, and for relieving its hold by its own weight as soon as the weight is taken off the chain or rope.

Second, The combination of the levers, B, C and C', with beam, A, and rod, e, operating as described, for the purpose of opening and closing the dredge, as described.

**GLASSWARE HOLDERS**—Hiram Dillaway, of Sandwich, Mass.: I claim an instrument composed of a handle, a supporting plate, a yoke, and a spring combined, to operate substantially as described, for the purpose set forth whether the yoke be provided or not with an internal holding die, g, g, as specified.

[This relates to the holding of glass bottles, lamps, bowls and other glassware during the manipulations necessary in their manufacture. It is a very convenient device, and far less liable to break the ware than the means usually employed; further than this, it never fails to hold all articles exactly in the center.]

**HULLING COTTON SEED**—Wm. R. Fee of Cincinnati, O.: I do not claim the device shown in the mill of Walker, patented in 1855, or any other form of mill dress heretofore known.

But I claim a series of cutting edges with deep intervening furrows, for the purpose of hulling cotton seed by a cutting action, which renders both the screening process and the expression of the oil easy and complete, as set forth.

**WATER CLOSETS**—Lewis Fisher, of Buffalo, N. Y.: I disclaim removal of the cover by the weight of the person upon the seat, but only considered, as this has heretofore been done in the construction of water closets.

I claim the arrangement of the sliding cover, A, with the jointed seat, D, and springs, B, for the purposes and substantially as described.

**PLANING MACHINES**—Benaiah Fitts, of Worcester, Mass.: I claim in driving gears on feed rollers for wood planing machines, the internal gear, F, and the external gear, G, in combination with the pinion, H, and connecting arms, I and J, when constructed and operated as set forth and described.

**MOWING MACHINES**—Alanson Gale, of Poughkeepsie, N. Y.: I claim operating the cutter bar, f, from the master wheel, A, by means of the mechanism constructed and arranged in relation to the main frame and master wheel of the machine, substantially in the manner described.

**WHETTING PLANE BITS**—Jesse M. Gilstrap of Washington Co., Ark.: I claim the use of the bit holder, H, constructed as described, when operated by the devices arranged in the manner and for the purposes specified.

**HOMINY MILLS**—J. B. Gowdy and J. A. Welsh, of Xenia, Ohio: We are aware that beaters secured to rotating shafts and placed within a case, have been previously used for cracking corn, and for analogous purposes. We therefore do not claim the beaters, f, attached to the shaft, C, separately or in themselves considered.

But we claim the shaft, C, provided with the beaters, f, and flanches, e, in combination with the horizontal plates, d, within the perforated case, A, substantially as shown, for the purpose set forth.

[By this mill the grain is thoroughly scoured, winnowed and cracked. The shaft is upright and hollow, and provided with both annular flanches and beaters, which travel between annular flanches projecting inward from the interior of the case. The feed is regulated by a slide, and the mill works very rapidly, and occupies but a small space.]

**CURTAIN FIXTURES**—Nathaniel S. Graves, of Boston, Mass.: I do not claim, broadly, fastening the curtain to the roller by securing it to a wire or rod that is introduced into a groove in the roller, having a narrow slit for the passage of the curtain, but this I only claim when the sides of the groove are dovetailed, as described, whereby the curtain is securely held to its roller without other fastenings, as set forth.

**MANUFACTURE OF SULPHURIC ACID**—Alfred Mond, of Camden, N. J.: I claim the process of preparing native metallic sulphures, by pulverizing them and mixing them with the substances, as described, in order to extract all the sulphur from them, for the purpose of making sulphuric acid.

**BREWERS' STEAM BOILING APPARATUS**—Adolph Hammer, of Reading, Pa.: Disclaiming connecting a series of branch pipes with, and on to a main pipe, upon which said branch pipes may be rotated, in the manner described by A. Stillman in his patent of May 16, 1846.

I claim arranging the steam pipe in boiling apparatus in two or more separate and distinct parts or series, in the manner substantially as described, whereby either both or all parts or series of pipes may be elevated by rotating the same upon axes of rotation at or near the center of the tub, for the purpose specified.

