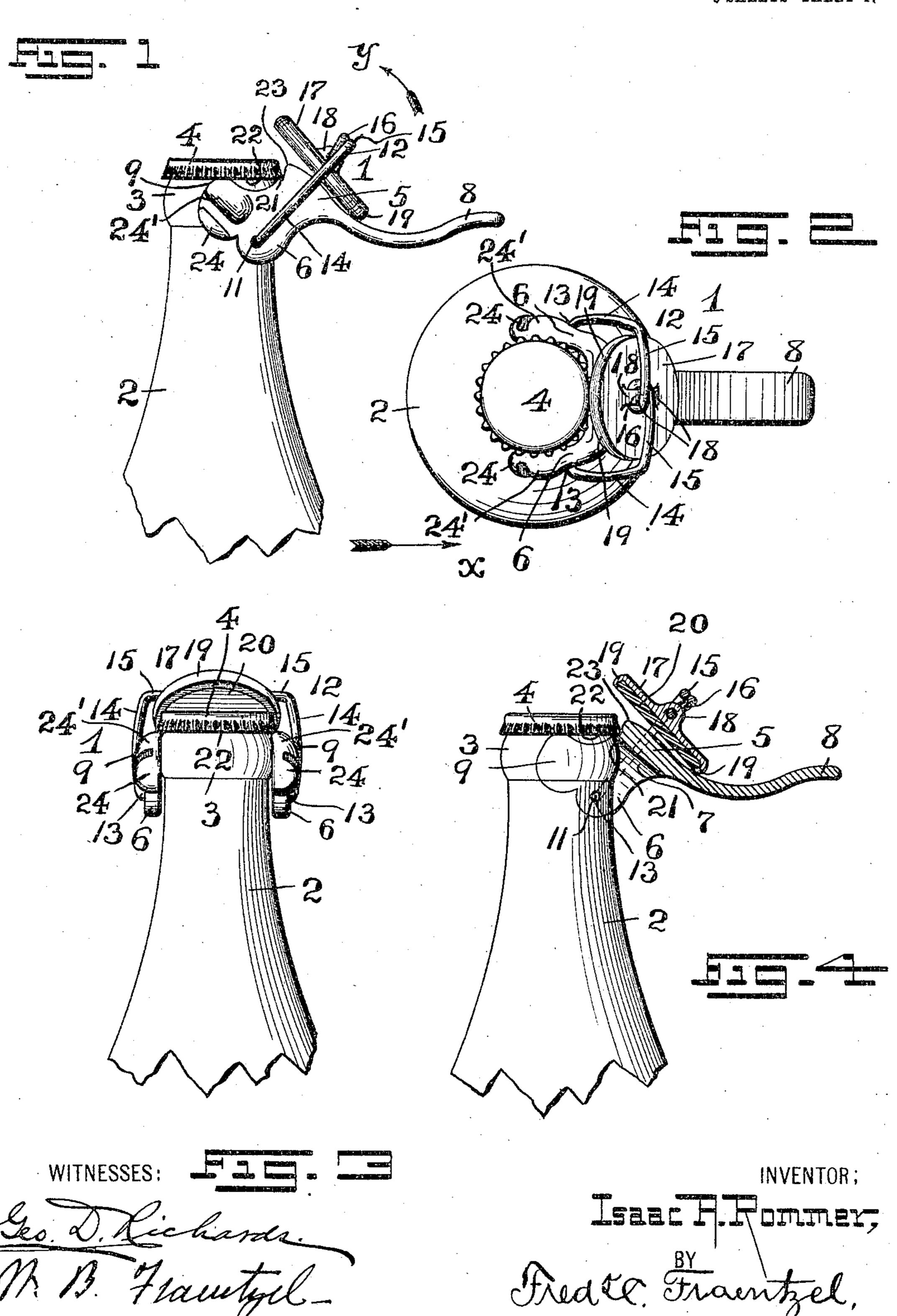
I. A. ROMMER. BOTTLE STOPPER. APPLICATION FILED OCT. 24, 1904.

