



[Reported officially for the Scientific American.]

LIST OF PATENT CLAIMS
Issued from the United States Patent Office
FOR THE WEEK ENDING JULY 14, 1857.

MACHINE FOR MAKING R. R. CHAIRS—Robt. Arthur, of Richmond, Va. I claim the use of the swages, B, constructed and operating in the manner specified, and operating in connection with the adjusting levers D, whereby uniformity in the length of the lips is secured, without reference to the length of the plate.

MACHINE FOR GAGING AND FILING SAWS—Emanuel Andrews, of Elmira, N. Y. I am aware that adjustable clamps and rollers for supporting and pressing upon the file while acting upon the teeth of the saw have been used. Such I do not claim.

But I claim the adjustable gage, M, and guide rollers, K, arranged and operating substantially as set forth, by means of which the cutting angle or rake of the teeth shall be accurately gaged before filing, the rollers acting as stops to prevent the further cutting of the file when the proper point is attained.

I also claim the adjustable setting gage consisting of the movable jaws, N and O, combined with the files G, or other cutting surfaces, which shall be equivalent in their operation, for the purpose of gaging the width of set which the saw is to receive, and also for dressing and finishing the points of the teeth smoothly and uniformly after being set substantially in the manner set forth.

FASTENING ARTIFICIAL TEETH—Theodore H. and James P. Bradish, of Utica, N. Y. We do not claim to be the first inventors of attaching linings, or partial linings, to artificial teeth at the time of manufacturing, although we are not aware that any plan for doing this has ever been brought into general use in any locality.

We are aware that a plate forming a tooth lining with its edges turned inward, to form a hold within the substance of the tooth has been constructed, and the tooth molded upon this plate, thus imbedding the edges and forming a partial lined tooth. We, ourselves, are the assignees and owners of the right of doing this, patented to George E. Murray, Dec. 4, 1849; but the lining in this case does not cover the whole tooth, and cannot, and by the continuous body of metal thus imbedded the substance of the tooth is divided and weakened, and is more liable to be fractured by expansion of the metal. We do not claim this method as our invention.

But we claim the construction and attachment of the linings in the manufacture of artificial teeth, by raising upon the back of the linings one or more series of separate anchors or projections, being so formed that when these anchors or projections are imbedded into the plastic material of the tooth at the time of its molding shall constitute the solid tooth and lining combined as described.

PEN AND PENCIL CASE—Edward Baptis, of Hudson, N. J. I do not claim the employment or use of two spiral grooves placed in reverse positions, or one having a right, and the other a left thread, and so arranged as to operate simultaneously the pen and pencil slides, for spiral grooves have been previously used for this purpose.

I claim the employment of such grooves when made with a varying pitch, substantially as described, for the purpose set forth.

[This is an improvement on the pen and pencil case formerly patented by the same inventor. The object accomplished is the highly important one of reducing the necessary size of the case, making it far more portable and convenient.]

CULTIVATING PLOWS—George G. Black, of Crossville, Ohio. I claim, in double plows, with two beams joined at the clevis and made to be adjusted to rows of crops of different widths, the rod, L, arranged between the beams, and provided with a cross bar, T, upon which the beams can vibrate when the plows are adjusted, as described.

NAIL PLATE HOLDER—Wm. H. Battell, of New Castle, Pa. I claim a nail plate holder composed of the socket, socket head and guide, and the jaws held thereto by a ring, substantially in the manner and for the purpose set forth.

HARVESTERS—John P. Manny, of Rockford, Ill. I claim the combination of two frames, one of which is adjustable, and can be raised or lowered at pleasure with the lifting piece, L, and platform, P, hinged to said adjustable frame, when said parts are constructed and arranged in relation to each other, in the manner and for the purpose set forth.

RIGGING OF SHIPS—James E. Cole, of Brooklyn, N. Y. I claim placing the centers of motion of the yards of a square-rigged vessel in line with each other, in the manner and for the purposes set forth.

CHURNS—Chas. H. Dana, of West Lebanon, N. H. I do not claim as new an oscillating churn.

Neither do I claim the causing of the dasher to make more than one up and down stroke at each oscillation of the cream vessel, independent of the specific means employed.

