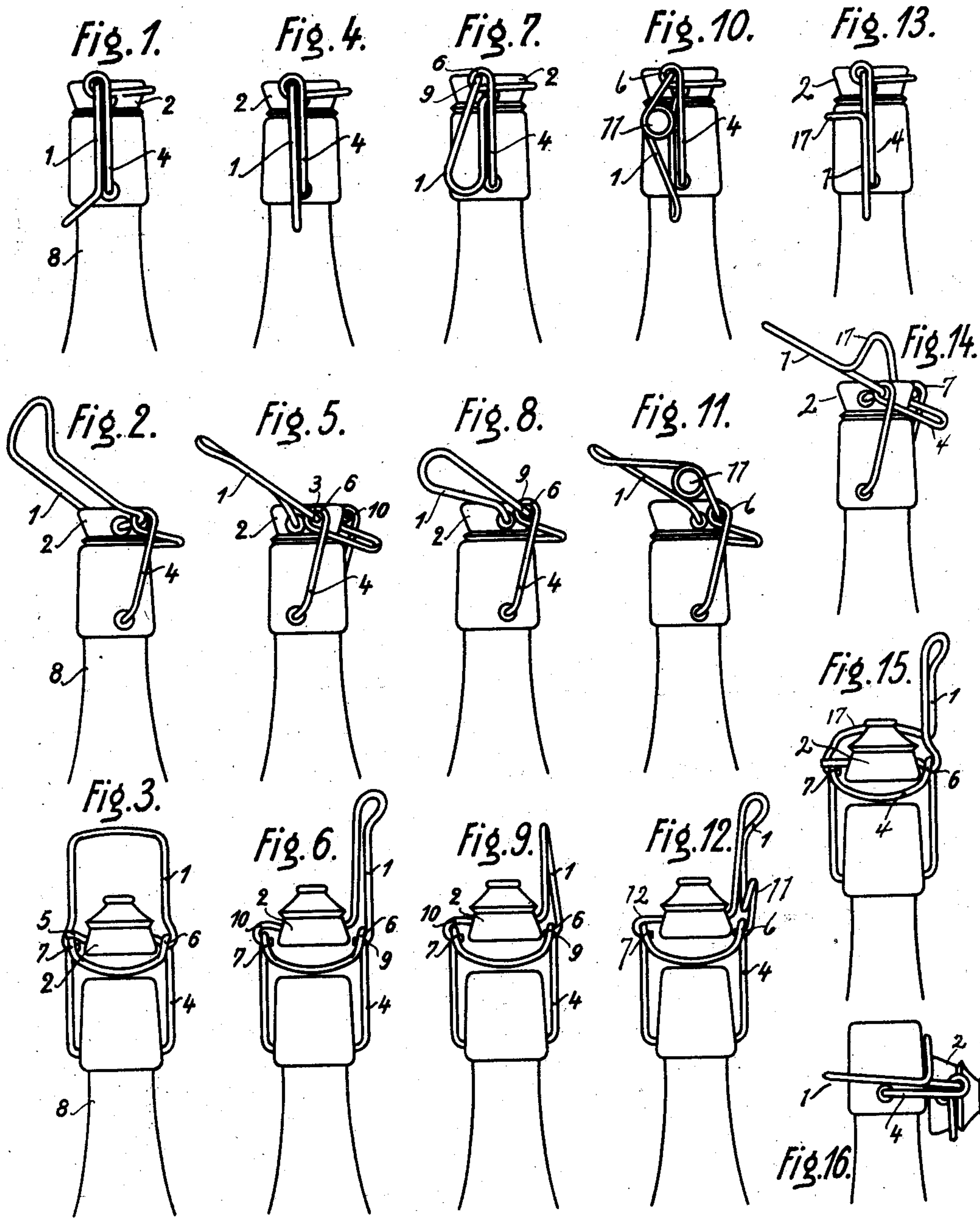


W. ORTMANN.
WIRE LEVER STOPPER.
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906,917.

Patented Dec. 15, 1908.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILHELM ORTMANN, OF DRESDEN, GERMANY.

WIRE-LEVER STOPPER.

No. 906,917.

Specification of Letters Patent.

Patented Dec. 15, 1908.

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To all whom it may concern:

Be it known that I, WILHELM ORTMANN, a subject of the German Emperor, and resident of Dresden, Germany, have invented certain new and useful Improvements in and Relating to Wire-Lever Stoppers, of which the following is a specification.

My present invention relates to wire lever stoppers for bottles or the like in which the turning lever is arranged on the head of the bottle while the locking lever is connected to the stopper. In such locks the locking lever can be usually turned around little eyelets of the turning lever in such a manner that the locking lever rests against the legs of the turning lever if the bottle is closed it being impossible to injure the bottle.

The object of my present invention differs in so far from these well known stoppers that its parts are thus constructed that the stopper can be rigidly placed and held on the head of the bottle by means of the locking lever.

A further advantage of my improved stopper may be found therein that the stopper can be exchanged. Besides I can remove the whole lock from the bottle and take the same apart.

In the accompanying drawing I have illustrated my improved wire lever stopper attached to beer bottles in five different constructions each time in a closed position, in a half way opened position and in an open position.

