

(No Model.)

E. L. MANSFIELD.

LUBRICATING JOURNAL BEARING.

No. 354,326.

Patented Dec. 14, 1886.

Fig. 1.

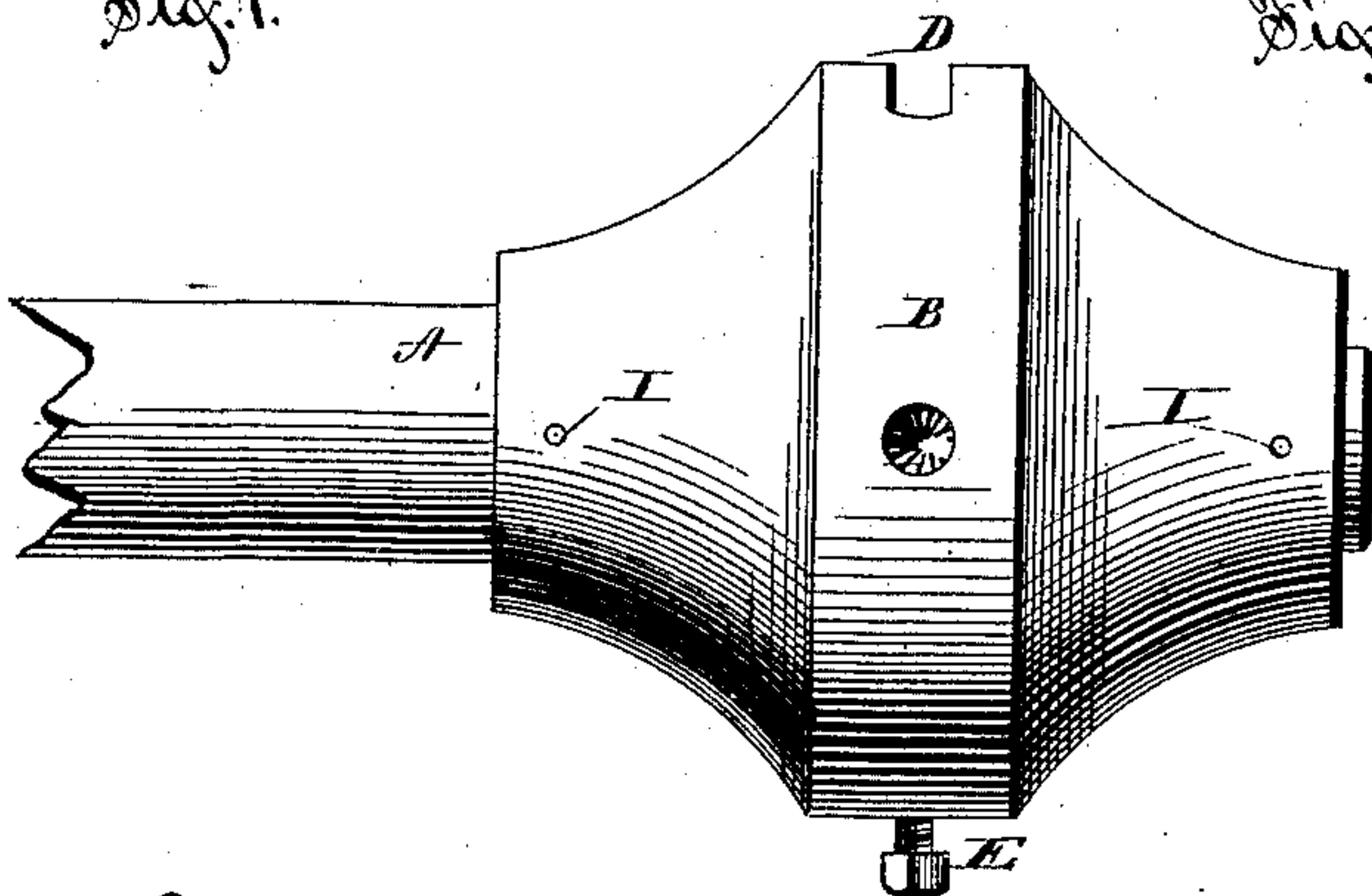


Fig. 6.

