E. GOLTSTEIN.

CAPSULE STOPPER FOR BOTTLES OR THE LIKE.

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Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Witnesses:

Inventor

Ewald Goltstein

James D. Norris

E. G. Wiesler
To all whom it may concern:

Be it known that I, EWALD GOLTSTEIN, engineer, a subject of the Emperor of Germany, residing at Cologne, Rhine Province, Empire of Germany, have invented certain new and useful Improvements in Capsule-Stoppers for Bottles or the Like, of which the following is a specification.

This invention relates to the kind of stoppers for bottles in which the stopper is opened by tearing the metal capsule. In the accompanying drawings some of such stoppers are shown.

Figure 1 is an elevation of the top of a bottle-neck fitted with an improved capsule-stopper, and Fig. 2 is a top plan view of the same. Fig. 3 is a vertical section, and Fig. 4 a top plan view of a modified form. Fig. 5 is a similar view of the same, but illustrating an improper arrangement of the fibers relative to the tearing-strip; and Fig. 6 is a top plan view of a further-modified form.

The tearing off of the ordinary capsules is considerably facilitated, and therefore the bottle more rapidly and easily opened, if the stopper be made in the manner hereinafter described.

Thin plates of sheet metal which are only rolled in one direction show a predetermined formation of the fibers. Therefore they are more easily torn in the direction of the rolling than in any other direction. The capsule shown in Figs. 1 and 2, which is adapted to be torn open by means of a tag α, is therefore made in such a way that the fibers run parallel to the tag α, thus diminishing the danger of the tag being torn off before the capsule itself is sufficiently destroyed. In the drawings the shading shows the position of the fibers.

A further example is shown in Figs. 4 and 5, in the latter of which the fibers lie in such a way that they run transversely over the bridge left standing between the two ends of the nick or slot and not parallel to it. If this were the case, in tearing off the capsule by means of the cut-out lid 2, which serves as a tag, this lid would tear off approximately along the lines c, Fig. 5—that is to say, that the annular capsule edges would not be torn apart.

If, however, the fibers be made to run in the manner shown in Fig. 4, the point of junction of the dotted tearing-lines e lies outside the capsule, and therefore tears the latter off.

Fig. 6 shows an arrangement in which the capsule is previously nicked along the dotted lines f, which lie in the continuation of the tearing-off strip or handle y. Here it is also preferable to cause the fibers to lie parallel with these lines in order that the tearing out of the strip may be further facilitated and under certain circumstances even the entire capsule torn through along the dotted lines k.

I declare that what I claim is—

A metallic capsule-stopper for bottles and the like, adapted to be torn off, in which sheet metal having a predetermined direction of fibers is employed for making the capsule, and the capsule made therefrom in such a way that the fibers run in the direction of the tearing substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EWALD GOLTSTEIN.

Witnesses:

JOHN SECKEL,

WILHELM LEHRKE.