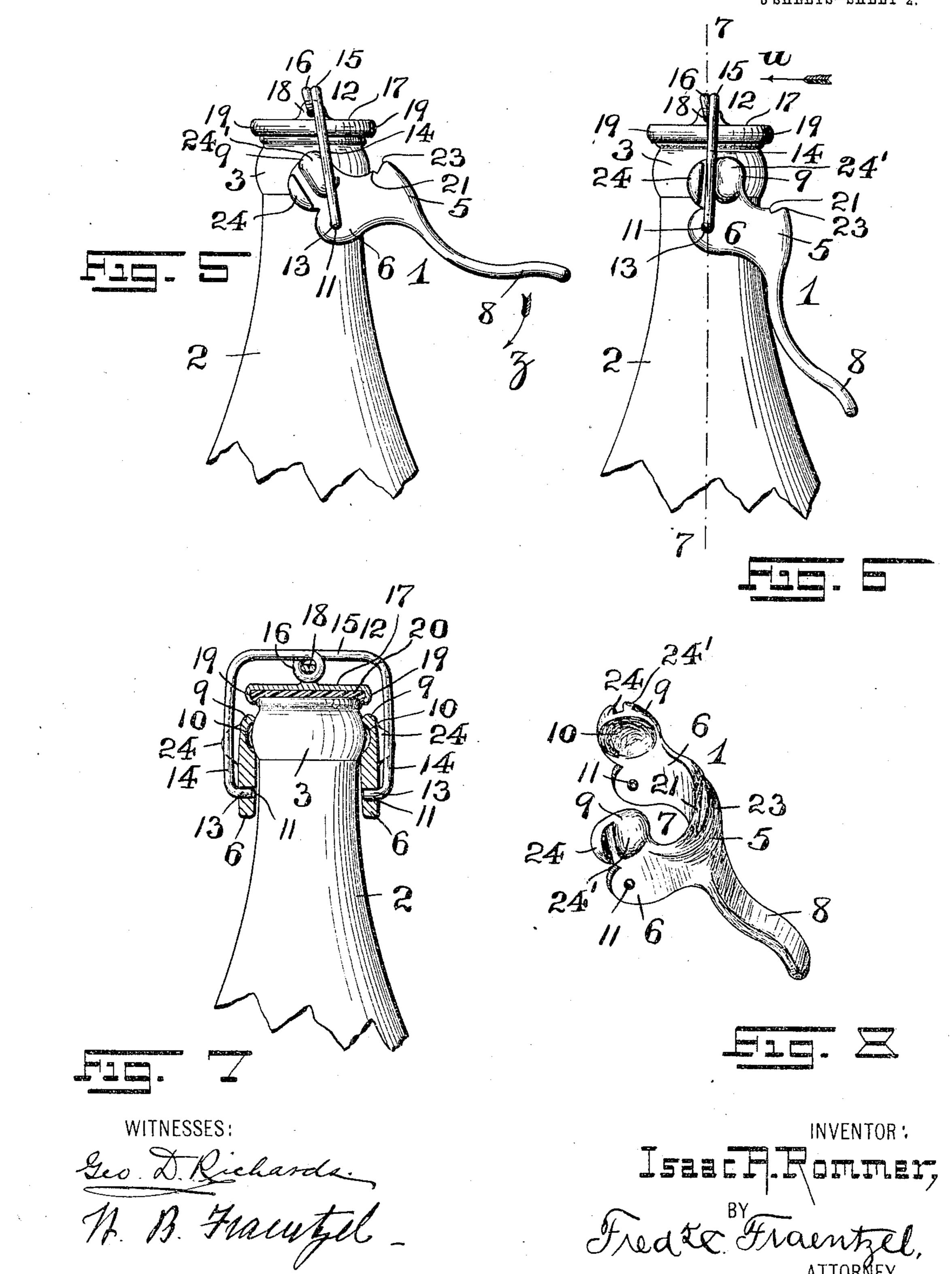
3 SHEETS-SHEET 1,



I. A. ROMMER. BOTTLE STOPPER.

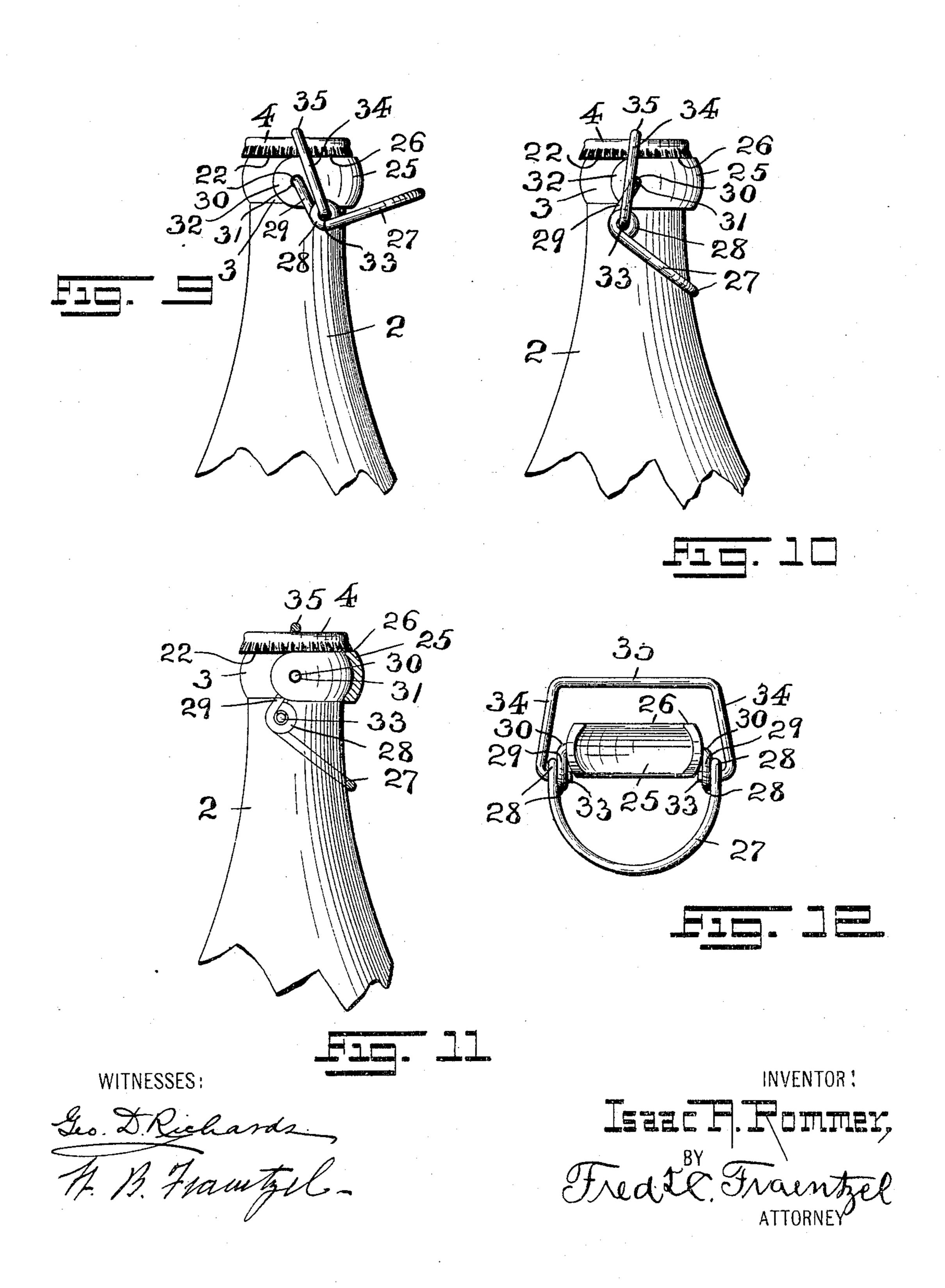
APPLICATION FILED OCT. 24, 1904.

3 SHEETS-SHEET 2.



I. A. ROMMER. BOTTLE STOPPER. APPLICATION FILED OCT. 24, 1904.

3 SHEETS-SHEET 3.



United States Patent Office.

ISAAC A. ROMMER, OF NEWARK, NEW JERSEY.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 784,350, dated March 7, 1905.

Application filed October 24, 1904. Serial No. 229,700.

To all whom it may concern:

Be it known that I, Isaac A. Rommer, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, 5 have invented certain new and useful Improvements in Bottle-Stoppers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it apper-10 tains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

My present invention has reference to im-15 provements in bottle-stoppers, and more particularly to improvements in combined sealcap removers and stoppers for bottles.

