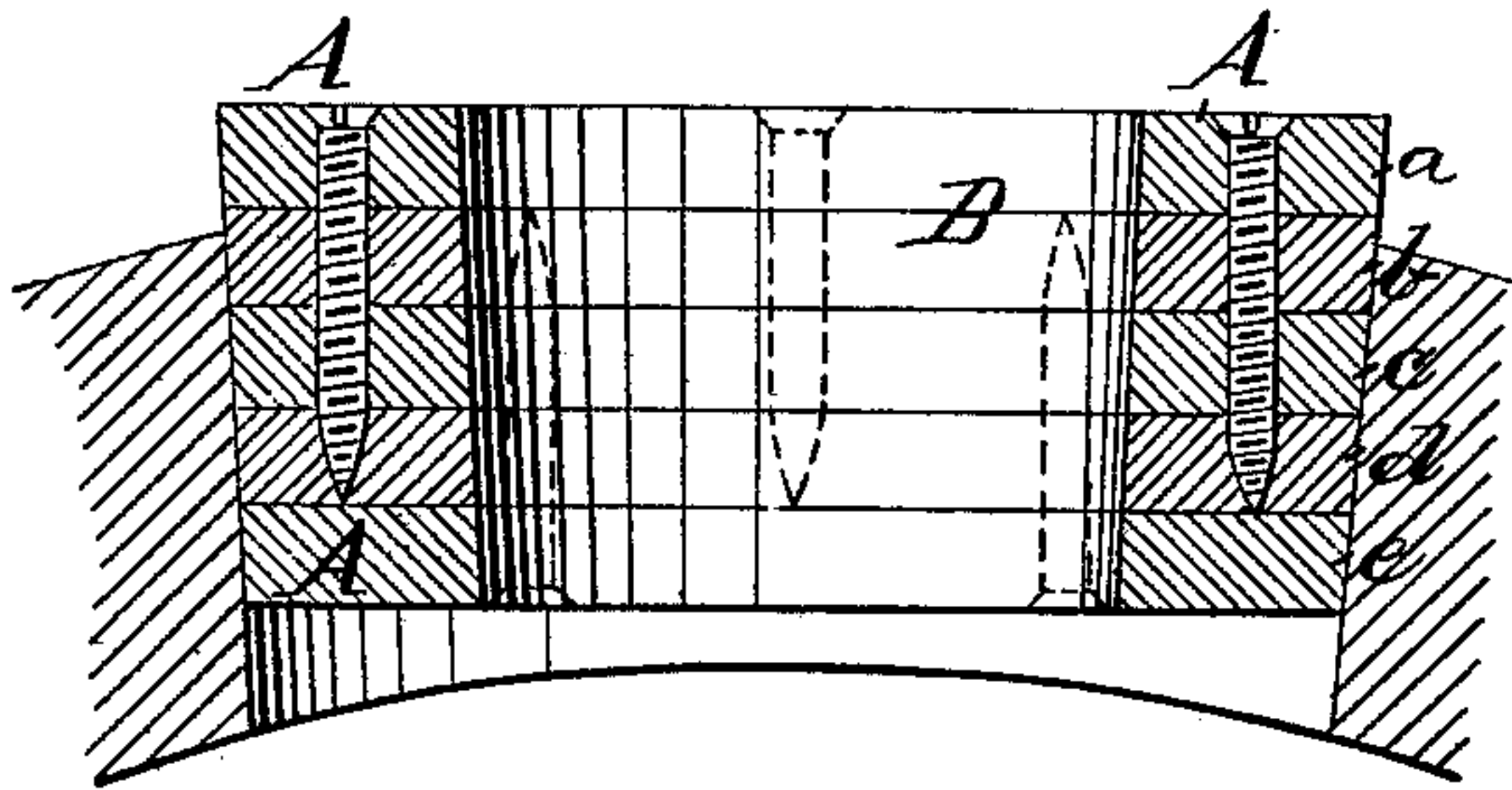


K. C. GILLETTE.  
