

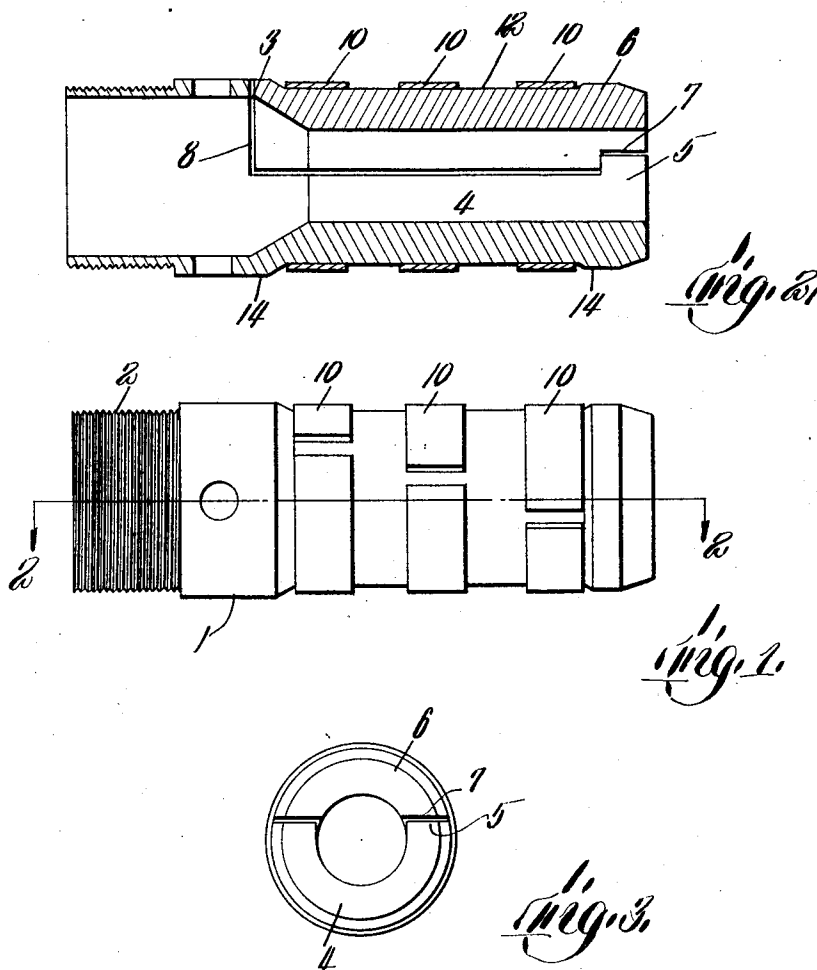
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STOCK PUSHER

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STOCK PUSHER.

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This invention relates to stock pushers such as are used to feed stock in automatic lathes, screw machines and the like and comprises a plurality of interfitting stock-engaging jaws held in assembled relation by springs which cause the jaws to engage the stock. One of these jaws is carried by being preferably integral with a sleeve to which connection may be made for moving the jaws to feed the stock.

For a more complete understanding of this invention reference may be made to the accompanying drawings in which

Figure 1 is a side elevation of the pusher.

Figure 2 is a central longitudinal section through the device on line 2—2 of Figure 1.

Figure 3 is an end view.

