

No. 705,199.

Patented July 22, 1902.

G. W. BOWEN.  
VENTILATING DAMPER FOR STOVEPIPES.

(Application filed Feb. 13, 1902.)

(No Model.)

Fig. 1.

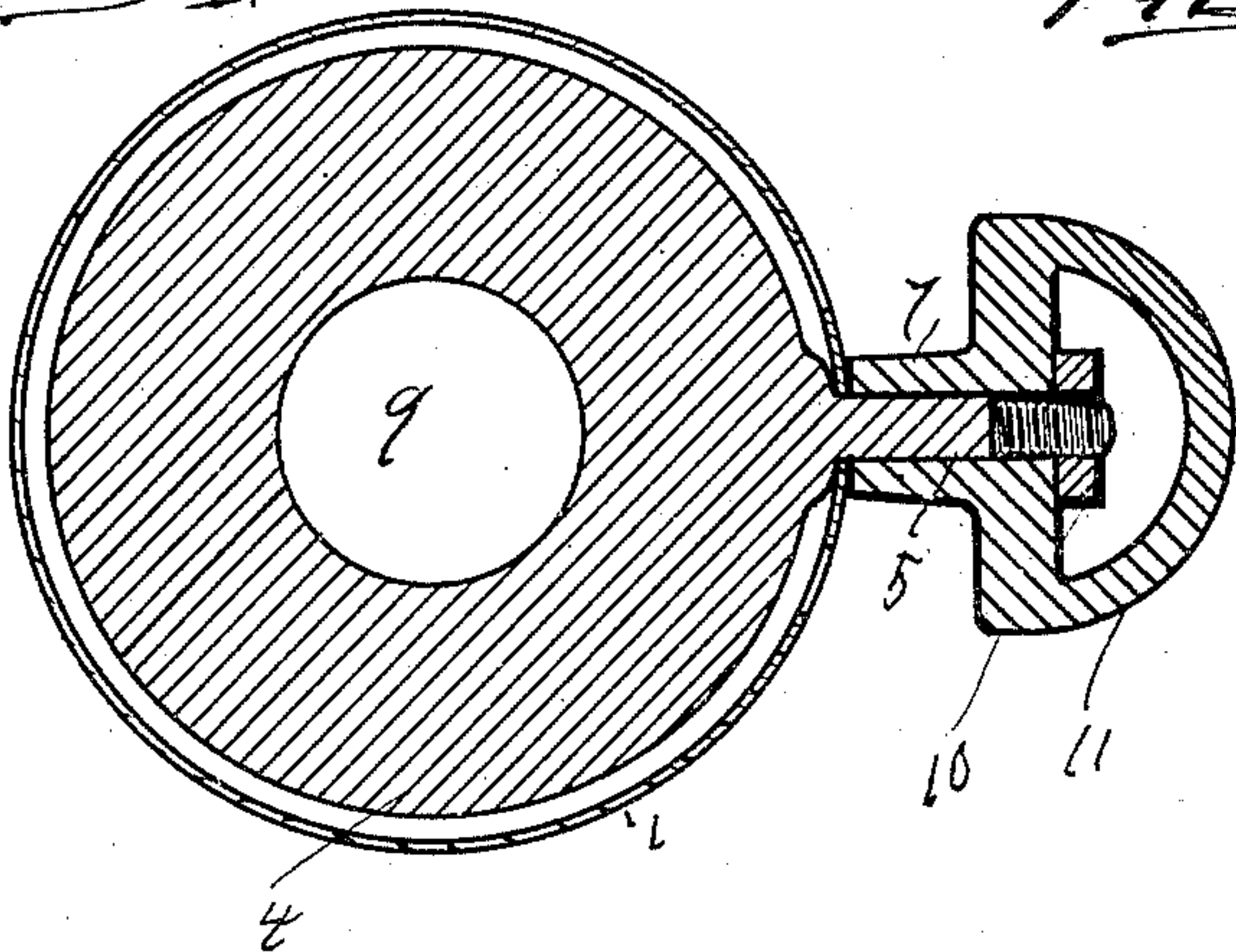


Fig. 2.

