May 13, 1924. 1,493,501

L. W. RICE

STOPPER

Filed April 4, 1923

Fig. 1.

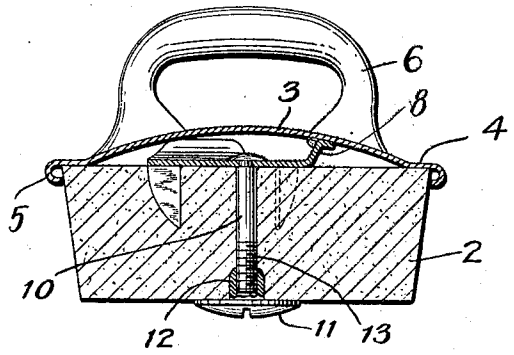


Fig. 2.

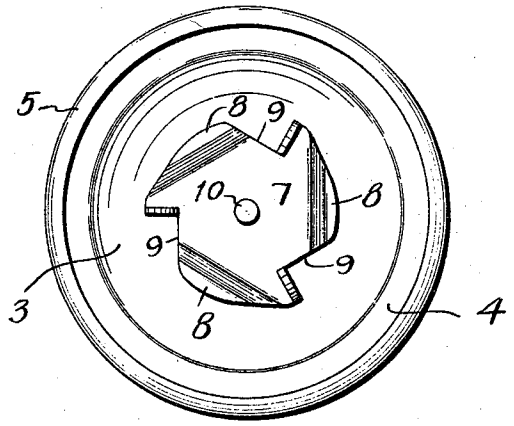
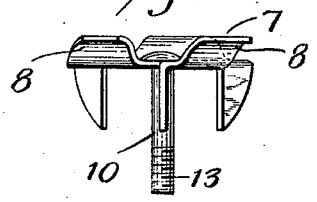


Fig. 3.



INVENTOR

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Patented May 13, 1924. 1,493,501

UNITED STATES PATENT OFFICE.

LOUIS W. RICE, OF NEW YORK, N. Y., ASSIGNOR TO BERNARD RICE'S SONS, INC., OF NEW YORK, N. Y.

STOPPER.

Application filed April 4, 1923. Serial No. 629,792.

To all whom it may concern:

Be it known that I, LOUIS W. RICE, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented new and useful Improvements in Stoppers, of which the following is a specification.

The invention relates to stoppers, and more particularly to stoppers for wide-mouth vessels such as beverage shakers, the stopper comprising a plug or block of cork and a metal top shell in which the cork is held. Heretofore considerable difficulty has been experienced with the plug coming loose from the top, and it is this difficulty which the present invention aims to overcome. This is accomplished by means of an anchorage united to the under side of the top and engaging the cork in the manner hereinafter described.

In the accompanying drawings forming part hereof:

Fig. 1 is a view, partly in elevation and partly in central vertical section, of a stopper embodying the invention;

Fig. 2 is a bottom plan view, without the cork and the retainer button; and

Fig. 3 is an elevation of the anchorage disk and its stem.

The illustrated stopper employs a wide circular block cork 2. The top shell 3 is domed, and has a marginal seat 4 for the top face of the cork and a rolled or flanged edge 5 which surrounds the base, that is to say the top, of the cork. The shell carries a suitable handle 6.

The anchorage is illustrated in its preferred form. It comprises a sheet metal disk 7 of substantial area, which is interposed between the base of the cork and the top shell, being united to the latter. For this purpose spaced peripheral portions of the disk are shown bent upward to form ears 8, the tops of the ears being bent laterally to provide suitable feet for soldering to the under side of the top 2.

The intermediate peripheral portions of the disk are cut for a distance on approximately chord lines 9, and are bent downward to form prongs, which lie in substantially radial planes as seen in Fig. 2, to enter the cork at distances from the center and keep the same from turning.

A central stem 10, riveted at its upper end in a hole in the disk, passes downward through a central opening in the cork to carry a retainer button 11 bearing upon the bottom of the plug. The said button has detachable engagement with the stem, to permit removal and replacement of the cork, being preferably formed with a hollow internally threaded collar 12 for cooperation with screw-threads 13 on the lower part of the stem. The lateral ears 8 that bear upon and are soldered to the domed top shell are of such height that the flat body of the disk 7 forms a table or seat for the central area of the top of the cork.

It will therefore be seen that the plug is firmly and immovably attached, yet can be taken off and put back or replaced at will, that the life of the cork is prolonged, and that the means employed are such as in no way to detract from the appearance.

I wish it to be understood that I do not limit myself to the precise form herein shown, as various changes and modifications may be made without departing from essentials.

What I claim as new is:

1. In a stopper, the combination with a cork plug and a metal top, of a central anchorage disk formed to afford a seat for the base of the cork and having prongs bent down to enter the cork and bent-up ears united to the metal top.

2. An anchorage for a stopper comprising a cork plug held in a metal top, said anchorage comprising a disk having spaced peripheral portions bent up to form soldering ears, and the peripheral portions between said ears cut approximately on chord lines and bent downward to form prongs lying in substantially radial planes.

3. In a stopper, the combination with a cork plug or block and a metal top, of a central anchorage disk between the top and the plug having bent-up ears united to the top and downward-projecting prongs to enter the cork, and a central retaining stem, substantially as set forth.

LOUIS W. RICE.