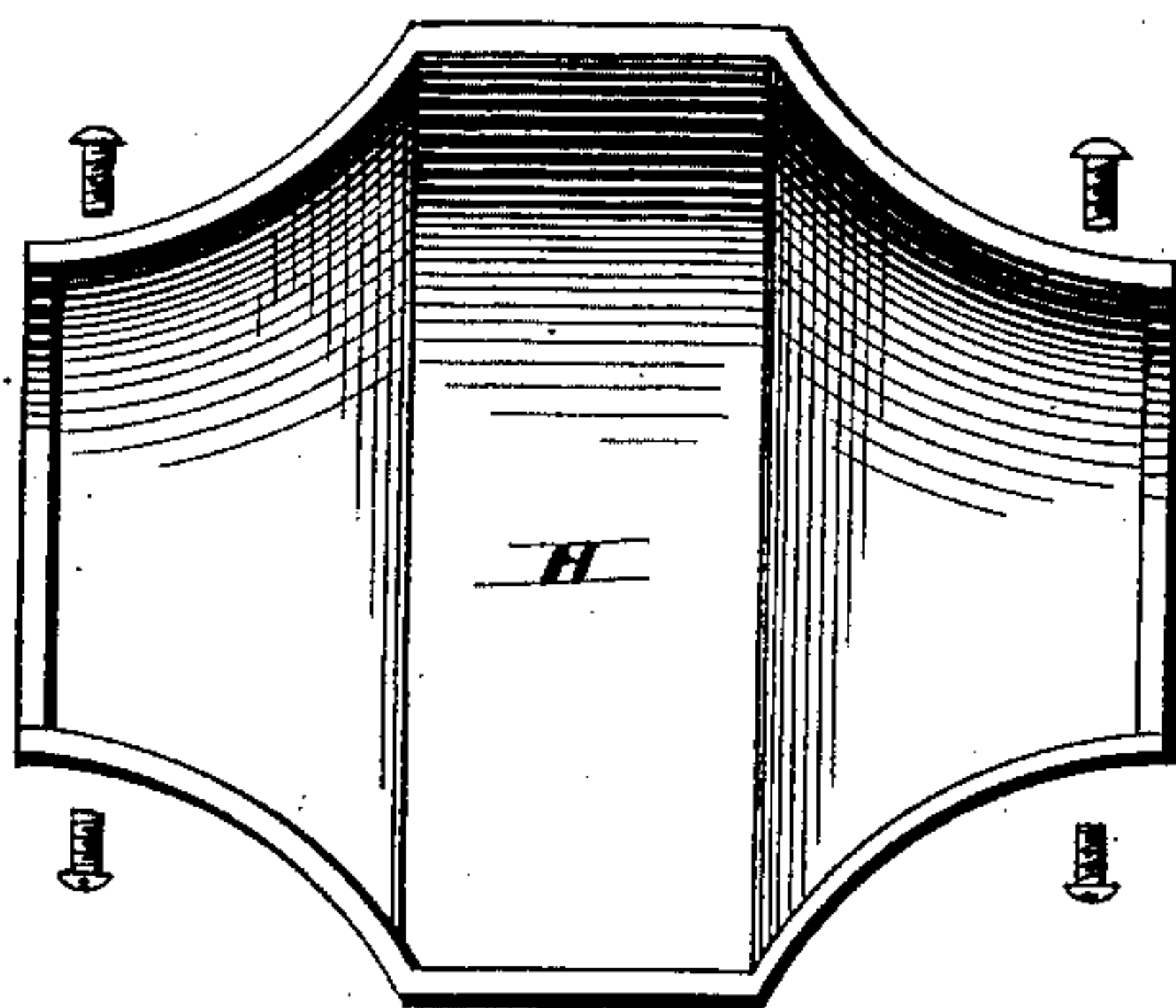


Fig. 2.

