

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

SHOCK-LOADING APPARATUS.—A. C. HAUDY-SHELL, Tama, Iowa. The construction of this apparatus is such as to elevate and deposit the shock of grain in a vertical path, whereby the shock may be stood up on end for the purpose of transportation. A hoisting mechanism is provided which is operable by the advancing movement of the loading apparatus, whereby the load may be conveniently deposited in transport vehicles.

SUGAR-CANE CONVEYER.—C. H. McNALLY, Waipahu, Hawaii Ty. This sugar-cane conveyer is a self-propelled machine which conveys cane and loads it upon cars, thereby saving a large amount of manual labor and enabling a small number of men to do the work which hitherto required six or seven times as many men.

Engineering Improvements.

LOCOMOTIVE VALVE-GEAR.—H. MAXWELL, West Oakland, Cal. The valve-gear is arranged to actuate the admission valves from the locomotive engine and permits the manipulation of a separate reversing valve by the engine for quickly reversing the engine independently of the motion of the admission valve-gear, thus preventing the flying back of the reversing lever.

RETAINING VALVE.—W. G. LAMB, City of Mexico, Mexico. The invention relates to fluid pressure brakes of the Westinghouse type, and aims to provide a new and improved retaining valve arranged to hold automatically the full pressure on the brakes while recharging the auxiliary reservoir, so that releasing does not take place until the full pressure is obtained in the auxiliary reservoir, to which the retaining valve is set.

OIL-FEEDER.—L. G. NILSON, New York, N. Y. In usual forms of oil-feeders it is found difficult to get a uniform positive and reliable flow, because the viscosity of most oils changes with the temperature, also when gasoline and the like is fed through needle valves, foreign particles carried with the oil interfere with the flow, and in carbureters where air is forced in with the gasoline, the light portions of the oil are carried off leaving a residue difficult to evaporate. The object of the present invention is to provide a feeder in which the above difficulties will be obviated.

Hardware.

NUT-LOCK.—T. C. BORNMAN, Summit, Miss. This nut-lock is particularly adapted for use on fish-plate bolt-nuts. One member of the lock consists of a washer having a tube formed on the lower corner in which a movable spring cotter is held in engagement with the nut to prevent it from turning.

GAS-BURNER.—T. HOLLAND, New York, N. Y. The burner is made of cast metal, the parts of which may be readily placed together and tightly clamped. The construction is such that three rows of jets may be directed to, and mingled at, the horizontal center of the burner, forming a practically continuous body of gas and giving a steady flame of great heat.

COMBINED DOUBLE ESCUTCHEON AND PAINT PROTECTOR.—S. THOMPSON, Chicago, Ill. The invention relates to a means for protecting the painting and enameling of fine doors and to provide a more ornamental and serviceable combined escutcheon for door-locks. Means are further provided for protecting the door-plate against injury.

Machines and Mechanical Devices.

SHOE-TURNING DEVICE.—G. B. GARDNER, Haverhill, Mass. This invention relates to a device for turning the heel or counter of a shoe. It is adapted to be used in connection with a previously patented device for turning the toe or front part of a shoe. When the two devices are placed together on a single bench they will provide an apparatus on which all necessary turning operations may be performed.

CIGARETTE-MACHINE.—J. C. HANSEN-ELLEHAMMER, 22 Oehlenschlaegersgade, Copenhagen, Denmark. The improvement relates to a filler-forming mechanism in which a mold is employed to which a layer of tobacco is delivered, the layer being divided or cut off by the action of a combined plunger and cutter mechanism. The plunger serves to pack the tobacco and press it down between the pressing-molds. It also serves to shut off the space in which the tobacco is located, as the molds are nearing each other, in such a manner that the entire quantity of the tobacco cut off is gathered together and no portion of the same is lost.

VENDING-MACHINE.—J. C. DE JANISCH, Paris, France. This invention provides a machine for automatically supplying the public with postage stamps, postal cards, letter cards, or other similar articles of predetermined value on the insertion of a coin of proper value. Means are provided to prevent spurious coins from operating the machine.

REVERSIBLE DRIVING MECHANISM.—C. S. PARCELLS, Willard, N. Y. This mechanism is of simple construction and is adapted for use in connection with motor or horseless carriages to change the speed of the driven shaft without altering the speed of the motor, the motor running at one speed at all times.

EMBOSSING-MACHINE.—I. CLAPPER, Osna-burg, Ohio. This invention is an improvement in machines for forming and ornamenting hollow clay building tile. The machine may be quickly adjusted to emboss one or more surfaces of a tile as it passes through the forming die, or it may be arranged to permit the formation of a tile without embossing.

