

J. D. COUGHLIN.
CROWN SEAL OPENER.
APPLICATION FILED DEC. 16, 1908.

930,732.

Patented Aug. 10, 1909.

Fig. 1.

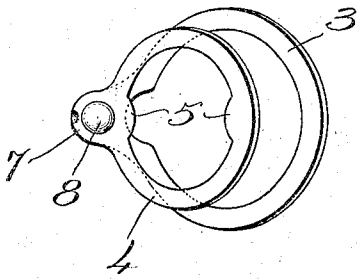


Fig. 2.

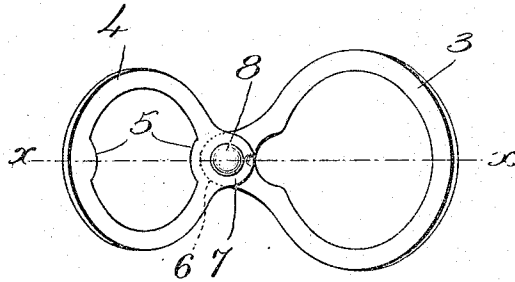


Fig. 3.

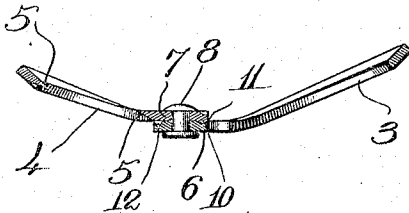


Fig. 4.

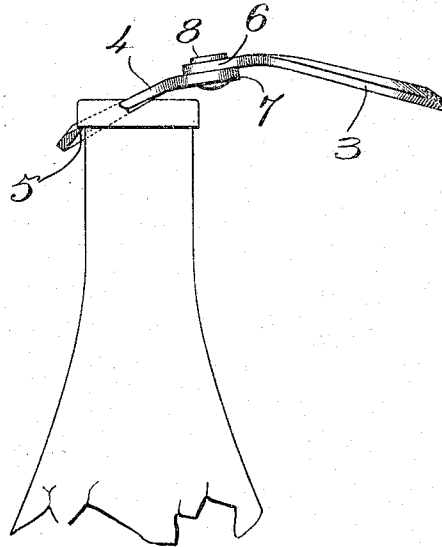


Fig. 5.

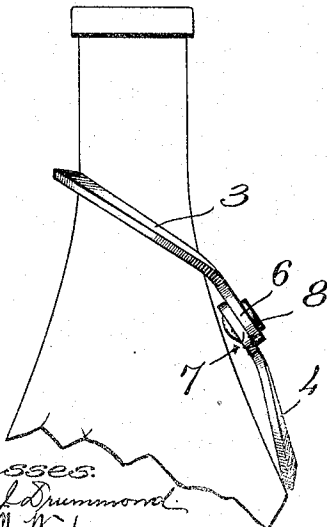
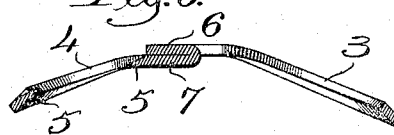


Fig. 6.



Witnesses:
Thomas J. Drummond.
Joseph M. Ward.

Inventor.
Joseph D. Coughlin,
by Lewis H. Gregory, atty.

UNITED STATES PATENT OFFICE.

JOSEPH D. COUGHLIN, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-THIRD TO T. FRANK NIGHTINGALE AND ONE-THIRD TO FRANK T. GRANT, OF BOSTON, MASSACHUSETTS.

CROWN-SEAL OPENER.

No. 930,732.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed December 16, 1908. Serial No. 467,835.

To all whom it may concern:

Be it known that I, JOSEPH D. COUGHLIN, a citizen of the United States, residing at Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Crown-Seal Openers, of which the following description, in connection with the accompanying drawing, is a specification, like numerals on the drawing representing like parts.

This invention relates to a crown seal opener and has for its principal object to provide a novel device of this class which can be inexpensively manufactured from sheet metal without any material waste of metal.

Another object of the invention is to provide a novel opener which may be compactly folded so as to permit it to be carried in the pocket.

I will first describe some embodiments of my invention and will then point out the novel features thereof in the appended claims.

Figure 1 is a view of a device embodying my invention showing it folded in condition to be carried in the pocket; Fig. 2 is a plan view showing the device opened out ready for use; Fig. 3 is a section on line *x-x*, Fig. 2; Fig. 4 shows the manner in which it may be used in removing a crown seal; Fig. 5 shows how it may be placed over the neck of a bottle; Fig. 6 is a modified form of the invention.

