

C. C. Stremme,

Bung.

N^o 76,670.

Patented Apr. 14, 1868.

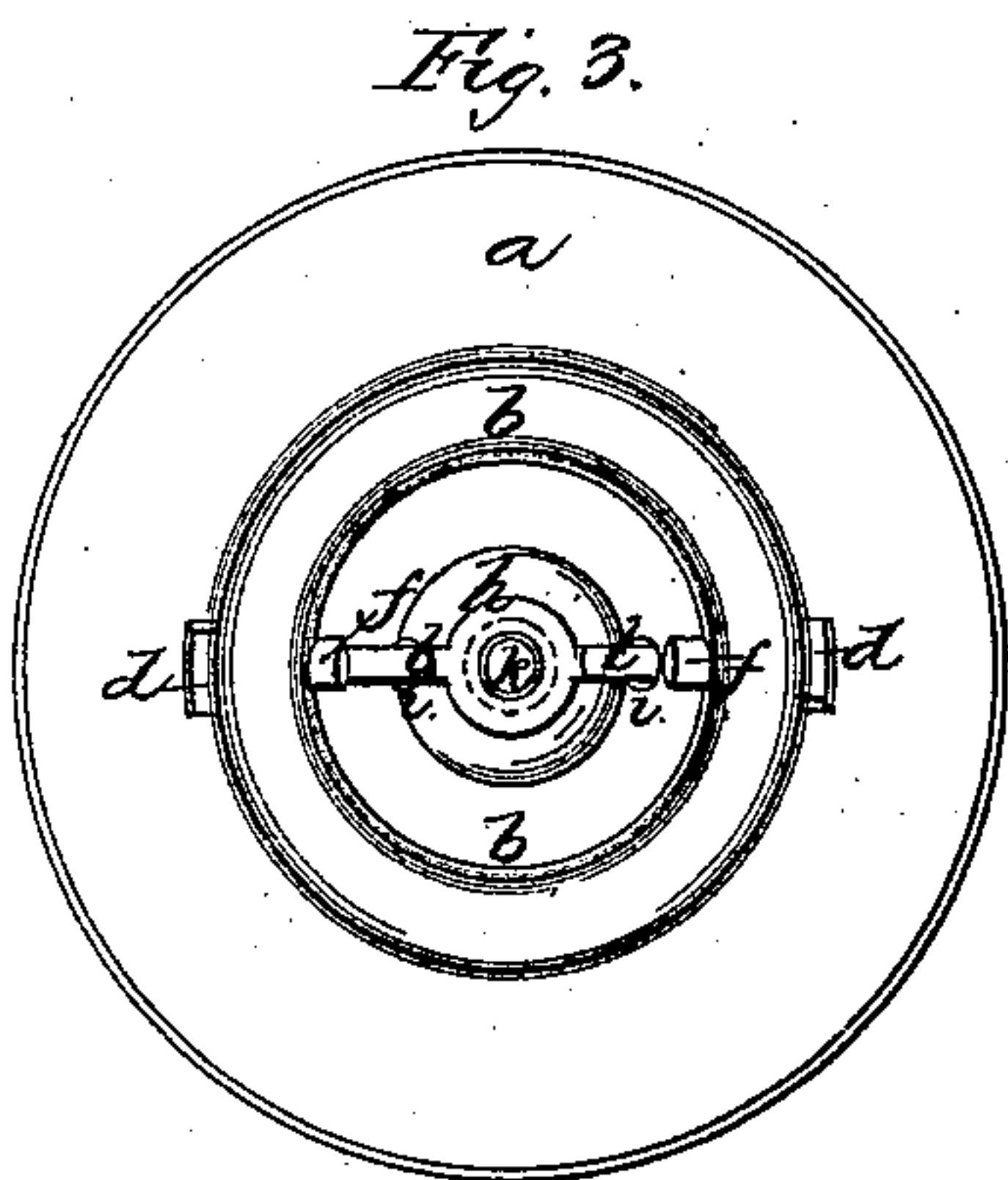
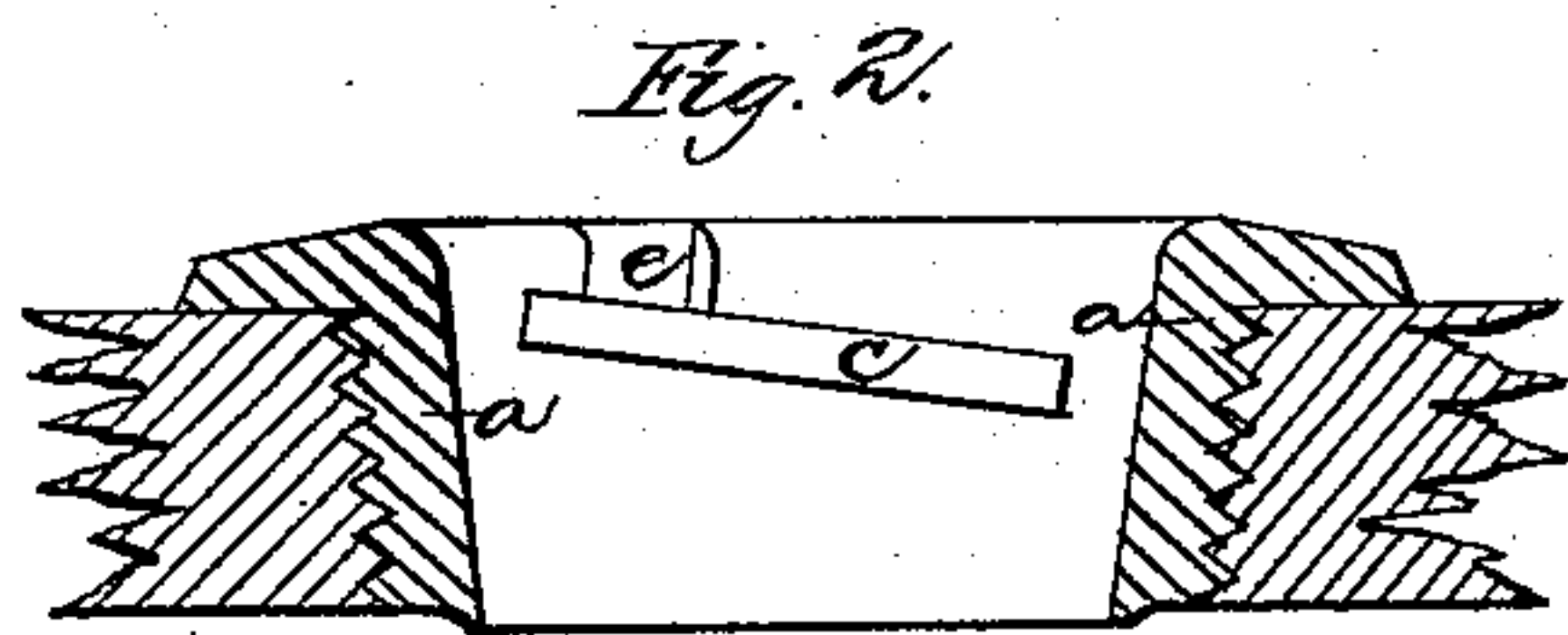
