

ENGINEERING INVENTIONS.

A car door has been patented by Mr. Thomas G. Ruffhead, of Renovo, Pa. This invention has special reference to mounting or hanging the door, and is designed to maintain a close joint between the door and car, however much the latter may be warped or sprung out of shape.

A wicket dam has been patented by Messrs. Benjamin F. and John C. Thomas, of Louisa, Ky. The dam is pivoted on a hinged post and supported by a prop abutting on a heater of special construction, whereby the dam can be easily raised and placed in position or lowered to discharge the accumulated waters.

A car coupling has been patented by Mr. Thomas Gaskins, of Arcadia, Fla. The coupling hooks have their front faces curved upwardly and pivoted to work vertically, in combination with horizontal bolts, a shoulder of support in front of the bolts for holding the hooks up, suitable drawheads, and other novel features.

A weighing scale for railway cars has been patented by Mr. Elonild Duplessis, of Lake Weedon, Quebec, Canada. This invention provides means whereby a railway ca. can be weighed at any point on the track, and with equal facility when the car is not standing level, the weight being taken at the four points of support.

A compound rail has been patented by Mr. Edward G. Chamberlain, of San Jose, Costa Rica, Central America. It has a central bar with flanged base and side reversible bars bolted thereto, having their lower edges resting entirely on top of the flanges of the central bar, the central and side bars having their upper edges even to form the tread of the compound rail.

AGRICULTURAL INVENTION.

A sheaf carrier for grain harvesters has been patented by Mr. William Bell, of Morden, Manitoba, Canada. It is made with a fork-shaped support or table to hold the sheaves delivered to it from the binding table, so that it may be conveniently operated by the harvester for dumping the sheaves to the ground, thereby preventing waste and saving time and labor.

MISCELLANEOUS INVENTIONS.

A fruit drier has been patented by Mr. Zachens W. Merithew, of Grand View, Ind. It is intended especially for open-air drying, and provides a simple construction for ample scaffold room in good drying weather, and perfect inclosure by means of the scaffolding in bad weather.

A heating drum has been patented by Mr. Walter Markle, of Tonganoxie, Kansas. It is designed to utilize waste heat from below to heat upper apartments, and provides certain improvements whereby air may be drawn from the heated room without admitting smoke or gas.

A combined wardrobe, bureau, and washstand has been patented Mr. Henry F. Wulff, of San Antonio, Texas. This invention covers a novel construction and arrangement of parts in an article of household furniture designed to be substantial, inexpensive, and very conveniently arranged.

A hoisting machine has been patented by Mr. Fridrich H. A. Peters, of Detroit, Mich. An endless rope is employed for operating the hoisting wheel, which is so constructed that the rope will be prevented from slipping, and will also take a hold upon the wheel to assist in hoisting.

A cider mill has been patented by Mr. Charles W. Boyle, of Bradley, Mich. It has pressing rollers journaled on a frame, with an endless belt passed between the rollers and bed rollers inclined toward one end, to facilitate discharge of the juice, the invention covering various novel features.

A sleigh knee has been patented by Messrs. Herman and Henry Wesle, of Medford, Wis. Combined with the runner and the beam is a cylindrical convex casting secured to the beam, with proper bearing plates, being designed to allow the runner to conform to inequalities of surface over which it passes.

A shell fish refrigerator has been patented by Mr. Henry C. Constantin, of Brooklyn, N. Y. This invention provides a receptacle for clams and oysters in the shell for restaurants, lunch rooms, etc., where they may be kept at an even, cool temperature, and readily withdrawn without opening the doors of the receptacle.

A combined slate and ruler has been patented by Louise M. Dyer, of Yazoo City, Miss. The frame has longitudinally and transversely ranging grooves, and a ruler fitted in the grooves at each side of the slate, these rulers being arranged with pencil guiding slots ranging lengthwise and crosswise of the slate.

A metallic mould has been patented by Mr. Philip F. Dillon, of Savannah, Ga. It is intended for casting metals and permitting of the shrinkage of the casting without subjecting it to strain, having a contractile core and contractile cope to permit of the shrinkage of the casting in the mould without danger of straining or cracking it.

A secondary battery has been patented by Mr. Ludwig Epstein, of Martinikenfelde, near Berlin, Germany. This invention covers a method of preparing powdered lead for electrodes, consisting in adding sulphate of lead to molten metallic lead and stirring the liquid mass until it has been transformed into a finely divided powder, with other novel features.

A baling press has been patented by Mr. William A. Laidlaw, of Cherokee, Kansas. The plunger has a slot fitted to receive a rope, combined with a shaft and a spring for giving it a rotary tendency, the rope secured to the shaft having a number of knots

whereby its connection with the plunger may be adjusted, thus making a press whose plunger rebounds or springs back after each pressing impulse.

A prop for top buggies has been patented by Mr. Isaac Bateman, of Fern, Pa. It is made of a volute-shaped spring, having a square socket formed on its inner and lower end and curved spring arms on its outer and upper end, the whole being constructed integrally, the volute spring being made thinner in its lower portion than the upper portion, to render it more elastic.

An ice creeper has been patented by Mr. Charles J. Lung, of Jamestown, N. Y. It has a metallic plate with spurs projecting from its under side, a toe strap secured to the front edge of the plate and metal clips secured to its rear corners, in connection with an elastic heel or back strap having rings through which the clips pass and by which the band is secured to the plate, the device being readily applied or removed without soiling the hands.

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