



Important Notice.

When an individual has made an invention, the first inquiry that naturally suggests itself is, "Can I obtain a Patent?" A positive answer to such questions is only to be had by presenting a formal application for a patent to the government, embracing a petition, and oath, specification, model, two drawings, and the payment of the official fees.

Those who wish to consult with ourselves on such matters, are at liberty to do so, either in person, at our office, or by correspondence through the mails. For such consultations we make no charge. We shall be happy, at all times, to examine inventions, and will give conscientious opinions as to their patentability.

Pen and ink sketches of the improvement, and a written description of the same, should be sent. Write plain; do not use pencil or pale ink, and be brief. Remember that all business committed to our care, and all consultations are kept by us secret and strictly confidential.

Parties wishing to apply for patents are informed that they can have the necessary drawings and documents promptly prepared at this office, on the most reasonable terms. It is not necessary for them to go to the expense of a journey in order to be personally present.

We have been engaged in the business of procuring patents for years, and have probably had more experience than any other firm in the country, owing to the fact that the amount of business done by us equals, if it does not exceed, that of all other professional patent agents in the United States combined.

In addition to the advantages which the long experience, great success, promptness and moderate charges of our firm, in obtaining patents, present to inventors, they are informed that all inventions patented through our establishment, are noticed editorially, at the proper time, in the SCIENTIFIC AMERICAN, without charge.

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[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS

Issued from the United States Patent Office

FOR THE WEEK ENDING DECEMBER 16, 1856.

ADJUSTABLE CANT HOOK—Mark Allcutt, of Hancock, N. H. I claim the arrangement and combination of the lever, with its pawl and slot, and the hook with its ratchet notches, substantially as described, and composing an improved cant hook, as specified.

GRINDING SAWS—Emanuel Andrews, of Elmira, N. Y. I claim, first, the manner described, or its equivalent, for decreasing the transverse motion of the stone when I wish to grind the most, as at the outer edge of the saw, and increasing the same when I wish to grind less, as at the center of the saw, as set forth.

Second, I claim the manner described, or its equivalent, for the adjustment of the stone, for the purpose of using a portion of the grinding surface of the same, at pleasure, or all the grinding surface if desired, as set forth.

I claim grinding saws to a taper, as described, by means of the adjustable face plates, in combination with the pivot boxes, O2, and sliding and yielding guides, M and O, as set forth.

PADLOCK CASE—Solomon Andrews, of Perth Amboy, N. J. I claim the making of the body or case of a padlock of one piece of wrought metal.

PLANING AND TAPERING WOODEN HOOPS—Clark H. Brown, of Forest Port, N. Y. I do not claim the circular saw and rotary planer, for they have been previously used for analogous purposes.

But I claim the combination of the saw, C, and the adjustable or sliding planer, G, operated or adjusted by the movement of the carriage, B, through the medium of the lever, F, and the pendulum, G, and arm, I, on the carriage, B, substantially as shown and described, for the purpose set forth.

[In this machine a circular saw and an adjustable rotary or sliding planer are combined and operated in an improved manner to saw and taper strips for hoops from bolts of timber, and plane or dress them at one continuous operation. The machine is simple, can be constructed at a small cost, and operates well.]

BAKE PANS—Wm. Beach, of Philadelphia, Pa. I claim the ordinary lapping of this metal pan corners as altogether distinct from my invention. I claim the construction of metallic bake pans with rounded corners, formed as described, by notching, cutting, lapping, and riveting, substantially as set forth.

PUMPS—Jabez Correy, of Boston, Mass. I claim, first, producing the reciprocating movement of the pump pistons by the oblique disk, steel balls, and adjustable steel sockets, constructed and operating substantially as described.

Second, constructing and arranging the duplicate cylinders, with their double-acting pistons in any odd numbers, five being the best, around the driving shaft, with its oblique disk, so as to be operated thereby from the center, substantially as described.

Third, enclosing the working parts in an oil cylinder, to keep them lubricated and free from dirt, substantially as described.

VALVE MOTIONS FOR STEAM ENGINES—John Butler, of Dunmore, Pa. I do not claim the use of two eccentrics to give the valve two distinct movements to admit and cut off the steam.

