

No. 894,372.

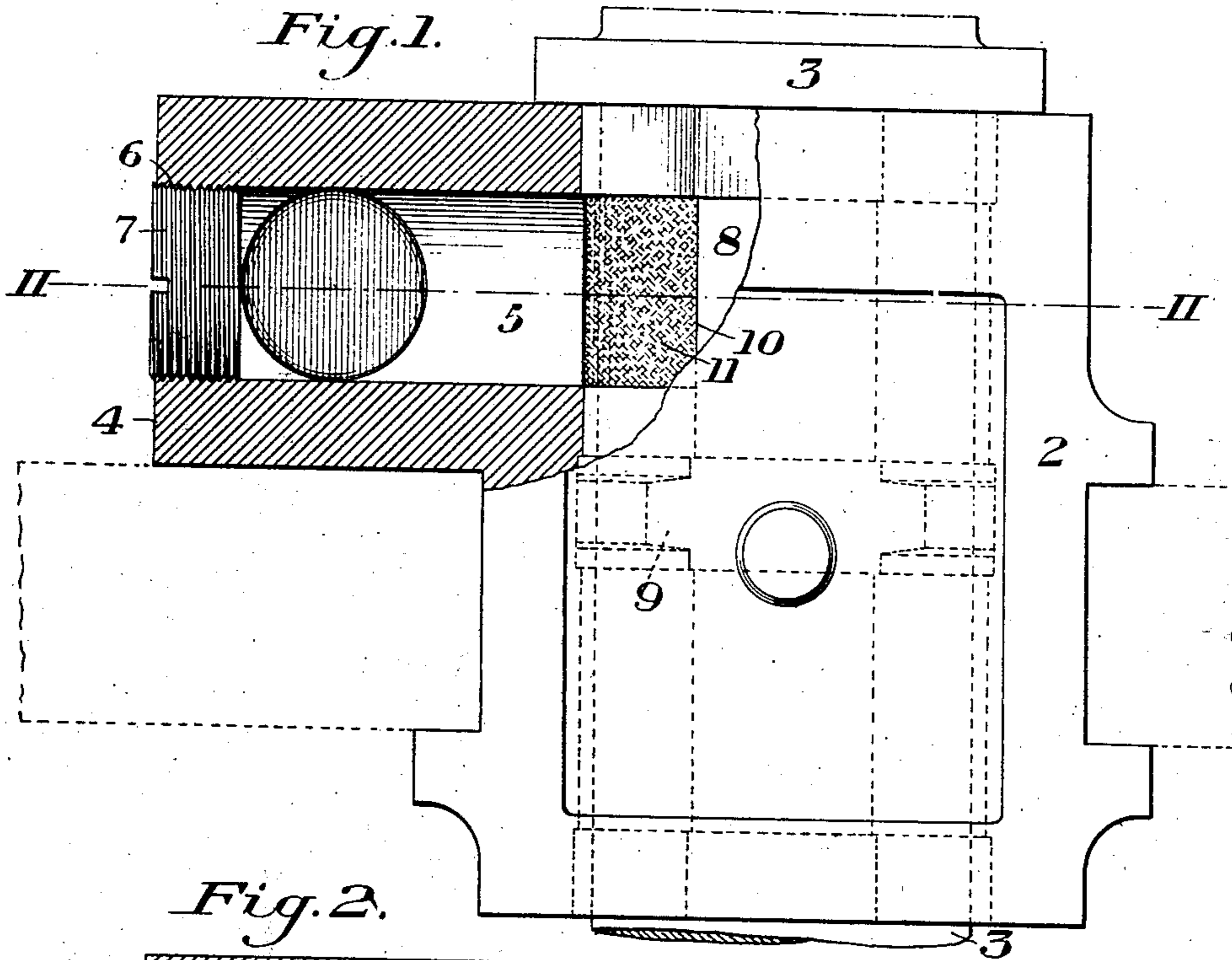
J. A. DUFFY.  
JOURNAL BOX.

PATENTED JULY 28, 1908.

