

ENGINEERING INVENTIONS.

A steam actuated valve has been patented by Mr. John T. Toole, of East Saginaw, Mich. Between the steam chest and the cylinder is an auxiliary steam chest with an auxiliary valve, with other novel features, whereby steam pumps will work with regularity, and will not be left on the dead center at starting or stopping.

MISCELLANEOUS INVENTIONS.

A register for elevators has been patented by Mr. Daniel Segur, of Toledo, O. It is a registering mechanism for measuring the distance traveled by hydraulic elevators in one direction, by which, when the size of the cylinder or piston is known, the consumption of water will be indicated.

A well drilling machine has been patented by Mr. Oscar Rust, of Ithaca, N. Y. This invention relates to machines in which the drill tool is worked on a rope actuated by a cam, and provides a friction gearing to prevent breakage, besides simplifying the construction, and enables the spool or the rope drum to be quickly thrown into or out of gearing.

A tedder has been patented by Mr. John M. Holler, of Albany, N. Y. The construction is such that by operating a lever easily reached from the driver's seat the forward end of the machine can be raised and lowered, and the tedder teeth adjusted to work at any desired distance from the ground, making a strong, convenient, and reliable hay tedder.

A baby carriage has been patented by Mr. George A. Ellis, of Gardner, Mass. The front ends of its side bars are bent upward to form springs for supporting the body at the front end, the side bars being braced by rods in the usual manner, the construction being simple and giving additional spring at the rear end.

A parlor base ball game has been patented by Mr. Jacob S. Aydelott, of Xenia, Ind. The apparatus of the game consists of a board or table having a baseball ground marked thereon, and a number of cards, each bearing one or more of the technical phrases used in baseball playing, the fielding and batting slides playing against each other with the cards.

A baling press has been patented by Mr. George Ertel, of Quincy, Ill. It has certain novel features of construction and combination of parts of the power connections between the sweep and the plunger, by which the power applied to the sweep is made to operate the plunger in the press box most effectively, while the device is simple and inexpensive.

Automatic water works forms the subject of a patent issued to Mr. Mathias A. Laska, of New Orleans, La. It consists of a special combination of pipes, valves, and other pieces, in connection with reservoirs, working on the siphon principle, for raising and delivering water without the use of a motor or other power machinery.

A door latch has been patented by Mr. Theodore C. H. Bayrholder, of Rising City, Neb. It is reversible, to suit either right or left hand doors, and its operation is simple, as the spindle does not have to be turned to withdraw the bolt, while the latch is strong and durable, may be easily applied to the door, and is cheaply made.

A wire hoop has been patented by Mr. Jacob C. Durling, of Marine City, Mich. This invention consists in a block grooved longitudinally, and apertured to receive the ends of the wire, bent outwardly and riveted in the block, thus making a fastener, so a strong hoop can in this way be made of wire instead of the ordinary hoop iron.

A chimney cap has been patented by Mr. Thomas Edwards, of Amherst, N. S., Canada. It is composed of two semicircular or arched hoods halved into each other at right angles, and secured to an open base to be fitted to the chimney top, to present direct draught openings through the hoods to the four points of the compass.

An auger has been patented by Mr. Benjamin Forester, of Salem, Oregon. The peripheral cutting edge is formed on the circumference of a slotted disk, the edge being in two parts, which begin at one of the slots of the disk and terminate at the other slot, the invention being an improvement on a former patented invention of the same inventor.

A saw has been patented by Mr. George N. Clemson, of Middletown, N. Y. It is made of a strip of steel, with teeth cut upon opposite edges for sawing metal, the blade so formed being heated to a suitable temperature for hardening, and the teeth being then simultaneously hardened while the body of the saw is left soft.

A follower for packing barrels has been patented by Mr. Charles T. Bellamy, of Prompton, Pa. It has penetrating points or locking surfaces at one side and a swinging brace or locking lever at the opposite side, to lock the follower to the inside of the cask, and keep the substance packed submerged in the brine or other preserving liquor.

