

**RECENTLY PATENTED INVENTIONS.**  
**Of Interest to Farmers.**

**TRACTION-ENGINE.**—L. G. DIX, Hood River, Ore. The invention relates to improvements in traction-engines, and more particularly to the belt-wheel thereon, the object being to provide a belt-wheel for operating a threshing machine or the like, the parts being so arranged that the wheel may be locked to the driving-gear when the engine is stationary and operating a machine, or released and remain idle when the engine is traveling or moving into position for connection with a threshing-machine or the like.

**MILK-CAN SEAL.**—W. F. BRUNNSEN, New York, N. Y. This invention has reference to improvements in devices for sealing milk-cans, the object being to provide a sealing or cover securing device of simple construction and so arranged that it cannot be removed from the cover without breaking the seal of soft metal.

**WIRE-REEL.**—A. ASPER, Hudson, S. D. This improvement in wire-reels is in the nature of an attachment for use on ordinary farm-wagons on which to reel up and unreel barbed or other wire used for farm-fencing or other purposes. The reel is secured in connection with the farm-wagon, so that the drive-pulley for turning the reel may be operated from one of the wheels of the wagon by frictional contact therewith.

**GATE.**—F. E. NELSON and G. W. TRIBBEY, Marshfield, Ore. This invention relates to improvements in gates in which a sliding weight traversing an oscillatory bar is used to cause the gate to swing in either direction to open and close the same. It can be readily operated to open and close at a considerable distance from the gate, whereby the necessity of leaving a vehicle approaching the gate is obviated.

**Of General Interest.**

**LEVELING-ROD.**—E. WISWALL, Lawrenceville, Ill. The invention is in the nature of a novel leveling-rod for the use of surveyors, engineers, and others in establishing levels and which shall be self-reading, or, in other words, shall indicate on its face without computation the distance in level between any two points, so as to permit of rapid work and avoid errors incident to computation. An endless belt connects with the rod, which belt is provided with a novel sequence of numbers. There is a foot-arrangement, and further a graduated scale to catch the eye and fix the reading of the hair-lines.

**STOCK AND DIE.**—N. TOBIAS, Kingston, Jamaica, W. I. In the present patent the invention has reference to metal tools and implements; and the object is the provision of a new and improved stock and die arranged to permit convenient and accurate cutting of right and left hand single threads of the same or different pitch.

**FORCEPS.**—J. SOMERS, San Juan, Cal. One purpose of the invention is to provide a conveniently-operated forceps to facilitate the cleanly removal of live or dead fetus in difficult parturition and also to provide an instrument wherein the various parts thereof can be quickly separated and the instrument reduced in size, for transportation or for cleansing purposes and the parts be readily and expeditiously assembled.

**HOLDER FOR REEDS FOR MUSICAL INSTRUMENTS.**—E. D. SNOWGRASS, Tillamook, Ore. The invention pertains more especially to pocket-cases to be carried by players on musical instruments of a certain type, in which to place the reed of the instrument during the time the latter is unused, so as to preserve the intended or original shape of the reed, and thereby enhance the availability or usefulness thereof for a longer period than ordinary.

**HOSE-COUPLING.**—J. F. POLMANN, Wallington, N. J. In Mr. Polmann's patent the invention refers to improvements in couplings for hose or pipes, the object being the provision of a threadless coupling so constructed as to prevent any possible leaking at the joint and to provide for a quick coupling of joints.

**HOLDER FOR NURSING-BOTTLES.**—A. H. OBERG, Sheridan, Wyo. One purpose of this inventor is to provide a holder especially designed for the form of nursing-bottles commercially known as the "hygeia" bottle, and to so construct the holder that it will be strong, light, and economic, and so that it will stand firmly in any position placed, whether the support be soft or hard.

**KNOCKDOWN CABINET.**—P. MORRISON, Chattanooga, Tenn. In this instance the invention relates to knockdown cabinets; and the inventor's object is to produce a cabinet of this kind which is very simple in construction and the parts of which are adapted to be readily assembled without necessitating the use of a great number of fastening devices.

**COMBINED LAWN-RAKE AND SNOW-SCOOP.**—R. F. LAWSON, Effingham, Ill. This implement is especially designed for use in raking lawns and in shoveling snow and which may also be used for other purposes, comprising devices whereby to readily adjust the several parts of the implement to adapt it to any of said uses. It may also be used as a hoe, being useful on freshly-plowed ground. The scoop will also be found useful for mixing mortar.

