

ENGINEERING INVENTIONS.

A signal has been patented by Mr. Jacob F. Riethmayer, of Lansdale, Pa. It is made with a bar carrying a flag or light and normally held within a casing by a spring catch, but so arranged as to be moved forward by the action of a weight when the catch is withdrawn by a tripping mechanism actuated by the train.

A railroad ditching machine has been patented by Mr. Alonzo H. McGrew, of Hurley, Dakota Ter. This invention covers an improvement on a former patented invention of the same inventor, the object being to facilitate and make more easy and certain the dumping of the contents of the scoop than was possible with the prior construction.

A railroad gate has been patented by Mr. Nathan Harris, of Wabash, Ind. It is pivotally supported to form a barrier across the track, and has a crank arm connected to a cylinder by a flexible pipe, a piston fitting the cylinder to compress air therein, and the device being automatically operated by a passing train to open the gate and adjust it to a normal raised or closed position after the train has passed.

AGRICULTURAL INVENTIONS.

A potato digger has been patented by Mr. James Van Siclen, of Jamaica, N. Y. It has a plow plate set at such inclination as to pass between the potatoes, and raise them with the soil to the surface of the ground, when a separator with fingers operates to clear the potatoes from the soil and vines and leave them ready to be gathered.

A plow has been patented by Mr. Artemus Rolow, of Cherokee, Iowa. The invention is an improvement for plows with hinged mouldboards to spread or narrow the plow, where a lever and rack are employed, whereby the rack is arranged at a suitable height and relation to the mouldboard, and is at the same time braced firmly from the handles.

A field weeder has been patented by Mr. James P. Johnson, of Willmar, Minn. It has an elevated cylinder carrying teeth or combs, in connection with spring-retracted strips arranged to move in contact with the teeth and acted upon by a cam, the machine being so constructed as to pull or comb out wild mustard without injury to wheat or other grain in which it may be growing.

MISCELLANEOUS INVENTIONS.

A gutter for buildings has been patented by Mr. Joseph Gray, of Amelia, O. It is a metal gutter suspended in a suitable eaves box, with a stationary cap which overlaps the edges of the gutter, the construction being such as to allow any amount of expansion or contraction, to prevent breaking of joints and leakage.

A sash cord fastener has been patented by Mr. Edward T. Bradbury, of Mahanoy City, Pa. This invention consists of an attachment to receive the end of the cord and wedge itself fast upon it, and also adapted to engage with or embed itself in a shoulder formed in the sash, whereby the sash cord can be easily detached from or reattached to the sash.

A heating apparatus has been patented by Mr. Henry C. Berry, of Wauseon, O. This invention covers a peculiar construction and arrangement of the firepot in connection with the casing of a stove, whereby the ashes and other accumulations are easily removed, and clinkers can be easily taken out, the parts being made of cast iron or other suitable material.

A naphthol black color compound has been patented by Messrs. Meinhard Hoffmann and Arthur Weinberg, of Mainz, near Frankfurt-on-the-Main, Germany. This invention relates to a new method of manufacturing blue to violet coloring matters belonging to the azo group, the product being delivered to the trade as a black paste or in solid form.

A channeling machine has been patented by Mr. Charles S. Ames, of Bishop, Ill. It consists of a pair of adjustably mounted channeling blades so arranged that they may be mounted in front of the formers of a leather rolling machine, or with rollers which bite upon a strap and carry it forward, or so the strap might be pulled through by hand.

A letter file has been patented by Mr. Lloyd Nottingham, of Norfolk, Va. This invention relates to that form of letter file in which an adjustable wire loop is connected to a base plate, the file being one which can be adjusted to stand upon a desk or hung against a wall, the invention providing a more secure attachment and a greater variety of adjustments.

A suspender or other buckle has been patented by Mr. Charles R. Harris, of Jersey Shore, Pa. It has a hook within a hook, a tubular hinged construction of the opening and closing portion of the buckle adapted to receive the ends of the wires of which the two main portions of the buckle are composed, with other novel features.

A gig saddle has been patented by Mr. Godfrey R. Lips, of Louisville, Ky. The saddle tree is of metal, formed with loops for holding a casting formed with a plate to support the jockey and give it a curved finish, giving a full and rounded support and preventing it from sagging, with other novel features, making a saddle which is light, cheap, and durable.

A cane stool has been patented by Mr. Eric O. Leermo, of Gold Hill, Nev. It consists of a casting forming the body of the stool, with legs and arms jointed to the body, with arms connected to a central head, in such way that it may be readily folded to form a staff or cane, or unfolded to form a convenient seat.