**SHIPS' CAPSTANS**—Samuel Huse, of New York City: I am aware that capstans have been arranged to give a more rapid motion, or one with increased power, by connecting or disconnecting the drum and barrel, and at the same time throwing into play or out of play internal gearing, or by changing the direction of motion the drum and barrel, and therefore do not claim generally the construction of a capstan to accomplish these ends.

But I claim the arrangement and use of the hollow shaft, D, attached at one end to the drum or head, and in combination therewith the movable gear plate, G, constructed substantially as described, and worked by a pinion on the lower end of D.

I also claim, in combination with such hollow shaft and movable gear plate, the arrangement of the clutch levers, or an equivalent thereof, for the purpose of connecting such movable gear plate to the barrel, and at the same time disconnecting the head and barrel, or vice versa, and thus changing the action of the capstan to a quicker or more powerful one in a moment, and without changing its motion or displacing any gear.

**STEERING APPARATUS OF STEAM CARRIAGES**—Edward C. Jones, of Pittsburgh, Pa.: I am aware that the lever arrangement which communicates the motion from the parts operating the steering wheel to the clutches of the driving wheels may be modified and changed in many different ways, by various mechanical means; I therefore do not confine myself to any particular, or to the special lever arrangements described, to effect said communication of motion, or power.

But I claim first, Operating the clutches, J, J', of the driving wheels by the same parts by which the steering wheel is operated, as a butting joint, and at the same time, by operating the said clutches, the one or the other of the driving wheels, simultaneously with the turning of the steering wheel to the right or left, substantially as set forth.

Second, I claim the arrangement of the lever, M, links, P, P', levers, N, N', with their arms, O, O', connected therewith, by a butting joint, and at the same time, when constructed, combined and operating in connection with the pinion, E, and the clutches, J, J', substantially as described, and for the purpose set forth.

Third, I claim the arrangement of a pivot, a, in or near the center of the steering wheel, and passing through its axle, for the purpose set forth.

**SHIPS' CAPSTANS**—David Knowlton, of Camden, Me.: I do not claim making a power capstan to operate by means of a combination of gear, ratchets and pawls.

But I claim, in my improved capstan, the combination of the gear, K, at the bottom of the capstan (when made and operated so as to rotate, or be made fast alternately, as described,) with the gear, L, pinion, G, attached to and revolving with the capstan head, C, they being connected by gears, and operating in the manner and for the purpose described.

**AUTOMATIC LUBRICATOR FOR R. R. CAR AXLES**—Alexander B. Latta, of Cincinnati, Ohio: I claim the arrangement of the lever, v, rod, w, and spring, x, combined with the car, y, as represented, or their equivalents, for actuating the lubricator, by the vertical vibrating motion of the cars, as, and for the purposes mentioned.

**FAUCET**—John C. Macdonald, of Cincinnati, Ohio: I claim the arrangement of the valve stem, H', the nut, o, the valve guide, F, the screw, C, and the cap or screw and nut guide, Q, which also contains the stuffing box m, for the purposes set forth.

[This is one of the forms of screw valve faucet—the novelty consisting in a peculiar screw, nut and guide—by which the valve stem is prevented getting out of line, and the valve surface is kept true to its seat. Great facility is also afforded for re-grinding the valve when necessary.]

**SILK DYEING MACHINES**—Nicholas Mary, Sen., of Philadelphia, Pa.: I claim the combination of the steam chambers, B and L, with the friction surface of rollers, D, E and F, for preparing and dyeing the material, the whole being arranged and operating substantially as described.

**LEAKAGE ALARM**—G. B. Massey, of Mobile, Ala.: I claim the arrangement of the parts cited relatively to one another for united operation, to produce a leakage alarm and register for ships, to wit, the bell, D, arranged on a firm part of the vessel, B, the spring, F, within the barrel, E, and the hammer, H, within the bell, the float, G, on the spring barrel, E, the hammer, H, within the bell, the pin wheel, J, and the mechanism by which they are operated and controlled on the arbor of the spring barrel, and the mechanism which measures the rise and fall of water alongside the signal mechanism, and so as to be actuated by the spring which sounds the alarm, substantially as and for the purposes set forth.

