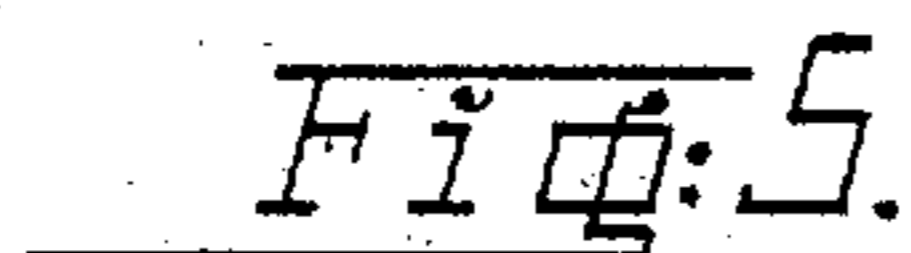
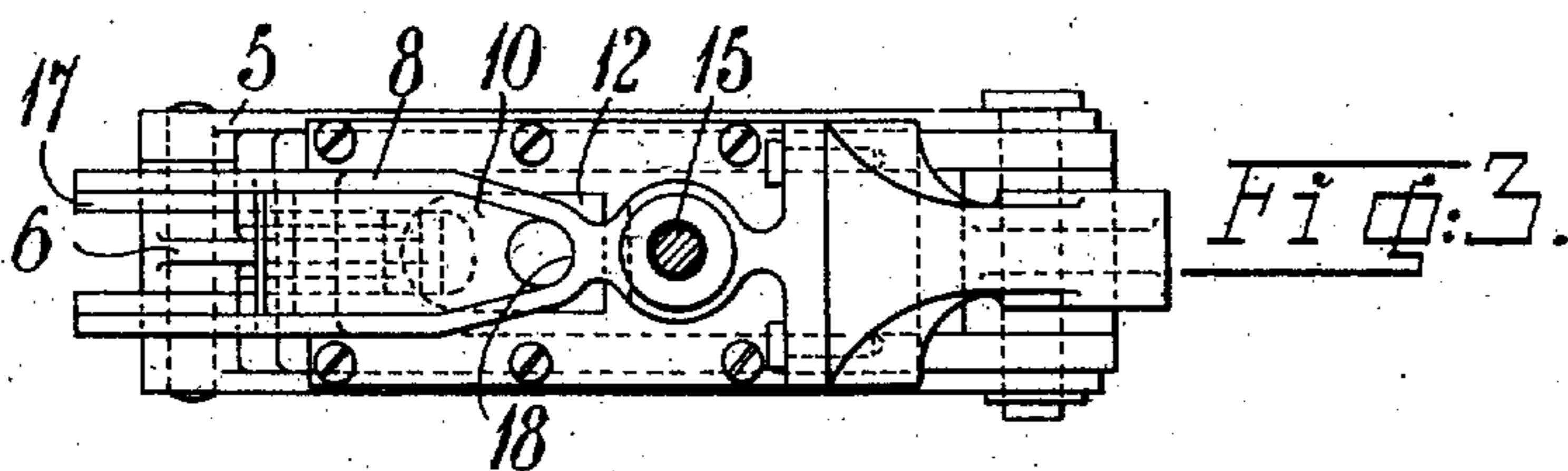
