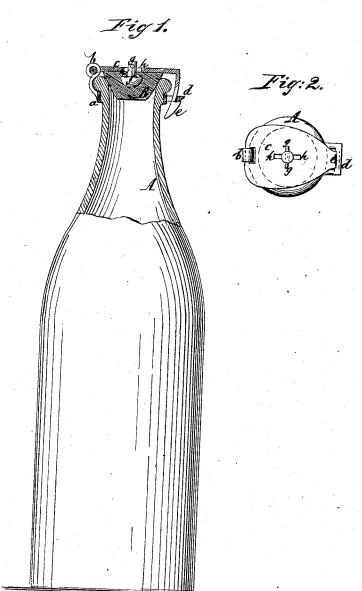
W. MORGENSTERN. BOTTLE STOPPER.



Witnesser: 6 Wahlers 6 F. Kastinhaber

In ventor:

Morgentual

Var Santorni & Harf

Utters

UNITED STATES PATENT OFFICE.

WILLIAM MORGENSTERN, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND FRANZ OTTO, OF SAME PLACE.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. 108,506, dated October 18, 1870.

To all whom it may concern:

Be it known that I, WILLIAM MORGEN-STERN, of the city, county, and State of New York, have invented a new and Improved Bottle-Stopper; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing-

Figure 1 represents a vertical central section of this invention. Fig. 2 is a plan or top

view of the same.

Similar letters indicate corresponding parts. This invention relates to that class of bottle-stoppers wherein the stopper is attached to a hinged supporting plate or lever; and it consists of a stopper, made of india-rubber or other suitable elastic material, fastened to a hinged supporting-plate by means of a button, the shank of which is provided with projecting pins or lugs, and which, when passed up through a slot in the supporting-plate and slightly turned, secures the stopper in position, so that when the stopper is worn out it can be readily removed from the supportingplate and replaced by another, all of which will hereinafter more fully be set forth.

In the drawing, the letter A designates a bottle, on the neck of which is secured a collar, a. From one side of this collar rises a standard, b, to which the supporting-plate c is hinged, while from the opposite side of said collar projects an eye, d. The supporting-plate is provided with a spring-hook, e, and if said plate is turned down over the mouth

of the bottle, this spring-hook catches in the eye d, as shown in Fig. 1 of the drawing.

B is the stopper, which is made, by preference, of vulcanized india-rubber, and which is attached to the supporting-plate by means of a button, f. This button is cast of iron, or made of any suitable material, and it is embedded in the material forming the stopper, so that the upper square shoulder of the button firmly

retains the stopper. From the shank of said button project two lugs or pins, g, and the supporting-plate is provided with a round hole to admit the body of the shank, and with two slots, h, to admit the lugs or pins g. After the shank of the button has been passed through the supporting-plate far enough to carry the lugs g clear of its upper surface, the stopper, together with the button, is turned around for ninety degrees, more or less, so that the lugs g will retain it in position, the elasticity of the stopper itself preventing it from turning.

When the supporting-plate is turned down over the mouth of the bottle the stopper enters said mouth, and by pressing the plate down until the spring-hook catches under the eye d, the stopper is caused to seal the bottle up hermetically. A slight inward pressure against the end of the spring-hook releases the supporting plate, and the stopper flies out, impelled by its own elasticity, and in some cases by the pressure of the contents of the bottle.

This bottle-stopper is particularly intended for effervescent liquids, which, when the stopper is released, discharge with great force; and by means of my stopper such liquids can be easily discharged without danger of spilling any portion thereof.

If the stopper is worn out, it can be readily removed and replaced by a new one without

disturbing the supporting-plate.
What I claim as new, and desire to secure by Letters Patent, is-

The slotted plate c, in combination with the stopper B, button f, and its lugs g, substantially as described, for the purpose set forth.

This specification signed by me this 13th day of August, 1870.

WILLIAM MORGENSTERN.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.