

No. 820,083.

PATENTED MAY 8, 1906.

J. A. ASTARITA.  
BOTTLE STOPPER FASTENER.  
APPLICATION FILED JULY 8, 1905.

Fig. 1.

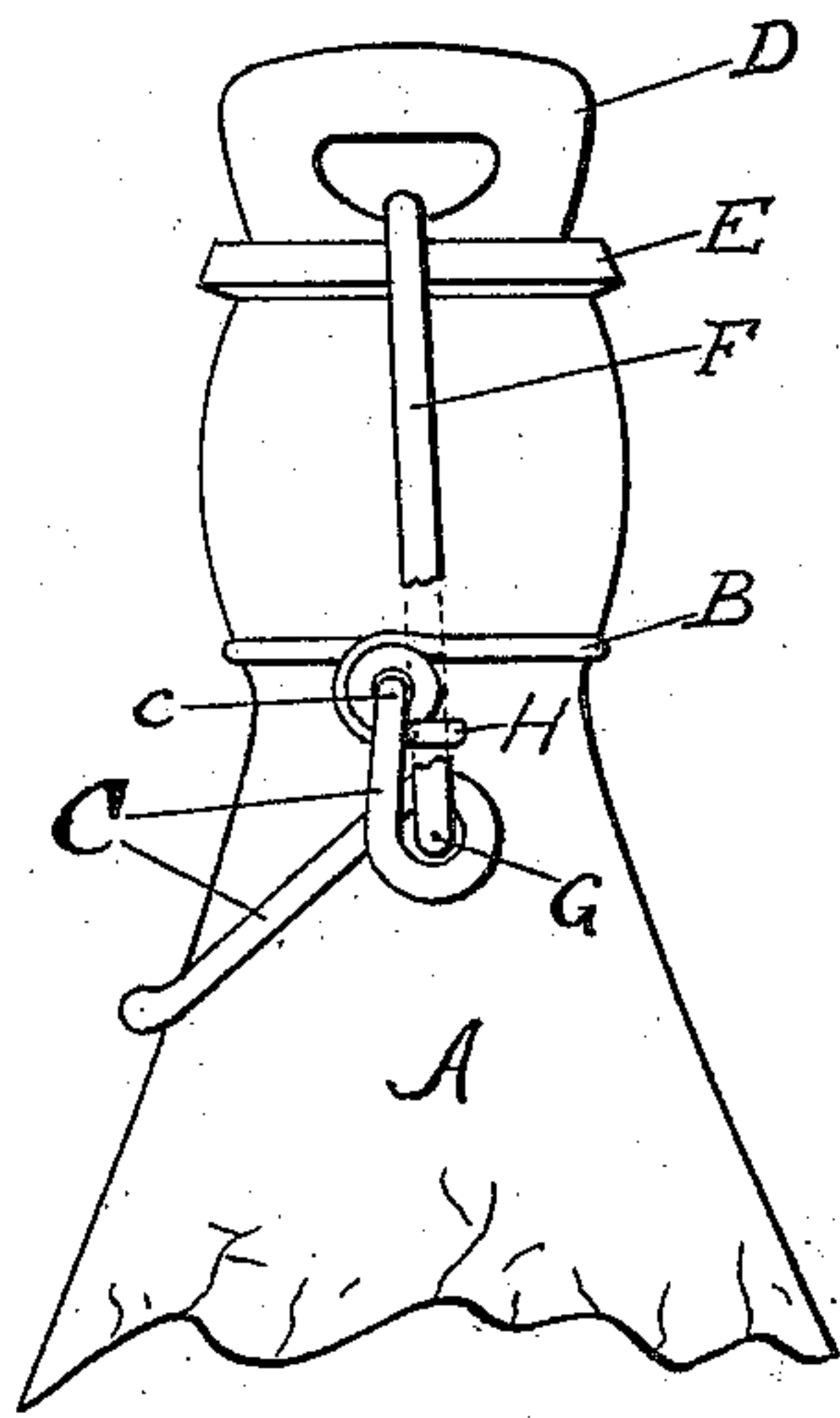


Fig. 2.

