

WASHING MACHINE. William Clark, of Prairie Du Chien, Wis. This machine consists of a cylinder attached to the axle of a one horse cart, to one of the wheels of which is fixed a gear, meshing into a pinion upon a central shaft passing through the cylinder. This shaft actuates an endless wire netting which passes between rollers in the cylinder, and also the rollers, which may be plain or fluted. The clothes are put in so that the wire netting carries up the goods from suds previously put in, to and between the rollers, so that by driving the machine about, the clothes are alternately soaked in suds and squeezed between the rollers till cleansed. Then a plug being drawn out at the bottom of the cylinder the suds are drawn off, and the continued motion of the machine squeezes out the water, and thus wrings the clothes dry.

RANGE SETTING.—Andrew F. Barry, of New York city.—The inventor proposes to have a wide cast metal plate, as high as the wall of the room, with a cornice at the top, an opening at the front for the range, and a register above the range for setting the latter, instead of the heavy and cumbersome brickwork now used. The plate will fit snugly against the wall at the edges and at the back of the cornice, but between the edges and the opening for the range it will swell outward by graceful curves, to the extent that it is desired to inclose the range. The front may be lined or grooved to represent stone or brick, or it may be ornamented in any approved way, and may have eyebolts or staples projecting from it at either or both sides of the range, near the floor, for the attachment of a bracket, for the support of the range boiler. The edges of the opening for the range may be formed in any way to match the walls of the range where they meet, to be lapped and bolted or otherwise for making close joints. It is claimed that these improved range settings may be afforded cheaper than the brickwork, can be much more readily put in, and will be more ornamental.

DRAWING BOARD.—J. B. Franklin, of New York city.—This invention provides drawing boards with concealed metallic stays or braces, whereby they are prevented from warping, and retained smooth when shrinking. The difficulty to be overcome consists chiefly in the necessity of keeping metal away from the surface of the board in order to permit the application of drawing pins. The invention consists in interposing metallic strips or braces between the hardwood edge pieces and the board in the dovetail grooves at the ends of the board, and also in the use, for large boards, of central hardwood cross pieces, lined at the edges with L shaped strips of metal. These pieces are let in to the body of the board, and act to hold the board from warping, as a piece dovetailed into the board would do. The entire board has nothing but wood on both surfaces, and can, therefore be used on either side.

GLOVE FASTENER.—Monroe B. Foote, of Northampton, Mass.—This is a new and improved fastener for gloves, mittens, and the like, applicable also for shoes and other articles. The invention consists in a metal or other disk, with two eccentric grooves or slots extending from opposite points near the periphery to points near the center, in such a way as to draw studs attached to the parts of the glove or other article to be fastened one toward the other, and hold them when turned in one direction, and push them in the opposite direction when turned the other way. The disk is made detachable from one of the studs for opening the parts more widely when relieved of the strain by the turning of it.

BUTTON.—George W. Phillips, of Fresh Pond, New York.—This invention relates to improvements in the construction of buttons for sleeves, bosoms, or other articles of wearing apparel; and consists in a front piece, of porcelain, metal, or other substance, with a shank having one end screw threaded and the other split for attaching to the said front piece of porcelain or other substance by driving into a hole having two opposite sides under cut for spreading and clinching the split shank, the screw threaded end of which is for attaching the disk for the back part of the completed button to it, said disk having a screw threaded socketed shank for screwing on to it.

ANIMAL POKE.—Nicholas Denny, of Saranac, Mich.—The bow of this poke passes around the animal's neck. The journals of the roller work in sockets or holes in the arms of the bow, in such a position as to leave a suitable space for the animal's neck between its upper side and the top or bend of the bow. The tail or bar of the yoke is pivoted to the upper or forward part of the roller. To the bar is attached a curved plate, which is forked or branched to form prongs or prickers, which pass up in an inclined direction through holes in the roller, in such position that, should the animal press the bar against a fence or other object, the prongs or prickers will be forced out against his neck and thus stop him. A spring, one end of which is attached to the roller, and the other or free end of which rests against the inner side of the plate, is made of such strength as to support the bar when raised from the ground and keep its weight from forcing the prongs or prickers out against the animal's neck.