Wooden Bushing.

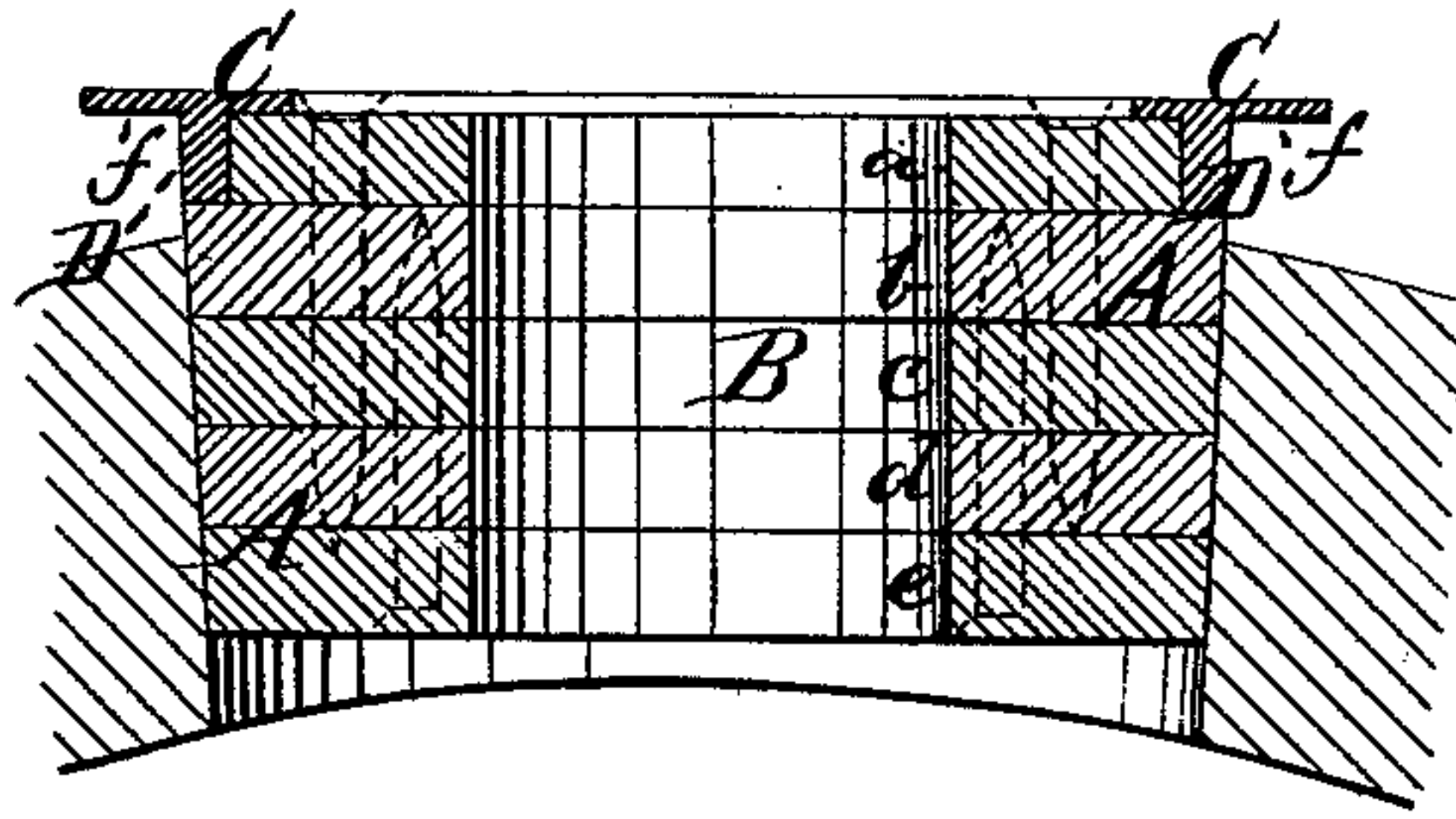
No. 222,269.