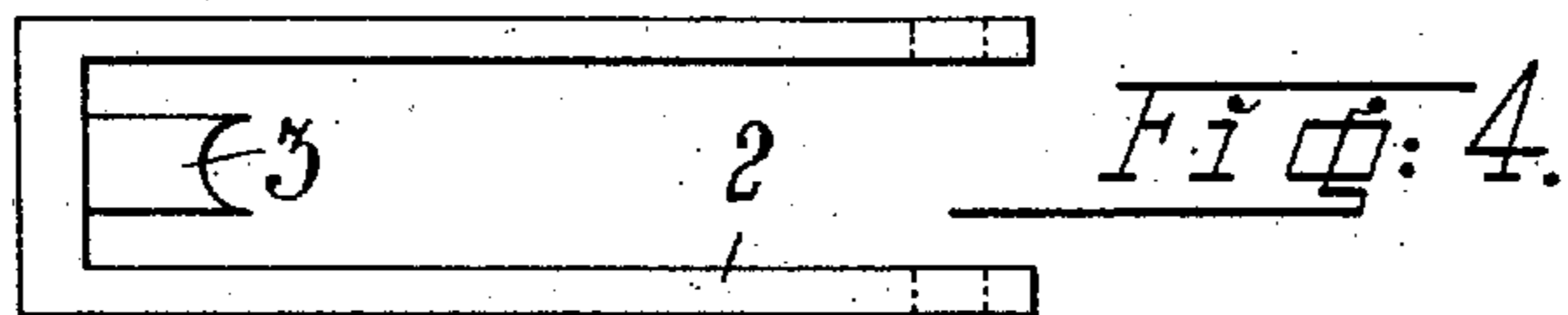
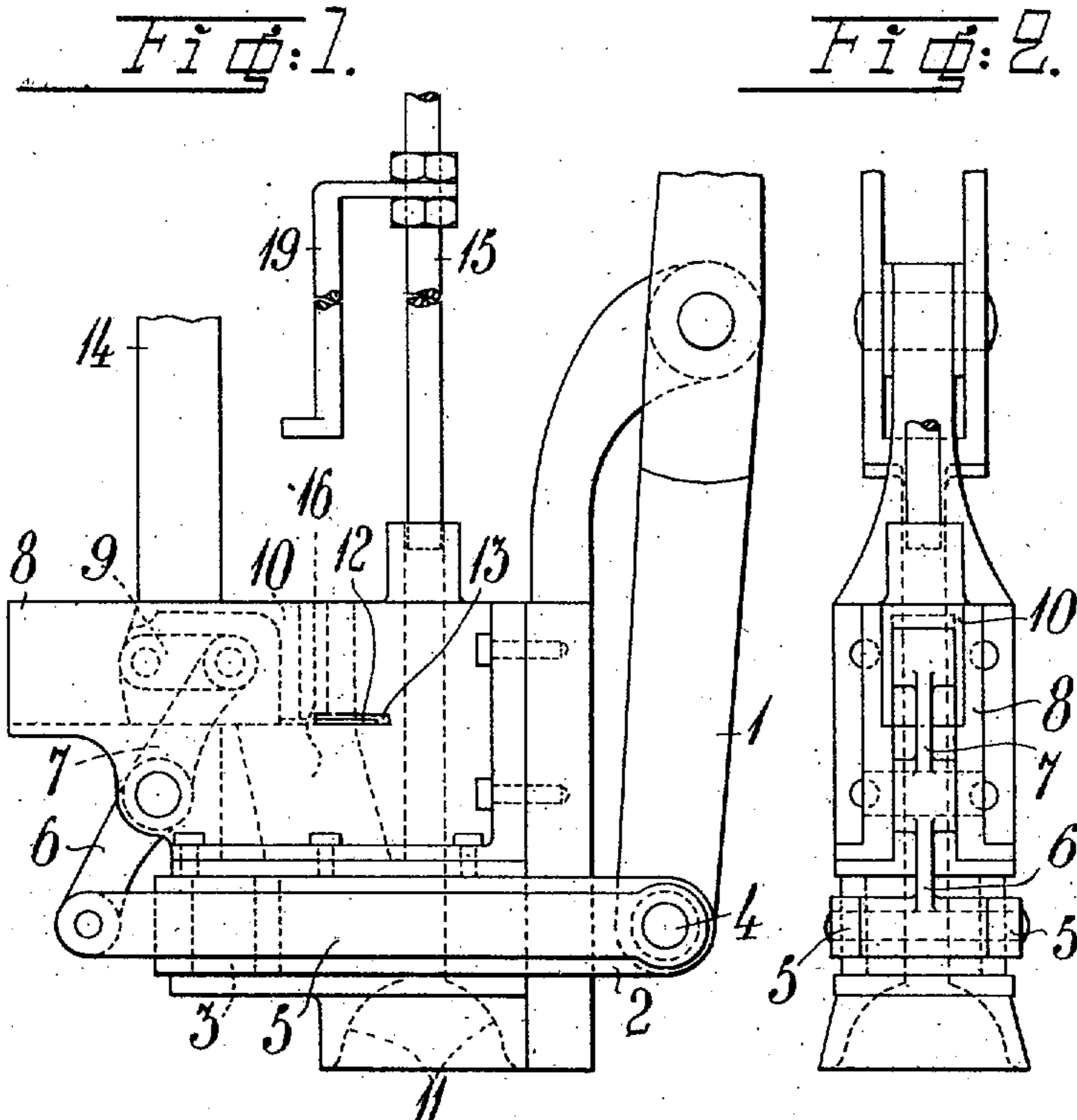


