

Recent American and Foreign Patents.

NEW HOUSEHOLD INVENTIONS.

IMPROVED WASHING MACHINE.

Charles K. Rogers, Oswego Falls, N. Y.—For the purpose of washing out streaky and heavily soiled parts, as wristbands, etc., a washboard is added and detachably secured. There is also a suitable device for holding a wringer, so that all the implements required for washing are placed within convenient reach.

IMPROVED WASHING MACHINE.

William Doan, Blountsville, Tenn.—This consists in an arrangement of cup shaped plungers or compressors attached to a two-armed lever, which is pivoted to the side of a box for containing the clothes and water. The box is provided with a corrugated side and bottom, and in it the said plungers are worked.

IMPROVED WINDOW SHADE ROLLER.

Daniel Willis, Harrison, N. J.—When the shade is drawn down slowly, a catch at each revolution of the roller drops into a cam notch, and when the shade is released, holds the roller from being drawn back by the tension of the spring. If the shade is drawn down a little and then released quickly, the quick motion of the roller throws the catch outward, so that it will pass over the shoulder of the notch, and when the motion is checked the catch will again drop into the notch and hold the roller in place.

IMPROVED WASHING MACHINE.

Samuel C. Wilson, Forest City, Ark.—By suitable construction, as each presser block moves forward and presses the clothes against the roller, the pawl of that roller will be drawn back, and as the presser block is drawn back the pawl will be pushed forward to turn the roller and change the position of the clothes, so that they may be operated upon each time in a new place.

IMPROVED AUTOMATIC FAN.

Seward F. Gray, Valdosta, Ga., administrator of James M. Gray, deceased.—This is an automatic fan for keeping off flies from dinner tables, sick beds, etc. The speed of the fan may be regulated, in the customary manner, by a suitable spring brake and regulating screw, that acts on a friction wheel placed on the shaft of one of the transmitting wheels of the clock train.

IMPROVED EARTH CLOSET.

Lemuel Altemus, Olney, Philadelphia, Pa.—This earth closet is so constructed that the dust from the falling earth cannot rise and settle upon the seat.

IMPROVED SHADE HOLDER FOR KEROSENE FIXTURES.

Patrick J. Clark and Joseph Kintz, West Meriden, Conn.—This is a shade holder for fixtures of all kinds, in which a lamp or fount with a chimney is used, so arranged that the fount, with the chimney attached, can be raised from the fount holder up into the shade. The fount chimney and shade can be moved horizontally sufficiently to be taken from the fixture without removing the shade.

IMPROVED COAL SCUTTLE.

Charles S. Irwin, St. Joseph, Mo.—This scuttle has a conical body with knees, on which it rests when placed on the stove. The bottom is concave, with median slide, to adapt it for use on magazine stoves.

IMPROVED PAPER DISH.

Sylvester E. Harlow, Fairbury, Ill.—The dish is made from a disk of paper which is cut radially from the center to the circumference, and it is stamped or crimped so as to form a conical bottom, that projects upward, and the flaring rim. The radial edges of the disk are thus made to overlap each other, and are secured by clips.

IMPROVED WARDROBE BEDSTEAD.

Wilson Sutcliffe, Wetherford, Texas.—This is an improved piece of office furniture, that combines office desk, bookcase, sliding and folding bedstead, hat rack, wash basin, and other devices, so as to utilize all available space in a very convenient manner.

IMPROVED COOKING RANGE.

Thomas J. Whitehead, South Paris, Me.—In this case, as in that for which a patent was granted to same inventor February 3, 1874, the range is in a double walled casing or air chamber, with doors and lids, affording access to the range. It is designed to have greatly increased facilities for cooking on a large scale, and possesses several new features adapting the construction to that end.

IMPROVED RECLINING CHAIR.

Benjamin F. Manier, Green Island, N. Y.—This consists of a supporting frame, which is attached to the bottom of the chair, and pivoted to the forked spindle, revolving in a stationary socket base. The bottom frame and chair are adjusted by the joint action of an arm pivoted to the spindle and to a bell crank lever.

IMPROVED NUTMEG GRATER.

Henry Scheibel, Bridgeport, Conn., assignor to himself and John Schneider, of same place.—This consists in the combination of a supporting main frame, having a socket or receptacle, with a spring-actuated follower and a grating disk. By taking the handle of the frame in one hand, and revolving the disk with the other hand, the nutmeg is grated.

IMPROVED BOOK SUPPORT.

