# No. 15,853. Improvements on Car-Couplings. (Perfectionnements aux accouplages des chars.)

Duncan McKinnon, (assignee of Samuel Brown,) Manton, Mich., U.S., 23rd November, 1882; for 5 years.

Claim-The combination, with the operating-rod K, sliding in keepers L secured to the end of a car, and the lever I pivoted to the end of the car, of the angular rod G F passing through the guide H, secured to the end of the car and provided with the hook a at its outer end, and coupling-pin E.

# No. 15,854. Improvement in Lubricating Compounds. (Perfectionnement dans les composés lubréfiants.)

Edmund Smalley, Spark Hill, N. Y., and Edwin D. Merritt, Jersey, N. J., U. S., 23rd November, 1882; for 5 years,

Claim.-Ist. A lubricating compound containing tallow, pine-tar and sulphur. 2nd. The lubricating compound composed of tallow, sulphur, pine-tar, chloride of sodium and biborate of soda.

No. 15,855. Improvements in Devices for Digging and Lining Wells with Cement. (Perfectionnements dans les appareils à creuser et doubler l s puits en ciment.)

William H. H. Davis, Oakfield, Mich., U. S., 23rd November, 1882; for 5 years.

Withiam H. H. Davis, Uakneid, Mich., U. D., 2010 Hovemon, 2002, for 5 years. Claim.—Ist. The method of constructing cement wells by, first, inserting in the well, as it is dug, sections of circular and collapsible and expansible curbing, then, after bricks are settled into water in the usual manner, removing the lower section of curbing from the well, then lowering into the well and upon the tier of brick an inner collapsible and expansible core or cylinder, then lining the well with suitable cement in the space between the core and the earth wall to within a short distance of the top of the core, then removing the next section of collapsible curving, raising the core and continuing the cementing in this manner until the well is completed. 2nd. The ad-justable cylinder B provided with the cross piece K, in combination with the supporting rope R, so constructed and arranged that the cylinder B may be supported, raised and lowered, entirely indepen-dant of the windlass and ropes used to hoist the earth, or lower the cement. 3rd. The combination of an outer collapsible and expansible curbing cylinder or core. 4th. The outer collapsible and expan-sible cylinder A, constructed in sections and provided with keys S S. 5th. The inner collapsible and expansible cylinder or core B, provid-ed with lapping edges and eye pins, and adjustable cross bar K and bottom L.

#### No. 15,856. Improvements in Shingle Machines. (Perfectionnements aux machines à bardeau.)

Isaïe Fréchette, St. Hyacinthe, Que., 23rd November, 1882; for 5 years.

Isate Frechette, St. Hyzeinthe, Que., 23rd November, 1882; for 5 years. *Claim.*—Ist. The combination of the cam cylinder R, travelling frame or carriage C and saw I. 2nd. The combination of the saw I, table et, planing disk  $b_1$ , casing et having slot $f_1$ , and table  $g_1$ . 3rd. The combination of the cam cylinder R with carriage C. 4th. The combination of the table  $c_1$ , planing disk or wheel  $b_1$ , casing  $c_1$  having slot  $f_1$ , and table  $g_2$ . 5th. The combination of the planing disk or wheel  $b_1$ , casing  $c_1$  having slot  $f_1$ , and table  $g_1$ . 5th. The combination of the cam cylinder R, carriage C, saw I, table et, planing disk or wheel  $b_1$ , casing c having slot  $f_1$ . The combination of the cam cylinder R, carriage C, saw I, table et, planing disk or wheel  $b_1$ , casing  $c_1$  having slot  $f_1$ , and table  $g_1$ .

No. 15,857 Improvement in Car and Journal Bearings. Wheels (Perfectionnement dans les roues des chars et les coussinets des tourillons.)

Gibson W. Fairman, William H. Gray and William R. Austin, New York, N.Y., U.S., 24th November, 1882; for 5 years.

New York, N.Y., U.S., 24th November, 1882; for 5 years. Claim.—1st. A car wheel bearing, formed of semi-annular bushing pieces fitted tightly into the hub of the wheel and having their concave fournal bearing surfaces grooved to fit corresponding V-shaped cir-cumferential grooves and ridges, on the periphery of the axle journal. 2nd. The axle B provided with a series of circumferential bevel edged grooves and intervening ridges extending over the entire wearing sur-face of the journal bearing, to prevent and take up the longitudinal movement of the axle in its bearings. 3rd. In combination with a suitably apertured wheel and grooved axle, the semi-annular tapering bushing and journal bearing provided with internal V-shaped grooves and ridges, and formed with a flange at its widest or inner end, and suitable screw-threads at its outer end, and a nut or cap screwed thereon. 4th. The circumferentially grooved journal provided with a continuous series of V-shaped grooves and ridges, combined with a continuous series of V-shaped grooves and ridges, opening check valve db, in combination with the journal bearing B D D.

No. 15,858. Improvements on Force Pumps. (Perfectionnements aux pompes foulantes.)

William A. Bickford, Hamilton, Ont., 27th November, 1882; (Extension of Patent No. 13,594.)

### No. 15,859. Improvements on Force Pumps. (Perfectionnements aux pompes foulantes.)

William A. Bickford, Hamilton, Ont., 27th November, 1882; (Exten sion of Patent No. 13,594.)