[In this device, a float within the hold of the vessel is so connected to striking apparatus and to a dial and registering apparatus, that by reference to the two latter the true depth of the water in the hold may be ascertained, and also the rate at which the surface of the water is rising or falling, while the striking apparatus, by acting on a bell attached, gives instant warning when the water rises to such a height as to demand attention.]

**REEPING TOPSAILS**—James W. Norcross, of Boston, Mass.: I do not claim carrying the reef tackles from the reef band upward through blocks placed at or under cross trees, and from thence down to the deck, whereby all that part of the sail which is below the reef band is suspended or drawn tightly up while the yard is being lowered down to or towards the reef band.

Nor do I claim sheaves or blocks or means of an arrangement of reef tackles, wherein each reef is fastened at one end of it to the topsail yard, thence led down through a leading block fastened to the reef band of the sail, thence carried upward to and through the yard, and around a sheave placed thereon, and thence carried toward the mast, and through a leading block affixed to the topsail yard near to the middle thereof, thence upward from the said leading block to and through a leading block affixed to the cross tree, thence downward therefrom and fastened to the topsail yard.

But I claim my arrangement of reef tackles described, the same consisting in fastening the said reef tackles to the sail at or near the reef band, thence leading them upward through sheaves or blocks or their equivalents, applied to the topsail yard, and from thence extending the said reef bands upward and through blocks suspended to the cross-trees, or that part of the topmast just below them, and thence leading the reef tackles downward, and fastening them to the topsail yard at or near its middle, substantially as described.

**FILTRATION PRESS**—Wm. Needham and Jas. Kite' of Vauxhall, Eng.: We do not claim the exclusive use of any of the parts, taken as parts of the apparatus described and shown, but only in so far as the same is used in combination, for the purpose of our invention.

We claim the exclusive use of the combination of parts described, forming apparatus or machinery for expressing liquids or moisture from substances.

**BATHING APPARATUS**—John K. O'Neil, Kingston, N. Y.: I do not claim an annular showering pipe separately, such, or its equivalent, having been used before in other connections.

But I claim the combination of the annular pipe, E, or its equivalent, with the flexible connecting pipe, D, or its equivalent, operating substantially in the manner and for the purpose specified.

**SAUSAGE CUTTERS**—Jacob Peters, of Hummelstown, Pa.: I claim the employment of the vertical sashes, a and b, the one arranged within the other, their knives interlapping and operating in different directions, for the purpose of sawing and more effectually preparing the meat, as set forth and described, it being understood that I do not claim the main features of the machine, as it is not, in that respect, new, nor yet the device merely of giving a sawing motion to the fixed knives of meat cutters, this also being not new; but only the arrangement here specified of two sets of knives working into each other with motions in opposite directions.

**GAS GENERATORS**—Allan Pollock, of Washington, D. C.: I claim, first, The peculiar form and arrangement of the retort with the grooves for the passage of the gas from the vent holes of the canister to the gas chamber.

Second, The canister, with the vent holes above described, by which I take the gas from the center of the canister, the lid extending down to or near the top of said vent holes.

**SAFETY TOPS FOR RAILWAY CARS**—Albert Potts, of Philadelphia, Pa.: I claim, first, The mode or manner of constructing railway passenger cars with the tops and bodies disconnected for the special purpose specified.

Second, I also claim the metallic plates or grooved and beveled rails as above described, for uniting the tops with the body of the car, as specified.

Thirdly, I also claim the combination of the pendulum as fully described in Figs. 3 and 9, for the purpose of holding the tops to the bodies of the cars, substantially as specified.

**OPERATING CAR BRAKES**—E. R. Roe, of Bloomington, Ill.: I claim the combination of the "anchor" F, in its connection with the arm, E, and the pin, G, and operated as described by the cam, and pins, in connection with the wheel, C, in the manner described, and for the purpose described.

**MASH COOLING MACHINES**—Jesse Shilling, of Troy, N. Y.: I claim the hollow arms, b, with the hollow teeth, c, attached, said teeth, some or all, having lateral shares or projections, f, attached; the hollow arms, b, being attached to a rotating shaft, B, and communicating with a pipe, G, which is connected with a fan box, H, the whole being arranged substantially as described for the purpose set forth.