A towel holder has been patented by Mr. Charles H. Delaney, Jr., of New York city. It consists of a flanged drum mounted on a shouldered axle, and a coiled spring within the drum, to the outer surface of which is attached a cord carrying a hook or clasp for holding the towel, the device being simple in construction and making an effective holder.

Pliers form the subject of a patent issued to Mr. Charles F. Hill, of Springfield, Wis. They are formed of two crossed levers pivoted at the intersection, each lever having a jaw in its inner edge with a semicircular recess having a semicircular groove, making a tool especially designed for closing open wire rings for holding uprights on fence wires.

A blacking box has been patented by Mr. George Ridgway, of Towanda, Pa. It has an inner rim attached to the bottom, and forming with the box

an annular space and compartment, so that when the box is taken in the hand, to use the blacking, the brush will be prevented from coming in contact with the fingers by the outer wall of the box.

A lemon squeezer has been patented by Mr. Jacob J. Sturla, of Memphis, Tenn. Combined with a cup having a perforated bottom is a pivoted lever with a block fitting in the cup, and an inverted cup shaped plate with notches in the rim, held on the bottom of the cup by a screw, so the juice cannot flow out too rapidly at the bottom or squirt out at the top.

A bedstead or cot has been patented by Mr. Henry Williams, of 2 Duke Street, London Bridge, Surrey Co., Eng. This invention covers a novel combination of parts in a bedstead or cot, which shall be comfortable and strong when set up, and which can be readily erected and conveniently taken down and rolled up in a small package.

A clothes line has been patented by Mr. Albert G. P. Dorsey, of Clarksburg, Ind. It is designed to be operated between the laundry room of a house and a post in the yard, so that clothes may be both hung out and taken in without going out of doors, and provides for preventing sagging of the line and gathering of the clothes pins, with various other novel features.

A draught equalizer has been patented by Mr. George C. Flagg, of Columbus, Ill. Combined with a triple tree are double trees pivoted to its under and upper sides, and having their inner ends turned downward and upward over the contiguous ends of the triple tree, to equalize the torsional strain and the draught on the shoulders of the middle horse.

A washing machine has been patented by Mr. Charles F. Decker, of Salt Lake City, Utah Ter. The tub has a series of vertical shafts, with plungers on their lower ends surrounded by open-ended cylinders, springs connecting the cylinders to the shafts, while other springs force the shafts downward, the tub being revolved and the plungers forcing the water through and beating the clothes.

A bobbin winder has been patented by Mr. William Connolly, of South Norwalk, Conn. It is to facilitate the winding of sewing machine bobbins with little attention from the operator, the bobbins being placed on the shaft of the winder and the thread caught in them, when they will be wound, and the rotation of the bobbin and thread spool stopped automatically when the bobbin is filled.

A spindle step for spinning machines has been patented by Mr. William A. Delmage, of Lowell, Mass. It is an annular depression or groove provided in the top of the air-chamber and around the spindle to facilitate oiling in cases where the spindle cannot readily be raised in the step, as in ring spinning frames, the invention being an improvement on a former patented invention of the same inventor.

Chenille for embroidery forms the subject of a patent issued to Mr. Julius Frelloehr, of San Francisco, Cal. It consists of a chenille strand of plush or pile threads, with binding threads twisted together thereon to hold the latter, and a fastening thread wrapped around the pile and binding threads, making a strand which will not untwist, without using gum arabic or other pastes.

A band saw mill has been patented by Messrs. Francis M. Hanks and Horace N. Sibley, of Midway, La. The saw has a longitudinal series of holes, and the wheels on which it is mounted have pins projecting through their peripheral faces to engage the holes, springs affording a yielding movement to the pins, and the saw being adapted to cut timber from either side of the table.

An apparatus for effecting emulsions of fats with milk, etc., has been patented by Mr. Carl August Johansson, of Stockholm, Sweden. It consists of two conical cups mounted on a shaft so that the larger openings face each other and a narrow vent is formed between the edges of the cups, so that the apparatus, being rapidly revolved, will finely divide a liquid fat and intimately mix it with milk.

