

(No Model.)

W. H. SUNDAY.
BUNG.

No. 406,602.

Patented July 9, 1889.

Fig. 1.

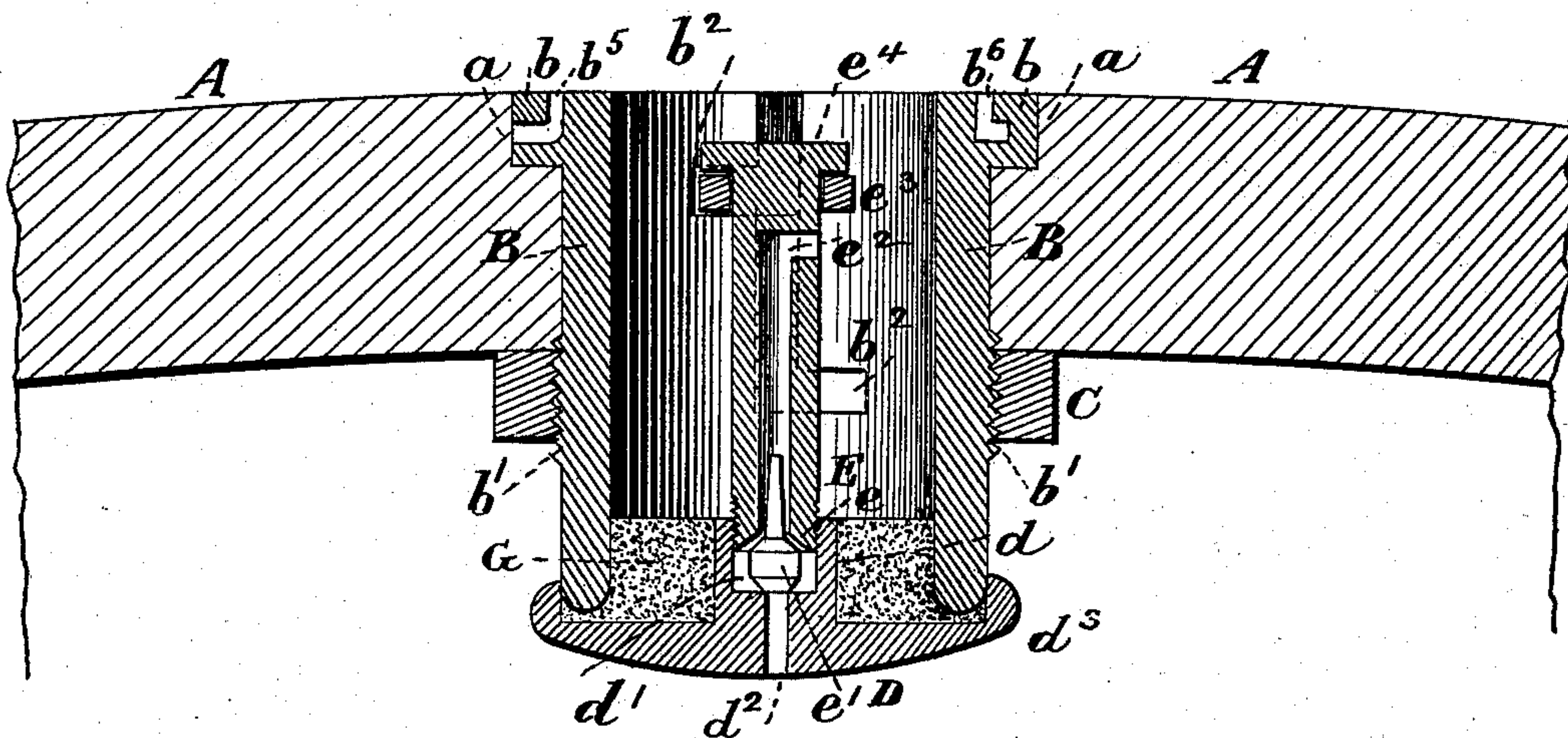


Fig. 2.