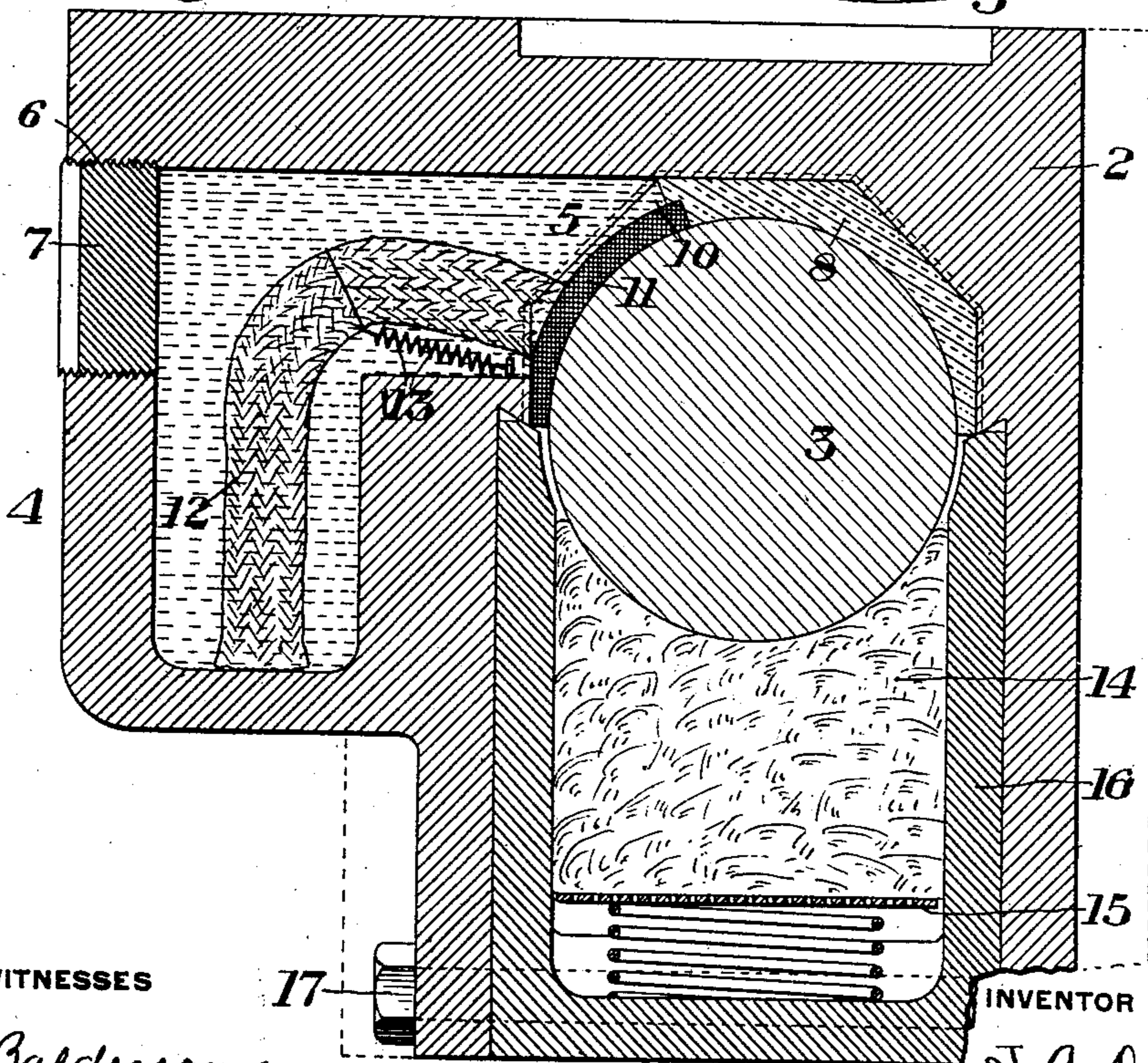
APPLICATION FILED AUG. 3, 1907.