TREMOLLO FOR ORGANS AND MELODEONS.—John R. Lomas, of New Haven, Conn., assignor to B. Shoninger, of same place.—This invention removes the strain from the shaft of the wind wheel, and overcomes the consequent friction and rattling noise produced when such wheel is connected with an oscillating wing or fan which acts as a tremollo for an organ or melodeon. The invention consists in the use of two wings or fans, which are connected with opposite cranks, and therefore vibrated in opposite directions, so that one will balance the other, thus keeping an even strain on the power applied, making it work with ease, without noise, and, it is claimed, producing a perfect tremollo and beautiful effect on the music.

CONSTRUCTION OF DIES FOR FORMING THE LIPS OF AUGER BITS.—Richard N. Watrous, of Elmira, N. Y., assignor to himself and W. W. Kellogg, of same place.—A block of steel suitable for the die required is so shaped at the striking surface as to constitute the die for forming the lip and head of an auger. Into the striking face of the die is bored a hole, preferably of slightly conical form, into which is inserted a steel pintle, of tapering form. At the end of the pintle is formed a pin or projection, which gives form to the inside of the lip or cut of the auger. A hole is bored into the opposite end of the die to permit the removal of the pintle by the insertion of a rod. The advantages of this arrangement are claimed to be manifold. The die and pintle can be tempered separately. The die, having to withstand the blow or pressure, must be very hard in order to be durable, while the pintle must have a spring temper to prevent breaking. Should the projecting pin break, which it is liable to do, a new pintle can be inserted without great cost, while heretofore the entire die would have to be made anew. Both dies of a pair are or may be provided with such removable pintles.

DRINKING FOUNTAINS FOR FOWLS.—John S. Orndorff, of Virginia City, Nevada.—A vessel with a cover, having a concentric series of holes, through which fowls may drink, but which prevents their getting into the water, has water placed therein, and in the center is inverted a vessel with a narrow mouth, previously filled with water. When the water in the first named vessel is exhausted, so that air can pass under the mouth of the inverted vessel, a portion of the water in the latter descends, and thus keeps up the supply.

MOLDBOARD FOR PLOWS.—George Peacock, Selma, Ala.—This invention has for its object to prevent soil from adhering to the moldboards of plows as they are drawn through it, and thus increasing their resistance to the draft animals, and necessitating frequent halts to enable the moldboards to be cleaned off. Supposing the cause of the adhering of soil to moldboards to be the formation of vacua between the earth and the clay by the great pressure of the one upon the other, the inventor has devised a mold board, having a corrugated, grooved, or ribbed exterior surface, and having also orifices made through it for the purpose of preventing the formation of such vacua.

WASHING MACHINE.—John Lawson, Humboldt, Kansas.—This invention relates to a cylindrical tub, supported in a horizontal position upon legs, the upper half of the tub being removable and serving as a cover, and the lower half being lined with a corrugated zinc plate, and a semi-cylindrical rubber, also corrugated, being placed within the tub, supported upon an axis, and vibratory with respect to the corrugated bottom.

BEEFSTEAK MANGLE.—Dr. John Locke, Lewisburg, Pa.—This invention relates to a beefsteak mangle, in which there are two serrated toothed cylinders placed side by side, between which the steak to be mangled is passed, the stays that support said cylinders not coming together at their outer ends, but being at an interval, which is opposite the space between the two cylinders, wide enough to permit part of the steak to pass through it when the whole cannot pass between the two cylinders.

TELLURIAN. Joseph Troll, of Belleville, Ill. This invention relates to improvements in tellurians, and consists in the arrangement of parts for illustrating the inclination of the earth's axis, for disengaging the lunar globe from the terrestrial, and in the apparatus as a whole, whereby is secured, by simple and inexpensive means, what heretofore required complicated and costly ones. The operation of the parts composing the train results in imparting to the entire daily and monthly train a rotation in a vertical plane about the sun globe; and the obliquity of the moon's orbit is indicated. The axis of the earth globe is jointed, for the purpose of illustrating the inclination of the earth's axis upon the ecliptic, which causes the change of seasons on the earth. The whole daily and monthly trains move about the sun by means of an automatic motor or watchwork or by hand, which better adapts the application for use in both schools and lecture rooms; the axis of the earth is shown inclined; the horizon both fixed and movable; and the lunar globe may be easily thrown out of action when it is desired to illustrate the movement of the earth alone.