The present invention has for its principal object to provide a simply and cheaply con-20 structed device which can be used as a bottlestopper, or the same may be employed, first, for removing a metallic sealing-cap from the mouth of a bottle, and, secondly, the device may then be used as an ordinary bottle-stop-25 per, the device being of such construction that it can be easily manipulated, can be quickly arranged in its operative position upon the neck of a bottle, and can be easily detached from said neck for use with another 30 bottle either as a seal-cap remover or as a bottle-stopper, as will hereinafter more fully appear.

A further object of this invention is to provide a novel form of bottle-stopper comprising 35 an open-ended or yoke-shaped body, with which is pivotally connected a stopper or sealing-cap engaging means, the said yoke-shaped body being adapted to be slipped upon the neck of the bottle from the side thereof and 40 being brought in removable holding relation with a portion of the usual annular enlargement or bead which surrounds the upper and outer part of the neck of the bottle.

A further object of this invention is to pro-45 vide a bottle-stopper having a yoke-shaped body, as above stated, provided with concaved or socket-shaped holding portions adapted to be brought into holding relation with the an-5° the bottle to tightly grip the same when the land Fig. 7 is a transverse vertical section 10°

stopper or sealing-cap engaging means connected with the said yoke-shaped body is forced into its binding or fastening engagement with the closing stopper or seal placed over the mouth of the neck of the bottle.

Other objects of this invention will be clearly understood from the following detailed description of the same.

With the various objects of my present invention in view the said invention consists in 60 the novel bottle-stopper hereinafter set forth; and, furthermore, this invention consists in the novel arrangements and combinations of devices and parts, as well as in the details of the construction of the same, all of which will be 65 more fully described in the following specification and then finally embodied in the clauses of the claim, which are appended to and form an essential part of this specification.

The invention is clearly illustrated in the ac- 70 companying drawings, in which—

Figure 1 is a side view of the upper portion. of a bottle and side elevation of one form of combined seal-cap remover and bottle-stopper embodying the principles of this invention, 75 the said combined seal-cap remover and bottle-stopper being shown in its relative position slipped upon the neck of the bottle just about to engage with a portion of the marginal edge of the seal-cap for the removal of 80 the latter from the mouth of the bottle. Fig. 2 is a top or plan view of the parts represented in said Fig. 1. Fig. 3 is an end view of the same looking in the direction of the arrow x in said Fig. 2, and Fig. 4 is a side 85 view of the upper portion of the bottle with its seal-cap and a central longitudinal vertical section of the combined seal-cap remover and bottle-stopper. Fig. 5 is a side view of the upper portion of the bottle and the com- 9c bined seal-cap remover and bottle-stopper after the seal-cap has been removed, showing the closing or stopper means of the device in its position upon the mouth of the bottle before being tightly closed down upon the 95 same. Fig. 6 is a similar view of the parts represented in said Fig. 5, but showing the closing or stopper means of the device closed nular bead or enlargement upon the neck of | down tightly upon the mouth of the bottle;

taken on line 7 7 in said Fig. 6 looking in the direction of the arrow u, the bottle portion and the connecting wire frame between the yoke-shaped body and the closing or stop-5 per means of the device being shown in elevation. Fig. 8 is a perspective view of a portion of the combined seal-cap remover and bottle-stopper, the seal-cap and tightening frame or bail being omitted. Fig. 9 is a side 10 view of the upper portion of the neck of a bottle and side elevation of a modified form of combined seal-cap remover and bottle-stopper, the device being designed more especially as a bottle-stopper for use directly with a 15 metallic seal-cap or ordinary cork, the said view showing the stopper-engaging means in its loose relation therewith; and Fig. 10 is a similar view of the same parts, showing the said stopper-engaging means bearing tightly 20 upon the said seal-cap or stopper. Fig. 11 is a side view of the upper portion of the bottle and metallic seal-cap thereon and central longitudinal vertical section of this form of combined seal-cap remover and bottle-stopper; 25 and Fig. 12 is a front view, upon an enlarged scale, of this form of combined seal-cap remover and bottle-stopper shown detached from the neck of the bottle.

Similar characters of reference are em-30 ployed in the above-described views to indi-

cate corresponding parts.

