No. 685,811. Patented Nov. 5, 1901.

H. W. ARMSTRONG.

LIFTING JACK.

Application filed July 1, 1901.

(No Model.)

Fig. 1.

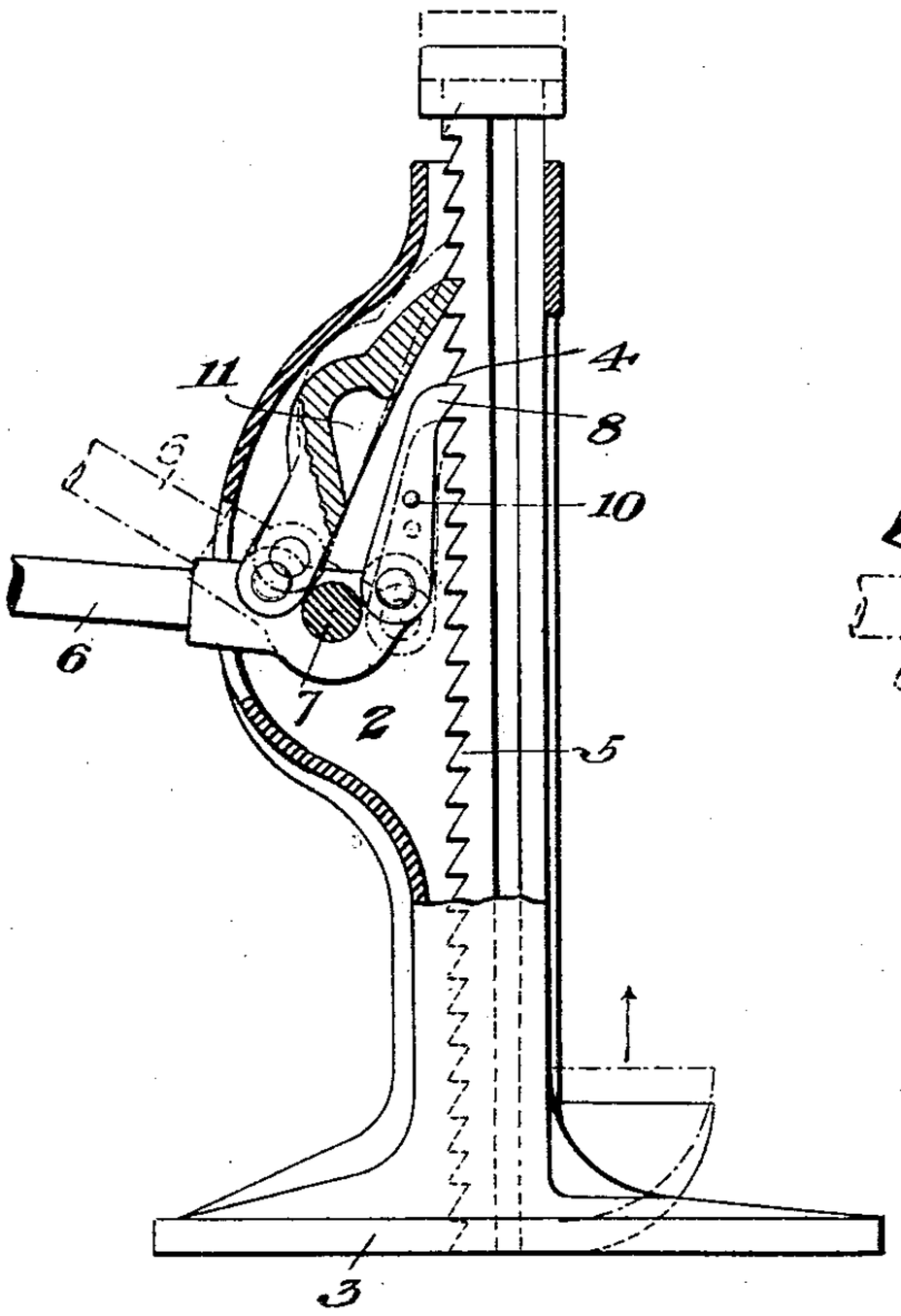
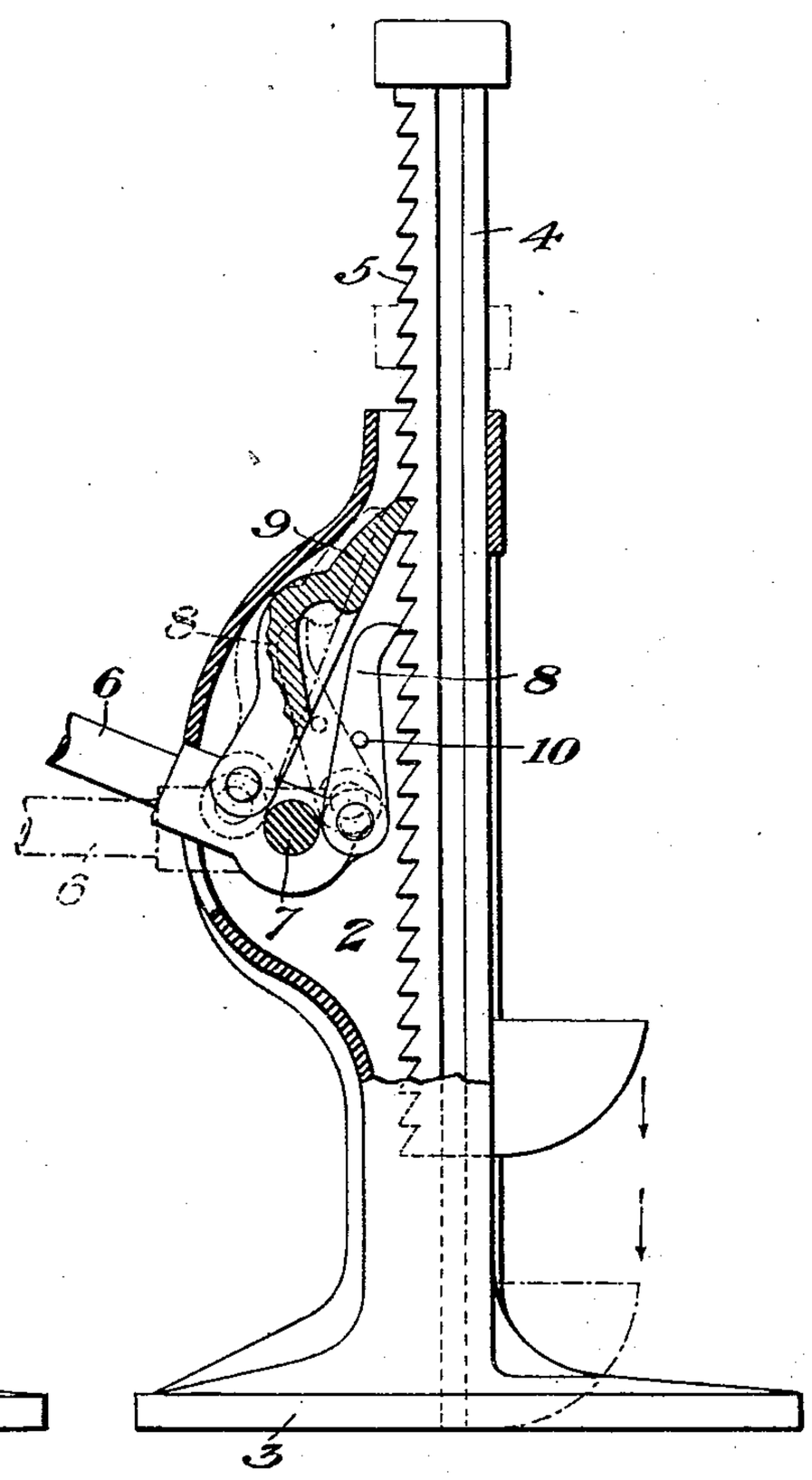