#### No. 15,860. Improvements on Seed Plant-(Perfectionnements ers. ð aux semoirs grains.)

John A. Houser, Fort Valley, Ga., U. S., 27th November, 1882; for 5 vears.

years. Claim.—The seed planter composed of a frame having covering-roller D, provided with crank J. connecting rod I, crank or transverse arm H, oscillating vertical shaft F, bucket wheel G composed of a cen-tral conical disk D, having radial arms or partitions L connected by annular rim M, forming a circumferential series of buckets, two of which are covered, the bed of the frame provided with discharge open-ings PP, and the seed tubes SS extending from the latter to the ground.

#### No. 15,861. Improvements on Ditchers.

(Perfectionnements aux fossoyeuses.)

James Clement, Grand Forks, Dak., U.S., 27th November, 1882; for 5 vears.

Claim--1st. The combination, in a carrier for ditching machines, of the carrying roller D, leather or rubber belt I, slats J and carvas cover K. 2nd. The combination, in a carrier for ditching machines, of the intermeshing carrying rollers D, leather or rubber belt I, slots of the intermesning. J and canvas cover K.

#### No. 15,862. Improvements on Book Racks.

(Perfectionnements aux bois des bibliothèques.) Thomas Gilfillan, (Co-inventor with Edwin J. Bonnett and Albert W. Flanders,) Barnet, Vt., U.S., 27th November, 1882; for 5 years.

Claim-A portable book rack composed of two side frames, consisting each of parallel standards a  $a_1$ , connected by cross bars d and having shoulders or offsets cc midway between said cross-bars, detachable connecting-rod or hanger-roll m, and detachable shelves K notched at the corners, as shown at r.

# No. 15,863. Improvements on Ploughs.

(Perfectionnements aux charrues.)

Jesse S. Felt, Greenwood, Me., U.S., 27th November, 1882; for 5 years.

Jesse S. Felt, Greenwood, Me., U.S., 27th November, 1882; for 5 years. Claim.-Iet. In a reversible plough, the combination, with the ro-tary mould boards  $dd_i$  of the two-faced hinged mould-boards  $ee_i$  pro-vided with pivots q, the long bearing  $e_i$  projecting through the rotary mould-boards and the button u. 2nd. The combination of the stan-dard b, for d having point w, mould-boards  $dd_i$ , pivot bolt f and bevel disks k, forming an adjustable stop for the point w to cause the plow-shares to take more or less land. 3rd. The combination of the rotary mould-boards  $dd_i$ , bevelled disks k, landside ab, the extensible hook q vertically adjustable, and the hinged mould-boards  $ee_i$ . 4th. The combination of the rotary mould boards  $dd_i$ , slot p and bottom u, with the landside ab and pivot bolt f, and adapted to be used with or with-out the hinged mould-boards.

#### No. 15,864. Improvements on Car Couplings. (Perfectionnements aux accouplages des chars.)

James McCree, Lansing, Mich., U.S., 27th November, 1882; for 5 years.

Claim.--Ist. In combination with a draw-bar and concealed within the head therof, a pivoted hook, which will be compelled to disclose the link entrance by the pressure of the entering link thereon. until the point of the hook will engage with the link. 2nd. In combination with a draw-bar within which an entire link is secured out of the way of an entering link a coupling hook pivotally secured and adapted to move radially and vertically, in combination with a dog also pivotally secured within the draw-bar.

#### No. 15,865. Improvements on Metrical Carburetters. (Perfectionnements aux carburateurs métriques.)

Walter M. Jackson, Providence, R. I., U.S., 27th November, 1882; for 15 years.

Walter M. Jackson, Providence, R. I., U.S., 27th November, 1882; for 15 years. Cloim.—Ist. The feed mechanism for supplying continuously a thin film of hydro-carboo to the carburetter, in combination with a meter and connecting operating mechanism, whereby the volume of gas, or air flowing to the burner controls the quantity of carburetting fluid ex-posed to the passing current of gas or air. 2nd. In combination with a valve provided with recess on its face, a valve casing provided with induction and eduction ports, and a meter and connecting mechanism, whereby the carburetter continuously. 3rd. The combination, in a car-buretter, of a single valve provided with recesses of a given capacity with a valve easing in which said valve is adapted to rotate, the valve casing being provided with induction and eduction ports communicat-ing with a supply reservoir and a carburetter respectively, and me-chanism operating in conjunction with the metrical mechanism of the apparatus, to supply the carburetter continuously with the hydro-car-bon in rezulated quantities. 4th. The combination, with a valve having a bevelled conoidal or inclined face, and provided with suitable recesses. of a valve seat having an oppositely bevelled conoidal, or in-clined face and provided with suitable induction and eduction ports and mechanism for operating the said valve. 5th. The combination, with a valve having a bevelled conoidal or inclined face provided eduction ports, for the purpose of metrically supplying the bydro-carbon contained in a suitable reservoir to the measured gas or air. 6th. A recessed valve for distributing carburetting fluid to a passing current of gas or air, the said valve being actuated by a suitable de-valve and valve casing, of a valve shaft, slotted at its inner end, and the shaft of the actuating mechanism provided with a transverse pin,