No. 791,108. PATENTED MAY 30, 1905.

S. H. PATTERSON.

BOTTLE STOPPER FASTENER.

APPLICATION FILED MAR. 1, 1905.

Fig. 1.

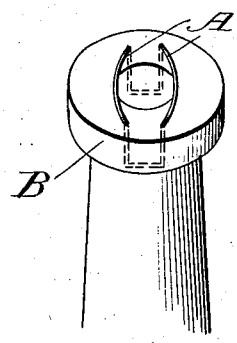


Fig. 2.

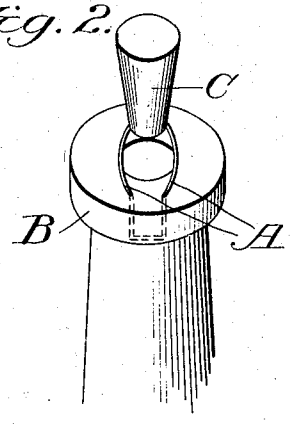


Fig. 3.

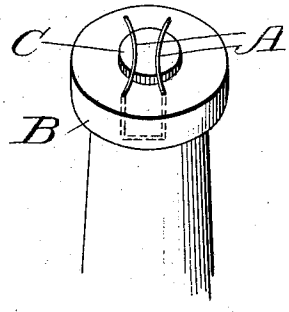


Fig. 4.

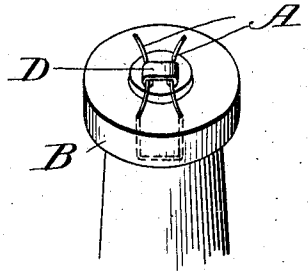


Fig. 5.

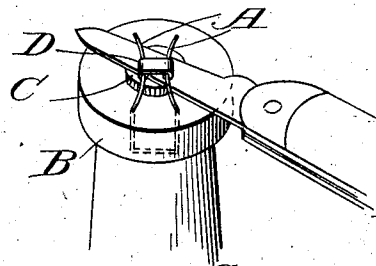


Fig. 6.

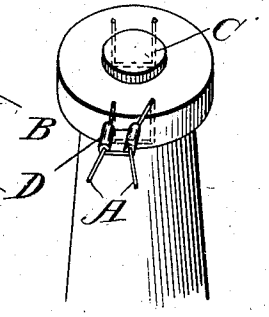


Fig. 7.

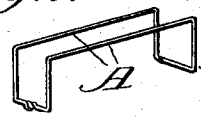


Fig. 7a.

Fig. 8.

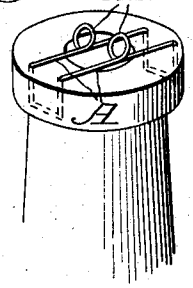


Fig. 9.

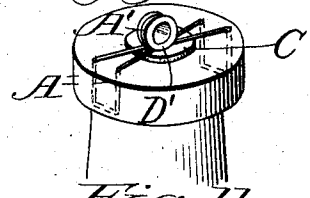
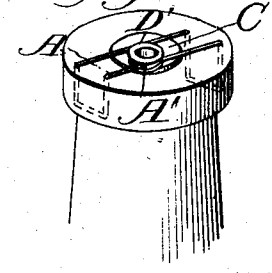


Fig. 11.

Fig. 10.



WITNESSES:

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Stuart H. Patterson

BY Geo. H. Evans

Attorney

No. 791,108. Patented May 30, 1905.

UNITED STATES PATENT OFFICE.

STUART HAYT PATTERSON, OF PLAINFIELD, NEW JERSEY.

BOTTLE-STOPPER FASTENER.

SPECIFICATION forming part of Letters Patent No. 791,108, dated May 30, 1905.

Application filed March 1, 1905. Serial No. 247,997.

To all whom it may concern:

Be it known that I, STUART HAYT PATTERSON, a citizen of the United States, residing at Plainfield, in the county of Union and State of New Jersey, have invented new and useful Improvements in Bottle-Stopper Fasteners, of which the following is a specification.

My invention relates to that class of stopper-fasteners in which the wire strands are embedded in the bottle-neck during the process of manufacture.

