

No. 870,073.

PATENTED NOV. 5, 1907.

J. H. WOODRING.
BALANCED VALVE.
APPLICATION FILED MAR. 28, 1906.

Fig. 1.

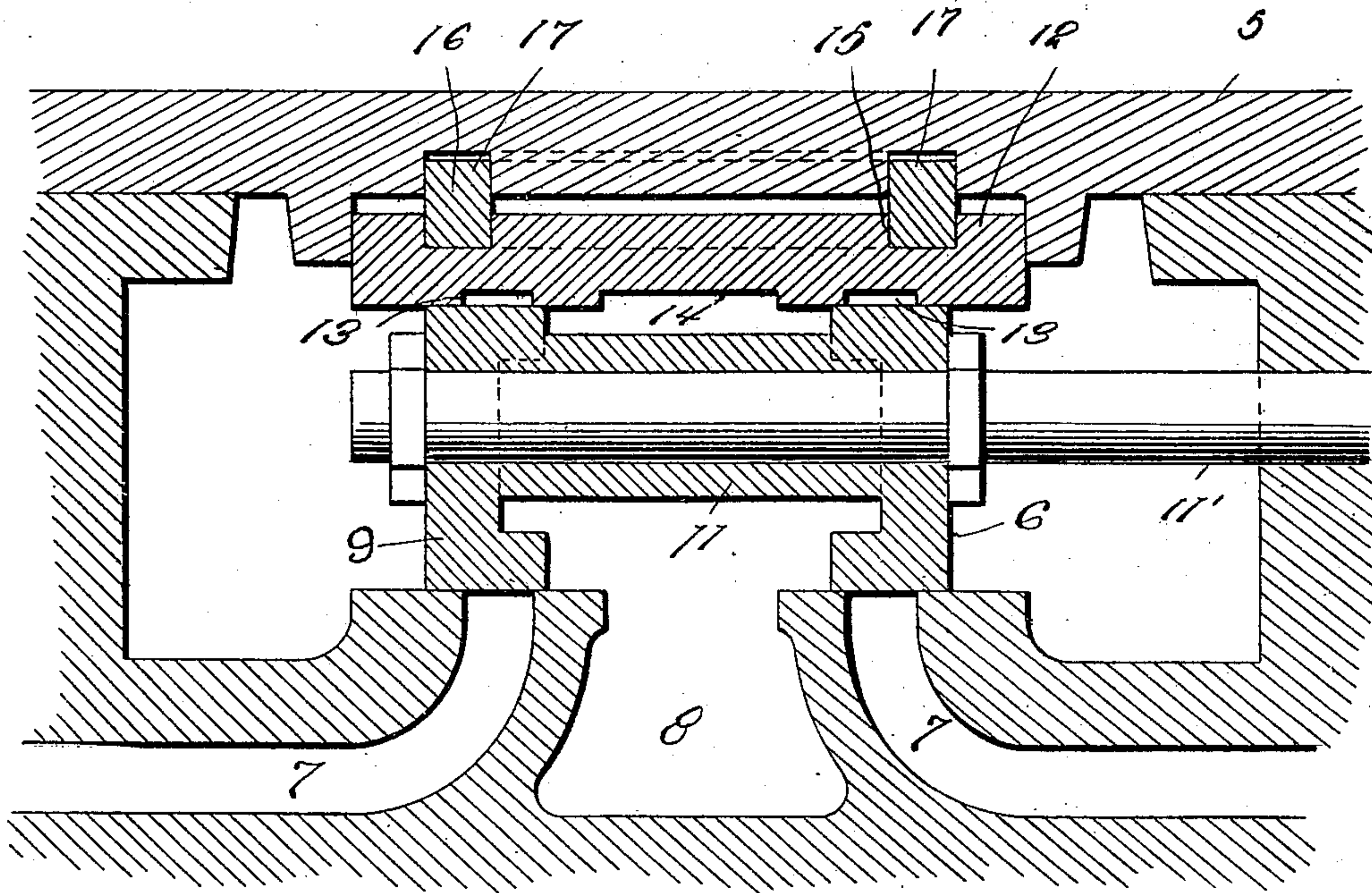


Fig. 2.