Patented Dec. 2, 1879.

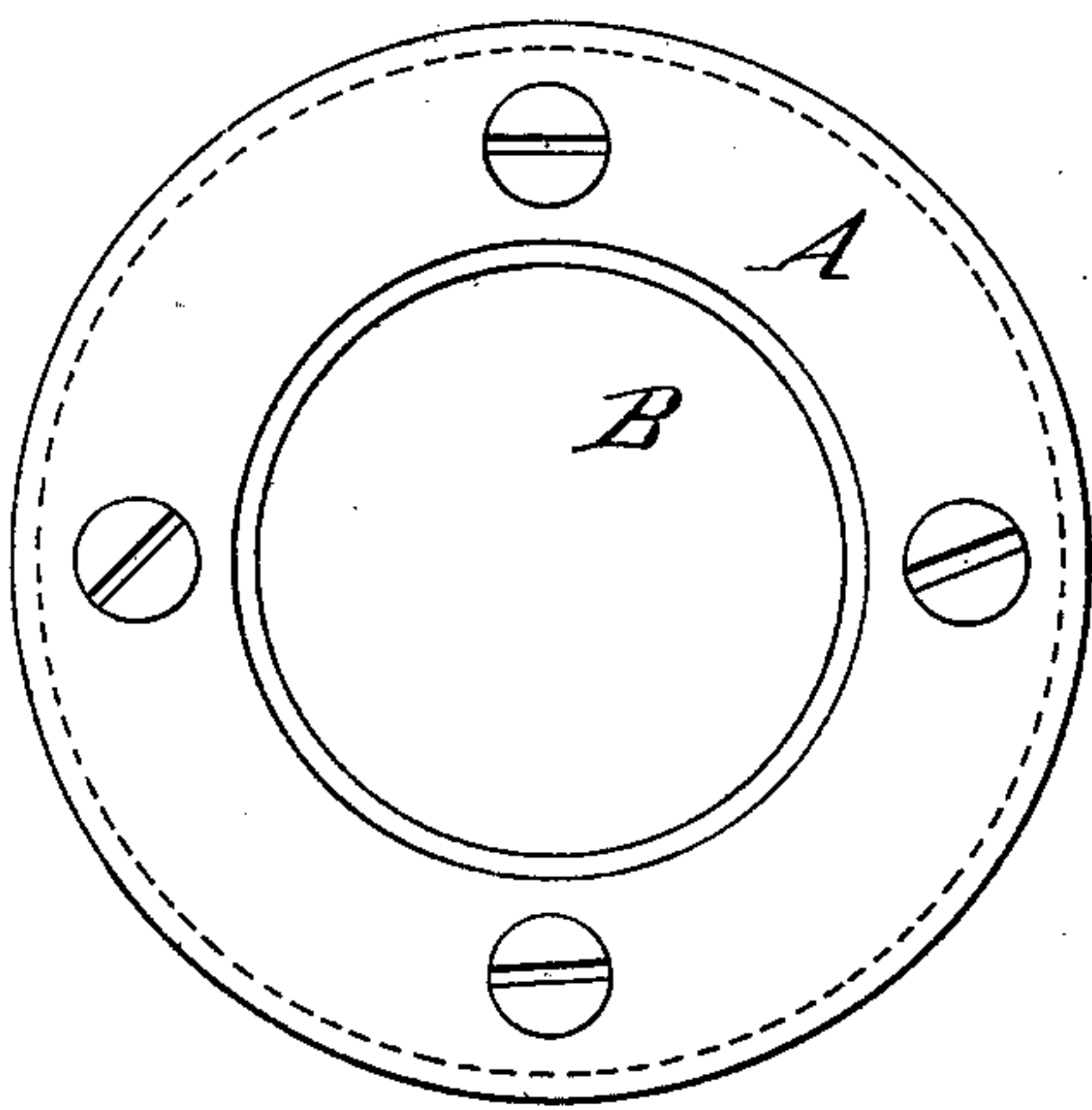
*Fig. 1*



