

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

**POTATO DIGGER.**—To the cranked axle of a hand cart is pivoted the bent handle of a fork or digger. The cart box is divided longitudinally in the middle, so that the cranked part of the axle has play between the two sections. In using the machine the cart is drawn along over the rows, and when in proper position over a hill of potatoes, the operator holds it fast by pressing the handles down upon the earth, thereby pressing spikes, which project from the handles, down into the soil; he then seizes the handle of the fork or digger, and draws it forward till the cranked portion of the axle is in a horizontal position. He then raises the handle into a vertical position, and plunges the tines of the fork down into the earth. Then, using the handle as a lever, he raises the mingled earth and roots, and separating the earth by a few shakes, tosses the potatoes into the cart box, and so proceeds from one hill to another along the row. Mr. Franklin Jones, of Terre Haute, Ill., is the inventor of this machine.

**MEDICAL COMPOUND OR LINIMENT FOR RHEUMATISM.**—John W. Helms, of Bainbridge, Ga.—This is an improved liniment for rheumatism, neuralgia, toothache, sprains, bruises, paralysis, etc.; and it consists of the liniment prepared of various ingredients in a peculiar manner.

**LEADER PIPE COUPLING.**—John Demarest, of Mott Haven, N. Y., assignor to himself and Jordan L. Mott, of same place. This is a new method of arranging couplings or brackets for holding cast iron leader pipes upon houses. It consists in a cast metal coupling having a suitable hole through it vertically for the pipe, and made in two parts, one of which, being attached to the building, has the other attached to it so that it may be readily taken off at any time for repairing the pipe or putting in a new section, and admit of doing this without disturbing the other sections or taking them down, as has to be done with the present mode of fastening the leader pipe. Besides having the advantage stated in regard to putting up and taking down the pipe, the arrangement of the coupling is simple and economical as to the quantity of metal used, and presents a neat and symmetrical appearance.

**CURTAIN FIXTURE.**—Joshua D. Legg, of Long Eddy, N. Y.—The roller is arranged to be revolved and held in position in the same manner as the ordinary curtain roller. Tapes are attached to the roller at one end, and to the lower end of the curtain at the other end. Two other tapes are attached to the roller and to the top or other end of the curtain. These tapes are so attached to the roller that when one pair is being wound around the roller the other pair will unwind, for instance, when letting down the top and raising the bottom of the curtain, and vice versa. By this arrangement the curtain may be dropped down, so as to cover the lower half of the window, or raised up so as to cover the upper half, or extended over the entire window, or be rolled up around the roller, as may be desired.

**GANG PLOW.**—This is a combination of various devices to form an improvement upon a plow patented July 27, 1869, by Hoell B. Smith, of Tremont, Ill., the same inventor being the author and patentee of the present improvement, which consists of certain peculiarities of construction, whereby, in three horse plows, the middle horse can walk in the furrow; and also in supplying a guard to hold the plow beams and sustain lateral strain.

**MEDICAL COMPOUND OR LINIMENT.**—Thomas B. Randall, of New York city.—This is a new mixture for the cure of rheumatism, neuralgia, lumbago, bruises, sprained swollen joints, pain in the chest, and other similar diseases and affections. This liniment is rubbed into the skin as near as convenient to the parts affected. The phosphorus it contains is claimed to enter the osseous structure, and give strength and vigor to the same, asafetida aiding in its ready absorption by the system.

**SAWING MACHINE.**—Christian O. Hansen, of Ferguson, Mo.—This invention consists in the adaptation of a rotary sawing machine to the employment of the saw mandrel as the driving shaft of a scroll saw, the power being applied by the saw driving gear, and the scroll saw and its adjuncts being detachably connected to the sawing machine to admit of adjusting it either for scroll or circular sawing, or for other work. The saw frame may be adjusted for employing the mandrel as the spindle of a tenoning lathe; also for the application of a boring and planing mandrel, and also for the application of a turning lathe attachment, and boring attachments.

