

tially as shown and described. 6th. In a nut tapping machine, a tap holder having a polygonal recess for the reception of the polygonal end of the tap, a plunger in the holder above said recess, a lever for actuating the plunger, and spring pressed pins held to the slide in the holder and adapted to lock the tap in place in the holder, substantially as shown and described. 7th. In a nut tapping machine, the combination, with a tap having a polygonal end formed with an annular semi-circular recess, of a tap holder having a polygonal recess for the reception of the polygonal end of the tap, spring pressed pins held to slide in said holder and adapted to lock the tap in place in the holder, and a plunger having longitudinal movement in the holder, to engage the upper end of the tap and push its recessed end past said pins, substantially as shown and described. 8th. In a nut tapping machine, the combination, with a tap having a polygonal end formed with an annular recess, of a tap holder having a polygonal recess for the reception of the polygonal end of the tap, spring pressed pins held to slide in the said holder, and adapted to lock the tap in place in the said holder, and a plunger held to slide in said tap holder to disconnect the said tap and holder, substantially as shown and described. 9th. In a nut tapping machine, the combination, with a swinging arm, of a nut holder and a clamp to grasp the tap when the arm and attached holder and clamp are swung outward, substantially as set forth. 10th. In a nut tapping machine, the combination, with a swinging arm, of a nut holder thereon, a normally open tap grasping clamp adjacent thereto, and closing on the tap when the arm is swung outward, and a clamp opener or releaser in the path of the clamp when the arm and its attached holder and clamp are swung inward, substantially as shown and described. 11th. In a nut tapping machine, the combination, with a lubricant tank receiver, of an arm mounted to swing into and out of the tank or receiver, and provided with a nut holder on its end within the tank or receiver, substantially as shown and described. 12th. In a nut tapping machine, the combination, with a shaft mounted to turn, of an arm secured on said shaft, a tap grasping clamp or gripper held on said arm to hold the tap in place on the arm, and a releaser operating in conjunction with the clamp and serving to open the same, as set forth. 13th. In a nut tapping machine, the combination, with a nut holder mounted to swing and having an end opening, of a fixed chute adapted to register with the said end opening, and an inclined vibrating chute discharging into the said fixed chute, substantially as shown and described. 14th. In a nut tapping machine, the combination, with a nut holder mounted to swing and having an end opening, of a fixed chute adapted to register with said end opening, and a fixed spring adapted to be engaged by said nut holder and serving to close the end opening of said chute, substantially as shown and described. 15th. In a nut tapping machine, the combination, with a nut holder, of a plate supporting said nut holder, spring pressed jaws pivoted on said plate, and a fixed plate having bevelled arms adapted to be engaged by said jaws to open the latter, substantially as shown and described. 16th. In a nut tapping machine, the combination, with a spindle mounted to rotate and to slide vertically, of a tap holder held on said spindle and adapted to support the tap, a rocking lever for imparting an upward sliding motion to the spindle, and a plunger for disconnecting the tap and its holder when the spindle is on one of its upward movements, substantially as described. 17th. In a nut tapping machine, the combination, with a lever mounted to swing and provided with a ring, of a tap holder passing centrally through said ring and adapted to support the tap, and a second lever fulcrumed on said tap holder and adapted to travel with one end on the said ring, and a plunger held to slide in said holder and operated by said second lever to remove the tap from the holder, substantially as shown and described. 18th. In a nut tapping machine, the combination, with a lever mounted to swing and provided with a ring, of a tap holder passing centrally through said ring and adapted to support the tap, a second lever fulcrumed on said tap holder and adapted to travel with one end on said ring, a plunger held to slide in said holder and operated by the said second lever to remove the tap from the holder, and cams for actuating the said lever and holder to move both simultaneously upward, substantially as shown and described. 19th. In a nut tapping machine, the combination, with a lever mounted to swing and provided with a ring, of a tap holder passing centrally through said ring and adapted to support the tap, a second lever fulcrumed on said tap holder and adapted to travel with one end on said ring, a plunger held to slide in said holder and operated by said second lever to remove the tap from the holder, cams for actuating said lever and holder to move both simultaneously upward, and a spindle having a rotary and a sliding motion and carrying said holder, substantially as shown and described. 20th. In a nut tapping machine, the combination, with a spindle mounted to turn and to slide, of a lever connected with said spindle to raise the same, a cam operating on said lever to raise the same, a finger held in said cam, a toothed wheel actuated by said finger and carrying a pin, and a shaft carrying an arm adapted to be engaged by said pin to turn said shaft, a cam held on said shaft, and a lever actuated by said cam for detaching the tap from the spindle, substantially as shown and described. 21st. In a nut tapping machine, the combination with a spindle mounted to turn and to slide, of a lever connected with said spindle to raise the same, a cam operating on said lever to raise the same, and a spring pressing on said spindle to move the same downward, substantially as shown and described. 22nd. In a nut tapping machine, the combination, with a spindle mounted to turn and to slide, of a lever connected with said spindle to raise the same, a cam operating on said lever to raise the same, a finger held in said cam, a toothed wheel actuated by said finger and carrying a pin, and a shaft carrying an arm adapted to be engaged by said pin to turn