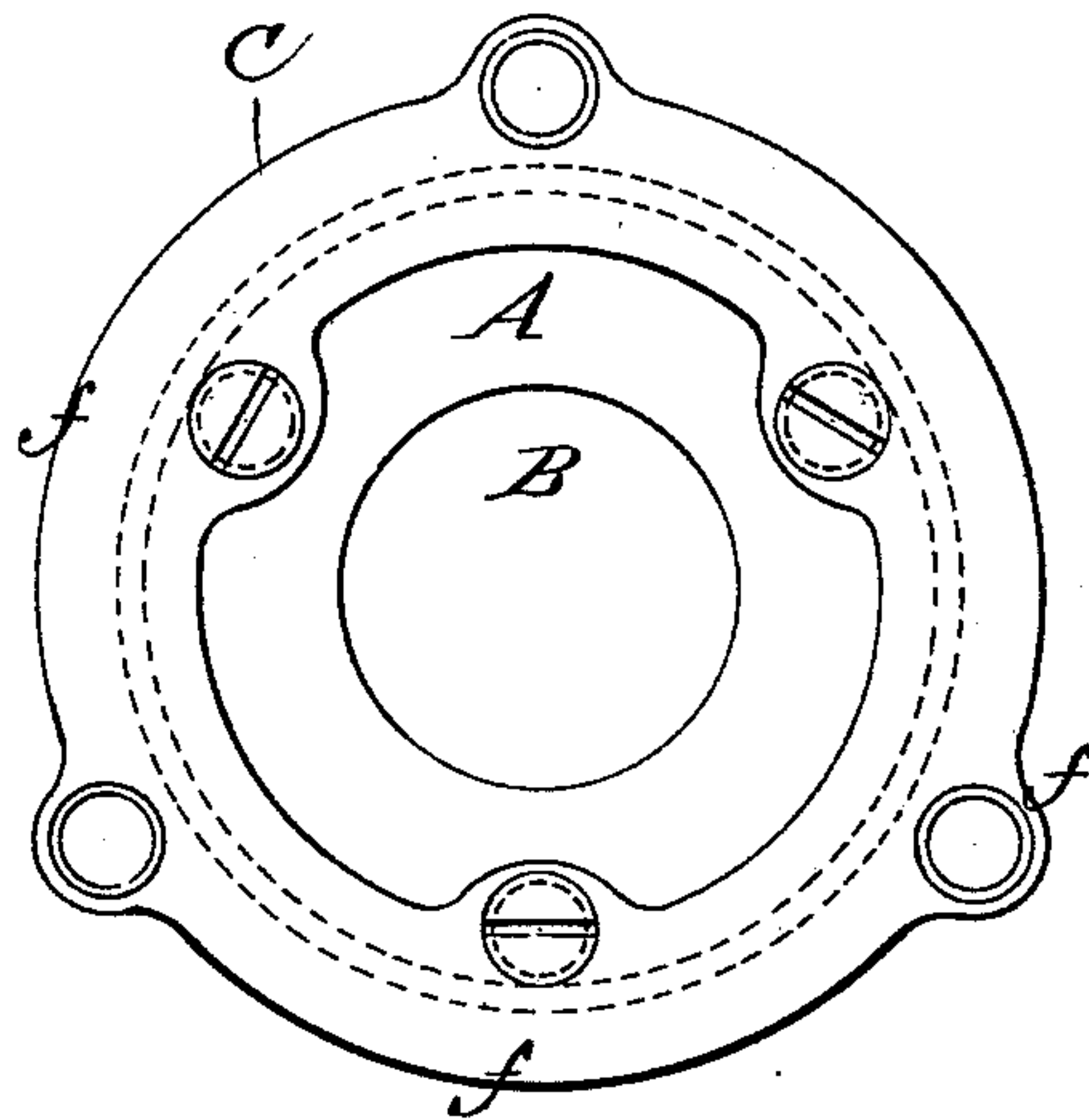
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN WOODEN BUSHINGS.