COMPRESS AND PACKER.—J. B. GRIFFIN and S. C. ANDERSON, Van Alstyne, Texas. This machine, which is adapted for compressing, packing and baling cotton or the like, will operate automatically to form the bat as the material is received from the gin, and will fold the bat back and forth in even layers in the press, forming a complete and symmetrical bale.

STAMP-CANCELING MACHINE.—G. R. SHERWOOD, 135 Adams Street, Chicago, Ill. The stamp-cancelling machine embodies a carrier and a holder thereon arranged to secure the letter by the action of atmospheric pressure, and to convey the same to and past the cancelling devices. A novel construction of parts is provided which permits the operation of the machine.

GRINDING-MACHINE.—W. H. FETTERS, Sycamore, Ohio. The invention relates particularly to improvements in machines for grinding or sharpening lawn-mower blades, and the object is to provide a machine of simple construction by means of which the blades may be quickly and accurately ground without removing the same from the mowing-machine.

Medical Appliances.

CLINICAL THERMOMETER.—J. F. WINDOLPH and R. C. STOFER, Norwich, N. Y. This thermometer is held against breakage in a casing in which it is submerged in an antiseptic solution. The construction is such as to wipe and clean the thermometer on removal from or insertion into the casing, and also to prevent leakage of the solution.

CLOSING AND LOCKING DEVICE FOR DENTAL FLASKS.—D. A. BAKER, Schenectady, N. Y. This closing and locking device may be readily applied to dental flask sections to securely close and lock them together without requiring much exertion on the part of the operator.

DENTAL APPLIANCE.—H. E. LINDAS, Greatbend, Kans. This appliance is adapted for use in the correction of irregularities of the teeth to establish harmonious relations between the jaws. The device enables the operator to make use of all the teeth in each dental arch as a reciprocal anchorage for changing the relative shape of maxilla, and at the same time permits the opening and closing of the mouth without interfering with the force used in the correction of the deformity.

MASSAGE-MACHINE.—C. FRANKSCHMIDT and J. STEFFERT, Chicago, Ill. The invention relates to a massage-machine for the use of barbers, physicians, nurses and others, suitable for general use and also for special use upon the face and scalp. The machine runs smoothly and safely without any appreciable jar and its effect upon the person operated upon is very agreeable.

Vehicles and Their Accessories.

VEHICLE-BRAKE.—W. A. CRITCHLOW, Vancouver, Canada. This brake is automatically brought into action by the pressure of the neck-yoke, saddle, back-strap, and breeching when the horse or team is holding back. The construction is such that the brakes will be off when the horse or team pulls ahead or when the vehicle is backed.

BICYCLE.—G. M. LILBURN, Haverstraw, N. Y. A novel construction of the bicycle frame and a novel method of driving the machine permits a great reduction in size of the frame of this improved wheel, and also enables the gearing of the bicycle to be changed while the rider is in motion. The driving mechanism is so arranged as to leave no parts exposed to the dust.

ELLIPTIC CHAIN DRIVING GEAR.—W. F. WILLIAMS, London, England. Two patents have been granted to Mr. Williams for improvements in elliptic sprocket wheels. These, being improvements on a previous invention, provide for the adjustment of the rectilinear ball bearings used to diminish the friction between the arms of the elliptic sprocket-wheel and the corresponding arms on the pedal crank. A further improvement provides means for excluding dust without interfering with the shifting movement of the sprocket-wheel.

Miscellaneous Inventions.

FOOT-WARMER.—J. P. MCABEE, Piedmont, Ala. The foot-warmer is of convenient construction to be used in buggies and vehicles for keeping the legs and feet of the occupant warm beneath the lap-robe. Provision is made for the burning of one or more lamps, and radiating heat therefrom.

BOLT-LOCK.—H. A. STOCKMAN, Johannesburg, South African Republic. Mr. Stockman has received two patents for improvements in bolt-locks which are designed especially for use in mine shafts for securing the upright guides to the cross-timbers. The invention will be found useful, however, in any location where it is desired to bolt together timbers which are subjected to vibration tending to loosen them. The first invention is especially designed for shaft work in mines where two

bolts or lag screws are secured from opposite sides. The second invention has a more general application, and provides a locking device by which the insertion of the bolt from one side will operate to make the lock or holder fast in its place and also secure the bolt from accidentally loosening.

EYELET.—I. W. GILES, New Bedford, Mass. As usually constructed eyelets have a uniform thickness of metal in both the tubular body and the flange. In attaching the eyelet to a boot or shoe, the flange is bent or curved down, and in such operation it is liable to be changed and distorted in form. Mr. Giles has invented an eyelet which is not subject to such distortion.

