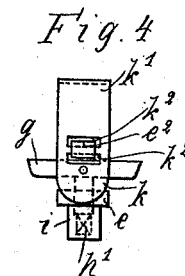
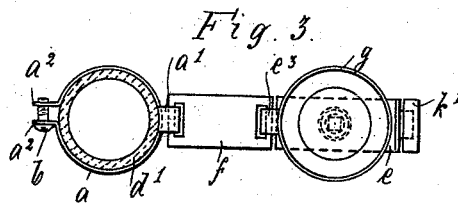
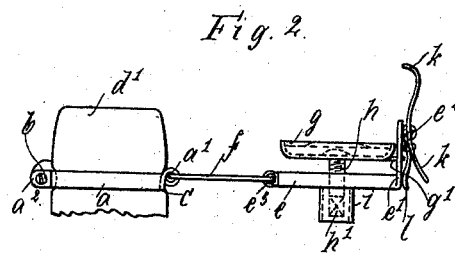
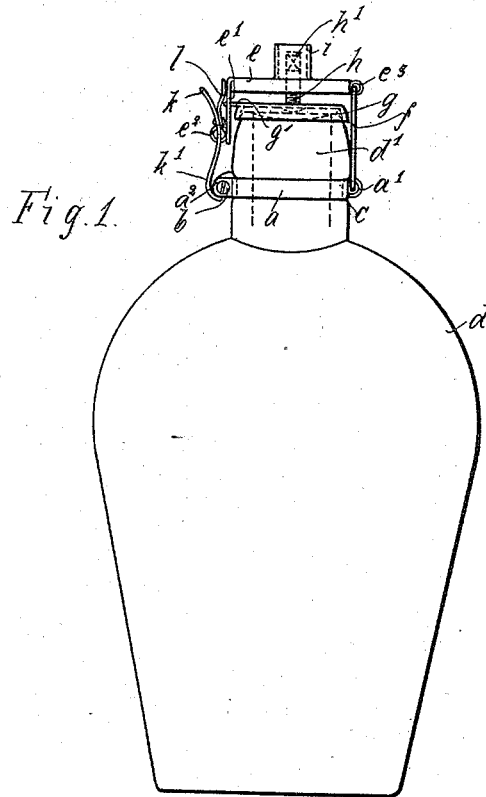


(No Model.)

A. W. SCHROEDTER.
CLOSING DEVICE FOR BOTTLES.

No. 526,329.

Patented Sept. 18, 1894.



Witnesses:

Arthur Wallther
Emil Freyser

Inventor:
August W. Schroedter

by
Kuhnt & Reissler
Attorneys.

UNITED STATES PATENT OFFICE.

AUGUST WILHELM SCHROEDTER, OF BERLIN, GERMANY.

CLOSING DEVICE FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 526,329, dated September 18, 1894.

Application filed July 6, 1893. Serial No. 479,745. (No model.)

To all whom it may concern:

Be it known that I, AUGUST WILHELM SCHROEDTER, a subject of the King of Prussia, German Emperor, and a resident of Berlin, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Closing Devices for Bottles, of which the following is an exact specification.

10 My invention relates to that kind of closing-devices for bottles, in which the former is constantly connected with the latter, and in which the closing-cap proper is, or may be, connected at both sides with a ring or
15 ring-like part encircling the neck of the bottle, and the novelty in this case consists in a special arrangement of hinges and combination of parts as will hereinafter be more fully described.

20 In order to make my meaning more clear, I refer to the accompanying drawings, in which—

Figure 1 is a side-view of my new device, shown in proper connection with a bottle,
25 and closing the same. Fig. 2 is also a side view of the same part, the device being opened and the main part of the bottle being left off. Fig. 3 is an upper view of the parts as shown in Fig. 2, the neck of the bottle
30 being in section. Fig. 4 is a front view of my stopper.

Similar letters refer to similar parts throughout the different views.

The ring *a* by means of which the whole device is held in its opened position as well as
35 in its closed one has in its middle part an ear *a'* and at both ends angular pieces *a² a²* which may be drawn toward each other by a screw *b* as much as necessary to press ring
40 *a* thereby into a groove *c* provided on the neck *d'* of the bottle *d*. There is then a space left between the parts *a² a²* as to be seen in Fig. 3. A cross-piece *e* having at one side
45 a projection *e'* with ear *e²*, and at the other side an ear *e³* is connected by means of link *f* with the ring *a*. Said cross-piece *e* holds the closing-cap proper *g* by means of screw
50 *h*, the angular head *h'* of which latter is surrounded by a small tube *i* fixed to the upper side of cross-piece *e*. Cap *g* is guided at one
55 side by a pin *g'* secured to the cap, and extending into a suitable slot of projection *e'*.

Now the main part of my invention consists in the arrangement of the flap *k k'* which
by means of its two apertures *k²*, is connected

with ear *e²* of projection *e'* like a hinge. Part *k* of said flap forms a handle, part *k'* a hook. This hook gripes over the screw or pin *b* and is kept in that position by a spring
60 *l* fixed to the flap *k k'* above ear *e²*, and pressing against cap *e*. Now, on putting the cap on the mouth of the bottle, and pressing at the same time on handle *k*, hook *k'* will gripe over pin *b*, and will be coupled therewith as
65 soon as handle *k* is released. The bottle is closed now preliminarily, and is then tightly closed by pressing the cap firmly down onto the mouth of the bottle by means of screw
70 *h*, *i. e.*, by a suitable key put on the angular head *h'* of said screw.

I am well aware, that closing-devices of similar construction have been made prior to my invention. In those older constructions, however, the last part of the three-fold hinge,
75 *i. e.* the flap *k k'* was secured to the ring around the neck. Therefore, after having removed the cap from the mouth the flap remained in upright position at the side of or
80 parallel to, the neck, which latter, consequently was not completely free. This drawback has been omitted in my new construction by arranging the flap at the cross-piece
so as to bring all the hinges into a consecutive row.

I now do not claim a closing-device of the type shown broadly; but

What I claim, and desire to secure by Letters Patent of the United States, is—

In a bottle-stopper in which a cross-piece (*e*) carrying the closing-cap proper (*g*) is movably held from a neck-ring (*a*) by means of
90 a link (*f*), the combination with the neck-ring *a* having its ends *a² a²* bent off parallel and connected by a screw or pin *b*, of a double-armed lever *k k'* hinged to a projection
95 *e'* forming part of cross-piece *e*, and situated opposite to link *f*; arm *k'* of said lever forming a hook adapted to catch over pin or screw *b*, arm *k* forming a handle for operating
100 said hook; a spring *l* adapted to keep hooked arm *k'* and pin or screw *b* in engagement being arranged between arm *k* and projection *l*, for the purpose as described.

In testimony whereof I have signed this specification in the presence of two subscribing
105 witnesses.

AUGUST WILHELM SCHROEDTER.

Witnesses:

R. HERPICH,
H. GENEHR.