

No. 720,269.

PATENTED FEB. 10, 1903.

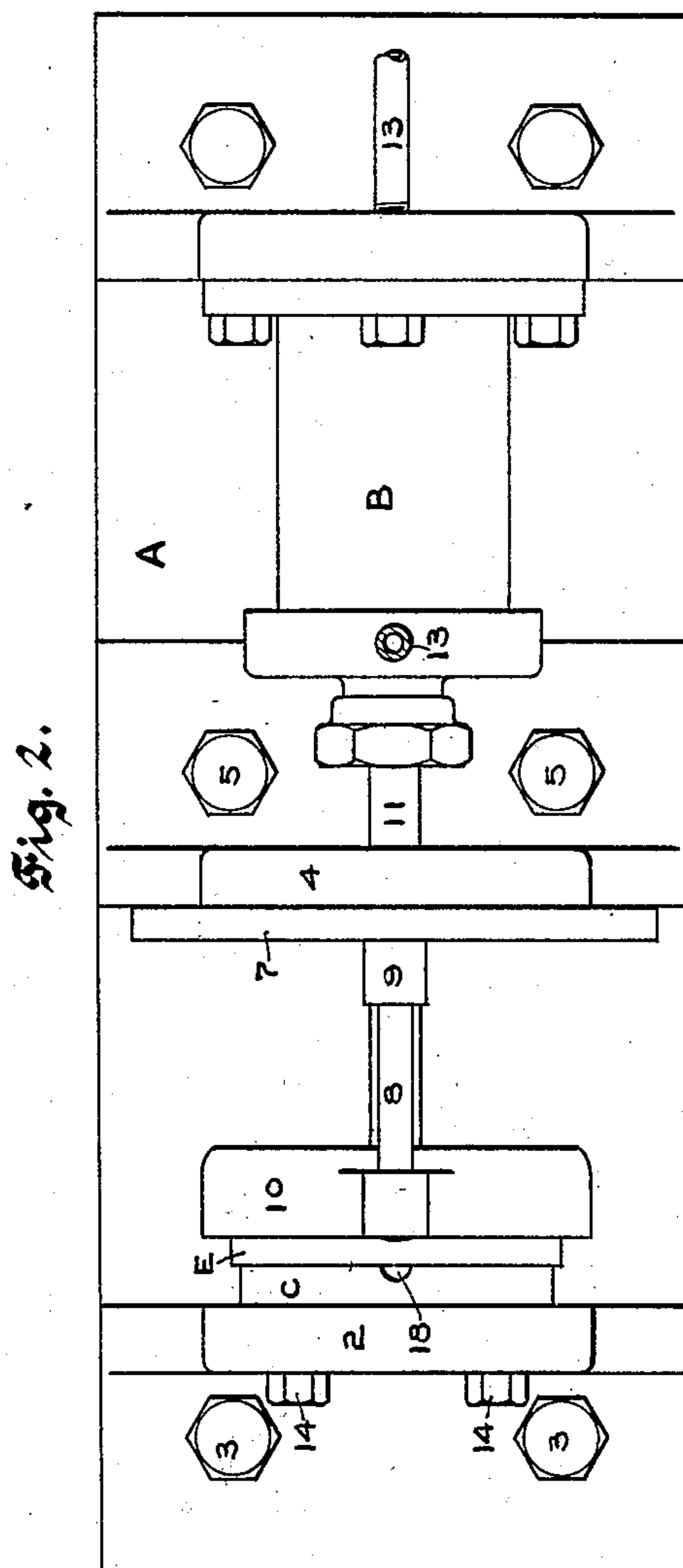
