

ENGINEERING INVENTIONS.

A car coupling has been patented by Messrs. Jonas Potter and John W. and William M. Hess, of Morrellville, Pa. It is of simple construction, and designed to couple with an opposing coupler of greater or less height, being so constructed that the coupling pin may be held out of engagement with the link when it is desired to shunt a car by bumping or to drive a car forward or back on the track.

AGRICULTURAL INVENTIONS.

A check row planter has been patented by Mr. James Dunkin, of Bridgeport, West Va. It is designed to plant corn or other seed in straight rows both ways by a system of marking which shall be easily discernible, and embodies an arrangement of dropping devices for depositing at the same time a quantity of fertilizer.

A combined cultivator, harrow, and seeder has been patented by Mr. Dalton Walls, of Appleton, Wis. This invention relates to a former patented invention of the same inventor, and provides a seeder attachment, a lateral adjustment of the axle and forward supporting bar, and the adjustment of the seat and shovel beams, with other novel features.

A plow has been patented by Mr. George Wolverton, of Charles City, Iowa. The plow is of that class whose beams are pivotally secured to the standard and adapted for adjustment vertically to vary the depth of the furrow, the standard being forked at its upper end, the beam resting between the forked ends upon a bolt passing through them, and the construction being light, strong, and inexpensive.

A hay loading machine has been patented by Messrs. Matthew H. and Leroy Arnold, Edward P. Mitchell and Ruben F. Tallaferro, of Hueneme, Cal. A rake is supported at the front end of a truck which has a vertical fixed post, there being a bar with a universal and permanent connection with the back of the rake and the lower end of the post, with mechanism for raising the rake and outer end of the bar and swinging them outward, with other novel features.

MISCELLANEOUS INVENTIONS.

A reversible car seat has been patented by Mr. John M. Sauder, of Harrisburg, Pa. It has a united seat and back supported on a base, with arms pivoted on the base and connected with a head, forming a universal joint with a plate on the bottom of the seat.

A mattress protector has been patented by Mr. Duncan W. McKinnon, of North Sydney, Nova Scotia, Canada. It consists of a pointed tube adapted to penetrate and pass through the mattress, in connection with a waterproof blanket with which the tube is connected.

A folding vehicle seat has been patented by Messrs. Samuel and George Penfold, of Guelph, Ontario, Canada. It is so made and mounted that it may be used in connection with the vehicle body either as a single or a double seat, and so the body will appear in proportion with the seat used in either form.

An animal trap has been patented by Mr. John W. Jones, of New York City. It is a trap in which decoys are used in the bait chamber, closed by a glass in front, and provided with a mirror to reflect the decoys, a separate trap chamber being provided to catch the animal.

A game trap has been patented by Mr. Tony Alexander, of Bogue Chitto, Miss. It is a device by which animals passing over the trap are caught around the body or neck without injuring their fur, the invention covering various novel features of construction and combinations of parts.

An animal trap has likewise been patented by the same inventor, containing somewhat similar features, the invention consisting of hinged catches adapted to engage jaws or prongs, a platform being pivoted on the catches and resting against the sides of the jaws when the catches engage the latter, the trigger operating with great ease and certainty.

A rubber boot has been patented by Mr. James F. Shaw, of Jackson, Mich. It has an opening in its instep covered by a flap, with means for holding the flap firmly against the leg of the boot to adjust the opening, so that rubber boots thus made can be readily drawn on over other boots made of felt or knit fabrics, etc.

A breech loading fire arm has been patented by Mr. Wilhelm Sonnenberg, of Winona, Minn. It has a device for locking the barrel on and unlocking it from the stock, means for setting the hammers and triggers when opening the barrel, and a device for locking the triggers automatically by the device for locking the barrel on or unlocking it from the stock.

A gate has been patented by Messrs. Edward R. and Solomon C. Chase, of Findlay, Ohio. It is adapted to slide sidewise, and has a slotted lever connected with it, with arms near its fulcrum, a spring lever, and other novel features, whereby the gate may be opened or closed from either side, and may be operated by a person in a vehicle.

A flood fence has been patented by Mr. Henry D. Merrill, of Columbus, Ind. It consists of posts fixed in the bed of the stream, with curved plates having stop arms attached to them, and a log or beam carrying pickets suspended from the posts, the end pickets engaging the stop arms, with other novel features.

A can washer has been patented by Mr. Sylvanus Roberts, of Chester, N. Y. It is an improved device for washing milk cans inside and out, consisting of a box with adjustable lid carrying brushes on its inner face to engage the outer surface of the can, and an expandable frame with brushes for insertion in the can, with other novel features.

An inkstand has been patented by Mr. John Hoey, of New York City. It has a cover which

swings from a pivot above the ink well, a hand piece being connected to the cover in front of the well, so that the act of dipping the pen will swing the cover back from over the well, the cover dropping of its own weight to close the well when the hand is removed.

A trace carrier has been patented by Mr. Austin McNally, of Cascade, Iowa. It has a block of soft India rubber fitted in its crown and projecting down between the prongs on which the cock eyes are placed, the prongs being slightly curved toward the center of the holder, so the rubber will hold them and there will be no danger of their casual detachment.

A knockdown box has been patented by Mr. John Hotham, of Hillside, Pa. It has a main body composed of sheet metal side pieces and sheet metal end pieces hinged together, the top and bottom being united to the edges by flanges in such way that they can be readily removed, when the body will collapse and the whole can be shipped flat.

A dish for table use has been patented by Messrs. James M. Sanders and William A. Stamats, of Morrisville, Ohio. It has a bowl portion and side wings or flanges of concave form, with a back wing, flange or receptacle, making a dish with various receptacles, whereby one dish will answer for a variety of purposes.

