

(Model.)

B. D. MARKS.
BOTTLE STOPPER FASTENER.

No. 281,199.

Patented July 10, 1883.

Fig. 1.

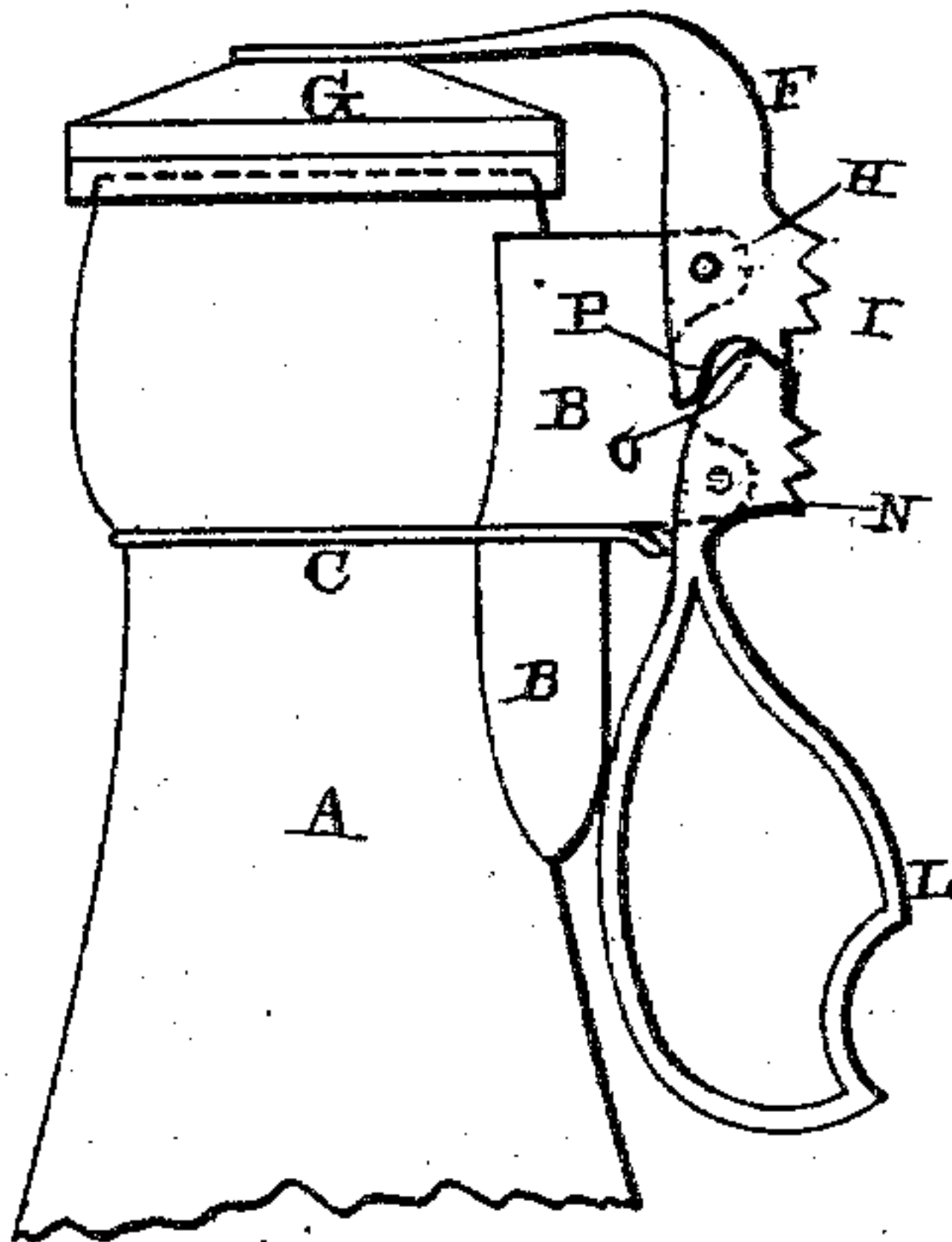


Fig. 2.