PUZZLE.—M. COPY, New York, N. Y. In this puzzle a cord is required to be several times wound around a rod against an abutting device, and a retainer is provided which, when removed completely releases the tie from the rod. The arrangement of the rod, abutting device and removable retainer is such that if the tie is not properly tied it will be held fast on removal of the retainer.

SHOE-POLISHER.—E. DE BAUN, Passaic, N. J. The invention relates to a device for polishing shoes, the device being especially adapted for individual use and being of such construction and arrangement that it may be effectively and easily used on one's own shoes and readily carried from place to place, so as to be within convenient reach.

SAD-IRON HANDLE.—C. T. DEMAREST, Hackensack, N. J. This handle is designed for convenient and quick attachment to and detachment from a single-cross-bar sad-iron. The construction is simple and positive in action, and the handle is locked in place without the use of a spring liable to lose its resiliency under the influence of the heat radiating from the sad-iron.

DERRICK-FRAME AND JOINT-COUPLING THEREFOR.—J. H. LOHNER, Bradford, Pa. The derrick frame which is adapted for use in drilling deep wells may be formed either of wood or of metal, and combines novel details of construction that adapt the parts for very convenient and reliable connection when the frame is being erected, and also permit their ready detachment when the derrick is to be removed.

SAFETY DEVICE FOR GAS-LINES.—J. C. FURMAN, Strattanville, Pa. The safety device is designed to guard against gas escaping in the house-service pipes in case the flames of the burner have gone out owing to lack of gas supply. The arrangement is such that the line is automatically shut off in case the gas pressure falls below a predetermined degree, and the line is kept closed until the safety device has been reset manually.

WEATHER-STRIP.—B. M. WHITING, Spokane, Wash. The weather-strip is adapted for use upon the bottom of a door, to render the same weather-tight. It consists of a movable panel so attached to the door as to be lifted out of engagement with the floor when the door is opening or shutting, but is held under spring pressure against the floor when the door is closed.

MUSICAL INSTRUMENT.—H. LANGFELDER, Berlin, Germany. The invention relates to citherns, guitar-citherns, and the like, and provides a new and improved musical instrument arranged to permit of readily sounding the strings by the use of flexible hammers pressed and released by the finger of the performer.

DEVICE FOR ARRESTING RUNAWAYS.—F. E. ARNOLD, Salt Lake City, Utah. The improved device consists essentially of a wire cable or other flexible member stretched across the street at a suitable height to arrest the further forward movement of the runaway animal. The cable is wound on a reel provided with a resistance device which tends to oppose with increasing force its continued rotation.

LINE-GRIP.—F. L. FERRE, New York, N. Y. Mr. Ferre provides a gripping and coupling device for clothes-lines, running over pulleys attached to houses. This line-grip will readily take up slack in the clothes-line and hold the slack without the trouble and annoyance of tying the ends of the line together.

WATER-WHEEL.—S. SHULTZ, Strongstown, Pa. The invention relates to a water-wheel arranged to turn on a vertical axis and having peripheral buckets acted on by a stream of water directed into or against the buckets diagonally to the frame of the wheel.

ELECTRIC BEEHIVE-HEATER.—H. VOGELER, Newcastle, Cal. The invention relates to improvements in beehive heaters wherein electricity is used to generate heat to warm and dry the inside of a beehive and preserve colonies of bees during very cold weather. The heater comprises an open-end tube held in an opening in the hive wall, and adapted to contain an incandescent electric lamp which supplies the heat.

SANITARY RECEPTACLE AND CESS-POOL.—J. P. MCCOY and T. N. GILMORE, New Orleans, La. The improved sanitary receptacle and cesspool is so arranged that the solid matter discharging therein will be liquefied before passing into the earth under the disintegrating action of the ammonia contained in the receptacle.

BOAT.—C. SCHAEER, Superior, Neb. The invention relates particularly to boats as distinguished from large vessels. It comprises a novel form of centerboard which may be

adjusted to contribute to the stability of the boat, and it further comprises a novel form of hull and emergency float.

POULTRY-ROOST.—J. H. F. EVERSZ, Walla Walla, Wash. This poultry-roost is designed for use in poultry houses and is arranged to prevent the fowls from contacting one with the other while roosting. It also brings verminicide in close proximity to the roosting fowl without the latter touching it.

REVOLVING CHIMNEY-CAP.—A. E. and F. J. COOK, Lawrenceburg, Ind. This revolving chimney cap is a substitute for high smokestacks and will prevent the wind from blowing the smoke back into the chimney, as the improved cap turns with the wind and insures a perfect draft.

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