But I claim the arrangement of the two rock shafts, E F, with their rockers operating upon a yoke, B, or its equivalent, attached to the valve stem, said rock shafts deriving motion from separate eccentrics, and the whole operating substantially as described.

[This improved valve motion of steam engines consists of a certain arrangement of eccentrics and rock shafts, rockers, and a yoke to actuate a slide valve, so as to make it serve both as an induction and eduction valve and a variable cut-off. By the arrangement a very quick movement can be given to the valve in opening and closing, while the ports are allowed to remain wide open during as much of the stroke as is desired. This valve motion is an ingenious improvement.]

SPRING BOLT—Wm. E. Copeland, of Fall River, Mass. I do not claim combining a lever with a bolt, and for the purpose of moving the said bolt rearward, because such is a very old application of a well-known device.

Nor do I claim so combining a lever with a spring bolt and its case to operate the bolt, substantially in the manner as described in the specification of the patent of Bush, that is to say, so that it shall operate not only as a cam lever, but as a stop.

Nor do I claim applying to a bolt or a rod a lever and a stop, and in such manner that the bolt or rod not only may be moved by power applied to the lever, but may be stopped or held in place by the stop acting against the lever, for such is an old and well-known contrivance.

But I claim as an improvement on the invention as patented by the said Bush, my improved arrangement of the stop lever, H, with respect to the bolt, and so as to operate therein, and into and out of the bolt case, substantially as specified.

I also claim combining with the main spiral spring, D, the secondary and separate spiral spring, E, or its equivalent, when the bolt is applied to its case, and the springs are arranged within a trapezoidal recess, or chamber of the bolt, and made so as to operate essentially as specified.

WATER MILL—John Heller, of East Lampeter, Pa. I claim the "Portable Quadruple Water Power," arranged and combined, substantially as described.

R.R. CAR COUPLING—Charles Flanders, of Charlestown, Mass. I do not claim the mere application of a lever to the shackle pin, for the purpose of elevating the same.

Nor do I claim connecting such lever to such pin by a chain or any other flexible equivalent, but for the purpose of steadying the pin, maintaining it in its proper position with respect to its hole in the draw bar, and enabling it to be drawn inwardly and outwardly.

I claim combining and arranging the lifter, D, and the spring, G, with the pin, A, the draw bar, C, and the elevating lever, E, so as to operate therewith, substantially as specified.

I do not claim the combination of a horizontally acting hook with a vertically moving box arranged in a draw bar, made to slide longitudinally on guides, and merely for the sake of disengaging the hook from its fellow, such having been patented by Joseph Miller, Nov. 14th, 1854.

But I claim the same, consisting in arranging the draw bar itself, so as to rock or tilt on a bearing, I, and to slide through a stirrup, K, applied to a system of levers, L, M, whereby the draw bar itself may be moved vertically, so as to properly adjust its receiving notch with respect to that of another draw bar as may be necessary in order to couple two cars together.

SKATE RUNNERS—John E. Forbes, of Hoboken, N. J. I do not confine myself to common iron skates alone, but steel blades or runners may be successfully used until they are entirely worn out, which is not the case with the skates that are in common use, for they cannot be kept sharp, consequently are abandoned.

Therefore, I claim forming the iron or runner of two parts or plates, a and b, for the purpose and in the manner substantially as described and shown.

FILTERING FAUCET—Geo. H. Fox, of Boston, Mass., and Henry J. Siller, of East Cambridge, Mass. We claim causing a portion of the water which has passed through the filter to return in the opposite direction whenever the cock is closed after using it for the purpose of cleansing the filter, as set forth.

LETTER JACK—Harvey Gray, of Bristol, Conn. I do not claim the screw, yoke, rollers, pawl, or ratchet, separately considered, for I am aware they are in use for various uses.

But I claim the employment of the screw, E, yoke, F, roller, G, pawls, I, ratchets, K, in combination, substantially and for the purpose as set forth.

