

C. W. BAUCE.
Bung for Barrels.

No. 229,943.

Patented July 13, 1880.

Fig 1.

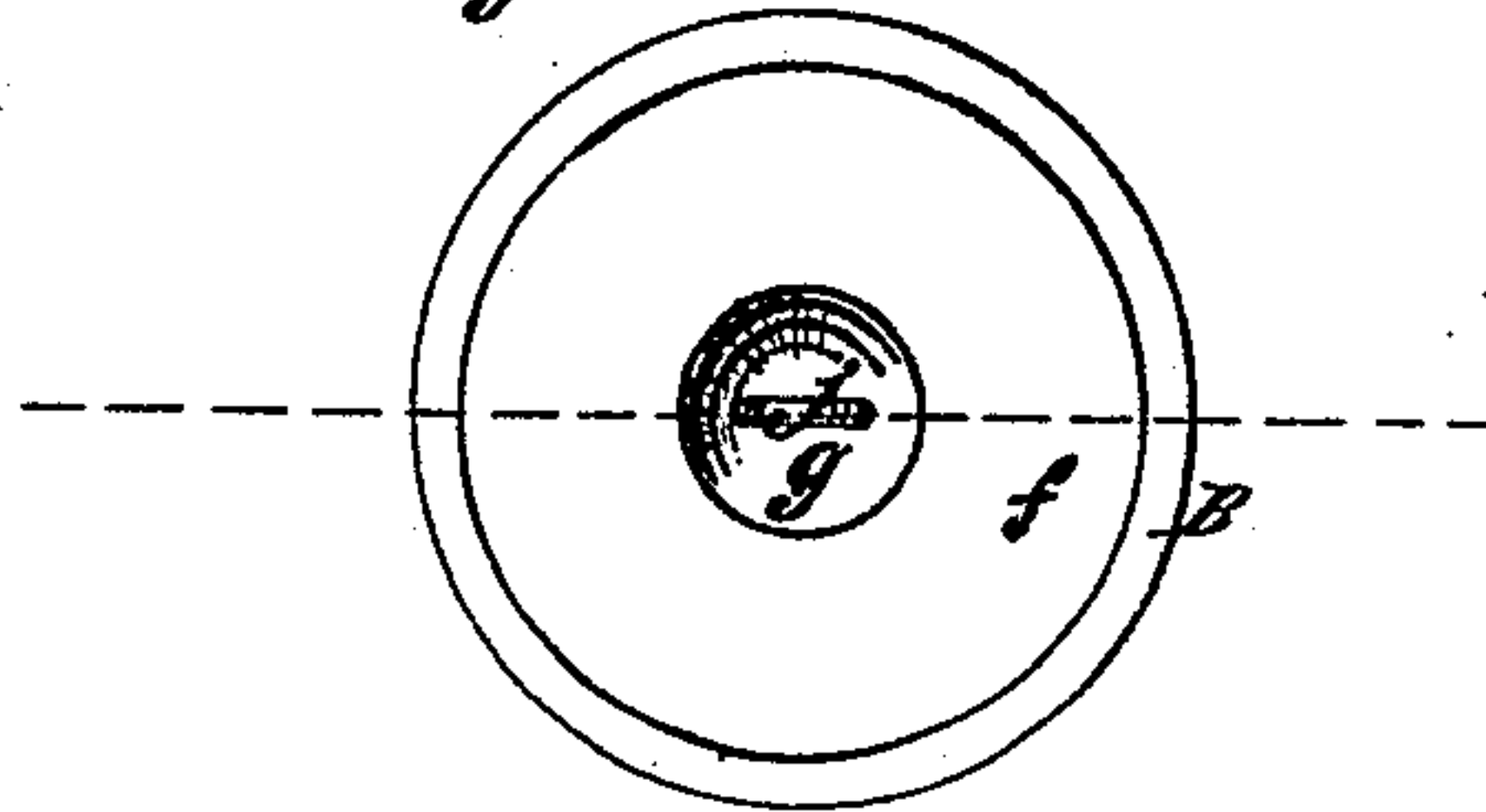


Fig 2.