The object of my invention is to provide a bottle-neck with strands embedded therein adapted to cross the stopper and so formed as to be connected by a permanent seal without having to be first tied together. This object I accomplish by the construction shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a bottle-neck, showing the fastening-strands pushed apart for the insertion of the stopper. Fig. 2 is a similar view showing the stopper about to be inserted. Fig. 3 is a similar view with the stopper in place under the strands. Fig. 4 is a similar view showing the strands permanently connected by a sealing device. Fig. 5 is a similar view showing the manner of severing the strands. Fig. 6 is a similar view showing the strands severed. Fig. 7 is a detail view of the strands. Fig. 7ª is a detail of the seal. Fig. 8 is a perspective showing the neck provided with another form of the fastening-strands. Fig. 9 is a similar view of the same with the sealing device in place. Fig. 10 is a similar view of a third form of the fastening-strands having the same seal as in Figs. 8 and 9, and Fig. 11 shows one of the latter seals.

A designates two wire strands embedded at both ends in the bottle-neck B during the process of manufacture. These strands may be connected together at their ends, as shown in the several figures, and may be of any suitable kind of material. In every instance these strands A are adapted to be moved to opposite sides of the opening in the bottle-neck, so as to permit the entrance of the stopper. After the insertion of the stopper C the strands are moved inwardly over the upper side thereof and permanently connected together by a seal.

In Figs. 4, 5, and 6 the seal D is formed of a flat piece of sheet metal having its end edges firmly bent around the strands A, so as to permanently connect them.

In Figs. 8 and 9 the strands are formed at their middle portions with vertically-disposed eyes A′, which register when the strands are brought together across the stopper and receive a seal formed of an ordinary eyelet D′, secured in place by an implement suitable for such purpose.

In Fig. 10 the construction is the same as in Figs. 8 and 9, except that the eyes A′ lie horizontally instead of vertically.

It will be seen that the strands are embedded at both ends, and hence there is no chance of their being disconnected and again connected to the bottle. Moreover, as the strands are connected at both ends to the bottle there are no loose ends to be first twisted together over the stopper prior to receiving the seal nor any loose extremities to be passed through openings in the bottle and then twisted together.

My construction is exceedingly simple and economical, and but little time is required for sealing a stopper. When so sealed, the stopper cannot be removed except by first severing the strands, and as these cannot be joined together again without evidence of the fact any one can readily detect whether or not he is receiving a bottle as originally filled.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A bottle-sealing device, comprising strands embedded at both ends in the bottle-neck, beyond the opening for permitting the insertion of a stopper and adapted to be moved over the stopper to receive a permanent connecting device.

2. In a bottle-sealing device, wire strands embedded at both ends in the neck of the bottle, extending across the opening and adapted to be moved to one side of the opening to permit of inserting the stopper.

3. A bottle-sealing device comprising wire

strands embedded at both ends in the neck of the bottle, extending across the opening and adapted to be moved to one side of the opening to permit of inserting the stopper, and a seal to permanently unite the strands when moved back across the stopper.

4. In a bottle-sealing device, wire strands embedded in the neck of the bottle and provided with loops or eyes to register with each other when moved over the stopper and a sealing device to permanently connect the eyes or loops.

5. In a bottle-sealing device, wire strands embedded at both ends in the bottle-neck and provided between their ends with seal-receiving loops or eyes to register when the strands are moved across the mouth of the bottle after the insertion of a stopper.

6. A bottle-sealing device, comprising wire strands embedded at both ends in the bottle-neck and formed between their ends with registering eyes or loops and a tubular seal to secure the loops permanently together.

7. In a bottle-sealing device, wire strands twisted together between their ends to form eyes or loops and embedded at both ends in the neck of the bottle.

8. In a bottle-sealing device, a single length of wire connected at its extremities to form an elongated loop; the ends of the loop being embedded in the neck of the bottle and the two strands between said ends extending across the bottle-neck at opposite sides of its opening and adapted to be brought together over a stopper to receive a permanent connecting-seal.

9. In a bottle-sealing device, wire strands to cross the mouth of a bottle and provided between their ends with registering eyes or loops; the opposite ends of both strands being formed for embedding in a bottle-neck.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

STUART HAYT PATTERSON.

Witnesses:
J. GILMORE DRAYTON,
FRANK DEPEW.