

IMPROVED IRONING APPARATUS.

James Ashton and Reuben H. Metz, Kent, Ill.—This consists of rollers, on which the cloths to be ironed are rolled, together with a table, on which the rollers are laid, and a heavy plate lying on the rollers, and having a forward and backward motion lengthwise, for rolling and pressing the clothes smooth. The table and the rolling plate are provided with chambers, in which heaters may be placed.

IMPROVED DROP CHANDELIER.

Henry Prescott, Keystone, O.—This chandelier may be readily raised and lowered, and set to any height. There is a grooved extension rod sliding in an inclosing tube of a stationary pipe, and connected with the connecting pipe section of the chandelier by a spiral coil of rubber hose, and a spiral spring. The extension rod may be readily set to any length by a set screw.

IMPROVED DOOR CHECK.

James H. Swift, Evansville, Ind.—This consists in attaching to the door frame an arc bar having a series of bolt holes, and so arranged as to pass through a slot of the bolt case. The spring bolt is connected, by bell cranks and wires, to a knob, so that, by turning the knob, the bolt will be pulled out of the bar, to allow the door to swing.

IMPROVED BURGLAR ALARM.

John S. Mace, Chillicothe, O.—This invention belongs to that class of burglar alarms in which an alarm is sounded upon a bell by a hammer, set in motion by a clock spring and spur gear by the opening of the door or window to which it may be applied. The improvement consists in the particular construction and arrangement of a pivoted stop rod with slide spring, and locking devices whereby the alarm is rendered more reliable in its operation, and readily set and adjusted either to give an alarm or not, as may be desired.

IMPROVED COOKING APPARATUS.

Mrs. John M. Goldsmith, Great Mills, Md.—This invention consists of a rectangular frame to be inserted in the oven of a cooking stove. In the frame are pivoted several spits, below which, on the bottom of the oven and within the base of the frame, rests a large pan. Above the spits the frame is arranged to hold one or more dripping pans, provided with small tubes in their bottoms for the purpose of causing the gravy to fall, drop by drop, upon the food cooking below, and thence into the lower pan, from which it may be returned to the ones above. The spits and pans may, if desirable, be removed and a coffee roaster, broiler, or other cooking utensil be substituted.

IMPROVED WARDROBE HOOK.

James E. Bryan, Humboldt, Kan.—This invention consists of a wardrobe hook so constructed that it will neither stretch nor tear the garments suspended from it, and will also permit them to be readily detached, without the necessity of raising them vertically, as required in the ordinary construction, in order to free the projecting end of the hook. The bar from which the garments are suspended is curved downward at the end, and a spring clamp bar, which presses upon the suspending bar, is curved in the opposite direction.

IMPROVED THUMB LATCH FOR DOORS.

Henry C. Hill, Norristown, Pa.—The thumb lever is pivoted to lugs on the fulcrum plate, which is attached to the door, and the lower part of which is so formed as to fit over the upper end of the upper lug piece of the handle, so that they both may be secured by the same screw. The handle is made with a bend or offset, to enable it to be placed sufficiently near the edge of the door to operate the latch, and leave space for the hand between the handle and the door casing.

IMPROVED WASHING MACHINE.

Thomas McC. Wilson, Venice, Pa.—This washing machine is so constructed that the space between the stationary rubber and the movable rubber may be regulated as desired, and that the movable rubber can be conveniently raised out of the way, when desired, to give convenient access to the interior of the suds box.

IMPROVED SMOKE BELL FOR GASALIER.

John Fox, New York city.—This invention consists of a bell-shaped body, with exit tubes radiating from the upper part, the stem of the smoke bell being insulated from the part of the gasalier from which it is suspended by being cemented into a socket with a non-conductor of heat.

IMPROVED MUSIC REPOSITORY.

Jerome C. Ward, Hillsdale, Mich.—This is a stand in which sheet music and music books may be conveniently stored away below the piano, and readily be taken out for use. Vertical rods extend from the lower to the upper shelves, and prevent the books in the swinging leaves from sliding down and interfering with the music on the shelves.

IMPROVED WEATHER STRIP.

S. Adam Rankin, Mulberry, Mo.—This strip is so constructed as to be raised by its own weight to a level with the lower edge of the door when the door is opened, and to shut down closely upon the threshold when the door is closed.

IMPROVED SASH HOLDER.