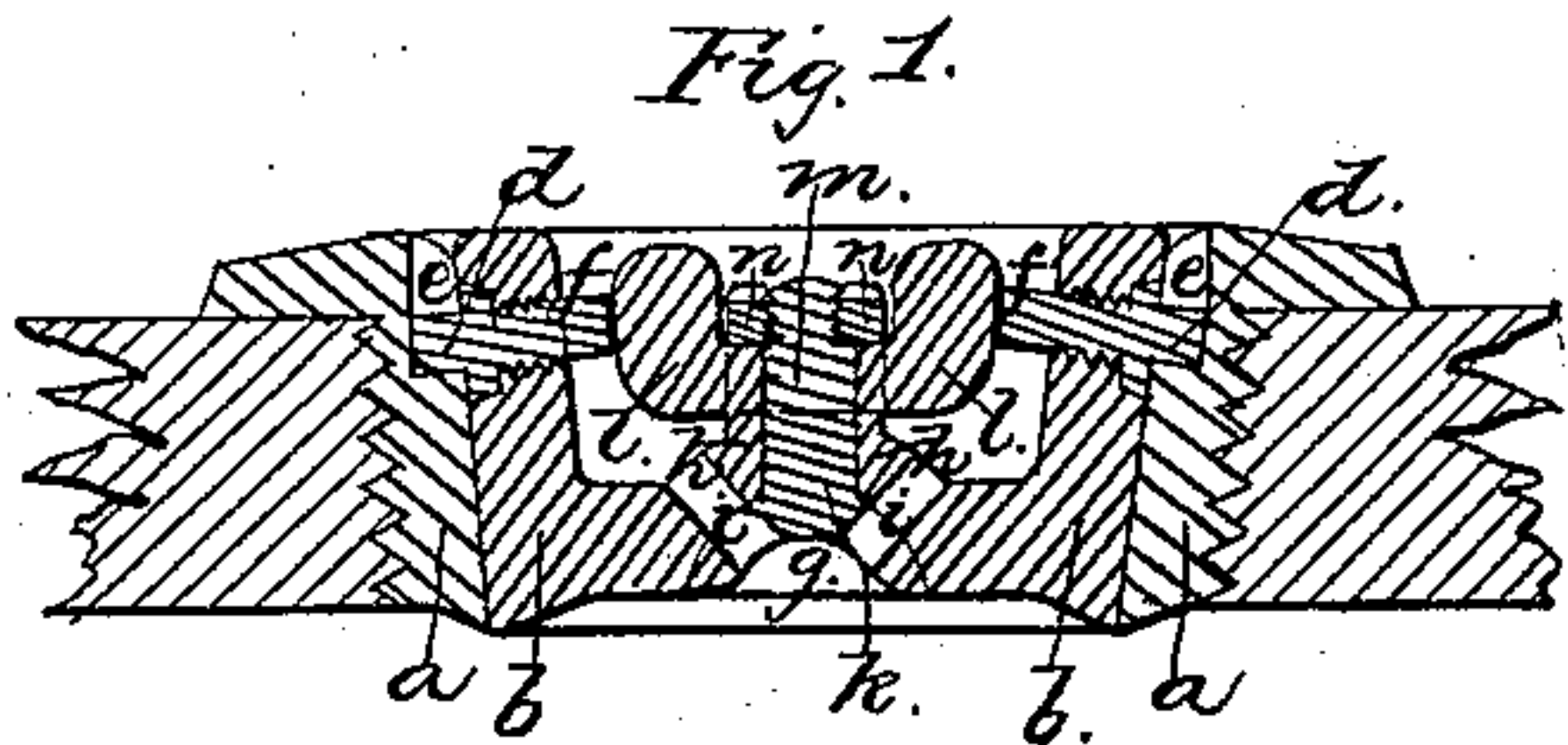


