

(No Model.)

J. EPPICH.
AUTOMATIC SHUT-OFF.

No. 583,736.

Patented June 1, 1897.

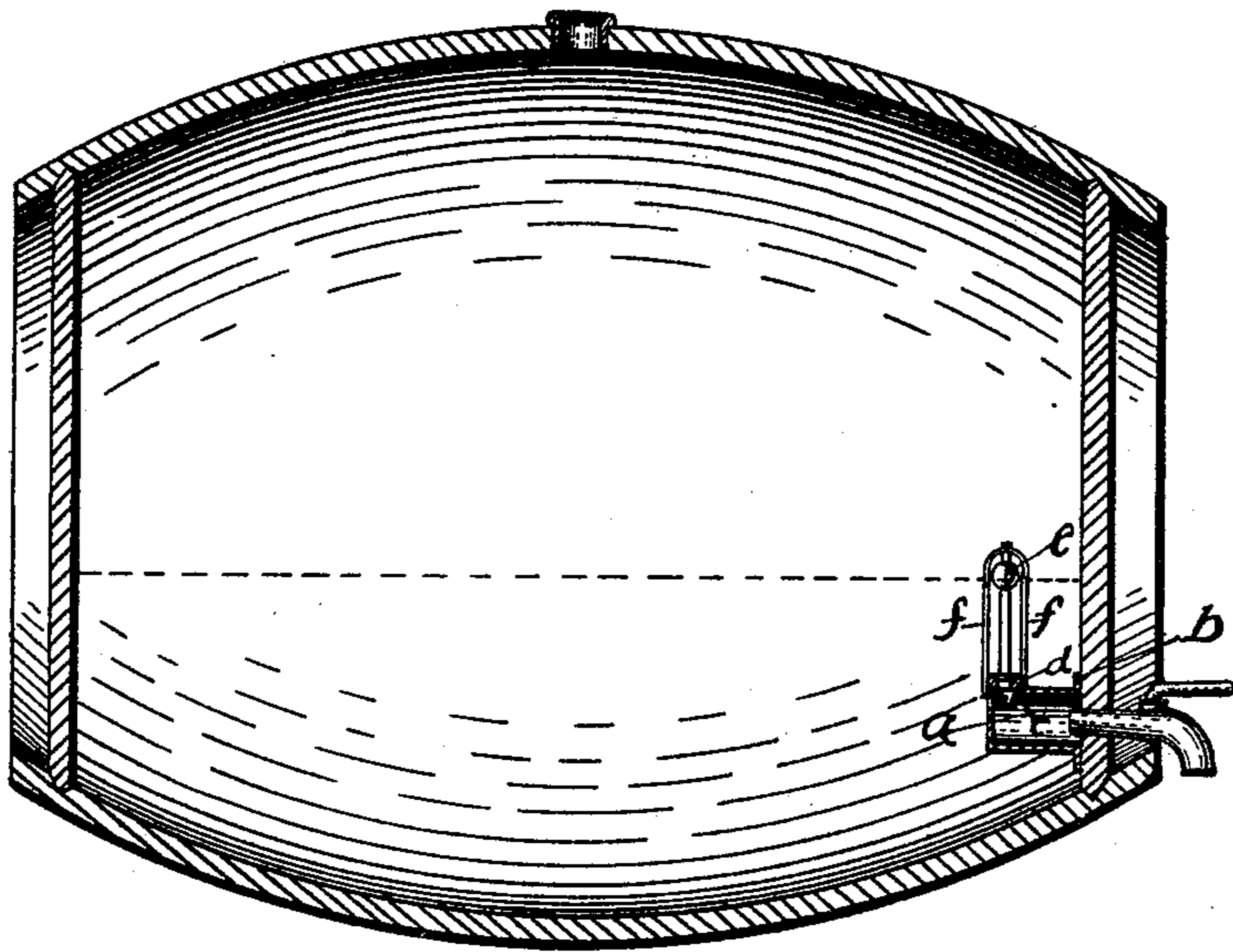


Fig. 1.