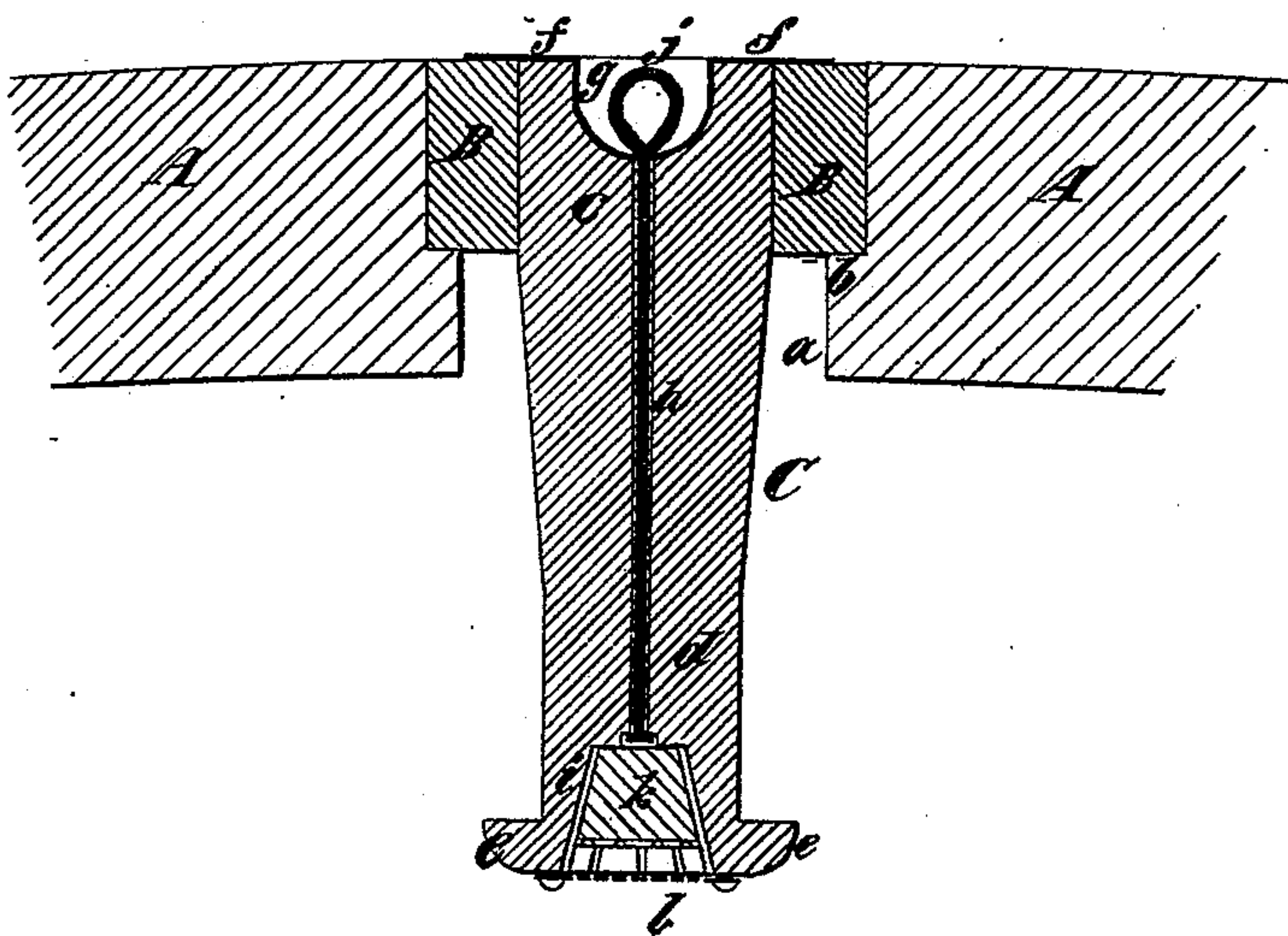