An animal poke has been patented by Mr. Timothy D. Reaves, of Farmington, Ky. It is a novel and inexpensive device to attach to the heads of horses, cattle, and other live stock, to prevent their jumping over or demolishing fences, while not being oppressive to the animals, and allowing them to graze more naturally and comfortably than heretofore.

A wire binder for boxes has been patented by Mr. James A. Griffiths, of Winter Park, Fla. It consists of wire fasteners bent to form prongs and eyes in such way as to hold the binding wires on the box and also assist in holding the top, bottom, ends, and cover of the box together, in boxes used for shipping oranges, etc.

A writing teacher's cabinet has been patented by Mr. John W. Lefevre, of Mooney, Ind. It has ink bottle ledges, pen rack, compartments for copy-books, blotting paper, etc., and with hook or other device for pen wipers, all conveniently arranged for writing teachers having to distribute such articles to the pupils in a schoolroom.

A bell crank has been patented by Mr. Nelson Magee, of Hoboken, N. J. Its construction is such that the strength of the springaction may be easily adjusted, and increased or diminished, and the spring is readily detached from the gudgeon when the crank is turned in the wrong direction, so there is no danger of injuring the spring, and the crank is cheap and durable.

A flexible button fastening for corsets or other garments has been patented by Mr. Sherwood B. Ferris, of Lakewood, N. J. The buttons are carried by tapes or a flexible strip passed forward and backward successively through the center portions of the buttons and secured to the garment at their terminal portions under cover and inclosure by a seamed portion.

A lifting jack has been patented by Mr. William Diggins, of Westfield, Ind. The lifting bar passes through keepers attached to the standard, its upper end being bent to form a rest, and by swinging down the operating lever the lifting bar is raised by connecting rods and locked in place at such height as desired, the device being simple, strong, and durable.

A folding table has been patented by Mr. John E. Cotton, of Fairfield, Me. It has hinged legs, carrying braces having pins on which are friction springs, in combination with slotted plates on the under surface of the top in which the pins move, locking pawls being pivoted to the plates to engage with the pins, the table being closed by turning upside down.

A hop drier has been patented by Mr. William S. Plummer, of Leavenworth, Kan. It is an attachment for a kiln, and the invention relates particularly to novel and easily adjusted devices for creating a vacuum, to make a suction above the material to be treated, and thus draw air up through it and quickly dry the mass.

A violin has been patented by Mr. Gustav A. Skugrud, of Genesee, Idaho Ter. Combined with the violin is a reed instrument, and tube and mouth-piece connected therewith, with valves and a lever in the neck of the violin for operating the valves, whereby the violinist may play the bass tones for the melody he is playing on the violin.

An automatic brake for vehicles has been patented by Mr. George McInroy, of Charleston, Pa. Its mechanism is operated by the holdback of the horses on the tongue, and there is also an arrangement of the running gear with the brake mechanism, whereby the brakes may be operated irrespective of the relative positions of the front and rear sections of the running gear.

A straw cutter has been patented by Mr. Horatio E. Collins, of Detroit, Mich. This machine is designed to cut a thicker layer of straw or hay and do more work than ordinary machines; it has vertically moving reciprocating knives, and relatively adjustable upper and lower feed rollers, whereby the material will be fed to the knives when separated, and the feed will cease when the knives meet.

A whiffletree hook has been patented by Mr. George R. B. Swanton, of Okawa, Hawk's Bay, New Zealand. It has an internally threaded socket, with axially bored head, having transverse grooves in its inner surface, the trace holder being provided with a transverse pin, and a spring resting on a flange pressing the trace holder outward, the device being simple and easily manipulated.

A fire extinguisher for chimneys has been patented by Mr. Desire Putzeys, of Brussels, Belgium. It consists of a plate with funnel-shaped opening secured inside the masonry of the chimney, above which is suspended a sphere by bands which will be severed by undue flame or heat in the chimney, when the sphere will drop into the funnel-shaped plate and close the chimney.

A jack carrier has been patented by Mr. Charles H. Driver, of Towns, Ga. It is for transporting lifting jacks horizontally, after they have been applied to and raised a building or other load, and consists of a laterally movable jack platform with an adjustable gear platform bearing operating gears, with a horizontal screw rod, designed to move such loads with safety and with greater economy than now customary.

A permutation padlock has been patented by Mr. Charles A. Volke, of Stapleton, N. Y. This invention consists in certain novel features of construction of the lock mechanism, covering the combination with the case and its bow or shackle of a plate, locking dog, pins, slotted posts, and a manipulating device consisting of a key and thumbpiece, with other special elements.

