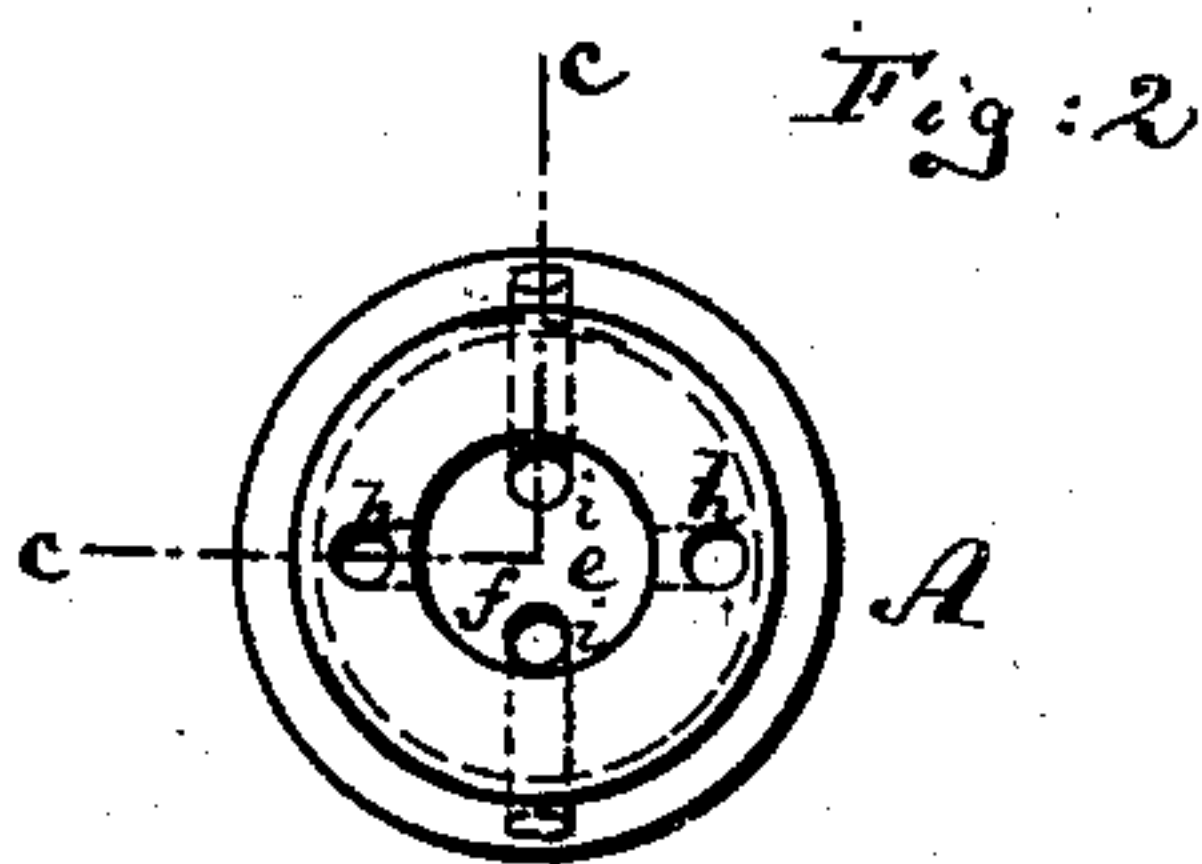
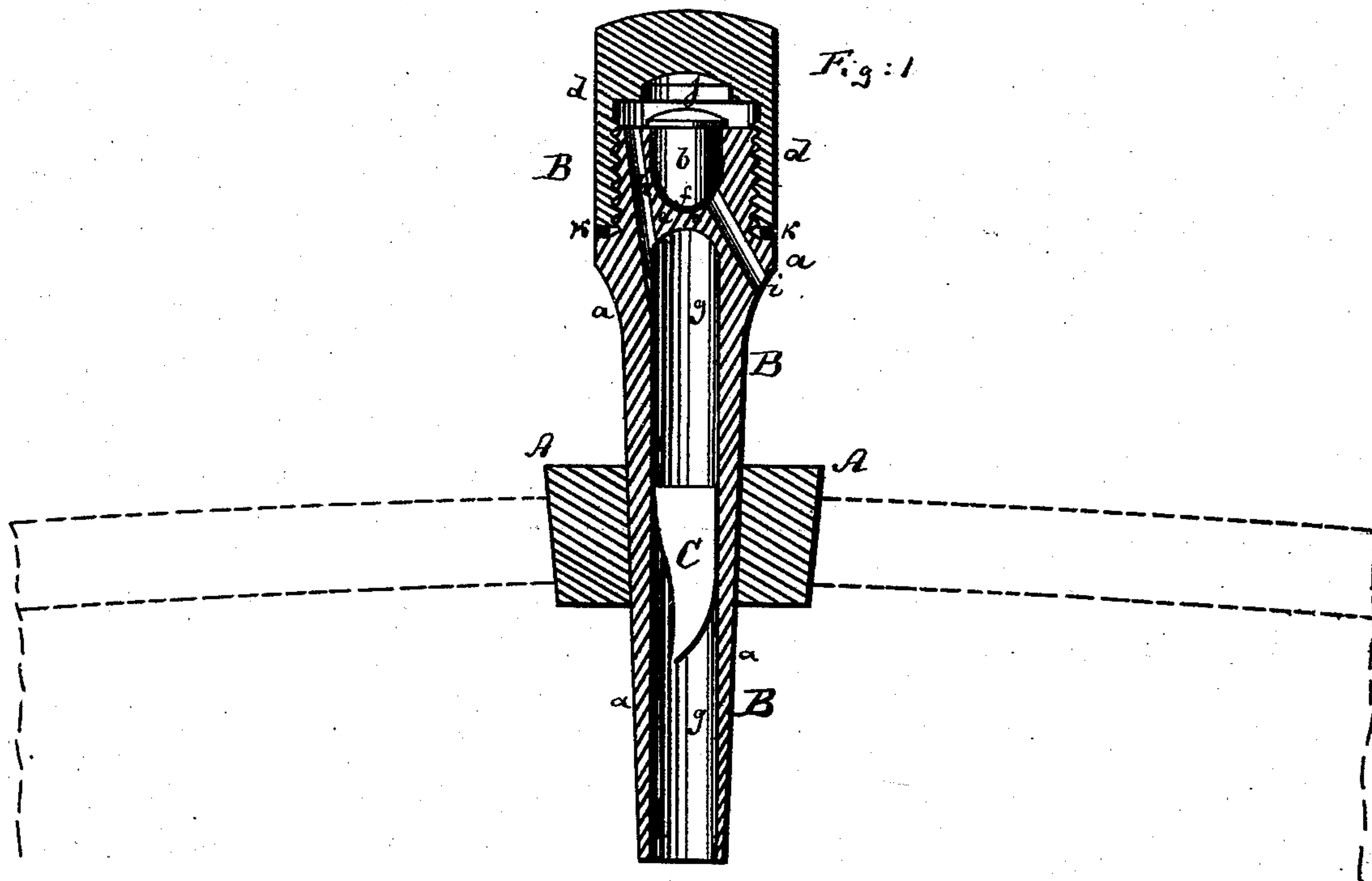


