

(No Model.)

H. F. KOLL.  
BUNG.

No. 586,101.

Patented July 13, 1897.

FIG 1

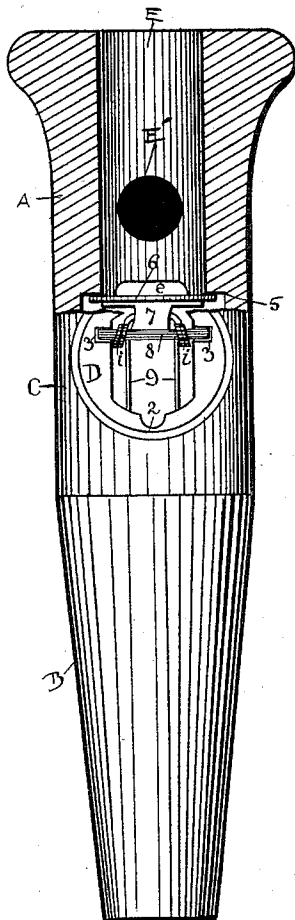
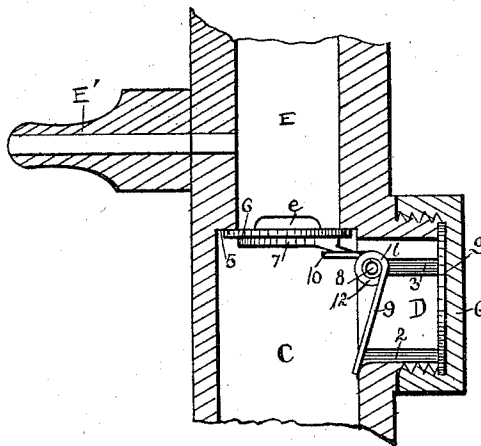


FIG 2



WITNESSES:  
G. P. Bolser  
W. E. Banker.

Henry F. Koll

INVENTOR

BY *W. E. Banker*

ATTORNEY.

# UNITED STATES PATENT OFFICE.

HENRY F. KOLL, OF SOUTH OMAHA, NEBRASKA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF TWO-THIRDS TO RICHARD A. FILTER, OF SAME PLACE, AND THEODORE WOLF, OF DOUGLAS COUNTY, NEBRASKA.

## BUNG.

SPECIFICATION forming part of Letters Patent No. 586,101, dated July 13, 1897.

Application filed February 1, 1896. Serial No. 577,808. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY F. KOLL, residing at South Omaha, in the county of Douglas and State of Nebraska, have invented certain useful Improvements in Bungs; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to a novel improvement in bungs, the object being to provide a device that shall be light and simple of construction, the parts further being removable and readily adjustable, as will be described more fully hereinafter.

In the accompanying drawings, Figure 1 shows a view, partly in section and with the cap removed, of a bung embodying my invention, while Fig. 2 shows a broken central sectional view more clearly showing the arrangement of the valve.

My bung is adapted to be used in connection with any ordinary barrel or other suitable receptacle having an entrance-opening for the bung, which is provided with the usual stub-spout E', leading to the force-pump. The bung is provided with a central opening E, within which a usual conducting-tube carried to the faucet is removably held.

In tapping a barrel with the bung as ordinarily constructed the bung-opening has to be closed by means of a cork during the insertion of the bung, the cork later being removed by the introduction of the supply-pipe leading to the faucet. This method not only leaves the cork in the barrel but occasionally it becomes misplaced, permitting the escape of the liquid out of the bung.

I aim to provide a simple bung which shall have a closure within to prevent any escape of the liquid or gas, and which closure shall be in the shape of a valve readily operated and only upon the insertion of the conduit-pipe leading to the faucet.

In the construction of my improved bung I provide an opening C, preferably of a diameter slightly larger than the opening E, which

opening is of a size to snugly accommodate the conduit-pipe without permitting any escape of the liquid. The shoulder formed by the enlarging of the hole C is of utility as a valve-seating for my spring-valve, which comprises a valve 7, having the trunnion-bearings 8, and to which the valve-disk 6, preferably of rubber or similar flexible material, is secured by means of an enlarged valve-head screw e, as is shown.

At a suitable point I provide my bung with an additional opening D, extending at right angles to the main opening and below the valve-shoulder, which opening is preferably elongated, as is shown in Fig. 1, the whole being in the form of a boss, threaded upon the outside to receive the threaded cap G.

At one point, preferably diametrically opposite the valve-seating, I provide the opening D with a central escape-way 2 and above with two inwardly-extending sockets 3 3, which terminate near the main opening C, and which sockets are adapted to receive the trunnions 8 of the valve 7.

Now to insert the valve 7 it is simply necessary to carry it through the opening D, which opening is made large enough so that said valve may be introduced, and then bring the trunnions 8 in line with the sockets 3, within which the valve is removably held. In this position, however, the valve would not necessarily be forced against the seating, and to accomplish this I use an approximately U-shaped spring, which is provided near the bow with the two spring-coils i, which are adapted to encompass the trunnions, the U portion 10 riding below the valve 7. In their normal position the stems 9 would be in line with the U portion 10, but after the valve has been inserted these spring-stems are curved at right angles and carried through the opening 2, through which they snugly pass, and then being permitted to escape to the right or left, as the case may be, in finding their true alinement in relation to the curved or bent portion 10, so that the valve is normally held against the seating 5. Now when the supply-pipe is to be introduced it is carried through the bung until the rounded end of the supply-pipe strikes the metallic

screw *e*, by which means the rubber valve is protected, so that this valve is carried away from the seating to permit the entering of this pipe. As soon as the pipe is withdrawn  
5 the spring of course forces the valve into its original seating.

The whole device is air-tight, the opening D being covered by means of a cap G. The valve 7, it should be understood, is below the  
10 stem E' and practically forms an air-tight device. Should anything occur to cause a leaking of the valve, the springs can be carried out of their proper position by simply carrying them through the central opening, and  
15 when both springs have been removed the whole valve is simply drawn out of the socket 3, within which socket this valve is held by virtue of this U-shaped spring 9, the forward position of the valve being determined by the  
20 position of the sockets 3.

Now, having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

In a bung provided with the usual vent and  
25 main escape-opening, the combination of valve-shoulders within and forming part of

said main escape-opening, of an additional opening extending at right angles to and entering said main escape-opening below said valve-shoulders, a cap adapted to close said  
30 additional opening, inwardly-extending sockets within said additional opening and within the upper end thereof, an escape-way centrally within and opposite said sockets, a valve provided with projecting trunnions  
35 adapted to work against said valve-shoulders, said trunnions being removably held within said sockets, and a U-shaped spring working below said valve, winding about said trunnions and being adapted to work within  
40 said main escape-opening, the length of said spring's stems beyond the trunnions being equal to the distance between said sockets and said central escape-way, all arranged substantially as and for the purpose set forth. 45

In testimony whereof I affix my signature in presence of two witnesses.

HENRY F. KOLL.

Witnesses:

RICHARD A. FILTER,  
DEXTER L. THOMAS.