J. K. LANNMARK.  
CORKING MACHINE.  
APPLICATION FILED JULY 17, 1908.

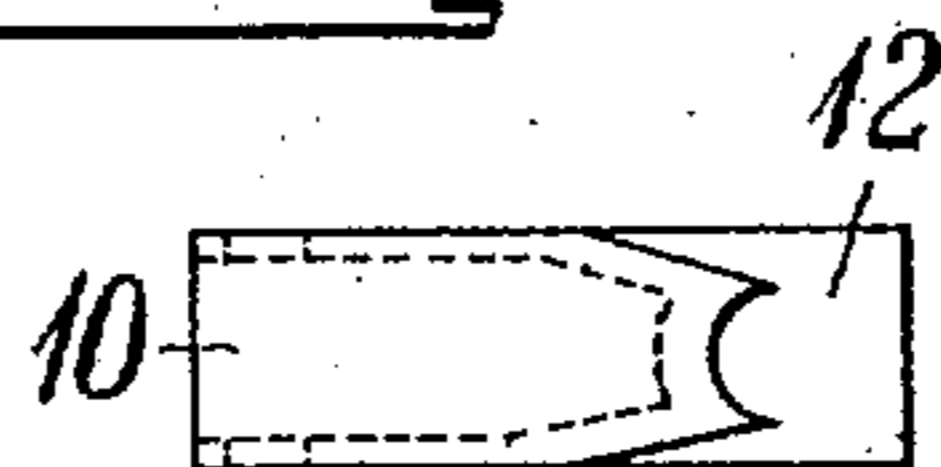
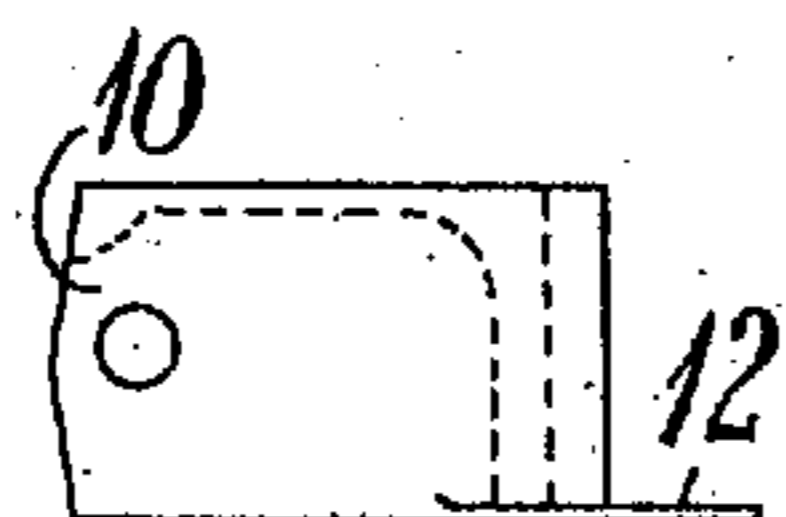
973,522.

Patented Oct. 25, 1910.

2 SHEETS—SHEET 1.



Witnesses:  
H. D. Smith.  
E. W. Morgan.



