

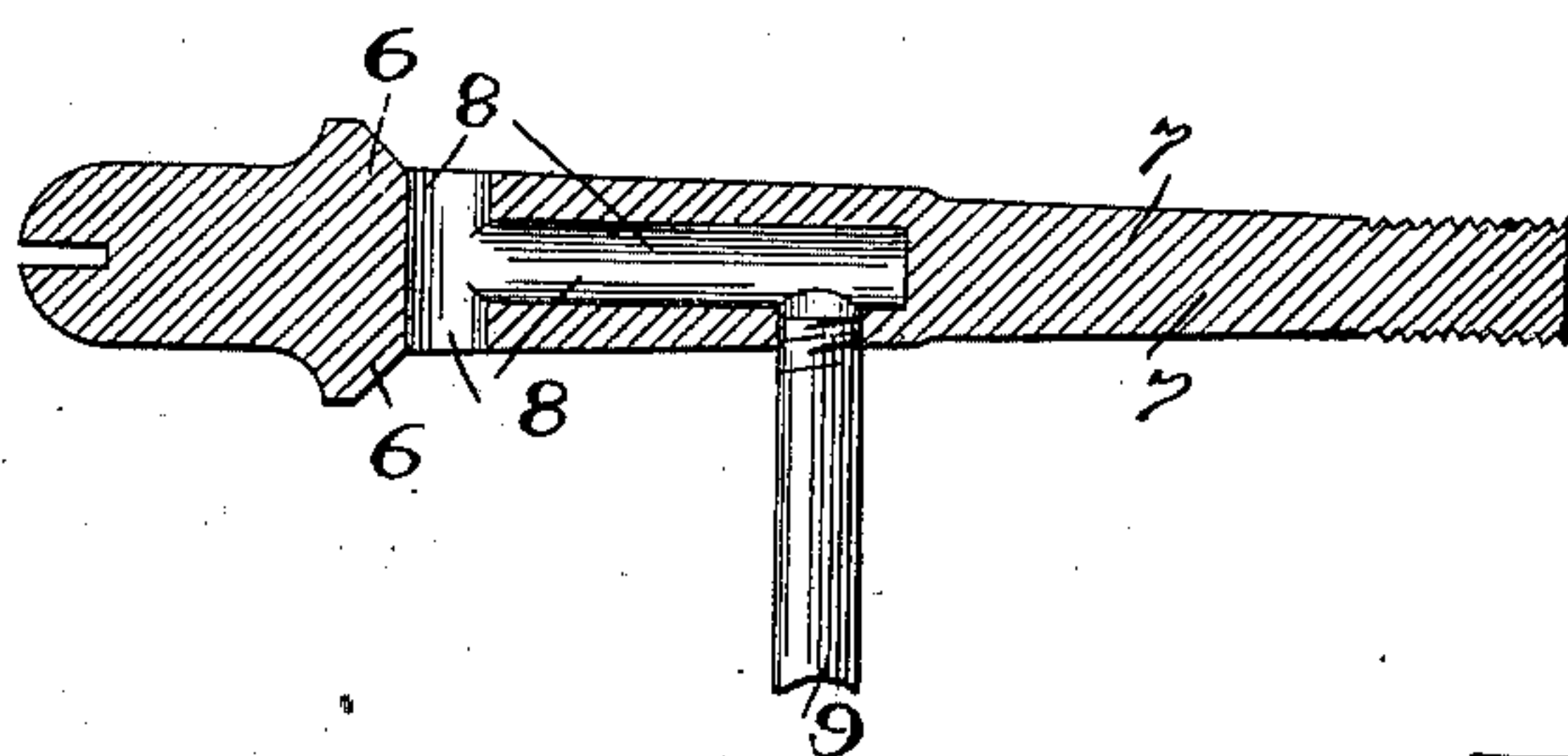
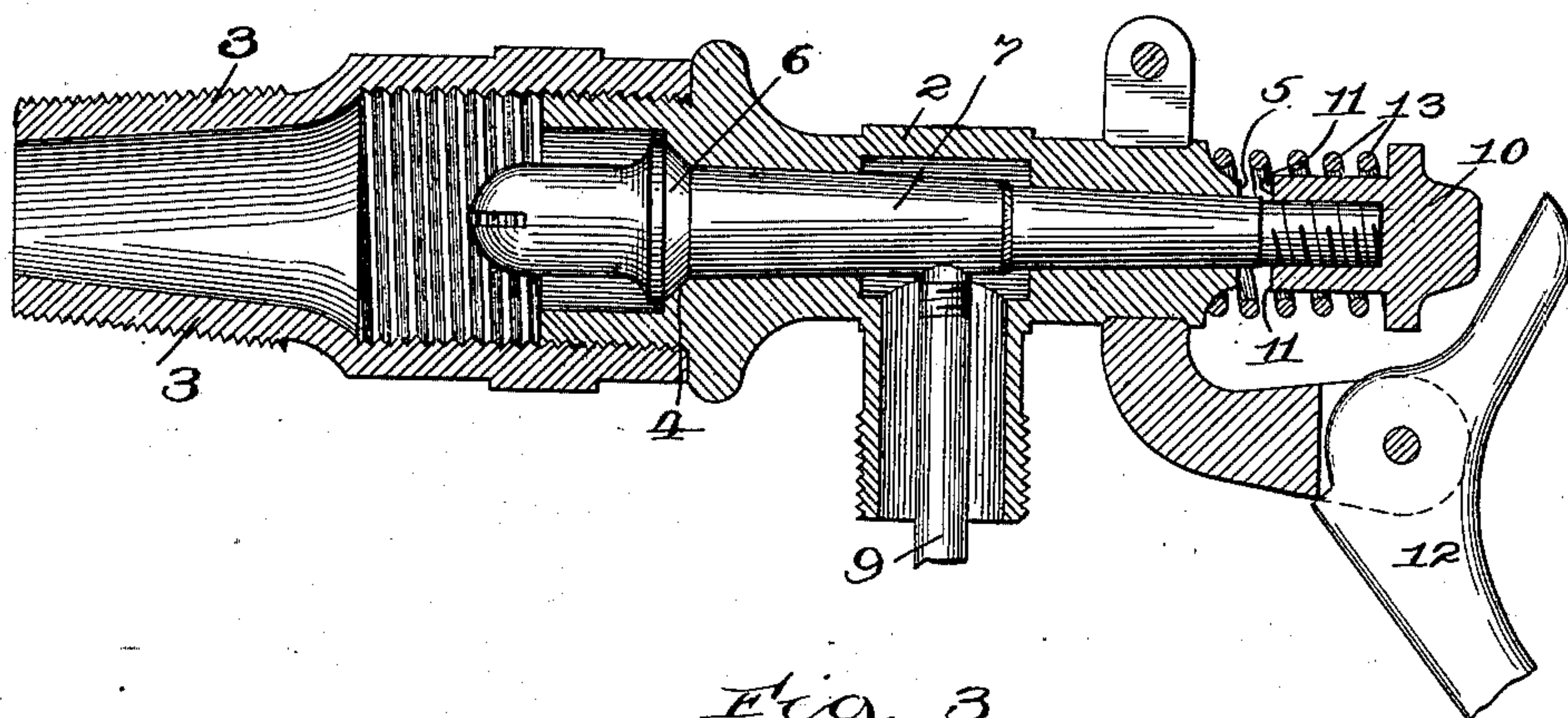