Referring now to Figs. 1 to 7, inclusive, the reference character 1 indicates one complete form of combined seal-cap remover and 35 stopper for bottles. 2 indicates the upper portion or neck of any suitable bottle. 3 is the usual enlargement or bead which surrounds the mouth of the neck of the bottle, and 4 is the usual metallic seal-cap suitably secured 40 upon and providing the usual closure for the mouth of the bottle. The device 1 consists. essentially, of an open-ended or yoke-shaped main body 5, formed with a pair of forwardlyextending arms 6, forming, with the said body 45 5, when viewed from the top a semicircular or other similarly-shaped receiving portion 7, adapted to be slipped over the side and upon the neck portion 2 of the bottle, substantially as illustrated. The said yoke-shaped 50 main body is provided with a handle or actuating-lever 8, and said arms 6 are preferably provided with upwardly-extending holding members 9, each member 9 being formed upon its inner surface with a concaved or 55 socketed portion 10, adapted to be fitted upon the convex surface of the enlargement or bead 3 of the neck of the bottle in a manner and for the purposes hereinafter more particularly described. Each arm 6 is also provided with 60 a receiving eye or perforation 11, as shown. for pivotally arranging therein, in the manner illustrated more particularly in Fig. 7 of the drawings, the bent ends 13 of a clamping or tightening frame 12. This frame is prefer-65 ably made from spring-wire and comprises

the upwardly-extending arms 14 and a laterally-extending connecting-bar 15, preferably formed at its central portion with a receivingloop 16. The said loop 16 is loosely arranged in a receiving loop or eye 18 of a sealing or 7° closing cap 17, preferably of metal, the said cap 17 being provided with a downwardly-extending marginal flange, as 19, providing with the said cap 17 a receiving socket or chamber into which is forced and suitably held therein 75 a sealing washer or disk 20, of rubber, cork, or any other analogous material, adapted to produce a gas-tight closure when closed down upon the surrounding edge of the mouth of the neck of a bottle, as will be clearly under-80 stood. It will thus be seen that the device 1 is provided with an oscillating closing-frame, from which is loosely suspended a sealing or closing cap, which when the device is not in use upon the bottle is capable of location in 85 the positions indicated in Figs. 1 to 4, inclusive, to enable the receiving portion 7 of the open-ended or yoke-shaped body 5 to be slipped upon the neck of the bottle with the concaved or socketed portions 10 resting upon 9° opposite sides of the convex bead or enlargement 3 of the neck of the bottle. Now by taking hold of the handle or lever 8 and raising the device 1 in the direction of the arrow y in Fig. 1 of the drawings, using the sock- 95 eted portions 10, which are closely hugging the bead 3, as fulcrumal supports, a lip or edge portion 21 is brought directly beneath the marginal edge 22 of the metal seal 4, as clearly indicated in Figs. 1, 2, and 4 of the drawings, 100 a raised portion or rib 23 upon the body portion 5 and located slightly back of said lip or edge portion 21 serving as a guide or fulcrum against the side of the metal seal-cap 4 and with the said lip or edge portion 21 105 quickly and easily forcing the said seal 4 from its closing relation upon the mouth of the bottle as the device 1 is still being moved in the direction of said arrow y. (Shown in said Fig. 1 of the drawings.) Immediately upon 110 the forced removal of the seal-cap 4 from the mouth of the neck of the bottle the clamping or tightening means or frame 12 swings in a forward direction and properly locates the sealing or closing cap or disk 17 and its seal- 115 ing-washer 20 in the proper position loosely above the mouth of the neck of the bottle, upon which the said cap 17 and its washer or disk 20 can be tightly closed down, as indicated in Fig. 5, to produce a gas-tight closure when the han- 120 dle or lever 8 is moved in a downward direction, (indicated by the arrow z in said Fig. 5.) When the parts of the device 1 are in the positions shown in Fig. 6 of the drawings, with the arms 14 of the frame 12 sprung in there- 125 ceiving-space between a pair of projections 24 and 24', as shown, then the mouth of the bottle is tightly closed and the frame 12 is held against accidental displacement. The device can then be used in the manner of a bottle 13°

stopper to permit the pouring of the beverage from time to time from the bottle until emptied of its contents, the device serving as a gastight closure to maintain the gaseous pressure 5 within the bottle, and thereby prevents the liquid from becoming flat and stale. To prevent the clamping-frame 12 and its sealing or closing cap or disk 17 from falling in front of the receiving portion 7 of the device 1 when 10 carrying the device in the hand, and thereby acting as an obstruction to readily placing the yoke-shaped body 5 upon the neck of the bottle, the said projections 24 and 24' act as stops with which the arms 14 of the frame 12 come 15 in contact, and thereby limits the forward movement of the frame 12 and cap 17, as will be clearly evident. By this means the said cap 17 is prevented from becoming located in front of the receiving portion 7 of the device 20 1, where it might act as an obstruction to prevent the easy and quick location of the device upon the neck of the bottle.