An overshoe has been patented by Messrs. Michael M. Clark and Peter McKernan, of Shenandoah, Pa. It has a stamped sheet metal bottom, with flange, and a stamped sheet metal heel, combined with a metal top sole, a leather upper and heel part being secured to the flange of the sole and the upper edge of the metal heel.

A seal lock has been patented by Mr. Amos Standing, of Duquoin, Ill. Combined with an apertured front plate and a slotted sliding bolt is a fragile seal fitting in the slot of the bolt and a lock device engaging the upper edge of the seal, with other novel features, the construction being simple and durable.

A dump cart has been patented by Mr. Thomas J. Flanagan, of Butte City, Montana Ter. It is especially applicable for the carting of minerals and stones, being so constructed that such materials will not wear away the parts as they are being carted or dumped, the invention covering various novel details of construction.

An indexed book has been patented by Frank Rosewater, of Cleveland, Ohio. It has at its opening edge a series of tags in oblique rows, each row representing a section of pages, and the inner edge of the cover has a series of subdivisions indicating by their position the fractional part of the space between the rows of tags.

A bustle has been patented by Mr. Cecil M. Durnil, of Fayette, Mo. It is made of adjustable bows hinged to a main wire formed with top and bottom curved wires, so that it may be adjusted both as to width and depth and attached to the body at or below the waist, closing up to the body under pressure and afterward assuming its designed proper shape.

An improvement in hames and rings therefor has been patented by Mr. Thomas S. Alexander, of Meriden, Conn. A section of the hame is provided with a shouldered post adapted to receive or carry the hame ring or terret, which has an aperture through which the post passes, so that the rings can be readily attached or detached.

An improvement in drawing instruments, calipers, etc., has been patented by Mr. Frank Miller, of New York City. The arms or jaws extended to form the working points are screw-threaded on opposite converging surfaces, in combination with an internally screw-threaded nut, to provide for a more convenient and accurate adjustment of the jaws or members to and from each other.

An automatic fire extinguisher and sprinkler has been patented by Mr. James H. Lynde, of Manchester, Lancaster County, England. It has a fusible seal and a seal-protecting composition of paraffine and barium between the water space and the seal, to prevent leakage while the solder is fusing, and insure complete separation of the joint before any water from the supply pipe is permitted to reach it.

A hand rock drill has been patented by Mr. August J. Becker, of Mount Carmel, Pa. It consists of a cutting tool having a shank fitting into the hollow shank of the holder, an annular lug or lugs being formed on the cutting tool, and fitting into corresponding recesses on the lower end of the shank of the holder, making a cutting tool that can be readily removed to facilitate grinding.

A washing machine has been patented by Mr. Seth W. Warren, of Olean, N. Y. The tub has at its sides guide strips and at its ends curved strips, in connection with a rubber, the body of which is curved in the arc of a circle, with rows of cells and upwardly opening valves on its under side, whereby the water is repeatedly forced through the fabrics, and the rubber has a combined rocking and reciprocating motion.

A cork fastener has been patented by Mr. Charles Von der Linden, of Rhinebeck, N. Y. It consists of two plates of metal, each bent twice at right angles in the same direction, forming long and short arms, the longer arms being pivotally connected by a rivet and the shorter arms having their extremities concave to fit them to the neck of a bottle, making a binder fitting over the cork and under a flange in the neck of the bottle.

Feathering blades of paddle and other wheels form the subject of a patent issued to Mr. Amos H. Carpenter, of Stockton, Cal. Blade arms are journaled at their centers in transverse apertures of the main shaft, longitudinal movement being prevented by collars, there being rings on the shaft having cam surfaces which operate rods connected with a crank or lever attached to each blade arm, with other novel features.

A pitman or pump rod has been patented by Mr. John F. Loomis, of Shelby, Iowa. Com-

bined with two sections of the rod are right-angular springs, clamps and spacing blocks being arranged between the portions of the springs at right angles to the rod, with other novel features, the invention being an improvement on a former patented invention of the same inventor, to make such rods elastic for taking up strains and jars.

A shade or globe holder has been patented by Mr. William J. Stratton, of Brooklyn, N. Y. It has a central ring with three or more outwardly extending arms, the arms bent to form shoulders, below which they extend downward in substantially vertical lines, the end of each of the vertical sections carrying a centrally apertured and internally threaded block, there being screws within the blocks which serve as the direct supports of the globe.

A dump cart has been patented by Mr. Frederic H. Evans, of Brooklyn, N. Y. The cart bodies have trunnions supported in bearings mounted to the rear and above the axle of the cart, the use of the crank axle being avoided, and also the necessity of adjusting and removing a tail board, while there is no rush and jar of the cart body, and the invention is applicable to a four-wheeled vehicle as well as to one of two wheels.

A combined shaping and sawing machine has been patented by Mr. William Huey, of Seaford, Del. This invention covers a novel construction and arrangement of parts in a machine which will at one operation cut off and saw out a round disk from a block or bolt of wood, to form the bottom of a fruit basket or measure, or the head of a keg or barrel, and will also cut staves with their croze, tapered shingles, etc.

A lever handle for agricultural implements has been patented by Mr. William B. Wagner, of Sheridan, Wyoming Ter. This invention relates to ratchet or bolt levers such as commonly employed, the lever having a handle extending at right angles, with a bolt or ratchet trigger having a handle extending in a line substantially parallel with that of the lever handle, so that in throwing the lever proper the trigger handle may be held against the lever handle without undue strain on the part of the operator.

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