SEWING MACHINES—James E. A. Gibbs, of Mill Point, Va. I claim, first, feeding up the thread to the needle by connecting the needle thread with the cloth feed motion or by giving the needle thread an independent feed motion, so that there shall be sufficient thread, and no more, at each stitch fed in to the needle to form the stitch, thereby causing the needle to draw the shuttle thread in to the cloth, and never above it, for the purpose of ensuring the meeting of the loops or locks within the body of the cloth.

Second, I do not claim straight clamp feeders for the purpose of feeding the cloth, as they are not new.

But I claim fastening the cloth upon a slotted table, moving with a rectilinear motion by means of a slotted curved spring, the slots in both spring and table corresponding with each other, and holding the cloth on both sides of the seam.

FIELD FENCE—James G. Hunt, of Reading, O. I claim the compound triangular brace, as shown and described, for the uses and purposes set forth, in combination with the projection of one or more rails in whole part of one section or panel beyond the slats or battens, and between the slats or battens of the adjoining panel.

SEWING MACHINES—Lewis Jennings, of New York City. I do not claim the belaying double-looped stitch, described in the patent of W. H. Johnson, dated March 7th, 1854.

I claim, first, the formation of the seam from a single thread by passing each loop, after it has passed through the cloth, or material to be sewed, through its immediate successor, and round the second one which succeeds it, by means of a needle and a "thumb and finger," operating substantially as described.

Second, the combination of the arm, F, to which the thumb and finger, B, C, are attached, the pivot, F, the slotted arm, I, the fixed pin, J, and the lever, G, or its equivalent, substantially as and for the purpose set forth.

[The common lock stitch in single thread sewing machines, when the thread is broken, is very easily ripped. In this machine there are peculiar devices for performing operations to form strong single thread stitching that will not rip out. Instead of each loop being interlaced with its immediate predecessor and successor formed by the needle, as in the common single thread sewing machines, each loop interlocks with the second one that precedes it, and the second that succeeds it, and in this manner makes a seam that will not rip. The improvement is ingenious, and unmistakably useful.]

SHIP'S WINDLASS—Peter H. Jackson, of New York City. I claim the double-acting pawl, Z, crank arm, A, and counter weight, S, applied to the heaver or heavers of the windlass, arranged and operated substantially as and for the purposes specified.

PHOTOGRAPHIC BATHS—Wm. Lewis and Wm. H. Lewis, New York City. We do not claim a hinged leg or support to the bath; but we are not aware that the hinged leg and button have ever before been combined together, for the purposes specified.

Neither do we claim a glass bath in itself, as bath have heretofore been made of plates of glass cemented together; and also circular vessels have been made use of, and elongated baths of gutta percha have been used, formed with one curved side; but we are not aware that solid glass baths have ever before been formed in a flattened or elongated shape, with the sides and bottom in a curved shape, as and for the purposes specified.

We claim retaining the nitrate of silver bath in the desired inclined position, by the combined operation of the leg, C, and button, E, for the purposes and as specified.

We also claim the solid glass pot, F, when formed with the curved sides and bottom for the purpose of protecting the plate from injury by contact with the bath or any sediment, in the manner specified.

GRINDING PAPER PULP—Joseph Kingsland, Jr., of Franklin, N. J. I claim the combination of the revolving grinding disk, having play in the direction of its axis, with the fixed grinding disks on either side of it, whereby the revolving disk is free to adjust itself at such varying relative distances from the fixed disks as may be required to prevent the grinder from clogging, and to adapt it to working properly upon different qualities of fibre, and under different rates of feeding, substantially as set forth.

I also claim the arrangement of the feeding and discharging orifices of the grinder and its grinding surfaces, as described, so that the motion of the revolving disk will facilitate the entrance of the fibre into the grinder, tend to retard its discharge therefrom until properly reduced, and to keep it, when in at those places where the grinding action is most energetic, substantially as set forth.

PARING APPLES—Horatio Keyes, of Leominster, Mass. I claim giving the knife a circular movement, entirely around the fork, G, and apple thereon, by means of the wheel, K, with the arm, M, and knife head, P, attached, and the cam, O, arranged as shown, or in any equivalent way, to effect the purpose desired.

[The knife in this apple-parer machine is arranged in such a manner that it is allowed to pass completely around the apple, thereby obviating the necessity for any backward or reverse motion of the knife, as in common apple-parers. Other fruit can be pared with it, equally as well as apples. This is an exceedingly simple apple-parer.]