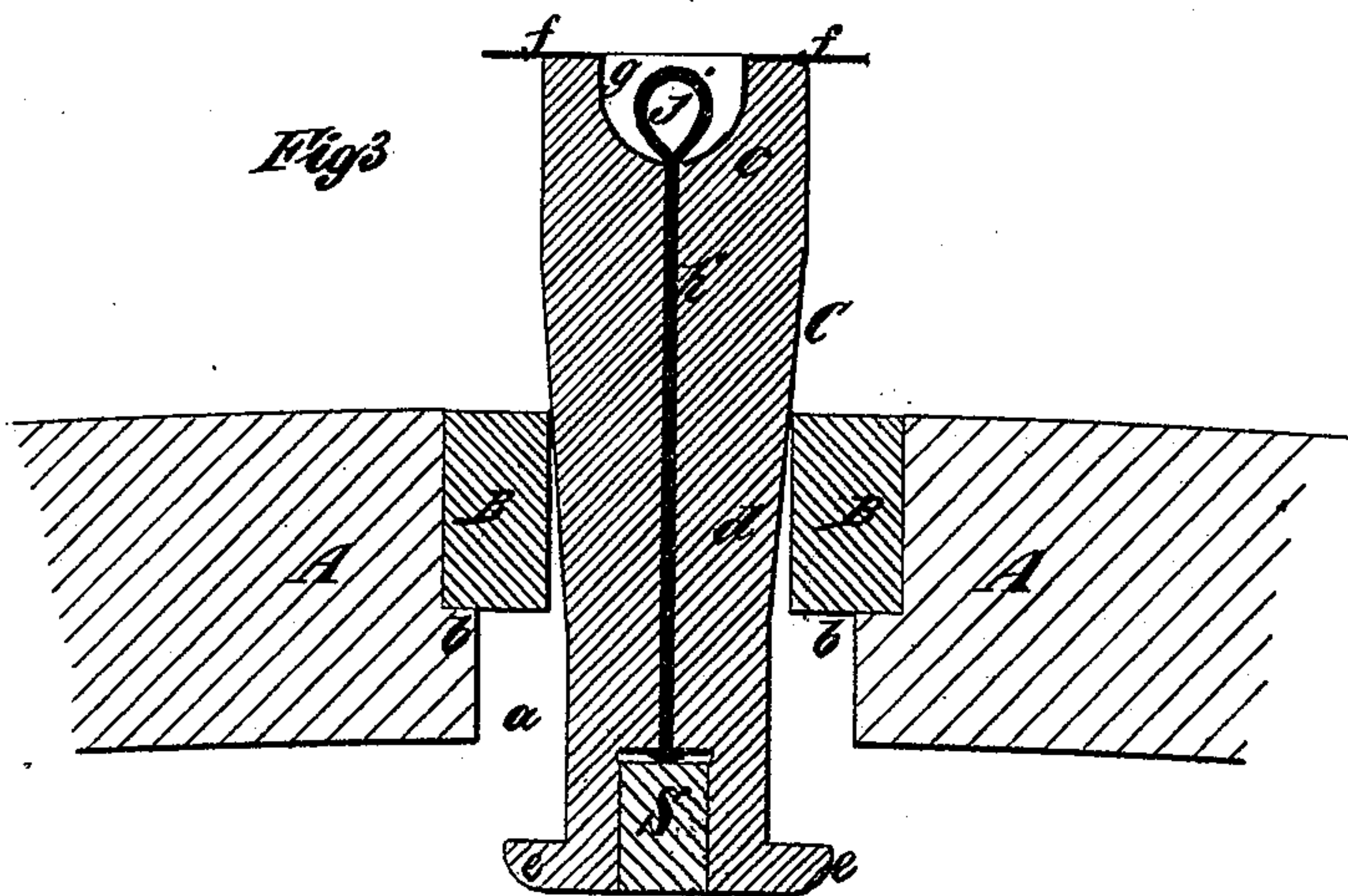