The device comprises two similar annular members 3 and 4, one of which constitutes a handle and the other of which is provided with a crown-seal-engaging lip 5. The member 3 as herein shown constitutes the handle, and the member 4 is that having the lip 5 thereon. These two members are preferably made of sheet metal and the exterior diameter of the member 4 is substantially the same or less than the interior diameter of the member 3. In fact in manufacturing the device from sheet metal I propose to die out the member 3 and in so doing to cut the member 4 from the part removed from the interior of the member 3. In this way both members of the device can be made from a sheet which is only large enough for the member 3 to be made therefrom.

The two members 3 and 4 are connected together in some suitable way so that when

in use they simulate a figure eight. These two members may be rigidly connected together or may be hinged to each other. I prefer the latter construction because it permits the device to be folded in a compact space, as shown in Fig. 1. Where the two members are hinged together I propose to make the member 3 with the extension 6 and to make the member 4 with a similar extension 7 and then to pivot the two members together by means of a pivot 8 which extends through the two extensions. The portion of each member including and adjacent the extension is situated at an angle to the main body of the member, as shown best in Fig. 3, and as a result when the two members are opened out they stand at a considerable angle to each other, while when they are folded together, as shown in Fig. 1, and dotted lines Fig. 3, they stand substantially parallel to each other.

The interior diameter of the handle member 3 is large enough so that said member may be set over the neck of a bottle, as shown in Fig. 5, and the advantage of placing the two members at an angle to each other is that when the device is thus hung on the neck of a bottle, the lip member 4 will hang down nearly parallel with the bottle and the device does not, therefore, extend out from the bottle sufficiently to be in the way.

It is not essential to my invention that the two parts should be hinged together for they may be made integral with each other as shown in Fig. 6. In this embodiment of my invention the member 4 is struck up from the member 3 when the latter is formed and is bent around into position opposite to the member 3. In so doing the stem or extension 7 of the member 4 is bent back on itself and overlies the stem or extension 6 on the member 3, thus making extra stiffness at the neck between the two members, which is the point that requires extra stiffness. A device of this sort is not capable of being folded but it has the advantage that it can be made complete from a piece of sheet metal no larger than is necessary for the making of the member 3, and has the further advantage which is secured by arranging the two members 3 and 4 at an angle to each other.

It is within my invention to make the member 4 with a crown seal engaging lip 5.

on either side thereof or on both sides, as herein shown. Where there are two crown seal engaging lips, as herein illustrated, the crown seal may be removed by using either
 5 of the lips and by either lifting on the handle member 3 or depressing said handle member according to the desire of the person using the device.

Where the two members are pivoted together, as shown in Figs. 1 to 5, it is desirable to provide some means in the nature of a lock for holding the members in their opened-out condition, as shown in Figs. 2 and 3, so as to avoid any danger of the device folding up when it is being used. While it is within my invention to provide any kind of a lock or catch for this purpose, I have herein shown the extension 6 as provided with a recess 10 adapted to receive a projection 11
 20 formed on the extension 3, said recess and projection being so positioned that when the device is opened out, the projection enters the recess and thus constitutes a lock for holding them in this position. I may if desired also provide the extension 6 with another recess 12 adapted to receive the projection 11 when the device is folded. The projection and recess are both comparatively slight and not sufficient to prevent the parts
 30 from being folded or opened out when sufficient pressure is applied to the two members.

In order to stiffen each member I may if desired make the sides thereof inclined slightly to the general plane of said member, as best seen in Figs. 3 and 6, thereby slightly dishing said member.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:—

40 1. A crown seal opener comprising two connected annular members, one of which constitutes a handle and the other of which has a crown seal engaging lip, and the latter of which has the same shape as the interior
 45 of the former and an exterior diameter at

least as small as the interior diameter of the former.

2. A crown seal opener comprising two annular members, each having an extension on one side which overlies and is secured to an extension on the other member, one of said members constituting a handle and the other having a crown seal engaging lip. 50

3. A crown seal opener comprising two annular members, each having an extension on one side which overlies and is secured to an extension on the other member, one of said members constituting a handle and the other having a crown seal engaging lip, the extension of each member being situated at an angle to the body thereof. 55 60

4. A crown seal opener comprising two annular members, each having an extension on one side which overlies and is pivoted to an extension on the other member, one of said members constituting a handle and the other having a crown seal engaging lip. 65

5. A crown seal opener comprising two connected annular members, one of which constitutes a handle and the other of which has a crown-seal-engaging lip, the walls of each member being inclined slightly to the general plane of the body of said member. 70

6. A crown seal opener comprising two annular members, each having an extension on one side which overlies and is pivoted to an extension on the other member to permit said members to be swung into a position parallel with each other, one of said members constituting a handle and the other having a crown - seal - engaging lip, and frictional means to hold the members either in their extended or in their folded position. 75 80

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses. 85

JOSEPH D. COUGHLIN.

Witnesses:

LOUIS C. SMITH,

THOMAS J. DRUMMOND.