But I claim the irregular curved pieces C, forming the undulating slot D, in combination with the slotted oscillating frame, E, and cross bar K, with friction rollers J, for giving three up and down strokes to the dasher at each oscillation of the cream vessel, as set forth.

AUTOMATIC LATHE—Alexander Edmonds, of Mount Pulaski, Ill. I claim the combination of the rotating cutter A, provided with a gage R, regulating the diameter of the rounds or cylinders with the nippers N and E, for forming chair staves.

I also claim the arrangement in the tenoning machine of the regulating screw V, and cap I, with the chamfer chisel C, for the purpose set forth.

DEVICE FOR SEALING BOTTLES, CANS, &c.—Mills B. Espy, of Philadelphia, Pa. I claim the combination of the upper plate B, having the slot G, and the two hooked projections F, the lower plate C, having the screw hole H, and the two hooked projections FF, with the thumb screw D, and jam nut E, the same being adapted and arranged together so as to be applicable to the mouth of a bottle or jar, substantially in the manner and for the purpose set forth and described.

WASHING MACHINES—Adam Fisher of Leavenworth City, Kansas Territory. I claim the combination of the bucketed wheel A, constructed as described, with the plain surfaced rubbing wheel B, the whole constructed and arranged substantially as described.

MATTRESSES—Wm. P. Ford, of Cheneyville, La. I do not claim broadly the use of moss as a material for stuffing bed sacks. I am also aware that floor mats composed of moss twisted into hard ropes and woven, have long been known and used, therefore I do not claim such use or manufacture of moss.

But to the best of my knowledge and belief, no mattress composed of moss made up as described, and presenting the peculiar qualities set forth was ever before known or used. My improved mattress is, therefore, a new article of manufacture.

I claim as a new article of manufacture a mattress when made in the manner described, of moss.

[This invention may prove to be one of considerable importance. The material employed is moss, of the kind used by upholsterers. The moss is spun or twisted into loose ropes, and woven. The bed is highly soft and elastic, and may be stirred, or "made up," like feathers.]

SHOT CARTRIDGE—Wm. B. Johns, of the U. S. Army. I claim the combination of the counter-sunk base piece B, copper disk D, case C, and felt disk F, as set forth.

CORN PLANTERS—Alvin Franklin, of Genoa Cross Roads, Ohio. I claim the combination of the plow box extension E, and hoe F, in the rear of the planting tube or passage, for operation together, and with an intermittent corn discharge, or seed depositing arrangement substantially as specified, for the purpose set forth.

I also claim providing the plow box extension E, with a knife or scraper N, arranged in relation to the hoe, for the purpose of clearing the latter in its back spring or stroke as shown and described.

ROPE MACHINES—Ezekiel Guile, of St. Louis, Mo. I claim the additional laying flyer F, when combined with the described machine, substantially as set forth and for the purpose specified.

I also claim the automatic stopping apparatus, when combined substantially as described.

I further claim the curvilinear dies, as shown, for the purpose specified.

PACKING OF PISTONS—George H. Hoagland, of Port Jervis, N. Y. I claim the setting out the packing by means of a tapering mandrel C, placed in the center of the piston rod, constructed and arranged substantially as described.

PIANOFORTES—G. Henry Hulskamp, of Troy, N. Y. I claim first, The arrangement and construction of the action of pianofortes, substantially as set forth, having the jack under hammer and springs attached to the key and moving in the same general direction with the hammer butt.

Second, I claim the use and application of the spring W, extending through the head of the under hammer, to bear against the hammer butt for the purposes described.

Third, I claim the regulating screw in the head of the hammer, or its equivalent, in the head of the under hammer, to regulate the height of that part of the action.

Fourth, I claim the shape of the hammer butt, with its spiral spring, substantially as set forth.

Fifth, I claim the double harmonic attachment, constructed as specified, or its equivalent, and I claim its parts, to wit: the interposing of a substance to touch one string only of a note, and the making of such substance to vary in hardness with the different notes of the instrument.

And sixth, I claim the corrugated spring, for the purposes specified.

CHURNS—Silas Hewitt, of Seneca Falls, N. Y. I claim the floats A, in combination with the flanges B, constructed and arranged in the manner and for the purposes set forth.