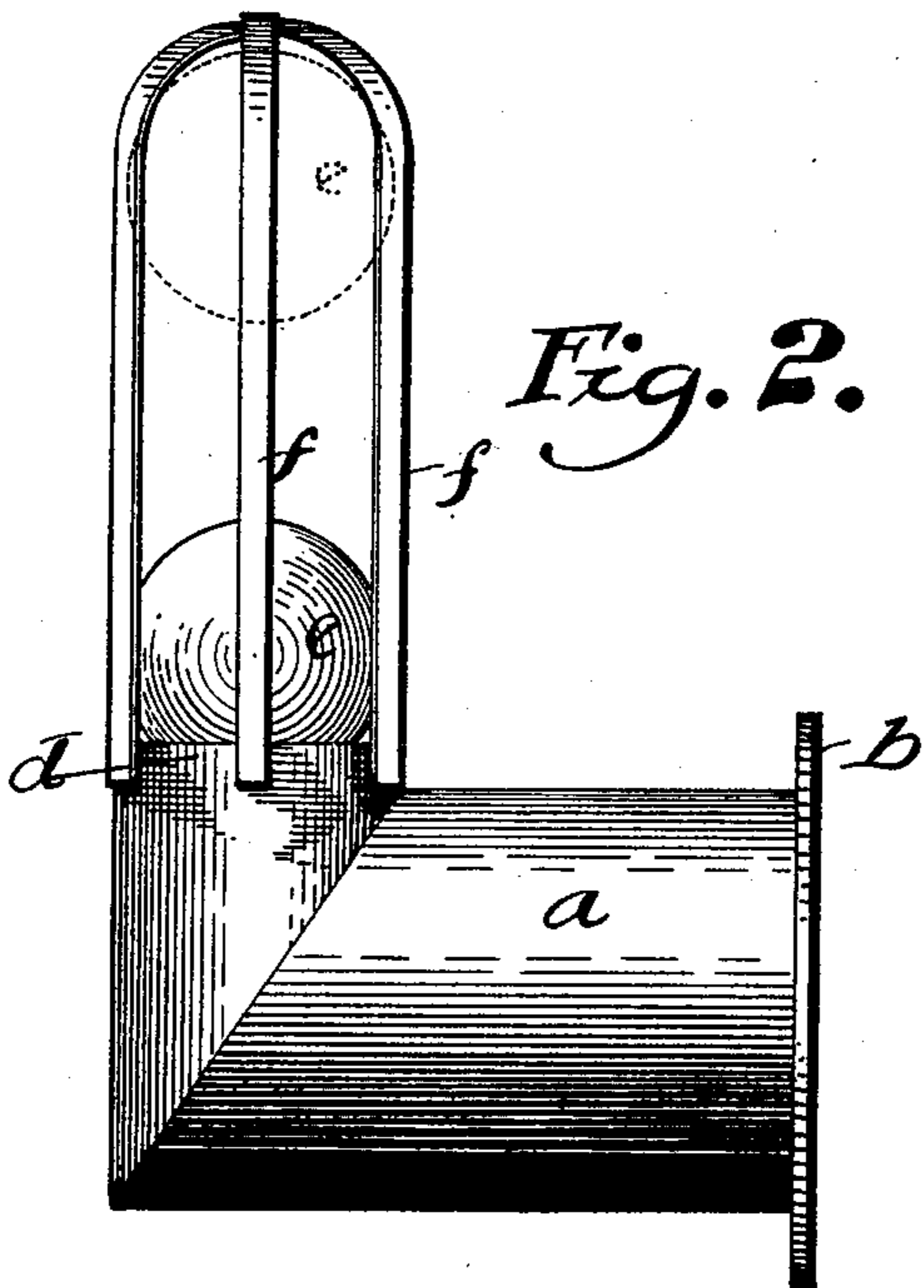


Fig. 2.