Fig. 11.



Fig. 4.

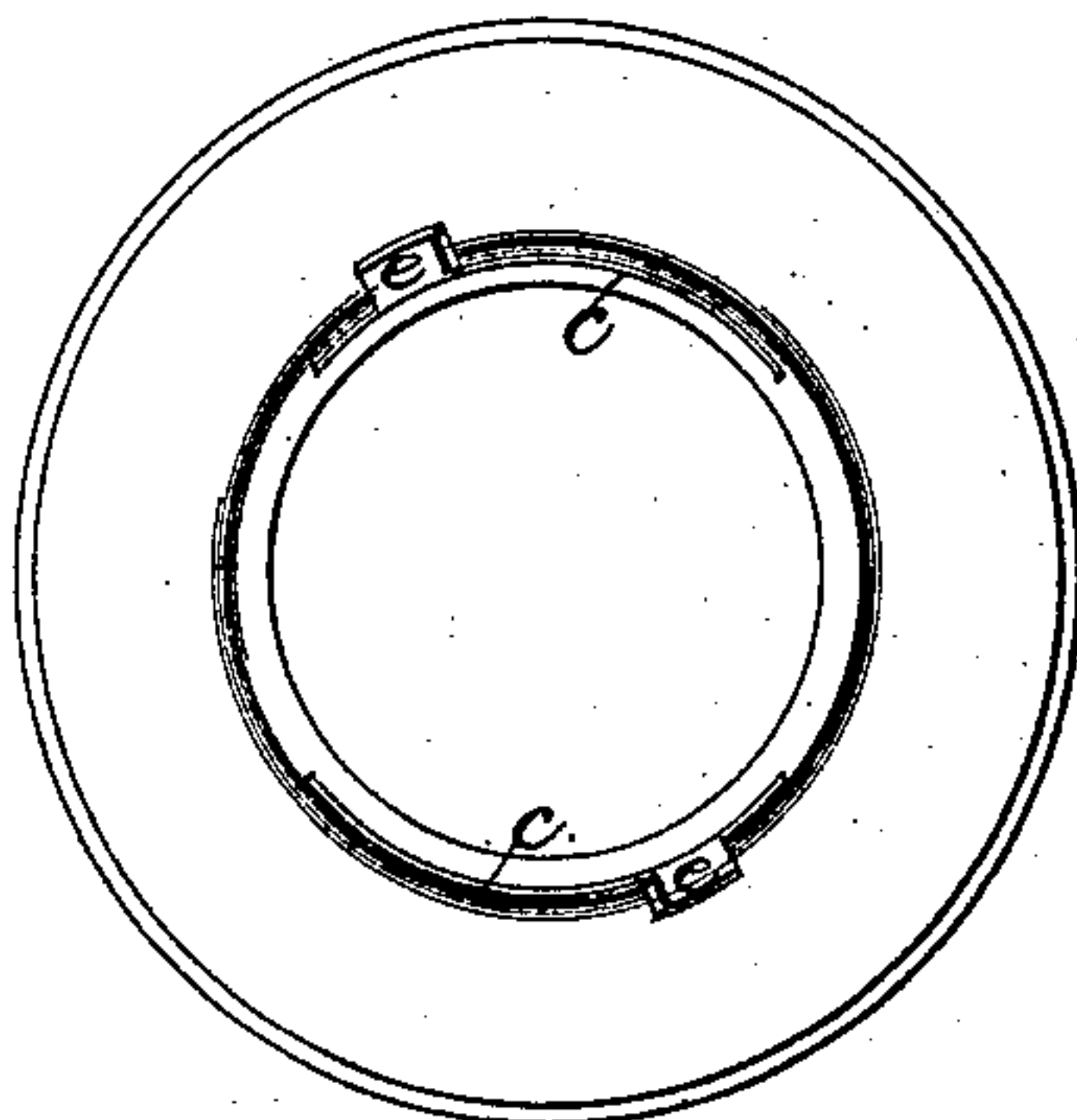


Fig. 10.