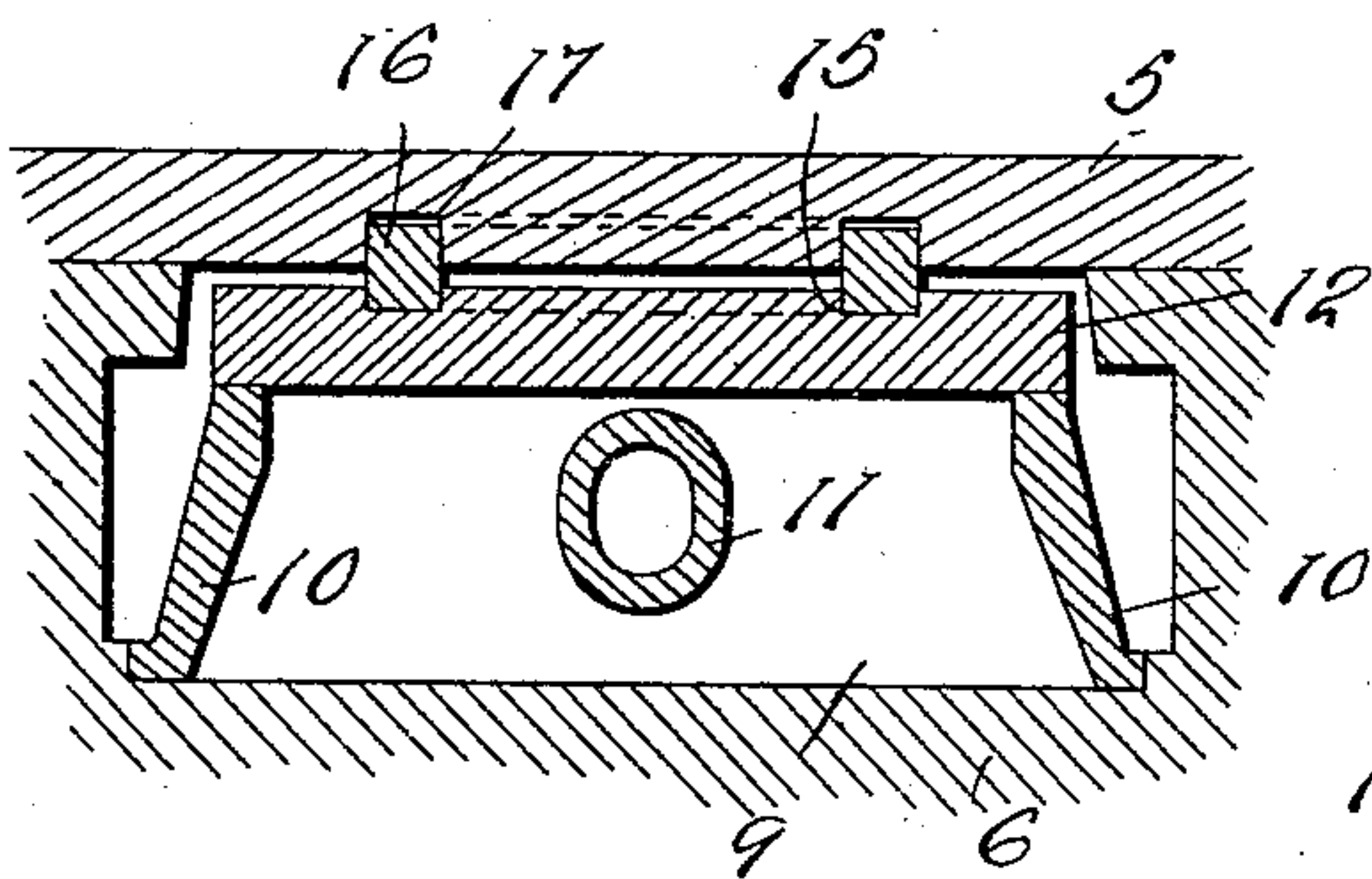
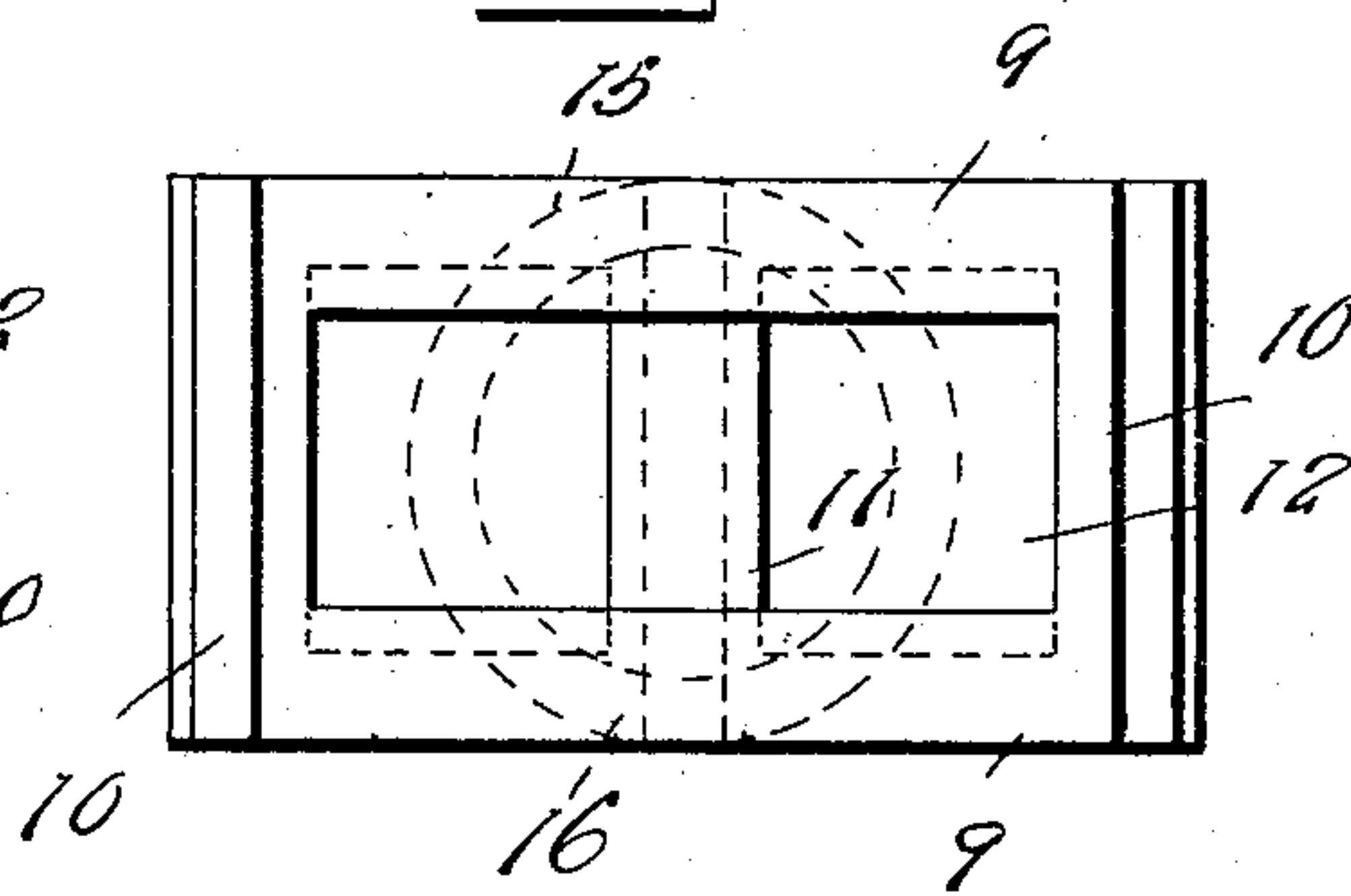