FISH HOOK HOLDER.—Levi Arnold, Belchertown, Mass.—This is an improvement in the mode of securing fish hooks to fish lines or holders, and consists in a grooved stem and ring slide, arranged to operate in connection. The line holder is of the form well known and in use. A stem is rigidly attached to the line or line holder. This stem is grooved to receive one or more hooks, and is made tapering or larger in diameter at its outer end than it is where it is joined to the line holder. At the end of the stem the groove or grooves are designed to be sufficiently deep to receive the stem or stems of the fish hooks. A sliding ring is placed on the stem. This ring is put on before the stem is attached to the line holder, its interior diameter being less than that of the outer end of the stem. When the ring is slipped back on to the small portion of the stem, the "flat" of the hook or hooks may be inserted within the ring, and then the ring and the hooks are slipped up until the ring comes in contact with the stem. In this position the "flat" prevents the hook from being withdrawn from the ring. A weight on the hook serves to tighten instead of loosen the slide.

SOLDERING APPARATUS.—Jacob Gulden, Keyport, N. J.—The can to be soldered is secured on a revolving plate, being held thereon by a spring presser foot, which also serves to hold in place the top which is to be soldered. The soldering iron is attached to a box or chamber in which a gas flame constantly maintains the necessary heat. The chamber and its attached soldering iron are held at a short distance from the work by suitable spring mechanism. The can being placed in position, the soldering iron is held down to the work by operating a foot treadle, and solder being placed at the point of contact, the revolving can is at once rapidly and neatly soldered.

BOOT STRETCHER.—J. Hoffman, Belvidere, N. J.—This instrument consists of a sole piece, from the heel of which rises an angular support, through the top of which descends a screw which presses upon the end of a lever having its fulcrum upon the upper surface of the sole piece. The end of the lever opposite the screw carries a metallic piece to stretch the leather when the lever is operated as described. There are two fulcrums upon the sole piece, one nearer the heel than the other, a short lever being put in the latter for stretching the instep. And also various lengths of levers may be used to stretch any particular part of the boot.

ICE ELEVATOR.—John J. Neuman, Middletown, Ohio.—This invention is an improvement in machinery for elevating ice from the water and delivering it to a chute or other conductor. It consists in an endless machine chain arranged on drums having perpendicular projections at suitable distances along it, one at each end of a strong frame, having bottom rails for the blocks of ice to draw up on and side rails to control it, which frame is connected at one end by hinges or hooks and eyes with the end of a chute or other conductor, and the other end is suspended in the water, so that the blocks of ice being floated against the chain will be caught by the projections, raised out of the water by the chain, and delivered to the chute, the chain being worked by suitable gearing applied to the upper drum.

BURIAL CASKETS.—J. Owen Moore, of Albany, N. Y.—This invention has for its object to make burial caskets or coffins which will not inclose or "box up" the corpse as long as the same is to be exposed, but will leave it entirely open to view from all sides, and which can be readily closed to form receptacles in which the corpse can be buried. The invention consists in hinging the sides and one of the ends of the coffin to the bottom of the same, and in hinging the cover to the sides, so that sides, ends, and cover can be let down to about a level with or below the bottom to fully expose the corpse in the latter. The corpse will then appear as lying on a sort of ornamental couch, producing thereby an effect far less gloomy and depressing than when partly boxed up ready for the grave. When the coffin is to be closed the sides and ends are swung up and the cover folded off the sides, suitable catches being used to hold the parts together. The disagreeable process of securing the lid down by means of screws is thus also avoided. One end of the casket may be rigidly affixed to the bottom so that it will remain in an upright position to support the grillion.

FARMER'S BOILER OR CALDRON.—This is a combination of a large kettle or caldrion with a furnace and jacket for heating, so arranged that the caldrion can be easily dumped, when it is desired to remove its contents. The furnace is provided at the upper end with a jacket which directs the heated gases and flame from the firebox up around the kettle, so as to effectively heat its contents. A portion of this jacket is made so that it slides backward out of the way when the kettle is to be dumped. The kettle is hung on trunnions, from which descend arms which engage the sliding part of the jacket when the kettle is turned upon the trunnions, and thus push this portion of the jacket downward and backward out of the way. The kettle is provided with a cover, having a spout and strainer. This is a good practical improvement which adds much to the convenience of such apparatus. George H. Buckley, of Quincy, Ill., is the inventor.