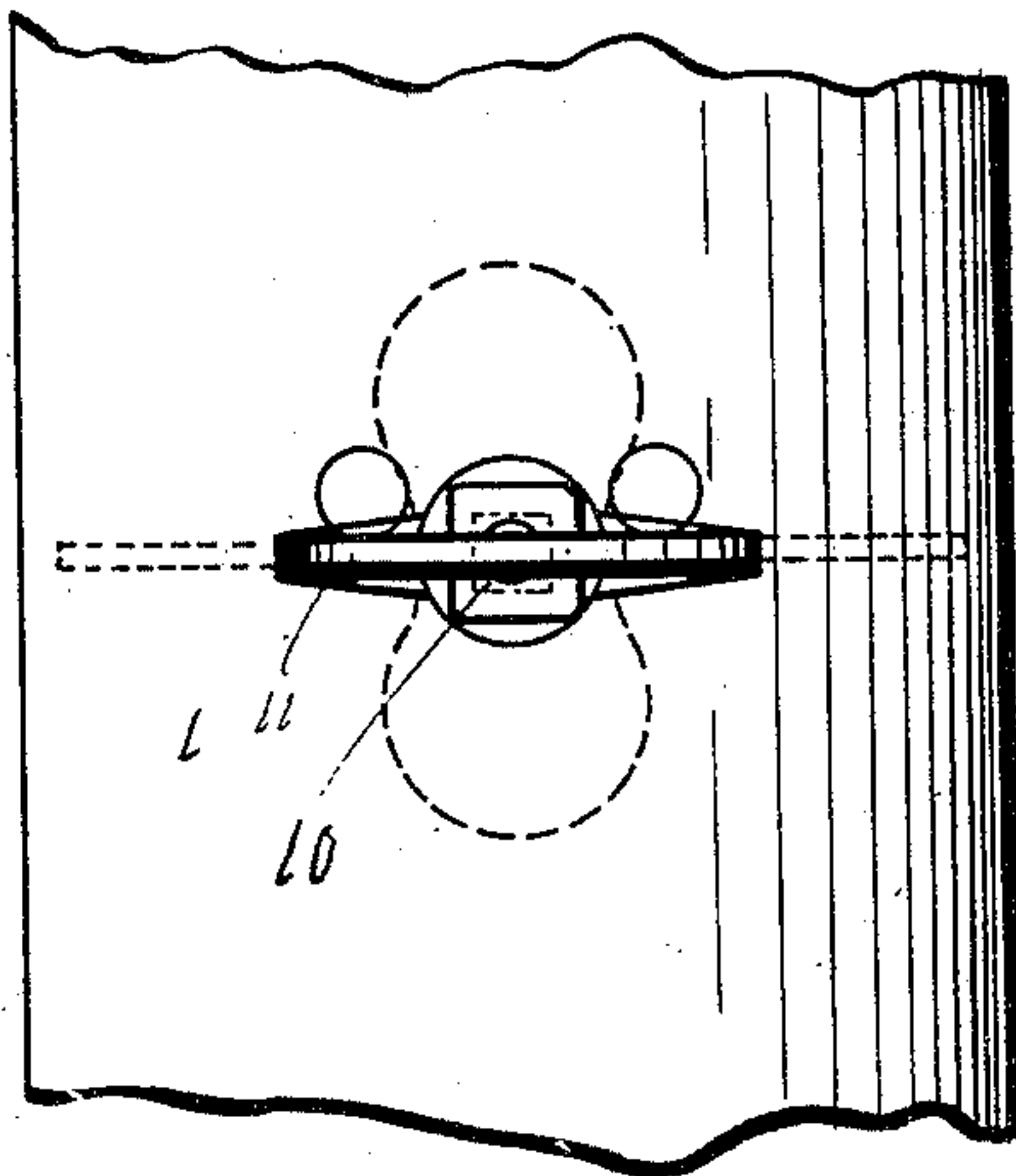


Fig. 4.