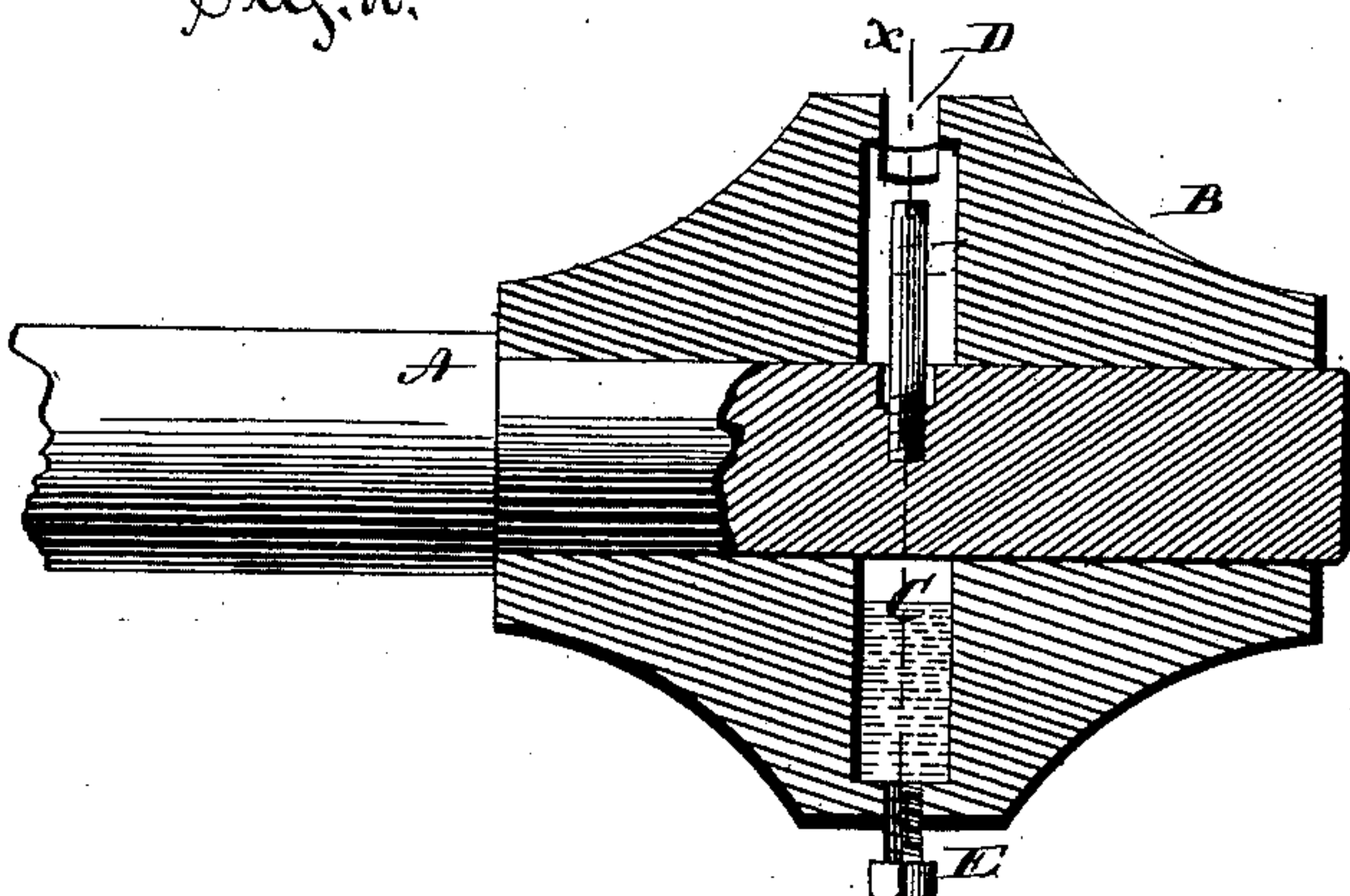


Fig. 3.

