

ENGINEERING INVENTIONS.

A steam engine governor has been patented by Mr. Eliphail L. Arnold, of Montgomery, Texas. It is specially adapted for engines operating saw mills and similar machinery, in which the load is suddenly changed, and provides an attachment which permits of operating the engine to its full capacity when the pressure in the steam chest increases.

A car coupling has been patented by Messrs. Joseph Y. Burwell, of Chico, and Frankie Mammel, of Roxbury, Kansas. The ends of the link are made arrow shaped, and there is a small slot in them, to adapt them to spring into and be held by clamps that are spring-held in the open mouth of the drawhead, with other novel features.

A steam generator has been patented by Mr. John Webster, of Brooklyn, N. Y. The invention covers novel features of construction and the combination of parts in a generator designed to admit water only as fast as it is flashed into steam, and is constructed to cut off the hot gases of the furnace should the feed water supply fail or the pressure become excessive.

AGRICULTURAL INVENTION.

A hay tedder has been patented by Mr. Curtis Gates, of Lyndon, Vt. The frame, supported on drive wheels, carries a crank shaft with a series of oppositely arranged cranks, forks being connected with the cranks and arranged to slide through oscillating guides pivoted in spring-pressed supports, the machine lifting hay from the ground and throwing it into the air for the purpose of separating it.

MISCELLANEOUS INVENTIONS.

A pencil holder for slate frames has been patented by Mr. Robert Holton, of Alpena, Mich. A receptacle for the pencil is bored in the wooden frame at one side, and a metallic spring is pivoted to cover the opening, the pencil being readily dropped out when the spring is turned to one side.

A scarf holder has been patented by Mr. William P. Clarke, of Winnipeg, Manitoba, Canada. It is made of a plate of metal having hooks on it for engaging the lower edge of the collar and a loop for receiving the collar button, all of the parts being formed integrally of thin sheet metal.

A heating stove has been patented by Mr. David J. Rogers, of Bardston, Ky. It has a base which extends out from the body or bowl of the stove, with a removable ashpan forming the sides of the base in place of the usual casting, and various other novel features.

A halter has been patented by Mr. Robert D. Whittemore, of Chippewa Falls, Wis. The invention has for its object to provide a means whereby the various portions of a halter may be speedily and readily adjusted to snugly fit any size horse, and be held securely in such adjustment.

A buckle and strap fastening has been patented by Mr. Robert W. Chapman, of Newark, N. J. The invention consists of a buckle permanently secured to the frame of a bag or satchel, with means for securing the strap to the buckle, making a fastening specially adapted for traveling bags, satchels, and other articles.

A lock has been patented by Mr. Benjamin Delvalle, of New York City. It is so constructed that the bolt, its projecting and retracting shoulders, the bolt catch, the unlocking slide bar, and its releasing disks, are all out of reach of the key, so that it is impossible to pick the lock or open it with a false key.

A thill coupling has been patented by Mr. William H. Tibbitts, of Crab Orchard, Neb. It consists of a clip having perforated lugs with a pendent stirrup connecting their ends, and other novel features, dispensing with the use of a screw nut on the bolt that secures the thills, and also preventing rattling.

A twine holder and lifter has been patented by Mr. Thomas Porter, of Philadelphia, Pa. This invention includes several novel features, including a revolving twine holder having the rod which lifts the slack fixedly attached to it in distinction to a stationary twine holder and separately moving lifting rod.

A device for controlling runaway horses has been patented by Mr. Isaac Grumbach, of Galveston, Texas. It consists of pads supported by lever arms pivotally connected to the bit, and means whereby the pads may be moved toward each other, so that they will bear upon the nostrils, whereby the rider or driver may apply a pressure to close the nostrils.

A portable fence has been patented by Mr. Davis C. Hapeony, of New Brunswick, N. J. It consists of posts and a series of panels hinged thereto, the build of the sections and the manner in which they are attached to the posts allowing of hard usage with but little wear, the object being to produce a fence specially adapted as a toy.

