ENGINEERING INVENTIONS

A car coupling has been patented by Messrs. Jacob W. Baker and George A. Prescott, of Dover, N. J. Combined with the drawhead and coupling pin is a movable toothed circular stop, adapted to support the pin when raised, and provided with pivots or bearings for operation in relation with the coupling

A car coupling has been patented by Mr. George W. Wilson, of Lanesborough, Minn. This invention covers novel features of construction and the combination of parts in a device by which cars may be coupled automatically as they come together, without requiring the train men to stand between the cars, while it is simple and inexpensive.

AGRICULTURAL INVENTIONS.

A check rower for corn planters has been patented by Mr. Alvin Devine, of Rantoul, Ill. This invention provides a planter that is operated from a wire or rope stretched at the side, wherein the wire need not be detached at the ends when the planter is reversed, while the operating mechanism is strong and simple and not liable to lose motion by slight wear.

A harrow has been patented by Mr. Elihu P. Stone, of Lincoln, Kansas. It has a transverse shaft with crank arms at its ends mounted on the harrow frame, with means for turning the shaft to raise or lower the harrow frame, with various other novel details and combinations of parts, whereby the teeth of the harrow may be raised out of the ground and

A cultivator has been patented by Mr. Wilbur F. Hubbell, of Wauseon, Ohio. It has a tubular plow beam, preferably formed of iron pipe, with a socket forged on its forward end and connected with an upwardly bent arm, making a beam and standard which will support a number of plows, and which may be readily adjusted to place the plows at different distances from each other.

*** MISCELLANEOUS INVENTIONS.

A hoisting machine has been patented by Mr. Patrick Connolly, of Scranton, Pa. The invention covers a machine of novel construction intended principally for use in mines for putting roof timbers and props or struts in place.

A bill or paper file has been patented by Mr. Frank B. Gilbert, of Jefferson, Texas. The invention consists in a file having a recess or slot formed near its piercing end and a tongue pivoted therein, to prevent the bills or papers on the file from

A spokeshave has been patented by Mr. James H. Polhemus, of Brooklyn, N. Y., This invention covers a novel construction and combination of parts in a spokeshave designed to be capable of use as readily in curves of small radius as upon a flat surface, or in apertures large enough to admit the tool.

A wagon jack has been patented by Mr. Nathan L. Hakes, of Grafton, N. Y. The invention covers novel features of construction and combination of parts, whereby there is no tendency to swing the load lifted by the jack, strain on the jack and vehicle being thereby reduced to a minimum, while but little power is required to work the jack.

A windmill has been patented by Mr. Martin V. Harper, of North Yakima, Washington Ter. It has a pivoted vane, presenting more or less surface to the wind, so that when the latter changes to a storm it assists in changing the face of the wind wheel from the direction of the storm, with other novel features, intended to make a simple, durable, and effi-

A spring bed bottom has been patented by Messrs. Frank W. Smith and George D. Livingston, of Dodge Center, Minn. A cover is stretched over the springs and folded at its corners, hooks held in the corners of the frame being passed through the folded corners of the cover, whereby the latter is drawn taut and held from displacement, while it can be readily applied and easily detached.

A hame tug buckle has been patented by Mr. Charles Rozell, of Great Bend, Kansas. It is cast in one piece and in box form, with a central passage for the trace and two side passages for the back pad biilet, to the lower end of which the belly band of the harness may be buckled, thus effecting a saving in stock and in the labor of attaching a separate billet to the

A machine for jointing and shaping shingles has been patented by Mr. Alfred T. Stimson, of Eureka, Cal. It is designed to take the shingles as they leave the shingle saw, bunch them radially in the The SUPPLEMENT contains lengthy articles emoracing machine, ornament the ends of the shingles according the whole range of engineering, mechanics, and physical to a pattern to be detachably clamped or bolted to an arm of the machine, and simultaneously joint their upper longitudinal edge.

A fastener for the meeting rails of sashes has been patented by Mr. John F. Pool, of Mount Carmel, Ill. The fastener consists of a catch mounted within a case, the catch being supported by a pivot pin which carries a forwardly extending spring resting in an aperture formed in the catch, whereby the sash may be held in closed position or may be held

A repeating watch has been patented by Ami F. Pfister, of Locle, Switzerland. The invention consists principally in a device for obstructing the hammers for a constant interval between the strokes of the hour and the quarter, the quarter and the minute, etc., and in novel means for disengaging the winding mechanism when the repeater is to be used, the arrangement of the gongs and the striking mechanism under the dial, with various novel details and combinations of parts, the repeating mechanism not encroaching upon the movement.

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