COAL TAR IN IRON FURNACES—Isaac G. Johnson, of Spuyten Duyvel, N. Y. I claim the employment of coal tar in the air furnace, substantially in the manner and for the purposes set forth.

FLY-WHEEL TO HAND CARS—Charles T. Kipp and John Lawrenson, of New York City. We claim the arrangement of levers B, and rods C, attached to crank wheel F, for operating the fly wheel A, the whole constructed and operated as described, and for the purpose set forth.

HEMP-DRAWING MACHINES—Saml. Lownds, of Brooklyn, N. Y. I claim the arrangement of a hemp-drawing frame, having its gills operated by guide dogs upon both sides of the frame, and attached to each alternate row of gills, substantially as described.

SEAL FOR CAR DOORS, &c.—D. W. Long, of Baltimore, Md. Though I have represented the same hasp that covers the seal as securing the doors, I do not confine my claim to this peculiar arrangement, as there may be other or additional locks for securing the door. Nor do I confine myself to the arrangement of the seal as described.

But I claim effectually securing the seals of car, or other doors, from accidental or designed injury, substantially as set forth.

CULTIVATORS—Howard Mann, of San Francisco, Cal. I claim the arrangement of shafts G, with rack bars F, and segmental plates H, in the manner and for the purposes set forth.

RAKING APPARATUS FOR HARVESTERS—John P. Manny, of Rockford, Ill. I claim in combination with a contracting trough-shaped platform, a self-contracting and elongating rake, substantially in the manner and for the purpose described.

I also claim raising and lowering a rake operated as set forth, to cause it to preserve its relative working position with regard to the platform, as said platform is raised or lowered by means substantially such as described.

MORTISE BORING MACHINE—Hiram E. Paine, of Troy, N. Y. I claim constructing the machine as described, so that the revolving side wheel reciprocating mortising bit thereof is moved by the machine alone endwise into the timber at, and only at, the ends of the mortise, whatever length of mortise is being cut, as set forth.

I also claim the described means used to prevent increased trembling of the mortising or boring bit, as the depth of the cutting increases.

BREASTPINS—John F. Mascher, of Philadelphia, Pa. I claim constructing breastpins, broaches, and other ornamental fastenings for dress, &c., with a spiral catch, substantially as and for the purpose described.

FREIGHT CARS—Henry D. Mears and Wm. Houlton, Jr., of Baltimore, Md. We claim the device for sealing described, the same consisting of soft metallic disks connected by a strip or wire of harder metal as described, the whole constructed and operated substantially in the manner set forth, and applied to the purposes specified.

FREIGHT CARS—Henry D. Mears and Wm. Houlton, Jr., of Baltimore, Md. We claim the seal described, the same consisting of a disk of soft metal having one or more holes or slots through it for the reception of the ends of a wire or metallic strip, which are confined by the compression of the disk, all constructed and operated substantially in the manner described, and applied to the purposes specified.

SELF-SETTING TRAP HOOK—Donald McLean, of Boston, Mass. I claim the combination of the hooks B and S, constructed substantially as set forth, with the elastic cord or spiral spring E, and line L, operating as described and for the objects specified.

LOCKS—L. F. Munger, of Le Roy, N. Y. I claim the combination of the wheels V, with the rotor, K, in the manner substantially as described, said wheels being retained in position, and imparting motion to each other in the manner substantially as set forth.

CARRIAGES—Rufus Nutting, of Randolph, Vt. I am aware that springs have been applied so as to converge from near the extremities of the hind axle to the fifth wheel on the front axle, so as to obviate the necessity of the usual reach, and also that springs of double curvature, for producing a compensating effect, are, in themselves, not new.

But I claim the arrangement of compensating springs, substantially as described and specified, with the front and rear axles, so that while the axles are retained in their proper positions, the action of the compensating spring prevents the spreading of the axles on one side of the vehicle, and thereby tends to preserve the accurate tracking of the hind wheels.

I also claim the combination of the guard with the hinder part of the springs, substantially as set forth and for the purposes specified.