Joseph R. Payson, Chicago, Ill.—This device is claimed to lock window sashes securely in position when closed, or, when opened to any desired extent, to tighten them so that they will not rattle in the wind; to support them when not balanced by weights or otherwise; to be applicable without notching or defacing the casing or sash; double acting, to prevent the sash from being raised or lowered; reversible, so that it can be applied to either the upper or lower sash, or to either the right or left hand; adjustable, so that it will act upon the sash whether loosely or closely fitted to the frame, and when not in use can be withdrawn entirely within the edge of the sash, so that it will not impede its movements, or rub against the casing.

IMPROVED HEATING DRUM.

Joseph R. Wieand, Allentown, Pa.—This consists of a heater, made of one or more sections connected by pipes that admit either direct or circuitous passage of the fire gases. Each section has a horseshoe-shaped partition forming flues.

IMPROVED SASH BALANCE.

William Cooper, Strathroy, Canada.—This is an improved device for attachment to a window, to enable the sashes to be raised or lowered together or separately, as may be desired. The upper sash descends by its own weight, and may be secured in any desired position. It is raised by turning a crank to wind up cords. The two sashes may also be raised and lowered together.

IMPROVED STAIR ROD.

George W. Hill, Brooklyn, N. Y.—In applying the device, the rod is placed in the angle between the projecting edge of the step and the upright board, with the points of the pieces entering the lower side of said projecting edge. There is a second rod which fits into the angle between the top of one step and the upright board of the other. The two rods are then held apart by spring devices.

IMPROVED WASHING MACHINE.

Joseph Gramelspacher, Jasper, Ind.—This consists of elastic rubbing fingers, of cotton or other like fibrous material, fitted so as to project from the surface, in combination with a stationary concave rubbing bed, which is extended along up an incline to the top of the tub, to afford an auxiliary hand rubbing bed, for convenience in rubbing out things which cannot be as well treated by the cylinder.

IMPROVED KNOB FOR VESSEL LID.

Charles Goldthwait, South Weymouth, Mass.—This serves to insulate the heat, and admit the ready handling of the cover without burning the fingers. The knob of wood is applied to the lid by a shank encircling tube, of suitable sheet metal, that is soldered by an exterior base flange to the lid. The shank of the knob is made somewhat shorter than the tube to produce a small insulating air space between the lid and knob.

IMPROVED LAMP BURNER.

Jacob Engle, Jr., Sharon Springs, N. Y.—The wick tube and the gas tube is extended sufficiently above the base of the burner to enable the outside case to be elongated downward from the flame to serve the function of a chimney, to regulate the air current, so that when it comes up to the flame it will be steady and strong, increasing the combustion and the illuminating powers.

IMPROVED SASH FASTENER.

Peter Meyer, Iowa City, Iowa.—This relates to such improvements in the sash fastener, for which letters patent have been granted to same inventor under date of June 22, 1875, that the same may be more strongly and reliably attached to the sash, and retain it at any desired height. The device consists of a curved and perforated latch, that swings on a suitable pin of a metal case attached to the sash, and is automatically forced by a spring against the locking pins of the window frame, so that the hole of the spring latch locks the sash at any desired height.

IMPROVED COFFEE POT.

Christian Vanderbeek, Rock Falls, Ill.—This is an improvement in the class of coffee pots or machines composed of two parts or receptacles, and adapted to be connected in such manner that the ground coffee will be subjected to the action of hot water as it passes from one pot or receptacle into the other. The invention relates particularly to providing the inner cylinder or receptacle with strainers of different degrees of fineness.

IMPROVED FASTENER FOR THE MEETING RAILS OF SASHES.

Joseph R. Payson, Chicago, Ill.—This improves the construction of the window sash lock for which letters patent were granted to same inventor January 4, 1876, to make it more secure against being opened from the outside of the window, and to draw the sashes together more firmly. The locking arm is pivoted at or nearly at an angle of 45° with the length of the meeting rails of the sash, and secured by suitable fastening devices.

IMPROVED LAMP BURNER.

James Curzon, Darien, Conn.—This invention relates to lamps having four wicks in a circle; and it consists of the wick tubes arranged radially to the center of the circle from top to bottom, with two ratchets at right angles to and crossing each other for working them, instead of the parallel arrangement of the tubes at the lower end and parallel ratchets heretofore employed. The invention also consists of a secondary bottom to the burner for screwing into the lamp top. Between these two bottoms is applied a packing of non-conducting material to protect the lamp from the heat.

IMPROVED ASH SIFTER.

Numa J. Felix, New York city.—This consists of a hinged and locked screen arranged in the upper part of a sliding box, from which the ashes are carried along a hinged gate into a bottom drawer, while the coal is dropped by swinging the gate over to the other side into an adjoining drawer, on the release of the screen, which is locked again to the box by the swinging back of the gate.