MACHINE FOR POINTING HORSE SHOE NAILS.—Harry A. Willis, of Vergennes, Vt.—An intermittently rotating carrying, holding, and delivering disk, of metal, with notches in the periphery, works on a horizontal axis in front of a set of four hammering dies, under a guard, and behind a guard. This disk is geared with a vertical shaft extending downward, and having a ratchet wheel on the lower end, with which a pawl works to impart one movement to the disk for each revolution of the driving shaft by which the pawl is worked through the medium of a lever and tappet. The nails, being previously roughly shaped, are put in the notches under one guard, and pointing to ward the hammers by hand, or any competent feeding mechanism; so that the heads will pass in front of the other guard, by which guards they are so confined in the notches as to be readily carried to the hammers and held for being acted on by them. The hammers are operated by a tappet wheel, whereon the tappets are so arranged that the hammers will be at rest, both when the nail is being carried to the position for being acted on by them, and when being carried away. After being hammered on the sides and edges, the nails are carried down and delivered into slots in a horizontally and intermittently revolving disk on the vertical shaft, working over another fixed disk, said slots being suitably shaped to receive the heads of the nails at the inner ends, while the points project beyond the disk as much or a little more than the distance from the point it is required to hammer them. These slots are arranged relatively to the notches of the previous disks, and the two disks are so geared together that a slot will always be ready to receive a nail from the first disk as soon as the nail passes beyond the guards and falls out. This disk, working intermittently, carries the nails first over an anvil, where they are hammered by a die, and then over a pointing die, through which they are forced by a punch, by which and the said die, the edges are trimmed off, and the nails are then discharged.

MACHINE FOR THE MANUFACTURE OF SOLDER, PRINTERS' LEADS, ETC.—Reuben Painter, Baltimore, Md.—This invention relates to a machine in which metals for the manufacture of solders, printers' leads, etc., are melted and stirred together while melting, and are drawn off from the melting pot through a tube having an adjustable feed apparatus, from which the compound is drawn off into circumferential grooves in a revolving wheel, within which grooves the compound is pressed by a danged roller above, and also cooled by means of cold water introduced within an annular closed box cast in the rim of the wheel next to the grooves therein, the compound being sent out of the grooves by means of spring scrapers fitting in the latter, and passed through a cutting apparatus, wherein it is divided into pieces of suitable length, being then a marketable commodity.

WOODEN PAVEMENT. James F. Cyles, Chicago, Ill.—This invention relates to a pavement whose foundation consists of boards or planks laid at intervals of an inch, more or less, crosswise of the street upon the ordinary sand bed, and whose rows of blocks are also laid crosswise of the street upon the board foundation directly above the intervals thereof, each row of blocks being furnished with a longitudinal rib, running centrally of one side and armed with projecting nails which extend into the recess side of the next row of blocks, when the latter are driven up against the aforesaid rib by which construction there are created two longitudinal spaces between every two adjacent rows of blocks, of which spaces the upper is to be filled with a novel concrete of Mr. Cyles' invention, and the lower is to be left open for drainage into the gutters at the sides of the streets.

ELECTRIC INSTRUMENT. L. L. Brecken, of Brooklyn, N. Y. This instrument may either be used as a toy for children or as a sounding instrument for telegraphing. By a suitable arrangement of parts, an armature may be caused to vibrate without interruption when the proper cups are attached to the battery. By another mode of connecting the wires, however, the armature may be made to vibrate or strike at the desired intervals for transmitting messages. An arm carrying a lamina projects upward from the armature, which striking against a sonorous body of any suitable character, gives the required sound. The armature tilts on its point of contact with the surface of the magnet, and has no lateral pivot as heretofore used. The friction of the pivots is thus avoided, the magnet moving on a spring support and moving easily on account of the flexibility of the spring.

BLOWER FOR CHIMNEY STACK.—Nathaniel L. Blanchard, of Spuyten Duyvil, New York.—The shaft of a fan blower is supported by the chimney or casing, and is placed one side of the center, or in a position where the wings just clear the cylinder on one side, and leave a broad opening on the other side. As the wings revolve, there is a constantly increasing current of the smoke and gases, the strength of which depends on the velocity with which the blower is revolved. The blower is driven by a belt from any convenient portion of the revolving machinery. The inventor states that his experience has taught him that it is more advantageous to draw the smoke and gases from the fire box through the boiler flues than to force or push them, as is usually done; and that the simple fan blower, when properly arranged, answers the purpose admirably.