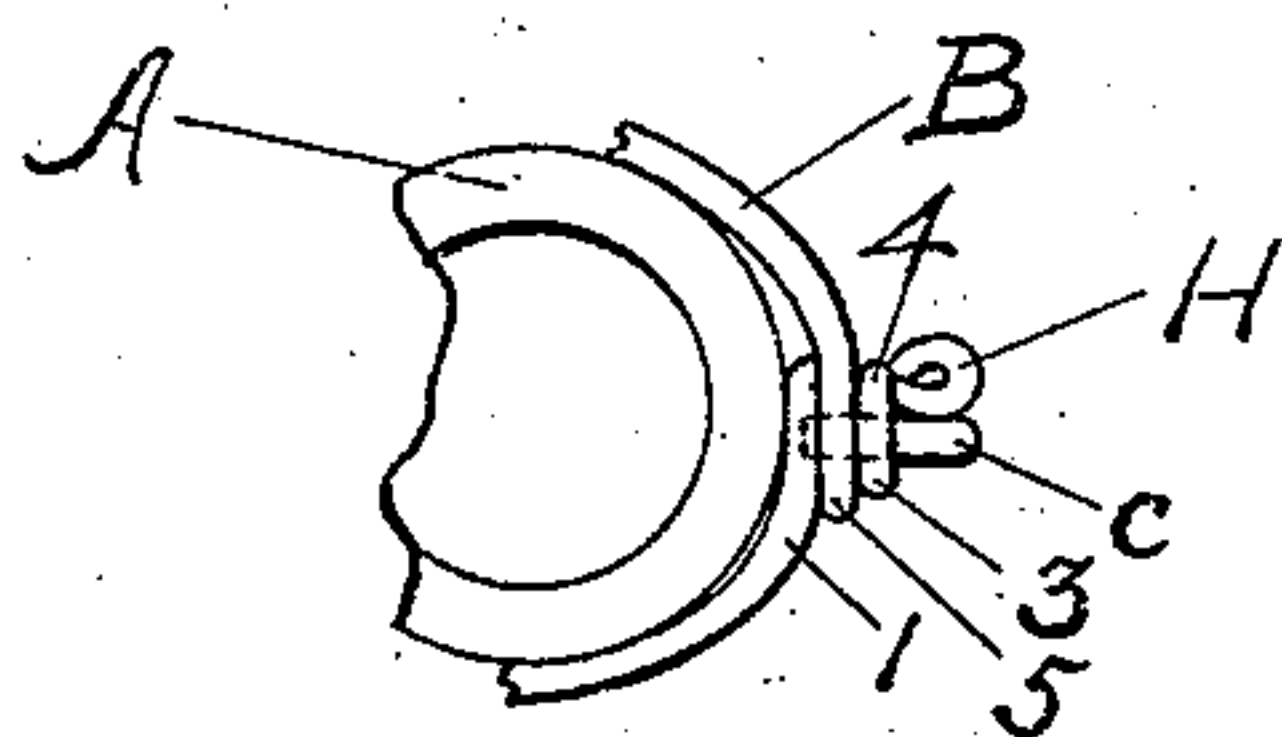


Fig. 3.