**DIGESTER FOR EXTRACTING SPIRITS OF TURPENTINE.**—F. D. McMILLAN, Atlanta, Ga. The invention refers to a form of di-

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gester which employs a vertical or upright cylinder. In this form difficulty has been found in discharging the woody residuum, owing to the fact that under the influence of heat the woody material becomes compacted and conglomerated or glued together and so tightly held by swelling as to be difficult of discharge, requiring several hours to discharge a single charge of residuum. The improvement promotes the discharge of this conglomerate mass remaining as residuum rapidly and conveniently.

**Hardware.**

**SHEARS.**—W. J. HANCOCK, Freeland, Colo. The invention has reference more especially to tanners' shears or such as are employed for cutting sheet metal or the like of the type in which the edges of the cutting-blades meet or close on a plane extending to one side of the pivot for the blades, thus to derive an increased leverage for the blades when manipulated through the medium of their rigid handles and to cause the latter to be brought to the outer face of the work operated upon by the shears.

**Heating and Lighting.**

**HEATING SYSTEM.**—J. O'NEILL, New York, N. Y. More particularly this invention relates to heating systems in which a by-pass is furnished about the radiators to maintain the circulation when these are closed, and where under certain conditions the movement of the heating fluid is liable to be somewhat throttled at points and surge laterally through the return openings and meeting the flow-water, diminish or neutralize the circulation. To obviate these difficulties and furnish an arrangement having but few fittings and in which a proper circulation is insured are the principal objects of the inventor.

**Household Utilities.**

**CLOTHES-DRAINING DEVICE.**—L. T. COOK, Atlanta, Ind. One purpose here is to provide a device adapted for use in connection with any form of washboiler, especially rectangular or oval, which drainer normally lies in the bottom of the boiler and is adapted to be lifted up and supported at the top of the boiler when the clothes are to be drained, thus preventing the water spilling over upon the attendant or the support for the boiler. A further purpose is to provide means for lifting the drainer to an upper position, supporting it while in such position, and finally when the clothes are sufficiently drained forcing the drainer in position to conveniently dump the clothes therefrom.

**WATER-CLOSET SEAT.**—L. KRAMER, Evansville, Ind., and F. L. KRAMER, East Orange, N. J. The purpose in this instance is to provide a construction of seat wherein the greatest possible amount of strength will be obtained, together with economy in labor and material. In order to strengthen the structure, glue or its equivalent is applied at the tongue-and-groove connections to the keys and dowels. The grains of the wood are also run to obtain a maximum of strength.

**Machines and Mechanical Devices.**

**SAWMILL-FEED.**—G. S. SERGEANT, Greensboro, N. C. The invention is an improvement in rope or cable feeds for sawmill-carriages. Many objections incident to the use of a certain form of drum are avoided in this invention by a novel construction suitably supported from the mill-frame and adapted for adjustment to exert any suitable tension on the rope. It can be readily applied to mills already built as well as to those in the course of construction.

**MOLD.**—I. ROBBINS, Wilkes-Barre, Pa. Mr. Robbins's invention pertains to a mold which is particularly applicable to the molding of concrete building-blocks and the like. The principal objects of the invention are to provide a mold of great simplicity and of low cost to manufacture and to operate. The device can be used for solid or hollow articles.

**ADJUSTABLE RIG FOR CIRCULAR SAWS.**—J. H. MARTIN, Springfield, Mo. The invention is an improvement in sawing-machines adapted for sawing down trees or cutting up logs and other analogous work. It is more particularly an improvement in that class of machines in which a circular saw is supported in a swinging arm pivoted upon a wheeled frame upon which is carried means for imparting rotation to the saw.

**ROPE-UNTWISTING MACHINE.**—F. A. KAISER, Scranton, Pa. The invention refers to such machines as are used for untwisting twisted strands or fibers. The object is to produce a machine which is simple in construction and which will operate with speed and efficiency. It is intended to be used especially for the purpose of untwisting African fiber, which is a commercial product in the form of a rope.

**RECORDING ATTACHMENT FOR LIQUID-DISPENSING APPARATUS.**—E. C. GRAHAM, Washington, D. C. In this patent the invention is an improvement in recording mechanism, and has for an object the provision of a novel recording mechanism by which to indicate the amount of liquid dispensed and the person dispensing the liquid from a dispensing apparatus.