ICE PICK.—William T. Eames, of New York city, assignor to Leonard J. Haas, of same place.—This is an instrument for picking and breaking ice. It consists in a breaking and picking instrument composed of a hammer head with a steel point or pick at one end, and a handle with a socket containing a pointed steel instrument for driving into the ice by the hammer. This pointed instrument is adapted to be held in the hand, for driving into the ice by the hammer in such parts as cannot be reached by the pick, for instance, a piece of ice being dropped into the mouth of a pitcher, and having projections low down in the contracted part of the vessel requiring to be chipped off to admit the piece, and that cannot be reached by the point, may have them chipped off by the pointed instrument driven by the hammer. It is also desirable to employ the instrument in any case, as it will not cause small pieces to fly off as much as the pick, which cannot be guarded with sufficient accuracy, at each blow, to prevent chipping off the wall of the hole formerly made. As the tool is intended for use on the table, these considerations are important, and make the instrument more desirable than those having only the pick point.

BELLOWS.—Alfred F. Jones, New York city.—The object of this invention is to obtain an air and watertight top and bottom for bellows or similar instruments, and airtight joints at their edges. For this purpose the inner face and edge of the wooden top and bottom are lined with sheet metal, and form a projecting metallic flange at the edge. The metal lining effectually closes the pores of the wood, making it water and airtight, while the projecting flange admits of such an attachment of the flexible sides that an airtight joint will be produced.

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- 118,420.—TYPE, BLOCKS, ETC.—J. A. Adams, Brooklyn, N. Y.
118,421.—LAMP.—J. Atwood, Waterbury, Conn.
118,422.—SPINDLE, ETC.—C. L. Austin, Lawrence, Mass.
118,423.—PAPER CUTTER.—W. G. Ayres, S. L. Cole, Brooklyn, N. Y.
118,424.—BEDSTEAD.—E. T. Barlow, San Francisco, Cal.
118,425.—FURNITURE.—B. B. Blackwell, Jamaica, N. Y.
118,426.—CORD.—A. Boardman, Lancaster, Pa.
118,427.—BLEACHING.—H. B. Bond, Terrebonne, La.
118,428.—RETAINER.—W. D. Brewer, Charlestown, Mass.
118,429.—SPIKE MACHINE.—F. Brusio, Buffalo, N. Y.
118,430.—RAKE.—J. V. Bryson, Greensburg, Ky.
118,431.—CLOTHES WRINGER.—P. H. Capron, Hudson, N. Y.
118,432.—HEATER.—E. Caulfield, Oswego, N. Y.
118,433.—BRACKET.—J. E. Chesley, Boston, Mass.
118,434.—PEN CASE, ETC.—J. M. Clark, Jersey City, N. J.
118,435.—DOLL.—G. P. Clarke, New York city.
118,436.—COUPLING.—C. M. Colby, Corinth, Vt.
118,437.—DRESSING ORES.—C. F. Collom, Calstock, England.
118,438.—BARREL, ETC.—J. B. Davenport, New York city.
118,439.—PRINTER'S RULE.—A. J. H. Duganne, New York city.
118,440.—SOAP.—R. Eastman, Media, Pa.
118,441.—TOY.—J. Fallows, Philadelphia, Pa.
118,442.—BOILER.—B. T. Fellows, Lancaster, Pa.
118,443.—BRAKE.—A. W. Filer, L. T. Hatfield, Danby, Ill.
118,444.—BOOT.—C. S. Foster, Ashland, and O. Saylor, Phil., Pa.
118,445.—MUSICAL INSTRUMENT.—J. Foster, Keene, N. H.
118,446.—LOOM.—H. R. Fry, Wabash, Ind.
118,447.—HOIST.—E. R. Gard, Chicago, Ill.
118,448.—SAWING MACHINE.—L. W. Green, Williamsport, Pa.
118,449.—GROOMING HORSES.—J. J. Greenough, Syracuse, N. Y.
118,450.—SEWING MACHINE.—W. O. Grover, Boston, Mass.
118,451.—STAND.—E. A. Harris, Chicago, Ill.
118,452.—SEAT.—B. Hershey, Erie, Pa.
118,453.—BOX OPENER, ETC.—G. J. Hill, Buffalo, N. Y.
118,454.—WINDOW BLIND.—I. H. Hobbs, Philadelphia, Pa.
118,455.—ROTARY PUMP.—C. E. Hutson, St. Louis, Mo.
118,456.—WATCH KEY, ETC.—J. Jenner, Chicopee Falls, Mass.