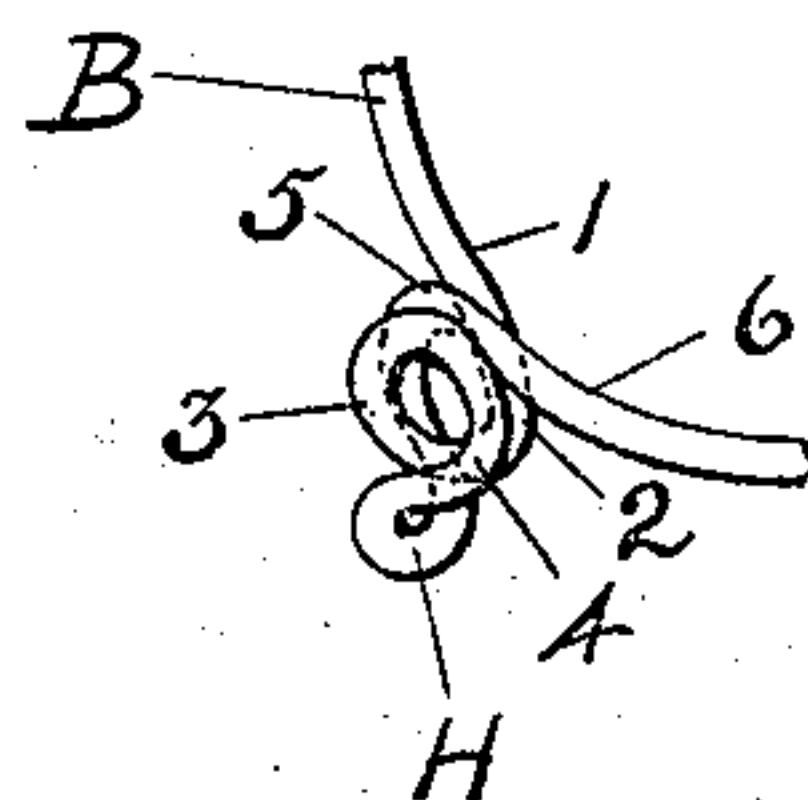
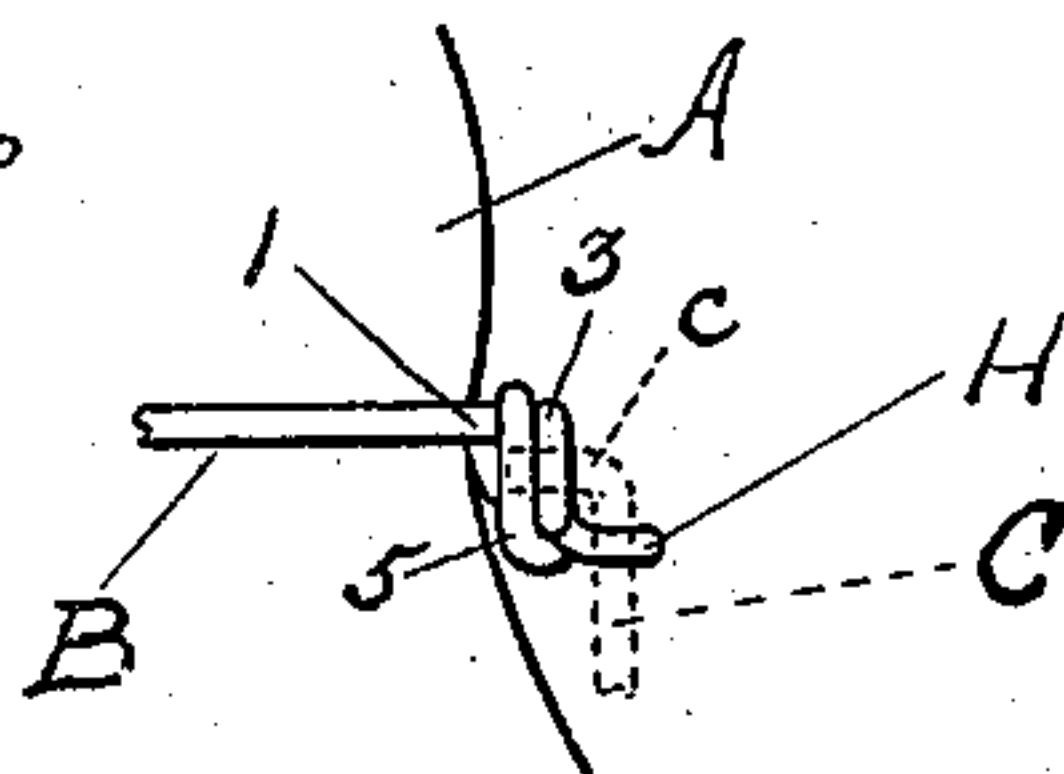


Fig. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSEPH A. ASTARITA, OF NEW YORK, N. Y.

## BOTTLE-STOPPER FASTENER.

No. 820,083.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed July 8, 1905. Serial No. 268,779.

*To all whom it may concern:*

Be it known that I, JOSEPH A. ASTARITA, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, (with post-office address 8 Van Dam street,) have invented certain new and useful Improvements in Bottle-Stopper Fasteners, of which the following is a specification.

My invention relates to that class of bottle-stoppers wherein the stopper is held down upon its seat by means of a yoke pivotally connected with a lever fulcrumed upon the bottle-neck and so arranged that when the point of pivotal connection of the yoke and lever passes a dead-center the stopper will be held upon its seat by the engagement of the lever with a fixed stop or projection.

The object of my invention is to provide a simple and convenient construction of fastener in which a stop shall be provided for the parts when the dead-center is passed and the lever shall be prevented from striking against the bottle, as in the usual constructions of device in which the neck of the bottle, where it is engaged by the lever, forms the stop. In this class of devices the operating-lever, to which the yoke is connected, is ordinarily fulcrumed by providing a wire ring upon the bottle-neck with an eye formed by twisting the wire and affording a point for pivotal connection of the lever, which for that purpose has its ends bent inward side-wise to enter the eyes.

My invention consists, essentially, in forming the wire ring with a laterally-projecting loop or bight which acts as a stop for the operating-lever. Said bight is preferably formed at the point where the eye is formed on the ring, and said bight is preferably formed also at an intermediate part of the wire between the beginning and end of a double twist or turn which constitutes the eye.

