

## Recent American and Foreign Patents.

## NEW CHEMICAL AND MISCELLANEOUS INVENTIONS.

## IMPROVED SCRAPER.

Prosper Coupal, St. Anne, Ill., assignor to himself and Joseph Dalpay, of same place.—While the scraper is being loaded, the handles are held in the ordinary position. When the scraper is to be unloaded the handles are raised, which causes the forward edge of the bottom to catch upon the ground, and, at the same time, causes rods to push back a catch plate which releases the rear edge of the bottom, and allows said bottom to revolve, discharging the load. As the bottom revolves, the handles are lowered, which brings the catch plate forward to receive and hold the rear edge of the bottom as it completes the half revolution, and, at the same time, the forward parts of the side edges of said bottom are caught and held by spring catches.

## IMPROVED FRAME FOR EXHIBITING DRESS GOODS.

Lewis H. Springer, Claremont, Minn.—This is a base socket with an upright standard, carrying a curved cross beam with bent-up ends. It is intended to be moved on the counter, and to be moved to any part thereof, so as to shade and expose the goods to the best possible advantage.

## IMPROVED GLOVE FASTENER.

William Hassall, New York city.—This consists of two plates, hinged to each other at their lower ends, slotted longitudinally, and having a ring passed through the said slots.

## IMPROVED COUPON CUTTER.

Salem M. Schafer, New York city.—This consists of a shears with angle blade contrived to cut two sides of a right angle at one and the same operation, whereby the coupons may thus be cut off the bond in one operation, instead of two, as required in the use of common shears.

## IMPROVED AUTOMATIC FAN.

Ervin G. Gollner and Emil Fretz, Dallas, Tex.—This consists of a fan attached to the pendulum of a clock mechanism. The pendulum is provided with pawls, in combination with the scape wheel, in such a manner as to give a quick strong movement to the fan.

## IMPROVED BRICK KILN.

John W. Brown, Milton, Vt.—The construction here is such that, by fully opening flues, the moisture and steam can be quickly expelled, and then, by closing the said flues less or more, the heat, during the process of burning, may be controlled as may be desired.

## IMPROVED PLATFORM SCALE.

Austin W. Comstock, Mount Pleasant, Iowa.—This is a new and ingenious mechanical device, which furnishes an apparatus easily adjusted, strong, durable, and not likely to get out of order. It is not practicable to explain the construction without drawings.

## IMPROVED SHEARS.

Henry Dornburgh, Olmsteadville, N. Y.—This consists of a bar for the support of the pivot, sustained on one of the blades outside of the other blade, so that the pivot has a bearing at each end. The strain is thus applied in the middle, in such a manner that, in connection with broad bearings, the blades are prevented from opening laterally along the edges, as they do when the pivot goes through one blade and screws into the other.

## IMPROVED OIL TANK.

John C. Chadwick, Baltimore, Md.—This invention relates to an improved construction of oil cans for grocers and other retailers of oil, which can be adapted to receive the contents of one or more barrels, and affords greater facilities for cleaning out the tank, by reason of a hinged segmental cover upon the rear upper portion of the can, and by reason also of the detachable character of the hood.

## IMPROVED PENCIL ATTACHMENT TO SLATES.

William E. Thomas, Ford's Store, Md.—This invention is a tube, open at its ends, to receive the pencil, and hinged to a rod attached to one of the bars of the slate frame, which latter is recessed to accommodate the tube. When the pencil is required for use, the tube is turned out of the recess, but otherwise the pencil is retained in the tube by reason of the ends of the latter abutting the end wall of the recess.

## AUTOMATIC AIR VENT ATTACHMENT FOR BUNGS.

James Talley, Jr., Kansas City, Mo.—The invention relates to an automatic vent tube, having certain peculiarities of construction, and a bung provided with a recess or cavity in its top portion to adapt it to protect the upper projecting end of the vent tube, the two being permanently attached, thus forming a combined bung and vent.

## IMPROVED SHOE FASTENING.

John M. Cayce, Franklyn, Tenn.—This latchet is formed essentially of two metal plates, one of which is hook-shaped, to adapt it to catch up a button attached to the opposite flap, while the other is pivoted to the hook, and so constructed that, when adjusted in a certain position, it will prevent the hook becoming accidentally disengaged from the button.

## IMPROVED PAPER JEWELRY.

Frederick W. Seidewitz, Baltimore, Md.—The object of this invention is to provide a cheap form of jewelry emblems and badges for temporary use, which, while presenting to the eye all of the appearance of the precious metals, are of very cheap production. It consists in ornamental devices embossed and stamped out from thin, gilded paper, and provided with a pin fastened in a fibrous disk, which is cemented to the back of the design.