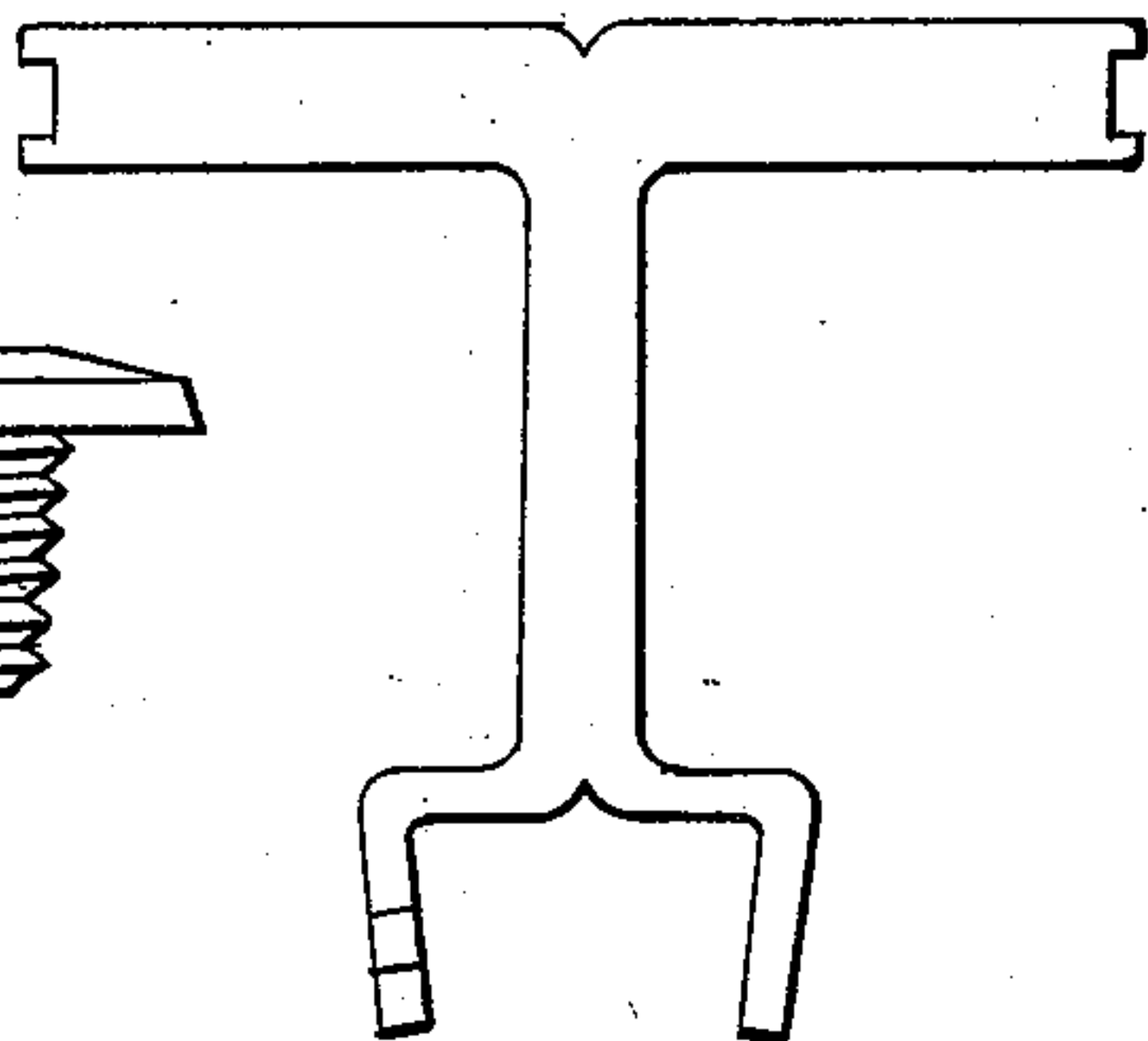


Fig. 5.

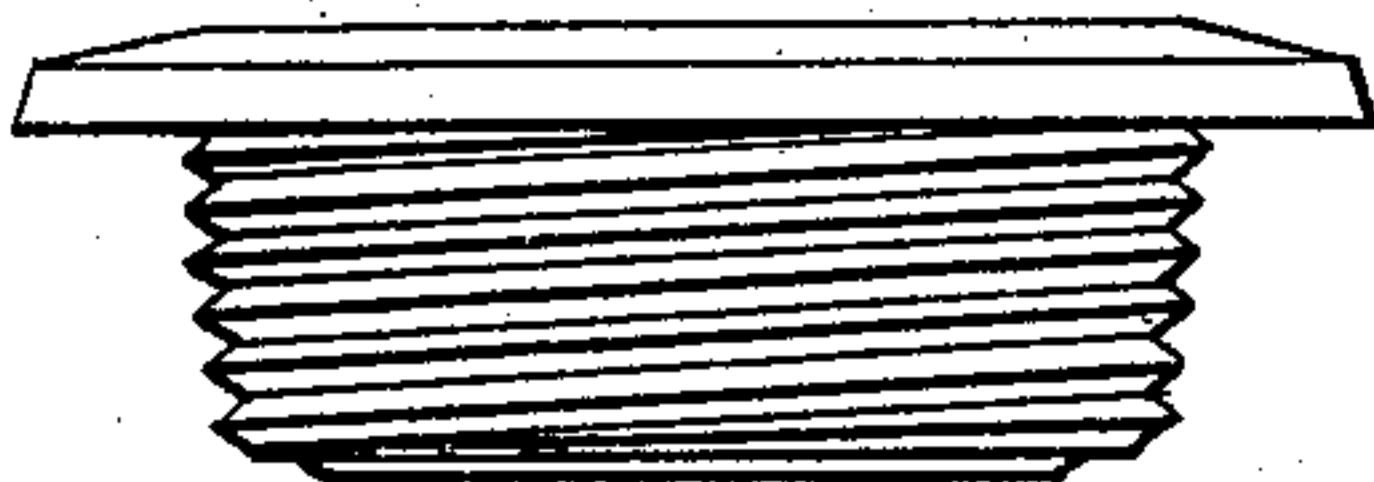


Fig. 6.

