

No. 659,895.

Patented Oct. 16, 1900.

J. H. PETERS.
BOTTLE ATTACHMENT.
(Application filed Nov. 28, 1899.)

(No Model.)

Fig. 1.

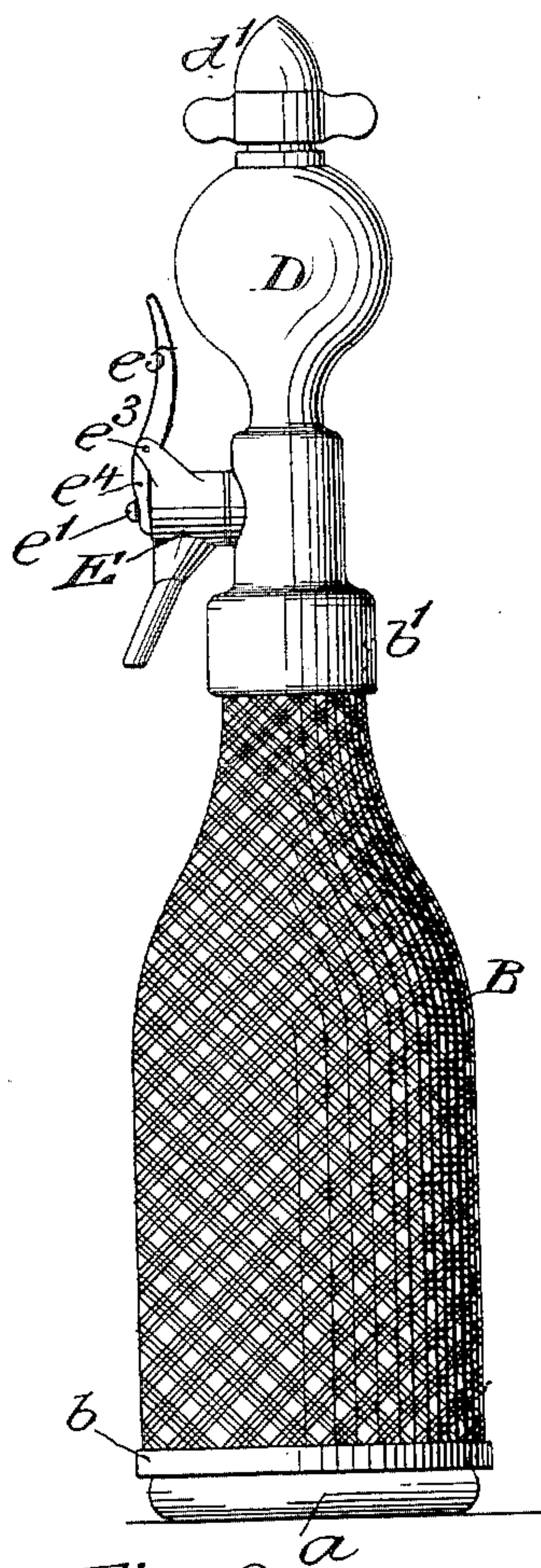


Fig. 2.

