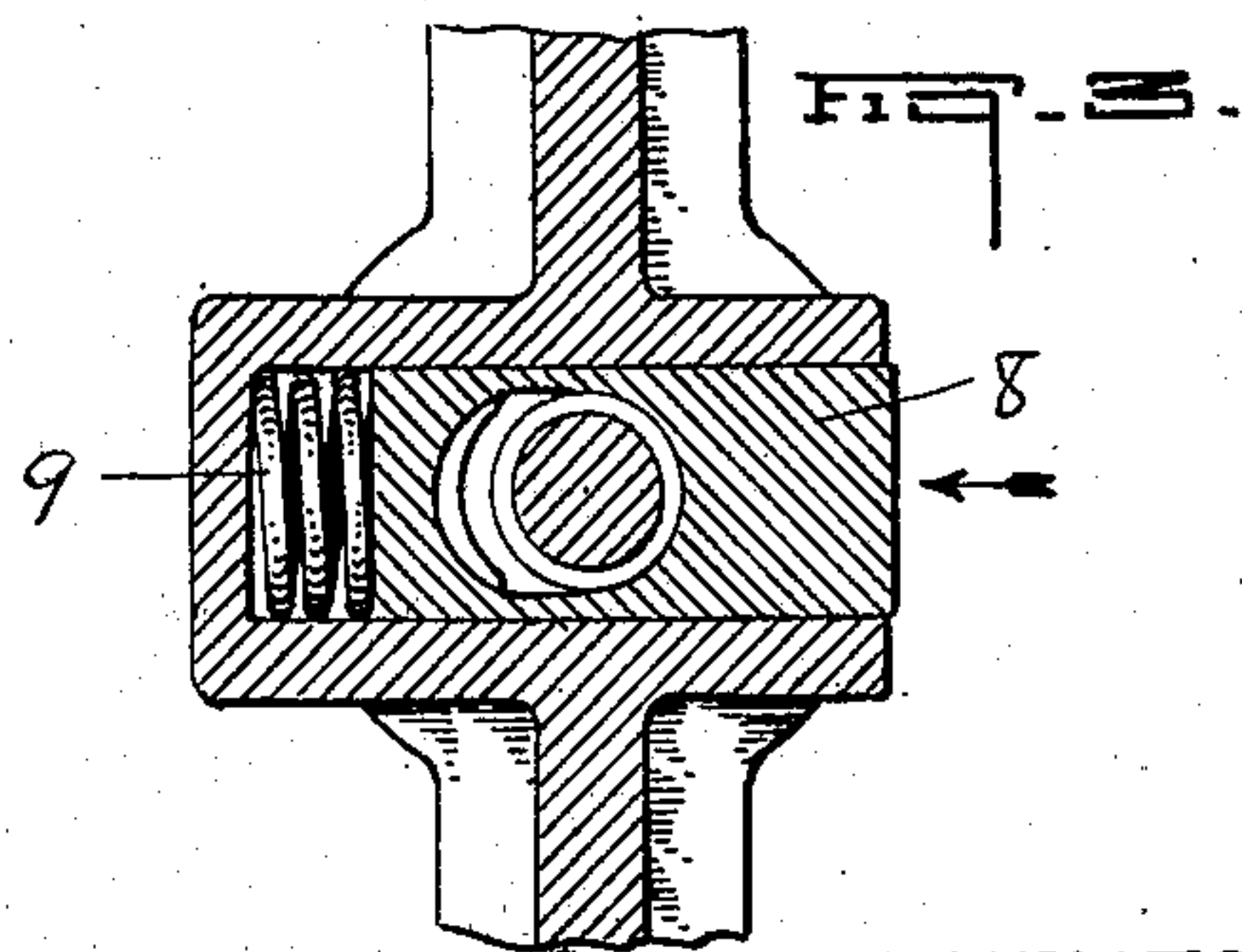