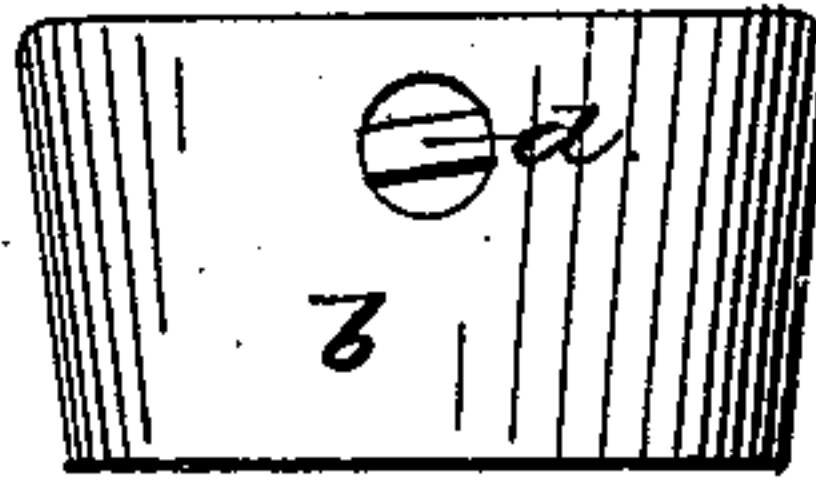


Fig. 7.

