

therein, a stop pin projecting from said screw, and a spring arranged to move said screw longitudinally to cause said pin to engage a notch, with which said slide is provided, when said screw is out of engagement with said nut, as and for the purpose specified. 5th. The combination of the fixed jaw, the segmental nut secured to said fixed jaw, the movable jaw, the slide secured thereto, the screw rod journaled in said slide, the segmental screw carried by said rod, and the handle secured to said screw rod and having a hub larger than the diameter of said screw, said hub serving as one of the journals of said screw rod and being adapted to enter and fit a hole with which said slide is provided, as and for the purpose specified. 6th. The combination of the fixed jaw, the segmental nut secured to said fixed jaw, the movable jaw, the slide secured thereto, the screw rod journaled in said slide, the segmental screw carried by said rod, the handle secured to said screw rod and having a hub larger than the diameter of said screw, said hub serving as one of the journals of said screw rod and being adapted to enter and fit a hole with which said slide is provided, and a half journal box secured in said slide in front of said screw, as and for the purpose specified.

No. 40,184. Binder. (*Moissonneuse-lieuse.*)

Abram G. Reaman, Ringwood, Ontario, Canada, 1st September, 1892; 6 years.

Claim.—1st. In the knotter device for harvest binders, the combination of the spring secured medially to the knotter frame and guided at its lower end between studs on said knotter frame, with the grip plate also guided between said studs and secured against said knotter frame by said spring and having a hook on its upper edge to hold the twine, and a shank by which it is operated, substantially as shown and described. 2nd. In combination, the spring secured medially to the knotter frame and guided by studs on said frame, the grip plate having a hook formed on its upper edge to hold the twine secured against the knotter frame and having a shank on said grip plate to connect it to a lever operated by a cam wheel so as to reciprocate said grip plate horizontally and the studs on the knotter frame above and below said grip plate to guide it and said spring, substantially as shown and described. 3rd. In combination, the clamping spring secured medially by a set screw to the knotter frame to clamp the grip plate, the grip plate having a hook on its upper edge to hold the twine, and the studs on the knotter frame to guide said grip plate and spring, substantially as shown and described. 4th. The combination of the twine guide formed at the bottom of the needle opening in the frame of the knotter, with the grip plate having a hook thereon, the spring secured medially by a set screw and guided by the studs on the said frame of the knotter, the said guide studs to direct said grip plate and spring, the bell crank hinged to said grip plate, and the cam wheel having a raceway formed on its periphery to operate said bell crank, substantially as shown and described. 5th. The combination of the cam wheel having an inwardly curved raceway formed on a portion of its periphery with the bell crank vibrated by said raceway, the grip plate hinged to said bell crank, and the spring secured medially by a set screw to bear on said grip plate, substantially as shown and described. 6th. The combination of the cam wheel having an inwardly curved raceway formed on a portion of its periphery, with the bell crank vibrated by said raceway, the grip plate hinged to said bell crank, the spring secured medially by a set screw to bear on said grip plate, and the studs on said frame to guide said grip plate and spring, substantially as shown and described.

No. 40,135. Combination Rule, Square and Compass.

(*Règle, équerre et compas combinés.*)

Marshall G. Flick, Toronto, Ontario, Canada, 1st September, 1892; 6 years.

Claim.—1st. In a combined rule, scale and compass the combination of a ruling edge divided into any number of equal divisions serving as a scale and having formed in it a series of pivot apertures adapted to receive the point of the pivot instrument and a series of radii apertures adapted to receive the point of the marking instrument, substantially as described. 2nd. In a combined rule, scale and square, the combination of a ruling edge divided into any number of equal divisions serving as a scale, two or more apertures formed in the body of the instrument, the line passing through which will be at right angles to the ruling edge, substantially as described. 3rd. In a combined scale, square and compass, consisting of a rectangular shaped piece of material having its two longest sides parallel and formed to serve as a ruling edge, each of said ruling edges divided into any number of equal divisions serving as a scale, a series of apertures in the body of said instrument adapted to receive the point of the instrument serving as a pivot, and a series of apertures in the body of the said instrument and in alignment with the first mentioned apertures adapted to receive the point of the marking instrument, and in two or more apertures in the body of the said instrument, one adjacent to either ruling edge, the straight line through which would be at right angles to the said ruling edges, substantially as described.

No. 40,186. Stop Cock. (*Robinet de retenue.*)

Cyrus F. Logan, Lock Haven, Pennsylvania, U.S.A., 1st September, 1892; 6 years.