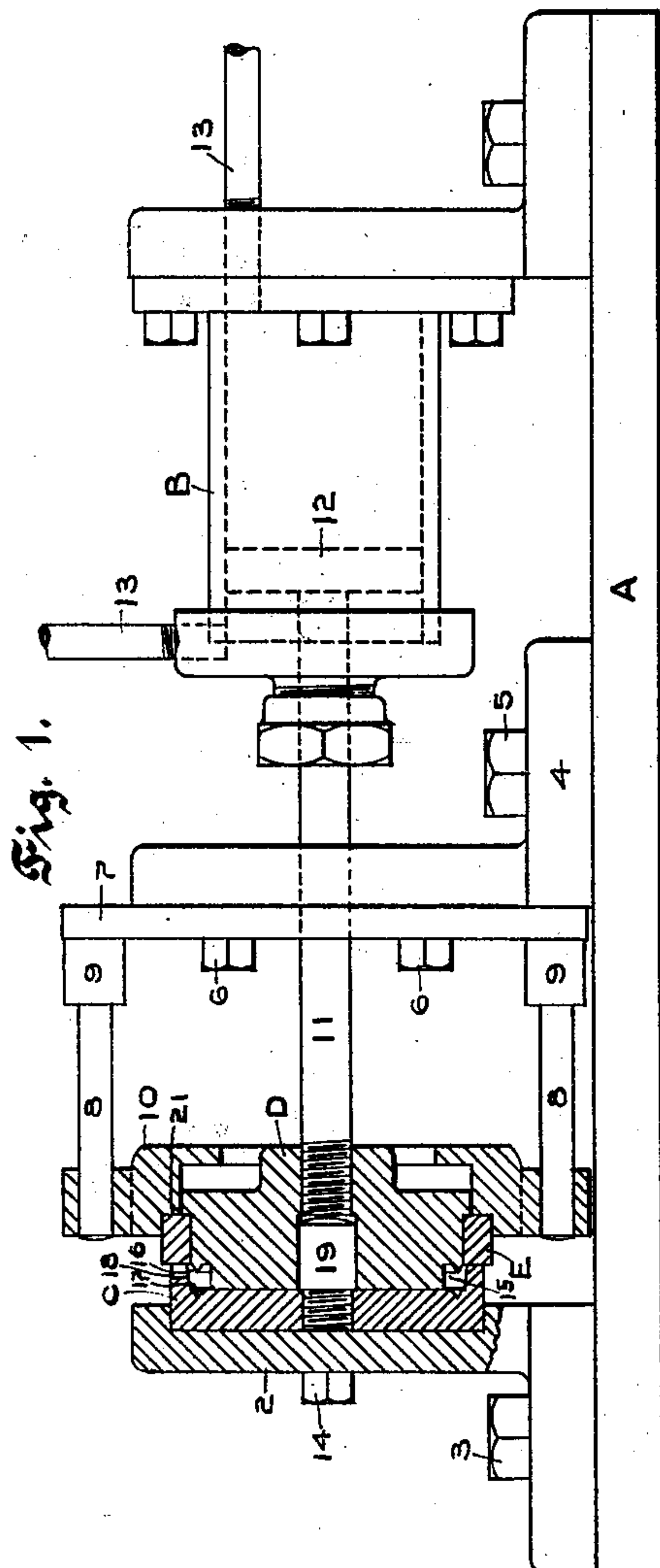
S. B. MACK.