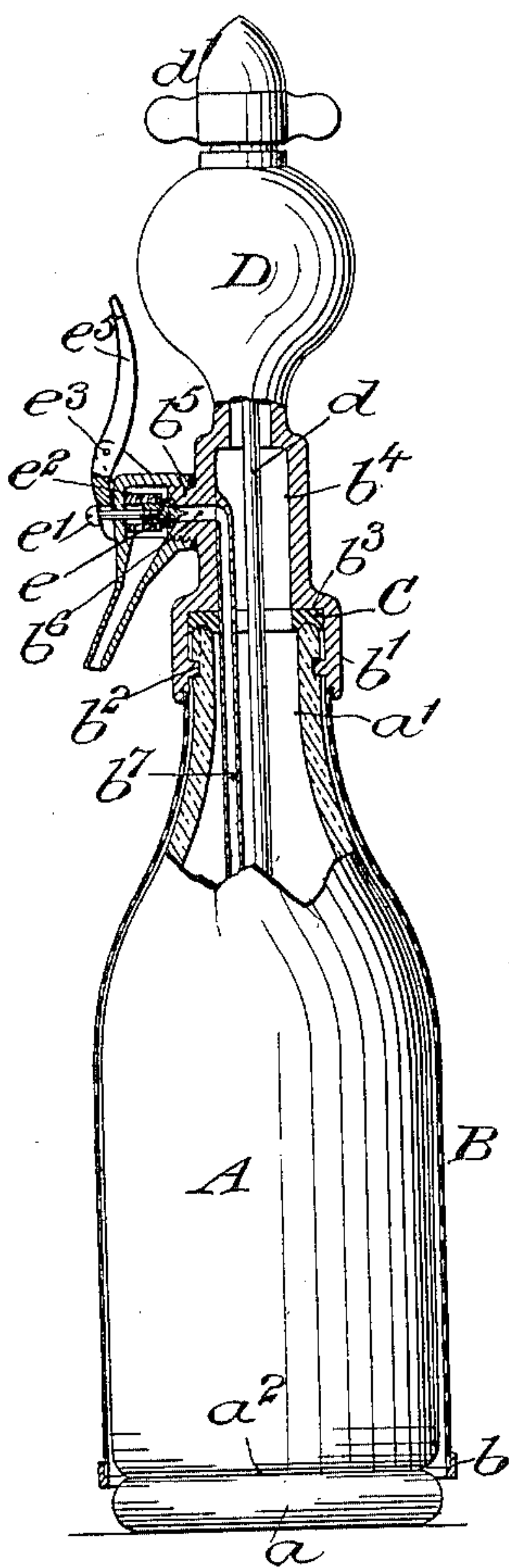


Fig. 3.