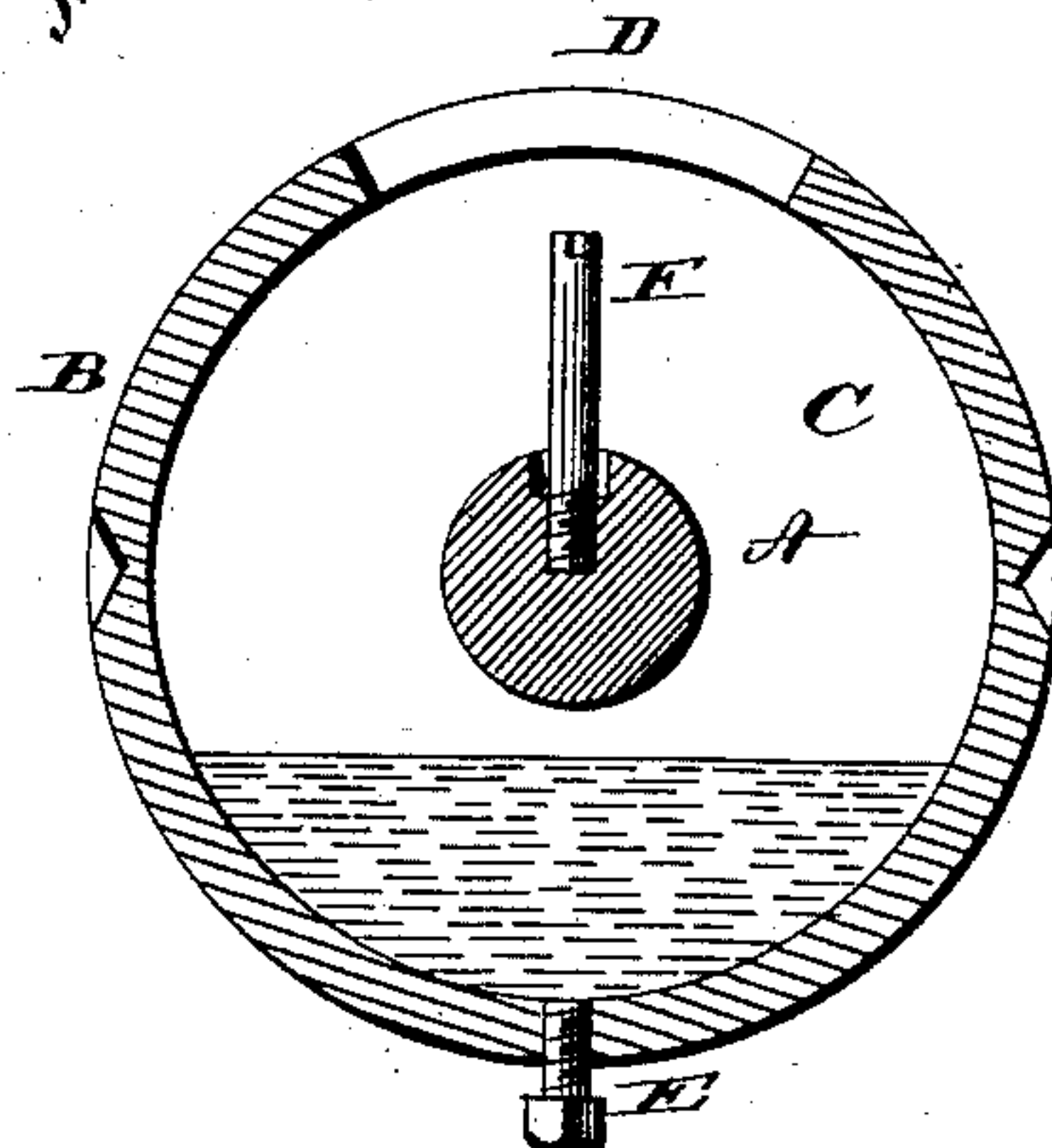


Fig. 4.