MOLD MECHANISM FOR CASTING PACKING RINGS.

APPLICATION FILED JUNE 28, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses,
W. H. Palmer.
Emily Eastman Otis

Inventor,
Samuel B. Mack.
by J. A. Johnson
his Attorneys.

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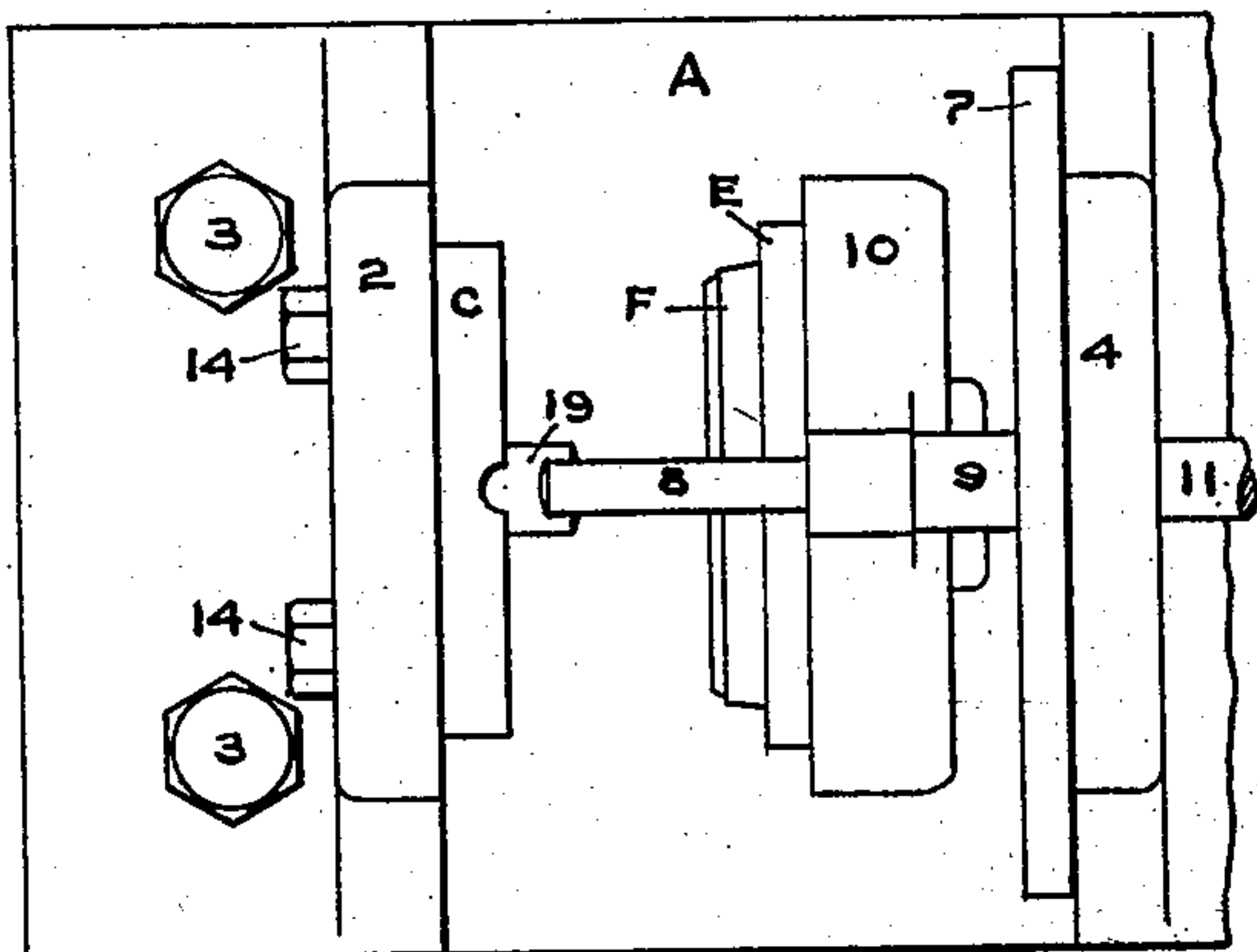