Specification forming part of Letters Patent No. **222,269**, dated December 2, 1879; application filed  
October 9, 1879.

*To all whom it may concern:*

Be it known that I, KING C. GILLETTE, of the city of Brooklyn, Kings county, and State of New York, have invented a new and useful Improvement in Bung-Hole, Tap-Hole, Spigot-Hole, or Vent-Hole Bushings, which improvement is fully set forth in the following specification and accompanying drawings.

Figure 1 is a vertical cross-section of the wooden bushing. Fig. 2 is a vertical cross-section of the wooden bushing with a metal plate fastened to its top. Figs. 3 and 4 are top views of different forms of the metal plate.

It is a well-known fact to those conversant with the trade of brewing, or other trades wherein barrels, casks, or kegs are repeatedly used, that the holes in the bung-staves and heads, wherein bungs, vents, and spigots are frequently introduced, and oftentimes with much unnecessary violence, become enlarged and irregular in form, and to such an extent as to necessitate the constant repairing thereof by the introduction of new staves and heads, thus adding largely to the expense and inconvenience of those using them.

Beer is generally drawn from kegs by the introduction of a tapering faucet, which is driven through the corked opening in the head by a heavy mallet. The inclined surfaces of the faucet, operating as a wedge, produce a lateral pressure, which readily splits the wood where the grain runs but one way, thereby not only losing the contents of the keg or barrel, but rendering it necessary to introduce a new head or stave.

This invention is intended to obviate such difficulties, or to offer a cheap and expeditious means of overcoming them.

It is apparent that in case there should be any occasion to make such repairs it can be more readily accomplished by the insertion of this bushing than by the method at present in vogue.

The bushing can be introduced with but little loss of labor or time, and will wear much longer than the original aperture, because the pressure is always against the grain of the wood endwise, and when worn out can be replaced, *ad infinitum*, without damage to the barrel.

By an examination of the accompanying drawings it will be observed that Fig. 1 represents a bushing made of two or more pieces or layers of wood, secured together by glue, screws, or other practical and well-known methods, in such a manner that their plane surfaces may be firmly united, but having the grain of the wood in each of the rings, plates, or layers so attached running in different directions transversely, thereby giving additional strength and preventing any tendency to the splitting of the bush itself or the wood which surrounds it.

A represents the bushing, with the opening or aperture B, for the introduction of a faucet, vent, spigot, or bung.

*a, b, c, d,* and *e* show the different layers of wood fastened together, but with the grain of the wood running transversely.

In Fig. 2, C represents a metal plate, secured to the outside or upper surface of the wooden bushing A by screws. The edges of said plate *f* extend beyond the outer circle or periphery of the bush, to admit of fastening the plate and bushing to the head or stave, and thereby prevent its being moved from its seat when once properly placed. To prevent the said plate from moving laterally, a flange or extension is made at right angles with said plate, as at D, in the form of an annular ring, which is made to fit the outer edge of the bushing with exactness, thus overcoming this difficulty and giving additional strength.

Having described my invention, what I desire to secure by Letters Patent is—

1. A wooden bushing made of two or more layers of wood, with the grain thereof running transversely, as and for the purposes herein described and set forth.

2. The combination of the wooden bushing A, made of two or more layers of wood, with the grain thereof running transversely, and the plate C, as herein set forth.

3. The plate C, having upon its inner side the annular ring, extension, or flange D, as specified and described.

KING C. GILLETTE.

In presence of—

JOSIAH H. MACY,

WALTER W. MONTAGUE.