## IMPROVED METHOD OF ROASTING COFFEE.

Joseph B. Underwood, Fayetteville, N. C.—The object of this invention is to improve the quality of roasted coffee, and to obviate, to a great extent, the loss in weight; and it consists in a method of roasting coffee, whereby the volatile products are utilized by being conveyed to a closed communicating chamber for cooling the coffee, wherein the said flavoring and aromatic exhalations are restored to the coffee as it is cooled, and the roasted coffee preserved and rendered less susceptible to the damaging effects of the atmosphere.

## IMPROVED PLUG TOBACCO BOX.

Benjamin F. Jaques, Petersburg, Va.—The box is so constructed as to permit the tobacco plugs contained therein to be conveniently inspected without the necessity of removing them. The box is rectangular and preferably oblong in shape, having flanged sides and open ends, one of which latter is hinged or removable. The tobacco is exposed to view the whole length of the box, and also at its ends, and the cover may be readily removed to allow insertion or removal of the tobacco.

## APPARATUS FOR HEATING AND MIXING OLEAGINOUS SEEDS.

William M. Force, Newark, N. J.—This is an apparatus for mixing oleaginous seeds, so that the seeds, crushed or otherwise, are properly heated, mixed, and tempered for the expression of the oil. The invention consists of a series of spirally arranged revolving stirrer pipes that are supplied with steam from a central upright shaft.

## IMPROVED TILLER HOLDER ATTACHMENT FOR VESSELS.

William E. Thomas, Ford's Store, Md.—In this attachment a single block is fixed to the forward end of the tiller and a double block near its middle, the shears in the latter being situated side by side, transversely. On each side of the rudder, single blocks are lashed to staples on the deck. A rope attached to a staple, fixed to the tiller, below the double block, runs, successively, through one of the blocks on the deck, the double block, (around the sheave on the same side), the single block at the forward end of the tiller, the double block (around the opposite sheave), and the opposite block on the deck; its end, then passing forward, is belayed to a cleat or pin on the tiller. By turning a set screw in the block on the forward end of the tiller, pressure is applied to the rope and the tiller fixed in any desired position.

## IMPROVED BEE HIVE.

Christopher Ellis, Level Land, S. C.—The object of this invention is mainly the production of a hive adapted for the application of active and efficient means of preventing the ravages of the moth, without, at the same time, destroying or injuring the bees. To this end, the hive is provided with a broad chamber or box, which is separate and preferably detachable, and a perforated metal plate is applied to an opening formed in the bottom board. The moth egg or young worm is destroyed by pouring hot water between the contiguous sides of the hive and the brood chamber, the perforated plate allowing the water to escape from the hive without drowning the bees, or otherwise injuring them. The invention likewise embodies certain other features of construction and arrangement of parts whereby advantages are attained in hiving, handling, and transporting bees.

## PROCESS FOR SEPARATING WOOL FROM MIXED FABRICS.

Dr. Joseph Wilkins, Baltimore, Md.—This invention relates to an improved process for separating wool fiber from its admixture with cotton for the purpose of utilizing the wool mixed with cotton in old rags. The improvement consists in the use with any of the active acids (SO<sub>2</sub>, HCl, and NO<sub>2</sub>) of chromic acid or any of its compounds, from which it may be liberated by the action of the other acids, which chromic acid, by reason of its affinity for the albumen of the wool, prevents the injurious action of the more active acids, and, while permitting the elimination of the cotton by the well known action of the actual acids, prevents the bad effects of the same upon the wool.

## IMPROVED BEER TAP.

George C. Drinen, Brooklyn, N. Y.—The novel feature in this tap consists in making the valve cylinder independent of the bush, and removable without detaching the latter. This allows the barrel to be easily cleansed.

## IMPROVED ICE CREAM FREEZER.

David J. Rogers, Bardstow, Ky.—This invention consists of a handle with three holes to fit over the square end of the dasher shaft. When the latter is inserted into the hole nearest to the middle of the handle, a projection on the latter strikes upon a projection on the upright sleeve of the can cover, and prevents the dasher from revolving independently of the can, which does not happen when the end of the shaft fits in either of the other holes. On the edge of the can cover is a curved catch, which, in conjunction with a hinged stop on the cross bar of the tub for the freezing material, allows the can to rotate but in one direction.