**DRILL CHUCK.**—Pompelius Philipp, of Beardstown, Ill.—This invention relates to a new way of giving end play to drill bits while in the act of being centered and thereafter; and consists in allowing a slight but constant lateral play to the chuck, within which the shank of the bit is made fast. By means of a flanged plate or cap the chuck is secured to the end of the mandrel by screws. The end of the mandrel is provided with a hemispherical cavity, which the end of the chuck is made to fit. The globular end of the chuck not only fills the cavity in the end of the mandrel, but extends out from it, and is of greater diameter than the socket portion of the chuck. The cap is made to slip over the socket portion of the chuck, and to fit a portion of a ball, so that, when it is screwed up to the flange on the end of the mandrel, or secured in its proper position, the chuck will be held to the mandrel, but not tightly, the globe or ball being allowed to turn, so that the point of the drill will adjust itself to the center. A pin or lug on one side of the ball, is placed in a recess formed in the cap and mandrel, by means of which the chuck is carried round with the mandrel.

**COTTON GIN ATTACHMENT.**—Hiram P. Harrell, of Roxobel, N. C.—This invention is an attachment to cotton gins for crushing the cotton seed as it is discharged from the breast of the gin. It consists in attaching rollers to the gin, arranged so as to receive the seed and crush it as it leaves the breast of the gin. These crushing rollers are revolved, either by means of the driving belt of the gin, or in any other suitable manner. Gear wheels on the shafts of the rollers, cause them to revolve with a uniform motion. The inventor does not confine himself to any particular mode of supporting or driving the crushing rollers; but connects them with the gin so that the seed will be crushed thereby as it drops from the breast of the gin. Aprons or guides are used for conducting the seed to and from the rollers; and scrapers are arranged to constantly clean the rollers, should the crushed seed and oil adhere to them.

**HORSE HAY FORK.**—Jacob H. Carothers, of Pine Grove Mills, Pa.—This invention is an improvement in horse hay forks, of the class in which a lever or link is employed for causing the prongs or teeth to clamp or compress the hay between them. It consists in a peculiar construction and arrangement of parts, whereby a very compact and apparently efficient implement is secured.

**MACHINE FOR PULPING WOOD FOR PAPER STOCK, ETC.**—Benjamin F. Barker, of Curtisville, Mass.—This invention relates to improvements in machinery for converting wood into pulp for use in the production of paper, and has for its object to insure the proper action of all parts, and simplify their construction and the arrangement of driving mechanism. It consists in a new form of stone, whereby centrifugal force is utilized for retaining the wood in contact with the grinding surface a longer time than it otherwise would remain. The invention also consists in the use of adjustable guides, whereby the blocks of wood are held to and caused to be fed against the grinding surface in the desired manner. There is also an attachment for grinding splinters and small pieces apart from the larger blocks, but on the same stone and in a new general combination of parts for the purpose specified.

**WINDMILL.**—Isaac Lehmer, of Lima, Ind.—This invention has for its object to furnish a simple and effective means for making the fans or wings of a windmill self adjusting, so that they will adjust themselves as the wind varies in force, by turning their edges more or less to the wind, as may be required. It consists in the construction and combination of rods, a spring, and a sliding wheel with the wings or fans and with the shaft, in such a way that as the movement of the fans or wings increases in rapidity, the centrifugal force thus engendered moves the fans or wings outward, which turns the edges of said fans or wings toward the wind, thus checking their movement. As the velocity of the movement decreases, the springs draw the fans or wings inward, which exposes more of their side surfaces to the wind, the fans or wings being thus self regulating. The fans or wings may also be adjusted to regulate their movement, or to turn their edges toward the wind, and has stop them, by moving the sliding wheel.

**GATE.**—William Hathaway, of Northbridge, Mass.—The hinge post of this gate has a projecting cap piece. The end of the top rail of the gate rests on the cap, and lower rail rests on an ear projecting from the gate post below, and the pintle of the hinge passes through the top rail, cap, bottom rail, and ear. The hinge is formed in this manner, which allows the gate to swing in either direction while supporting it in the most substantial manner. A cap on the latch post has a recess therein for receiving the catch in the end of the top rail. A latch piece receives the slat rail next to the top. This passes through a long mortise in the end piece, so that it can be moved up and down therein, and play is given it at the other end, which allows of that motion. This rail is thus arranged for and operates as a latch.