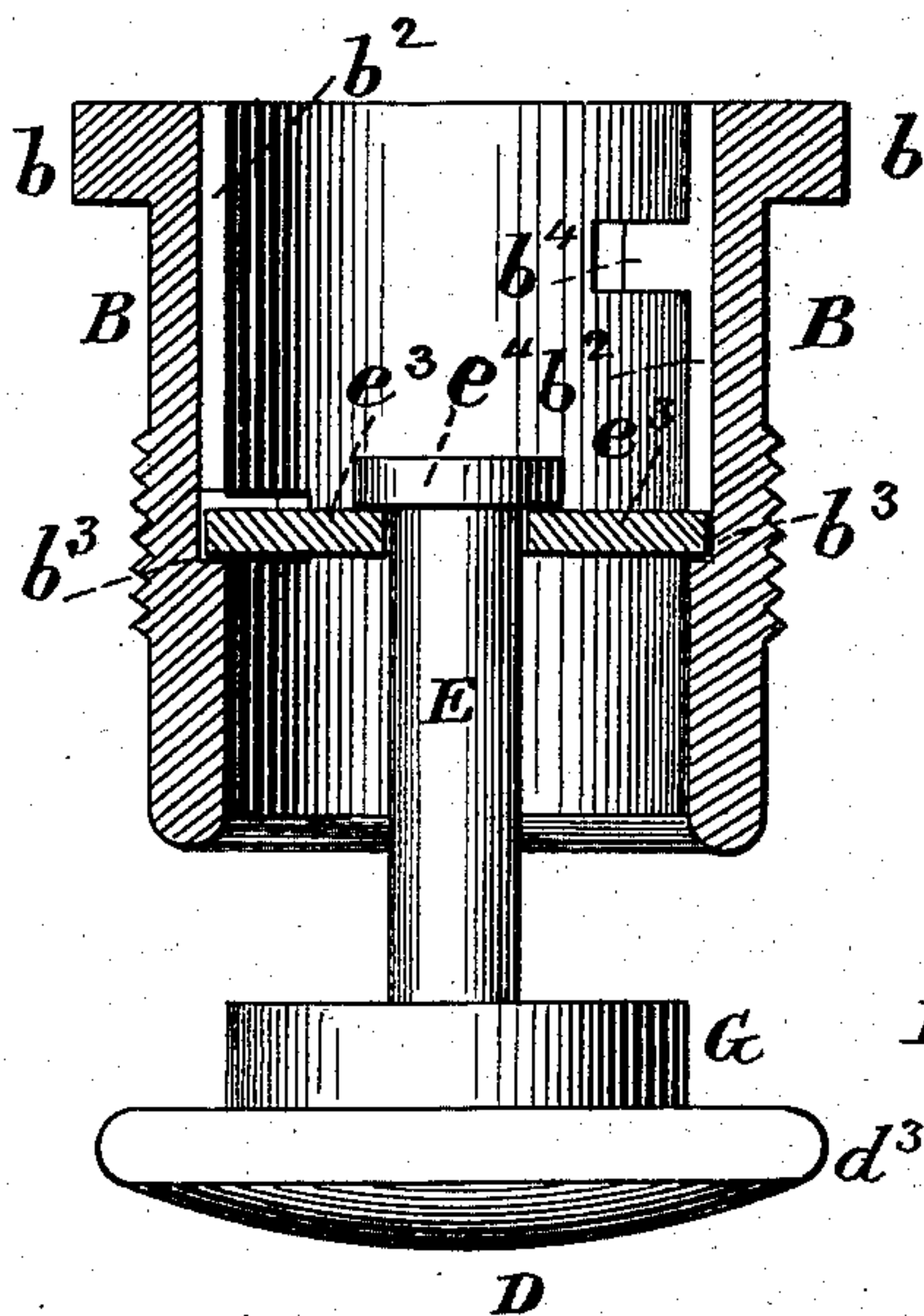


Fig. 3.

