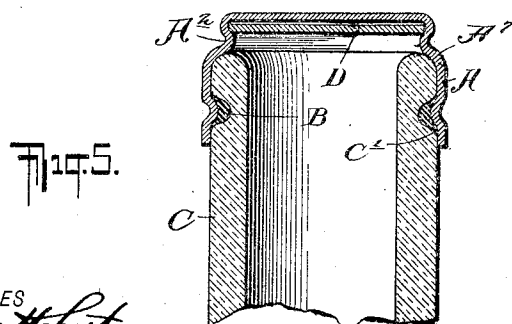
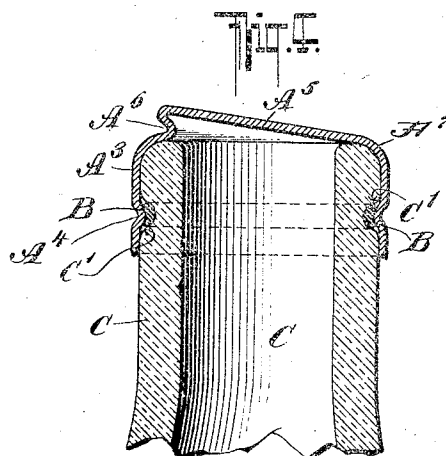
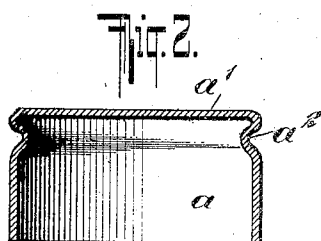
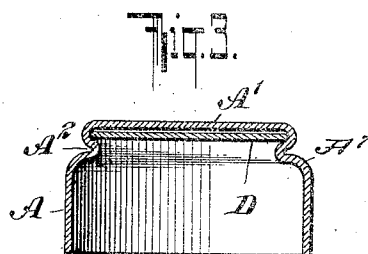
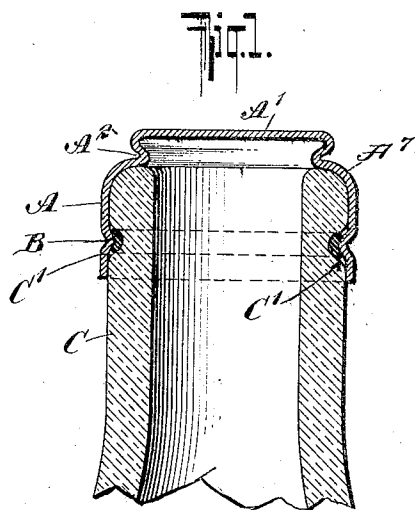


No. 858,174.

PATENTED JUNE 25, 1907.

E. GOLTSTEIN.
BOTTLE CAP.

APPLICATION FILED JUNE 26, 1906.



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EWALD GOLTSTEIN, OF COLOGNE, GERMANY.

BOTTLE-CAP.

No. 858,174.

Specification of Letters Patent.

Patented June 25, 1907.

Application filed June 26, 1906. Serial No. 323,427.

To all whom it may concern:

Be it known that I, EWALD GOLTSTEIN, a subject of the Emperor of Germany, and a resident of Cologne, Germany, have invented certain new and useful Improvements in Bottle-Caps, of which the following is a specification.

My invention relates to bottle caps such as are made of metal or other resistant material, and has for its object to so construct the cap that it will be readily cut open and also in such a manner as to save certain valuable parts of the cap and prevent their separation from the bottle or other receptacle to which the cap is applied.

Reference is to be had to the accompanying drawings in which

Figure 1 shows the neck of a bottle with one form of my improved cap applied thereto; Fig. 2 is a cross section of another form of the cap showing its appearance before it is applied to the bottle; Fig. 3 is a similar view of a third form of my invention and Fig. 4 is a sectional view of the neck of a bottle with still another form of my cap applied thereto; and Fig. 5 shows the cap of Fig. 3 applied to a bottle.

As illustrated in Fig. 1 the cap consists of suitable material such as aluminium, and comprises an annular portion A which is adapted to surround the bottle neck, and a removable central portion A' in the nature of a disk which is so connected with the annular portion as to facilitate separation therefrom. For this purpose I provide at the upper edge of the annular portion an inwardly bent portion A' resting on the end surface of the neck and the outer edge of the central portion A' is also bent inward, thus forming a contraction or groove A² which facilitates the use of a cutting tool, such as a knife. The groove also guides such knife as it is passed around the cap since the edge of the central portion A' overhangs the inner edge of the portion A'. Before the cap is applied, its ring-shaped portion A is straight, substantially as shown in Figs. 2 and 3, and after this portion has been slipped over the neck C of the bottle, which is provided with a rubber washer B located in a groove C', the annular portion A is nicked or pressed inward at such groove, so as to force it into contact with the packing ring B, by means of a suitable tool or machine. In this manner the cap is firmly connected with the bottle. When it is desired to open the bottle,

the central portion A' is removed by cutting it away with a knife or other tool.

Among the advantages of my invention I desire to point out particularly the great ease of opening the bottle; as the removal of the central portion of the cap is facilitated. Another advantage consists in the fact that the annular or surrounding portion A remains connected with the bottle and therefore permanently protects the washer B against injury by dirt, dust or light. The bottles which are returned to the brewery or bottling establishment still have the ring A and the washer B upon them, and I thus save the said ring which, when made of aluminium as I prefer to do, is relatively valuable. The used ring A would be removed at the brewery or bottling establishment and a complete new cap would be substituted, but the original washer may be used a number of times.

The cap shown in Fig. 2 differs from the one first described chiefly by having the diameter of the removable portion or disk a' equal to that of the annular portion a. The throat or contraction a² is similar to the one shown in Fig. 1.

In Fig. 3 I have stiffened the removable portion of the cap by means of a separate disk D which is held by the contraction A², the form of the cap being otherwise the same as that in Fig. 1. Fig. 5 shows this type of cap applied to a bottle. This strengthening disk may be of advantage in some cases to prevent injury to the removable upper portion of the cap which may be termed a sealing disk or sealing portion.

I claim:

1. The combination with a receptacle, of a cap having an annular portion surrounding the neck of the receptacle, and inwardly bent portion located above said annular portion and resting on the end surface of the neck, and a sealing portion extending across the receptacle's mouth, and located above said inwardly bent portion and projecting outwardly so as to overhang the same and form a contraction between the sealing portion and said inwardly bent portion.

2. The combination with a receptacle, of a cap having an annular portion surrounding the neck of the receptacle, an inwardly bent portion located above said annular portion and engaging the end surface of the neck, a sealing portion located above said inwardly bent portion and projecting outwardly so as

to overhang the same, and to form a contraction or groove between the sealing portion and said inwardly bent portion, and a strengthening member in the sealing portion
5 of the cap.

3. A cap for sealing bottles and other receptacles, comprising an annular edge portion adapted to fit around the bottle neck, and a central sealing portion connected with
10 the said annular portion by a contraction forming a groove to guide the tool used in opening the bottle.

4. A cap for sealing bottles and other receptacles, comprising an annular edge por-

tion adapted to fit around the bottle neck, 15
and a central sealing portion connected with the said annular portion by a contraction forming a groove to guide the tool used in opening the bottle, and a strengthening member in the upper portion of the cap. 20

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

EWALD GOLTSTEIN.

Witnesses:

BESSIE F. DUNLAP,
LOUIS VANDORY.