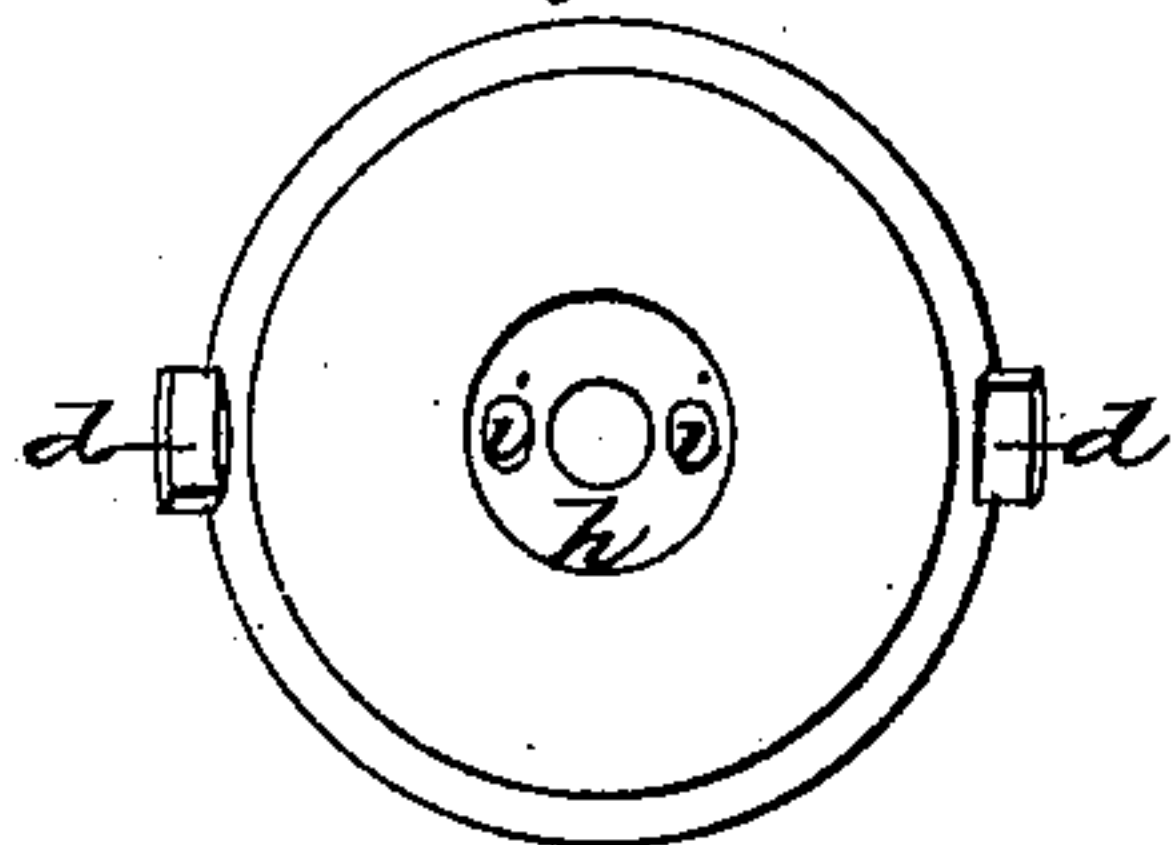
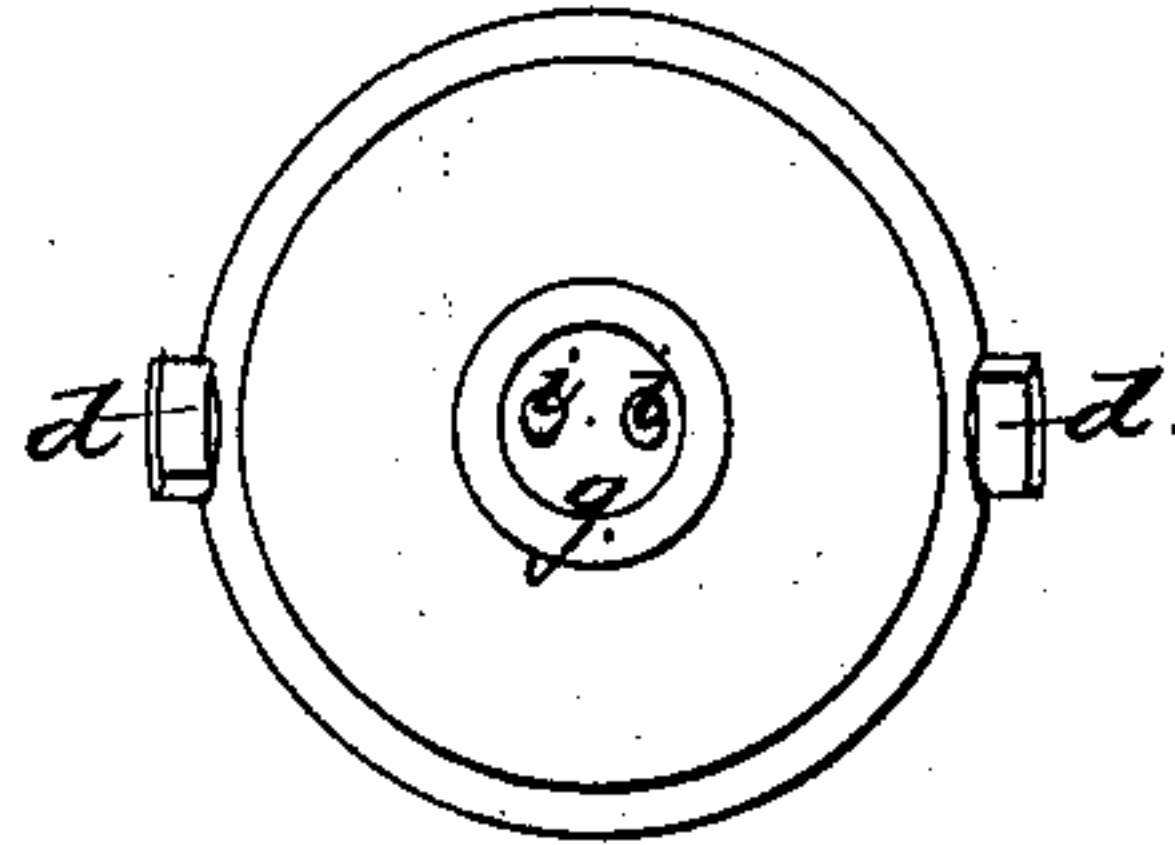