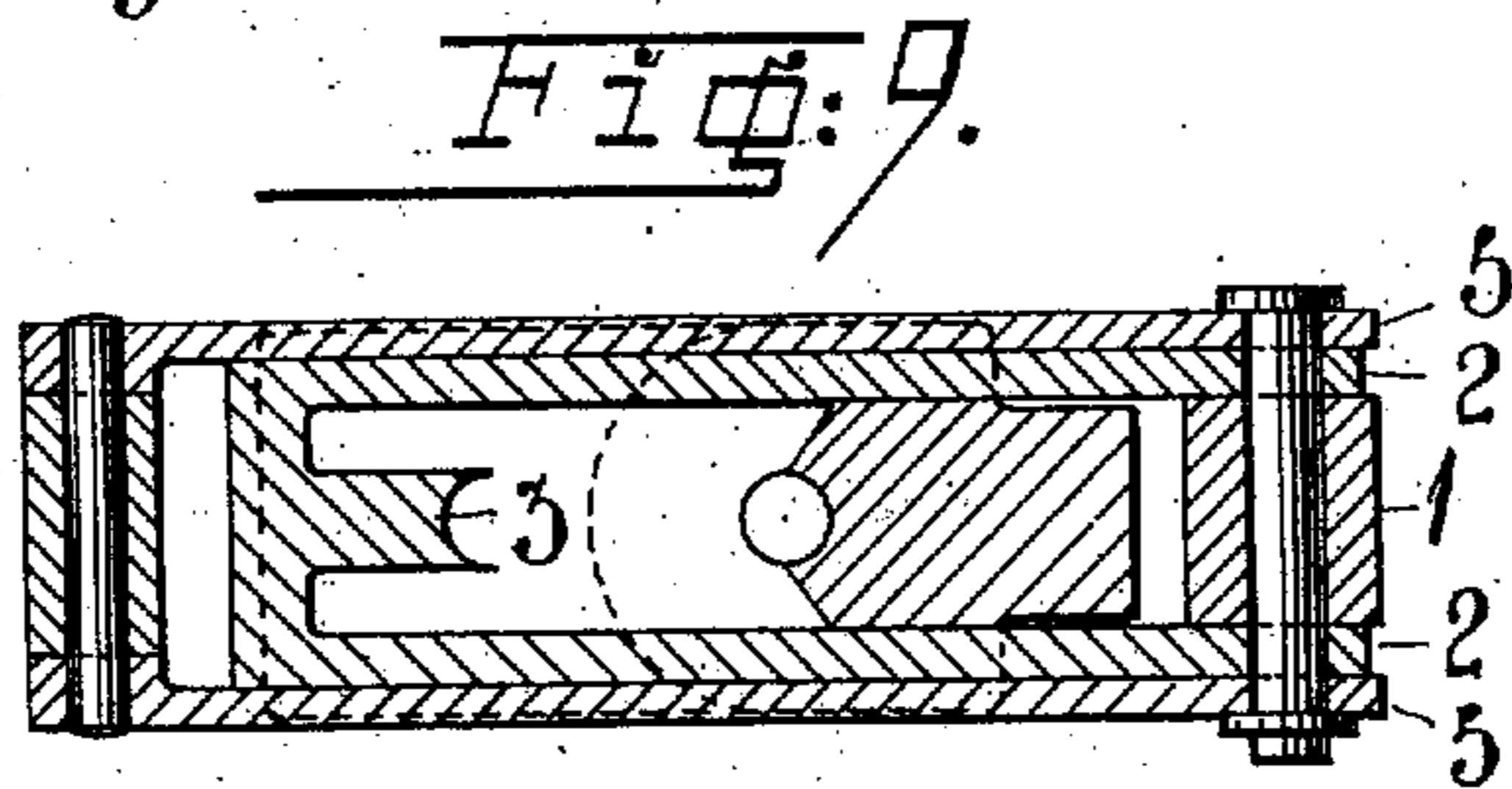
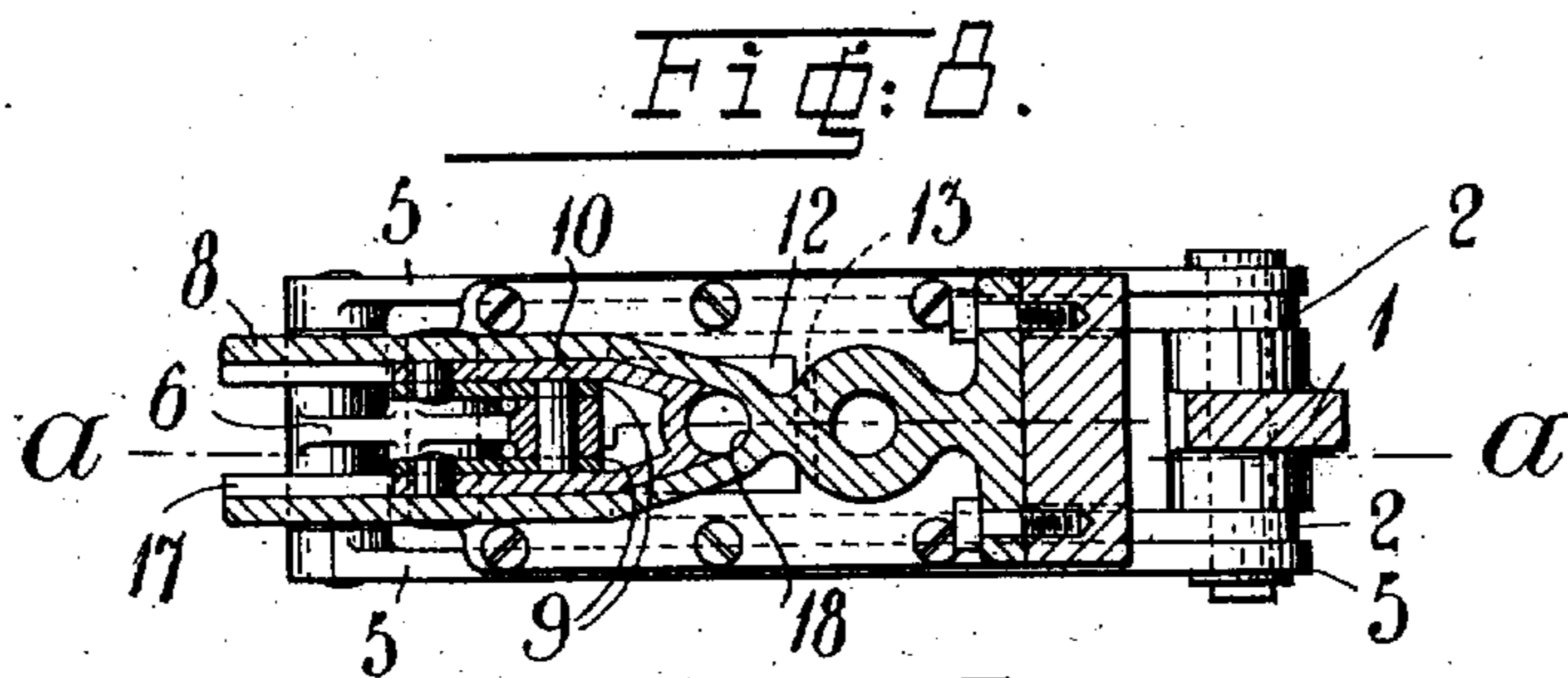