**PAD FOR STAIR AND OTHER CARPETS.**—Edward H. Bailey, of Brooklyn, N. Y.—This invention consists in excluding moths and noxious insects from carpets by means of a pad formed of one or more layers or sheets of paper, surrounded by cotton batting or wadding, and a bag or outer case of cotton, linen, or other suitable cloth or material, the case being tightly sewed up so as to inclose the batting. The paper is impregnated with the essence of oil of sandal wood, or with the essence of oil of cedar, for rendering not only the pad but the carpet under which the pad is placed moth and insect proof; and the odor of the wood will permeate the carpet, and render it moth, worm, and insect proof.

**CUTTING APPARATUS FOR HARVESTERS.**—Marshall Harrison, of Laclede, Mo., assignor to himself and Jefferson Mize, of same place.—In this invention the rear ends of the movable cutters are pivoted to a supplementary spacing bar. The object of this is to connect the series of cutters in such a manner that, if either one of the pivots by which they are connected to the sliding bar and stationary rib should give way, the operation of the tooth will not be prevented but allowed to go on as usual. In this way many of the usual stoppages in cutting, by which all the hands that follow the harvester are delayed in their work, are entirely obviated.

**CLAMP FOR MAKING PICTURE FRAMES.**—Leonard A. Johnson, of Candor, N. Y., assignor to himself and John O. Frost, of same place.—This invention relates to a new machine for holding the pieces of a picture frame in place while the joints are being cut by a saw, and, subsequent to such sawing, for holding the glued pieces in close contact. To the top of the frame of the machine are pivoted four oblong slotted frames or plates, whose pivot pins project from them into apertures of the table, and to which are attached corner blocks or followers, each of which has a button projecting from its lower face into the slot of the plate, wherein it can slide but not work up and down, being held in place by a projecting rib, or countersunk in said plate. Above the plate, each cornerpiece constitutes a block with a rectangular recess in one edge. The blocks are held by ropes or cords that pass through a central aperture of the table, connected with a block under the table top. A short cord connects this block with a lever or treadle, which can be set higher or lower at either end. The pieces which are to constitute one picture frame, are held in place by the corner blocks or followers which are drawn against the jointed ends of the pieces, by the cords drawn down by means of the lever. The joints are then cut by means of a fine saw, which is guided in a slit of each block, to work in the desired angle. The ropes are so adjusted that they make the picture frame square at every angle, the confining blocks being self adjustable. There is a projection on one side of every block for the back of the saw to rest on, to prevent the saw from cutting deeper than just through the frame. After the joints are in this manner completed, the pieces are removed and properly glued, and then replaced in the machine, and firmly held together by means of the lever; the frame can then be finished. The ropes are not in line with the miters of the picture frame, but all meet at a common center, so that the strain will be equal on each side of the corner of the frame, the sides being of different lengths. If the frame is made equilateral, the ropes will also be in line with the miters. The table has several apertures for permitting the adjustment of the plates to the holding of larger or smaller picture frames.

**CARPENTER'S PLANE.**—Henry N. Frederick, of Hancock, N. Y.—The face of the planing iron has a toothed portion, into which mesh the teeth of a segment. This segment is formed at the lower end of a lever, that turns on a pin whose bearings are in the sides of the plane. By swinging the lever on its pivot, the iron will be set up or down, as may be desired. A slotted lever pivoted to the plane can be clamped by means of a thumb screw to lock the iron in any suitable position. Other means for thus securing the lever and iron, may, however, be substituted for lever and screw.

**LUBRICATOR FOR PICKER SPINDLE IN LOOM.**—Thomas Parker, of Shelby, N. C.—This invention consists in a new way of applying lubricating material to a picker spindle. A wick is confined in a tubular screw, inserted into the top of the picker. The upper portion of the tube is enlarged, forming a cup, which allows the upper portion of the wick to spread and absorb oil. The lower portion of the wick is more compressed; but not so much so as to prevent a sufficient quantity of oil from passing through it for lubricating the spindle with which it is in contact. As the picker is thrown by the picker staff over the spindle at each throw of the shuttle, the spindle will be constantly lubricated when there is oil or other lubricating liquid in the wick.