[The mashing rake is hollow, and air blown into it by a fan or other suitable blower escapes from the bottom and sides of the hollow teeth, and rising through the liquid cools it very rapidly.]

**GRAIN MILLS**—O. W. Stanford, of Cincinnati, O.: I do not wish to be understood as claiming any particular number of concentric channels, f, and grinding surfaces, g; nor the shape of said channels and the manner of furnishing the grinding surfaces with teeth.

But I claim the alternate channels, f, and grinding surfaces, g, as represented on the surfaces of the plates, d and h, when said alternate channels, f, and grinding surfaces, g, are made concentric with the center of motion given to the plates, and when arranged with each other, and operated in the manner and for the purposes shown in the specification.

**WINNOWER MILLS**—Manassah Grover, of Clyde, O., assignor to himself and H. Seely, of Hudson, Mich.: I claim arranging in the throat or opening of the fan case, a series of troughs or scoops, c, in combination with the obtuse angles, E, of the fan blades, in the manner and for the purposes fully described.

**PEGGING BOOTS AND SHOES**—B. F. Sturtevant (assignor to himself and Elmer Townsend), of Boston, Mass.: I claim the bell shaped feed wheel, A, and its arrangement with reference to the awl and peg wood carrier, and provided with one or more ranges of holes substantially as described, the awl being made to work at an inclination to the axis of the wheel or from the axis towards and through the rim of the wheel as described.

I also claim the above described mode of feeding the shoe along—that is, by the awl or its equivalent and the feeder wheel, the latter not only assisting in feeding the shoe along by the pressure and action of the ranges of tapering holes, but in holding the shoe in position while the awl is raised out of the sole.

**EXPANDING AUGER BIT**—Asa Weeks (assignor to himself and O. W. Fiske) of South Boston, Mass.: I do not claim the invention of movable cutters; nor do I claim the employment of a double threaded screw for adjusting the distance of a lip and cutter as shown in the patent granted to J. P. Rollins, December 25, 1855.

But I claim combining with the double threaded screw, C, and arranging on the split tapering shank as described, a rotary sleeve, and its screw, arranged as described.

**LIME KILNS**—Daniel Stephens, of Elmira, N. Y.: I claim the diagonal or oblique flues with sloping bottoms arranged substantially as described in combination with the shaft, B, and its branches, b, b, for the purpose specified.

**FILTER**—J. A. Thompson, of Cayuga, N. Y.: I do not claim the ordinary cask filter with pot or reservoir with attachable metallic air and draught pipes, the whole fitted with charcoal, alternated with gravel, sand, &c., the same having been known and used.

But I claim the combination of the receiving vessel or upper filter, the reservoir with flange or rim, and attachable air and draught pipes to same, substantially as described; not confining myself to any particular mode or material which shall produce like effects and results.

**STEAM GAGES**—D. G. Wells, of New York City: I claim the use of a flattened tube when constructed and arranged in layers, substantially as described, and for the purposes set forth.

**TEA KETTLES**—Wm. Westlake, of Milwaukee, Wis.: I am aware that tea kettles have been made having lateral pipes attached for the admission of gas as a fuel. An example is seen in Bogget & Pettit's patent, April 18, 1854. I do not claim such tea kettles. They are quite different in construction from mine, are used for a different purpose, and operate in a different manner. No air would enter through the fine apertures of their burners. My kettle forms a highly useful household article, and is not dependent for its operation upon a pressure of coal gas.

I claim as a new article of manufacture a tea kettle made as described.

[The object is to economize fuel by making the heat of the fire more intense directly under the kettle. The invention consists in constructing a tube entirely through the kettle, so as to lead air down through the kettle into a perforated chamber below. The fire may be either in this perforated chamber or within the stove on which the whole is placed.]

**FINGER BAR FOR REAPING AND MOWING MACHINES**—J. T. Whitaker and C. D. Read, of St. Charles, Ill.: I claim a tubular finger bar when constructed in the peculiar manner, and for the purposes substantially as set forth.

**TRY SQUARES**—Joel Whitney, of Winchester, Mass.: Having thus fully described the construction and operation of my improvement on the try square, I will proceed to point out the parts which I claim as my invention, and desire to secure by Letters Patent.