IMPROVED TABLE LEAF SUPPORT.

James Pleukharp and Samuel M. Shilling, Columbus, O.—This is an improved table leaf support that holds the leaf firmly in place, and raises it always to the same level without straining the hinges so as to render repairs necessary. When the leaf is folded, it is also held in rigid position. The invention consists of a forked spring arm with side notches, hinged to the leaf, and locking to a recessed guide hasp attached to the table.

IMPROVED CHRISTMAS TREE BRACKET.

August Dahler, New York city.—This is an improved bracket for Christmas trees, by which two candles may be supported on the same bracket, so as to balance each other. The device consists of a symmetrically bent band with central spring part, and with candle holders at both ends.

IMPROVED WINDOW SHADE FIXTURE.

John E. Dohen, Brooklyn, N. Y.—In the lower end of the shade is placed a bar of sufficient weight to hold it straight and to unroll it when released. The upper end of the shade is placed in a longitudinal groove in the roller, where it is secured by a key fitted into the said groove. The key has a longitudinal groove formed in its under side to fit upon a tongue of the roller in the bottom of its groove. It is held in place, clamping the end of the shade, by two tubular caps placed upon the ends of the roller, and in the sides of which, opposite the edges of the key, are formed slots for the edge of the shade to pass through. To the caps are attached pivots, which work in brackets attached to the window casing.

IMPROVED DOOR CHECK.

Thomas Hill, Portland, Me.—This invention has for its object to provide an adjustable fastener for both hinged and sliding doors, which shall be adapted to allow the same to be opened more or less and at the same time secure them against the ingress of parties from without. To this end, the inventor employs a notched and slotted bar, which is pivoted to the door jamb, and a sliding bolt, which is attached to the door, the arrangement being such that the head of the bolt works in the slot of the bar.

IMPROVED BED LOUNGE.

Ferdinand Braun, New York city.—This consists of a lounge with folding seat section, provided with a swinging sideboard, that is extended at the ends to form the supporting legs. The sideboard is hooked by a pivoted rod to the hinged head section, that locks, when folded back, securely to the back of the lounge. The lounge is readily changed to a bed, and vice versa, in an easy and convenient manner, by swinging out or folding the parts described.

IMPROVED COFFEE POT.

George W. Hubbard, Windsor, Vt.—This consists of an inverted funnel, in combination with a filtering cup, to cause the water to flow up and filter down through the coffee. The said funnel has a curb extending upward from its base around and above the bottom of the filter in order that the water, after passing down through the coffee, and on its way to the bottom of the pot, shall be made to flow upward at this place, leaving its sediment on the top of the funnel at its junction with the curb. The tube by which the water is conducted up into the filtering cup is perforated so as to deliver the water upon the coffee in jets.

IMPROVED WEATHER STRIP.

Theodore G. Plate, Hackettstown, N. J.—This is a weather strip in a groove in the bottom of a door, to be closed down on the threshold automatically when the door closes by contact with the door jamb, and having springs to raise it. It consists of a strip suspended from a striking rod by toggle-jointed bars, which are made to thrust the strip down by endwise movement of the rod, which is caused by contact of the end of the rod with the jamb. It also consists of an adjustable screw stud in the jamb, to be screwed out and in to regulate the movement of the strip, so as to insure its closing properly. It also consists of a novel arrangement of the springs, and also of the manner of supporting and grinding the striking rod.

IMPROVED ASH SIFTER.

John H. Raymond, Syracuse, N. Y.—This invention consists in an outer receptacle having circular guide grooves in connection with a swinging cover of arch form, and having lateral end flanges. When the cover is closed over the drum the same is revolved, so that the ashes are separated from the coal particles and dropped to the bottom of the receptacle.

IMPROVED BABY TENDER.

Thomas Shaw, Morris, Ill.—This is a device to hold a baby and allow him to jump, swing, and walk, without danger of falling. It is a kind of swing or seat for the child, suspended at the extremity of a horizontal bar. The child's feet rest upon the floor, so that he may jump or swing himself about as he may wish.

NEW AGRICULTURAL INVENTIONS.

IMPROVED FENCE.

Ambrose E. Balliet, Limestoneville, Pa.—This invention consists in a portable fence, formed of the horizontal boards, halved at their ends, the cross bars and pins arranged so that the pins pass through holes in the ends of the boards of the one panel across the outer side of the cross bar, and are attached to the ends of the boards of the other panel.

