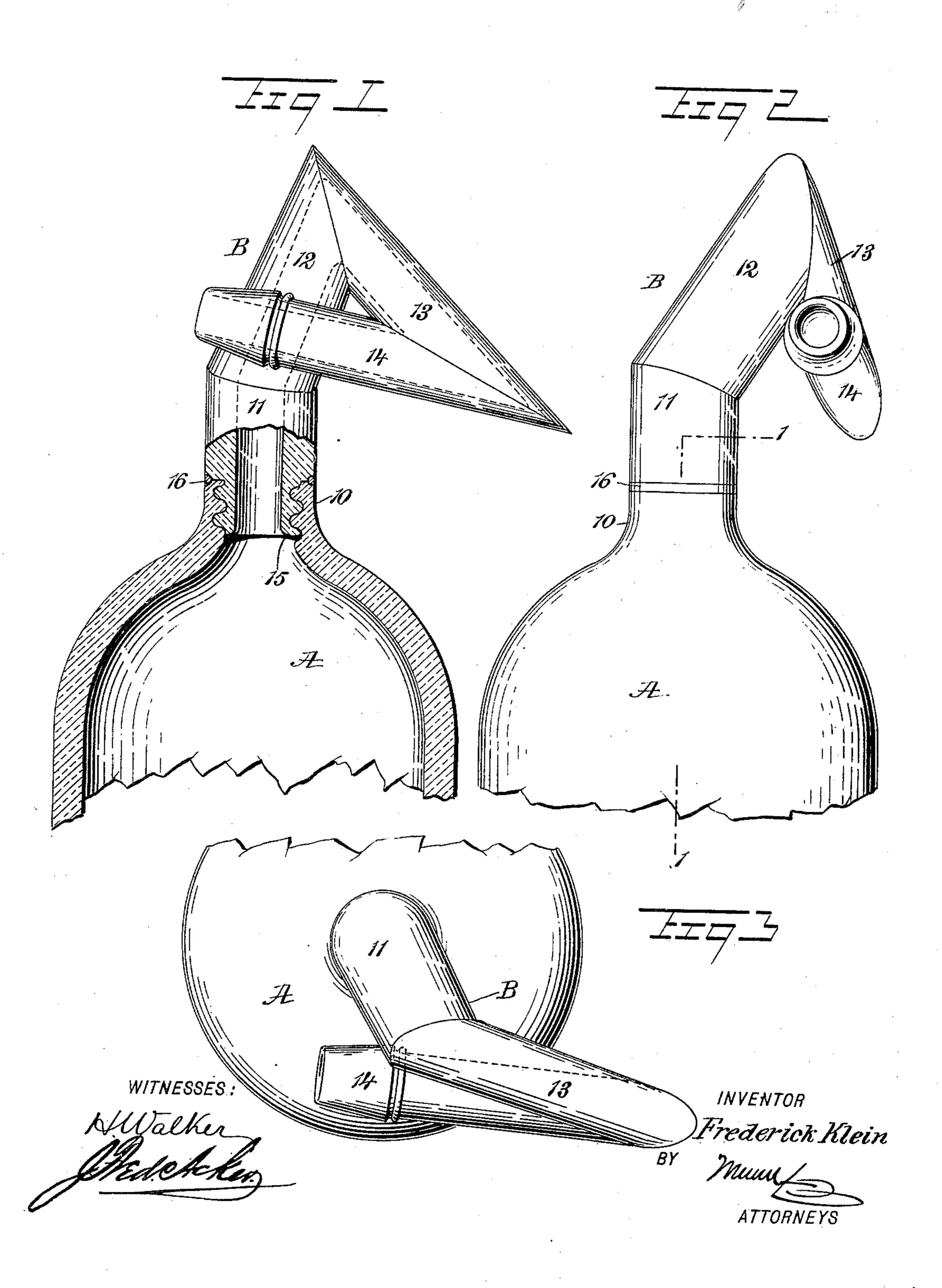
## F. KLEIN. NON-REFILLABLE BOTTLE.

(No Model.)

(Application filed Dec. 27, 1901.)



## UNITED STATES PATENT OFFICE.

FREDERICK KLEIN, OF NEW YORK, N. Y.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 697,851, dated April 15, 1902.

