

# UNITED STATES PATENT OFFICE.

HERMANN BÖGELMANN, OF CREFELD, GERMANY.

## BOTTLE-STOPPER.

No. 821,456.

Specification of Letters Patent.

Patented May 22, 1906.

Application filed July 1, 1904. Serial No. 215,003.

*To all whom it may concern:*

Be it known that I, HERMANN BÖGELMANN, dairy-keeper, a subject of the German Emperor, and a resident of 191 Inratherstrasse, Crefeld, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

The present invention relates to bottle-stoppers, and has for its object the provision of a simplified form of stopper which is especially adapted for milk-bottles.

The form and arrangement of the spring for maintaining the closure of the bottle is the principal feature of the present invention, a second important feature being the stopper proper, the construction of which is such as to preclude the possibility of the above-mentioned spring being damaged by an improper opening of the bottle.

In order that the invention may be clearly understood, it will now be described in detail with reference to the accompanying drawings, which illustrate two embodiments of the same.

Figure 1 is a part-sectional front elevation of a bottle provided with the new stopper, and Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a front elevation of the top of a bottle provided with a modified form of the stopper, and Fig. 4 is a side elevation of Fig. 3.

Referring more particularly to Figs. 1 and 2, the bottle is closed by means of the plug 2, which may suitably be made of porcelain. This plug is provided with a rubber or other gasket 1, so as to sit tightly in the mouth of the bottle-head 7. The wire bail is made, preferably, in one piece and may be plated to protect it from oxidation and rust. The horizontal portion 4 of the bail passes through the hole 3 in the plug, and at the lower part 9 the bail is bowed, so as to embrace the bottle-neck to the extent of, say, three-fourths of its circumference. Between the limb 4 and the bow 9 the bail at each side is spirally coiled about a vertical axis, as shown at 5 and 6, so as to afford resilience. The two ends of the bail may be united in any suitable manner, such as by being bent to form interlocking eyes 11 or by being soldered or the like.

In stoppering the bottle it is merely necessary to press the plug down upon the bottle-mouth and then to slightly draw the bow downward, whereupon it can be snapped round the bottle-neck below the shoulder presented by the bottom of the head 7.

In the modification shown in Figs. 3 and 4 the bail between the limb 4 and the bow 9 instead of presenting vertical spiral springs, as shown in Figs. 1 and 2, is wound or coiled, preferably circularly, about a horizontal axis, as shown at 10 10. The plug 2 is here drawn as having a semispherical head, and the limb 4 of the bail lies but slightly above the bottle-mouth, so that there are no prominently projecting parts presented. This precludes the danger of the stopper being accidentally unseated by shock or blow and of the bail being injured by the plug being improperly forcibly raised without the bail having been first released. Instead of the semispherical form any other rounded shape may naturally be given to the head.

Having thus described my invention, what I claim is—

1. A bottle-stopper, comprising in combination, a plug, and a bail of wire which engages the plug above and has a bowed portion below adapted to embrace the bottle-neck under the head lateral portions extending from the plug to the bow and being twisted to form a coil above the said bowed portion at each side, substantially as described.

2. A bottle-stopper, comprising in combination, a horizontally-perforated plug, and a bail of wire which passes through the hole in the plug and has a bowed portion below adapted to embrace the bottle-neck under the head, lateral portions extending from the plug to the bow and being twisted to form a coil above the said bowed portion at each side, substantially as described.

3. A bottle-stopper, comprising in combination, a plug having a hemispherical horizontally-perforated head, and a bail of wire which passes through the hole in the plug and has a bowed portion below adapted to embrace the bottle-neck under the head, lateral portions extending from the plug to the bow and being twisted to form a coil above the said bowed portion at each side, substantially as described.

In witness whereof I have hereunto signed my name, this 21st day of May, 1904, in the presence of two subscribing witnesses.

HERMANN BÖGELMANN.

Witnesses:

W. BRUCE WALLACE,  
GERH. PLATZEN.

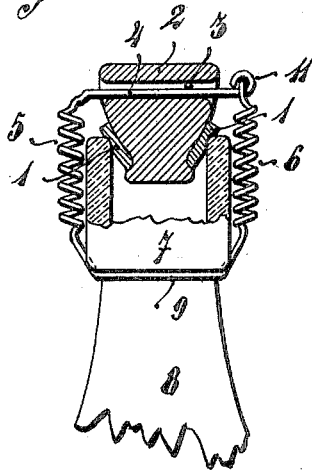
No. 821,456.

PATENTED MAY 22, 1906.

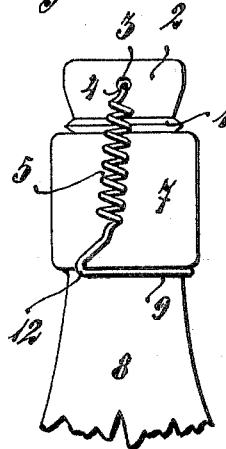
H. BÖGELMANN.  
BOTTLE STOPPER.

APPLICATION FILED JULY 1, 1904.

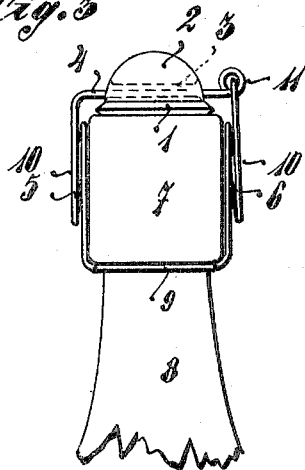
*Fig. 1*



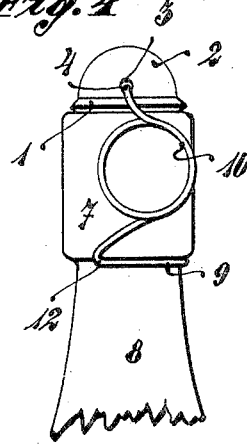
*Fig. 2*



*Fig. 3*



*Fig. 4*



WITNESSES:

*Paul Lange*  
*Carl Krehair*

INVENTOR:

*Hermann Bögelmann*