- 118,457.—STEAM BOILER.—W. R. Jones, Cambridge, Mass.
- 118,458.—SHIP.—H. Jordan, Liverpool, Eng.
- 118,459.—HYDROCARBON GAS.—J. Kidd, New York city.
- 118,460.—LOG CART.—A. Kirkwood, Jackson county, Miss.
- 118,461.—FENCE.—H. H. Landis, Lancaster, Pa.
- 118,462.—CULINARY VESSEL.—S. Lee, Taunton, Mass.
- 118,463.—STEAM ENGINE.—C. Levy, Toronto, Canada.
- 118,464.—IMITATION CARVING.—W. W. Ley, Croydon, Eng.
- 118,465.—BRAKE.—W. Loomis, Torrington, Conn.
- 118,466.—MOLDING.—J. S. Loomis, Brooklyn, N.Y.
- 118,467.—THREAD CUTTER.—J. A. Lord, Sanford, Me.
- 118,468.—ELEVATOR.—J. Macomb, Chicago, Ill.
- 118,469.—STUD.—R. H. McCann, Zanesville, Ohio.
- 118,470.—CALK.—J. J. Mervesp, New York city.
- 118,471.—PAVEMENT.—D. H. Mulford, Saratoga Springs, N.Y.
- 118,472.—GAS.—P. Munzinger, Philadelphia, Pa.
- 118,473.—PADLOCK.—H. Nelson, Jerome, N.Y.
- 118,474.—COUPLING.—J. Ochsner, New Brighton, Pa.
- 118,475.—JACK.—A. V. Ojeda, San Francisco, Cal.
- 118,476.—COUPLING.—J. H. Oliver, Baltimore, Md.
- 118,477.—STONE.—A. Ott, New York city.
- 118,478.—WASH STAND.—D. O. Parker, Liverpool, Nova Scotia.
- 118,479.—CHAIR, ETC.—D. O. Parker, Liverpool, Nova Scotia.
- 118,480.—CHAIR.—D. O. Parker, Liverpool, Canada.
- 118,481.—FEEDING WIRE.—E. C. Parkhurst, Hartford, Conn.
- 118,482.—GRINDER.—J. Pedder, Abel, Temperanceville, Pa.
- 118,483.—HERNIAL PAD.—W. Pomeroy, New York city.
- 118,484.—DENTAL PLATE.—S. Purvine, H. Smith, Salem, Oreg.
- 118,485.—PURIFYING SEWAGE, ETC.—C. Rawson, London, P. Ovensen, Surrey Co., J. Wylde, Leamington, W. McCree, Leyton, H. Hill, Hastings, England.
- 118,486.—BOUQUET HOLDER.—J. C. Reed, Boston, Mass.
- 118,487.—WASHING MACHINE.—J. W. Ricker, Chelsea, Mass.
- 118,488.—STAMP HOLDER.—J. C. Rogers, Van Buren Co., Mich.
- 118,489.—CUTTING CONCAVES.—H. C. Rosin, Chicago, Ill.
- 118,490.—SEWING MACHINE.—J. B. Safford, Poughkeepsie, N.Y.
- 118,491.—TYPOGRAPHER.—C. L. Shoes, Milwaukee, Wis.
- 118,492.—SHEARS.—F. Smiley, Batavia, N. Y.
- 118,493.—BROOM HEAD.—C. Smith, Woodstown, N. J.
- 118,494.—COOP.—J. B. Smith, North Haven, Conn.
- 118,495.—YEAST.—H. Sommer, A. Weiss, Massillon, Ohio.
- 118,496.—PETROLEUM PUMP.—J. Sparks, Rouseville, Pa.
- 118,497.—COFFEE ROASTER.—N. S. Thompson, Richmond, Ind.
- 118,498.—SCROLL SAW.—B. D. Wallace, Boston, Mass.
- 118,499.—GAGE.—S. Ward, Westfield, N. Y.
- 118,500.—CHAIR.—E. Watkins, A. McConnell, Philadelphia, Pa.
- 118,501.—MINING COAL.—C. D. Whitcomb, Chicago, Ill.
- 118,502.—MATCH.—McC. Young, Frederick, Md.
- 118,503.—ENGINE.—J. Allonas, W. Bauman, Mansfield, Ohio.
- 118,504.—BRICK MACHINE.—F. Alsip, North McGregor, Iowa.
- 118,505.—COCK.—O. N. Ames, Haydenville, Mass.
- 118,506.—PRESSURE GAGE.—J. Anderson, Allegheny, Pa.
- 118,507.—CHEESE VAT.—A. B. Armstrong, Dorset, Vt.
- 118,508.—FLOUR BOLT.—W. Bashor, Johnson City, Tenn.
- 118,509.—PRINTING MACHINE.—M. Bebro, Manchester, Eng.