Allston Wilson, New York city.—This is a book rest of cheap and compact construction, on which the book may be conveniently arranged for reading and the leaves retained or clasped without the use of the hand, the book being quickly placed thereon and the leaves turned over in an easy manner. It consists of a supporting block, with swinging arms, folding away in a recess of the block, and having pivoted holding arms or clasps, folding into recesses at the ends of the arms, for holding the leaves. When the book is placed on the rest for reading, the arms are raised to the height required by the size of the book, and the holding arms then swing forward on the leaves. For turning a leaf, the arms are slightly raised, and, after the turning of the leaf, carried down again on the pages. When the book is taken off, after use, the leaf holders are folded back into the arms, and the arms then folded down on the block, so that the rest takes up only a small space, and may be stored away in convenient manner.

IMPROVED DOOR SPRING.

Frank C. Rhenbottom, Union City, Mich.—Screen and storm doors are generally hung on the outside of, and so as to lap over, the case, rendering it necessary that the springs shall fasten on the edge of and swing under the door when opened, while the moulding of case also leaves a very small space for the attachment of spring. Hence this inventor employs a downwardly tapering spiral spring, which may be adjusted to the edge of a door or the oval surface of a moulding.

IMPROVED SPRING PILLOW.

Angeline Underwood, Carrollton, Ill.—This invention consists of a skeleton frame composed of longitudinal curved spring ribs of wire, and transverse stays attached to a square frame, and backed up by one or more elliptic and spiral springs, and the whole covered in a suitable manner. The object is to provide a pillow which shall retain its form and be cooler and more comfortable in use than those of ordinary manufacture. Eyes are formed on the ribs and stays form a joint with the frame, so that the parts may move freely without danger of breaking. The frame or skeleton thus

formed is covered in any desirable way. A pillow made in this manner is cool, cleanly, and much more pleasant to use than the ordinary stuffed ones. It is specially adapted for sick rooms and hospitals, as it is readily aired and cleaned. When the pillow is to be used merely for a "sham," the spiral springs may be omitted.

NEW TEXTILE INVENTIONS.

IMPROVED YARN GUIDE AND CLEANER FOR SPOOLING MACHINES.

Joseph Garrett, Chester, Pa.—The object of this invention is to provide a cheap, durable, and efficient device for use in connection with the yarn guide of cotton spooling machines, for preventing the yarn passing through the guide slot always in the same place, so that the yarn will not be broken by the accumulation of dirt, seeds, etc., on the guide, as when the ordinary guide is used.

IMPROVED KNITTING MACHINE NEEDLE.

Stephen Woodward, Manchester, N. H.—This improved needle for knitting machines is so constructed that the hook and latch of the same may be turned up from the work, and thereby a part only of the needles be used for knitting, without the trouble of removing the unused ones from the cylinder; and the invention consists of a knitting machine needle provided with a hinge or loose joint between the latch piece and the shank, and also with an extension or crook of the shank. When the hook is down the shank will be at the left, the crook at the right, and the hinged part on the right of the end of extension, so that the shank will readily run in the cam, while the hinged part will be turned up from the work.

NEW AGRICULTURAL INVENTIONS.

IMPROVED CORN HARVESTER.

Aaron Wilson, Tekama, Neb., assignor of one half his right to C. B. Telyea.—This is an improved machine for gathering corn from the stalks while standing in the field, which removes all the ears from the stalk by means of stripper fingers.

IMPROVED MILK PAN.

William Cooley, Waterbury Centre, assignor to himself and C. C. Warren, Waterbury, Vt.—In using this apparatus, the milk is put into the pan, the cover is put on, the air pump is applied, and the air is pumped out, forming vacuum above the milk. By thus removing the pressure of the air from the milk the cream is claimed to rise quickly.

IMPROVED BEEHIVE.

Randall T. Van Valkenburg, Angola, Ind.—The new features are found in the door having a rear piece with contracted aperture for excluding robbers. Also frames inclosed by the gauze covered frames, which form the living and breeding apartment for the bees; and surplus boxes for receiving the surplus honey made during the summer season.

IMPROVED ANIMAL TRAP.

George Washington Gibson, Shelbyville, Ky.—This trap is so constructed that there may be nothing to alarm the animal as he enters the trap, that it will lock the animal in as he attempts to reach the bait, and will reset itself as the animal passes into the cage or inner chamber.

IMPROVED CHURN.

James W. Smith, Humansville, Mo.—The cream having been poured into the receptacle and the cover secured, a rotary dasher is set in motion, and made to throw the cream toward the center, while its arms operate the reciprocating dashers, that force the cream outwardly from the middle of the churn.

IMPROVED EGG CARRIER.

Lewis Inglee, New York city.—The eggs rest on elastic rubber disks stretched over suitable apertures in a board or tray, and are held upright by vertical leaf springs.

IMPROVED COMBINED CORN PLANTER AND CULTIVATOR.