**TUBE EXPANDER.**—Charles H. Clark, of Laramie, Wyoming Ter.—A central feed screw or roll is made tapering, from its forward to its rear end. The thread of the screw is made wide, strong, and with parallel sides, and has a shallow groove formed in its center to receive the bead of the small rollers, placed in slots in a cylindrical frame, with their faces resting against the screw. The rollers are perforated longitudinally to receive a wire, the ends of which enter notches in the frame, where they are secured in place by open spring rings, placed in grooves in the outer surface of the said frame. This construction allows the wires to be conveniently removed, and the ends of the rollers ground off to receive the longitudinal extension caused by the great side pressure to which they are exposed when in operation, and which would soon cause them to bind in the frame. Upon one, two, or more of the rollers is formed a bead, in such a position as to form a bead in the tube at the water side of the tube sheet. The bead at the end of the tube is formed by concave rollers pivoted to a ring, which, when at work, rest upon the edge of another ring upon the rear part of the tubular frame, which is prevented from turning by a tongue and groove. This ring is forced forward to feed the rollers to their work by a nut which fits upon a screw thread cut upon the rear part of the frame. The screw thread cut upon the inner surface of the tubular frame is made deep, so as to mesh into the thread of the screw or roll, even at the smallest part of the screw.

**AUTOMATIC TRAP FOR WASH BOILERS.**—Henry R. Robbins, Baltimore, Md.—This invention consists in a device intended to be placed on the bottom of a wash boiler, and operating to gather up water under steam pressure; and to conduct it upward through a vertical pipe having an elbow at its top from which the water is ejected with much force and played in a stream, within the boiler, upon the clothes, thereby assisting materially in cleansing the same.

**COTTON CULTIVATOR.**—Richard H. Furnelle, Beulah, Miss.—This invention consists in the combination, in one mechanism, of a barring off mechanism, a scraping mechanism, a cutting out mechanism for bringing the plants to stands, and a throwing on mechanism for heaping soil upon the stands.

**COMBINED PLOW AND STOCK FOR CULTIVATORS.**—Martin Kennedy, Chicago, Ill.—This invention relates principally to a stock so constructed as to receive different implements, such as a share and mold board for a single plow; two mold boards, one on each side, both constituting a double plow; two beams armed with shovels and constituting a cultivator; and a point to be used when the double mold boards and cultivators are employed.

**EGG PACKING BOX.**—Nathan L. Janney, Wilmington, Del.—This invention relates to packing eggs held in little bags, which depend from perforated shelves, which shelves are supported horizontally in a box at suitable distances one above another by means of a partition whose ends enter vertical grooves in the sides of the box, the eggs supported in each shelf being covered with a piece of cloth which extends beneath the bottoms of the aforesaid partitions.

**WHEEL CULTIVATOR.**—John A. Viars, of Sherman, Texas.—This invention relates to a new and useful improvement in agricultural implements; and consists in a construction, arrangement and combination of parts whereby the plows or teeth may be raised or lowered, or made to penetrate the ground as much or little as may be desired. One or more plows may be used at one and the same time, arranged in any manner, so as to be raised and lowered. Pivot wheels or casters allow the machine to be turned in the field at pleasure.

**APPARATUS FOR UTILIZING WASTE HEAT.**—Ben James Hobson, Covington, Ky.—The invention consists in a peculiarly advantageous arrangement of two supplementary drums, connecting tubes, and entrance and exit flues in an enclosing or main drum, whereby a maximum area of heating surface is provided within a given space.

**FLOOR CLAMP.**—Thomas S. Urie, of Hubbardston, assignor to himself and George H. Cagwin, of Carson City, Mich.—Two bent bars are pivoted together so that they resemble in form a horse shoe, jointed in the middle of the bend. To one of the sections or bent bars is attached a gripping device, which seizes the beam or joist, and the other bar is forced against the floor board, to be clamped by means of a lever and toggles.

**DITCHING MACHINE.**—David Whitesell, of Mattoon, Ill.—Wheels, provided with disks having annular cutting edges on their peripheries, cut the sides of the ditch. A double mold board plow, having horizontal cutting edges, extends out to a point in line with the disk cutters. A rotary cutter, placed between the two sides of the mold board, cuts through the grass sod of the furrow slice and divides it into two equal parts. These three instrumentalities cut the soil at all necessary points. Auxiliary mold boards, for receiving the soil from the double mold board and forcing it outwardly beyond the sides of the ditch, are employed. These are hinged, by arms, to a standard, rigidly attached to the beam. By suitable mechanism, the mold boards are lifted from the ground, and the point of the plow is raised when desired.