Fig 3.



Witnesses:
Chandler Hall,
Thomas E. Birch

Inventor
Charles H. Baucé
by his attorney
Edwin H. Brown

UNITED STATES PATENT OFFICE.

CHARLES W. BAUCE, OF JERSEY CITY, NEW JERSEY.

BUNG FOR BARRELS.

SPECIFICATION forming part of Letters Patent No. 229,943, dated July 13, 1880.

Application filed December 26, 1878.

To all whom it may concern:

Be it known that I, CHARLES W. BAUCE, domiciled in Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Bungs for Barrels, Casks, Kegs, &c., of which the following is a specification.

The object of this invention is to produce a simple and inexpensive bung, which may serve as a vent when desirable.

To this end it consists in a bung comprising, among other features, a pin designed to be used with a band of india-rubber for closing a bung-hole having a countersunk loop for withdrawing it, having an externally-tapering portion for expanding said ring and a cylindrical portion of sufficient size to hold said ring in its expanded position without any tendency to work outward, having a passage through it for a vent to afford ingress of air to the barrel, cask, or keg on the withdrawal of liquid from it, as also a downwardly and inwardly opening valve for closing said vent when not necessary to be opened.

In the accompanying drawings, Figure 1 designates a plan of a bung embodying my improvements. Fig. 2 is a central longitudinal section of the same, showing it inserted in the bung-hole of the barrel, cask, or keg; and Fig. 3 is a central longitudinal section of the bung, showing it raised, so as to admit of its use as a vent-valve during the withdrawal of liquid from the barrel, cask, or keg.

Similar letters of reference designate corresponding parts in all the figures.

A designates a portion of a barrel, cask, or keg of ordinary construction, provided with a bung-hole, *a*, having a seat or shoulder, *b*, in its upper portion. B designates a ring of india-rubber or other suitable material fitted within the bung-hole *a* and resting upon the seat or shoulder *b*. C designates a pin, which may be made of wood, comprising a cylindrical or straight upper portion, *c*, a downwardly-tapering portion, *d*, located below the former, and flanges *e f* at the ends. The lower flange, *e*, is represented as made of wood in the same piece with the pin; but the upper flange, *f*, may be made of sheet or other thin metal, so as not to project materially beyond the surface of the barrel, cask, or keg. It is shown

as made with a cup-shaped body, *g*, fitted into a countersink in the upper part of the pin C, and as retained securely in place by a rod, *h*, extending from it longitudinally through the pin to a cavity, *i*, at the lower end thereof. This cup-shaped body or countersink in the upper end of the pin C is provided with a device whereby the pin may be conveniently drawn. This device consists of a loop, *j*, provided at the end of the rod *h*, and capable of receiving within it an instrument whereby the pin C may be withdrawn or loosened.

The passage through which the rod *h* extends is made sufficiently larger than the rod to admit of the ingress of air around said rod to the cavity *i* at the inner end of the pin C. In this cavity *i* is shown a downwardly-opening valve, *k*, free to play inward and outward within the said cavity, so as to close the end of the passage around the rod *h* and preclude the ingress of air through it, or so as to open said passage to permit of the ingress of air through said passage. The cavity *i* is sufficiently larger in diameter than the valve *k* to allow of the passage of air around it into the barrel, cask, or keg. The valve is upheld against the passage around the rod *h* by the pressure within the barrel, cask, or keg until that pressure is reduced by the withdrawal of some of the liquid therefrom, whereupon the valve drops, and air enters through the passage around the rod *h* and the cavity *i* into the barrel, cask, or keg.