I claim the flattened pin, working in the slot, in combination with the eccentric pin, arranged substantially in the manner and for the purpose described.

**SMOOTHING PLANED WOODEN SURFACES**—B. D. Whitney, of Winchendon, Mass.: I claim the scraper, u, pivoted and operating in the manner substantially as described, in combination with a mechanism for the purpose of carrying the wood forward in contact with the scraper.

**POLISHING STONE AND GLASS**—G. H. Wood, of Green Bay, Wis.: I claim the polisher, F, supported and operated as above described, in combination with the adjustable guide and gage, frame G, and the reciprocating carriage, K, when the whole is arranged to operate conjointly as shown for the purpose specified.

[There are two motions to the polisher, one being an ordinary rotary movement, and the other a circular traveling motion of the axis around a center. The glass or other article to be polished is mounted on a bed which is moved with a reciprocating movement. The surface is polished very uniformly and expeditiously.]

**SPRING LANCETS**—J. F. Martin, of Marshall county, Va., administrator of Wm. Parkinson, deceased, of the same place: What is claimed is the invention of said Parkinson is the application and adjustment of the spring, B, being the re-action spring by which the blade is instantly drawn back, by which safety and accuracy are attained in bleeding.

**SHEARING AND PUNCHING**—B. F. Hooper (assignor to himself and Ransom Ballou, Jr.) of Albany: I claim the employment of the beam, D, having an inclined slot in its extremities carrying the pins on which the punch and shears are suspended as described, and operated in the manner substantially as set forth in the specification.

**MARKING TIME OF ATTENDANCE OF WORKMEN**—B. F. Harris, (assignor to John McKillop) of Brooklyn, N. Y.: I claim, first, The combination of the registering surface operated by clock work with the movable markers, when the latter are arranged as set forth.

Second, The combination of the movable markers and their arms, c and l, with the indicators, u, and their concomitant parts as set forth.

**MOULDING BRICKS**—J. Z. A. Wagner, of Philadelphia, Pa., assignor to P. H. Watson, of Washington, D. C., assignor to E. S. Kenwick, of New York City: I claim in my machine for making tubular bricks the combination of the mold box with a core, and an annular bottom or piston, the whole constructed and operating substantially as set forth.

**SEWING MACHINES**—Wm. C. Watson (assignor to himself, G. H. Wooster, and J. W. Gregory) of New York City: I claim the improved device for seizing the loop, and holding and properly presenting it for the passage of the needle, consisting of a vibrating hook, b, in combination with a gripper or hold fast, c, so arranged and operated as alternately to close upon the loop after being engaged by the hook, to draw back the said loop, and to release the same after the passage of the needle through in the manner described.

**TURNING SPOOLS**—A. D. Waymouth, (assignor to himself and H. W. Page) of Fitchburg, Mass.: I claim the combination of a stamping or milling wheel with mechanism substantially as above described, for turning a spool from a piece of wood as explained, the said wheel being arranged so as to mill, engrave, or indent the end of a spool while said spool is being made or before it is separated from the stick as explained.

I also claim the combination of the two pitmans and the lever plate or wheel, or equivalent devices, with a lever for elevating the severing cutter, and that for carrying the body cutter, whereby the said body and severing cutters are made to operate in the manner as specified, that is during one single forward movement of the lever, L, connected with the severing cutter.

I also claim the tapering screw chuck constructed as specified.

**HOT AIR FURNACES**—D. P. Weeks, of Boston, Mass.: assignor to himself and Eben Seaver, of Charlestown, Mass.: I do not claim the invention of a tapering discharge pipe, nor arranging a series of such around the fire pot; and so as to open at their bases into the same.

Nor do I claim combining and arranging with a firepot, and such a series of pipes a conical or tapering radiator closed at its top, and placed within the series and directly to receive the fire, and so as to receive the products of combustion from the fuel, and deflect them outwardly towards and into the mouths of the several discharge pipes.

Nor do I claim an annular radiator; nor do I claim conical or frusto conical bases or semi-cones combined with the fire pot, and its series of tapering discharge pipes, and serving to support and open into said pipes respectively, as I am aware that much of such is used in the furnace of Gardner Chilson, and claimed by him in his Patent dated September 26, 1854.