F. W. KUENNE.
Bungs for Barrels and Casks.

No. 166,280.

Patented Aug. 3, 1875.



Witnesses:

A. Moraga.
C. H. Weidner.

Inventor

F. W. Kuenne
by his attorney
Alv. Briesen

UNITED STATES PATENT OFFICE.

F. WILHELM KUENNE, OF NEW YORK, N. Y.

IMPROVEMENT IN BUNGS FOR BARRELS AND CASKS.

Specification forming part of Letters Patent No. **166,280**, dated August 3, 1875; application filed June 30, 1875.

To all whom it may concern:

Be it known that I, F. WILHELM KUENNE, of the city of New York, county and State of New York, have invented an Improved Bung for Barrels and Casks, of which the following is a specification:

Figure 1 is a vertical central section of my improved bung for barrels and casks, the line *c c*, Fig. 2, indicating the plane of section. Fig. 2 is a top view of the stock of the bung after the screw-cap and valve have been removed.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in placing a reed or tongue into the vent of the bung for obtaining a sound whenever the barrel is tapped.

In the drawing, the letter A represents an annular stopple placed in the opening in the bulge of a barrel or cask, and closed as long as the barrel or cask is not to be tapped by a wooden plug in the center. B is my improved bung, made of metal or suitable alloy, and composed of three parts, *a*, *b*, and *d*. The part *a* is the stock or shank of the bung, being of slightly conical form, of a diameter to fit and fill the central opening of the stopple A, in manner indicated in the drawing. The stock A is entirely tubular from end to end, but near its upper end a partition, *e*, is formed in its bore, dividing the same into a short upper valve-chamber, *f*, and longer lower vent-passage, *g*. The upper end of the vent-passage *g* connects by one or more upwardly-extending apertures, *h*, with the upper end of the stock, as in Fig. 1, said apertures passing alongside of the valve-chamber, as shown. The lower part of the valve-chamber connects with one or more downwardly-projecting apertures, *i*, that extend to the periphery of the stock. The part *b* is the valve of the bung, being of a size to fit loosely into the chamber *f*, and provided with a flange that rests on the

upper end of the stock *a*. The part *d* is the screw-cap of the bung, being screwed over the upper end of the stock, as shown, to cover the upper ends of the apertures *h* and the valve *b*, forming a vent-chamber, *j*, above said valve. A rubber or other washer, *k*, is interposed between the lower end of the screw-cap *d* and the shoulder of the stock, against which the same bears. This washer serves to prevent the entrance of air directly into the vent-chamber *j*. C is a reed, whistle, or tongue, placed within the lower vent-passage *g*, to sound an alarm whenever air is drawn through the same.

In practice my improved bung is, by means of a hammer, driven through the annular stopple A, so as to discharge the central plug into the barrel. When the barrel is tapped, and a vacuum created by the withdrawal of the liquor, the air will be withdrawn from the vent-chamber *j*, and the valve *b* consequently sucked open. Fresh air will then be free to enter through the apertures *i* into the valve-chamber *f*, thence into the vent-chamber *j*, thence down through the apertures *h* into the passage *g* and body of the barrel. Thus the vacuum will be replenished with air. But if the gas within the barrel tends to escape it will hold the valve *b* firmly upon its seat, and be thus prevented from escaping. As the air enters the barrel through the bung B it must affect the reed, whistle, or tongue C, and produce a noise, which will warn the proprietor of the establishment that the contents of his barrel or cask are being withdrawn.

I claim as my invention—

In combination with the vent-passage *g* of a bung, B, the reed, whistle, or tongue C, substantially as specified.

F. W. KUENNE.

Witnesses:

F. V. BRIESEN,
A. V. BRIESEN.