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES H. WOODRING, OF CORRY, PENNSYLVANIA.

BALANCED VALVE.

No. 870,073.

Specification of Letters Patent.

Patented Nov. 5, 1907.

Application filed March 28, 1906. Serial No. 308,537.

To all whom it may concern:

Be it known that I, JAMES H. WOODRING, a citizen of the United States, residing at Corry, in the county of Erie, State of Pennsylvania, have invented certain
5 new and useful Improvements in Balanced Valves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to balanced valves and has for its object to provide an improved construction of this nature which will embody novel features tending to render valves of this nature more efficient and durable and as a further object to simplify the construction of
15 such valves.

In the drawings, Figure 1 is a vertical sectional view through a steam chest showing my construction of valve in position therein. Fig. 2 is a similar view therethrough taken in a plane at right angles to that
20 of Fig. 1. Fig. 3 is a bottom plan view of the valve proper.

Referring to the drawings, the numeral 5 denotes a steam chest, 6 my improved form of slide valve, and 7 and 8 respectively the inlet and exhaust ports communicating with the steam chest.
25

The valve 6 is of hollow rectangular construction, open at its top and bottom, and comprises sides 9 and ends 10. The sides 9 of the valve are connected by means of a sleeve 11 which is formed integral therewith
30 and which opens at its ends therethrough, as shown in

Fig. 1, the said sleeve being located at the middle of the valve and intermediate the upper and lower edges of the sides thereof and designed for the reception of a valve rod 11'.

Disposed upon the valve 6 is a plate 12 which is recessed in its under face, as indicated at 13 and 14, and which is provided in its upper face with an annular groove 15 in which is seated the lower portion of a packing ring 16. The packing ring 16 has its upper portion seated in an annular groove 17 formed in the under
40 face of the top of the steam chest and with its upper edge face in spaced relation to the bottom of the groove and it will be understood that the said ring prevents lateral movement of the said plate but allows the plate to take up the wear of the valve 6.
45

What is claimed is:

A device of the type set forth, the combination with a steam chest of a sliding valve comprising a rectangular body including sides and ends, an integral sleeve connecting said sides and communicating with the outer surfaces
50 thereof, said sleeve being designed to receive the valve rod therethrough, a wear plate imposed on said valve and formed in its upper surface with an annular groove, said steam chest having one of its walls formed with a groove confronting and alining said first named groove, and a
55 packing ring having portions thereof disposed in each of said grooves.

In testimony whereof, I affix my signature, in presence of two witnesses.

JAMES H. WOODRING.

Witnesses:

C. G. PETTENGILL,
M. WIGHT.