

J. P. CARSON.  
 STOPPER FOR CLOSING AND SEALING BOTTLES.  
 APPLICATION FILED JAN. 22, 1913.

1,080,891.

Patented Dec. 9, 1913.

FIG. 3.

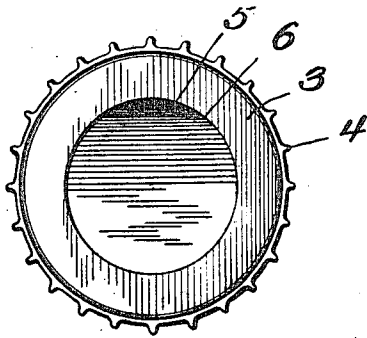


FIG. 5.

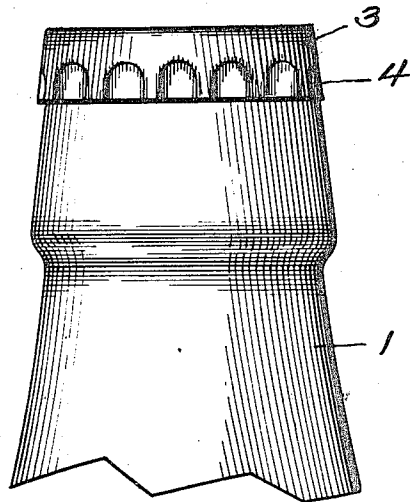


FIG. 4.

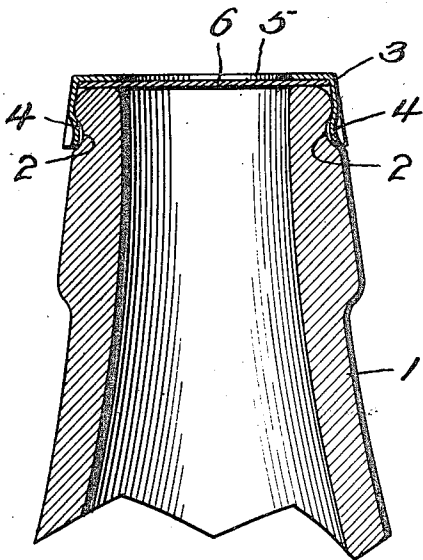


FIG. 1.

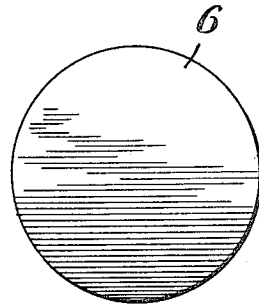


FIG. 2.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JOSEPH P. CARSON, OF CHESTERFIELD, VIRGINIA.

STOPPER FOR CLOSING AND SEALING BOTTLES.

1,080,891.

Specification of Letters Patent.

Patented Dec. 9, 1913.

Application filed January 22, 1913. Serial No. 743,614.

*To all whom it may concern:*

Be it known that I, JOSEPH P. CARSON, citizen of the United States, residing at Chesterfield, in the county of Chesterfield and State of Virginia, have invented certain new and useful Improvements in Stoppers for Closing and Sealing Bottles; and I do hereby declare the following to be 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.

My invention relates to improvements in stoppers for closing and sealing bottles containing liquids under pressure, and is particularly designed to provide for the free discharge of the contents of the bottle without the necessity of using any specially designed tool to remove the closure.

The object of my invention is to provide a sealing and closing means for bottles which can be manufactured at a comparatively small cost, and a stopper which will allow the consumer to gain access to the contents of the bottle without difficulty.

My invention as hereinafter described, consists of a disk of tough, strong paper, or other suitable material, which has been antiseptically treated with some waxy, paraffin or resinous material, which renders said disk aseptic and at the same time impervious to gases or liquids. The disk is made slightly larger than the outside diameter of the mouth of the bottle to be covered. In conjunction with said disk or cover, and to be used therewith, but separate therefrom, for the purpose of fastening said disk or cover over the mouth of the bottle and thus completely sealing and closing the same, I provide a skeleton metal fastening device having an opening therethrough, the diameter of which is approximately the same as the inside diameter of the mouth of the bottle, and a corrugated flange, said metal fastening being adapted to fit snugly over said disk and when locked to press it firmly over the mouth of the bottle, and the corrugated flange, locking around the head of the bottle, the two together form a complete liquid and gas-tight closure or stopper.

In the accompanying drawings, which illustrate the invention:—Figure 1 shows the top plan of the sealing disk ready to be inserted into the skeleton metal fastening device. Fig. 2 shows a side view of the same. Fig. 3 shows the top plan of my

skeleton metal fastening device. Fig. 4 shows a vertical section of the same when in use. Fig. 5 is a side view of my improved stopper applied to the neck of the bottle, and sealing contents of the same.

In the drawings, 1 designates the neck of an ordinary bottle such as may be used for containing beer or other liquids under pressure.

2 is an annular groove which extends around the neck of the bottle near the top thereof.

3 is a skeleton metal fastening device provided with corrugated edges 4, which are adapted to engage the groove 2 and lock the skeleton fastening device upon the bottle and thereby secure and lock the sealing disk 6, hereafter described, upon said bottle. The metal fastening 3 is also provided with an aperture 5 which is preferably, but not necessarily, made annular in form, and is approximately the same in diameter as the interior of the neck of the bottle, thereby permitting the free discharge of the contents of said bottle when the disk is punctured as hereafter set forth.

On the underside of the skeleton metal fastening device, and separate therefrom, but tightly fitting therein, and therefore completely covering the aperture in the same, I provide the sealing device 6. This sealing device consists preferably of a disk of fibrous material such as tough paper or the like, easily puncturable and rendible, which has been rendered aseptic or which has been antiseptically treated with some waxy or other substance, which renders the said disk not only aseptic and impervious to gases or liquids, but sufficiently strong to resist any pressure to which it may be subjected from gases within the bottle.

In use, after the bottle has been filled, the disk 6 is placed within the corrugated flange of the skeleton metal fastening device 3, and said fastening device is then applied to the bottle, the disk 6 being clamped at its edges to said bottle between the under side of said fastening device and the top of the bottle, and is securely held in place. In order to discharge the contents of the bottle, thus hermetically sealed, it becomes necessary to merely puncture the sealing disk 6 with a knife or other suitable rigid object. After the cap has been punctured, and even though the opening made therein may be very small, the liquid in the bottle, being under pressure,

will force or rend its way through the cap, and will automatically enlarge the initial opening, so that the entire contents of the bottle may be exhausted.

5 My invention may be applied to closures for repeated as well as for single use, so far as the skeleton metal fastening device is concerned, the inside disk alone being injured when the puncture is made.

10 In carrying out my invention, I do not confine myself to the use of paper or of any other specified material in the manufacture of the disk referred to, nor do I confine myself to the use of wax or paraffin, or any  
15 other specified material in the treatment thereof, but I may use any such material as will be sufficiently strong to withstand the pressure and the action of the gases and liquid within the bottle.

What I claim and desire to secure by Letters Patent is:—

A sealing device for bottles containing liquids under pressure, comprising a disk of easily puncturable material, impervious to liquids and rendible, said disk being capable  
25 of withstanding a pressure from within sufficient to rend the same after a puncture is made and means for locking and holding said disk over the mouth of the bottle to seal the same, said disk having a portion of the  
30 disk intermediate its edges exposed.

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

JOSEPH P. CARSON.

Witnesses:

B. J. TAYLOR,  
J. E. MASON.