

No. 850,410.

PATENTED APR. 16, 1907.

E. H. WEATHERHEAD.  
LIQUID TAPPING DEVICE.

APPLICATION FILED JUNE 5, 1905.

2 SHEETS—SHEET 1.

Fig: 1.

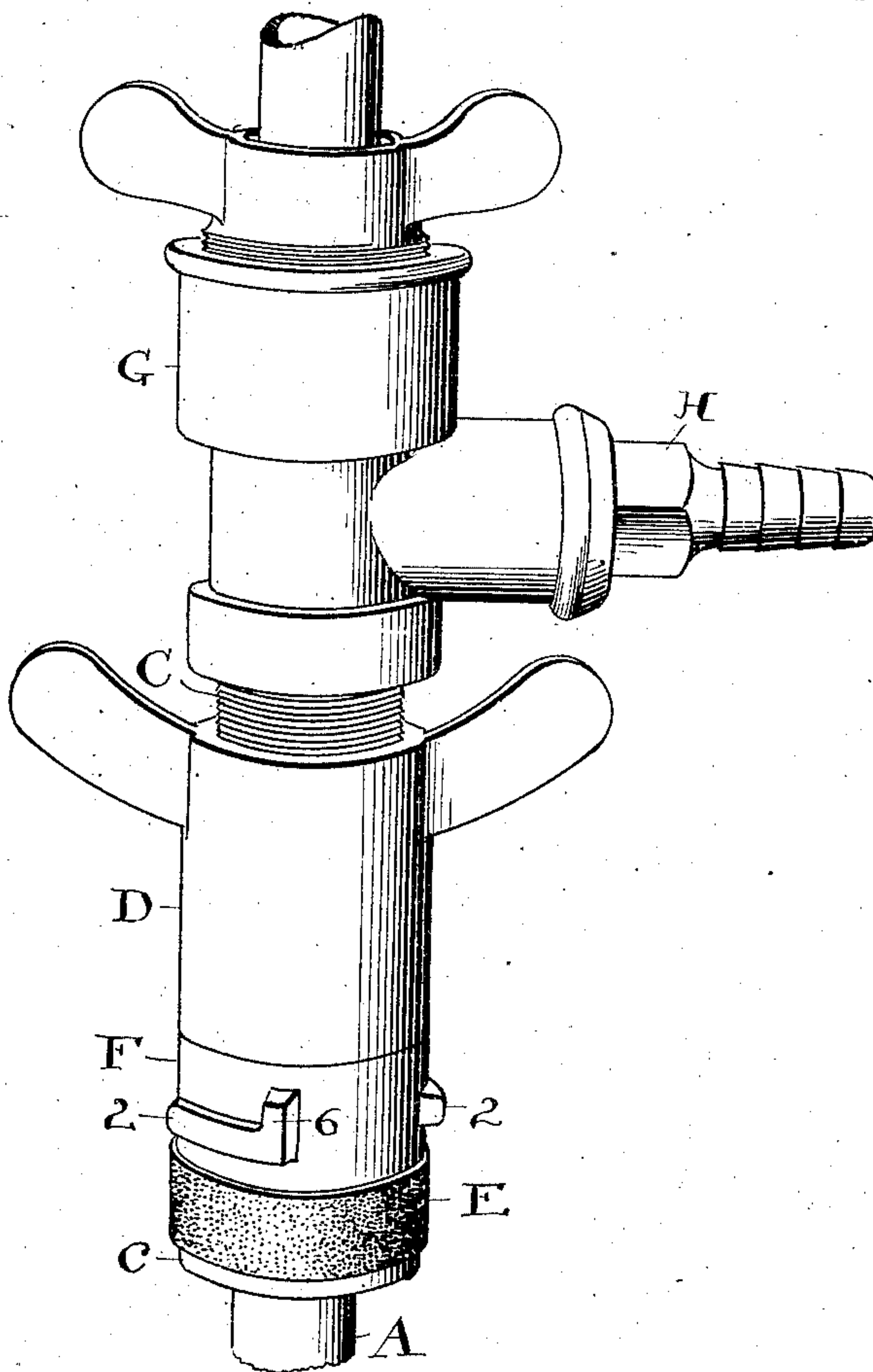
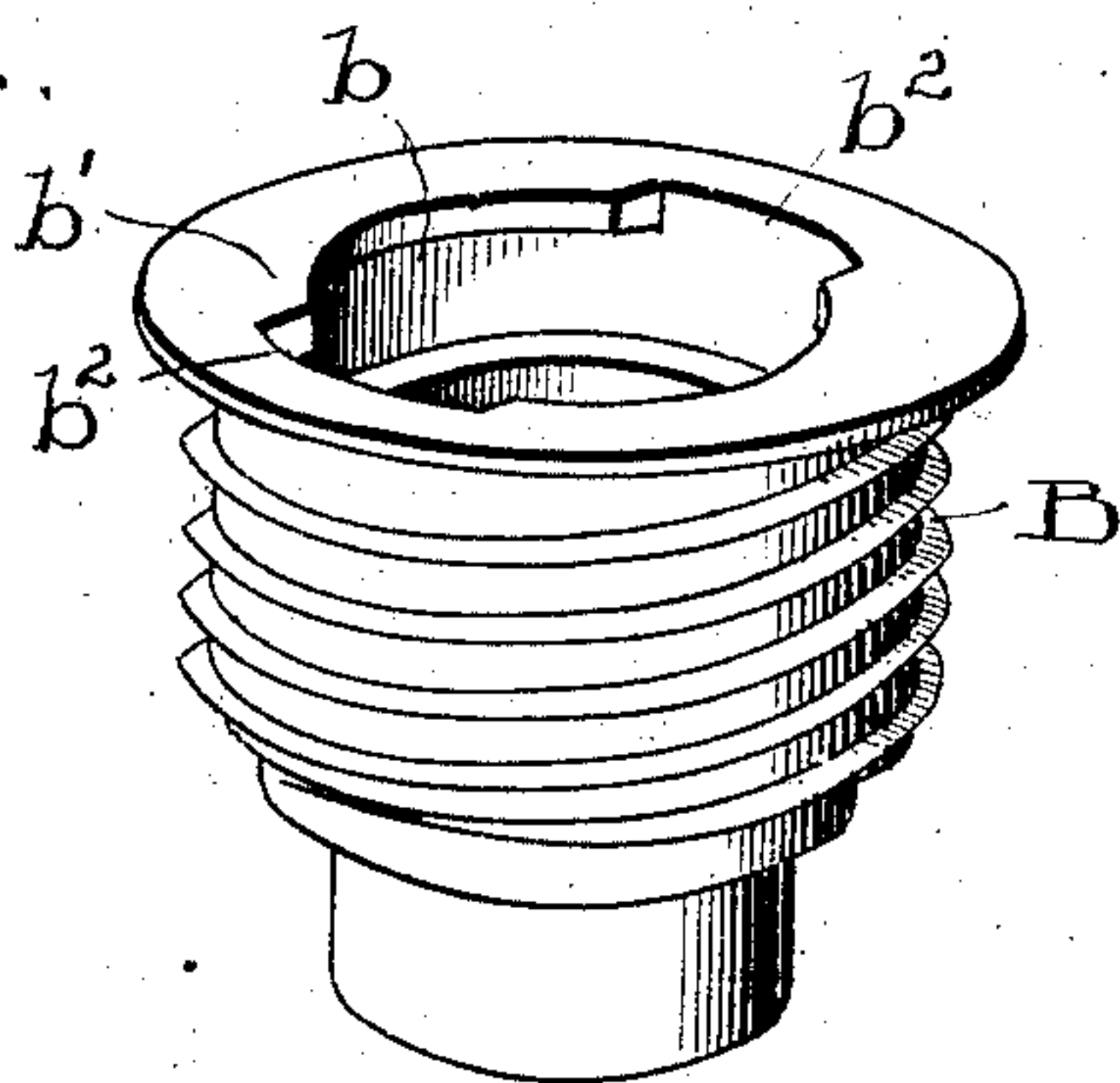


Fig: 2.