## NEW WOODWORKING AND HOUSE AND CARRIAGE BUILDING INVENTIONS.

## IMPROVED DEVICE FOR GREASING AXLES.

Alfred G. Curtis, Ottawa, Ill.—This invention relates to an improved construction of devices for lubricating the skein of vehicle axles, and it consists in a filling tube and a plunger fitting therein, which, together, are employed for charging a longitudinal reservoir in the skein with grease, the said reservoir running the entire length of the skein and opening through a slot upon the surface of the skein, by means of which construction the axle is rendered self-greasing until the reservoir is exhausted. The latter may be refilled without taking off the wheel.

## IMPROVED FOUR-WHEELED VEHICLE.

William Buckneridge, Port Huron, Mich.—This invention is an improvement in the class of four-wheeled vehicles provided with a jointed reach to facilitate turning within narrow limits. The front and rear axles are connected by a jointed reach without the aid of any supplementary device, and the body of the wagon is pivoted to the front axle, and supported on the rear axle by means of friction rollers, so that it moves freely thereon whenever the wagon is turned to the right or left.

## IMPROVED ARCH BAR FOR FIRE PLACES.

Isaac McCown Wickersham, Harrodsburg, Ky.—The ordinary support for the brick arch of chimney fire places is a flat iron bar, made either straight or slightly curved. The chief objection to this—apart from the total lack of ornamental design or configuration—is the liability of obstruction to the passage of smoke by reason of the thickness of the brick arch or wall resting on the bar. To obviate this objection, and also secure certain other advantages, the inventor employs an arch bar formed of a vertical front plate, having a horizontal top flange to support the brick wall, and of a back plate, projecting upward and inward from the lower edge of the front plate, at an angle of about 45°, for the purpose of directing the smoke.

## NEW HOUSEHOLD INVENTIONS.

## IMPROVED WASHBOARD.

John S. Washburn, Jersey City, N. J.—This consists of a series of round bars, around which a strip of wood is passed and fastened. The strip being bent upon a curve will not be liable to break or crack, and thus will not cut nor tear the clothes.

## IMPROVED HANGING SHELVES.

Richard St. Leger Brodrick Chinnery, Kankakee, Ill.—These are so constructed that they may be lengthened and shortened to adjust it to the breadth of the place where they are to be hung.

## IMPROVED CHAIR AND LOUNGE.

James W. Barnes, Navasota, Texas.—This invention relates to certain improvements in invalid chairs, designed more particularly for persons afflicted with pulmonary affections and with weakness or curvature of the spine. It consists mainly in the attachments to and adjustments for the back of a chair; the first of which consists of adjustable and detachable and horn-shaped supports, which are adapted to fit beneath the armpits and sustain the weight of the patient, and the second of which consists in the adjustment of the back of the chair to facilitate the getting out of and into the same.

## IMPROVED STOVE KNOB.

Ralph Strickland, Albany, N. Y.—This invention consists of a knob made of a shell of thin metal filled with plaster of Paris or other suitable non-conducting material. The shell is in two parts, a body and a cap, through both of which a screw passes centrally, serving to attach the cap to the body, and the knob to the stove door, by means of a nut on the inside of the latter.

## IMPROVED BED LOUNGE.

William E. Buser, Chillicothe, Ohio.—The lounge has a removable top and a hinged adjustable bottom, which latter may be raised or lowered at will. The said bottom is supported upon hinges when raised to a horizontal position, and the hinges lie flat when the bottom is lowered. The head of the lounge is also hinged, and may be adjusted in position to correspond with the bottom.

## IMPROVED HOT AIR GLOBE AND SHADE HOLDER.

Leander E. Fish, Washington, D. C.—This invention is designed to impart steadiness to the flame of argand gas burners which are used with cylindrical chimneys, and more particularly to those burners which are exposed to drafts of air, as street lamps and outdoor lights. The invention consists in the application of an outer globe or cylindrical chimney to the chimney proper, which outer globe is drawn inward at the bottom to form, with its holding device, a closed hot-air chamber around the chimney proper, so that the air which feeds the flame is compelled to pass down the annular space between the two chimneys, or the chimney proper and the globe, before it reaches the flame, whereby the air is fed to the flame hot, which is an advantage, and the flame is completely protected from flickering or blowing-out even, even when exposed to a heavy wind. The invention also further consists in the clamping device for holding on the outer globe or chimney with an airtight connection, and also in the construction and arrangement of a shade holder attached to the same globe-holding devices.