COTTON GINS—Daniel Pratt, of Prattville, Ala. I do not claim feeding the cotton spirally to the saws, irrespective of the means employed for effecting the purpose.

But I claim the ledge e, secured or placed within the hopper or box E, as shown, so as to close the central portion of the lower end of the hopper or box, and cause the cotton, when fed into the box as described, to be fed spirally to the saws from the center of the box towards each end, for the purpose set forth.

[The outer side of the cotton box or hopper is hinged or connected by joints at its upper edge, so as to maintain its proper position by gravity, and allow the attendant to discharge the seeds by lifting it, at any time. The lower part of the box is closed in the middle but open at both ends.]

LIME KILNS—Leonard Phleger, of Philadelphia, Pa. I claim the employment in a lime kiln of a series of water cells, for supporting the limestone, arranged and operating as described.

LOCKING CYLINDRICAL DOOR BOLTS—Charles G. Page, of Washington, D. C. I claim locking the bolt by means of the loose handles, substantially as set forth.

DRAINING MACHINE—A. P. Routt, of Somerset, Va. I claim the employment in connection with a double mold-board plow, of a heavy V-shaped or taper roller G, said roller being hung so as to run behind and between the two mold boards, and so as to be capable of revolving and adjusting itself to the different depths at which the plow may be set to cut substantially as and for the purpose set forth.

[This plow is exceedingly simple, and yet well adapted for forming drains in wet, marshy lands. The improvement consists simply in arranging a V-shaped roller behind a double mold board plow, said roller being hinged to the beam so as to accommodate itself to the different depths at which the plow enters the soil.]

OIL CANS—Geo. W. and Geo. H. Simmons, of Bennington, Vt. We do not claim the interior tubes of the can. Nor do we claim generally the fastening of the air vents of an oil can to the stopper.

But we claim fastening the air vessel or tube T, to the oil tube A, and the oil tube to the stopper S, so that the whole may be removed together for the purpose of cleansing or repairs, by which means we produce a better article of manufacture than when said tubes are fastened to the can, and are not removable; the whole being made as set forth.

FLY TRAP—W. F. Shannon, of Greensboro, Ga. I claim the invention of the box above described, and the bag and its attachment to the box, for the purposes named.

WREST-PINS FOR PIANOS—Gustav Schilling, of Hoboken, N. J. I claim combining the heads of wrest-pins with an adjustable screw to which the string is attached, in such manner that the direction of the stringing force is mathematically true in the direction of the axis of the adjustable screw by the means substantially as described and set forth.

MACHINE FOR CUTTING METAL—James Tetlow, of Salem, Mass. I would remark that I do not claim the machine or combination of levers or joints and slides for operating the cutter.

But I claim forming the cutter, C, with an obtuse angle in such a manner as to give to the surface of the plate while being cut a broad flat bearing D to rest upon, while the other cutter F is cutting through the plate, the obtuse angle of the cutter C, being the supplement of the acute angle of the plate when cut.

CENTERING MACHINE—E. F. Whiton, of West Stafford, Conn. I claim arranging the laterally adjustable notched holders, d, d, in such a manner in relation to the longitudinally adjustable spindle, C, and its pointed marker p, as to enable the ends of shafts of various sizes to be centrally marked, substantially as set forth.

LOCKS—Wm. Whiting, of Roxbury, Mass., and Henry Pickford, of Boston, Mass. We claim the combination of the slides, I, with the pawl, o, so arranged that whenever the slides are allowed to touch the tumblers, the pawl shall engage the teeth of the tumblers, and hold the stationary.

Second, Operating the slides, the bolt and the pawl, O, directly from the wrench shaft, in the manner substantially as set forth.

ADJUSTING TENON CUTTERS—Melyn Weatherington, of Springfield, O. I do not claim boring round tenons, as this is a very common device.

But I claim the combined use of the uncut counter sunk disk and removable rings, and the bit adjustable thereto, for the purpose of making an adjustable hollow auger, capable of boring tenons of various sizes, without splitting or dividing the stock, substantially as described.

GOVERNORS OF STEAM ENGINES, &c.—A. F. Ward of Louisville, Ky. I claim the arrangement of the friction socket, D, the female screw socket, H, with its arms, q, q', and the clutch, t, on the governor rod, f, the whole combining to operate as described, so that the female screw socket, h, may be prevented turning till the full supply of steam is given or till the steam is cut off entirely, and afterwards be caused to turn with the governor rod.

