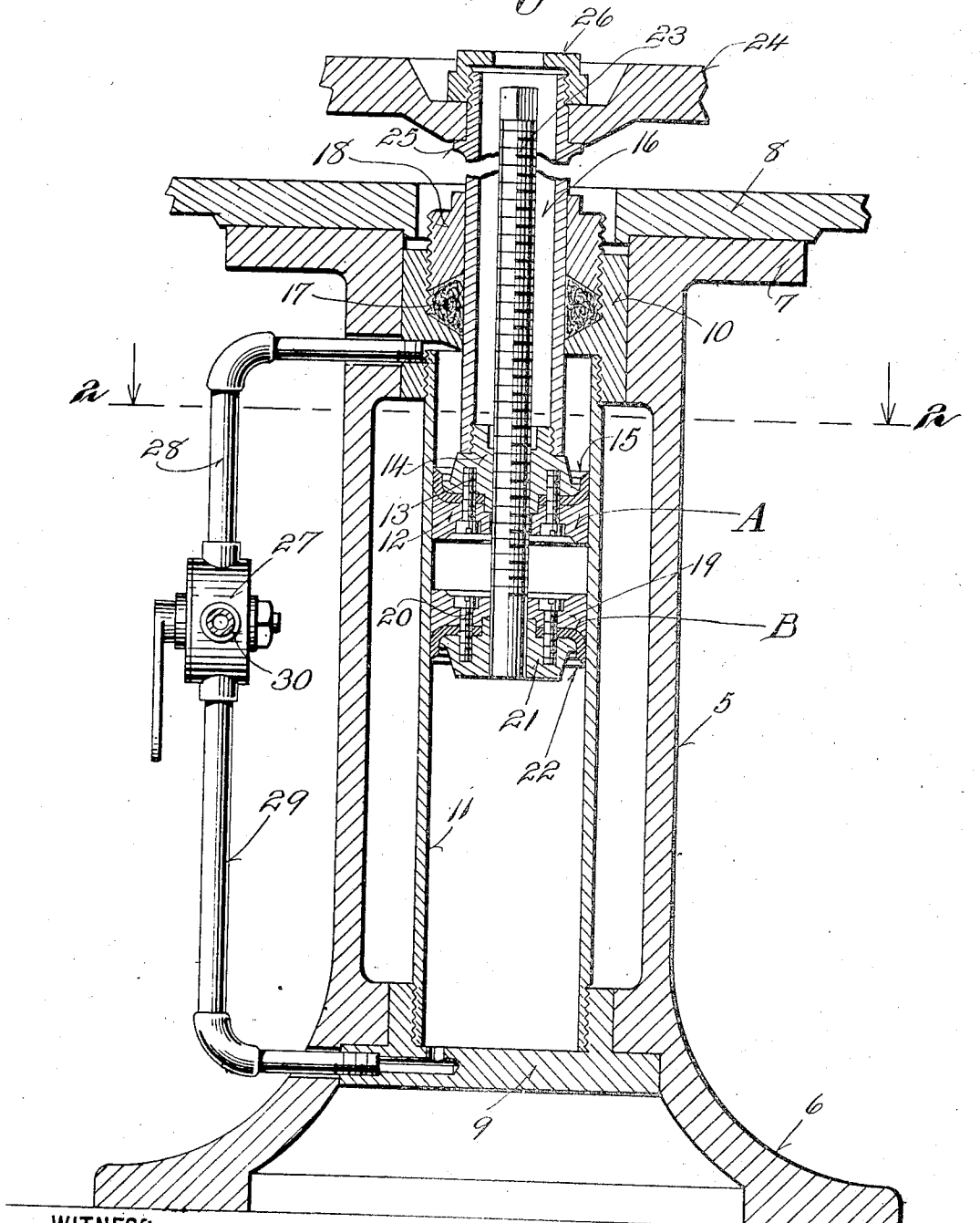


J. W. DEARSLEY,
MOLDING MACHINE.
APPLICATION FILED APR. 8, 1919.

1,325,006.

Patented Dec. 16, 1919.
2 SHEETS—SHEET 1.

Fig. 1.