2 SHEETS—SHEET 1.

*Fig. 1.*



*Fig. 2.*



WITNESSES

*R. A. Balderson.*  
*W. W. Swartz*

INVENTOR

*J. A. Duffy.*  
*By Babcock, Byrnes & Parmelee,*  
*his Atty.*

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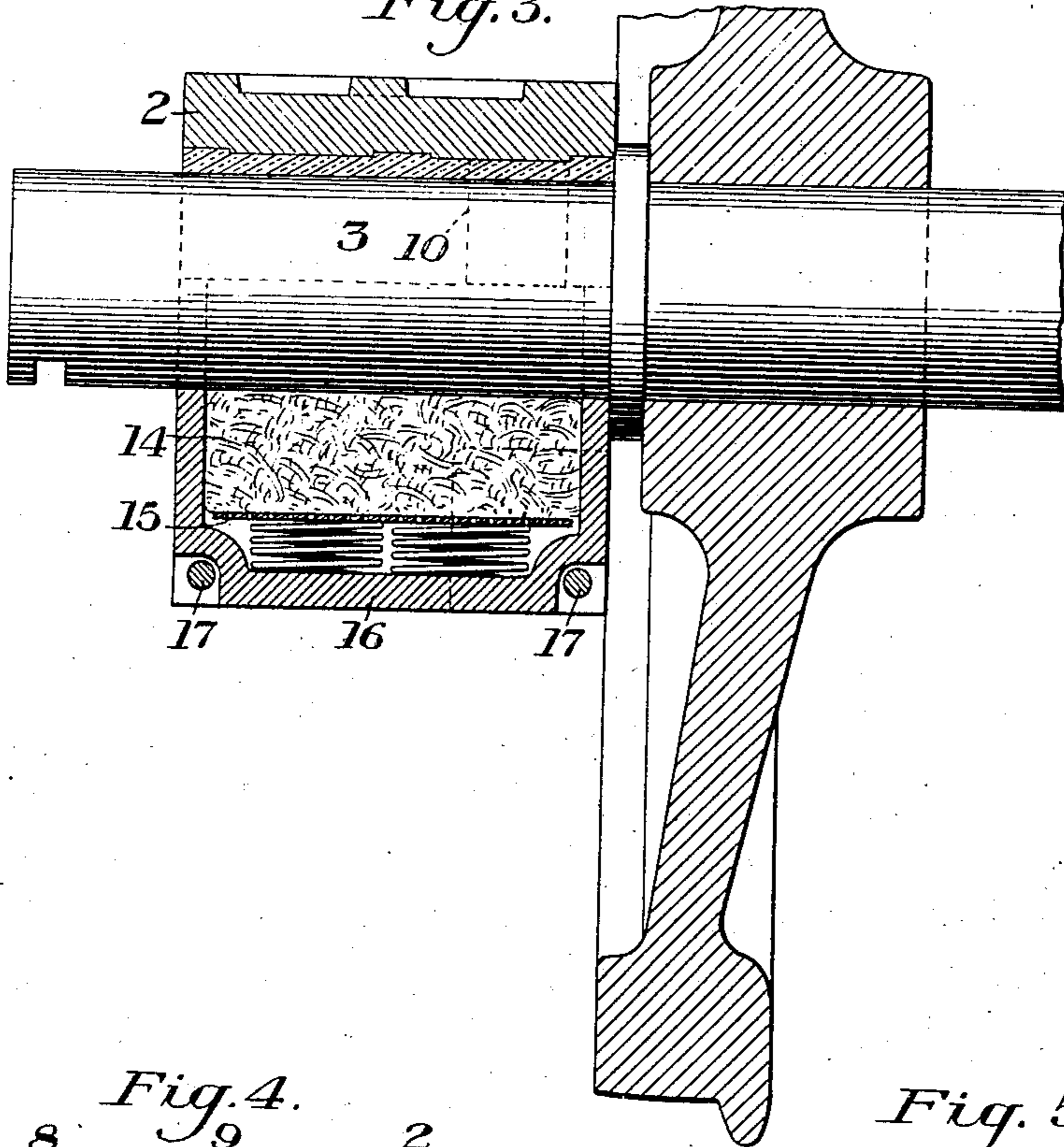
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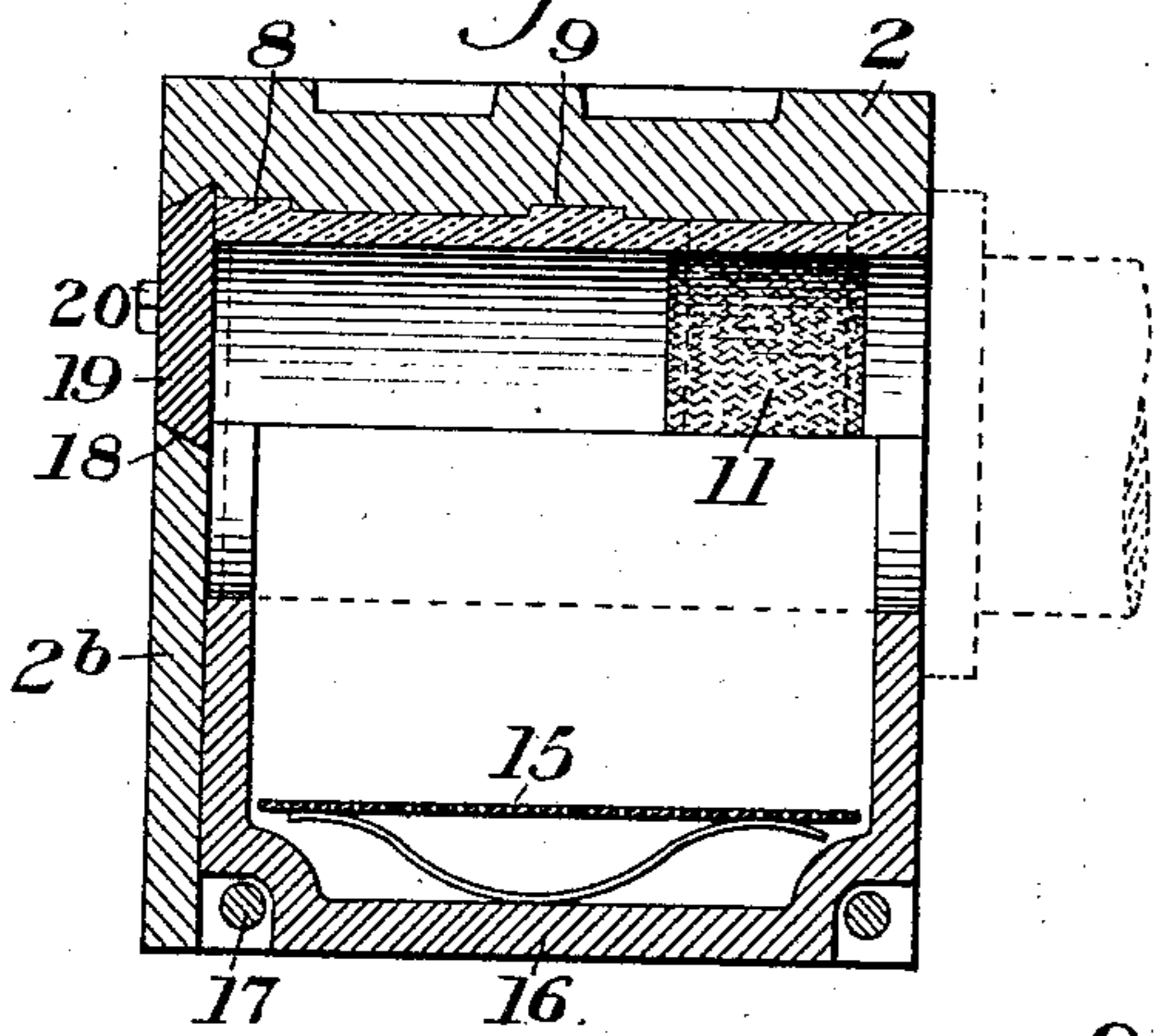
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2 SHEETS—SHEET 2.