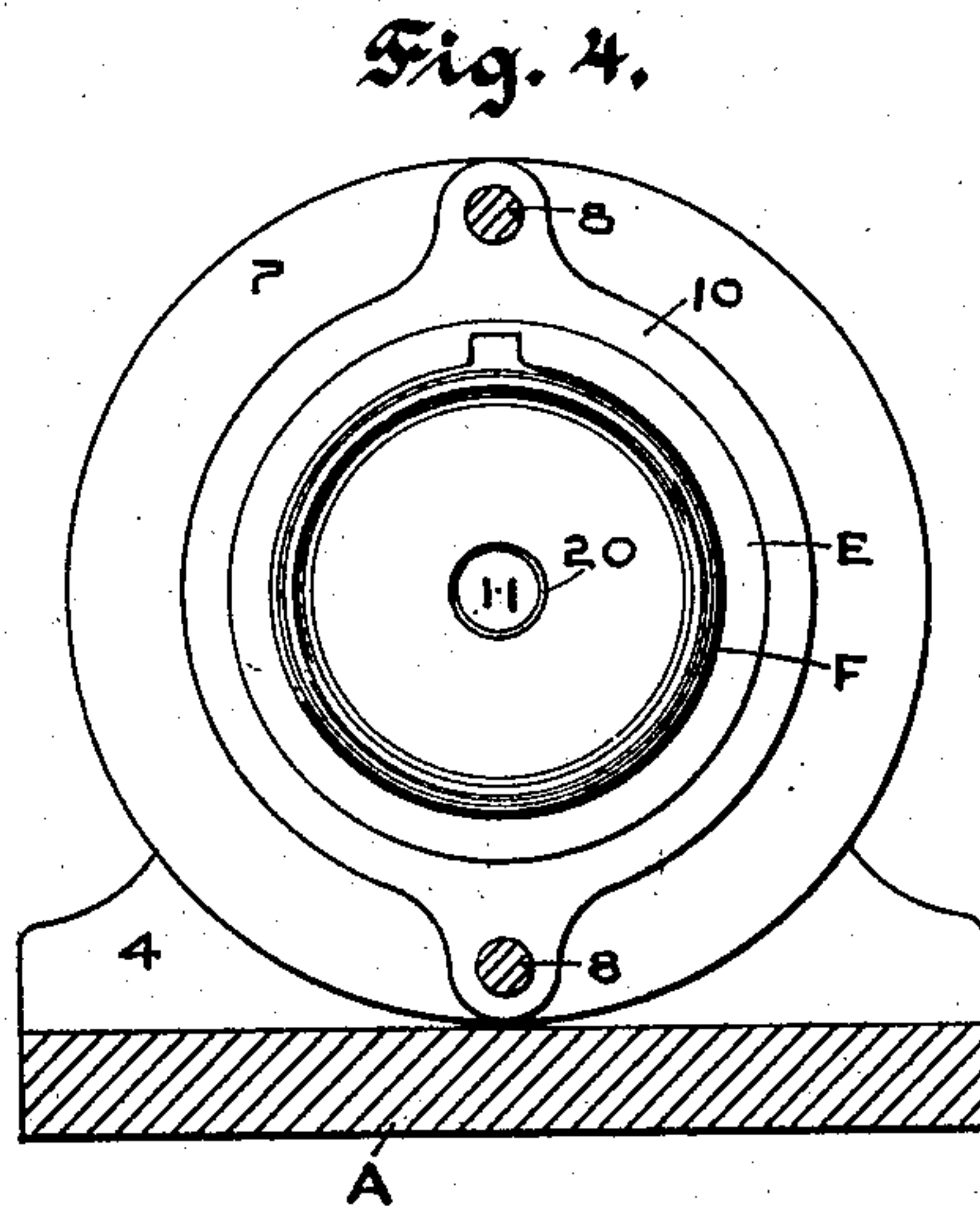
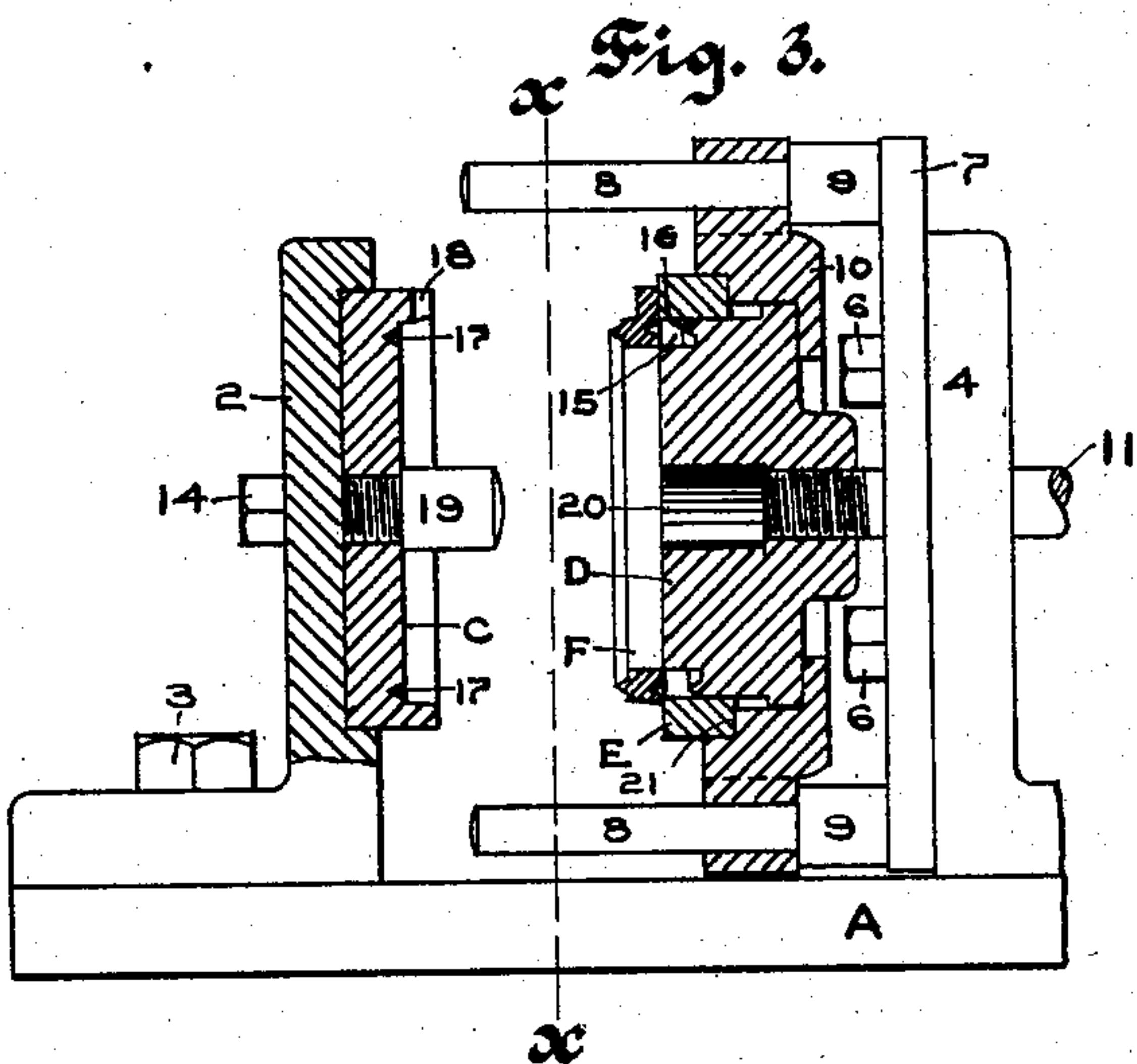
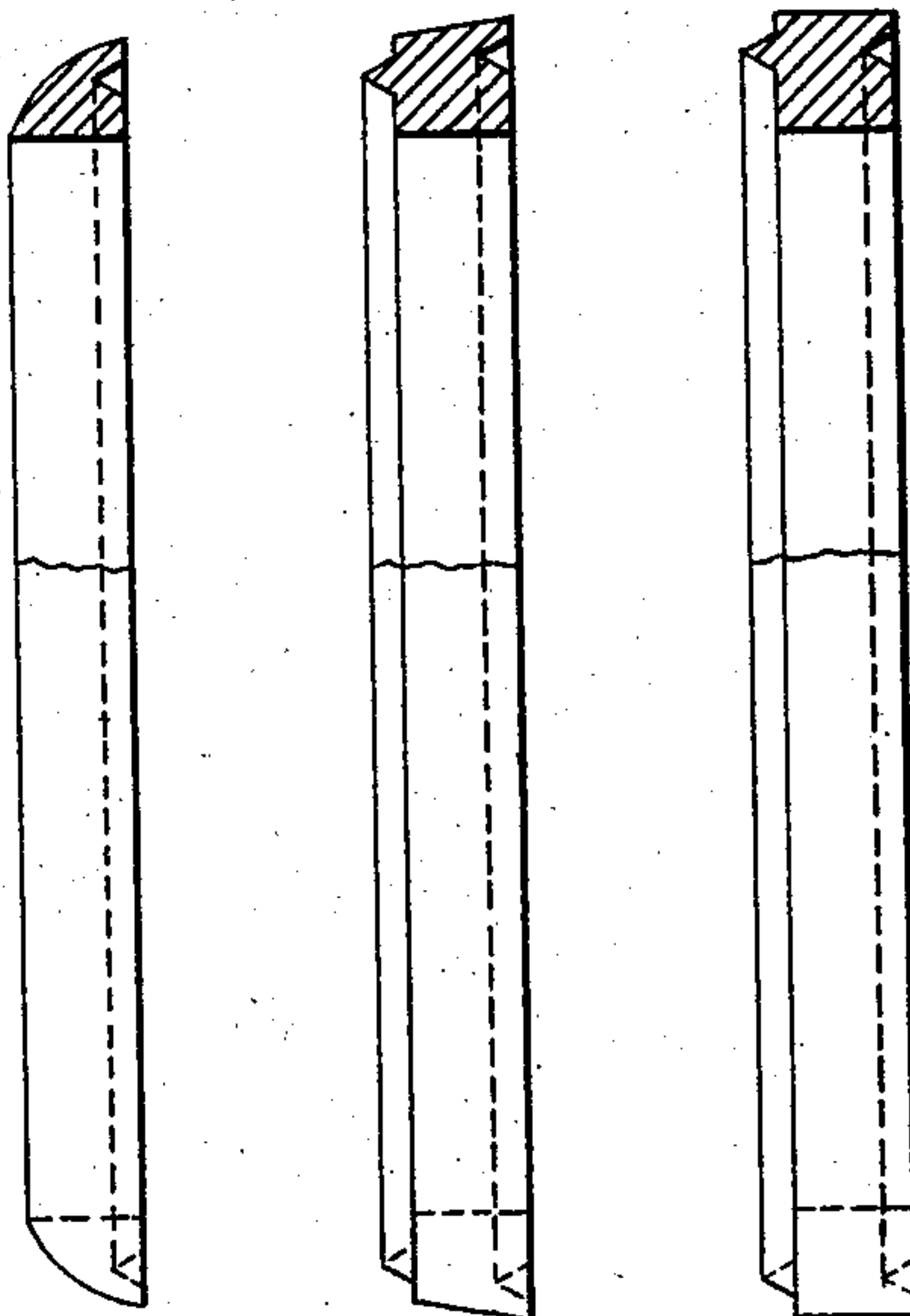