## IMPROVED SHUTTER FASTENER.

Joshua E. Brooks, Baltimore, Md.—This invention consists of two tumbler latches in a metallic box inserted in the window sill, and which are pressed by pivoted springs against a spear-headed catch, fixed to the shutter. The tumbler latches are connected by a rod which pivots in opposite ends of each. The tumbler latches are released from the spear-headed catch by the aid of a handle which passes up from one of the latches, through a curved slot in the metallic box.

## STOPPER FOR WASH BASIN OVERFLOW OPENINGS.

Ezra Webb, New York city.—This is a plate provided with a number of small projections to enter the holes in the overflow opening in the side of the wash basin. The object is to prevent the outflow of sewer gas at that point.

## NEW AGRICULTURAL INVENTIONS.

## IMPROVED CLOD CRUSHER.

John M. Crockett, Dallas, Texas.—This implement consists of two series of flat parallel bars, which are curved or bent twice, and attached at their ends to the same cross bars. The bends of the bars of one series are at such points as bring them out of alignment with those of the others; and hence, when a clod escapes being crushed by a bar of one series, it will ordinarily pass laterally under the next bar, and thus be subjected a second time to a crushing action. The clods are thus broken up, and the land leveled. The implement is light, cheap, strong, durable, and effective.

## NEW MECHANICAL AND ENGINEERING INVENTIONS.

## IMPROVED PERPETUAL AUTOMATIC CALENDAR ATTACHMENT FOR TIME PIECES.

Miner H. Paddock, East Clarkson, N. Y.—The calendar, with its attachment, is arranged for the days, weeks, and months, with indicating hands for each, and, while being practically automatic, is also perpetual: that is to say, the mechanism is such as compensate for the irregular number of days occurring in the different months, by a system of skipping, whereby a single day wheel of 31 subdivisions is made to indicate, successively and in proper order, the different number of days (28, 30, or 31) as they occur in the successive months of the year.

## IMPROVED WATER COIL STEAM GENERATOR.

Benjamin S. Benson, Baltimore, Md.—This invention relates to a novel construction of steam generator adapted to be also used as a boiler. It belongs to that class of generators in which a cylindrical coil of pipes is employed above a furnace or heating chamber, to generate the steam; and it consists in the construction and arrangement of the coils, which are made to project at one point beyond the containing shell, and are provided, upon the outside of the shell, with peculiarly constructed elbow joints, which permit the ready removal of the deflector or worn-out sections of the coil, and also give easy access to the pipes for cleaning out the same. The invention also consists in the peculiar construction and arrangement with the coils of a thermostat or automatic relief chamber for the surplus water not evaporated by the generator.

## SPRING POWER AND TREADLE FOR SEWING MACHINES.

James H. Morley, Holyoke, Mass.—This is a combination of foot power and spring power. One of the treadles works the machine directly, and the other is connected to the spring power for winding it up.

## IMPROVED ROTARY ENGINE.

John R. Peters, Dover, N. J.—This consists of plain flanges attached to the hub and extending out as far as the pistons move, with stationary packing rings pressing on the edges of the flanges and against the case. This is claimed to prevent the radial end wear of the pistons by the packing rings and the loss of steam through the necessary clearance between the inside edges of the circumference of the flanges and the case. The invention also consists of compound pistons, consisting of two or more plates in each groove in the hub, the ends and tops of which may be so formed as to prevent serrated edges, and constitute with condensed steam what is called water packing.

## IMPROVED ROLLER GAGE FOR SAWMILLS.

Aaron Reppard, Savannah, Ga.—An adjustable roller guide is employed, on the side of which the boards are cut, with a shifting lever and a scale for setting it for boards of any thickness. Said roller is located just in advance of the saw, so that, by setting the log against it, every board will be gaged exactly alike as to thickness. The roller gage is mounted in a bracket, which slides on the bed piece, and the lever is connected to it by a link, and to the bed piece by a bracket.

## IMPROVED TYPE WRITER.

Philander Deming, Albany, N. Y.—The object of this invention is to so improve the type writer that it may be made available in an effective manner for short hand reporting, and that the speed of the same in copying common writing may be considerably increased. The invention consists of a double escapement in connection with the rack bar of the carriage of the printing cylinder, the escapement being operated by an anvil and key, that may be brought in connection with the space key.

## BOILER FEED WATER HEATER AND REGULATOR.

Frank W. Keys, New York city.—This consists of a couple of tanks, with water supply and boiler connections, and with valve mechanism, by which they are alternately opened to exhaust and fill. They are in communication with the boiler, the pressure being balanced. The invention also consists of another tank in connection with the two first-mentioned, to receive the water before it enters the others, and also to receive the exhaust steam for heating the water.