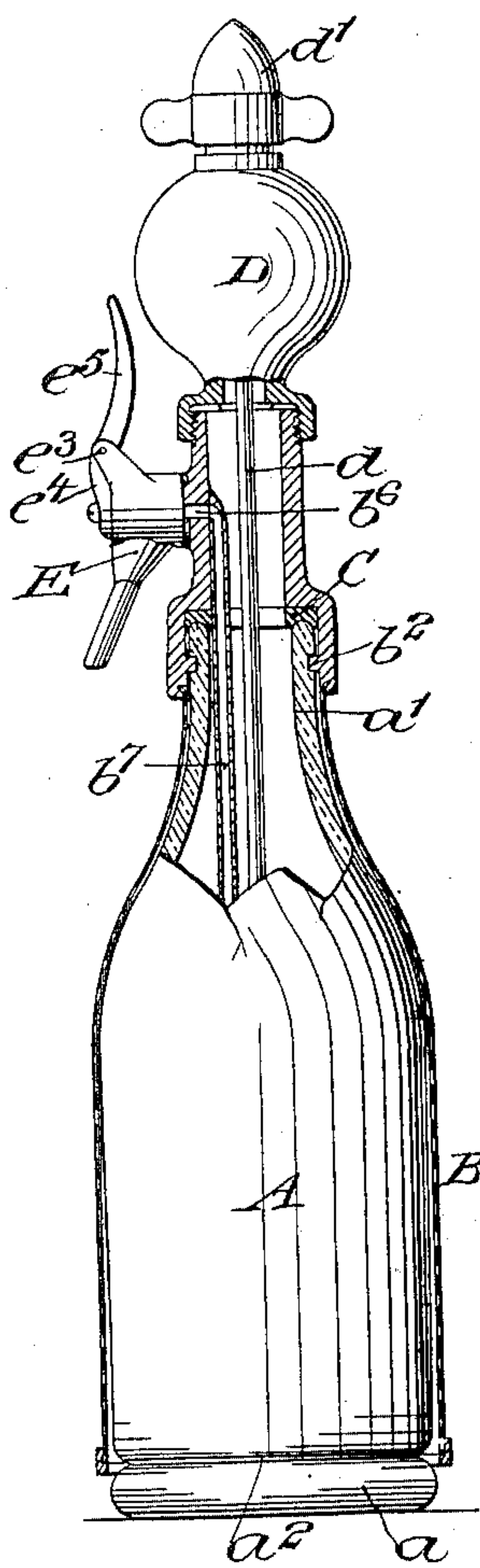
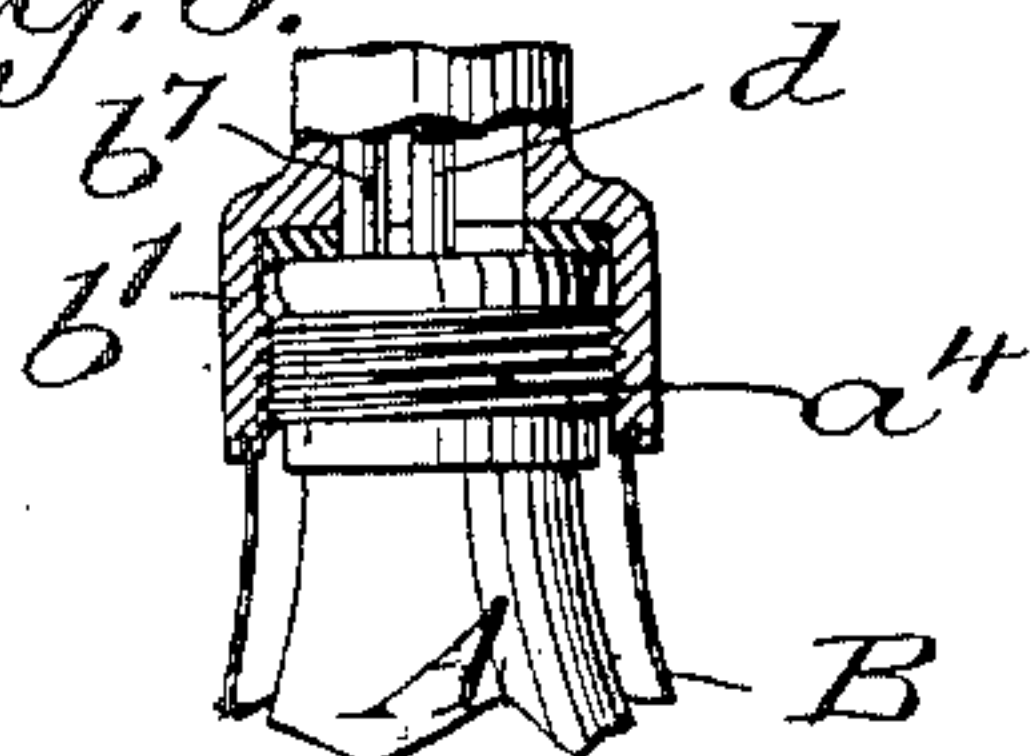