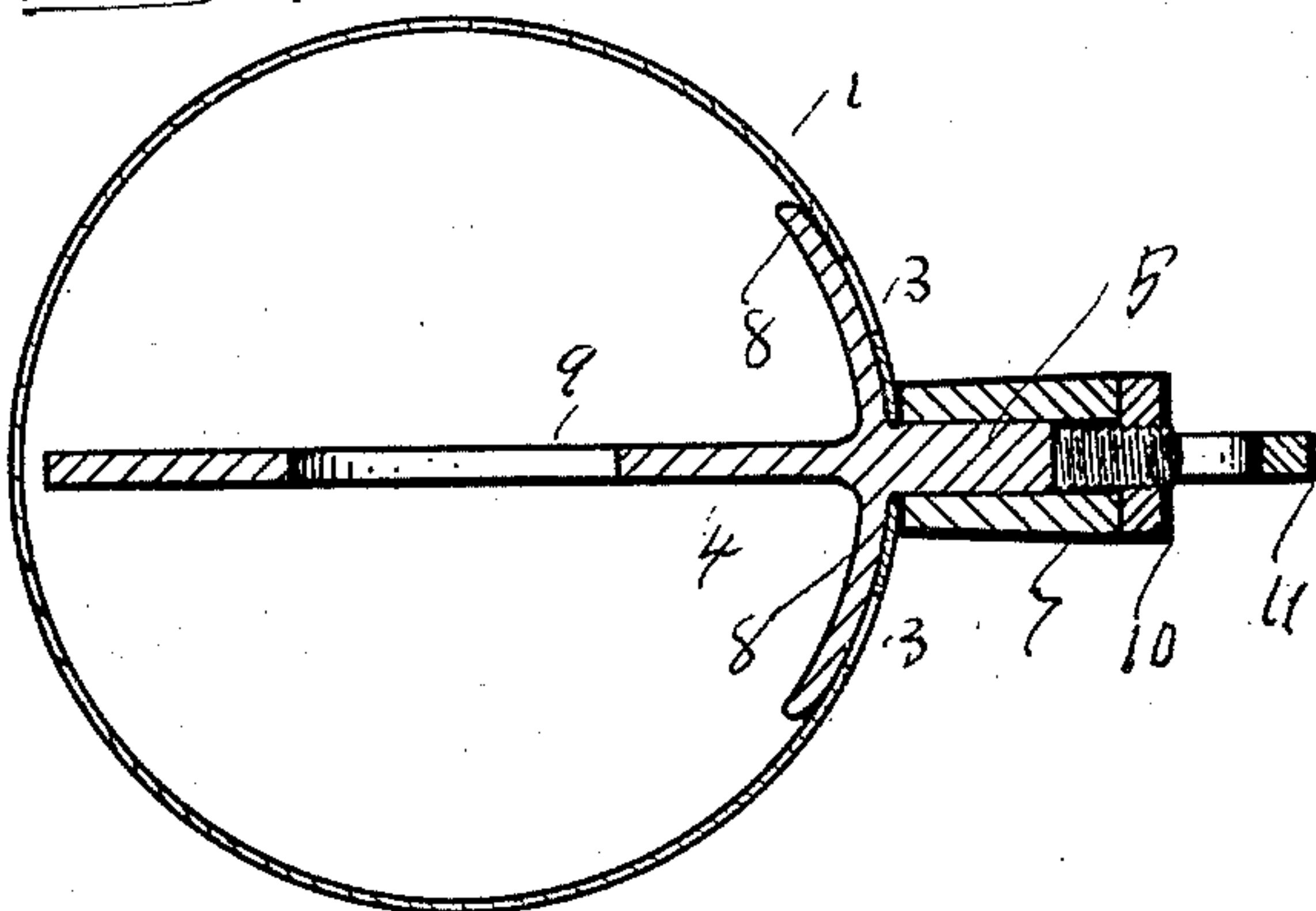


Fig. 3.