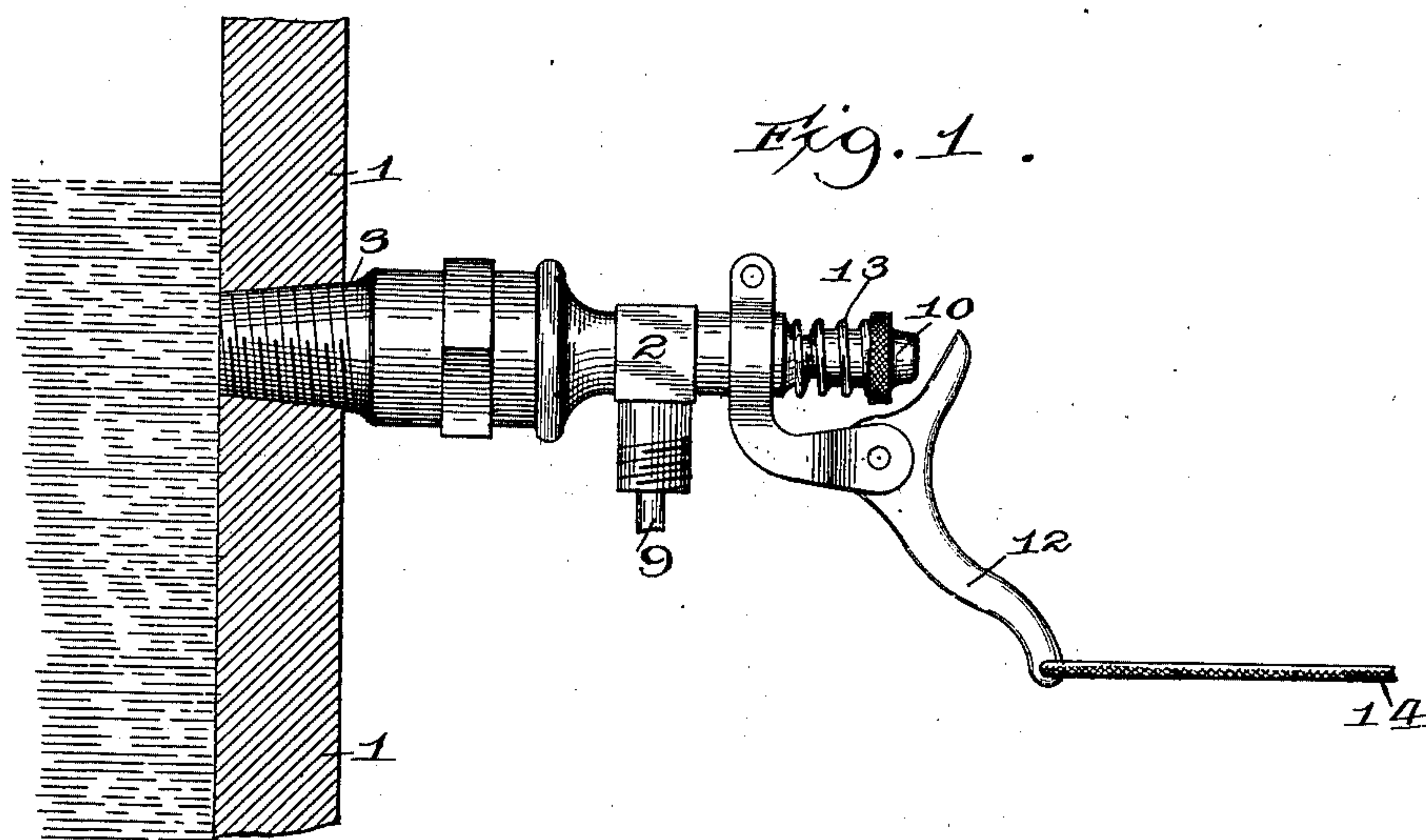
No. 663,736.