Claim.—1st. In a stop cock, the combination of the casing having a conical seat and bearing, a series of open V-shaped vertical oil

grooves arranged in a series around in the face of said bearing, and a rotating plug provided with an upper and lower inclosed oil reservoir, and a series of distributing passages communicating with said reservoirs and extending through the body of the plug, substantially as set forth. 2nd. In a stop cock, the combination of the casing having a conical seat and bearing, and an oil chamber located beneath said bearing, a series of vertical V-shaped oil grooves formed in the face of said bearing, and a rotating plug provided with an inclosed reservoir at its upper end, a series of distributing passages communicating with said reservoir and extending through the body of the plug, and a series of supplemental distributing passages in the bottom end of said plug and communicating radially with the oil chamber located beneath said plug and bearing, substantially as set forth. 3rd. In a stop cock, the combination of the casing having a conical seat and bearing, and an oil chamber located beneath said bearing, a series of vertical oil grooves formed in the face of said bearing, a rotating plug mounted within said seat and provided with a lower concaved end inclosing said casing oil chamber, an inclosed reservoir within the top end of said plug, a series of radially extending distributing passages communicating with said reservoir and extending through the body of the plug, and a supplemental series of radially extending distributing passages in the bottom end of said plug and communicating with the space inclosed by the concaved bottom thereof, substantially as set forth. 4th. In a stop cock, the casing having the bottom reservoir C, combined with the rotating plug E, provided with the concaved bottom F, which, when the plug is seated within the casing, incloses the bottom reservoir, and the series of oil passages communicating with the concaved bottom, substantially as set forth.

No. 40,187. Meter for Fluids. (*Compteur à fluide.*)

Fred W. Holt, St. George, New Brunswick, Canada, 1st September, 1892; 6 years.

Claim.—1st. In a meter, the combination, with a cylinder, a slotted hollow guide therein, and a piston moving on said guide, of a projecting rod which reciprocates in the guide, a stop secured to the inner end of the rod, an adjustable sleeve on said rod, a stop secured to the sleeve, both of said stops being engaged by the piston, a registering and a valve mechanism which are operated by the rod, substantially as shown and described. 2nd. In a meter, the combination, with a cylinder, a slotted hollow guide therein and a piston moving on said guide, of a projecting rod which reciprocates in the guide, a stop secured to the inner end of the rod, a sleeve on said rod, a stop secured to the sleeve, both of said stops being engaged by the piston, an interior screw threaded cap swivelled to the outer end of the rod and which engages the outer end of the sleeve, whereby the latter is made adjustable in relation to the rod, and a registering and a valve throwing mechanism which are operated by the rod, substantially as shown and described. 3rd. In a meter, the combination, with a cylinder, a reciprocating rod and a piston, of a shaft journaled to one side of the rod, an arm secured to said shaft which is loosely mounted to the rod, a registering mechanism which is actuated by the shaft, and a valve throwing mechanism which is also operated by the shaft, substantially as shown and described. 4th. In a meter, the combination, with a cylinder, a reciprocating rod, a piston and a partially revolving shaft which is operated by the rod, of a laterally projecting pin in the upper end of the shaft, arms loosely connected to the opposite ends of the said pin, a worm shaft, heads secured thereon which are engaged alternately by the said arms, a registering mechanism which is operated by the worm shaft, and a valve throwing mechanism, substantially as shown and described. 5th. In a meter, the combination, with a cylinder, a reciprocating rod and a piston, of a shaft which is partially rotated by the rod, a second shaft adjacent the first named shaft, a spring which is clamped at its opposite ends to the adjacent ends of the shafts, a valve throwing mechanism which is operated by the said shafts, and a registering mechanism, substantially as shown and described. 6th. In a meter, the combination, with a cylinder, a reciprocating rod and a piston, of a shaft J, which is partially rotated by said rod, arm M, on said shaft, shaft K, a spring which connects the adjacent ends of the shafts, arm S, secured to shaft K, a valve throwing rod which is reciprocated by the arm S, a locking mechanism for said rod which is operated by the arm M, and a registering mechanism, substantially as shown and described. 7th. In a meter, the combination with a cylinder, a reciprocating rod and a piston, of a shaft J, which is partially rotated by the said rod, arm M, shaft K, a spring connecting the adjacent ends of the shafts J, K, arm S, a valve throwing rod reciprocated by the arm S, pivoted latches which lock the said rod at the ends of its stroke, and which are engaged by the arm S, and a registering mechanism, substantially as shown and described. 8th. In a meter, the combination with a cylinder, a reciprocating rod and a piston, of shaft J, which is partially rotated by said rod, arm M, shaft K, a spring which connects the said shafts, arm S, a valve throwing rod which is operated by said arm, pivoted latches having notched ends which engage the arm S, at the end of its throw, inwardly projecting set screws on the opposite ends of the latches, and which are engaged by the arm M, and a registering mechanism, substantially as shown and described. 9th. In a meter, the combination with a reciprocating rod, and a piston, of shaft J, which is partially rotated by said rod, arm M, shaft K, a spring connecting said shafts, arm S, a valve throwing rod operated by said arm, support O, hav-