

ENGINEERING INVENTIONS.

A cable grip for traction railways has been patented by Mr. Orlando H. Jadwin, of New York City. It has a laterally projecting counterbalance, and means for securing to the grip perfect flexibility in all directions, so as to reduce cramping and binding strains and adapt the parts to a free and easy motion through the varying conditions and positions of use.

A switch for tracks for carrying iron has been patented by Mr. Edwin A. Kern, of Girard, Ohio. It is designed for use in rolling mills, etc., where a number of side tracks join the main track, and is a vertically tilting switch pivoted at a point higher than the main track, but adapted to be lowered to rest upon the main track and held in place thereon when in use.

A rotary engine has been patented by Mr. Joseph E. Beauchemin, of Sorel, Quebec, Canada. It has a series of cylinders secured radially on a hub which forms a valve seat, with ports and an exhaust chamber, the ports leading into the cylinders, in which pistons having central openings operate on the rim of a wheel held eccentrically to the hub, the engine being adapted to be operated by water, air, or steam.

AGRICULTURAL INVENTIONS.

A harvester guard renovator has been patented by Mr. George W. East, of Heltonville, Ind. It is for sharpening worn-out or dulled harvesting or mowing machine guard fingers, and comprises a swage, a steel re-enforcing anvil plate, and a truing up gauge, whereby the work can be quickly, easily, and thoroughly accomplished.

Cultivating harrow teeth form the subject of a patent issued to Mr. Charles C. Crumb, of Burlingame, Kansas. The teeth are to be made lighter or heavier, according to the style of the cultivator or harrow, but they are of novel form, designed to work easily and be practically self-cleaning, to promote light draught of the implement, and so it will not clog easily.

A hay press has been patented by Mr. William A. Laidlaw, of Cherokee, Kansas. This invention is an improvement in that class of presses known as continuous, and whose followers are operated by a reversible sweep that allows them to be thrown back by the rebound of the hay or other material being pressed, after reaching the limit of the forward movement.

A check row planter has been patented by Mr. John Clark, of Sheffield, Iowa. It is for planting corn or other seed in accurate rows, and may be made with one or two or more feeds to plant different rows of hills, two rows of hills being preferred, the draught being very light, and the machine being designed to be operated successfully by one horse in well prepared ground.

A band cutter and feeder for thrashing machines has been patented by Mr. John H. Spurgin, of Carthage, Mo. Combined with endless horizontal slat belts is a vertical partition held between the belts, a second set of endless slat belts being held above, passing over a swiveling table, on the under side of which fixed knives are held at each side of the partition, pushing prongs or fingers being secured to the ends of the slats of the central slat belt, with other novel features, the invention being an improvement on a former patented invention of the same inventor.

MISCELLANEOUS INVENTIONS.

A carpenter's rule has been patented by Mr. Michael H. Walsh, of Boston, Mass. This invention covers a novel construction, making a rule which may be used as a bevel or square as well as a rule, in which the legs may be adjustably clamped in any desired position.

A nose guard for eyeglasses has been patented by Mr. George H. Emerson, of Bucksport, Me. A nose piece is adjustably secured upon arms which project from the opposing edges of the glass frame, the adjustment being simply, conveniently, and readily made.

A running gear for vehicles has been patented by Mr. Adam Bock, of Murfreesborough, Tenn. This invention relates to an improvement in front platform carriage gear, in which it is designed to simplify the construction, and provide a light, durable, and conveniently applied device.

A horseshoeing rack has been patented by Mr. Samuel M. Martin, of Sidney, Ohio. It consists of a pen that is readily adjustable to the size of any animal, and in which the animal can readily be securely fastened, the rack being such that it can be readily taken down and removed out of the way.

A snare tightener for drums has been patented by Mr. John H. Buckbee, of New York City. It consists of snare clamping jaws mounted on guide rods on the side of the drum in such way that by turning a thumb screw in one direction the snares are tightened, while a reverse movement loosens them.

An oil filter has been patented by Mr. George W. Gallaway, of Rye, N. Y. It consists of a can with a partition, and having one or more overflow pipes, in combination with one or more filtering pans mounted above the partition, for filtering waste oil such as drips from bearings, etc.

A tobacco frame has been patented by Mr. Joseph F. Drury, of St. Vincent, Ky. It is for carrying tobacco in leaf form in a suspended or unpacked condition, the invention covering a novel construction of rack upon which the tobacco can be readily placed, or from which it can be conveniently removed.

A precautionary device for poison bottles has been patented by Mr. Frank H. Nutter, of Minneapolis, Minn. Combined with a stopper is a plate having pricking points on its outer face and a fastener on its under face to secure it to the stopper, so that when bottles in which it is used are thoughtlessly grasped the points will prick the fingers.

A portable tea and coffee pot has been patented by Emma E. C. Thompson, of Chicago, Ill. It has an upper and a lower communicating section, one being expandable and contractible horizontally to fit within or outside of the other section, whereby greater portability and convenience is obtained than is ordinarily possible.

A chain wrench has been patented by Mr. Jules Magnette, of Long Island City, N. Y. It is especially adapted for use in connection with pipes, and is so constructed that the pipe may be turned from right to left, or vice versa, without removing the wrench, while it permits of tightening the chain less than the length of the link.

A hoof parer has been patented by Mr. Henry F. Riblett, of Mannington, West Va. It is of the kind made with pivoted arms, one of which has a buttress resting against the horse's hoof and the other a paring knife, the invention providing such a tool with which the paring may be evenly done and the tool be rendered durable.