**SASH-OPERATING MECHANISM.**—G. P. BULL, Ojus, Fla. In this instance the inven-



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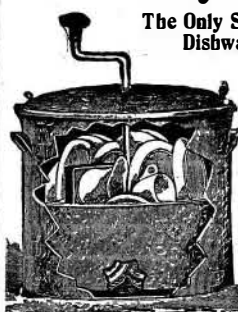
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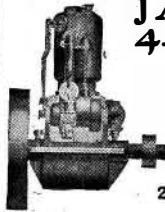
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tion has reference to improvements in mechanism for raising and lowering window-sashes, the object being to provide a simple means in connection with the sash-weight whereby the sash may be conveniently operated from the side of the window-casing.

**Prime Movers and Their Accessories.**

**PISTON-PACKING.**—T. W. W. SMITH, Baltimore, Md. Mr. Smith's improvement relates to packing, commonly known as "packing-rings," for pistons, and has for its object certain improvements in the construction thereof over similar packing as same has heretofore been fashioned, the same to be effective to an improved degree and adapted for use in piston rods, and similar reciprocated bodies requiring packing therebetween and their inclosing body.

**VALVE-GEAR FOR STEAM-ENGINES.**—J. W. DAVIS, Olney, Ill. In this case the invention is an improved means for effecting instant movement of the slide or other regulating valve of an engine, it being adapted to cut off at full stroke, if desired, and the usual eccentric cam or cam-rod and other valve-gear being dispensed with.

**TUBE-CLEANER.**—T. ANDREWS, Rockaway, N. J. The improvement is in devices for cleaning scale or the like from the interior of steam-boiler tubes, the object being to provide a tool for this purpose of the turbine type that may be operated by air, steam, or water pressure and having ports and turbine-blades so arranged that the motive agent may operate with great force.

**Railways and Their Accessories.**

**TRAIN SIGNAL APPARATUS.**—J. R. MONROE, Haskins, Iowa. As its object the invention provides apparatus which will insure that a train-order is delivered to a train before the train is allowed to pass a signal station. More specifically the invention contemplates an arrangement for controlling the semaphore-levers through the medium of the pad upon which the orders are copied.

**RAIL-JOINT.**—W. D. McCURDY, Dennison, Ohio. The joint is formed by means of a metal coupling or connecting-piece applied to the meeting ends of the rails and which is effective without the aid of bolts or spikes, while providing a firm and rigid support for the rail ends. The coupling comprises a form of chair adapted to receive the meeting ends of the rails and a block, preferably of iron, which serves as a wedge for holding the coupling firmly engaged with the rails.

**RAILWAY-TIE.**—C. J. KOFF, Paducah, Ky. In the present patent the improvement has reference to railway-ties, the object of the inventor being the production of a metal tie provided with simple means for attaching rails thereto, and, further, provided with means for yieldingly supporting a rail upon the tie.

**Pertaining to Recreation.**

**NET.**—H. J. HUGHES, New York, N. Y. The object of the invention is to provide a new and improved net arranged to clearly and accurately indicate the side lines of the lawn-tennis court to aid the players in properly serving the ball and to readily determine whether a ball was passed over the net within the proper boundaries.

**CABINET.**—J. L. COLEMAN, Fargo, N. D. The invention pertains to a cabinet intended to be placed in a pool or billiard parlor for the purpose of receiving the balls when removed from the tables. The object is to produce a cabinet of improved construction, which is especially adapted to facilitate the removal of the balls when they are to be racked up or spotted upon the table.

**Pertaining to Vehicles.**

**VEHICLE-WHEEL.**—L. A. ALLWINE, Lorain, Ohio. The invention relates to wheels commonly known as "elastic" or "spring" wheels, and has for its object the cure of objections to wheels of this character as they have been heretofore constructed. It consists of a novel arrangement and construction of cushioning means interposed between two independent portions in the make-up of the wheel and also novel details of construction whereby the invention is practiced.

**LANTERN-HOLDER.**—H. WALDSCHMIDT, Benson, Ill. This invention relates to improvements in holders for lanterns or lamps used on vehicles—such as buggies, wagons, and the like—the object being to provide a holder that will be simple in construction, inexpensive, and having no parts liable to get out of order, and that may be readily placed in position.

**ELECTRICALLY-OPERATED VEHICLE.**—H. DUCASSE, Paris, France. This case is a division of an application for Letters Patent for an electrically-propelled vehicle formerly filed by Mr. Ducasse. His invention relates to an electrically-operated vehicle, and more particularly to the means for supporting the controlling mechanism and other parts related thereto. To this end it comprises a cross-bar extending from one side to the other of the vehicle-frame and carrying the entire group of parts to be thus supported.

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