Like letters of reference refer to like parts throughout the different views.

Figures 1 to 3 show one form of construction of my improved wire lever stopper, Figs. 4 to 6 show a second form of construction of my improved wire lever stopper, Figs. 7 to 9 show a third form of construction of my improved wire lever stopper, Figs. 10 to 12 show a fourth form of construction of my improved wire lever stopper, Figs. 13 to 15 show a fifth form of construction of my improved wire lever stopper, Fig. 16 shows the position into which the stopper is placed if the bottle is opened and emptied.

Common to all these constructions is the form and arrangement of the turning bail 4 while the locking lever 1 shows each time a different form and arrangement.

In the construction shown in Figs. 1-3 the locking lever 1 is of a shape similar to

the ones well known heretofore. The stopper 2 is exchangeable. The one straight end 5 of the lever 1 passing through the eyelet 6 of the turning bail 4 and through the stopper 2 rests on its free end on the eyelet 7. The other end of the locking lever is formed like a hook and catches into the eyelet 7 of the turning bail. The lever 1 shows the form of a bow which if the bottle is closed rests around the neck of the same without touching the bottle (Fig. 1). The legs of the wire lever 1 rest while closing the bottle against the legs of the turning bail and prevent the bow from striking against the neck of the bottle. If the stopper 2 shall be exchanged I simply remove the lever end 5 from the eyelet 7 and draw the stopper from the said end.

Figs. 4-6 show a construction in which the stopper 2 can not be exchanged. The locking lever 1 is located on one side of the stopper the wire legs being loop like pressed together. The one wire leg 9 provides a hook engaging the eyelet 6 of the turning bail 4. The other end 10 is passed through the stopper 2 and catches into the eyelet 7 of the bail 4.

According to the construction shown in Figs. 7-9 I shorten the locking lever 1. The end 10 of the lever 1 is besides bent a little more away from the other leg in order to form a loop into which I can place a finger if I wish to open the bottle. This sort of bottle locks is especially designed for export bottles.

The construction shown in Figs. 10 to 12 provides a stronger elasticity of the locking lever this construction having the advantage of an easy opening and closing of the mechanism and besides more uniformly presses the stopper into the opening of the head of the bottle, whereby uneven cuttings of the mouth pieces of the different bottles are equalized. The locking lever 1 forms at its lowest end a ring and thereafter with its one end an elastical loop 11 before said end engages the eyelet 6 of the turning bail 4. The other end 12 of the locking lever upward directed and passing through the stopper engages the eyelet 7 of the turning bail 4. The locking lever suspended and shaped as here above described strikes only against the wires of the turning bail and can therefore never injure the bottle.

In the construction shown in Figs. 13 to 15 the stopper 2 is again exchangeable and

it differs in so far from the one shown in Figs. 1 to 3 that the locking lever 1 forms no bow but is arranged on one side of the stopper, whereby the one leg 17 runs in a semi-circular way around the bottle engaging with its hooked end the eyelet 7 of the bail 4. The other leg is constructed as the part 5 shown in Figs. 1 to 3.

The most important advantage of my improved wire lever stopper consists in an easy opening and locking of the bottle. The locking lever can besides never strike against the neck of the bottle and injure the same as its legs are stopped by the legs of the turning lever. The stopper button can be easily exchanged in order to renew the tinning of the wires and the closed lock can be easily secured by a lead seal.

If the bottle is opened and if the same shall be emptied the stopper can be placed and clamped into the position shown in Fig. 16, so that it can not move. This prevents a touching of the fluid contained in the bottle with the stopper if said fluid is poured out.

The position shown in Fig. 16 is attained by turning the locking lever 1 after the bottle has been opened completely backward whereby the stopper 2 is placed with its broad surface against the head of the bottle. Hereafter the locking lever 1 is again turned forward and the stopper pressed softly against the head of the bottle the lever 1 having adopted a horizontal position, so that the lock can not leave its place. This adjustment can also take place in the constructions shown in Figs. 1 to 12.

A further important advantage of my improved stopper consists therein that it fits any sort of bottle necks.

What I claim as new and desire to secure by a United States Letters Patent is:—

1. In a wire lever stopper having a cross hole the combination of a locking lever (1) provided with a hook line end adapted to engage underneath a turning bail and with a second end passing through the hole of the stopper and carrying the same, and a turning bail (4) adapted to be pivotally fastened to the head of a bottle and provided with eyelets passing over the hook like ends of said locking lever and with wire legs serving as a stop for the locking lever substantially as described and for the purpose set forth.

2. In a wire lever stopper having a cross hole the combination of a turning bail adapted to be pivotally fastened to the head of a bottle and provided with eyelets, a locking lever provided with two hook like ends engaging underneath said eyelets of said turning bail, and a loop formed by the locking lever at one side of the stopper before passing through the hole of the same substantially as described and for the purpose set forth.

In testimony whereof I have hereunto signed my name this 12th day of July 1907, in the presence of two subscribing witnesses.

WILHELM ORTMANN.

Witnesses:

PAUL ARRAS,
HECTOR C. BYWATER.