Application filed December 27, 1901. Serial No. 87,413. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK KLEIN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, 5 in the county and State of New York, have invented a new and Improved Non-Refillable Bottle, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide ro a novel construction of cap or outlet section for the bottle, whereby after the bottle has been emptied of its contents it cannot be refilled and again presented as an original pack-

age.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying 20 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a partial side elevation and partial sectional view of the upper portion of a 25 bottle having the improvement applied, the section being taken substantially on the line 1 1 of Fig. 2. Fig. 2 is a front elevation of that portion of the bottle shown in Fig. 1, and Fig. 3 is a plan view of the same.

The body A of the bottle is shown provided at its top with an interiorly-threaded socket member 10, adapted to receive a peculiar form of cap or outlet section B, preferably made of glass. This outlet-section B is tubular and 35 constitutes the actual neck of the bottle. It is usually made to gradually decrease in diameter or taper from its inlet in direction of

its outlet portion.

In the construction of the cap or outlet sec-40 tion B a series of integral or continuous members are employed, four being shown in the drawings, (designated, respectively, as 11, 12, 13, and 14.) The lower member 11 is straight and is provided with an exteriorly-threaded 45 tubular bottom extension 15, adapted to be screwed into the socket member 10 of the body, as is shown in Fig. 1. The next upper member 12 of the outlet-section extends upward at an angle to the lower section and in-50 clines more or less in direction of the front of the bottle. The third member 13 extends

ber 12 and has more or less of a forward inclination, as is shown in Figs. 2 and 3. The fourth or mouth member of the cap or outlet 55 section B extends at an angle from the lower end of the third or downwardly-inclined member across the front face of the second member 12 with more or less of an upward inclination, and the outer end of the mouth mem- 60 ber is normally closed by a cork of any description.

The body of the bottle is first filled, and then the cap B is screwed to place and is made practically an integral portion of the body by 65 the exterior application of molten glass to the socket member 10 of the body and the cap B where the two meet, and at said point a groove may be made to receive the molten glass, as

is shown at 16 in Figs. 1 and 2.

The angular connections between the various members of the cap or outlet sections B and the position of said members relative to each other effectually prevents the bottle being filled at its mouth. The upward inclina- 75 tion of the mouth member 14 will prevent any liquid from running out which may remain in the member 12 when the bottle is placed in an upright position. When the cork is removed from the mouth of the bottle and the 80 bottle is properly inclined, the liquid in the bottle may be freely poured out.

I desire it to be understood that while the cap-section B is shown as screwed into the body-section of the bottle, the cap-section 85 may be screwed upon the outside portion of the socket member of the body-section. It will be observed that the arrangement of the members of the cap in side elevation approximates in shape that of a figure 4, as described. 90

Having thus described my invention, I claim as new and desire to secure by Letters

Patent—

1. A bottle provided with a neck formed in a series of connected members at angles to 95 each other, the mouth or outlet member extending across the face of one of the intermediate members, as specified.

2. A bottle the neck of which is formed in a series of connected members at angles to 100 each other, the mouth or outlet member extending across the face of one of the intermediate members with an upward inclination, downward at an angle from the second mem-! as and for the purpose specified.

forth.

3. A bottle provided with a neck formed in a series of connected members at angles to each other, and approximating in shape that

of a figure 4, as described.

4. A bottle provided with a neck having an upwardly-projecting member, an outwardly and downwardly projecting member, and an inwardly-projecting member extending across the upwardly-projecting member, as set forth.

5. A bottle provided with a neck having an upwardly and outwardly projecting member, an outwardly and downwardly projecting member, and an inwardly and upwardly pro-

jecting member, as set forth.

6. A bottle cap or outlet section, comprising a straight member, an upwardly and outwardly inclined member, outwardly and downwardly inclined member, and an inwardly and upwardly inclined member, as set forth.

socket member, and a cap or outlet section, comprising a straight member secured to the socket member of the bottle, an upwardly and outwardly inclined member, an outwardly and downwardly inclined member and an inwardly and upwardly inclined member, as set

8. A bottle, comprising a body having an interiorly-threaded socket member, a cap or outlet section, consisting of a straight member having an exteriorly-threaded extension screwing into the bottom section, an upwardly and outwardly inclined member, an outwardly and downwardly inclined member, and an inwardly and upwardly inclined member, and 35 means whereby the cap or outlet section is prevented from being unscrewed from the body, as set forth.

9. A bottle, comprising a body having an interiorly-threaded socket member, a glass 40 cap or outlet section formed of a series of connected members at angles to each other, one of the members having an exteriorly-threaded extension screwing into the socket member of the body, the cap and body at their point 45 of juncture being provided with an annular groove, and a ring in said groove, as set forth.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

FREDERICK KLEIN.

Witnesses:
EDWARD PRECHT,

CHARLES STOEPPLE.