My invention consists, further, in the peculiar form or location of the several portions of the double twist or turn which constitutes the eye and has for its object to give additional stiffness to the bight which forms the stop.

In the accompanying drawings, Figure 1 is a side elevation of a bottle-stopper fastener constructed in accordance with my invention and showing the parts in locked position. Fig. 2 is a plan elevation of one side of the ring and the lever pivoted thereon. Fig. 3 is a perspective showing the form of the eye

and stop on the ring. Fig. 4 is an edge view of the eye and stop.

A indicates the bottle, around the neck of which is placed the wire ring B to afford a support for pivoting the operating-lever C. The latter, as usual, is composed of a piece of wire the ends of which are bent laterally inward, as at *c*, to enter eyes formed at opposite sides of the bottle-neck from the wire of which the ring B is composed.

D indicates the stopper having the usual elastic gasket E, and F indicates the usual yoke, which passes over or through the top of the stopper D and has its free ends pivotally connected, as at G, with the operating-lever C. This pivotal connection is formed in any way—as, for instance, by bending the wire of which the lever C is composed to form eyes into which the bent ends of the yoke F enter.

H indicates the loop or bight formed from the wire of which the ring B is made and extending laterally into position to be engaged by the lever C as soon as the same passes the position of dead-center in the operation of locking the fastener by pressing down the outward or free end of said lever.

The eye which is formed from the wire B to receive the pivotal ends of lever C is preferably composed of a double twist or turn to afford stiffness, and the loop or bight H is located between two portions of said double twist or turn, as will be seen by following the direction of the bent wire.

Starting from the point 1 on the wire B the same is bent downwardly at 2 and then upwardly at 3 to form the first turn or twist for the eye and then downwardly at 4 to form the beginning of the second turn or twist for the eye.

In the usual construction the continuation from the side 4 would be upwardly to form the opposite side of the second turn or twist of the double eye and then by way of the continuation 6 of the ring B to the opposite side or to the twisted ends of the ring. In the present case, however, as will be seen, the continuation from the side 4 is directly into a bight H of sufficient length to permit it to be bent out laterally, as shown, to form the stop for the operating-lever of the device, and from said loop or bight H the wire continues to form the side 5 of the second turn of the eye. It will also be seen that this second turn 5 is carried back of the side 3 of the first turn and its bent-over upper part is located between 3 and the part 1, being held between part 3 and



part 1 when the two turns are compressed together by suitable means to give them solidity and stiffness. By thus locating the portions of the two turns or twists that form the eye with relation to one another and to the bight H, which forms the stop, I secure additional stiffness. I do not, however, limit myself to this particular way of continuing or locating the twists or turns of the wire which form the eye with relation to one another. By thus locating them, however, and by further locating the loop H at an intermediate portion of the double twist or turn which constitutes the eye I secure stiffness and rigidity. Preferably, as shown, the two sides of the loop H are compressed or brought together to aid in securing stiffness.

The device is operated in the usual manner in closing the bottle. The lever C is thrown down to depress the stopper and to carry the pivotal point of connection of yoke F with the ring C beyond the dead-center or line of strain. As soon as that dead-center is passed the lever engages the stop H and further movement is thus prevented, while the stopper is held down firmly to its seat by the resiliency of the gasket E and the spring of the parts of which the fastener is composed.

What I claim as my invention is—  
 1. In a bottle-stopper fastener, the combination with a wire ring and an operating-le-

ver pivoted thereon, of a laterally-extending bight of wire formed from the wire ring and adapted to act as a stop for the parts when they pass the dead-center in locking. 35

2. In a bottle-stopper fastener, a wire ring upon the bottle-neck, having a double twist or turn to form an eye, and a laterally-extending bight or loop forming a stop and interposed between the loops or turns forming the eye. 40

3. In a bottle-stopper fastener, a wire ring, having a double turn or loop to form an eye, and a bight intermediate to said turns adapted to form a stop, the continuation of wire between the said bight and ring being located intermediate the ring and the first turn or twist which forms the eye, as and for the purpose described. 45

4. In a bottle-stopper fastener, a wire ring having a twist which forms an eye and a laterally-projecting loop merging into the eye and forming a stop, as and for the purpose described. 50

Signed at New York, in the county of New York and State of New York, this 6th day of July, A. D. 1905. 55

JOSEPH A. ASTARITA.

Witnesses:

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 LILLIAN BLOND.