[This invention is admirably adapted to provide for the extreme variations of resistance experienced in some work, as in the operations of rolling mills. The connection between the governor and the throttle valve, or cut-off, is practically lengthened and shortened to a very considerable degree by a self-acting device as the load varies.]

BUREAU BEDSTEADS—Ethan Whitney, of Boston, Mass. I do not claim so applying a bedstead to a wardrobe or case, as to enable the said bedstead to be turned on hinges or their equivalents, from a vertical position in the case to a horizontal position so as to project from and out of the case.

Nor do I claim when separately considered, making a bedstead in two parts hinged together or making a bedstead in two parts of the same, to slide into a sofa frame by means of guide grooves and projections applied to the same, as represented in the patent of A. Walker, dated July 29, 1842.

But I claim a bedstead, as constructed substantially as described, viz., with the bedstead portion made in two parts hinged together as described, and applied to the case by projections, K, K, and g, g', d, d, arranged as specified, in order that the said bedstead may be either folded together, and slid back into the case, or be drawn forward, and out of the case and unfolded or let down into a horizontal position, as circumstances may require.

MACHINES FOR CLEANING COTTON—L. S. Chichester, (assignor to Henry G. Evans,) of New York City. I claim the combination of the spring bars, I, n, one or more series operated as shown, the hopper B rotating picker or arms d, shake screens, D H, and deflecting screens, L M, arranged substantially as and for the purpose set forth.

[This invention removes dirt, grit, sand, &c., which has become mixed with cotton before it arrives at the gin. Such substances are very detrimental both to the cotton and to the gin. The cleaning is effected by blows from spring bars, which also benefit the cotton by lightening and enlivening it.]

PUMPS—Birdsall Holly, (assignor to Silsby Mynders & Snowmaker,) of Seneca Falls, N. Y. I claim the leather placed over the perforations, d, in the top of the base E, and the chamber, h, which is placed on the leather, said leather being provided with a flange, f, provided with holes, 1, 2, either of which is fitted on the pin, 3, for the purpose of exposing or closing the passage, 4, substantially as described for the purpose specified.

[This pump is very simple and cheap, and provides an equivalent of a small leak through the whole, which is left open in winter, and drains the pump to prevent injury by frost. On the approach of spring the leak is stopped by simply shifting the packing leather, and the pump then retains its water.]

CULTIVATORS—Henry Schreiner, Jr., of Berrysburg, Pa. I am aware that plows similar to mine have been patented, and also harrows. I therefore disclaim the plows separately, and the harrow separately.

But I claim in connection with the cultivator, E, E, F, F, the arrangement of the cross beams, A A', C, and the transverse beam, D, in the manner and for the purpose set forth.

LUBRICATOR—H. J. Hawkins, of Mobile, Ala. I do not claim the origination of lubricating steam engines by a stationary or movable machine, as some such method has long been in use.

I claim the general arrangement of this lubricator with its mode and manner of admitting the lubricating substances, so as to strike at once on all parts of the interior surface of the cylinder.

CUTTING TENONS—W. H. Harrison, of Philadelphia, Pa. Being well aware that one oblique circular saw and the employment of two beveled washers between a fixed collar and the saw are claimed in the patent of Amos D. Highfield (assigned to him and myself) I wish it to be understood that I do not claim any such device in this application.

But I do claim the use of two circular saws upon the same shaft, when their planes form an acute angle with each other, and made adjustable on their shaft, by means substantially such as set forth.

CAR SEATS—B. J. La Mothe, of New York City. I claim constructing seats with elliptical springs, c, c, at the sides receiving the cushions at the upper part of said springs, when combined with the friction rollers, Q, Q, or their equivalents, whereby a lateral motion is allowed to said seat, substantially as and for the purposes specified.

