No. 661,789.

Patented Nov. 13, 1900.

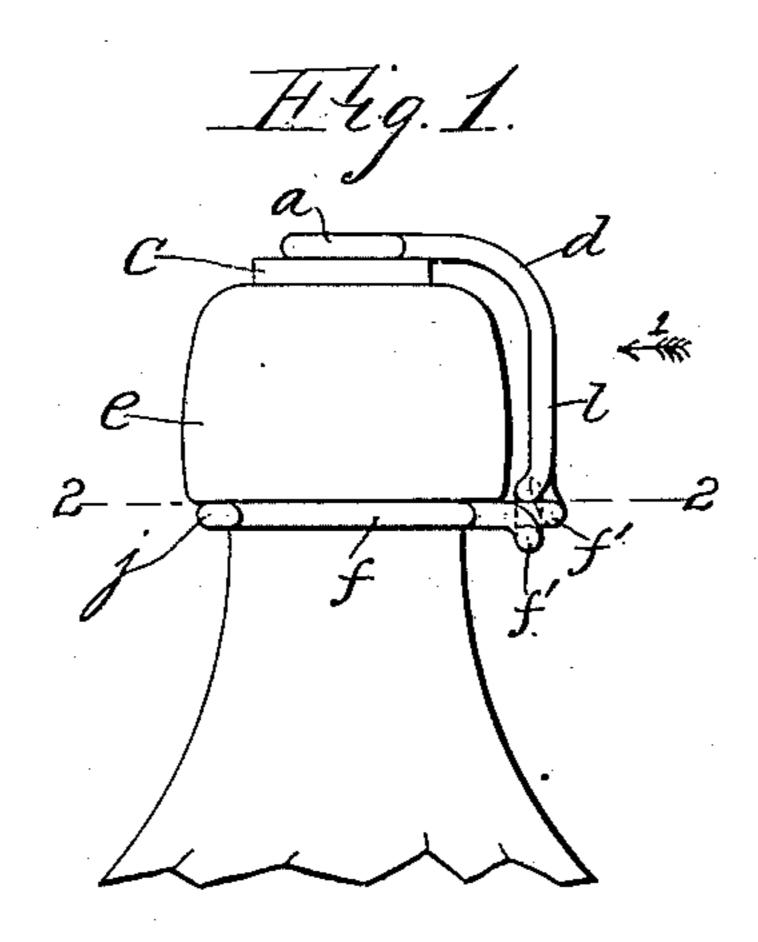
G. T. CHAPMAN, Dec'd.

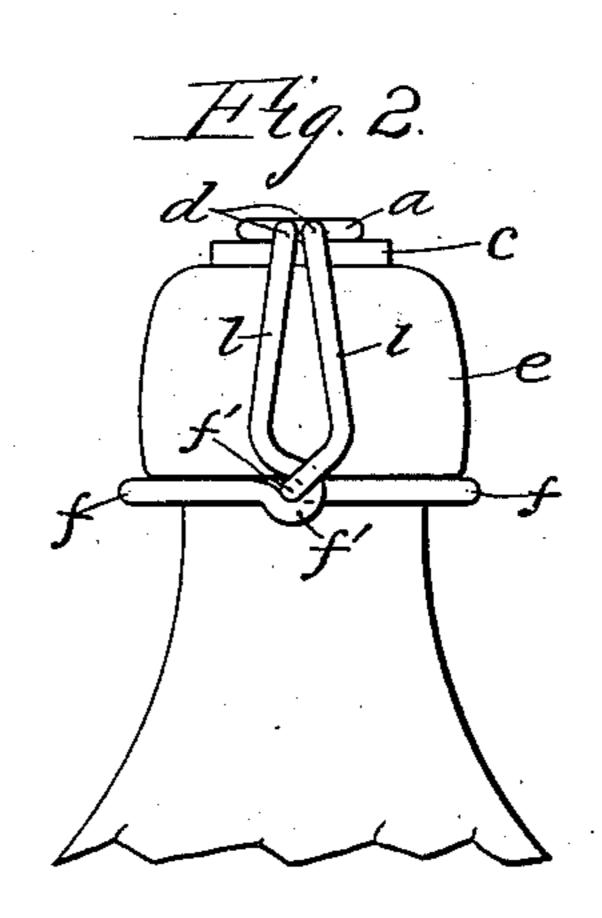
K. H. CHAPMAN, Administratrix.