WRINGING BLIND ROBS—T. F. St. John, of Le Roy, N. Y. I claim, first, the device formed of the reciprocating bars, P, provided with the lever, Q, having hook, S, at its lower end, the bars, I, attached to the uprights, M, M, the lever, Q, being operated substantially as shown, by which device the staples are properly formed, and when formed, driven or forced into the rods or slats.

Second, I claim the combination of the reciprocating bars, P, and lever, Q, arm or lever, J, with cutter, K, attached, the reciprocating bar, G, with dog, d, and arm, E, attached, and the cam, S, the whole being arranged and operating conjointly, as described, for the purpose specified.

R.R. GATE FOR CATTLE GUARD—J. T. McIntyre, of Middletown, Del. I claim the arrangement of the tilting platforms, and the tilting catch guards with each other, in connection with the machinery, and the crossing of common roads, in such a manner that the attempt to pass to the right or to the left, from said crossings on to the track, or space between the enclosing fences, will, by the weight of the animals making the attempt, instantly raise a barrier before them, across the entire width of said railway space, substantially in the manner and for the purpose set forth.

HARVESTING MACHINES—Robert Morrison, of Richmond, Va. I claim hinging the guard or shield by one of its ends, to the frame, and supporting the other end thereof on the tongue, so that it may run or move on said tongue, when the machine rises or falls, to accommodate itself to the inequalities of the ground, or for passing over water courses, substantially as described.

PRINTING HAT LININGS—Wm. Moultrie, of New York City. I claim the application and employment of the printing cylinder, K, described, or its equivalents, in combination with the feed and impression rollers, the fountain, B, the endless tapes, M, N, T, U, the drying vessel, G, and the revolving brush, P, when used in the manner substantially and for the uses and purposes mentioned.

CHIMNEY COWLS—Patrick Miham, of Boston, Mass. I do not claim surrounding the main flue of a chimney, with an air flue, whereby air may be thrown upward between the two, and over or above the discharging or upper end of the smoke flue, in order to promote the draft, nor do I claim arranging an inverted cone in or above the discharging end of a smoke flue.

I claim the arrangement of hollow frusta, B, C, with respect to each other, a smoke flue, A, and an inverted cone deflector, D, placed at and in the upper end of said smoke flue, A, as set forth.

I also claim arranging on the flat top surface of the deflector, D, as described, an enclosing deflecting guard, E, and a discharge spout, F, the same being disposed, so as not only to gather the water which may fall on the top of the cone, and discharge it in one stream upon the inner surface of the upper external frustum, B, but so that the guard may serve to deflect, as described, a current of air, which may strike on the top of the cone, D.

I do not claim providing a ventilator or chimney cap, with a cap plate, elevated on columns or rods extending above the rest of the cap or ventilator.

I claim providing the cap plate, G, when it is directly over the conical deflector with an opening, while the remainder of the cap plate may extend over the opening between the cone, D, and the outer cone, B, as described, the same being to allow air to pass through the cap plate, and impinge on the top surface of the cone, D, in manner and for the purpose as described.

MOWING AND REAPING MACHINE—J. W. Mulley, of Amsterdam, N. Y. I do not claim placing the platform lower than the wheel frame. Neither do I claim the large driving wheel in connection with an elevated main frame.

I claim connecting the frame of the platform with the frame carrying the driver's and raker's seat, in the manner substantially as set forth, namely, securing the relative position of the frames by means of the brace, J, in the rear, and the laterally inclined draw shoe in front, when the above parts are constructed and arranged as described.

I also claim the rod, A, and the rails, 5, connected in the manner described, in combination with the pole, N, the rocking shaft, 3, and the lever, 2, the whole being constructed, arranged, and operated in the manners specified and for the purpose set forth.

WEAVING SHADE CORD—Thos. Nelson, of Troy, N. Y. I claim the arrangement of the inclined planes, C, C, G, G, around a circle, and divided from each other, by the chasm or pathway, Z, the same being intended as the course or track of the spool cars.