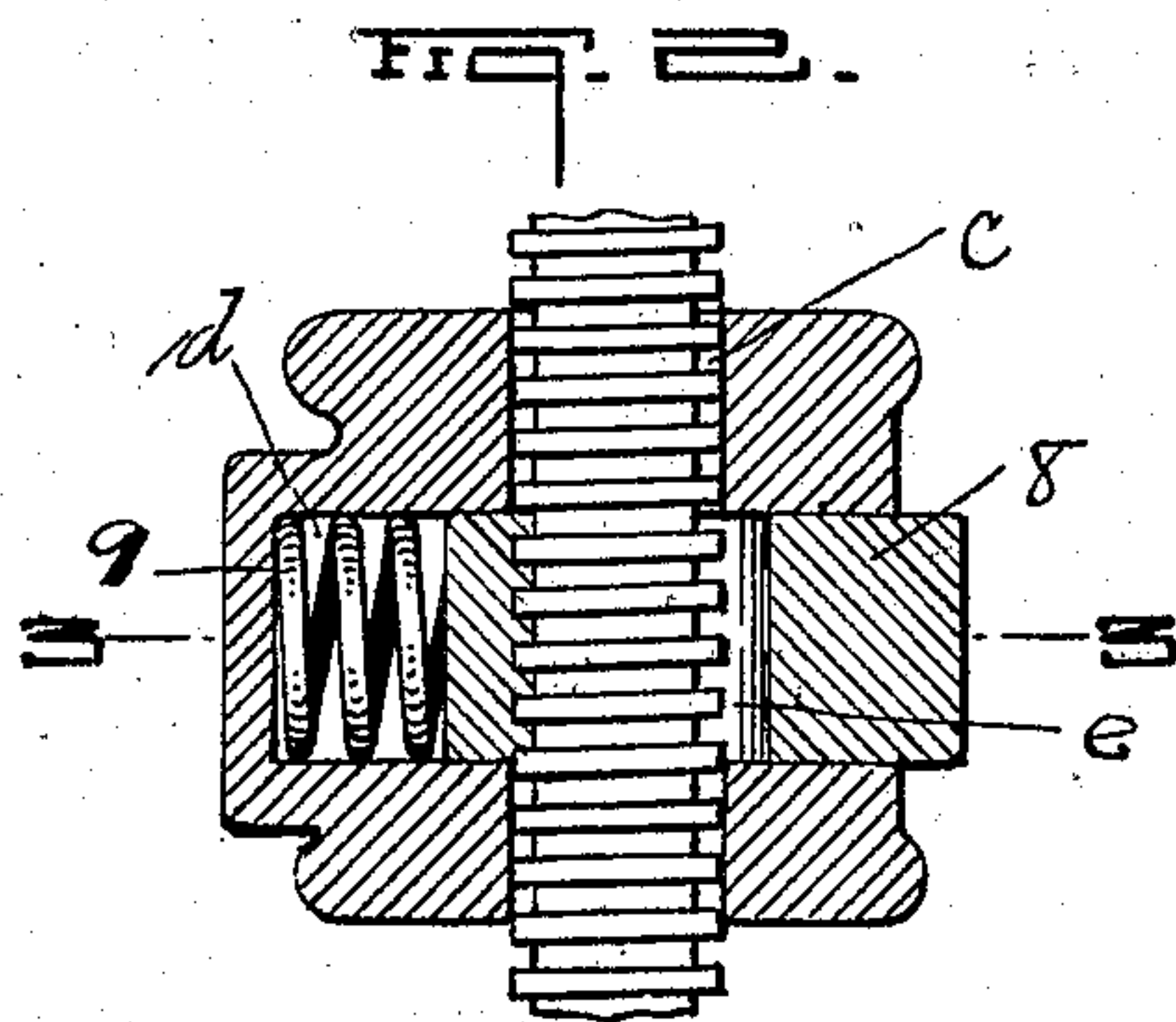