- 118,510.—COMMODE, ETC.—S. P. Boone, Americus, Ga.
- 118,511.—CANCELING STAMPS, ETC.—P. W. Brown, J. Delaware, Richmond, Va.
- 118,512.—FASTENING.—J. K. Butler, Yarmouth, Canada.
- 118,513.—ASH SIFTER.—E. C. Cady, Warwick, R. I.
- 118,514.—CAR DOOR.—H. L. Clark, Rahway, N. J.
- 118,515.—CAR TRUCK.—J. Clark, London, England.
- 118,516.—WATER WHEEL.—D. Craik, Chateaugay, N. Y.
- 118,517.—INSECT DESTROYER.—S. Creighton, Lithopolis, O.
- 118,518.—TRUCK.—F. D. Dellinger, S. H. Hunt, Waynesboro', Va.
- 118,519.—WRINGER.—W. Denton, Amsterdam, N. Y.
- 118,520.—BEE HIVE.—E. W. Diefendorf, Moniteau, Mo.
- 118,521.—CHIMNEY STOP.—C. H. Earle, De Pere, Wis.
- 118,522.—CULTIVATOR.—J. S. Fleming, Island Creek, Ohio.
- 118,523.—SACCHARINE MATTER.—W. Barton, Southampton, Eng.
- 118,524.—SUGAR.—W. Barton, Southampton, Eng.
- 118,525.—ENVELOPE MACHINE.—J. C. Gaston, Cincinnati, O.
- 118,526.—HARVESTER.—W. F. Goodwin, Metuchen, N. J.
- 118,527.—TOE LASTER, ETC.—C. L. Graves, Osage, Iowa.
- 118,528.—PAVEMENT.—J. F. Cyles, Chicago, Ill.
- 118,529.—CHURN POWER.—L. A. Haight, Cairo, N. Y.
- 118,530.—WAGON BRAKE.—W. T. Hamilton, Luthersburg, Pa.
- 118,531.—UNLOADING HAY.—E. Harrison, Mountain View, Cal.
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- 118,534.—COOKING STOVE.—E. Hopkin, Philadelphia, Pa.
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- 118,541.—EXAMINING CIGARS.—J. Levy, Wolcottville, Conn.
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  - 4,529.—RUBBER, ETC.—A. Charles, Pittsburgh, Pa.—Patent No. 13,253, dated April 4, 1871.
  - 4,530.—STOVE.—Eddy, Corse & Co., Troy, N. Y.—Patent No. 35,564, dated June 10, 1862; reissue No. 2,709, dated July 30, 1867.
  - 4,531.—EVAPORATING, ETC.—T. W. Johnson, Jr., A. W. Goodell, Windsor, Nova Scotia.—Patent No. 108,793, dated November 1, 1870.
  - 4,532.—TELEGRAPH.—C. Little, Rutherford Park, N. J.—Patent No. 103,496, dated October 18, 1870.
  - 4,533.—PLOW.—J. C. Pfeil, Arenzville, Ill.—Patent No. 76,343, dated April 7, 1868.
  - 4,534.—BUFFING LEATHER, ETC.—A. W. Pratt, Salem, Mass.—Patent No. 89,789, dated May 4, 1869.
  - 4,535.—GENERATOR.—R. E. Rogers, J. Black, Phila., Pa.—Patent No. 65,281, dated May 28, 1867.
  - 4,536.—SUGAR.—M. L. Sanderling, Jersey City, N. J.—Patent No. 60,797, dated January 1, 1867.
  - 4,537.—DIVISION A.—EDGE TOOLS, ETC.—The Collins Company, Collinsville, Conn.—Patent No. 30,668, dated Nov. 20, 1863.
  - 4,538.—DIVISION B.—EDGE TOOLS, ETC.—The Collins Company, Collinsville, Conn.—Patent No. 30,668, dated Nov. 20, 1863.
  - 4,539.—WATER WHEEL.—J. Tyler, West Lebanon, N. H.—Patent No. 15,309, dated July 8, 1856; reissue No. 3,015, dated June 30, 1868; extended seven years.
  - 4,540.—STOVE.—W. Walker, Malden, Mass.—Patent No. 108,852, dated November 1, 1870.
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