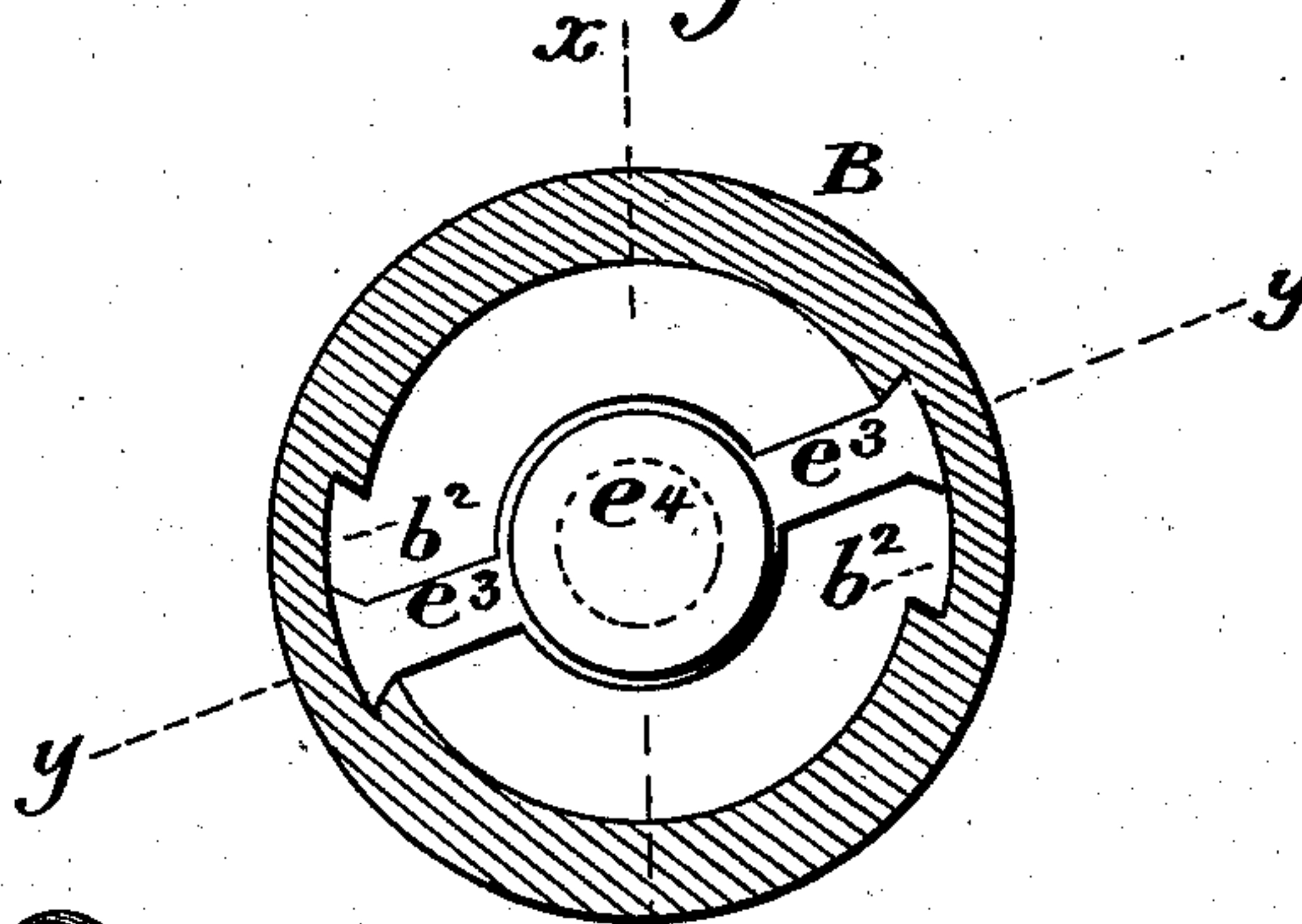


Fig. 4.

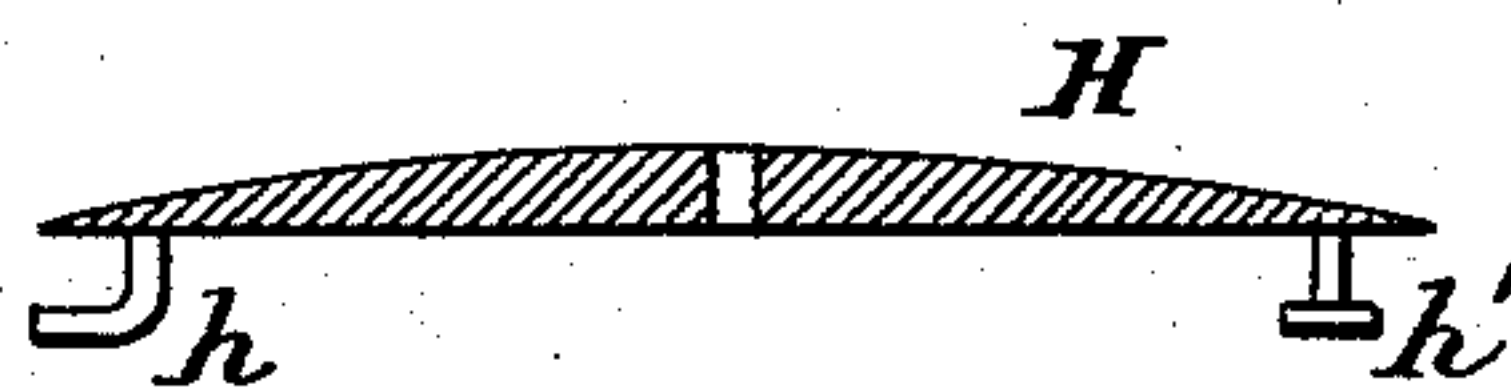
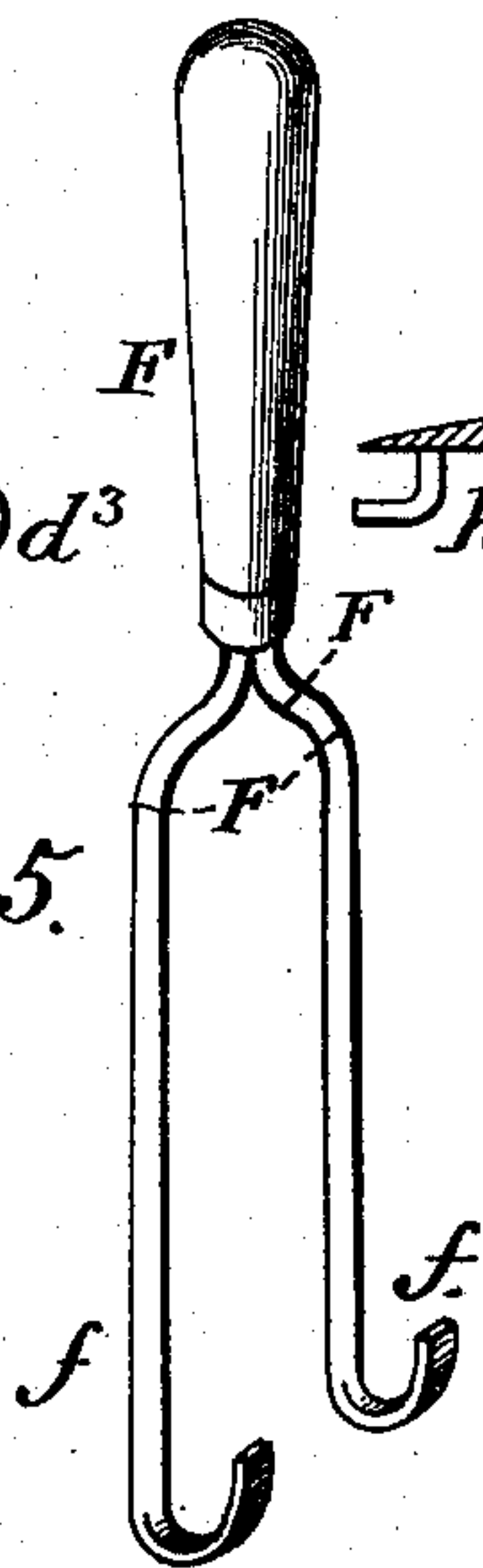