An inkstand has been patented by Mr. Samuel B. Jerome, of New York City. It has a base with a series of ink wells, and lids so hinged thereto, and connected together by a chain, that the opening of one lid will close all the others, and the writer thus be prevented from dipping his pen in any other than the well in use.

A carriage top has been patented by Mr. Salem E. Kierolf, of Jackson, Tenn. This invention is designed to promote convenience and facility in getting in or out of the carriage, employing, in lieu of the common front bow, a bow restricted in its limits to the canopy or cover, additional braces being connected to the front and middle bows.

An open front heater has been patented by Mr. John Hucksans, of Brooklyn, N. Y. This invention relates to portable grates, etc., in which a baffling plate is arranged at the back, below the damper, to cause the heat to be thrown out into the room, the invention providing a convenient adjustment of the plate to suit the state of the fire in the grate.

A ditching machine has been patented by Mr. Isaac N. Knight, of Boise City, Idaho. Combined with a plow beam having plows on its under side is a parallel shaft on which rollers revolve, with means for raising and lowering the beam relatively to the shaft, whereby two or more furrows or ditches for irrigating may be made.

A safety attachment for car heaters and car lamps has been patented by Mr. George F. Seaver, of Dover, N. H. A sliding hood is provided for each heater and each lamp, with various novel details and combinations of parts, whereby, in case of accident to the car, it will not be liable to take fire from the burning fuel in either the heater or lamps.

A door check has been patented by Mr. Benjamin F. Boughn, of Randolph, Neb. It consists of a frame adapted to be attached to the floor, in which is a pivoted spring-actuated lever catch and a sliding abutment, to act as a stop in preventing the door from injuring the wall, and also to hold the door open and prevent it from slamming to again.

An improvement in gig saddles for harness has been patented by Mr. Marcellus M. Hitt, of Luray, Va. The skirts and tug straps are held by terrets, the straps being folded under at the lower ends and secured permanently to the skirts, in combination with a ring for supporting the thill loop, with a snap hook secured to the loop.

A wire tightener has been patented by Mr. David T. Brown, of Walker, Mo. It is an improved device, comprising a gripper for the wire, a rotating head supporting the gripper, a holder supporting the head or body, and a handle by which to turn the body and the gripper connected with it, for tightening fence and other wires.

A coal chute has been patented by Mr. John H. Du Bois, of Hoboken, N. J. It has a series of tapering hoppers connected together by links, whereby the series of hoppers may be swung out of action one at a time, and with which coal may be loaded from a high coal dock into a vessel below without pulverizing or breaking the coal.

A wagon curtain has been patented by Mr. John H. Huckle, of Brooklyn, N. Y. Ways carrying sliding blocks are secured to the sides of the wagon, arms being attached to the blocks to control the curtain, so that by sliding the blocks toward the front of the wagon the curtain may be lowered and closed, or the curtain may be held half open, or rolled entirely up.

A lead pencil sharpener has been patented by Mr. George H. Courson, of Baltimore, Md. It has a fixed conical body having a file-like outer face, a swinging arm being pivoted upon the body, provided with a pencil-holding tube, the arm having a rotary motion, the sharpening being accomplished by revolving the arm, and without danger of breaking the point.

A washing machine has been patented by Mr. John R. Welpton, of Red Oak, Iowa. This invention consists of a tubular washing wheel provided with a series of compartments closed by doors and having outer and inner openings for inlet and exit of steam and water, to wash different kinds of clothes at the same time separately and in the same water.

A speed indicator has been patented by Mr. Hezekiah Conant, of Pawtucket, R. I. It consists of a clock gear, a gear for connection with an engine, and a differential gear in mesh with both, having indicator hands moving forward or backward according to the predominance of motion in the clock or engine gear, to conveniently and certainly show the rate of speed of a revolving shaft.

A device for dressing the teeth of saws has been patented by Mr. Wallace C. Yeomans, of Condersport, Pa. It consists of a frame adapted to slide and carry a file, with means for adjusting the frame in such position in relation to the saw that the file stands at an angle to the teeth, making an implement for side-dressing the teeth accurately on both sides to any desired angle.

A wagon body has been patented by Mr. Felix Burgess, of Darlington, Wis. Combined with the bottom boards are interlocking transverse connecting bars secured to the under side of the bottom, and provided with pivoted buttons, making a body which can be conveniently removed or placed on the wagon by a single person, and which may be knocked down or built up in any small barn or wagon shed.

A thill coupling has been patented by Mr. Oscar P. Barker, of Peoria, Ill. This invention covers a novel construction for the secure attachment and ready detachment of the thills or tongue of a vehicle, so that they may be quickly changed, providing also an anti-rattler, and allowing for the detachment of the horse from the vehicle should he become unmanageable.

The art of ornamenting cards forms the subject of a patent issued to Mr. Charles Schwartz, of Brooklyn, N. Y. The method consists in placing ornamental paper coated with an adhesive in a die having raised letters or ornaments, then placing the sheet to be ornamented on the coated surface of the ornamental paper, and subjecting both to pressure, thus cutting and sticking the latter to the sheet, all in one operation.

A wagon body has been patented by Mr. Richard G. Hart, of Quincy, Mo. This invention is designed to provide for undue wear of the bottom and sides of the body by the bolsters and standards, braces being let into sockets in the bottom of the body and having a stepped or ribbed connection with the sides, angle plates being offset from and applied to the bottom of the body and forming the bottoms of the sockets.

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