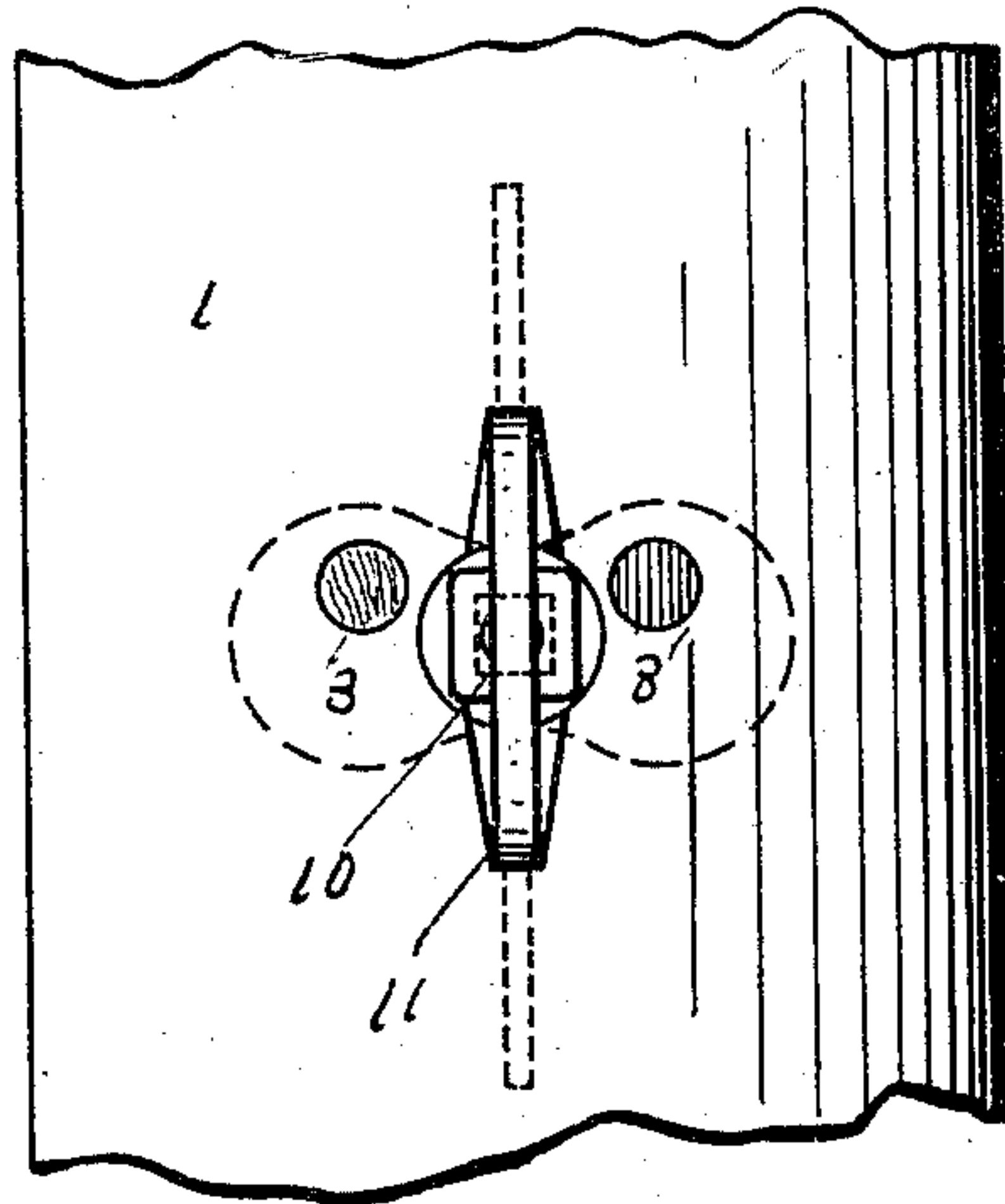


Fig. 5.