Fig. 6.



Witnesses:

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Fig. 4.

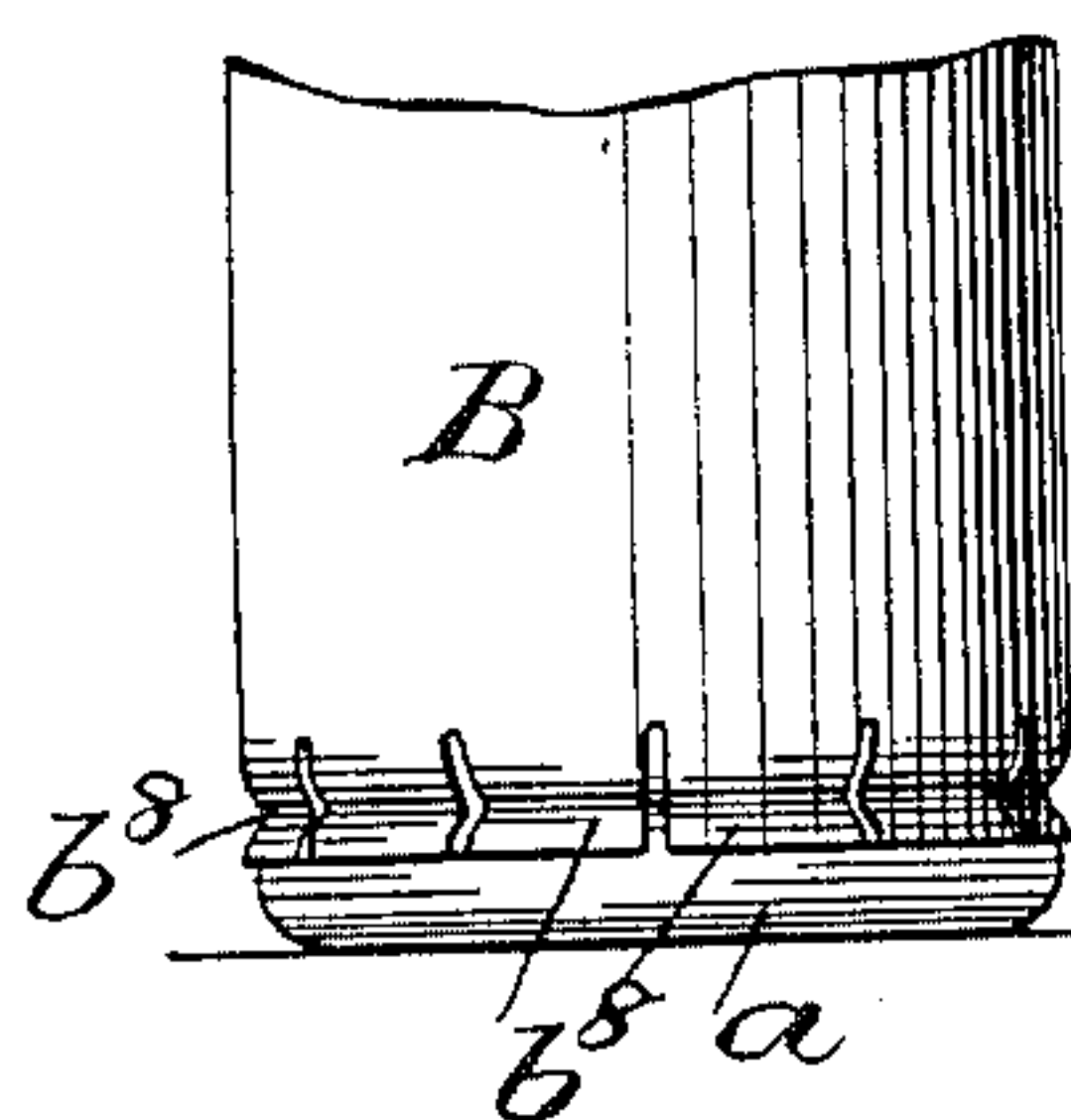
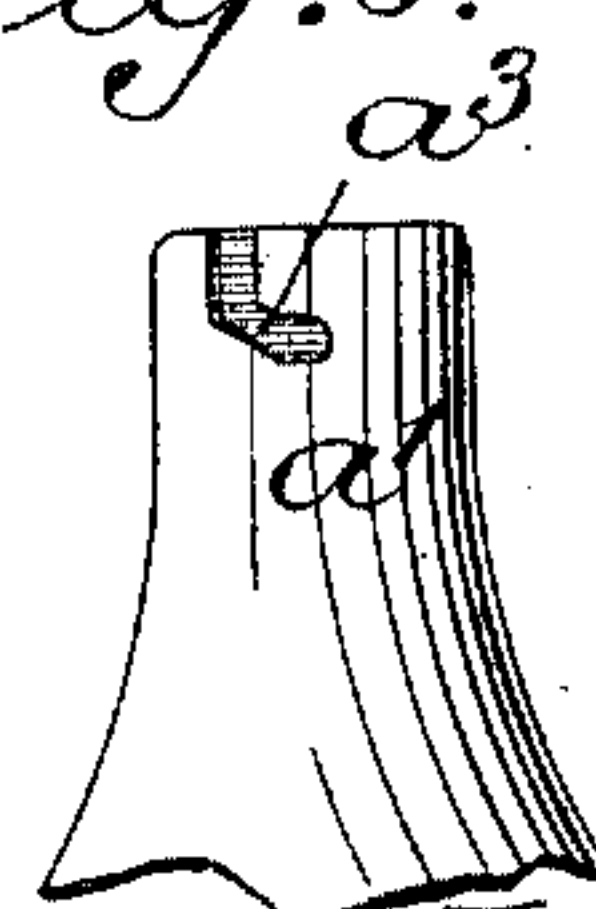


Fig. 5.



Inventor:

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Jacob Henry Peters
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UNITED STATES PATENT OFFICE.

JACOB HENRY PETERS, OF NEW YORK, N. Y.

BOTTLE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 659,895, dated October 16, 1900.

Application filed November 28, 1899. Serial No. 738,533. (No model.)

To all whom it may concern:

Be it known that I, JACOB HENRY PETERS, a subject of the Emperor of Germany, (but having made the oath prescribed by law of my intention to become a citizen of the United States,) and a resident of the borough of Brooklyn, in the city and State of New York, have invented a new and useful Improvement in Bottle Attachments, of which the following is a specification.