But I claim the combination and arrangement of the parachute radiator, A, air chamber B, and pipes, F, F', with the fire chamber C, and the reverberating chamber D, having smoke passages or pipes E, applied to the same and leading into the radiator, A, as described.

I also claim the manner of constructing the radiator, A, viz., with a tapering tunnel, i, an annular deflecting dome, f, and a discharge passage or pipe, d, arranged together substantially as specified.

I also claim constructing the air chamber, B, with a bulb or projection park, k, when such chamber is arranged within a reverberating chamber, D, made to communicate with the discharge pipes, E, E, and a chamber of combustion, and to surround the radiator, A, opening at its lower end into the said chamber of combustion essentially as set forth.

**DROP PRESS**—Wm. Wilson, Jr., (assignor to Wilson, Green and Wilson, Jr.) of Brandywine, Del.: I claim the employment of the spring, E, when so arranged with the drop, C, as to effect the delivery of the article stamped, substantially in the manner set forth.

**SETTING PORCELAIN TEETH**—M. L. Wright, of Cleveland, O.: I do not claim the carving of full sets of teeth out of one piece of porcelain material or full sets of teeth out of the same, nor of block work to be united to a metallic base; nor the molding or modeling of porcelain material around porcelain teeth on a porcelain base for full sets or full half sets of teeth.

But I claim the making of parts of full sets or parts of half sets of teeth for either the upper or lower jaw where one or more teeth are good and permanent, and where one, two or more may be skipped as seen at e e, figs 1, 2 and 3, making the whole plate and teeth of one piece of porcelain in the manner described.

**RE-ISSUES.**

**RICE HULLERS**—Peter McKinlay, of Charleston, S. C. Patented April 1, 1851: I claim operating the pestle by having it attached to a rod passing through the bottom of the mortar, and receiving motion through a crank or its equivalent, substantially as and for the purpose and object set forth.

**BOOT CRUMPS**—J. M. Read, of Boston, Mass., assignee (through Abraham Thayer) of Josiah Copeland, of Weymouth, Mass. Patented January 20, 1854: I do not claim strictly the combination with a pyramidal frustrum or block A of another piece of metal forced down upon or over it by a screw or other contrivance separate from the main straining screw, and for the purpose of confining the corners or edges of the leather between the said pieces of metal.

Nor do I claim the forcing of the two jaws or pieces of metal together by a screw or other contrivance separate from the main straining screw; but I claim the manner described of arranging the block, A, and clasps C, so that the turning up of the straining screw shall at the same time perform the double operation of confining the ends of the leather between the block and clasp, and of stretching the leather over the boot form, the whole being substantially as described.

**ADDITIONAL IMPROVEMENTS.**

**HOLTING WINCHES FOR SHIP BOARD**—Joel Bryant, of Brooklyn, N. Y. Patented April 7, 1857: Therefore disclaiming the individual parts of the said winches and all other winches for hoisting hitherto known or used, and reserving and claiming the right to increase or diminish the number of wheels, blocks, sheaves or pulleys or to change their relative position within the legitimate scope of my invention as necessity may require or expediently point out—with reservation, and without infringing upon any other known invention of winches.

I claim the invention and use of winches for hoisting and operating substantially as described and set forth in the original, and in this additional description and specification of new and additional improvements in winches.

**IMPORTANT TO INVENTORS.**

INVENTORS AND PATENTEEs will bear in mind that the editors of the Scientific American are conducting the most extensive American and European Patent Agency in the world. They have offices in New York, Washington, London, Paris and Brussels, through which they prosecute applications for patents upon such terms as have not failed to bring them a business in extent far beyond that of any other agency in this country. This clearly shows the confidence reposed in them by inventors generally. They have no new or peculiar process to advertise, by which the business is to be done. They proceed according to law, and they have found that, after an experience of nearly twelve years, no other system, however peculiar, can equal it. Inventors should never trust their business to inexperienced persons. If they wish to have their papers prepared to stand a legal test, they should be cautious to employ agents experienced in the business. Circulars of information sent free.