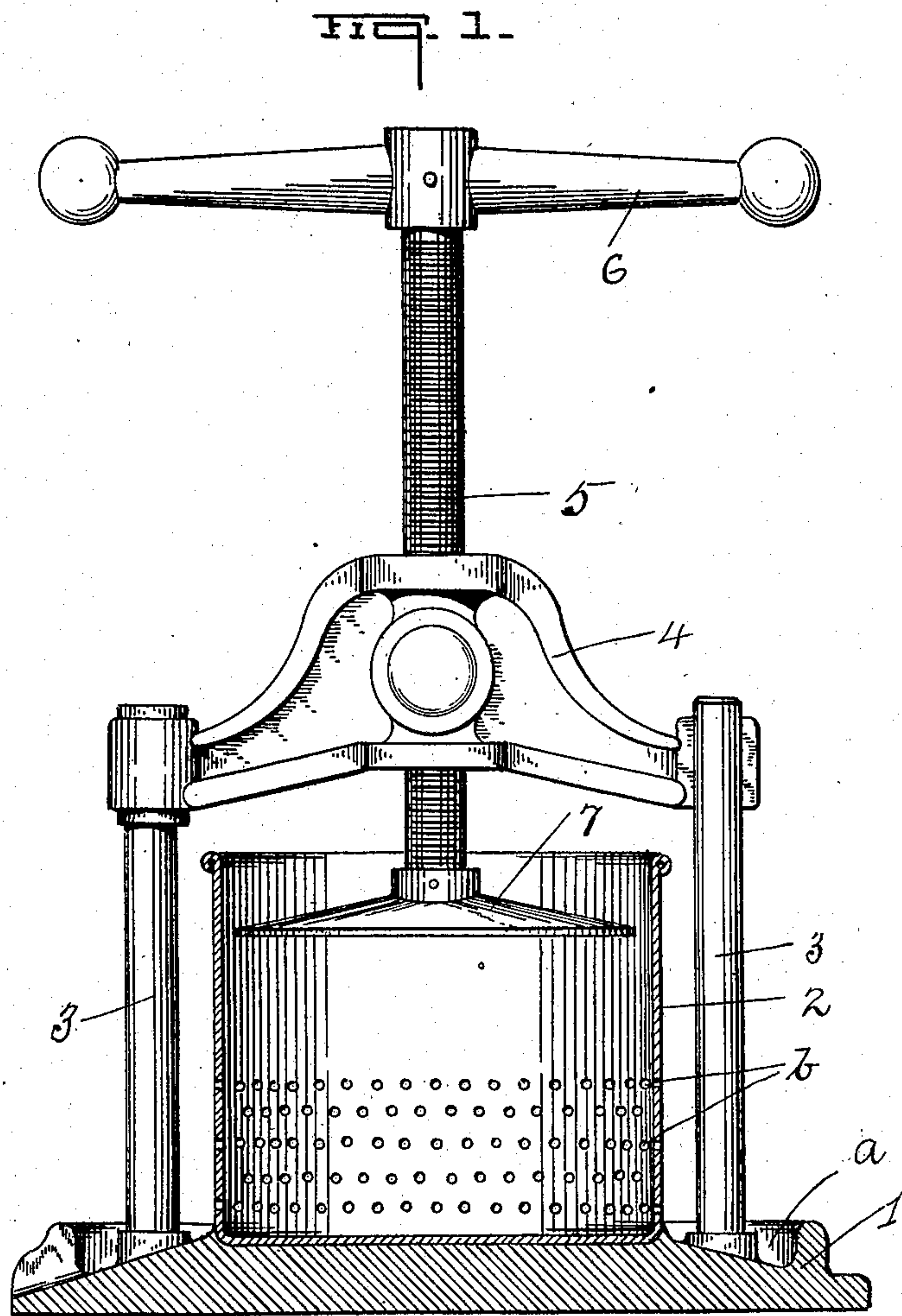