Official List of Patents.

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- 119,442.—PRESERVING FRUIT.—D. Ackart, Schaghticoke, N. Y.
- 119,443.—REFRIGERATOR.—C. Avery, Erie, Pa.
- 119,444.—CART.—O. Benson, J. G. Falk, Chicago, Ill.
- 119,445.—DIE.—J. Carroll, Oakland, Cal.
- 119,446.—COUPLING.—J. Childs, West Troy, N. Y.
- 119,447.—PINCERS.—A. Clarke, Boston, Mass.
- 119,448.—STOP MECHANISM.—R. Cook, New Hartford, N. Y.
- 119,449.—CAP BLOCK.—R. Cook, T. Hanford, New Hartford, N. Y.
- 119,450.—STRAP.—H. Cornell, A. H. Marshall, Wilmington, Del.
- 119,451.—PLATE GLASS.—E. Cossaboom, Lenox, Mass.
- 119,452.—SHEARS.—J. F. Creighton, Placerville, Cal.
- 119,453.—REFRIGERATOR.—H. Davis, R. Alden, Erie, Pa.
- 119,454.—WATER GAGE.—M. Doyle, Baltimore, Md.
- 119,455.—GAS LAMP.—G. S. Dunbar, Pittsfield, Mass.
- 119,456.—SIGNAL.—G. F. Folsom, Boston, Mass.
- 119,457.—SASH HOLDER, ETC.—L. Gathmann, Chicago, Ill.
- 119,458.—ORGAN VALVES, ETC.—C. D. Goodman, Cleveland, O.
- 119,459.—LOOM HARNESS.—R. B. Goodyear, Wilmington, Del.
- 119,460.—CLARIFYING WINES.—A. Gottschalk, Napa, Cal.
- 119,461.—POTATO DIGGER.—I. Hicks, Hartford, Wis.
- 119,462.—SAW SET.—D. Jones, Allegheny, Pa.
- 119,463.—KING BOLT, ETC.—J. A. Judd, Newton, Mass.
- 119,464.—PAPER PULP.—M. L. Keen, Jersey City, N. J.
- 119,465.—PAPER PULP.—M. L. Keen, Jersey City, N. J.
- 119,466.—BRIDGE.—L. Kittinger, Massillon, Ohio.
- 119,467.—CORN PLANTER.—J. Knoll, J. P. Pence, St. Paris, O.
- 119,468.—MEDICAL COMPOUND.—J. McKee, New Orleans, La.
- 119,469.—GRINDING ROCK.—W. J. McKenzie, St. Helens, Eng.
- 119,470.—CORN PLANTER.—N. B. Moody, Woodman, Wis.
- 119,471.—SAD IRON, ETC.—F. Myers, New York city.
- 119,472.—CIDER MILL.—N. A. Patterson, Knoxville, Tenn.
- 119,473.—HEEL.—A. T. Perrine, Boston, Mass.
- 119,474.—FIRE ARM.—G. R. Pierce, Grand Rapids, Mich.
- 119,475.—COUPLING.—S. D. Pratt, Penn Yan, N. Y.
- 119,476.—PAVING.—H. Saunders, Chester, Pa.