I claim the arrangement of the spool cars, in combination with each other, and with the guides, which operate in the rear of the inclined planes, by means of pens or equivalent apparatus passing from the cars through slots in the planes.

I claim the arrangement of carriers or shuttles, U, U2, attached to the eccentrics passing through the chasm, Z, between the upper and lower planes, and traversing circularly and delivering the wool or filling, between the threads of the warp, as they change their relative positions, by the alternate vibrations and depressions of the spool cars.

GRINDING MILL—T. B. Stout, of Keyport, N. J. I do not claim, simply, feeding the grain or grass through the sides of the burrs, nor do I claim a dress composed of alternate long and short ridges, together with feeding spaces, in themselves, separately.

I claim the arrangement and combination of the feeding cavities, A, a feeding apertures, G, G, and the form of dress given to the grinding surfaces, substantially as specified.

METALLIC SLATS FOR BLINDS—J. S. Sanson & W. P. Farrand, of Philadelphia, Pa. We claim the combination of bed beam and shear with the spring stops, constructed, arranged and operating substantially as and for the purposes set forth.

REAPING AND MOWING MACHINES—D. C. Smith, of Tecumseh, Mich. I claim the combination of rock shaft, H, with hollow rock shaft, K, when the same are connected for joint operation in moving two sickles at once, by means of mechanism described, and arranged and operated, in relation to each other, from main wheel A, as set forth.

SECURING SPRINGS IN UPHOLSTERY—W. Wright, of New York City. I claim securing the spring, A, to its seats, B, B, by having annular grooves, a, made in the seats, and having the greater portion of the coils, c, at the ends of springs, made or bent in horizontal form, and somewhat larger in diameter than the grooves, a, so that they will have a requisite bearing on the seats, and be retained by their elasticity within the grooves, as described.

[This improvement secures upholstery springs, for mattresses, &c., on their seats, in a superior manner. An annular groove is made in each spring seat, and a portion at each end of the spiral is made horizontal and somewhat larger in diameter than the grooves, therefore, when fitted into their seats they are retained more firmly by their elasticity.]

BORING MACHINE—Samuel Klahr, of Reamtown, Pa. I claim the arrangement and combination of the shaft, X, endless screw, Z, pinion, V, and pulleys, T, as operating on an endless chain and railway carriage for the purpose of boring pump stocks, as described.

I also claim the shape and construction of the pinion, V, and pulleys, T, with pins, U, solid on one shaft, for the purpose set forth.

I do not claim the combination and arrangement of the drum, J, with the device for operating the drum, C.

But I claim the combination and arrangement of the drum, J, with the device for operating both of the carriages, C and Z, for boring post and pump stocks, forming a neat portable machine, substantially as set forth.

FINGER BAR FOR HARVESTING MACHINES—Wm. H. Seymour, of Brockport, N. Y. I do not confine myself to the form of finger bar I have described, for so long as it is made hollow, it may be varied in shape and proportions, without any departure from the principle of my invention.

I claim, first, casting the finger bar, composed of an upper and an under plate, united by the guard fingers all in one piece, substantially as described.

Second, the openings in the back of the hollow finger bar, in combination with the inclined ribs, for the purpose and in the manner described.

Third, ribs or partitions constructed and arranged substantially as described.

APPARATUS FOR COAL OIL—Richard Shroder, of Darlington, Pa., assignor to Jno S. Russell, of Pittsburgh, Pa., and Richard Shroder and Alex. Anderson, of Beaver Co., Pa. I do not claim, broadly, the extraction of oil from bituminous coal, excepting in the manner described.

But I claim constructing the retort, or generator, with openings at different heights, as shown, for the purpose of obtaining oil of different qualities, as set forth.

CUTTING AND FOLDING PAPER—Charles Moore, of Hartford, Conn., assignor to W. G. Sheldon, of New York City, and L. B. Chandler and Chas. Moore. I claim first, the use of a frisket with a blade or cutter attached thereto, in combination with a stationary cutter or blade, for the purpose of cutting a sheet of paper in two parts, by one and the same operation.

Second, I claim the crimping blades, V, V2, operating in the manner substantially as specified and for the purposes set forth.