A smoke and cinder conductor has been patented by Mr. James H. Meacham, of Petersburg, Va. The body of the conductor extends over the tender and over the top of each car, and between the cars it has a jointed and detachable coupling, which is the main feature of the invention, and which allows movement in any direction without permitting the escape of smoke or cinders at the joints.

A mechanical movement has been patented by Messrs. James E. and John W. Adams, of Glassborough, N. J. This is a device involving novel features of construction, and intended to give considerable speed and power with a small expenditure of force, being especially applicable for the running of small machinery, such as sewing machines, churns, jig saws, fans, etc.

A cream separator has been patented by Mr. Merritt C. Barden, of West Pawlet, Vt. It is a milk receiver with a conical bottom, and with a floating stopper of such specific gravity that it will stop at rest between the milk and cream, so that when the milk is drawn off from an opening in the center of the conical bottom, this floating stopper will automatically close the opening and thus separate the cream from the milk.

A paper making machine has been patented by Mr. Edwin Wilmont, of Laona, N. Y. This invention provides means, either by a roller or vibrating bar with perforating points, for continually perforating the endless felt apron used in pressing the water from the pulp on a paper machine, so that the apron will not have to be taken from the machine for washing and to have its fibers reopened.

A ground marker has been patented by Mr. John V. B. Rapp, of New York city. It has parallel bars with shafts, and marking teeth clamped to the parallel bars, there being shoes for regulating the depth of the marks and a gauge for regulating the distance between the series, the device making an easily adjustable implement for marking tilled land in parallel rows for the reception of seed.

A coal mining machine has been patented by Mr. Walter S. Gordon, of Atlanta, Ga. It has revolving toothed cutters or saws mounted on a common shaft, and a smaller intermediate rotary cutter working in the same plane between the two larger cutters, to remove the coal between the direct cuts of the larger cutters, and all geared to be run by power transmitted from a frame mounted on a carriage or truck forming the rear end of the machine.

A brake for baby carriages has been patented by Mr. William H. Tier, of Astoria, N. Y. A metallic brake strap passes around the inner end of the hub of the wheel, and is connected by a lever with the handle bar in such way that the movement of the wheel can thereby be readily checked, stopped, or prevented, or the brake can be permanently set so that the carriage when standing upon inclined ground will not be liable to start accidentally.

A coffee and spice mill has been patented by Mr. James W. Miller, of Butler, Pa. The shell in which the grinding cone of the mill works is largest in diameter at the bottom, the coffee or other substance to be ground being fed downward by gravity from a hopper between the serrated outer face of the cone and the inner toothed face of the shell, the fineness of grinding being regulated by adjustment of a nut, and the device being such as will make a neat appearance.

A scrubbing brush holder has been patented by Mr. John T. Gramer, of Bowmansville, Pa. It consists of a yoke having downwardly projecting arms with spurs extending inward toward the center of the yoke, and adapted to engage the edges of the scrubbing brushes, a cam being journaled in the yoke to press the scrubbing brushes in opposite directions against the spurs, whereby the brushes may be readily clamped in position for use or removed from the holder.

A vibrating churn has been patented by Mr. Charles J. Fellrath, of Gatesville, Texas. The invention relates particularly to a motive power or driving mechanism for churns, freezers, etc., and has a sliding frame bearing a fly wheel and crank on one side of the supporting standard and toothed gears on the other side, the fly wheel and toothed segment being arranged in vertical planes, and the frame being vertically adjustable on the standard.

A blind nailing plane has been patented by Mr. William G. Stranahan, of Minneapolis, Minn. It has a shuttle operated by a hand lever and carrying a narrow knife made to project slightly through a longitudinal groove in the body of the plane, to strike against and cut beneath the surface of the wood in such way that the shaying will not be crumpled or narrowed, and will entirely fill up the cut when put on again over the driven nail.

An atomizer has been patented by Mr. Ferdinand A. Reichardt, of New York city. It has an outer and an inner tube of soft rubber, in connection with a narrow strip of copper inclosed within the outer tube, by which the tubes may be held at any desired curve, the outer ends of the tubes are detachably connected with a tip having a central passage for the liquid and side passage for a jet of air, and the atomizer as a whole may be cheaply made, and its parts sold as separate articles.

A process of transferring a precipitated or reduced metal has been patented by Messrs. Theophilus and James Millot, of New York city. It consists in precipitating the metal upon a hard surface, then applying a coat of viscid substance to such deposit, flowing the plate, placing the material to which the transfer is to be made upon the treated surface of the plate, expelling the excess of solvent, washing the whole, and stripping the material and the deposit from the surface of the plate, thus readily bringing out metallic-faced patterns on textile and other flexible fabrics.

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