said shaft, substantially as shown and described. 23rd. In a nut tapping machine, the combination, with a spindle mounted to turn and to slide, of a lever connected with said spindle to raise the same, a cam operating on said lever to raise the same, a finger held in said cam, a toothed wheel actuated by said finger and carrying a pin, a shaft carrying an arm adapted to be engaged by said pin to turn said shaft, a cam held on said shaft, and a lever actuated by said cam for detaching the tap from the spindle, substantially as shown and described. 24th. In a nut tapping machine, the combination, with a spindle mounted to turn and to slide, of a lever connected with the spindle to raise the same, a cam operating on the lever to raise the same, a finger held in the cam, a toothed wheel actuated by the finger and carrying a pin, a shaft carrying an arm adapted to be engaged by the pin to turn said shaft, a cam held on said shaft, a lever actuated by the cam for detaching the tap from the spindle, and a detaching device connected with the holder of the said spindle, and actuated from said lever, substantially as shown and described. 25th. In a nut tapping machine, the combination, with a shaft having a slow turning movement, of a cam held on the shaft, a shifting lever actuated by the cam, a clutch held to slide on and to turn with the shaft and connected with the shifting lever, and a gear wheel having a constant rotary motion, mounted loosely on the shaft and provided with a clutch adapted to be engaged by the first named clutch, substantially as shown and described. 26th. In a nut tapping machine, the combination, with a shaft having a slow turning movement, of a cam held on the shaft, a shifting lever actuated by the cam, a clutch held to slide on and to turn with the shaft and connected with the shifting lever, a gear wheel having a constant rotary motion, mounted loosely on said shaft, and provided with a clutch adapted to be engaged by said first named clutch, and a spring pressing on the first named clutch to force the latter suddenly in contact with the gear wheel clutch, substantially as shown and described. 27th. In a nut tapping machine, the combination, with a shaft having an intermittent fast and slow rotary motion, of a cam wheel secured on the shaft and provided with a pin and a recess in its periphery, a lever adapted to be engaged by said pin, and provided with a segmental gear wheel, a gear wheel in mesh with said segmental gear wheel, a second shaft on which said gear wheel is mounted loosely, a spring coiled on said shaft and secured at one end to the gear wheel, and at its other end connected with said shaft, as set forth. 28th. In a nut tapping machine, the combination, with a shaft having an intermittent fast and slow rotary motion, of a cam wheel secured on said shaft and provided with a pin and a recess in its periphery, a lever adapted to be engaged by said pin, and provided with a segmental gear wheel, a gear wheel in mesh with said segmental gear wheel, a second shaft on which said gear wheel is mounted loosely, a spring coiled on said shaft and secured at one end to the gear wheel, and at its other end connected with the shaft, and a segmental arm secured on the shaft and carrying the nut holder, substantially as shown and described. 29th. In a nut tapping machine, the combination, with a shaft having an intermittent fast and slow rotary motion, of a cam wheel secured on said shaft, and provided with a pin and a recess in its periphery, a lever adapted to be engaged by said pin and provided with a segmental gear wheel, a gear wheel in mesh with said segmental gear wheel, a second shaft on which said gear wheel is mounted loosely, a spring coiled on said shaft and secured at one end to said gear wheel, and at its other end connected with said shaft, a segmental arm secured on said shaft and carrying a nut holder, and a tap clamping device held on said segmental arm and adapted to support the tap, substantially as shown and described. 30th. In a nut tapping machine, the combination, with a shaft having an intermittent fast and slow rotary motion, of a cam wheel secured on said shaft, and provided with a pin and a recess in its periphery, a lever adapted to be engaged by said pin and provided with a segmental gear wheel, a gear wheel in mesh with the said segmental gear wheel, a second shaft on which said gear wheel is mounted loosely, a spring coiled on said shaft and secured at one end to said gear wheel, and at its other end connected with said shaft, a segmental arm secured on said shaft and carrying the nut holder, a tap clamping device held on said segmental arm and adapted to support the tap, and a fixed plate for opening said clamping device, substantially as shown and described.

No. 40,855. Fastener for Window Blinds.

(Arrête-store de fenêtre.)

George Hees, Son & Co., Toronto, assignees of Thomas Picton Brown, Belleville, both in Ontario, Canada, 2nd November, 1892; 6 years.

Claim.—As an article of manufacture, a curtain roller clip, consisting of a piece of metal having a body portion C, and teeth B and A bent to an angle to the body portion C, as and for the purpose hereinbefore set forth.

No. 40,856. Expander for Bands.

(Dilatateur pour bandes.)

Piercy Little, Mount Vernon, New York, and Oscar Landback, Northumberland, Pennsylvania, both in the U.S.A., 2nd November, 1892; 6 years.

Claim.—1st. The combination, with the expanders and levers pivotally connected to the expanders, of a cam for forcing the ends