Eli Chapman Gage, Witoka, Minn.—This improves the construction of the corn planter for which letters patent were granted to same inventor December 30, 1873. The novel features consist in the addition of a gear wheel, which may be removed and another substituted when it is desired to alter the distance apart of the hills, and a new mode of suspending the plows when turning or moving from place to place.

IMPROVED HARVESTER RAKE ARM.

Samuel Noxon, Jr., Ingersoll, Ontario, Can.—This consists of the metallic section of the rake arm made in two parts, each of which has a part of the pivot for the cam roller, and also a pivot for the hinge, by which the arm is hinged to the revolving head of the rake stand. The arrangement is such that not many pieces are required, and the construction is simplified.

IMPROVED HAND CORN SHELLER.

Ludwig H. Pirrung and Michael Zirbes, Chicago, Ill.—This consists of a grooved plate, swinging toothed lever, and conducting hood and spout, for conveying the shelled corn to a suitable receptacle. The ear is held with the left hand, and turned while the lever is worked to and fro with the right hand, until the corn is shelled from the cob.

IMPROVED CULTIVATOR.

Elijah H. Perkins and Solomon D. Perkins, Visalia, Cal.—This machine is adapted for cutting the weeds beneath the surface of the ground in cultivating plants so small as not to require soil to be thrown around them. It is also so constructed that it may be expanded and contracted for cultivating rows of plants of different widths.

IMPROVED HOP POLE.

Charles A. Sands, Burlington, Kan.—This invention consists of a central pole that is permanently set in the earth, upon which slides a cross head, to the outer extremities of which wires are attached, that are held at their lower ends by hooks fixed in stakes driven in the earth. The pole is provided with a rope for raising the cross head, and the ropes are furnished with friction blocks for the purpose of holding them taut.

IMPROVED TREE PROTECTOR.

John G. Peace and Isaac D. Comstock, Salem, Mo.—This consists of a tree box or protector, made of a number of slats nailed to top and bottom bands of sheet metal, and closed by the hook ends of the same lapping over the end slats. The tree boxes may be manufactured very cheaply, and applied or removed with great facility.

IMPROVED CHURN.

James Higgins, Westfield, N. J.—This consists in hanging a dasher churn on trunnions in a suitable frame, and providing one of the trunnions with a toothed wheel and a lock lever or detent, by which the churn may be held in a vertical or inclined position. It further consists in the construction of the mechanism by which the churn is driven.

IMPROVED COMBINED FERTILIZER AND SEED SOWER.

Richard L. Galer, Dunham, and Elijah E. Spencer, Paris of St. Armand East, Quebec, Can.—This invention consists in a combined fertilizer and seed sower with straight or crooked movable boots, divided into two flukes in such a manner that, the fertilizer being placed in the front boxes and the seed in the rear boxes (the boots having drills and covers attached thereto), the drills open the ground, and the fertilizer falls first and then the seeds. The fertilizer and the seeds are then covered with earth by covers hinged to the boots. This machine is capable, by means of its

straight and crooked movable boots, of changing the width of the rows and furrows in which the fertilizer and the seeds fall.

IMPROVED BEEHIVE.

Hiram Hatfield, Ossian, Ind.—In this invention the main portion of the hive, being an inner case, rests on cleats on the front and back, having its bottom composed of two sloping pieces, one of which drops below the other sufficiently to make a suitable passage for the bees into the hive, but so that the passage cannot be gained by the crawling bee moths. The bees have entrance through the outside case to this passage. It may be closed by a slide, and the passages may be partially closed by a detachable gate. The hive fills the outside case between the front and back, but is narrower the other way to make ventilating spaces, in which the dampers are arranged to shut off the air; also, to cut off the passage into the upper part of the outside case when the honey boxes are to be changed.

IMPROVED CULTIVATOR AND CHOPPER.

William B. Killough, Larissa, Tex.—This cultivator and chopper is so constructed that the plows may be conveniently raised from and lowered to the ground, adjusted to work at any desired distance apart, and at any desired depth in the ground, which will enable the plows to be moved laterally in guiding the machine, and which will allow the plows and chopping hoe to yield should they strike an obstruction, to prevent the machine from being broken. This invention consists in combinations of the various parts, to receive and support the operating mechanism of the machine, for guiding and controlling the plows, and for other operations which need engravings to properly describe their nature.

IMPROVED HORSE HAY FORK.

John B. Denning, Ross, O.—This fork consists essentially of a straight stock and pivoted arms or spurs, operated by a sliding rod. There is a new construction and arrangement of the catch and sliding rod which economizes space, and enables the case to be made flat and narrow, and at the same time avoids the necessity heretofore existing of pivoting the catch in such manner as to be exposed exteriorly of the case.