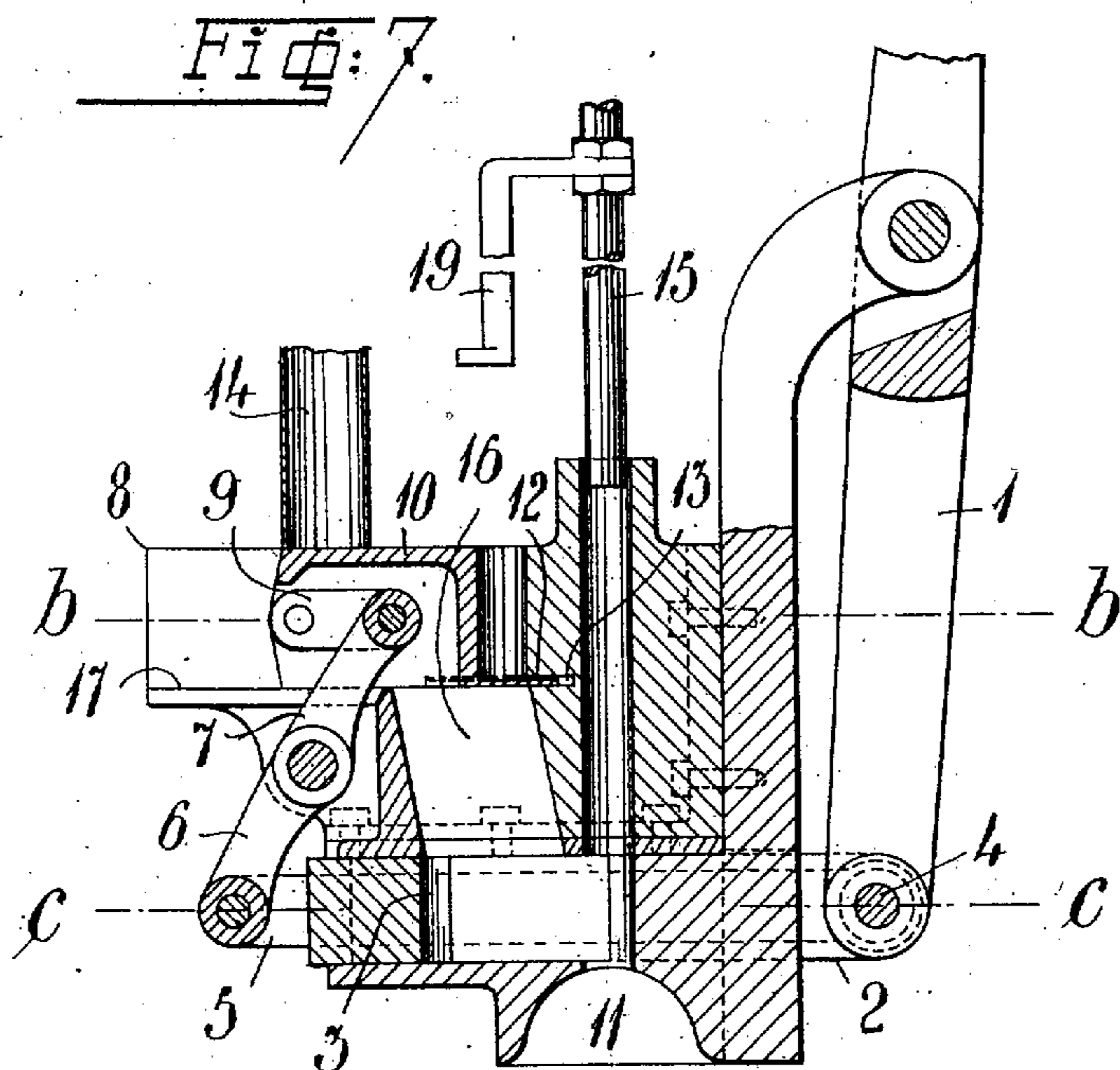
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J. K. Lannmark,  
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2 SHEETS—SHEET 2.