I also claim constructing the back of the seat by an enclosing frame formed of the double bent rod, h, with eyes at both ends, through which eyes, and between the bends of which rod, the sustaining pipe or rod, f, passes substantially as and for the purposes specified—it being understood that I do not claim a surrounding metallic rod receiving padding to form the backs of chairs, as this has heretofore been made use of, but I am not aware that a metallic frame for receiving padding to form the backs of car seats has ever before been formed as herein specified, whereby great strength and lightness are combined, and the back adapted to resist pressure from either side.

RE-ISSUE.

WROUGHT IRON RAILROAD CHAIRS—The New York Wrought Iron Railroad Chair Company, of New York City, assignees of (by instrument of Samuel S. Cox, now deceased.) Patented Aug. 8, 1849. What is claimed as the invention of deceased is, First, A suitable support for a chair blank, in combination with bending levers or a bending apparatus, and a former or the equivalents thereof acting in combination substantially as specified.

Second, A drop hammer or its equivalent, in combination with bending levers, a former and a suitable support for the chair blank or their equivalents, all substantially such and acting in combination substantially in the manner set forth.

ADDITIONAL IMPROVEMENTS.

HUB BORER—John Shaerer, of Reading, Pa. Patented January 13, 1857. I claim in addition to my patent of the 13th day of January, 1857, in combination with the boring shank or shaft, the collar A, with its double flange, O, one above and the other below the frame, C, the holes, c, and the stop E, the whole being arranged to operate in the manner and for the purpose specified.

FIREARM—F. D. Newburg, (assignor to Richd. V. De Witt,) of Albany, N. Y. Patented Aug. 12, 1856. I claim the placing of the tape priming within the chamber of the arm, B, and operating the priming by the movement of the arm through and in combination with the ratcheted rod and spring, n, and pawl spring, n, or their equivalents substantially as set forth in the specification.

DESIGNS.

COOKING STOVES—Jas. Maguire, Jos. A. Read and Duncan Wright, (assignors to Chas. Gilbert,) of Philadelphia, Pa.

STOVES—N. S. Vedder, of Troy, N. Y., assignor to North, Chase & North, of Philadelphia, Pa.

STOVES—S. W. Gibbs (assignor to Rathbone & Co.,) of Albany, N. Y.: Two cases.

PARLOR STOVES—E. J. Cridge, of Troy, N. Y.

COOKING STOVES—J. E. Hyde, of Troy, N. Y.

CLOCK CASES—Pietro Ciquinni, of West Meriden, Conn.

How to Fall Asleep.

The great point to be gained in order to secure sleep, is escape from that clinging, tenacious, imperious thought, which, in most cases of wakefulness, has possession of the mind. Various methods have been suggested by different authors to diffuse the thoughts. Our own method, and one which we imagine conduces most naturally to lead the mind into easy dreaming, is to imagine a journey over some familiar path, bringing successively into the mind's eye the scenery at each portion—an exercise which rarely fails of success in a tolerably short space of time.

Dr. Binn, in his "Anatomy of Sleep," describes his process as follows:—

"I turn my eyeballs as far to the right or left, or upwards or downwards, as I can without pain, and then commence rolling them slowly, with that divergence from a direct line of vision around in their sockets, and continue doing this until I fall asleep, which occurs generally within three minutes, and always within five, at most. The immediate effect of this procedure differs from that of any other of which I ever heard, to procure sleep. It not merely diverts thought into a new channel, but actually suspends it. I have endeavored innumerable times, while thus rolling my eyes, to think upon a particular subject, and even upon that which before kept me awake, but I could not. As long as they were moving around, my mind was a blank. If any one doubts this, let him try the experiment for himself. Let him pause just here, and make it. I venture to assure him that if he makes it in good faith, in the manner described, the promise of 'a penny for his thoughts,' or for each of them, while the operation is in progress, will add very to his wealth."

A Novel Apiary.

The Portland *Argus* states that some unused flues in a chimney in an elegant mansion near that city were recently found to be nearly filled with bees and honey-comb. The flues of the chimney had never been used; they were plastered smooth inside, and were perfectly dark, a stone having been placed upon the top of each flue. The bees had descended the adjoining flues and found small holes about ten inches from the top of the chimney, leading into the closed flues, and through these holes they had made their way in and out. They have, as is supposed, occupied these places for three years, having been kept warm in the winter by the heat from the adjoining flues.