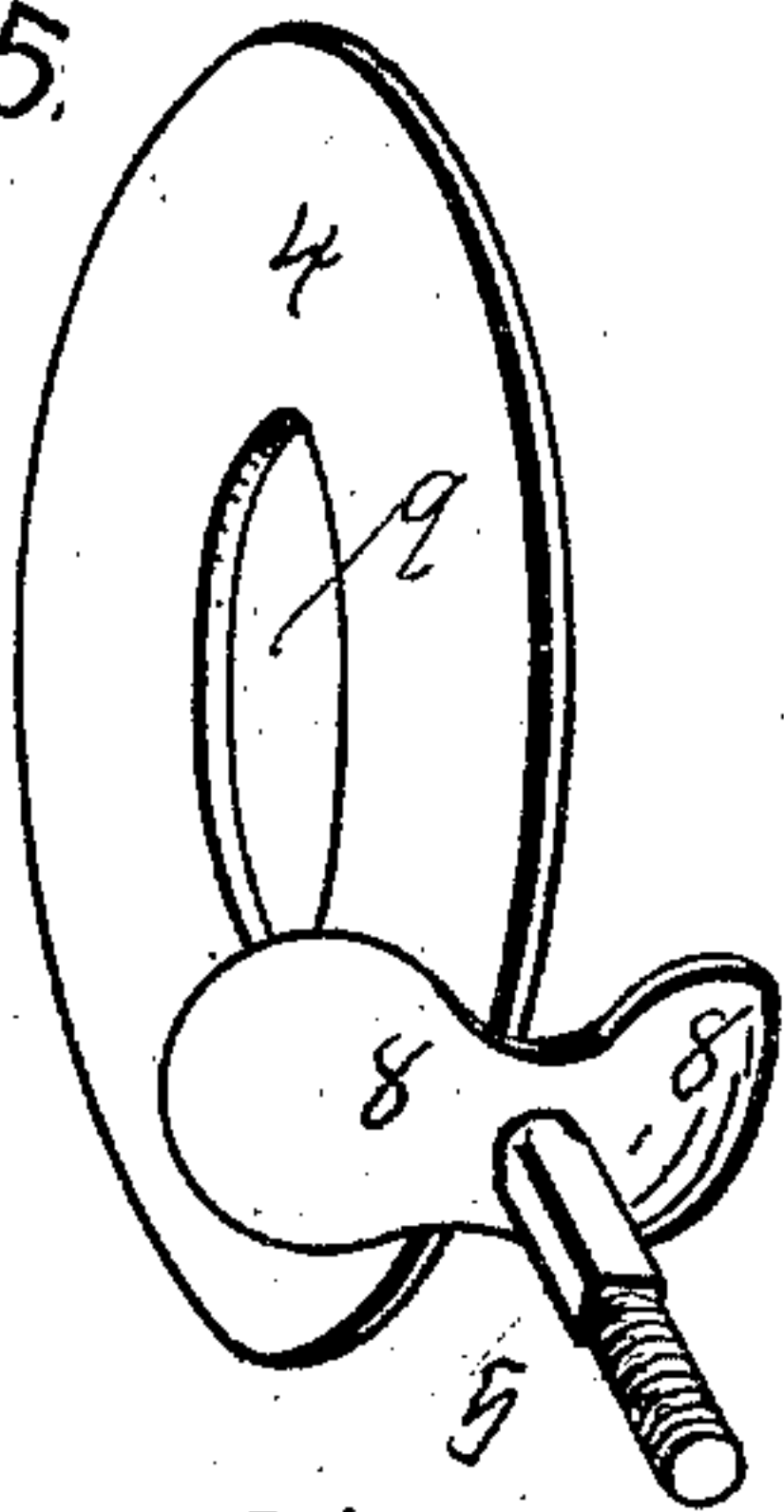


Fig. 7.