From the foregoing description it will be clearly seen that I have produced an efficient 25 bottle-stopper for positively closing the mouth of the bottle, the said device being capable also as a lifter for removing the usual metal seal-cap with which the mouth of the bottle is closed from the said mouth of the bottle.

In lieu of the construction of combined sealremover and bottle-stopper shown in Figs. 1 to 8, inclusive, and described in the foregoing specification I may use another form of device, (shown in Figs. 9 to 12, inclusive,) which 35 is of a general construction embodying the principles of this invention. This device consists, essentially, of an open-ended or yokeshaped main body 25, which has its inner surface made concave, as shown, so as to be read-4° ily fitted upon the convex bead or enlargement 3 of the neck of the bottle when slipped upon the same from the side of the neck and with its upper marginal edge portion 26 directly beneath the marginal edge 22 of the 45 metallic seal-cap 4, or approximately so, in the manner illustrated in Figs. 9, 10, and 11 of the drawings. By placing the said main body 25 in position upon the said bead or enlargement of the neck of the bottle and forc-5° ing its upper marginal edge 26 in an upward direction against the said sealing-cap 4 the latter is easily forced from its closing relation with the mouth of the bottle. To use this device as a bottle-stopper, the said seal-cap 4 is 55 again placed over the mouth of the bottle, and a suitable clamping or tightening frame connected with the said body 25 is firmly clamped down upon the upper surface of the said sealcap 4, whereby the latter is secured upon the 60 mouth of the bottle and produces a gas-tight closure. This clamping or tightening frame, which is preferably made from wire consists, essentially, of a handle or lever member 27, provided with a pair of oppositely-located loops or 65 eyes 28, from which extend the pivot-arms 29.

Each pivot-arm 29 is provided with a right-angled pivot member or pintle 30, movably arranged in perforations or bearings 31 in the end portions 32 of the body 25. Pivotally arranged in the said loops or eyes 28 are the pintles or 70 pivot members 33 of the arms 34 of a clamping or tightening frame, which is provided with a cross-bar 35 between the said arms 34, as clearly shown in the drawings, and which is brought down tightly upon the seal-cap 4.75 when the handle or lever member 27 is moved from the position represented in Fig. 9 of the drawings to the position shown in Fig. 10. It will be understood that by lengthening the arms 34 the device shown in said Figs. 9 to 12, 80 inclusive, may also be used as a bottle-stopper with the ordinary corks in place of the usual means of fastening such corks in position by wire. It will also be understood that both the devices shown in the accompanying drawings, 85 with but slight changes, may be made so that the forwardly-extending arm portions of the main body of the device can be brought in pivotal or oscillatory engagement with the lower or under edge of the bead or other en- 90 largement surrounding the upper part of the neck of the bottle and the devices used in the manner above described either as a seal-cap remover or a bottle-stopper.

I am aware that changes may be made in the 95 arrangements and combinations of the various devices and parts, as well as in the details of the construction of the various parts thereof, without departing from the scope of my present invention. Hence I do not limit my in- 100 vention to the exact arrangements and combinations of the devices and their parts as described in the foregoing specification and as illustrated in the accompanying drawings, nor do I confine myself to the exact details of the 105 construction of any of the said parts.

Having thus described my invention, what I claim is—

1. A device of the character specified comprising an open-ended or yoke-shaped body 110 adapted to be slipped upon the neck of a bottle from the side thereof, means on said body for engagement with a seal-cap secured over the mouth of the bottle, for the removal of said seal-cap from the mouth of the bottle, and 115 a clamping or tightening means connected with said yoke-shaped body for tightening a sealing-cap, or the like, over the mouth of the bottle, substantially as and for the purposes set forth.