- 119,477.—WATER WHEEL.—H. Shears, Merton, Wis.
- 119,478.—GAS BURNER.—G. E. Smith, New York city.
- 119,479.—SHUTTER FASTENER.—J. F. Smith, Boston, Mass.
- 119,480.—GAS BURNER.—W. B. Stoffer, Memphis, Tenn.
- 119,481.—MOTH PROTECTOR.—F. F. Voigt, New Orleans, La.
- 119,482.—PUMP.—W. H. Ward, Auburn, N. Y.
- 119,483.—STEAM ENGINE.—W. H. Ward, Auburn, N. Y.
- 119,484.—STEAM ENGINE.—W. H. Ward, Auburn, N. Y.
- 119,485.—GRAPE PICKER.—G. A. Warner, San Francisco, Cal.
- 119,486.—TWISTING BARS.—A. D. Williams, London, England.
- 119,487.—BED BOTTOM.—G. Wilson, Chicago, Ill.
- 119,488.—VESSEL.—A. Wingard, San Francisco, Cal.
- 119,489.—WASH BOILER.—E. M. Wright, Geneva, N. Y.
- 119,490.—GOVERNOR.—G. Aab, Brooklyn, N. Y.
- 119,491.—LATCH.—H. D. Alderfer, Grater's Ford, Pa.
- 119,492.—GAS LIGHT.—A. N. Allen, R. H. Dewey, Pittsfield, Ms.
- 119,493.—GRAIN DRYER.—S. V. Appleby, Spotswood, N. J.
- 119,494.—COUPLING.—S. Barnum, Whitestown, N. Y.
- 119,495.—GRAIN DRILL.—A. P. Barry, Martinsville, Miss.
- 119,496.—SEWING MACHINE.—A. H. Bartlett, Sptn. Duyvil, N. Y.
- 119,497.—LAMP.—W. W. Batchelder, Boston, Mass.
- 119,498.—BRONZING MACHINE.—E. F. Benton, Buffalo, N. Y.
- 119,499.—TURN BUTTON.—P. Bradford, New Haven, Conn.
- 119,500.—BLOWER STAND.—P. Bradford, New Haven, Conn.
- 119,501.—KETTLE.—F. M. Brignac, St. James, La.
- 119,502.—PLOW CLEVIS.—J. Brison, Compentine, Iowa.
- 119,503.—DISCHARGING COLOR.—B. G. Brooks, Manchester, N. H.
- 119,504.—SHAFT, ETC.—B. G. Brooks, Manchester, N. H.
- 119,505.—REGULATOR.—A. S. Cameron, New York city.
- 119,506.—EXTRACTING CAPS.—W. Clewis, Iliou, N. Y.
- 119,507.—STRETCHER.—J. D. Crocker, J. A. Brand, Norwich, Ct.
- 119,508.—REFRIGERATOR.—D. Cromwell, St. Louis, Mo.
- 119,509.—GATE.—S. A. Darrach, Newburg, N. Y.
- 119,510.—WASH BOILER.—W. J. Dodge, New York city.
- 119,511.—WHEEL.—H. E. Dodson, West Liberty, Ohio.
- 119,512.—SHAVING HORSES.—F. J. Elford, Webster, N. Y.