Fig. 9.



Fig. 8.



Witnesses:

A. J. Hamilton.
Wm. Stancel

Inventor:

Conrad C. Stremme.

United States Patent Office.

CONRAD C. STREMME, OF AUSTIN, TEXAS.

Letters Patent No. 76,670, dated April 14, 1868.

IMPROVEMENT IN BUNGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CONRAD C. STREMME, of Austin, in the county of Travis, in the State of Texas, have invented a new and improved Bung for Beer and other Barrels; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon, similar letters of reference indicating corresponding parts in the several figures, of which—

Figure 1 is a vertical section through the middle of bung and bung-socket.

Figure 2, a vertical section through the middle of the bung-socket, without the bung.

Figure 3, a view of bung and bung-socket from above.

Figure 4, a view of the bung-socket from above.

Figure 5, a side view of the bung-socket.

Figure 6, a side view of the bung.

Figure 7, a view of the bung from below, the faucet-like air-valve removed.

Figure 8, a view of the bung from below, showing the faucet-like air-valve in the centre.

Figure 9, a side view of the air-valve's plug and axle.

Figure 10, a front view of the key by which the bung, as well as the female screw, on top of the air-valve's axle, is to be turned.

Figure 11, a side view of the same key.

The nature of my invention consists in employing a metallic bung, which is sunk into a circular socket, also of metal, and tightened there, when turned, by two teeth, which, standing opposite each other on the side of the bung, move in two inclining corresponding slits in the side of the socket, like a screw in the nut, and in the providing of the bung with an independent vent or air-valve of faucet-like construction.

To enable others to make use of my invention, I will proceed to describe its construction and operation.

As will be seen from the drawings, a circular metallic socket, *a*, is tightly screwed into the bung-hole, for the reception of the bung, *b*. Its opening is conical, wider above than below, and so is the side of the bung, which is also of metal, and fitted to the socket most intimately by grinding, just like the glass stoppers generally are to the neck of glass bottles. In the upper part of the socket's inner side, two slits, *c c*, are cut opposite each other, and sloping both downward in the same direction, like the worm of a female screw. These slits are intended to guide two teeth, *d d*, protruding from the side of the bung, also opposite each other, for the purpose of tightening the bung to the socket, by turning it in the direction of the downward slope of the slit, say from the left hand to the right. To avoid the acute running out of the slit on top of the socket, and for the purpose of hindering the bung from falling out so easily when untightened, a cut, *e*, from above, rectangular to the inclining slit, is made to communicate with the latter a little back from the upper end of the same, and just wide enough to admit the above-mentioned teeth *d d*. These teeth are cut out of the head of a screw, the ends of which, *f f*, project into the cavity of the bung above, made mainly for the arrangement of the air-valve, and serve as holds for the key, (figs. 10 and 11,) by which the bung is to be turned. The plug, *g*, of the faucet-like air-valve, consists either in a cone, or, as here represented, in a hollow hemisphere, fitted to a dome-like socket, *h*, in the bottom of the bung, by grinding. Plug *g* and dome *h* are each provided with two holes, *i i*, opposite each other, and arranged thus, that these in the plug correspond exactly with those in the dome, so as to be able to form, when adjusted, two single openings through plug and dome together. Such adjustment, or also disconnection of the just-mentioned holes, is to be performed by the turning of the axle, *k*, with which the hemispheric plug *g* is provided on its top. This axle *k* reaches through the dome *h*, in its centre, where it is provided with a winged-lever key, *l*, set on a hexagonal cut, above which it is kept by a female screw, *n*, that also tightens the connection between the hemispheric plug and the dome.

In order to protect the metal against the attacks of the fluids in the barrels, and *vice versa*, I intend to cover the parts that come in contact with the same with a coat of different protecting substances, according to

the nature of the fluids. Against beer, for instance, I would use a coat of pitch; against oils, spirits, wine, &c., a coat of tin or enamel, like that used for iron pots, &c.

The advantages which this new bung offers are—

First. It needs no hammering in closing and opening the bung-holes of the barrels, as is required by the use of the common wooden bungs, and preserves, therefore, in general, the bung-staves, as well as also especially the pitch-coat in the beer-barrels, and keeps, on that account, the beer always free of the disgusting pitch particles which are sometimes swimming in it.

Second. The fluid may be drawn off without moving the bung, and without boring air-holes into the bung-stave, as it requires only the turning of the air-valve in the centre of the bung to admit the necessary air into the barrel to allow the intended performance, adding, at the same time, to the convenience as well as to the preservation of the bung-stave; and

Third. It protects against fraudulent extractions from the barrel, as, by sending liquids from one place to another, the address may be pasted over the bung; and, besides, the bung cannot be conveniently turned and taken out without the key.

The working of the two teeth in inclined slits inside the socket admits the construction of a bung with an entirely closed joint at the bottom, enabling it to fit perfectly within the socket. This remedies the defect of leakage in a bung where the teeth work on inclined planes at the bottom of the socket, for, in such a bung, the grooves admitting the teeth must necessarily extend from top to bottom of the socket.

I am aware that there are already similar arrangements applied for the closing hermetically of cans, bottles, &c., and I lay no claim to such arrangements in general.

What I do claim as my invention is—

1. The combination of the bung with the socket, the bung being secured by means of the teeth *d d*, working in inclined slits inside the socket, thereby making a water-tight lock for a barrel, without shouldering or the use of packing.

2. The vent or air-valve, constructed as shown, in combination with the bung, as substantially set forth.

CONRAD C. STREMME.

Witnesses:

A. J. HAMILTON,
JESSE STANCEL.