2. A device of the character specified comprising an open-ended or yoke-shaped body adapted to be slipped upon the neck of a bottle from the side thereof, means on said body for engagement with a seal-cap secured over 125 the mouth of the bottle, for the removal of said seal-cap from the mouth of the bottle, and a clamping or tightening means connected with said yoke-shaped body for tightening a sealing-cap, or the like, over the mouth of the 130

120

bottle, consisting, essentially, of a clampingframe, and a lever or handle for forcing said clamping-frame in a downward direction, substantially as and for the purposes set forth.

3. A bottle-stopper comprising an openended or yoke-shaped body adapted to be slipped upon the neck of a bottle from the side thereof, means on said body for engagement with a seal-cap secured over the mouth of the 10 bottle, for the removal of said seal-cap from the mouth of the bottle, a clamping or tightening frame pivotally connected with the said body, and a sealing-cap loosely connected with the said clamping-frame, substantially as and

15 for the purposes set forth.

4. A device of the character specified comprising an open-ended or yoke-shaped body. having forwardly-extending arm portions forming with said body a receiving portion 20 adapted to be arranged upon the neck of a bottle and said arm portions having an oscillatory relation with portions of the neck of the bottle, and a clamping or tightening means connected with said yoke-shaped body for 25 tightening a sealing-cap upon the mouth of the bottle, substantially as and for the purposes

set forth. 5. A device of the character specified comprising an open-ended or yoke-shaped body 30 having forwardly-extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a bottle and said arm portions having an oscillatory relation with portions of the neck of the 35 bottle, and a clamping or tightening means connected with said yoke-shaped body for tightening a sealing-cap upon the mouth of the bottle, consisting, essentially, of a clamping-frame, and a lever or handle for forcing 40 said clamping-frame in a downward direction, substantially as and for the purposes set

forth. 6. A device of the character specified comprising an open-ended or yoke-shaped body 45 having forwardly-extending arm portions forming with said body a receiving portion adapted to be arranged upor the neck of a bottle and said arm portions having an oscillatory relation with portions of the neck of 50 the bottle, means on said body for engagement with a seal-cap secured over the mouth of the bottle, for the removal of said seal-cap from the mouth of the bottle, and a clamping or tightening means connected with said yoke-

55 shaped body for tightening a sealing-cap upon the mouth of the bottle, substantially as and for the purposes set forth.

7. A device of the character specified comprising an open-ended or yoke-shaped body 60 having forwardly-extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a bottle and said arm portions having an oscillatory relation with portions of the neck of 65 the bottle, means on said body for engage-

ment with a seal-cap secured over the mouth of the bottle, for the removal of said seal-cap from the mouth of the bottle, and a clamping or tightening means connected with said yokeshaped body for tightening a sealing-cap upon 7° the mouth of the bottle, consisting, essentially, of a clamping-frame, and a lever or handle for forcing said clamping-frame in a downward direction, substantially as and for the purposes set forth.

8. A device of the character specified comprising an open-ended or yoke-shaped body having forwardly-extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a 80 bottle, and a socketed holding member on each arm portion, said socketed holding members being adapted to be brought in oscillatory relation with a bead upon the neck of the bottle, and a clamping or tightening means 85 connected with said yoke-shaped body for tightening a sealing-cap upon the mouth of the bottle, substantially as and for the purposes set forth.

9. A device of the character specified com- 90 prising an open-ended or yoke-shaped body having forwardly-extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a bottle, and a socketed holding member on each 95 arm portion, said socketed holding members being adapted to be brought in oscillatory relation with a bead upon the neck of the bottle, and a clamping or tightening means connected with said yoke-shaped body for tightening a 100 sealing-cap upon the mouth of the bottle, consisting, essentially, of a clamping-frame, and a lever or handle for forcing said clampingframe in a downward direction, substantially as and for the purposes set forth.

10. A device of the character specified comprising an open-ended or yoke-shaped body having forwardly-extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a 110 bottle, and a socketed holding member on each arm portion, said socketed holding members being adapted to be brought in oscillatory relation with a bead upon the neck of the bottle, means on said body for engagement with a 115 seal-cap secured over the mouth of the bottle. for the removal of said seal-cap from the mouth of the bottle, and a clamping or tightening means connected with said yoke-shaped body for tightening a sealing-cap upon the 120 mouth of the bottle, substantially as and for the purposes set forth.

