

ENGINEERING INVENTIONS.

A car axle box has been patented by Mr. Stephen R. Stinard, of Pompton, N. J. The invention consists in fitting a tray having inclined or sloping side walls into the axle box below the axle journal, whereby the setting oiled waste will be forced or crowded against the axle journal and the lubricant be retained in the tray.

A metallic packing has been patented by Messrs. William E. and Frederick G. Brockett, of Park City, Utah Ter. It consists of a gland-like packing ring with lubricant-holding groove combined with fractional packing rings having sloping backs and grooves or recesses, in connection with a special form of stuffing box, being specially adapted for piston rods, valve stems, expansion joints for pipes, etc.

A railway train timer has been patented by Mr. George W. Housel, of Bloomsbury, N. J. This invention covers a special construction of clock and auxiliary features designed to indicate to engineers or trainmen when the last train passed the indicator, as well as the time of day, so that the engineer may know by a glance at the instrument the exact time between his train and the one preceding him.

A splice bar for railroad rails has been patented by Mr. Jonas Potter, of Morrellville, Pa. It consists of a plate with a central chair and end chairs, the rail having its base cut away to the face of the web at each side to form opposite rabbets in the base at the end, and recesses beyond the rabbets, making an economical and effective means of splicing the rails and securing them to the sleepers.

AGRICULTURAL INVENTIONS.

A combined potato digging and harvesting machine has been patented by Mr. Arthur P. W. Wade, of Cedar City, Mo. This invention covers a novel construction, combination, and arrangement of parts in a machine by which the potatoes are plowed out of the ground, separated from the dirt and sticks, and transferred to a wagon or dropped in a row alongside the machine.

A double cutter bar has been patented by Mr. William T. Wardall, of near Manly Junction, Iowa. Combined with two cutter bars and their cutters a spacing strip is arranged between the sections of the finger bar and formed with slots through which the connecting bolts pass, making a double cutter bar which will not clog, and with the parts so constructed that the cutters may be adjusted to operate in the most effective position.

MISCELLANEOUS INVENTIONS.

A curry comb has been patented by Mr. William R. Adams, of Omaha, Neb. The body portion has one toothed face and one plain face, the handle device being held adjustably to the body to allow either face to be used, the handle device consisting of a leather plate and a rubber strip.

A saw gauge has been patented by Mr. Edward S. Nixon, of near Chattanooga, Tenn. It is a novel device which can be readily applied to, a block or board, to be sawed, and held firmly in place thereon, to accurately guide the saw in the direction in which the block or board is to be cut.

A churn has been patented by Mr. William W. Perkins, of Palouse, Washington Ter. A cup-shaped dasher is journaled to rotate in a cream vessel, the dasher having a closed top, a bottom opening and side port, with a radial wing or piston operating when the dasher is rotated to force the cream through the port, and thus cause the butter to come quickly.

A combined mail bag fastener and tag holder has been patented by Mr. Henry N. Ockford, of Jackson, Mich. The body portion has a cross pin and a clamp for holding the mail bag ropes, and a tag holder with an eye to receive the pin of the fastener, with other novel features, for conveniently locking the bag and carrying its indicator tag.

A boot or shoe stretcher has been patented by Mr. Lloyd Nottingham, of Norfolk, Va. It is adapted for stretching a boot or shoe in length as well as width and in the instep portion, the invention covering a novel construction and adaptation of parts, whereby also the stretcher may be used in stretching two boots or shoes at the same time with one screw.

The manufacture of white lead forms the subject of a patent issued to Mr. William P. Talbot, of Brooklyn, N. Y. The invention covers an improved article of manufacture, being a circular lead buckle cast on one face with blade-like ridges on opposite sides of the diameter of the buckle, whereby the ribs will be quickly corroded with the body of the buckle.

A sleigh shoe has been patented by Mr. George A. Stevens, of Hartsville, Mass. It is of that class having a dovetailed groove in its inner face for receiving the bolt for securing the shoe to the runner, the invention covering the formation of the groove and the combination therewith of a bushing of suitable relative shape.

A spirit level has been patented by Mr. Enos F. St. John, of Highland Station, Mich. It consists of a circular tube partially filled with spirit or other proper liquid, mounted in connection with a semicircular graduated plate, whereby the instrument may be used for obtaining level or perpendicular lines or intermediate angles.

A kitchen cabinet has been patented by Mr. John G. Shaffer, of Clay City, Ind. It consists of a case with extension cupboard having centrally hung or pivoted safes, each with semicircular sides and back, the safes being adapted to discharge their contents without the use of a scoop or other means usually employed for that purpose.

A chain wrench has been patented by Mr. William H. Brock, of Brooklyn, N. Y. It is a pipe wrench of novel make, designed to give greater ease in applying the wrench to the pipe, the getting of a firmer

and more manageable grip, while making a strong wrench and one which can easily be repaired or parts replaced when worn.

A felly bolt has been patented by Mr. Duncan W. McKinnon, of North Sydney, Cape Breton, Nova Scotia, Canada. The bolt and nut are formed with re-enforcing sections, the head of the bolt being nicked after the manner of an ordinary wood screw, making an improved bolt for preventing the splitting of the fellyes without detracting from their appearance.

A floor jack has been patented by Mr. John L. Fredericks, of La Grangeville, N. Y. Combined with a brace bar having a spur and head adapted to be struck by a mallet is a pivoted lever and a push bar pivoted to the lever with a series of notches on its under edge, a block pivotally attached to its free end, with a link connecting the push and brace bars.

A conduit for electric conductors has been patented by Mr. Edward E. Greene, of New York City. Its sections are designed to replace and serve as the ordinary curb, and are cast or moulded in iron, artificial stone, or other suitable material, ducts for the conducting cables extending longitudinally through the sections, making a conduit which can be cheaply and easily laid, and affording ready access to the conductors.

A mop wringer and scrubbing brush holder has been patented by Messrs. Zottique R. La Fleche and Joseph A. Ledoux, of Concordia, Kansas. It is so made that the mop may be wrung by winding it upon a roller by means of a small crank, while the brush, pivoted in short arms, may be clamped in any desired position, the device being simple, convenient, and effective.

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