NEW MISCELLANEOUS INVENTIONS.

IMPROVED COMBINED SACK HOLDER AND SACK FILLER.

Friedrick Sondermeyer and Frederick Schindler, Perryville, Mo.—This is an improved machine for holding sacks while being filled, and for raising grain or other substances from the floor or ground and discharging it into the sacks. The new features are improvements in the hopper and adjusting mechanism, and also a device which guides the grain inward as the machine is moved forward, so that the grain may be taken up by the elevator.

IMPROVED CARTRIDGE.

Herbert Buffington, Jacksonville, Fla.—There is a movable anvil for cartridges, consisting of a tubular main part, conical head, and end collar or shoulder at inner end. The fire from the primer passes directly through the tube to the charge, and not around the outside of the tube, securing thereby the reliable firing of the cartridge, and also a more effective combustion of the powder charge.

IMPROVED HELMET LIGHT.

Henry K. Nitzte, Philadelphia, Pa.—This is a safety reflecting light, combined with the helmet of a miner's hat, or adapted to fasten to the breast of a person by a hook.

IMPROVED ELECTRIC TRAIN SIGNAL.

Laning L. Ferris, New York city.—This is a signal to be used on railway trains for indicating the separation of the train or the detachment of cars, and for the use of the conductor in signaling the engineer. It consists of a device attached to each end of the cars that automatically makes an electrical connection so as to ring a bell at the engine when the cars are separated. It also consists in the arrangement of levers or keys by which the conductor by pulling a cord may signal the engineer.

IMPROVED HAT HOLDER.

Payson H. Miner, Rome, N. Y.—This consists of a support formed of a continuous rod, having conical spiral at one end, upon which the hat rests, and a coil for receiving the screw, by which it is attached to the under side of the seat. The device is provided with an arm, by which it is turned, and to which a spring is attached for holding it in place.

IMPROVED SCHOOL DESK SEAT.

Elbridge Haynes, Kirk's Cross Roads, Ind.—When the seat is thrown up into vertical position the supports form contact with metallic stays, that are screwed to the side standards and to the fulcrums of the seats, so as to strengthen the bolts and define the extent of motion of the seat.

IMPROVED HORSESHOE.

Harry B. Cornish and Charles P. Hunt, River Falls, Wis.—This invention consists in cutting slightly tapering arc shaped grooves in the under surface of horseshoes. The arc of the said grooves is described in a vertical plane, and the grooves are dovetail in transverse section and open downward. It also consists in forming upon the base of the calks a tongue that is the counterpart of the arc shaped dovetail. The object is to provide a horseshoe in which the calks may be readily inserted or removed, but which cannot become loosened by any action of the horse's foot.

IMPROVED REVERSIBLE SEAT.

Lucius T. Stanley, Indianapolis, Ind.—This seat is supported by two pairs of swinging bars, whose upper ends are pivoted nearer together than their lower ends, so that the seat is reversed by swinging it on the bars.

IMPROVED MACHINERY FOR SCALLOPING BOOT UPPERS.

William Manley, Rochester, N. Y.—This is an improved machine for holding the button flies, vamps, and quarters of shoes while being scalloped. It was fully described and illustrated on p. 322, vol. 35.

IMPROVED WEIGHTED HORSESHOE.

Eugene E. Seixas, Galveston, Tex.—This is an improved weighted horseshoe designed for use in training a horse to trot fast, by extending his stride and squaring his action. It may also be used to prevent a horse from striking his knees with his feet. It is so constructed that the weight may be attached and detached, as required, and which when attached shall be entirely out of sight.

IMPROVED BOTTLE STOPPER.

George A. Ohl, Newark, N. J.—This improves the bottle stopper for which letters patent have been granted to A. Luthy, under date of November 2, 1875. It consists, mainly, of a rigid curved stopper-carrying lever that is provided at the lower end with an elongated loop or eye that plays in an extension staple of a solid collar of the neck, to which the closing bail is pivoted.

IMPROVED BLANK BOOK.

Hezekiah S. Archer, Brooklyn, N. Y.—This book is so made that any sheets whose reading matter has become valueless, or whose memoranda have served the purpose for which they were originally intended, may be removed. The leaves are open slotted, and are held by clamp nuts working on screws.

IMPROVED WIRE FENCE BARB.

John Nelson, Creston, Ill., assignor to himself and William H. Gossett, of same place.—This consists in a barb for fence wires, made from a short piece of wire by forming loops at the ends of a straight middle part, at right angles therewith, or nearly so, and upon the opposite sides of the wire, leaving the points projecting in opposite directions.