An improvement in velocipedes has been patented by Mr. James R. Trigwell, of Brixton Rise, London, England. In ball bearing steering joints, this invention provides a retaining device for confining the anti-friction balls to their seats when the neck and head are disconnected, whereby the balls can be conveniently introduced or removed at will.

A device for operating awnings has been patented by Mr. Theophile Charron, of Kankakee, Ill. The invention covers a novel construction and combination of parts whereby an awning may be readily raised and lowered, and wherein the awning, when raised, will be expeditiously and neatly folded up against the building.

A road digger and scraper has been patented by Mr. Alberto Finks, of New Berlin, N. Y. Combined with a wagon frame carrying a scraper bar a concave scraper blade is also arranged, with an angular point at one end and a gradual taper at the other, both bars being controlled by independent levers, to quickly and shape the contour of a road.

A nut lock has been patented by Mr. Lavaea Self, of Piedmont, Mo. Combined with a fish plate having a flange extending over the foot of the rail, and having a cavity for receiving a spring holder, is a spring holder fitted to the cavity and a spring supported by the holder and adapted to engage the sides of the nuts.

A picture frame has been patented by Mr. William Schumacher, of Brooklyn, N. Y. The moulding is formed with a recess and beads at the edges, in combination with an ornamental facing strip of fabric and a plastic backing embossed with figures and secured in the recess as a separate and independent facing.

A rope coupling or socket has been patented by Mr. Alfred Clark, of Warren, Pa. It is specially adapted to securing a rope or chain to a drill, or to coupling lengths of rope together, and, by this device, the connection is so arranged between the socket and the rope that the latter may be readily removed from the socket without being injured.

A tablet press has been patented by Mr. M. Fairchilds Doud, of Kansas City, Mo. The invention covers novel features of construction and the combination of parts in a press for use in the manufacture of tablets or blocks of stationery, the press being simple in construction and easily operated by persons of ordinary skill.

A back stay fastening for carriage tops has been patented by Mr. Henry E. Horn, of Denver, Col. It consists of a plate set within the back part of the carriage seat on each side and fastened by means of screws, the plate having a number of lugs on the inner side with threaded openings for the reception of screw buttons.

A hand power for sewing machines has been patented by Mr. William P. Clarke, of Rockton, Ga. A bracket is connected with the table or some portion of the sewing machine frame, and a hand lever is pivoted on the bracket, connected by a link with the treadle, or with the pitman of the machine, making a cheap and efficient hand power attachment.

A combined shovel and hoe has been patented by Mr. Anton Schad, of Louisville, Ky. This invention provides a simple and inexpensive implement which may be readily converted into either a shovel or a hoe, having locking devices, whereby the blade may be rigidly fixed in line with the handle or be set at an angle thereto.

A regenerative gas lamp has been patented by Mr. Charles E. Bell, of Greenfield, Ohio. The invention covers a combination of tubes with flaring ends, a concave disk connected with one of the tubes, an apertured ring between the disk and one of the flaring ends, together with a novel arrangement of heating chamber and various other special features.

An edging and joint plate for concrete pavements has been patented by Mr. John C. Hoyt, of Sedalia, Mo. The invention includes the special construction of the joint plates and their fastenings, forming moulds into which concrete or cement is placed and hardens, making an easily laid, cheap, and substantial walk adapted alike for private grounds or thoroughfares.

A blinder attachment for bridles has been patented by Mr. Charles H. Adams, of New York City. The invention consists in providing the blinds with pulleys, and cords passing through them, to be united over the neck and operated with the reins, whereby a horse may be effectually and quickly prevented from seeing, the device to be operated from the saddle or from a vehicle.

An apparatus for moulding perforated blocks has been patented by Mr. Peter McIntyre, of New York City. It is for use with clay, asphaltum, or similar material, and provides a reciprocating follower carrying several penetrating points arranged to be thrust through a moulding box provided with apertures, and adapted to be secured to the frame in line with the penetrating points.

