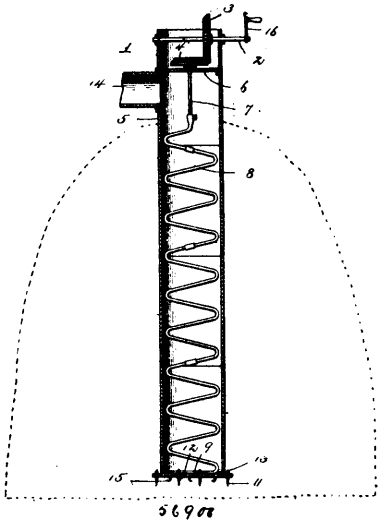
locking mechanism in the other knob adapted to be engaged by the lever therein, substantially as and for the purpose described. 13th. The combination witn a hollow knob, of a series of notched rotatable tumblers mounted therein, a device for engaging the notches in said tumblers, and a connection extending from said lever through the knob spindle and connected to means in the opposite knob, whereby said lever may be actuated, substantially as described. 14th. The combination with a hollow door knob, of a plurality of rotatable tumblers mounted therein and notched, a lever mounted in said knob for engagement with the notches in the tumblers, a spring for giving said lever a normal tendency, and an operating connection for said lever extending through the knob spindle and adapted to be operated from the opposite knob, substantially as described. 15th. The combination with a pair of knobs independently rotatable with relation to each other, of means located in one knob for coupling the two knobs together, and means on the other knob for effecting a a coupling of the two knobs together, substantially as described. 16th. The combination with a hollow knob, of locking mechanism arranged therein, a lever for engaging the lock tumblers, and a latch for maintaining the engagement between said lever and tumblers, substantially as described. 17th. The combination with a hollow knob, of locking mechanism arranged therein, a lever adapted to engage the notched tumblers of the locking mechanism, and a latch for engaging the free end of said lever and provided with means exterior to the knob whereby said latch may be operated, substantially as described. 18th. In a lock, a plurality of nested tumblers having notched rims in combination with projections on the inner and outer surfaces of said rims, substantially as and for the purpose specified. 19th. In a lock, a series of nested tumblers having notched rims, each provided with a series of perforations, in combination with projections having a removable connection with said rims and made interchangable as to the several perforations therein, substantially as described. 20th. A hollow knob, and a series of rotatable tumblers nested therein and provided with notches, as described, in combination with a second knob, having its spindle extended into the first named knob and provided with means for engaging one of said tumblers, and means on each of said tumblers for taking up and rotating the adjacent tumbler, all arranged for joint operation, substantially as described. 21st. The combination with a knob spindle, of a polygonal collar thereon, and a spring for engaging said collar, substantially as described. 22nd. The combination with a knob spindle, of an escutcheon plate, and a spring connected to the inner surface of said plate and bearing at its free end against said spindle, substantially as described.

No. 56,900. Hay Boring Apparatus.

(*Appareil à percer le foin.*)

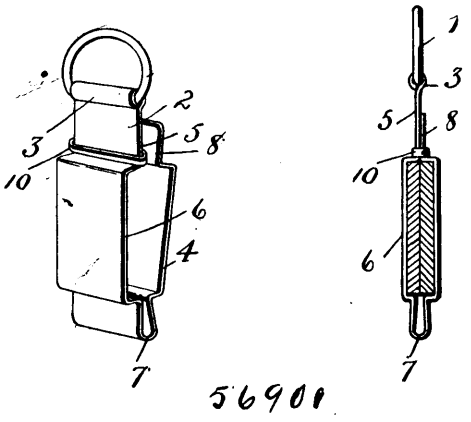


56900

William Cole, Millerton, Pennsylvania, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

Claim.—1st. In a hay boring apparatus, the combination of a cylinder or tube, an auger or rotating shaft within the tube, a wormer operatively connected with the rotating shaft, a knife bar adjusted athwart the lower end of the tube carrying cutting blades outside the body of the tube, and means whereby motion may be imparted to the rotating shaft, substantially as described. 2nd. In an apparatus for boring in hay or straw, the combination of a tube or cylinder, a knife bar carrying knives upon which the cylinder rests, a series of fingers or projections connected with the knife bar, a wormer or elevator for lifting the cuttings within the cylinder, and means for imparting motion to the wormer and cutters, substantially as described. 3rd. In a hay boring apparatus having a rotary shaft and means for operating the same, the combination with such shaft, of a wormer, a knife bar carrying knives outside the periphery of the tube or cylinder and also carrying knives within the periphery of said tube or cylinder, and carrying fingers for loosening and picking up the hay, substantially as described.

No. 56,901. Trace Carrier. (*Porte-traits.*)

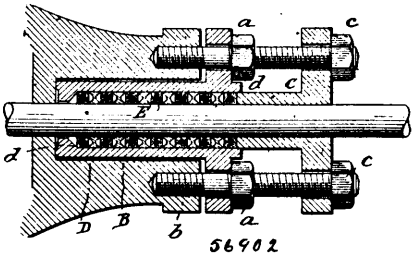


56901

William Oliver Kinne, Fargo, North Dakota, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

Claim.—1st. A trace supporter, provided with a trace securing clamp and supporting means, substantially as described. 2nd. A trace supporter, provided with a rectangular trace-securing clip and means for clamping the same upon the trace, substantially as described. 3rd. In a device of the character described, a flat strap of metal bent to form a hook at one extremity, a neck below the hook, a sprung loop at its opposite extremity, and a trace-securing clip intermediate the neck and the loop, substantially as described. 4th. In a device of the character described, the combination with a securing ring provided with a straight bar, of a flat strap of metal bent to form a hook encircling said bar, a neck below the hook, a sprung loop at its opposite extremity, a trace-securing clip intermediate the sprung loop and neck, and provided with an extremity designed to lie flat against the neck, and a clamping loop encircling the neck and designed to be slid upon the extremity, substantially as described.

No. 56,902. Metallic Packing for Piston and Valve Rods. (*Garniture métallique.*)



56902

Edwin J. Armstrong, Oswego, New York, U.S.A., 5th August, 1897; 6 years. (Filed 17th July, 1897.)

Claim.—1st. A packing for piston and valve rods, consisting of a series of soft, anti-friction metal rings D having a continuous groove formed in each side thereof and formed with broad bearing surfaces, and suitable packing *d* interposed between said rings, whereby endwise pressure may force said last named packing into said grooves, substantially as described. 2nd. A packing for piston and valve rods, consisting of a series of soft, anti-friction metal rings D of cruciform section, and suitable packing *d* interposed between said rings, whereby endwise pressure will crush said rings, substantially as described. 3rd. A packing for piston and valve rods, consisting of a series of soft, anti-friction metal rings D of cruciform section, and braided-wire coils *d* arranged between said rings and at each end of the series of rings, substantially as described. 4th. The combination with the stuffing box A, of a steam engine, of an auxiliary packing-box B arranged within the main box, a series of soft, anti-friction metal rings D of cruciform section, a series of braided-wire packing coils *d* arranged between said rings, and a gland C adapted to follow said packing, substantially as described.