A. W. WILLIAMS.  
 QUICK RETURN FOR SCREW PRESS MECHANISMS.  
 APPLICATION FILED MAY 22, 1908.

924,122.

Patented June 8, 1909.



WITNESSES:

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 by *John H. Roney*  
 his ATTORNEY



# UNITED STATES PATENT OFFICE.

ALONZO W. WILLIAMS, OF HOMESTEAD, PENNSYLVANIA.

## QUICK RETURN FOR SCREW-PRESS MECHANISMS.

No. 924,122.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed May 22, 1908. Serial No. 434,262.

*To all whom it may concern:*

Be it known that I, ALONZO W. WILLIAMS, a citizen of the United States, residing at Homestead, R. F. D. 129, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in a Quick Return for Screw-Press Mechanism, of which improvement the following is a specification.

My invention relates to improvements in screw pressure mechanism for presses, and particularly to mechanism of this character for use in lard, fruit and similar presses.

The object of my invention is to produce a device in which the pressure screw can be quickly elevated and lowered. I accomplish this object by means of the apparatus hereinafter described, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 is an elevation, partly in section, of a lard press embodying my improvement. Fig. 2 is a central section through the screw socket. Fig. 3 is a transverse section on line 3—3 of Fig. 2.

Referring to said drawings, 1 is the base plate of the press which is provided with the trough *a* or other suitable means for receiving and holding the substance forced by compression from any substance contained in the vat or vessel 2 as hereinafter described. The said vat is provided with numerous perforations *b*, as shown, and secured upon the base plate in any suitable manner. The pressure mechanism is mounted upon the vertical posts 3, 3, which are fixed firmly in the base, as shown, the upper ends thereof having mounted thereon the yoke 4, in which the pressure screw 5 is supported, the upper end of the screw being provided with a suitable handle 6 or means to operate the same, and its lower end has secured thereto, in any suitable manner, the pressure foot 7. The said yoke is provided with a vertically disposed orifice *c* and with a transversely disposed socket *d* which intersects and extends laterally beyond said vertically disposed orifice, and in which the plug 8 is seated. The said plug is provided with an orifice *e* which is adapt-

ed to register with the orifice *c* in the yoke, the transverse diameter of which is less than its conjugate diameter and is threaded on one side only correspondingly with the screw, for the purpose hereinafter described. A spiral spring 9 is seated between the inner end of the plug 8 and the bottom of the socket for the purpose of holding the threaded side of the orifice *e* in engagement with the screw, as shown in Fig. 2. By pushing the plug 8 inwardly and thus compressing the spring, the plug is disengaged from the screw which is then enabled to be readily and quickly elevated or lowered in the orifice.

The special advantage of my improvement is that it enables the pressure foot to be brought to its most elevated position, as shown in Fig. 1, quickly, thus avoiding the waste of time which occurs in constructions in which, to accomplish this object, the screw has to be operated in a reverse direction to that necessary to force the foot in contact with the substances under treatment.

I claim as my invention and desire to secure by Letters Patent:

1. In quick return for screw presses, the combination of a screw, a support therefor having an orifice in which the screw is operably disposed and a socket extending from one side and intersecting said orifice; a plug seated in said socket provided with an orifice threaded on one side and adapted to register with said first mentioned orifice and adapted to engage with and to be disengaged from said screw.

2. In pressure mechanism for presses, the combination of a screw, a stationary yoke having a vertically disposed orifice centrally thereof, a socket intersecting said orifice, a plug having an orifice adapted to register with the orifice in said yoke, one side of said plug having a thread, and a spiral spring seated in said socket between the end of said plug and the bottom of said socket.

3. In quick return mechanism for screw presses, the combination of a screw, a support therefor having an orifice in which the screw is operably disposed, and a socket extending from one side and intersecting

said orifice; a plug seated in said socket and provided with an orifice the conjugate diameter of which is greater than its transverse diameter, and having a thread on one side thereof, the said plug being adapted to engage with and to be disengaged from said screw.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

ALONZO W. WILLIAMS.

In the presence of—

CLARENCE A. WILLIAMS,

JOHN H. RONEY.