A combined buttoner and cigar cutter has been patented by Messrs. Louis B. Prahar and Charles S. Shepard, of Brooklyn, N. Y. Combined with the slotted stem of a button hook is a bar hinged in the slot, provided with a cutter, making a device which can be readily used for buttoning shoes or gloves, or for cutting off the ends of cigars, and which can be conveniently carried in the pocket.

A safety wheel for roller skates has been patented by Mr. Rossiter I. Towle, of Gunnison, Col. Prongs project downward from the rear end of the skate, with a series of apertures for receiving a pin, with a roller mounted between the prongs on the pin, and a series of apertures for receiving a locking pin for locking the roller in place, and enable the skater to easily maintain his equilibrium.

A barrel leveling and trussing machine has been patented by Mr. Gustav H. W. Simmon, of St. Louis, Mo. It has a stationary and a movable platform, each with diagonal slots, and hoop drivers held in the desired positions by bolts passing through the slots, with movable barrel leveling disks acted on by weights, with other novel features, for leveling and trussing barrels, kegs, etc., at one operation.

A flexible abrasive or polishing disk has been patented by Mr. Joseph W. Byers, of Charleston, Ill. It is especially designed for dressing and finishing rubber plates and artificial dentures, and consists of a circular body of cloth, rubber, leather, or other flexible material, that will keep pliable, having an outside layer of flexible abrading material, all carried on the mandrel of a lathe.

A hame coupling has been patented by Messrs. William A. Smith and John H. Hughes, of Woodlawn, Neb. It consists of a main plate with arched and apertured middle part and grooved side flanges, with adjustable side plates carrying hinged loops to receive the hames, to keep the horse's neck cool and prevent it from being pinched, while it is adjustable for larger or smaller horses.

A lamp burner has been patented by Mr. Joseph A. Coultans, of Brooklyn, N. Y. It has a cylindrical tapered neck, a fountain cap with inverted conical seat, differing slightly in diameter from the neck of the burner, and wedge-shaped projections from a ring placed within the burner, and taking into hook-shaped catches from the fountain cup, forming a tight joint to prevent leakage by capillary attraction or by moving the lamp.

A swing has been patented by Mr. Geo. Bauer, of St. Louis, Mo. Its construction is such that, with one or more persons occupying each seat, when those on one seat exert a downward pressure on the foot board, the swing frame is swung toward the side on which the pressure is exerted, when a like pressure on the other side produces a motion in the inverse direction, so the swing can be readily operated by those occupying it.

A learner's telegraphic instrument has been patented by Emmor Bonsall, of Davenport, Iowa. Combined with a frame having spring contacts connected with circuit wires are devices for pulling a slotted or recessed strip between the spring contacts, thus breaking and closing the circuit, so that a perfect drill of the ear in the Morse characters can be accomplished by the aid of the machine, the characters being sounded so that one can thereby learn them without a teacher.

A rheostat for incandescent electric lights has been patented by Mr. S. Ambrose Hill, of Sunbury, Pa. (George Hill, administrator of S. Ambrose Hill, deceased.) It consists of a series of insulated wires secured to a drum or cylinder, the wires having base parts, and their ends connected by fine insulated wires, one of the wires being connected with a binding post, a contact spring connected with another binding post resting on the base parts of the wires.

A measuring pump has been patented by Mr. Amos B. Simonds, of Youngstown, O. It is more especially designed for measuring oil as drawn from a barrel, the pump bringing the oil into a vessel provided with floating gauge rods which indicate the quantity thus pumped, before it is removed from the vessel by a cock in its bottom, while under this vessel is a drip pan to conduct the drippings back into the pump.

A galvanic battery has been patented by Messrs. Alexander H. and Alfred W. Roovers, of New York city, and Percy G. Williams, of Brooklyn, N. Y. The zinc electrode has a longitudinal perforation, and the packing small side perforations, within and without the battery, while the carbon cap is in one end of the case and a rubber or other non-corrosive stopper in the other end, making an improved portable therapeutic apparatus, not liable to leak, and occupying but little space.

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