ATTEST.  
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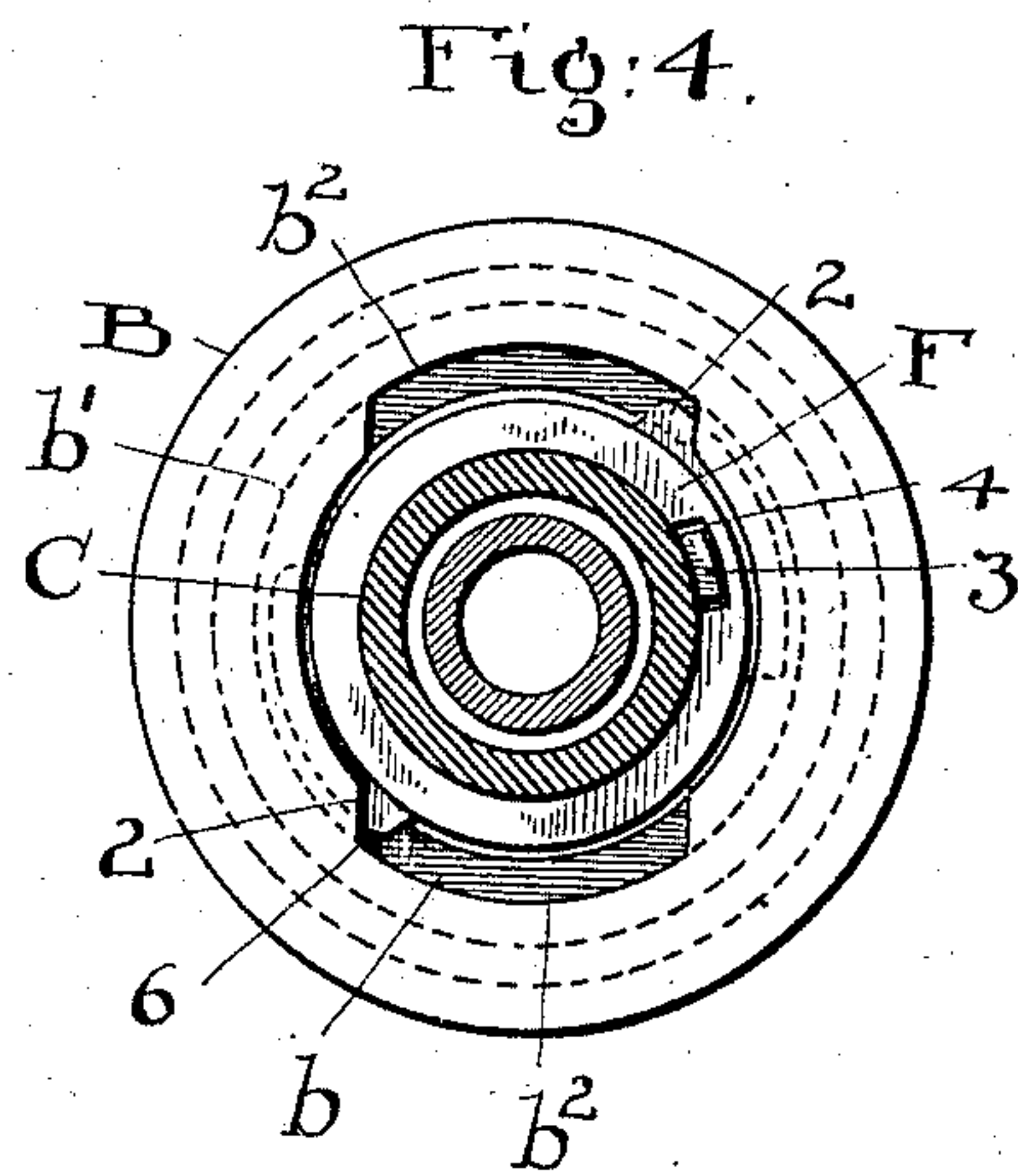