Fig. 5.



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BUNG.

SPECIFICATION forming part of Letters Patent No. 406,602, dated July 9, 1889.

Application filed April 19, 1889. Serial No. 307,829. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SUNDAY, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Bungs for Barrels, Kegs, or other Vessels; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to improve the construction of a bung for barrels or other vessels, so that it may be conveniently opened for the inlet of liquids and closed against the escape thereof without removal.

Figure 1 of the drawings is a vertical section of the bung on line $x x$ of Fig. 3. Fig. 2 is a vertical section on line $y y$ of Fig. 3. Fig. 3 is a horizontal section of the bung. Fig. 4 is a vertical section of the cover, and Fig. 5 is a perspective view of the forked hook-wrench used in raising or lowering the valve.

In the drawings, A represents a barrel or other vessel, rabbeted at a to receive the annular flange b on the hollow bung B. The latter is also threaded on the outside at b' for a jam-nut C, so that the nut and flange may hold the bung tightly to the vessel. The nut is screwed up into place on new vessels before the heads are inserted, and dispensed with on old barrels, where the bung may be simply driven into the stave. In the latter case I prefer to make the bung more or less conical in shape.

The bung B is provided on the inside with a bayonet-slot b^2 and at the lower end with a perforated valve D, into which screws the stem E, so as to form a seat e for the air-inlet valve e' and air-channel e^2 . The valve and stem D E are also screw-coupled, so that the valve e' and seat e may be placed in the de-

sired local relation to each other. The valve-stem E has two opposite radial arms $e^3 e^3$, which may be in one piece with the stem, or attached to a ring upon which may rest a stem-head e^4 . When the valve is open for the inlet of liquid to the vessel, as shown in Fig. 2 of the drawings, the arms $e^3 e^3$ are supported on the shoulder b^3 of the bung, but when closed to prevent escape of liquid from the vessel rest on the shoulder b^4 . In order to raise or lower the valve D, I engage the hooks $f f$ of the bifurcated wrench F on the arms $e^3 e^3$, turn and cause the arms to pass up or down the bayonet-slot b^2 until they rest on the shoulder b^3 or on b^4 .

G is a cork, rubber, or any preferred packing, to secure a liquid-tight joint between the valve D and the bung B.

H is a cover for the open top of the bung, provided with the catches $h h'$, which work in the slots $b^5 b^6$ of the bung.

The valve D has a hollow projection d , into which the stem E screws, so as to leave a chamber d' deep enough to allow the valve e' a slight up-and-down motion.

The valve D is hollowed out to receive the cork G, which surrounds the projection d and has the upward rim-flange d^3 , which embraces the lower end of the bung when the valve D is closed.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

A bung having the inside bayonet-slot b^2 , in combination with a valve D, having the stem E, provided with arms $e^3 e^3$, which engage said longitudinal slot, whereby said valve may be opened or closed by a forked hook-wrench, as described.

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

W. H. SUNDAY.

Witnesses:

A. RUPPERT,
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