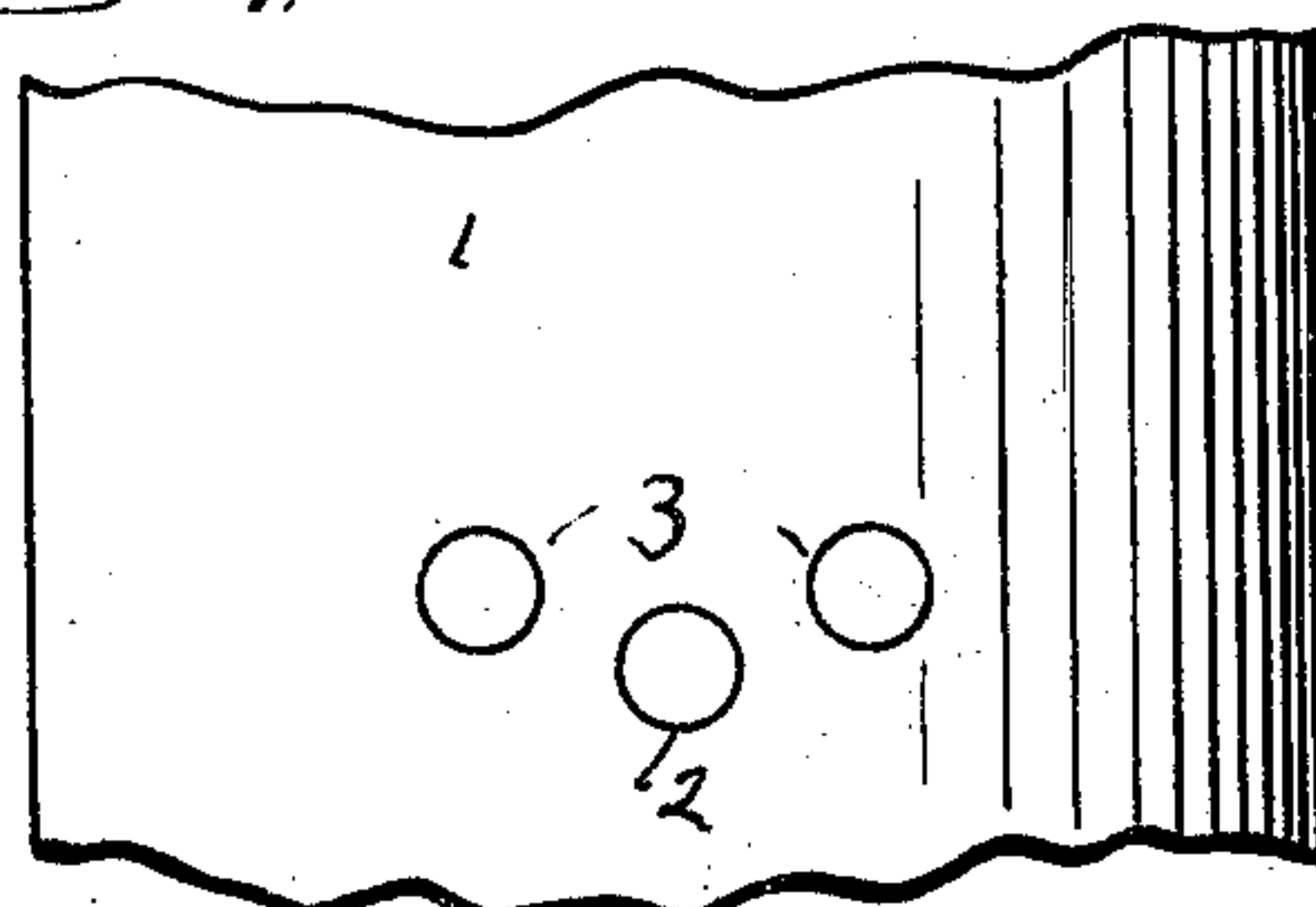
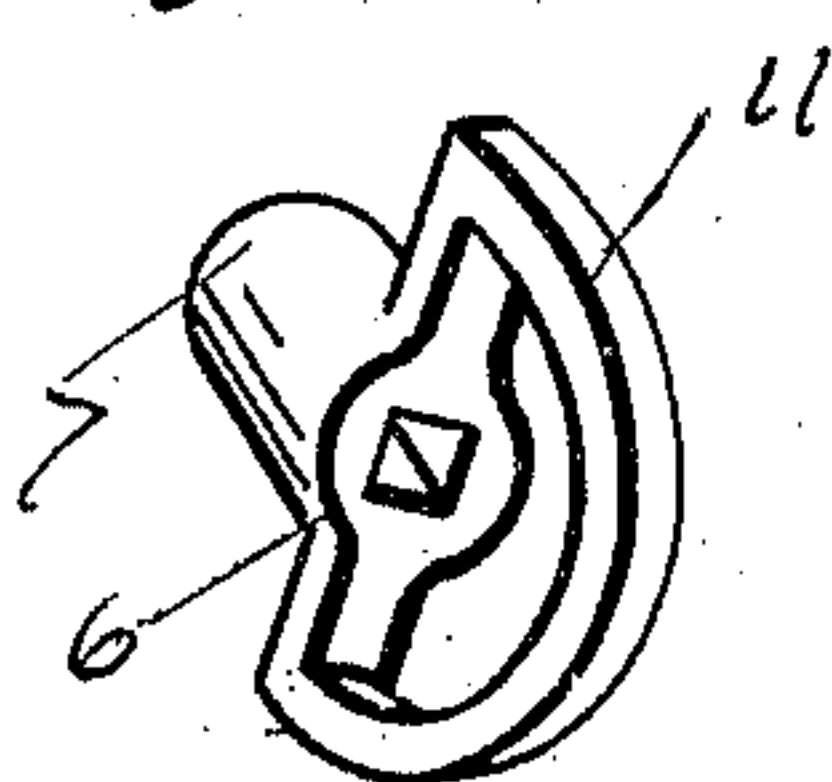


Fig. 6.



WITNESSES:

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ATTY.



# UNITED STATES PATENT OFFICE.

GEORGE W. BOWEN, OF LOUISVILLE, OHIO.

## VENTILATING-DAMPER FOR STOVEPIPES.

SPECIFICATION forming part of Letters Patent No. 705,199, dated July 22, 1902.