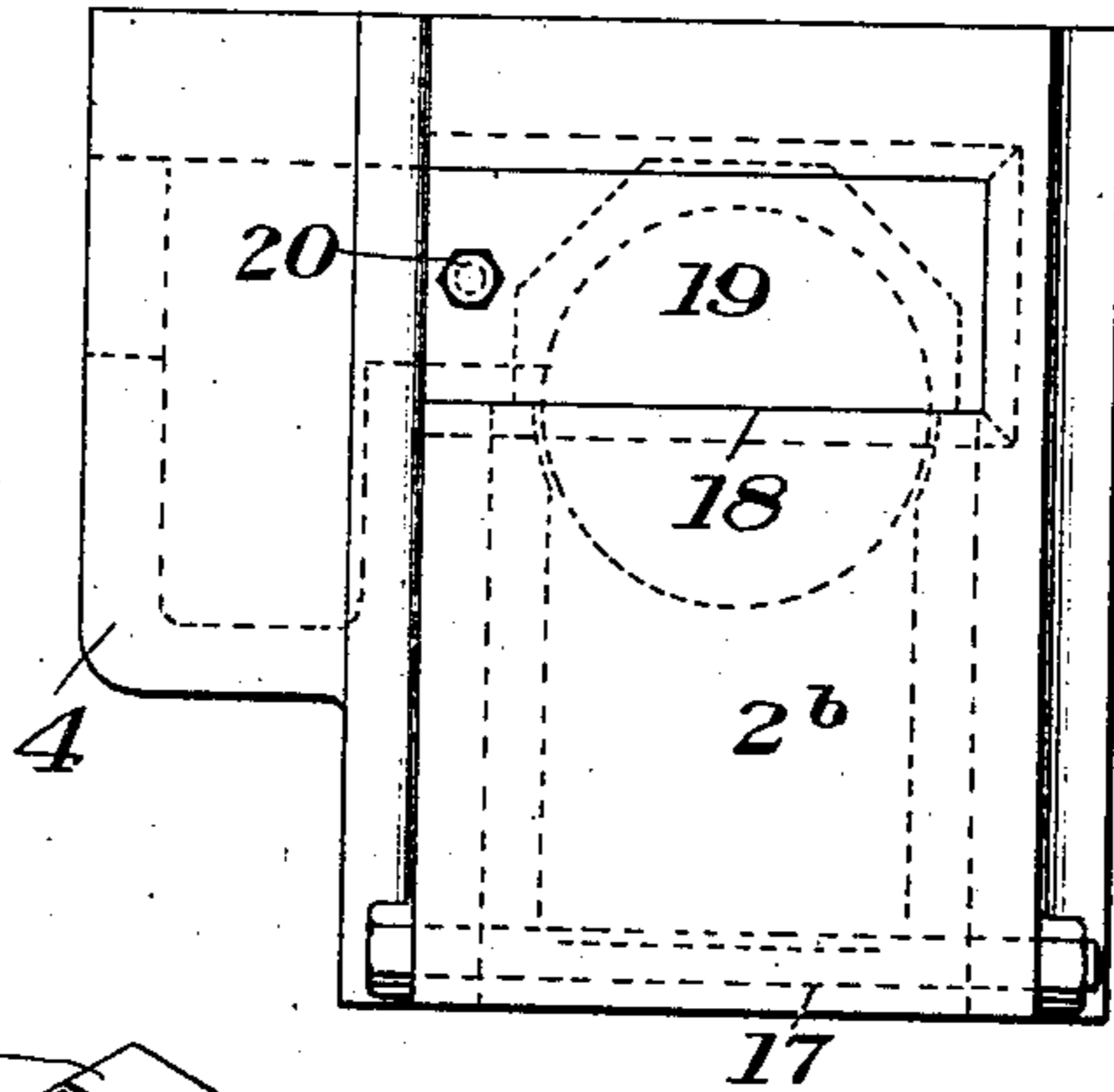
*Fig. 3.*



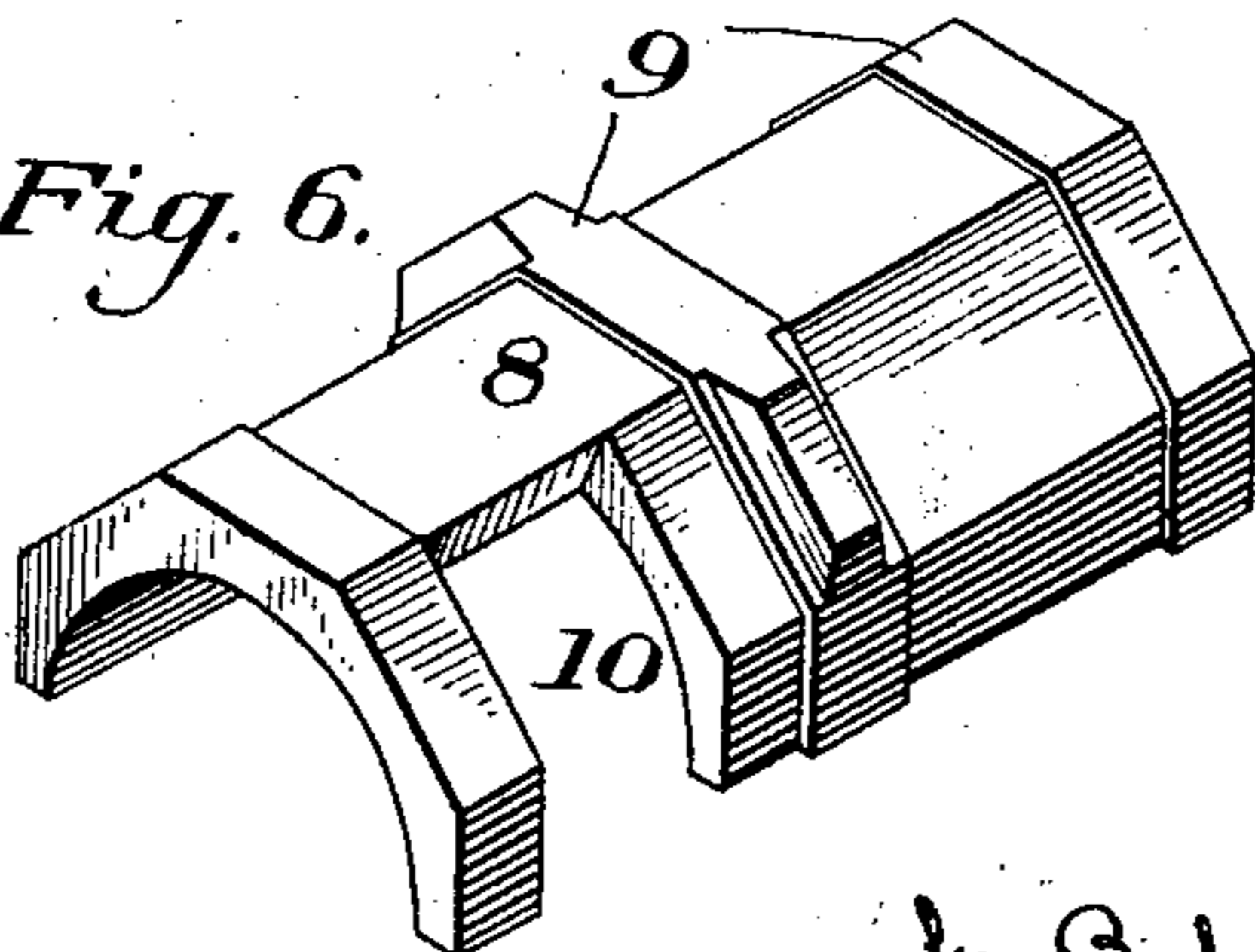
*Fig. 4.*



*Fig. 5.* 2a



*Fig. 6.*



WITNESSES

R. A. Balderson  
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J. A. Duffy,  
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# UNITED STATES PATENT OFFICE.

JAMES A. DUFFY, OF PITTSBURG, PENNSYLVANIA.

## JOURNAL-BOX.

No. 894,372.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed August 3, 1907. Serial No. 386,883.