Referring to these Figures, 1 represents a sleeve threaded at its rear end as at 2 for attachment thereto of the usual mechanism by which reciprocating motion is imparted to the pusher to feed the stock in the usual manner. This sleeve 1 is cut away angularly as shown at 3 to form a segmental stock-gripping jaw 4 projecting from one end of the main portion of the sleeve and integral therewith. At its outer end this jaw is provided with upwardly extending lugs 5. Co-operating with this jaw 4 is a complemental jaw 6 formed loosely to interfit the cut away portion of the sleeve and having notches 7 in its outer end within which the lugs 5 extend. The jaw 6 is thus held when in assembled relation between the end face 8 of the cut away portion of the sleeve and the lug 5 against disassembly with relation to the jaw 4 in an axial relation, and with the confronting faces of the jaws substantially uniformly spaced from end to end to properly grip the stock passing therebetween through the space of substantially uniform size from end to end where it is engaged by the jaws. The jaws 4 and 6 are prevented from disassembly by relative lateral motion by means of one or more split spring rings 10 which embrace the jaws and rest within the limits of a portion 12 of reduced diameter on the outer faces of these jaws between annular shoulders 14 to retain the rings thereon. These springs 10 not only hold the jaws from relative lateral disassembly, but also hold them into clamping relation to the stock which passes through the sleeve 1 in the usual manner. As herein shown three springs 10 are employed but the number may be made more or less as may be desired and the springs may

be of variable widths and thicknesses or both in order to provide for an adjustment of the pressure by which they are held together and into engagement with the stock. While as shown two jaws are employed, it is evident that more than two might be employed if desired, of which one or more may be integral with the supporting sleeve and one or more separate therefrom and interfitting with the integral jaw or jaws and held assembled therewith by the clamping springs.

Having thus described an embodiment of this invention it should be evident that various modifications might be made therein without departing from its spirit or scope as defined by the appended claims.

I claim:

1. A stock pusher comprising a sleeve, a stock-engaging jaw integral with said sleeve, a mating jaw interfitting with said first mentioned jaw, and means for holding said jaws assembled to form a stock receiving space therebetween of substantially uniform size from end to end.

2. A stock pusher comprising a sleeve, a stock-engaging jaw projecting from one end portion of said sleeve, a mating jaw interfitting with said first mentioned jaw, and a spring for holding said jaws assembled to form a stock receiving space therebetween of substantially uniform size from end to end.

3. A stock pusher comprising a sleeve, a stock-engaging jaw projecting from one end portion of said sleeve, a separate mating jaw interfitting with said first mentioned jaw, and means acting to clamp said jaws against the work to form a stock receiving space therebetween of substantially uniform size from end to end.

4. A stock pusher comprising a sleeve, a stock-engaging jaw projecting from one end portion of said sleeve, a mating jaw interfitting with said first mentioned jaw, and a spring ring surrounding said jaws and acting to hold said jaws assembled substantially uniformly spaced from end to end of said first jaw, and into clamping engagement with stock extending through said sleeve.

5. A stock pusher comprising a sleeve cut away at one end to form a stock-engaging jaw having a shoulder at its outer end, a mating jaw fitting into said cut away portion and being notched to receive said shoulder, and one or more split spring rings surrounding said jaws and acting to hold

said jaws assembled substantially uniformly spaced from end to end of said first jaw, and in engagement with stock passing through said sleeve.

5 6. A stock pusher comprising a sleeve cut away at one end to form a segmental stock-engaging jaw having a shoulder at its outer end, a mating segmental jaw fitting into said cut away portion and being notched to receive said shoulder, and one or more split
10 spring rings surrounding said jaws and acting to hold said jaws assembled substantially uniformly spaced from end to end of said first jaw, and in engagement with stock
15 passing through said sleeve.

7. A stock pusher comprising a sleeve cut away at one end to form a segmental stock-engaging jaw having a shoulder at its outer end, a mating segmental jaw fitting into said
20 cut away portion and being notched to re-

ceive said shoulder, and one or more split spring rings surrounding said jaws and acting to hold said jaws assembled substantially uniformly spaced from end to end of said first jaw, and in engagement with stock
25 passing through said sleeve, said jaws being of reduced diameters between their ends forming shoulders to retain said rings in position.

8. A stock pusher comprising a sleeve, a
30 stock-engaging jaw carried by said sleeve, a second separate stock-engaging jaw interfitting with said first jaw in a manner to prevent relative axial disassembly thereof and substantially uniformly spaced from end to
35 end of said first jaw, and means for preventing lateral disassembly thereof.

In testimony whereof I have affixed my signature.

FRANK L. CONE.