Fig. 6. Fig. 7. Fig. 8.



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UNITED STATES PATENT OFFICE.

SAMUEL B. MACK, OF ST. PAUL, MINNESOTA, ASSIGNOR OF TWO-THIRDS TO ALFRED MUNCH AND SAMUEL R. PARSLow, OF ST. PAUL, MINNESOTA.

MOLD MECHANISM FOR CASTING PACKING-RINGS.

SPECIFICATION forming part of Letters Patent No. 720,269, dated February 10, 1903.

Application filed June 28, 1902. Serial No. 113,555. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL B. MACK, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Mold Mechanism for Casting Packing-Rings, of which the following is a specification.

My invention relates to improvements in mold mechanism for casting packing-rings, its object being particularly to provide means for removing the cast ring from the male mold; and it consists, further, in the features of construction and combination herein-
after particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of the mold mechanism, the molds and the adjacent parts being shown in section. Fig. 2 is a top elevation of the same. Fig. 3 is a longitudinal section of the molds and adjacent framework. Fig. 4 is a section on line *xx* of Fig. 3. Fig. 5 is a top elevation of the mechanism shown in Fig. 3; and Figs. 6, 7, and 8 are details, partially broken away, of packing-rings cast by my invention.

In the accompanying drawings, A represents the base of the framework.

2 represents the female-mold holder, secured by bolts 3 upon one end of the base.

4 represents an angle-plate secured by bolts 5 to the base A. Secured upon the face of the angle-plate 4 by means of bolts 6 is a plate 7, carrying forwardly-projecting rods 8, buffer-rings 9 being arranged upon the inner ends of the rods. Slidably supported upon the rods 8 is the stripper-ring holder 10. Slidable through the angle-plate 4 and plate 7 is a piston-rod 11, connected with a piston 12, arranged in the cylinder B, said cylinder being connected by pipes 13 with a suitable source of steam or compressed-air supply.

C represents the female mold, secured by bolts 14 in the mold-holder 2.

D represents the male mold, adapted to be secured upon the threaded end of the piston-rod 11.

E represents the stripper-ring, which surrounds the male mold, as shown in Figs. 1 and 3.

The male mold is formed with a cut-away portion 15, into which projects the rib 16. The female mold is formed with a corresponding groove 17 and is also formed with a suitable gate 18.

The female mold C is provided with a central stud 19, adapted to slide into the opening 20 in the male mold D, forming a guide therefor.

Fig. 1 shows the position of the parts ready to be used to cast a ring. In this position of the parts the stripper-ring E, which surrounds the male mold, will bear against the outer edge of the female mold, as shown in Fig. 1. The metal to form the ring is then poured into the space 15 through the gate 18. As shown in Fig. 1, when the ring is being cast the stripper-ring E rests against the shoulder 21 of the male-mold holder 10, and the male mold stands some distance in front of the rear wall of the holder to permit of movement of the mold within the holder. Upon the ring being cast the piston 12 is actuated to withdraw the male mold from the female mold and with it the ring F, which lies within the space 15 around the end of the mold. The male-mold holder is withdrawn until it strikes the buffer-rings 9, which stop the travel of the holder. The continued movement of the piston draws the male mold rearwardly within the holder, and as the stripper-ring is held stationary by the holder the continued travel of the mold will cause the stripper-ring to push the cast ring away from the male mold, as shown in Fig. 3. The parts are then adapted to be returned to the position shown in Fig. 1 to allow of further use.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination, a female mold, a male mold, a stripper-ring surrounding said male mold in position to make contact with the female mold when the molds are closed, and means for closing said molds.

2. In combination, a female mold, a male mold, a stripper-ring surrounding said male mold, a holder for said male mold, means for sliding said holder, and means for sliding said male mold within said holder, for the purpose set forth.

3. In combination, a female mold, a male mold, a holder for said male mold, means for slidably supporting said holder, a shoulder carried by said holder, a stripper-ring surrounding said male mold and abutting against said shoulder, means for sliding said holder, means for sliding said male mold within said holder, and means for limiting the movement of said male mold within said holder.
- 5 4. In combination, a female mold, a male mold, a stripper-ring surrounding said male mold, said stripper-ring abutting against said female mold and extending inward beyond the edge of the same when the molds are brought together, and means for bringing 15 said molds together.
- In testimony whereof I affix my signature in presence of two witnesses.
- SAMUEL B. MACK.
- Witnesses:
H. S. JOHNSON,
EMILY EASTMAN OTIS.
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