*To all whom it may concern:*

Be it known that I, JAMES A. DUFFY, of Pittsburgh, Allegheny county, Pennsylvania, have invented a new and useful Journal-Box, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view, partly broken away, of one form of journal box embodying my invention; Fig. 2 is a section on the line II—II of Fig. 1; Fig. 3 is a sectional view on a smaller scale, showing the box applied to a car-axle; Fig. 4 is a vertical section of a modified form of the box; Fig. 5 is an end view of the box shown in Fig. 4; and Fig. 6 is a perspective view of the brass.

My invention has relation to journal boxes, and it is designed to provide means of novel and effective character for maintaining the lubrication of the journal.

A further object is to simplify the construction of the box; to facilitate the removal and insertion of the brasses, and to provide means whereby the shaft or journal may, if desired, be extended entirely through the box so as to project beyond the outer end of the same.

My invention will be best understood by reference to the accompanying drawings, which will now be described, premising, however, that various changes may be made in the construction and arrangement of the several parts by those skilled in the art, without departing from the spirit and scope of my invention.

In the drawings, the numeral 2 designates the box casting, which, in the form shown in Figs. 1, 2 and 3, is open at both ends to permit the axle or journal 3 to extend entirely through the same in the manner shown in Fig. 3. This casting is formed with a lateral chambered extension 4, which forms a lubricant reservoir or well which communicates with the upper portion of the box proper by means of the passage or opening 5.

6 is a filling-opening for the lubricant reservoir or well, and is normally closed by a screw-plug 7, or other suitable means.

8 designates the brass which is seated in the upper portion of the box over the journal, and is held from endwise displacement by means of suitable ribs or projections 9 which fit within recesses in the walls of the box. Adjacent to the passage or opening 5 the brass is cut away, as indicated at 10, and a piece of felt or other suitable material, indi-

cated at 11, is inserted in this cut-away portion in contact with the journal. I also preferably provide the lubricant reservoir or well with a wick 12 which extends into the lower portion thereof and which acts to convey lubricant to the felt or other material 10, a spring 13 being preferably attached to the wick to hold it in contact with the felt. The space within the box below the journal is filled with waste or other fibrous material, as indicated at 14. This material is preferably pressed upwardly against the journal by a spring-actuated follower 15. The box itself being open at the ends, I insert therein, for the purpose of containing the material 14, a separate box or cell 16, which is closed at the ends and bottom and which is secured in the open lower portion of the journal box by bolts 17, or other suitable means.

In operation the felt 11 which contacts with the journal, is kept constantly soaked with lubricant, either by direct contact with the lubricant contained within the upper portion of the reservoir or well, or by the capillary action of the wick 12. The excess lubricant delivered to the journal falls into the cell 16, thereby keeping the waste 14 saturated therewith, so that the entire surface of the journal is kept constantly lubricated.

In the modification shown in Figs. 4 and 5, the journal-box casting 2<sup>a</sup> has an integral outer end wall 2<sup>b</sup>. An opening 18 is formed in the upper portion of this wall to permit access to the box for the purpose of inserting and removing the brass. This opening is normally closed by a dove-tailed door or slide 19 which may be secured against accidental displacement by a bolt or other fastening 20.

The advantages of my invention result from the construction and arrangement by which a thorough and effective lubrication of the journal is at all times provided; from the facility with which access to the box may be had for the purpose of renewing the parts; and from the simplicity of the construction as a whole.

I claim:—

1. A journal box having a laterally offset chambered portion forming a lubricant reservoir or well communicating with the box proper at its upper portion, a brass having a cut-away portion, a body of lubricant conducting material seated in the cut-away portion at the point of communication with the lubricant reservoir or well, said box having

an open bottom chamber below the brass, and a removable box or cell removably secured within said chamber and extending upwardly therein; substantially as described.

- 5 2. A journal box having a brass at its upper portion which is longitudinally cut-away at one side, and also having a chambered extension at its inner end at right angles to the journal, the chamber of said extension

communicating with the cut-away portion 10 of the brass and arranged to form a lubricant reservoir; substantially as described.

In testimony whereof, I have hereunto set my hand.

JAMES A. DUFFY.

Witnesses:

LAURENCE H. LEE,  
H. M. CORWIN.