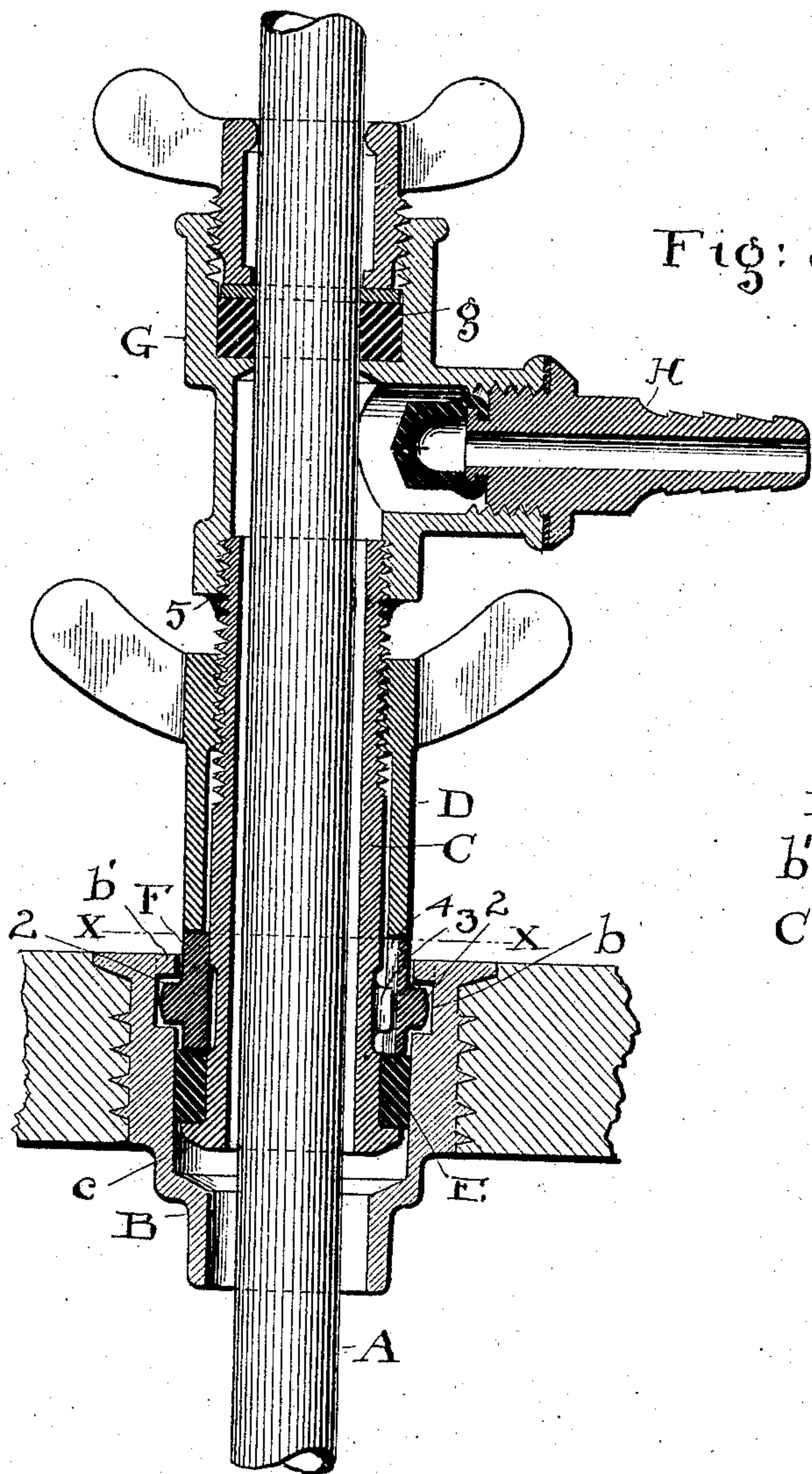
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*W. B. Moser*  
c. a. sell