Witnesses

C. Schallinger  
R. Hordstein

Inventor  
Johannes K. Lannmark

by B. Singer  
Att'y

# UNITED STATES PATENT OFFICE.

JOHANNES KARLSSON LANNMARK, OF STOCKHOLM, SWEDEN.

## CORKING-MACHINE.

973,522.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed July 17, 1908. Serial No. 444,151.

*To all whom it may concern:*

Be it known that I, JOHANNES KARLSSON LANNMARK, a subject of the King of Sweden, and residing at Stockholm, Sweden, have invented certain new and useful Improvements in Corking-Machines, of which the following is a specification.

This invention relates to a machine for closing bottles by means of corks.

Objects of this invention are to provide a machine, wherein the closing corks are supplied in a continuous feed, to subject the corks to a primary compression, to remove the impurities forced out of said corks in the primary compression and to complete the closing operation in a secondary compression.

Other novel features contained in this invention will be more fully described in the following specification, and will be pointed out in the appended claims.

In the drawing, Figure 1, is a side elevation of the improved corking machine, Fig. 2, is an end elevation of the same, Fig. 3, a top plan view, Figs. 4, 5 and 6 show details of the improved corking machine, Fig. 7, is a section on line *a-a* of Fig. 8, Fig. 8, is a transverse section on line *b-b* of Fig. 7, Fig. 9, is a section on line *c-c* of Fig. 7.

The corks are supplied to the machine by means of a preferably vertical feeding tube 14, the lower end of said feeding tube being alternately closed and opened by an oscillating compression member 10. Oscillatory motion is imparted to the compression member in the following way: An actuating lever 1 oscillatably mounted on the frame 8 of the machine carries two links 5 at its lower end pivotally connected therewith and slidably mounted in the frame of the machine. The other ends of the two links 5 are pivotally connected to an arm 6 of a double-arm lever. The compression member 10 is at its lower surface provided with a preferably horizontal projecting portion 12. In a similar way as the two links 5, a U shaped element 2 is pivotally connected to the lower end of the actuating lever 1 and is slidably mounted in the frame of the machine. This U shaped element 2 carries at its rear end a second compression member 3 preferably integral therewith.

The operation of the machine is about the following: When the upper end of the actuating lever 1 is oscillated to the left, an oscillatory motion in the same sense is imparted to the upper arm 7 of the double arm

lever and the primary compression member 10 is moved to the left freeing thereby the lower end of the feeding tube 14. A cork dropping from the feeding tube is moved toward the stationary part of the compressing device in the return motion of the lever 1 and the compression member 10. In this way the cork is subjected to a primary compression and the horizontally projecting portion 10 wipes the bottom of the cork and ejects the impurities forced out of the cork through apertures 13 provided in the frame 8 of the machine. In the succeeding motion to the left of the compression member 10 the cork is freed and it drops through the channel 16. In front of the secondary compression member 3 the upper part of the lever 1 then is moved to the left and the cork is subjected to a secondary compression. Finally the plunger 15 is lowered and presses the cork into the mouth of the bottle, which is placed in the recess 11 at the bottom of the machine. Simultaneously with the plunger 15 a parallel extension 19 of the plunger pushes the following cork through the channel 16 in front of the returning compression member 3.

I claim:

1. A bottle corking machine, comprising in combination, a cork feeding tube, a frame, a lever pivotally attached to said frame, a cork compressing member pivotally connected with said lever means for removing impurities pressed from the cork, a second cork compressing member, means for imparting oscillatory motion to said lever and a device for driving a cork into a bottle.
2. A bottle corking machine, comprising in combination, a cork feeding tube, a frame, a lever pivotally attached to said frame, a cork compressing member pivotally attached to said lever, means for removing impurities pressed from the cork, a second cork compressing member, means for imparting oscillatory motion to said lever and reciprocatory motion to said members, and a device for driving a cork into a bottle.
3. In a bottle corking machine, the combination, with a cork feeding tube, of a frame, a lever pivotally connected to said frame, a cork compression member, means for removing impurities pressed from the cork, a link pivotally connected to said lever and said member, said member being adapted to close said tube when in operative position, an operating lever, a second cork com-

pression member pivotally connected with said operating lever, links pivotally connected to both of said levers, said levers, compression members and links being connected, so that reciprocating motion in opposite direction is imparted simultaneously to said compression members, when said operating lever is actuated.

4. In a corking machine, the combination with a cork feeding tube, of a frame, a lever pivotally connected to said frame, said frame being provided with lateral apertures, a cork compression member provided with a-portion adapted to project through said

apertures and to remove the impurities pressed from the cork, a second cork compression member, said frame being provided with a passage for transmitting the cork from one compression member to the other one, means for actuating said compression members, and a vertically reciprocating plunger.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHANNES KARLSSON LANNMARK.

Witnesses:

AUGUST ÖHRGREN,

AUGUST FERDINAND THUNBERG.