IMPROVED HARVESTER.

Joseph Miller, South Bend, Ind.—This invention is an improvement in the class of reapers which are provided with a traveling rake for conveying the cut grain up an elevator and delivering it on to a binder's table or into a receptacle from which it may be removed by hand or discharged by any suitable mechanical means. The improvement relates to mounting the reel upon a sleeve which revolves upon the rod or shaft by which the reel is adjusted with relation to the cutter bar; to the arrangement whereby the reel is adapted to be adjusted while revolving; to the arrangement of an endless traveling rake carrying chains; to providing certain links of said chain with lateral flanges to adapt them for attachment of the toothed rake bars; to the arrangement of the driving wheel shaft and the tubular shaft of the crosshead carrying the gears which mesh with and thus communicate motion from the driving wheel to the pinion of the supplementary driving shaft; to the manner of stringing the beveled and shouldered cutter plates upon a wire cable, and to the construction of the driving pulley.

IMPROVED BAG HOLDER.

Isaac E. Shumaker and John S. Moorhead, Kellersburg, Pa.—This consists of a sliding bag-holding frame, that is adjustable to different widths and lengths of sacks, and raised and dropped during filling by a hoisting double lever mechanism.

IMPROVED SULKY PLOW.

John W. Grimes, Appleton City, Mo.—This invention is an improvement in the class of sulky plows in which the plow proper is suspended from the wheeled frame in such manner as adapts it to be raised and lowered at will, for the purpose of changing the depth of furrow, or for holding the plow entirely off the ground while being transported from one point to another. The improvement relates particularly to the construction and arrangement of parts whereby the plow beam is held steady while in use, adapted to be raised and lowered bodily, by means of a single lever, while in operation, and also without changing the horizontal position or angle of the plow beam, and whereby the draft is applied in a direct line with the plow beam whatever be its adjustment.

IMPROVED PLOW.

Joseph Shickel, Bridgewater, Va.—This invention consists in connecting a moldboard and plow point by a projection on the former, and a countersink on opposite sides of the latter, in addition to the ordinary clamping bolt, thus enabling the point to be fastened, after reversal, with equal security and facility as before.

IMPROVED TILE-LAYING MOLE PLOW.

Stephen H. Reynolds, Hillsborough, Ind.—This relates to the construction and arrangement of a lever for laying and adjusting the drain tiles or tile sections, and the means for adjusting the pitch of the furrow tube and regulating the depth of the furrow. The implement lays the tiles without opening a permanent ditch.

IMPROVED SULKY PLOW AND CULTIVATOR.

Eli W. Russell and John N. Russell, Ashley, Mo.—This machine may be readily adjusted for use as a plow or as a cultivator. The plow is free to turn upon the axle, while a collar keeps it from lateral movement upon said axle. By adjusting the collar, the plow may be adjusted to cut a wider or a narrower furrow, as may be desired.

IMPROVED PLOW.

Francis R. Bell, Marshall, Texas.—This improves the construction of a moldboard for which letters patent were granted to the same inventor May 18, 1875, to make it more effective in preventing the black lands of Texas, and other sticky and waxy soils, from adhering to it. The invention consists in a wooden moldboard faced upon its rear side with metal, having a recess between it and said metallic facing, and perforated with numerous small holes.

IMPROVED PORTABLE FENCE.

Tilmon A. H. Cameron, Petra, Mo.—This invention is a portable fence, designed to form a yard or enclosure for stock. It is composed of sections or panels, which are hinged together, mounted on casters, wheels, and provided with braces for holding the panels in the desired relative position. The fence is thus adapted to be readily shifted from one part of a field to another, and to be adjusted in a hollow square or other form, according to the nature of the field or configuration of the grazing surface. The invention further relates to providing supports for an awning, the same being self-adjusting and folded together with the panels.

IMPROVED SELF-DISCHARGING MANURE SPREADER.

Thos. A. McDonald, Durham, Nova Scotia, Canada.—This consists of a wagon for transporting manure and spreading it broadcast or in drills. The bottom of the wagon is in the nature of an endless traveling belt, or apron, supported upon polygonal shafts, one of which is geared with, and derives motion from, the rear axle. The latter is provided with a spring clutch mechanism, by which it may be thrown into and out of gear with the endless apron at the will of the driver, in order to thus regulate the discharge of the manure. The means immediately employed to throw the clutch out of engagement are pivoted levers, operated by connecting rods and a lever under control of the driver. The manure is discharged from the end of the wagon by the endless apron, and broken up or pulverized by a toothed roller.