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# UNITED STATES PATENT OFFICE.

EDWARD H. WEATHERHEAD, OF CLEVELAND, OHIO.

## LIQUID-TAPPING DEVICE.

No. 850,410.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed June 5, 1905. Serial No. 263,726.

*To all whom it may concern:*

Be it known that I, EDWARD H. WEATHERHEAD, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Liquid-Tapping Devices; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to liquid-tapping devices adapted to draw liquid from kegs, barrels, and other vessels; and to this end the invention consists in the construction and combination of parts substantially as shown and described, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of the invention, and Fig. 2 is a like view of the bushing adapted to be seated in the bung-hole of the containing vessel. Fig. 3 is a vertical central sectional elevation of the mechanism shown in Fig. 3; and Fig. 4 is a cross-section on line  $x x$ , Fig. 3, looking down.

In the device thus shown the idea is to draw liquid under pressure from a barrel, keg, cask, or other containing vessel, and the construction provides a draft tube or pipe adapted to be inserted into a barrel or other vessel and a liquid-tight bung mechanism through which said pipe is inserted and a fluid-passage is provided within and through said mechanism about said pipe for the introduction of pressure fluid over the liquid after a manner now well known. In fact I am well aware that there have been a number of devices of the general nature of this one made and patented from time to time, and hence I do not claim the idea of the invention as a whole to be original with me, but I do claim that the invention herein improves the known art in essential particulars and that well-known defects in construction and operation are remedied by my invention, and as will now appear.

Thus B represents an externally-threaded bushing adapted to be engaged in the bung-hole of a barrel or vessel, substantially as seen in Fig. 3, and which is provided internally about its upper portion with an annular channel  $b$  and a flange  $b'$  about the top of said channel in the edge of which are formed notches or recesses  $b^2$ . All the other mech-

anism is supported in or through the medium of this bushing, and one of the material advantages of this invention is found in the manner of detachably but fixedly connecting said mechanism with the bushing. To this end I provide a packing and supporting tube C, which has a lateral flange  $c$  about its lower end on which rests the packing-ring E, and an external thread about its upper end upon or over which is engaged the sleeve-shaped tightening-nut D. A coupling-collar F is sleeved upon tube C over packing E below nut D, and has lugs or short ribs 2 oppositely and horizontally about its outside adapted to be inserted and removed through the recesses or notches  $b^2$  in bushing B and to be turned around beneath the flange  $b'$  thereon within limits. A feather or vertical rib 3 on said tube C, Fig. 3, enters a vertical groove or channel 4 in said collar and enables the collar to move up and down, but not to rotate upon the said tube. Hence by turning the tube the said collar also is turned to make engagement with the bushing and to remove it therefrom. The said collar and nut D are sleeved upon tube C before the coupling-joint G above is connected therewith.

It will be seen that with this construction and arrangement of parts engagement of the mechanism with bushing B is rendered exceedingly simple but effective and said mechanism is firmly locked in the bushing by tightening-nut D. This causes the packing-ring E to be compressed and spread between the flange-seat  $c$  and collar F and tightly against the inner wall of the bushing, so as to seal the mechanism at that point, and this manner of engagement of collar F with the bushing also prevents blowing out of the mechanism from within the bushing; but removal is easy when nut D is withdrawn and the packing-ring contracts to normal condition and all the parts are loosened. Then the collar F is rotated with tube C to disengage from beneath the bushing-flange, and all the united parts are drawn out together. The coupling G, its packing-ring  $g$  about pipe A, and nipple H may be regarded as common features; but I have found that it is desirable to unite tube C and coupling G as if they were one piece, and so I thread the tube into the coupling and then solder them together at 5.

The ribs 2 on collar F have shoulders 6,

which are adapted to engage the end edge of recesses  $b^2$  and limit the rotation of the collar therein.

5 The mechanism herein other than the bushing constitutes together what is usually known as the "bung" and is separately removable as a whole from the bushing.

What I claim is—

10 In liquid-tapping mechanism, a bushing having an annular interior channel about its top, in combination with bung mechanism in said bushing, comprising a tube, a packing-ring about the bottom of said tube adapt-

ed to press laterally against the wall of the bushing, a collar over said packing-ring to 15 bear upon the same and lock said tube against rotation, said collar constructed to rotatively engage in the said channel of the bushing, and a nut threaded upon said tube and bearing down upon said collar. 20

In testimony whereof I sign this specification in the presence of two witnesses.

EDWARD H. WEATHERHEAD.

Witnesses:

C. A. SELL,

R. B. MOSER.