A rounding jack for hat brims has been patented by Mr. Michael Hild, of Philadelphia, Pa. The main frame has a sliding knife stock and sliding adjusting rod attached to the knife stock, in combination with a set screw for locking the adjusting rod, with a guard formed with a tongue in combination with the main frame, and there are various other novel features.

A baling press has been patented by Mr. David L. Hannay, of Greenville, N. Y. The press case has two baling boxes or chambers, one directly over the other, fitted with plungers connected by their pitmen with oppositely set cranks of a shaft journaled in the press case frame, making a novel plunger-actuating mechanism, the press being simple, durable, and "continuous" acting.

A binding clamp for battery electrodes has been patented by Mr. Horatio J. Brewer, of New York City. It consists of a holder having inclined sides fitting on the wedge-shaped end of a battery electrode, with a set screw screwing in the top plate of the holder and firmly securing the holder to the battery electrode, and also holding the wire in a firm contact with the battery electrode.

A neck yoke swivel has been patented by Mr. James M. Colman, of New Castle, Washington, Ter. Its construction is such that with it the neck yoke may be turned in any direction in a horizontal plane, and may be swung as desired in a vertical plane by turning it upon its connection with the pole of the vehicle, obtaining a perfectly free and easy motion for the horses.

A machine for winding yarn has been patented by Mr. Benjamin A. Dobson, of Bolton, Lancaster County, England. The invention covers a novel combination and arrangement of parts to stop the winding automatically when the yarn breaks or fails, to provide improved means for regulating the tension on the threads, and to give greater facilities for piecing up the broken threads.

A graduated fling case, especially designed for receiving photographs, has been patented by Mr. Richard M. Hodge, of Princeton, N. J. It consists of an outer box with central longitudinal and transverse partitions, giving spaces for articles to be filed of different sizes, while the connections between the partitions and the case and between upper and lower strips give a frictional contact sufficient to hold them in any position to which they may be moved.

A centrifugal amalgamator has been patented by Mr. William White, of Mount Vernon, N. Y. The invention consists of a pan provided with a number of pockets, which are preferably produced by forming concentric ridges about the axis of the pan, to prevent the mercury from moving in a body to the extreme edge of the pan when rapidly revolved, being an improvement on a former patented invention of the same inventor.

A button fastening machine has been patented by Messrs. Chester L. Olds and John Eklund, of St. Joseph, Mich. It is for fastening buttons on shoes, and in one operation forms the staple from a continuous wire, passes it through the eye of the button, and clinches it in the leather to securely attach the button, the invention covering a machine of peculiar arrangement and construction of parts for carrying out these successive steps.

A vehicle heater has been patented by Mr. Edward A. Olmstead, of New York City. It is more especially applicable as a tramway or street car heater, and has a boiler connected by tubes with a secondary boiler or drum, the boiler mounted within a casing having a fire chamber, below which is a lamp box having a perforated metal diaphragm in its upper portion, the vehicle being heated by the circulation of hot water or steam.

A propeller for boats, ships, etc., has been patented by Messrs. Pius and Karl Kaul, of Brooklyn, N. Y. A vertical paddle is revolved by a crank, and there is an upper guide through which the handle of the paddle slides as its lower end revolves with the crank, the invention covering novel features, whereby the paddles may be adjusted to the depth of the water and the swiveling guide at the upper end of the paddle.

A machine for threading and pointing screw eyes has been patented by Mr. John B. Hardy, of Brooklyn, N. Y. The invention covers a mechanism for feeding the blanks from the revolving hopper to an auxiliary hopper, means for feeding the blanks to the pointer, means for swinging the pointer and pointer spindle laterally to align them with the jaws for revolving the blanks, to point the same and cut the thread, and means for giving the pointer and pointer spindle a longitudinal movement for entering the blank between the revolving jaws.

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