

H. MARTIN.  
Bottle-Stopper.

No. 204,350.

Patented May 28, 1878.

Fig. 1.

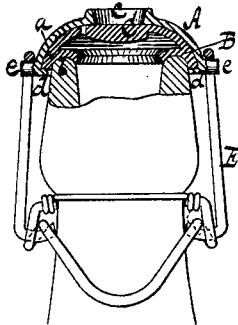


Fig. 2.

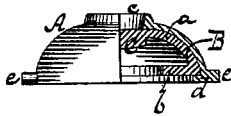


Fig. 3.

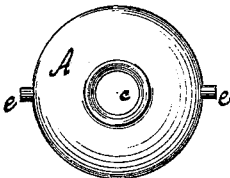
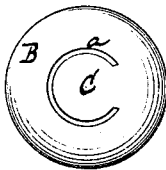


Fig. 4.



Witnesses.

*Otto Neufeland.*  
*Hugo Bruggemann*

Inventor:

*Henry Martin*

*by*  
*Van Gantvoord & Hauff*

*his attorneys*

# UNITED STATES PATENT OFFICE.

HENRY MARTIN, OF NEW YORK, N. Y.

## IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **204,350**, dated May 28, 1878; application filed May 14, 1878.

*To all whom it may concern:*

Be it known that I, HENRY MARTIN, of the city, county, and State of New York, have invented a new and useful Improvement in Bottle-Stoppers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a sectional side view of a bottle-neck containing my invention. Fig. 2 is a like view of the valve and its supporting-cap. Fig. 3 is a plan view of the supporting-cap. Fig. 4 is a like view of the valve.

Similar letters indicate corresponding parts.

My invention relates to that class of bottle-stoppers embodying a flap-valve which is arranged on the interior of a supporting plate or cap fastened to the bottle and beneath an inlet-hole in said cap.

My invention consists in the combination, with a supporting-cap, of an india-rubber valve-ring, which is fitted in said cap constructed with two inwardly-projecting flanges and with a flap or the valve proper on the upper flange, so that great elasticity is given to the flap, while a very effective packing between the stopper and the mouth of the bottle is produced.

For the purpose of retaining the india-rubber valve-ring within the supporting-cap, I provide the latter with an inwardly-projecting flange on its lower edge, which permits of forcing the ring into the cap and catches under the ring.

In the drawing, the letter A designates the supporting-cap of my stopper, having an inlet-hole, *c*, in its top part, and B is the valve-ring, having two inwardly-projecting flanges, *a b*. The upper flange *a* is curved, so as to fit the curved top part of the cap A, and it has a continuation, C, to form the flap or valve proper, the same being of larger diameter than the inlet-hole *c* of the cap. The lower flange *b* is straight, and is of such diameter as to fit on the mouth of the bottle to which my stopper is to be applied.

I make the ring A, together with its flanges *a b* and flap C, of a single piece of vulcanized india-rubber, which is molded in the usual way.

The letter *d* designates an inwardly-projecting flange formed on the lower edge of the cap A for the purpose of holding the valve-ring B within the cap. This flange *d* permits of forcing the ring B into the cap A, while after this is accomplished the ring is thereby effectually held in position.

The cap A is made of such diameter that its flange *d* does not hinder the lower flange *b* of the valve-ring from resting on the mouth of the bottle.

It will be seen that by forming the flap C on the flange *a* the flap is caused to open and close with great facility, while by the flange *b* an elastic and tight joint is produced between the stopper and the bottle.

In order to adapt the cap A to be fastened on a bottle, I provide the same with spurs *e e* to receive the bail E of a stopper-fastening device, which latter obviously may be of any known form of construction.

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

1. In a bottle-stopper, the combination, with a supporting-cap which is provided with an inlet-hole and adapted to be fastened to a bottle, of an india-rubber valve-ring, which is fitted in said cap, constructed with two inwardly-projecting flanges and with a flap on the upper flange, the other flange being fitted on the mouth of the bottle to which the whole is applied, substantially as hereinbefore set forth.

2. The combination, in a bottle-stopper, of an india-rubber valve-ring having two inwardly-projecting flanges and a flap on the upper flange with the supporting-cap A, which is adapted to receive said valve-ring, and constructed with an inwardly-projecting flange on its lower edge to hold the ring in position, substantially as hereinbefore described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 10th day of May, 1878.

HENRY MARTIN. [L. s.]

Witnesses:

W. HAUFF,  
CHAS. WAHLERS.