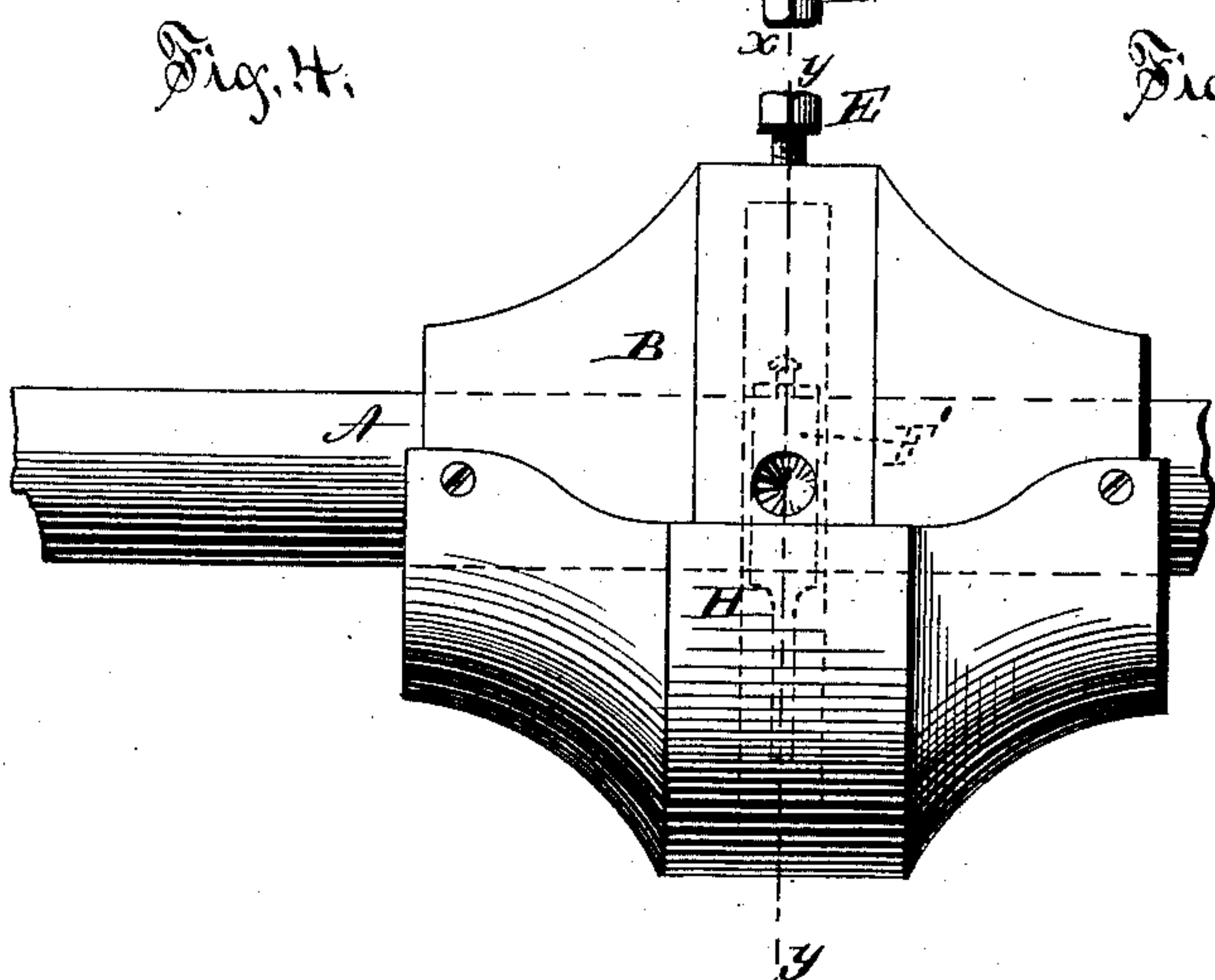
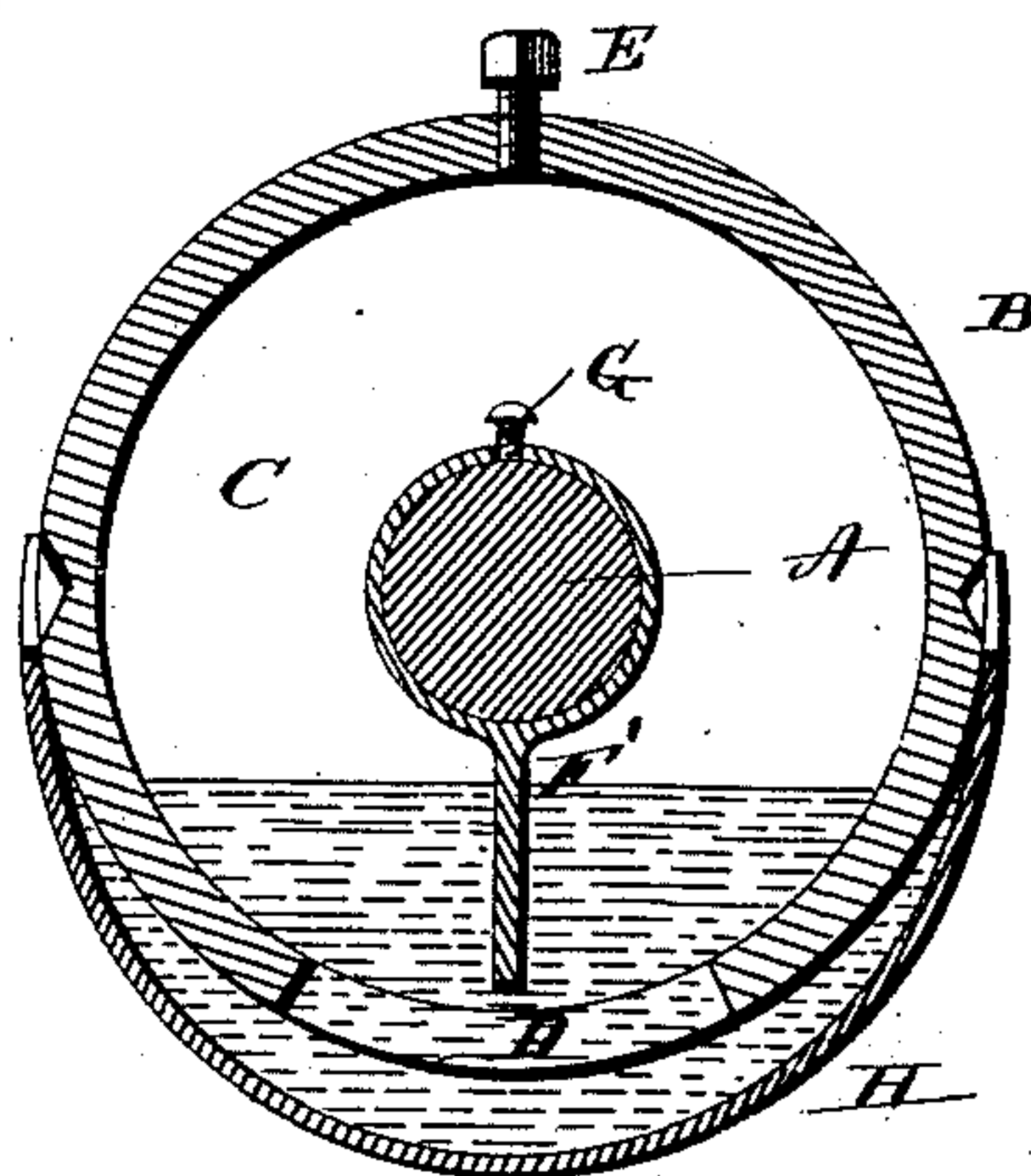