Application filed February 13, 1902. Serial No. 93,880. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. BOWEN, a citizen of the United States, residing at Louisville, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Ventilating-Dampers for Stovepipes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a transverse section of a stovepipe, also a sectional view of the damper, its shank, knob, and holding-nut, showing the damper closed. Fig. 2 is a side elevation of a portion of a stovepipe, showing the damper in dotted lines closed and the ventilating-apertures open. Fig. 3 is a view showing the damper open and the ventilating-apertures closed. Fig. 4 is a transverse section of a stovepipe, showing a transverse section of the damper, showing the same open. Fig. 5 is a detached view of the damper. Fig. 6 is a detached view of the damper-knob. Fig. 7 is a side elevation of a section of a stovepipe, showing the ventilating-apertures and the damper-shank aperture.

The present invention has relation to ventilating-dampers for stovepipes; and it consists in the novel construction hereinafter described, and particularly pointed out in the claim.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents a portion of a stovepipe-section to which the damper is to be attached. This stovepipe-section is provided with the shank-aperture 2 and the ventilating-apertures 3, all of said apertures being located and arranged substantially as shown in the drawings, and, as shown, the ventilating-apertures 3 are located somewhat higher than the shank-aperture and are so located for the purpose of bringing said apertures above the damper-plate 4 when said damper is turned, as illustrated in Fig. 1, also in dotted lines, Fig. 2. The damper-plate 4 is provided with the shank 5, which is angular in cross-section and is so formed for the purpose of fitting in the an-

gular aperture 6, formed in the knob-stem 7. The damper-plate 4 is provided with the lateral flanges or wings 8, which are curved laterally to correspond with the curvature of the pipe in which the damper-plate is to be placed.

For the purpose of allowing gas and smoke to escape from burning fuel when the damper is closed, as illustrated in Fig. 1, said damper is provided with the opening 9, which is preferably located as shown.

It will be understood that when the damper is closed, as illustrated in Figs. 1 and 2, the flanges or wings 8 will be in a vertical position or above and below the closed damper-plate; but of course it will be understood that after the damper is placed in a stovepipe extending horizontally then the blades or wings would be in a horizontal position instead of a vertical one.

The angular shank 5 is provided with an outer screw-threaded portion, which outer screw-threaded portion is for the purpose of receiving the screw-threaded nut 10, said screw-threaded nut being for the purpose of holding the knob 11 and its shank 7 in proper relative position and at the same time forcing the inner end of the shank 7 against the outer edge of the stovepipe and drawing the outer sides of the flanges or wings 8 against the inner edge of the stovepipe, thereby forming a bearing upon either side of the stovepipe—that is, upon the inside and outside—by which arrangement the plate 4 is held in proper position without a bearing located diametrically opposite the operating-shank. It will, however, be understood that the nut 10 should not be drawn tightly, as by so doing the damper could not be easily operated, but should be so adjusted that the damper-plate will be held at substantially right angles to the pipe in which it is located.

The operation of my invention is as follows, to wit: When it is desired to give a direct draft, the damper is turned as illustrated in Figs. 3 and 4, at which time the flanges or wings 8 are brought in position to close the ventilating-apertures 3, and when it is desired to close the damper the plate 4 is brought into the position illustrated in Figs. 1 and 2, which movement opens the ventilating-apertures 3, thereby allowing air to pass



through said apertures and into the pipe 1, above the plate 4, by which arrangement the proper amount of ventilation is produced when the damper is closed, and when the damper is open or in position for direct draft the ventilation to the pipe is cut off.

It will be understood that by my peculiar arrangement of attaching the damper-plate to the stovepipe-section the usual cross rod or bar is dispensed with, thereby doing away with the annoyance occasioned by the bending and warping of the usual cross-rod employed to operate a damper.

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

In a ventilating-damper for stovepipes, the combination of a stovepipe-section, provided with a bearing-aperture and ventilating-apertures, said ventilating-apertures located in a different plane from that of the bearing-

aperture, a damper-plate provided with a single bearing-shank, having angular and screw-threaded portions, and lateral flanges or wings extended substantially at right angles to the damper-plate, and curved to correspond substantially with the curvature of the stovepipe-section, said bearing-shank extending through the bearing-aperture, and a knob fitting over the angular portion of the damper-shank, and means for securing said knob on said shank adapted to draw the wings and knob into frictional engagement with the pipe, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE W. BOWEN.

Witnesses:

J. A. JEFFERS,  
F. W. BOND.