WITNESS

INVENTOR

J. F. Britt

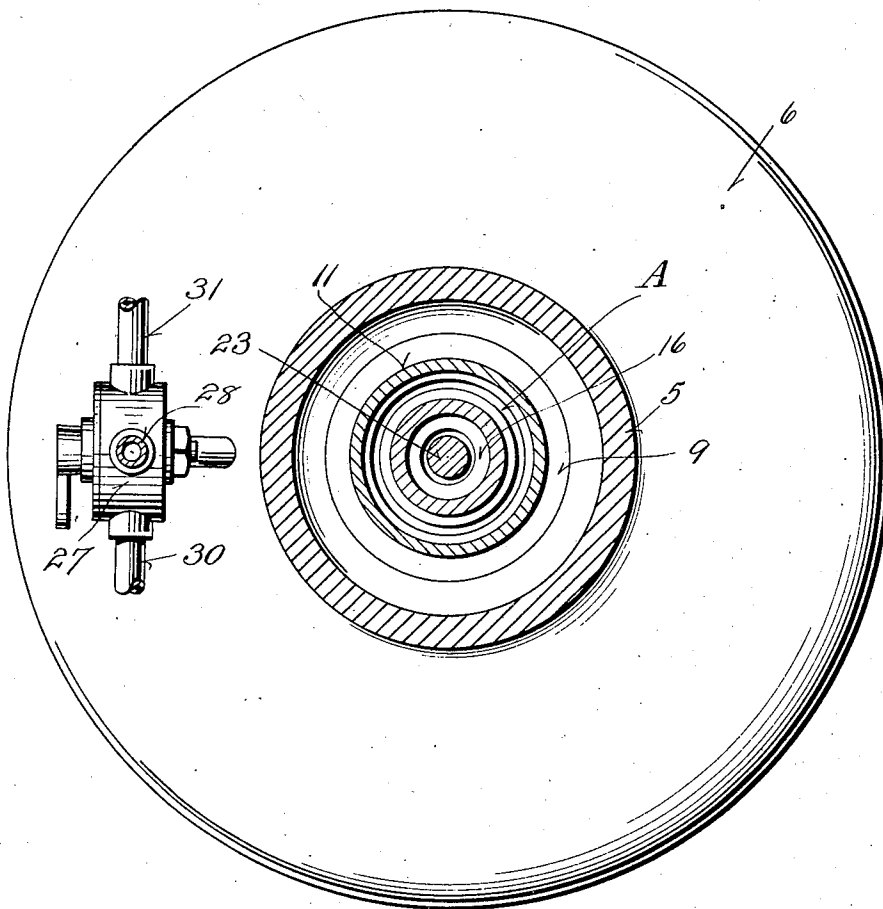
John W. Dearsley
BY *Young & Young*
ATTORNEYS

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Fig. 2.



WITNESS

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UNITED STATES PATENT OFFICE.

JOHN W. DEARSLEY, OF RACINE, WISCONSIN.

MOLDING-MACHINE.

1,325,006.

Specification of Letters Patent.

Patented Dec. 16, 1919.

Application filed April 8, 1919. Serial No. 288,607.

To all whom it may concern:

Be it known that I, JOHN W. DEARSLEY, a citizen of the United States, and resident of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Molding-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to new and useful improvements in devices for adjusting the length of stroke of a reciprocating piston, and is more particularly directed to the embodiment of such an arrangement in a pneumatically operative molding machine, whereby to provide for variation of the degree of movement of the pattern shifting member of the machine.

It is in general the object of my invention to simplify and otherwise improve the structure and to increase the efficiency of devices of this character.

More particularly, it is my object to provide a stroke adjusting mechanism for a piston, which is carried entirely by the piston and which is readily operable from a point exterior of the cylinder in which the piston travels.

With the above and other objects in view, which will be apparent as the description proceeds, my invention resides in the novel features of construction, combination and arrangement of parts as hereinafter described and defined by the appended claims, it being understood that changes in the precise embodiment might be made by those skilled in the art, without departing from the spirit of the invention.

Figure 1 is a vertical sectional view through the base portion of a molding machine embodying my invention.

Fig. 2 is a transverse sectional view there-through on the line 2—2 of Fig. 1.