Fig. 5.



WITNESSES
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LUBRICATING JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 354,326, dated December 14, 1886.

Application filed September 15, 1886. Serial No. 213,615. (No model.)

To all whom it may concern:

Be it known that I, EDWIN LASELLE MANSFIELD, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Lubricating Journal-Bearings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of my improved journal-bearing. Fig. 2 is a longitudinal axial section of the same. Fig. 3 is a transverse section on line *xx*, Fig. 2. Fig. 4 is a side elevation of a modification showing an oil-fountain attached. Fig. 5 is a transverse section of the same, taken on line *yy*; and Fig. 6 is a plan view of the oil-fountain.

Like letters of reference indicate corresponding parts throughout the several figures.

My invention has relation to lubricating journal-bearings; and it consists in the improved construction and combination of parts constituting the same, as will be hereinafter fully set forth.

In the accompanying drawings, A represents a shaft journaled in the bearing B. Said bearing consists of one piece of metal, in the center of which is formed a narrow circular lubricant-chamber, C, with its plane perpendicular to the bore of the bearing. A slot, D, opens from the top of the bearing into said chamber, and a port, stopped by the screw-plug E, is formed in the bottom of the same.

To that portion of the shaft which lies in the chamber there is secured an agitator, F, which may be a simple pin screw-threaded at one end and nicked at the other, to be turned into a socket in the shaft, Figs. 2 and 3; or it may be formed of a ring provided with a set-screw and with a pin projecting from one side,

as seen at F in Figs. 4 and 5. The socket formed in the shaft for the agitator is larger at the upper than at the lower end, and only the lower portion is screw-threaded. This allows the agitator to be dropped through the slot D into its socket, where it will stand until it can be driven down. The other form of agitator is placed in the bearing before the shaft is entered, and then when the shaft has passed through the ring into place the set-screw G is tightened.

The lubricant is poured into the chamber through the slot D, and as the shaft revolves the agitator carries portions of the lubricant onto the shaft. To clean the bearing, the plug E is withdrawn and steam or other agent forced through the lubricant-chamber.

In Figs. 4 and 5 the bearing is represented as placed with its slot downward and an oil-fountain, H, attached thereto by passing screws through holes therein, and turning them into the sockets I. Thus a large oil-chamber is formed and a chance afforded for sediment to drop entirely out of reach of the rotating agitator. This fountain may also be used as a drip-box when the bearing is placed with the slot upward. The agitator serves also to limit any undue longitudinal movement of the shaft.

Having thus fully described my invention, I claim—

The combination, with the shaft A, an agitator secured thereto, and the bearing B, provided with chamber C, slot D, and screw-stopped port E, of the part H, secured by its upper edge directly to said bearing.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

EDWIN LASELLE MANSFIELD.

Witnesses:

EVERETT KENT DEXTER,
JOHN WENTWORTH PORTER.