Fig. 2.



WITNESSES

Geo. B. Fleming

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his attys.

UNITED STATES PATENT OFFICE.

HARRY W. ARMSTRONG, OF OAKMONT, PENNSYLVANIA.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 685,811, dated November 5, 1901.

Application filed July 1, 1901. Serial No. 66,669. (No model.)

To all whom it may concern:

Be it known that I, HARRY W. ARMSTRONG, of Oakmont, Allegheny county, Pennsylvania, have invented a new and useful Lifting-Jack, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figures 1 and 2 are side elevations, partly broken away, showing the parts in different positions.

My invention relates to that class of lifting-jacks wherein pawls are pivoted to a lever on opposite sides of the fulcrum, these pawls engaging a toothed lifting-bar; and its object is to provide a simple jack of this character which can be easily and quickly lowered without the use of any additional tripping devices or latches.

In the drawings, 2 represents the hollow body of the jack, having a base 3.

4 is the lifting-bar, having the ratchet-teeth 5, and which is guided within the frame in its vertical movements.

The operating-lever 6 is pivoted within the frame at 7 and carries two pawls 8 and 9. The pawl 8 is a short pawl pivoted to the front end of the lever beyond its fulcrum and is provided with a pin 10, which may be reached through a slot in the side of the hollow frame. The pawl 9 is pivoted to the lever on the other or rear side of the fulcrum and is longer than the pawl 8, so as to engage with an upper tooth of the lifting-bar. The pawl 9 is provided in its intermediate portion with a recess or pocket 11, into which the pawl 8 may be thrown by the operator, when desired.

In the operation of the device the lifting-bar may be raised in the usual manner, the pawls working alternately, giving a double-action jack. When it is desired to release the lifting-bar and allow it to drop, the lever is lifted to take the weight off the lower pawl, which pawl is then thrown back into the recess of the longer pawl, and the lever then being depressed the angular position of the lower pawl will force the upper pawl backwardly, and thus disengage it from the lifting-bar and allow it to drop.

The advantages of my invention result from the engaging of one pawl with the other in such a manner that without the use of any third element the one pawl will force the other out engagement with the teeth. A cheap and simple jack is thus afforded which is not liable to get out of order.

A pin or shoulder may be used on the upper pawl instead of the inclosed recess shown, and many other variations may be made in the form and arrangement of the parts without departing from my invention.

I claim—

1. A double-acting jack having pawls pivoted to the lever on opposite sides of the fulcrum, one of said pawls having a shoulder arranged to receive the other pawl and thereby be forced out of engagement with the teeth of the lifting-bar; substantially as described.

2. A lifting-jack having a toothed lifting-bar, a lever having pawls pivoted on opposite sides of its fulcrum, the rear and longer pawl having a shoulder in its intermediate part arranged to receive the front and shorter pawl; substantially as described.

3. A double-acting jack having a toothed lifting-bar, a hollow body in which the bar is carried, and a lever having two pawls pivoted thereto within the hollow body on opposite sides of its fulcrum, the rear and longer pawl having a recess arranged to receive the shorter pawl, the said shorter pawl being accessible through the hollow frame; substantially as described.

In testimony whereof I have hereunto set my hand.

H. W. ARMSTRONG.

Witnesses:

GEO. B. BLEMING,

L. M. REDMAN.