To preclude the displacement of the valve *k* a covering, *l*, of wire-gauze or other suitable material, is arranged over the mouth of the cavity *i*, and to preclude the same from at all interfering with the passage of air between the valve *k* and the cavity *i* the said valve is grooved or recessed upon its outer face, so as to leave spaces between said face and the said covering *l*.

This bung which I have described may be applied to a barrel, cask, or keg by simply slipping the ring B over the pin C and inserting both into the bung-hole, so that the ring B fits upon a shoulder therein, or is retained from slipping inward by any other equivalent devices. The bung-hole may then be tightly closed by forcing the pin C inward by a blow or otherwise, so that its tapering portion will

expand the ring against the walls of the bung-hole, and its upper cylindric or straight portion will fit within the ring and hold it securely in position without any tendency to work outward, the flange *f* overlapping said ring, so as to preclude the pin from slipping inward too far.

If desirable, the pin *C* itself may be used as a vent-valve by withdrawing or raising it sufficiently to allow its tapering portion merely to rest loosely within the ring *C*, as represented in Fig. 3. When so withdrawn or lifted up it may, on the withdrawal of liquid from the barrel, cask, or keg, be lifted up sufficiently to permit of the entrance of air between its lower portion and the rubber ring into the barrel, cask, or keg.

When the pin itself is used as a vent, it is unnecessary to employ the passage around the rod *h* as a vent and to employ the valve *k*. In lieu of them a cork, *S*, tightly closing a cavity in the lower end of the pin, and serving to preclude the entrance of air through the passage around the rod *h*, may be employed, all as shown in Fig. 3.

It will be seen that by my invention I have produced a very simple, convenient, and desirable bung, which will not protrude beyond a barrel, cask, or keg to which it may be applied when inserted so as to close the same, and which may be easily withdrawn, and will serve the additional purpose of a vent for the ingress of air upon the withdrawal of liquid.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A bung for use in the bung-hole of a barrel, cask, or keg, comprising the combination of a ring of india-rubber or other suitable material, and a pin provided at the ends with

flanges, and comprising a downwardly externally tapering portion for expanding the ring to fill the bung-hole, and a cylindrical or straight portion above the tapering portion of a diameter sufficient to hold the ring in its expanded position, substantially as and for the purpose specified.

2. A bung for use in the bung-hole of a barrel, cask, or keg, comprising the combination of a ring of india-rubber or other suitable material, and a pin provided at the ends with flanges, and comprising a downwardly externally tapering portion for expanding the ring to fill the bung-hole, and a cylindrical or straight portion above the tapering portion of a diameter sufficient to hold the ring in its expanded position, and having in its outer end a countersink containing a loop, whereby the pin may be withdrawn, substantially as specified.

3. A bung for use in the bung-hole of a barrel, cask, or keg, comprising the combination of a ring of india-rubber or other suitable material, a pin comprising a downwardly-tapering portion for expanding the ring, and a cylindrical or straight portion above the tapering portion of a diameter sufficient to hold the ring in its expanded position and provided with a passage extending through it, and a downwardly and inwardly opening valve for automatically controlling the ingress of air through the same into the barrel, cask, or keg to which the bung is applied, substantially as specified.

CHAS. W. BAUCE.

Witnesses:

OWEN PRENTISS,
THOMAS E. BIRCH.

Correction for Letters Patent No. 229,943.

It is hereby certified that in Letters Patent No. 229,943, dated July 13, 1880, to Charles W. Bance, for "Bungs for Barrels," the surname of the patentee was erroneously written and printed in said Letters Patent *Bauce* instead of *Bance*; that the proper corrections have been made in the records of this Office, and that the said correction is hereby made in the said Letters Patent.

Signed, countersigned, and sealed this 5th day of November, A. D. 1880.

[SEAL.]

C. SCHURZ,
Secretary of the Interior.

Countersigned:

E. M. MARBLE,
Commissioner of Patents.