## RETAINER FOR BOTTLE STOPPERS.

(Application filed Mar. 6, 1899.)

(No Model.)





## United States Patent Office.

GEORGE T. CHAPMAN, OF NEW YORK, N. Y.; KEREN H. CHAPMAN ADMINISTRATRIX OF SAID GEORGE T. CHAPMAN, DECEASED.

## RETAINER FOR BOTTLE-STOPPERS.

SPECIFICATION forming part of Letters Patent No. 661,789, dated November 13, 1900.

Application filed March 6, 1899. Serial No. 707,898. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. CHAPMAN, a citizen of the United States of America, and a resident of New York city, county and State of New York, have invented certain new and useful Improvements in Retainers for Bottle-Stoppers, of which the following is a specification.

My invention consists of improvements in contrivances of wire retainers having spring-jaws to grip the neck of the bottle under the head for the connection of the retainer with the bottle and an elastic arm with an elbow extending upward and over and bearing down on the top of the stopper under tension adapted to maintain pressure to keep the stopper tight, as hereinafter described, reference being made to the accompanying drawings, in which—

of a bottle with a stopper-retainer of my invention applied to retain the stopper, the retainer being detachable for release of the stopper. Fig. 2 is an elevation of the same in the view indicated by the arrow 1, Fig. 1. Fig. 3 is a plan view of the retainer and section of the neck of the bottle on line 2 2, Fig. 1.

The retainer consists, essentially, of a 30 short piece of spring-wire bent double in the middle and preferably so as to form an eyeloop  $\alpha$  for bearing on the top of the stopper c, the two members being bent at right angles at d to reach down one side of the head 35 e of the bottle, and said members are looped around each other at f' and extended laterally to form jaws f to grip the neck of the bottle under the head for attaching the retainer to the bottle, so as to be detachable for 40 releasing the stopper. In my improved retainer of this character I make the curves of the jaws f on a considerably shorter radius than the radius of the neck of the bottle for which the retainer is designed for two pur-45 poses—first, to make the bearing-points h at the extremities of the jaws only, whereby the grip of the retainer on the neck is much more substantial than when the bearing-grip is intermediate of said points, and, second, the

greater outward projection of the middle portion of the jaws affords good hold for applying the retainer to the bottle directly downward upon the head of the bottle and then pressing on these projections with the thumbs. The said projecting bows are also very advantageous for enabling the retainer to be applied along with the stopper when forced in by mechanical means, the plunger being provided with parts adapted to engage them at the same time that another part takes effect on the top 60 of the stopper.

Another improvement which I make in such retainers is to form eyes j at the ends of the jaws for locking them by the hasp of a padlock or by any kind of a locking-link for protecting liquor, medicine, poison, or other bottles from unauthorized opening. Thus the jaws looped around each other at f' constitute a practicable lock-up device.

The retainer is detached by holding the 70 bottle in the two hands and applying the thumbs to the extremities of the jaws and pushing them backward, and these eye-terminals also serve for better bearing points of the thumbs for so detaching the retainer. 75

These retainers will in practice be made of well-tempered spring-wire adapted for continual use indefinitely.

The object of entirely detaching the fastening from the bottle is very important on ac- 80 count of a prevailing objection and prejudice to wire fastenings which are not detachable and reusable. In pouring effervescent beverages it is desirable to immerse the head of the bottle to prevent overfilling the glass. 85 Permanent wires become filthy and are consequently offensive, besides being in the way in wiping the bottle before the beverage is served. This lessens the sale of goods in many places and entirely prevents the sale 90 in neat and orderly restaurants and tidy families. To make it detachable without destroying it is therefore of great commercial advantage.

I am aware of the patent to Wetzel, No. 95 363,870, in which similar jaws are clasped together at the junction of the jaws and the vertical members for a like purpose; but I

only claim such connection by looping them around each other, which is a simpler and cheaper construction.

What I claim as my invention is—

In a bottle-stopper retainer formed of a single piece of spring-wire and comprising jaws f for gripping the neck of the bottle under the head, vertical members l, and the loop-arm  $\alpha$  for bearing on the top of the stopper; the vertical members l looped around

each other at f', the gripping-jaws bent on a shorter radius than the radius of the bottle, and also formed with eye-terminals, and all constructed substantially as described.

Signed by me at New York, N. Y., this 27th 15

day of February, 1899.

GEORGE T. CHAPMAN.

Witnesses:

A. P. THAYER, C. SEDGWICK.