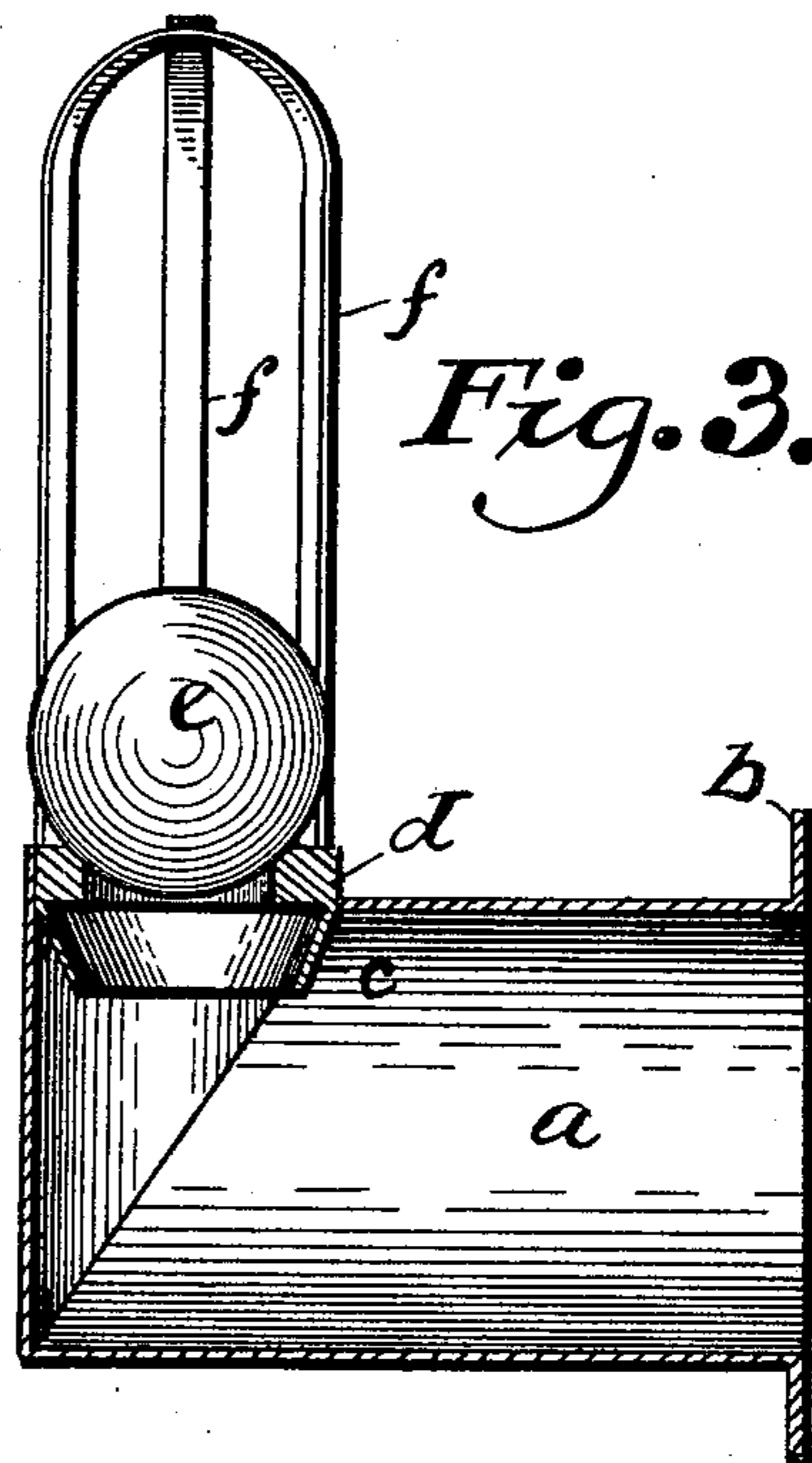


Fig. 3.

Witnesses:-

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By

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UNITED STATES PATENT OFFICE.

JOHN EPPICH, OF ALLEGHENY, PENNSYLVANIA.

AUTOMATIC SHUT-OFF.

SPECIFICATION forming part of Letters Patent No. 583,736, dated June 1, 1897.

Application filed December 15, 1896. Serial No. 615,802. (No model.)

To all whom it may concern:

Be it known that I, JOHN EPPICH, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Shut-Offs, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in automatic shut-offs, and has for its object to construct a device of the character to be used in withdrawing gaseous liquids from their vats or cells into the barrel or keg and prevent any air from entering into the filter through which the liquid passes to the barrel or keg.

The invention further aims to construct an automatic shut-off for the above-described purpose that will be extremely simple in its construction, strong, durable, effectual in its operation, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more specifically described, and particularly pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a longitudinal sectional view of the vat or cell, showing the shut-off in position. Fig. 2 is a side elevation of my improved automatic shut-off. Fig. 3 is a vertical longitudinal sectional view of the same.

Referring to the drawings by reference-letters, *a* indicates the cylinder, which is formed at one end with a flange *b* for securing the shut-off to the vat or cell. This cylinder is provided on top, at the rear end, with an inlet-port, in which is arranged a funnel-shaped flange *c*, and above the funnel *c* a collar *d*, supported by said flange *c*, which forms a seat for the shut-off *e*, consisting of a ball composed of rubber or other suitable material, said ball being inclosed in a cage formed of bands or wires *f f*, secured to the cylinder.

The operation is as follows: The shut-off is placed in the vat or cell with the cylinder over the spigot-hole in the head of the vat and the cylinder fastened by means of the flange *b* to the head. When the vat or cell is empty, the ball will rest on the seat *d* and close the inlet to the cylinder, and when the cask is full the ball will be held in the top of the cage and off the seat by the liquid which will flow into the cylinder and through the spigot to the filters. As the liquid descends in the vat the ball will also descend, and when the liquid reaches the level of the seat for the ball said ball will rest on the seat, closing the inlet and preventing the air from the vat passing into the cylinder.

In the ordinary method the liquid is drawn through the spigot of the vat into the filter and from the filter to the barrel or keg, and as the liquid in the vat passes the upper part of the opening in the spigot it allows the air to enter the same and the filter, causing the gaseous liquid to foam and spoiling all that is contained in the filter and the remaining portion in the vat.

By the use of my improved automatic shut-off this is entirely overcome, as the inlet to the filter is immediately closed when the liquid reaches the top of the seat for the base.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

In combination with a vat, a cylinder having a securing-flange around the outlet, said cylinder provided with a lateral extension having an outlet-opening, a collar in said opening forming a seat, a funnel-shaped flange below said collar, a ball-valve resting on said collar, a cage surrounding said opening limiting the movement of said ball-valve, substantially as shown and described.

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

JOHN EPPICH.

Witnesses:

A. R. APPLEMAN, Jr.,
H. E. SEIBERT.