Referring now more particularly to the accompanying drawing, 5 designates the main standard of the molding machine constituting the present embodiment of my invention, this standard being tubular in shape and having its lower portion flared to form the supporting base 6, the standard being provided at its upper end with an outwardly extending annular flange 7 to which is secured the bottom 8 of the pattern stripping portion of the machine, the upper portion of the machine forming no part of my invention and being hence not specifically shown. A lower cylinder head block 9 is

secured in the lower portion of the standard and an upper cylinder head block 10 is mounted in the upper portion of the standard, the ends of a cylinder 11 being threaded in these blocks and thus mounted concentrically in the standard and closed at its ends by the blocks.

Reciprocable in this cylinder is a piston comprising extensibly connected upper and lower sections A and B respectively. The upper piston section A comprises a block 12 substantially equal in diameter to the diameter of the cylinder and connected by screws 13 with a superposed block 14 of slightly smaller diameter, a cup shaped washer 15 being clamped between these blocks by the action of the screws 13. The stem 16 of the piston is threaded on the upper block 14, this piston stem being tubular in the present instance and slidably extending through the upper cylinder head 10, said head being recessed for the reception of packing 17 and a follow sleeve 18 to provide a packing gland for the piston stem. The lower piston section comprises an upper block 19 substantially equal in diameter to the diameter of the cylinder and connected by screws with a lower block 21 whereby to clamp a cup shaped washer member 22 therebetween. The connection of the piston section is effected by a screw shaft 23 which has its lower end secured in the block 19 and which is passed through the blocks 12 and 14 of the upper piston section A, said shaft being in threaded connection with the latter block. The upper end of the shaft terminates adjacent the upper end of the piston stem and is squared for the reception of a suitable wrench.

The piston stem 16 is utilized in the usual manner to carry the pattern crab plate 24, which seats on an annular shoulder 25 outstanding from the upper portion of the piston stem and which is retained in place by a centrally apertured cap 26 threaded on the upper extremity of the piston stem.

Admission of and exhaustion of operating fluid with respect to the ends of the cylinder is effected by a conventional valve 27 from which pipes 28 and 29 extend respectively for communication with cylinder ports in the head blocks 9 and 10. This valve is provided with the supply pipe 30 and an exhaust 31, and since the valve may be of any preferable conventional nature to procure reciprocating movement on the pis-

ton in either direction, no specific construction is shown therefor.

An exceedingly simple arrangement has thus been provided whereby the operative stroke of the piston may be adjusted by reason of its extensible nature, and this adjustment may obviously be effected without interfering with the sealing of the cylinder.

While I have shown my improved stroke adjusting means as particularly applied to a molding machine it will be appreciated that the adjusting means may find use in other connections and that various changes and modifications of the structure herein illustrated may be employed to meet differing conditions of use and manufacture without departing in any manner from the spirit of the invention.

What is claimed is:

1. The combination with a cylinder of a piston disposed therein, means for procuring reciprocation of the piston, a tubular stem on the piston extending outwardly of the cylinder and means disposed in said stem and extending into the cylinder for varying the length of stroke of the piston.

2. The combination with a cylinder of a pair of piston sections slidable therein, a tubular stem extending from one of the piston sections outwardly of the cylinder and a shaft secured to the other piston section

and threaded to pass through the first named piston section and disposed in the tubular stem.

3. The combination with a cylinder, of a pair of piston blocks therein, a member secured to each of said blocks, a cupped washer disposed between each block and a corresponding member and having its peripheral bearing portion turned to engage the cylinder, a tubular stem secured to one of the piston blocks and extending outwardly of the cylinder, and a shaft secured to the other piston block and threaded in the first named piston block, said shaft being extended in the stem to provide means for adjustably spacing the piston blocks.

4. A machine of the class described including a tubular base standard, a pattern stripping portion mounted on said standard, a vertical cylinder mounted in the standard, a piston in the cylinder, a tubular stem for said piston extending through the top of said cylinder, a pattern crab plate mounted on the upper end of the stem, and means disposed in said tubular stem and extending into the cylinder for varying the length of stroke of the piston.

In testimony that I claim the foregoing I have hereunto set my hand at Racine, in the county of Racine and State of Wisconsin.

JOHN W. DEARSLEY.