My invention relates to an improvement in bottle attachments, one object being to provide a complete device composed of a guard, a gas-charging device, and an interposed siphoning device which will be very simple in structure and which may be instantly connected to or disconnected from a bottle, the body of the bottle at the same time being thoroughly protected while the liquid therein is being charged and during the time that the apparatus is connected therewith.

My invention further relates to detachable bottle-guards for bottles in which beverages are to be charged with the object in view of providing simple and inexpensive means for removing such guards, so that one guard may serve in turn for an unlimited number of bottles.

A further object is to provide for greater ease and comfort in cleansing the bottles as well as the guards, and in addition bottles containing the beverage to be treated may be kept wherever desired and be cleaned or dried when wanted, while the guard is kept separate.

A further object is to provide certain new and useful improvements in the structure of the several parts.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a view of the attachment in side elevation. Fig. 2 is a partial vertical central section through the same. Fig. 3 is a view similar to Fig. 2, showing a modified form in which the gas-charging device is removable instead of being cast integral with the tubular siphon-carrying portion of the guard. Fig. 4 is a detail side view of the bottom of a bottle and the lower portion of a modified form of guard in which the body portion of

the guard is developed into spring-clips arranged to snap into the annular niche or groove in the bottom of the bottle. Fig. 5 is a side view of the upper portion of the bottle, showing the locking-groove therein for removably attaching the bottle to the guard at this point; and Fig. 6 is a detail view, partially in section, showing a modified form of securing the bottle to the apparatus.

The body of the bottle herein represented is denoted by A, its thickened bottom by a , and its neck by a' . An annular groove or niche a^2 may be formed in the bottle between its body portion and bottom. The guard for preventing the particles of glass from flying if the bottle should explode while charged or being charged comprises a body portion B, having its upper portion preferably contracted to nearly fit the shape of the bottle which it is adapted to receive, and a ring b' at the top of the body portion, which ring is fitted to receive therein the top of the neck of the bottle. I have represented this body portion in Figs. 1, 2, and 3 as being composed of some woven material—such, for instance, as woven wire—and I have represented it in Fig. 4 as composed of some stiff material—such, for instance, as sheet metal. However, the material of which the body portion of the guard is composed is not important, as I may find it desirable to use a rigid guard or a flexible guard to suit different requirements.

In the form shown in Figs. 1, 2, and 3 the open bottom of the body portion of the guard is preferably reinforced by the stiff ring b .

The neck of the bottle may be removably secured to the top b' of the guard in some suitable manner. I have represented in the accompanying drawings the means for connecting the neck of the bottle with the guard-ring as a pair of bayonet-joints arranged diametrically opposite each other, the sockets a^3 of the joints being formed in the neck of the bottle and the projections b^2 adapted to enter the sockets being formed in the inner walls of the ring b' .

The bottle may be removably secured to the apparatus also by providing the neck of the bottle with a metal band, as a^4 , (see Fig. 6,) which band may be provided with an exteriorly-screw-threaded portion, which is adapt-

ed to engage a screw-threaded portion on the interior of the guard-ring b' . The top of the ring b' is drawn inwardly to form a shoulder b^3 over the top of the bottle, and a suitable yielding hollow washer C is interposed between the said shoulder and the top of the bottle for forming a tight joint between the ring and the bottle when the bottle is secured in position within the guard. This ring b' is extended upwardly beyond the top of the bottle to form a tubular extension b^4 , the top of which extension is surmounted by a gas charging or releasing device D. This gas charging or releasing device may be of any well-known or approved form, that herein shown consisting of a hollow body provided with a depending tube d , which is intended to extend down into the interior of the bottle A, through which tube the gas is led into the body of the liquid within the bottle from a charging bomb or capsule (not herein shown) seated temporarily within the screw-cap d' . This gas-charging device D may be cast integral with the ring b' and the tubular portion b^4 , as shown in Figs. 1 and 2, or it may have a screw-threaded engagement with the top of the said tubular portion b^4 , as shown in Fig. 3.