11. A device of the character specified comprising an open-ended or yoke-shaped body having forwardly - extending arm portions 125 forming with said body a receiving portion adapted to be arranged upon the neck of a bottle, and a socketed holding member on each arm portion, said socketed holding members being adapted to be brought in oscillatory re- 130

lation with a bead upon the neck of the bottle, means on said body for engagement with a seal-cap secured over the mouth of the bottle, for the removal of said seal-cap from the 5 mouth of the bottle, and a clamping or tightening means connected with said yoke-shaped body for tightening a sealing-cap upon the mouth of the bottle, consisting, essentially, of a clamping-frame, and a lever or handle for 10 forcing said clamping-frame in a downward direction, substantially as and for the purposes set forth.

12. A bottle-stopper comprising an openended or yoke-shaped body having forwardly-15 extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a bottle, and a socketed holding member on each arm portion, said socketed holding members being adapted 20 to be brought in oscillatory relation with a bead upon the neck of the bottle, a tighteningframe pivotally connected with the said arm portions, a sealing-cap suspended from said tightening-frame, and means for tightening 25 said sealing-cap upon the mouth of the bottle, substantially as and for the purposes set forth.

13. A bottle-stopper comprising an openended or yoke-shaped body having forwardlyextending arm portions forming with said 30 body a receiving portion adapted to be arranged upon the neck of a bottle, and a socketed holding member on each arm portion, said socketed holding members being adapted to be brought in oscillatory relation with a 35 bead upon the neck of the bottle, a tighteningframe pivotally connected with the said arm portions, a sealing-cap suspended from said tightening-frame, and a handle or lever connected with the said yoke-shaped body for 40 tightening said sealing-cap upon the mouth of the bottle, substantially as and for the purposes set forth.

14. A bottle-stopper comprising an openended or yoke-shaped body having forwardly-45 extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a bottle, and a socketed holding member on each arm portion, said socketed holding members being adapted 50 to be brought in oscillatory relation with a bead upon the neck of the bottle, means on said yoke-shaped body for engagement with a seal-cap secured over the mouth of the bottle, for the removal of said seal-cap from the 55 mouth of the bottle, a tightening-frame pivotally connected with the said arm portions, a sealing-cap suspended from said tightening-frame, and means for tightening said sealing-cap upon the mouth of the bottle, sub-60 stantially as and for the purposes set forth.

15. A bottle-stopper comprising an openended or yoke-shaped body having forwardly-

extending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a bottle, and a sock- 65 eted holding member on each arm portion, said socketed holding members being adapted to be brought in oscillatory relation with a bead upon the neck of the bottle, means on said yoke-shaped body for engagement with a 70 seal-cap secured over the mouth of the bottle, for the removal of said seal-cap from the mouth of the bottle, a tightening-frame pivotally connected with the said arm portions, a sealing-cap suspended from said tightening- 75 frame, and a handle or lever connected with the said yoke-shaped body for tightening said sealing-cap upon the mouth of the bottle, substantially as and for the purposes set forth.

16. A bottle-stopper comprising an open-80 ended or yoke-shaped body having forwardlyextending arm portions forming with said body a receiving portion adapted to be arranged upon the neck of a bottle, a socketed holding member on each arm portion, said 85 socketed holding members being adapted to be brought in oscillatory relation with a bead upon the neck of the bottle, a stop projection upon each holding member, a tighteningframe pivotally connected with said arm por- 90 tions and adapted to be brought in engagement with said stops to limit the forward movement of said frame, a sealing-cap suspended from said tightening-frame, and means for tightening said sealing-cap upon the mouth 95 of the bottle, substantially as and for the pur-

poses set forth.

17. A bottle-stopper comprising an openended or yoke-shaped body having forwardlyextending arm portions forming with said 100 body a receiving portion adapted to be arranged upon the neck of a bottle, a socketed holding member on each arm portion, said socketed holding members being adapted to be brought in oscillatory relation with a bead 105 upon the neck of the bottle, a stop projection upon each holding member, a tighteningframe pivotally connected with said arm portions and adapted to be brought in engagement with said stops to limit the forward 110 movement of said frame, a sealing-cap suspended from said tightening-frame, and a handle or lever connected with said yokeshaped body for tightening said sealing-cap upon the mouth of the bottle, substantially as 115 and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 6th day of October, 1904.

ISAAC A. ROMMER.

Witnesses:

FREDK. C. FRAENTZEL, GEO. D. RICHARDS.