Third, I claim, in combination with the crimping blades, the use of folders, either with or without the auxiliary frisket, when constructed and operated substantially in the manner set forth.

Fourth, the use of auxiliary friskets, when operated by projecting pins, or by any other competent mechanism, in conjunction with the folder, to carry over such parts of the sheet to be folded, as will not, when operated upon by the folding blade, sustain and carry over their own weight.

Fifth, the combined contrivance of the take off, and the crimping blade of the last fold, and the combination of the take off with any other blade designed to co-operate therewith for the purpose of clamping the folded sheet or sheets, and of carrying them off, and of discharging them from the machine.

Sixth, I claim the arrangement of the spring and pawl or their equivalents, operating the take-off, in the manner specified.

Seventh, the use of sliding or movable beds, C, C, with hanging sides, D, D, as a means of arranging the cutting, crimping, and folding mechanism, and all the cams, levers, springs, racks, &c., which operate the same, so that the machine may be expanded or contracted, without disarranging the parts on which the proper motions depend.

Eighth, I claim the punching points or pins, in connection with the corresponding holes of the crimping blade, n.

WIND MILLS—S. W. Ruggles, (assignor to Silas Ruggles,) of Fitchburgh, Mass. I claim the disk, J, and buckets, K, in combination with the wire or rod, I, connected with the vane bar, E, and arranged as described, for the purposes specified.

[This is a peculiar and ingenious windmill. It has secured to a convex disk, a series of expanding buckets, which open and close, as they rotate on a vertical shaft, for filling with the wind, and then collapsing when coming round against the wind. They are opened and closed by an adjustable rod attached to a rotating frame, so as to receive the force of the wind at the proper angle, and then close at the proper time.]

REAPING AND MOWING MACHINES—T. D. Burrall, of Geneva, N. Y. I do not claim the cutter bar cutters or guard, in themselves, as these are well known.

Neither do I claim bringing a notched or turned edge in contact with the lower side of the vibrating cutters, as this has been used, when the stationary cutters were made in one piece of sheet metal, and said metal folded over, to serve as a finger board; but I am not aware that the finger board has been before formed with a continuous lip or rib, at the front edge, coinciding or nearly so, with the front edge of the vibrating cutter bar, when free space is allowed below and behind said cutter bar for any extraneous substance to free itself, and pass away with the grass or grain, to the rear of said finger board, as the machine advances.

I claim placing the front edge of the cutter bar on the line, or nearly so, of the front edge of the finger board when said finger board is formed with the raised front edge or lip, leaving free space below and behind the cutter bar, for any extraneous substance to escape from beneath said cutter bar, and pass freely away to the rear with grass or grain, as specified.

DRYING GRAIN IN THE MASS—J. C. Pedrick, of Washington, D. C. I claim the double convex lenticular vessel, or perforated exhaust chamber, B, or its equivalent, constructed and operated as set forth, for drying grain in bulk, in granaries, or in vessels.

ADDITIONAL IMPROVEMENT.

HUBS FOR CARRIAGES—Joseph Smith, of Delaware, O. I do not claim making the hub in sections, nor the use of two sets of anti-friction rollers, as that has been done before.

But I claim additional to the patent granted me on the 19th day of Feb. 1856, is the combination of the boxes, C, C, cylinder, d, board, k, with the rollers, i, i, i, all arranged substantially as described and for the purposes set forth.

Cotton Seed for Oil.

The New Orleans Picayune notices the engagement of a ship of 800 tons to take a full cargo of cotton seed from that port to Providence, R. I., where the article is to be turned into oil and oil cake. An extensive factory for extracting oil from the seed of cotton is already in operation in Rhode Island, and one or two companies are forming in Boston with the object of getting up similar establishments there. This is an enterprise in which the South, says the Picayune, is greatly interested, promising as it does, to convert an article hitherto worse than useless into one of great commercial value.

[In reference to the use of cotton seed for manufacturing oil, we would ask the planters what they would use as a manure to restore the equilibrium of the soil for succeeding crops of cotton. If the cotton seed which makes such an excellent fertilizer is to be sent away to make oil, then something else must be used as a substitute, or the best cultivated cotton lands will soon cease to yield profitable crops.]