A siphoning device is interposed between the gas-charging device and the top of the bottle, which siphoning device may be constructed as follows: The tubular extension b^4 of the guard, which in the present instance is represented as forming a permanent part of the guard-ring b' , is provided with a laterally and outwardly extended projection b^5 . A hole b^6 extends from the exterior to the interior through the projection b^5 and connects with the bore at the upper end of a downwardly-extended tube b^7 , which is permanently secured to the interior of the tubular extension b^4 and is fitted to extend downwardly into the interior of the bottle when the apparatus is applied thereto. A tubular nozzle E has a screw-threaded engagement with the projection b^5 . A valve e is located within the tubular nozzle E and is arranged to open and close the free end of the hole b^6 . This valve e is provided with an outwardly-extended stem e' , which passes through the wall of the nozzle to the exterior thereof, where it is provided with an enlargement or head at its outer end. The valve is normally held closed by means of a spring e^2 , interposed between the head of the valve and the inner wall of the nozzle, which spring preferably consists of some yielding material—such, for example, as rubber. The valve is positively opened when it is desired to permit the liquid to escape from the interior of the bottle by means of an operating-lever pivoted at e^3 on the exterior of the nozzle and having one arm e^4 in engagement with the stem e' and its other arm e^5 arranged to be within convenient reach of the hand of the operator when the apparatus is in use.

While I have shown and described one form of siphoning device, it is evident that many other forms might be advantageously employed, if so desired.

In Fig. 4 I have represented the body portion of the guard as being composed of some stiff material—such, for instance, as sheet metal—and have represented its bottom as being developed into a plurality of spring-clips b^8 , which are fitted to engage the annular groove or niche a^2 in the bottle when the bottle is inserted within the guard, this serving as an additional means for retaining the bottle in its position.

The apparatus, constructed and arranged as above described, is very simple and complete, and the bottle may be removably secured therein by simply inserting the bottle into the interior of the guard through its open bottom and then giving the bottle a slight turn, causing its neck to firmly engage the top ring of the guard. When it is desired to remove the bottle, a slight reverse movement of the same will release it from its engagement with the guard and permit it to be removed.

If desired, the bottle may be still more rigidly held in its position by means of the spring-clips at the bottom of the guard.

It is evident that changes might be resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein set forth; but

What I claim is—

1. The combination with a bottle, of a guard, a gas-charging device and a siphoning device, located between the gas-charging device and the bottle, the said siphoning device forming a permanent part of the guard, substantially as set forth.

2. The combination with a bottle, of a guard extended upwardly beyond the top of the bottle, a gas-charging device surmounting the guard and a siphon interposed between the gas-charging device and the top of the bottle, substantially as set forth.

3. The combination with a bottle and its guard, of a gas-charging device forming a permanent extension of the guard, substantially as set forth.

4. The combination with a bottle and its guard, of a gas-charging device forming a permanent extension of the guard and a siphon interposed between the gas-charging device and the bottle, substantially as set forth.

5. The combination with a bottle, of a guard comprising a body portion and a ring surrounding the neck of the bottle, the said ring being extended upwardly beyond the top of the bottle and a gas-charging device forming a permanent part of the said ring, substantially as set forth.

6. The combination with a bottle and a guard comprising a body portion and a ring

surrounding the neck of the bottle, of a siphoning device and a gas-charging device forming permanent extensions of the said ring, substantially as set forth.

5 7. The combination with a bottle, of a guard for embracing the bottle having an open bottom whereby the bottle may be inserted into and removed from the guard and means for removably securing the neck of the bottle to
10 the said guard when the bottle is in position therein, substantially as set forth.

8. The combination with a bottle, of a guard comprising a body portion and a ring surrounding the neck of the bottle and means
15 for removably securing the neck of the bottle to the said ring, substantially as set forth.

9. The combination with a bottle, of a guard having its body portion developed into a plurality of spring-clips arranged to snugly en-

gage the bottle for removably securing it with- 20
in the guard, substantially as set forth.

10. A siphoning device comprising a tubular portion having a lateral projection and a downwardly-extended inner tube opening to the exterior through the said projection, a
25 nozzle removably secured to said projection, a valve within the nozzle fitted to seat in the open end of the said projection, and means for opening and closing the valve, substantially as set forth. 30

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 23d day of November, 1899.

JACOB HENRY PETERS.

Witnesses:

FREDK. HAYNES,
R. B. SEWARD.