Patented Dec. 11, 1900.

T. A. DELANEY.
GAGE COCK.

(Application filed June 7, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS A. DELANEY, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE HILLS-MCCANNA COMPANY, OF SAME PLACE.

GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 663,736, dated December 11, 1900.

Application filed June 7, 1900. Serial No. 19,411. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. DELANEY, of Chicago, Illinois, have invented certain new and useful Improvements in Gage-Cocks, 5 whereof the following is a specification.

In the accompanying drawings, Figure 1 shows a vertical section of a boiler with my gage-cock attached, the latter being shown in elevation. Fig. 2 is an enlarged longitudinal 10 section of the device. Fig. 3 is a longitudinal section of the valve.

In the figures, 1 represents a boiler to which my device is attached.

2 is a casing which may be attached to the 15 boiler by a hollow plug 3, as set forth in my Patent No. 509,879, of December 5, 1893. The casing 2 is provided at each end with valve-seats 4 and 5.

6 is a valve which closes on the seat 4. The 20 stem 7 of the valve 6 fits closely to the inside of the casing 2 and is provided with a steam and water channel 8, through which steam and water may escape when the valve is open.

9 is a vent-tube screwed into the outlet 8 25 of the stem 7 to direct the discharge and prevent scale, &c., lodging in the casing 2 and clogging the device.

10 is a knob secured to the end of stem 7 30 and having its inner end faced off to form a valve 11 to close against the seat 5, and thus positively prevent water or steam blowing out at the end of the casing.

12 is a lever by which the valve 6 is opened.

13 is a spring to effect the closure of the 35 valve.

To operate the device, the attendant moves the lever 12, either by the cord 14 or otherwise, and so throws the valve 6. Steam or 40 water will then pass through the valve and through the passage 8 in its stem and out through the tube 9, and it will be prevented from passing out at the end of the casing

partly by the close fit of the valve-stem 7 in the casing and partly by the seating of the valve 11 of knob 10 on the seat 5. When the lever 45 is released, the valve 6 closes by the force of the spring 13 or by the force of the steam or water, or both.

I claim—

1. In a gage-cock, in combination with the 50 casing thereof, a valve and a valve-stem fitting closely in the bore of the casing and provided with a vent-channel, substantially as set forth.

2. In a gage-cock, in combination with the 55 casing thereof, a valve-stem extending through the casing and carrying a valve at each end, said valves being so adjusted that when one is closed the other is open, substantially as set forth. 60

3. In a gage-cock, a casing provided with a side outlet, in combination with a valve-stem extending through the casing and having a vent-channel with a side outlet registering with the side opening of the casing, and 65 a valve attached to each end of the stem and so adjusted that when one is closed the other is open, substantially as set forth.

4. In a gage-cock, the combination substantially as set forth, of the casing 2 having the 70 valve-seats 4 and 5 at opposite ends thereof the valve-stem 7 fitting closely in the bore of the casing, and provided with the vent-channel 8, the valves 6 and 11, attached to opposite ends of the stem 7 and so adjusted with 75 reference to each other that when one is on its seat the other is off its seat, the lever 12 for opening valve 6 and closing valve 11, and the spring 13 for closing valve 6 and opening valve 11.

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