- 119,513.—SCOURING SKINS, ETC.—E. Fitzhenry, Boston, Mass.
- 119,514.—STOVE.—J. H. Goodfellow, Troy, N. Y.
- 119,515.—DESK, ETC.—T. Gregg, Danville, Pa.
- 119,516.—CHUCK.—J. L. Hayden, Haydensville, Mass.
- 119,517.—SCROLL SAW.—I. Hird, Cincinnati, Ohio.
- 119,518.—LANTERN.—J. J. Hull, J. Kaufman, Brooklyn, N. Y.
- 119,519.—PAVEMENT.—S. H. Ingersoll, New York city.
- 119,520.—RAIL CHAIR.—C. E. Jarvis, Grafton, W. Va.
- 119,521.—TAPERING FORMS.—H. Kellogg, Milford, Conn.
- 119,522.—ALARM.—J. Kirk, London, England.
- 119,523.—CHILD'S CARRIAGE.—J. G. Krieger, Washington, D. C.
- 119,524.—WAGON BRAKE.—C. M. Luffkin, Unity, N. H.
- 119,525.—POLISHING NEEDLES.—F. W. Mallett, New Haven, Ct.
- 119,526.—HARNES.—R. McHardy, Edinburgh, Scotland.
- 119,527.—RAISING WEIGHTS, ETC.—T. Moore, Stockton, Eng.
- 119,528.—HAY PRESS, ETC.—P. L. Negley, Castleton, Ind.
- 119,529.—STAPLE.—W. F. Nolker, E. H. Morgan, Cincinnati, O.
- 119,530.—EAR DROPS.—L. L. Northrup, Johnston, R. I.
- 119,531.—THIMBLE, ETC.—J. A. Pettet, Philadelphia, Pa.
- 119,532.—HAY RAKE.—P. Pfeifer, Durhamville, N. Y.
- 119,533.—JACK.—J. E. Plummer, Binghamton, N. Y.
- 119,534.—SASH HOLDER.—G. B. Ransom, Chester, Conn.
- 119,535.—HEATING STOVE.—W. F. Ross, Davenport, Iowa.
- 119,536.—CURTAIN RACK.—F. and W. Schmidt, Cincinnati, O.
- 119,537.—MATRICES.—A. Shiland, Albany, N. Y.
- 119,538.—BOOT PATTERN.—E. Shopbell, Ashland, Ohio.
- 119,539.—CLOTHES DRYER.—G. C. Smith, Hamilton, Ohio.
- 119,540.—BRACELET.—J. H. Sprague, Providence, R. I.
- 119,541.—VALVE.—G. M. Sternberg, New York city.
- 119,542.—THERMOMETER.—G. M. Sternberg, New York city.
- 119,543.—THERMOMETER.—G. M. Sternberg, New York city.
- 119,544.—SPARK ARRESTER.—W. M. K. Thornton, St. Louis, Mo.
- 119,545.—DUST SHIELD.—W. M. K. Thornton, St. Louis, Mo.
- 119,546.—BARREL.—J. Tomlinson, Goderich, Canada.
- 119,547.—BUG DESTROYER.—P. S. Van Wagner, Saltfleet, Can.
- 119,548.—REFRIGERATOR.—J. B. Webster, St. Louis, Mo.
- 119,549.—LANTERN.—W. Westlake, Chicago, Ill.
- 119,550.—ROSE HEAD.—W. Westlake, Chicago, Ill.
- 119,551.—MILLSTONE.—J. I. Yount, Tippecanoe, Ohio.
- 119,552.—LATCH.—J. H. Allison, Charlottesville, Ind.
- 119,553.—VEGETABLE CUTTER.—H. Baldwin, Nashua, N. H.
- 119,554.—HOT AIR FURNACE.—J. C. Barnes, Albany, N. Y.
- 119,555.—SEWING MACHINE.—A. H. Bartlett, Spuyten Duyvil, N. Y.
- 119,556.—BACK BAND HOOK.—H. Beagle, Jr., Philadelphia, Pa.
- 119,557.—HUB AND SPOKE.—W. Beauchamp, Grayville, Ill.
- 119,558.—TURBINE.—A. Bee, Lancaster, Mass.
- 119,559.—MILK CAN.—T. M. Bell, New York city.
- 119,560.—CARRIAGE SPRING.—O. E. Bennett, Cannonsville, N. Y.
- 119,561.—LIGHTING GAS JETS.—A. L. Bogart, New York city.
- 119,562.—BOILER FURNACE.—E. Boileau, St. Louis, Mo.
- 119,563.—LABEL, ETC.—T. W. Bracher, New York city.
- 119,564.—SPRING, ETC.—G. A. Brown, Reading, Mich.
- 119,565.—SCREW CUTTER.—G. W. Brown, A. T. Gifford, Prov., R. I.
- 119,566.—NAVAL RAM.—W. Brown, Portsmouth, England.
- 119,567.—WATER WHEEL.—O. Bryant, Chesterfield, Mass.
- 119,568.—CURTAIN.—W. N. Bulkeley, Brooklyn, N. Y.
- 119,569.—BREAD CUTTER.—I. S. Bunnell, Carbondale, Pa.
- 119,570.—CROZE, ETC.—A. Busenger, Mount Solon, Va.
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REISSUES.

- 4,573.—MILK COOLER.—A. E. Baldwin, Newark, N. J.—Patent No. 93,583, dated August 10, 1869.
- 4,574.—CLOTHES WRINGER.—C. A. Cummings, F. M. Swallow, Worcester, Mass.—Patent No. 34,395, dated February 11, 1862.
- 4,575.—STEAMING CLOTH.—L. M. Heery, Hinsdale, Mass.—Patent No. 115,200, dated May 23, 1871.
- 4,576.—BOBBIN WINDER.—C. H. Palmer, New York city.—Patent No. 105,363, dated July 12, 1870.
- 4,577.—BINDING BOOKS.—J. L. Rile, New York city.—Patent No. 115,896, dated June 13, 1871.
- 4,578.—EXTRACTING OIL, ETC.—L. S. Robbins, Rye, N. Y.—Patent No. 75,980, dated March 24, 1868.

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