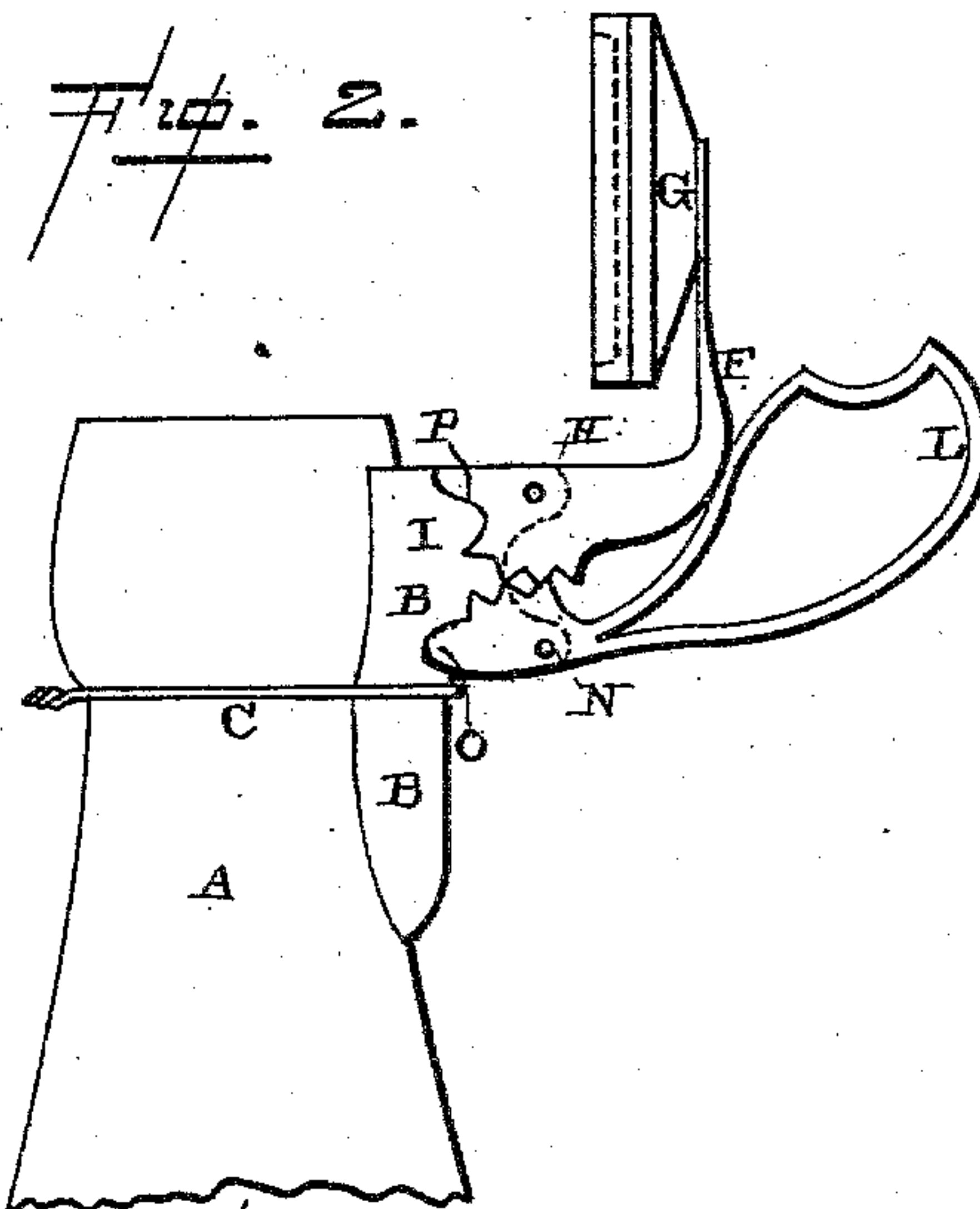
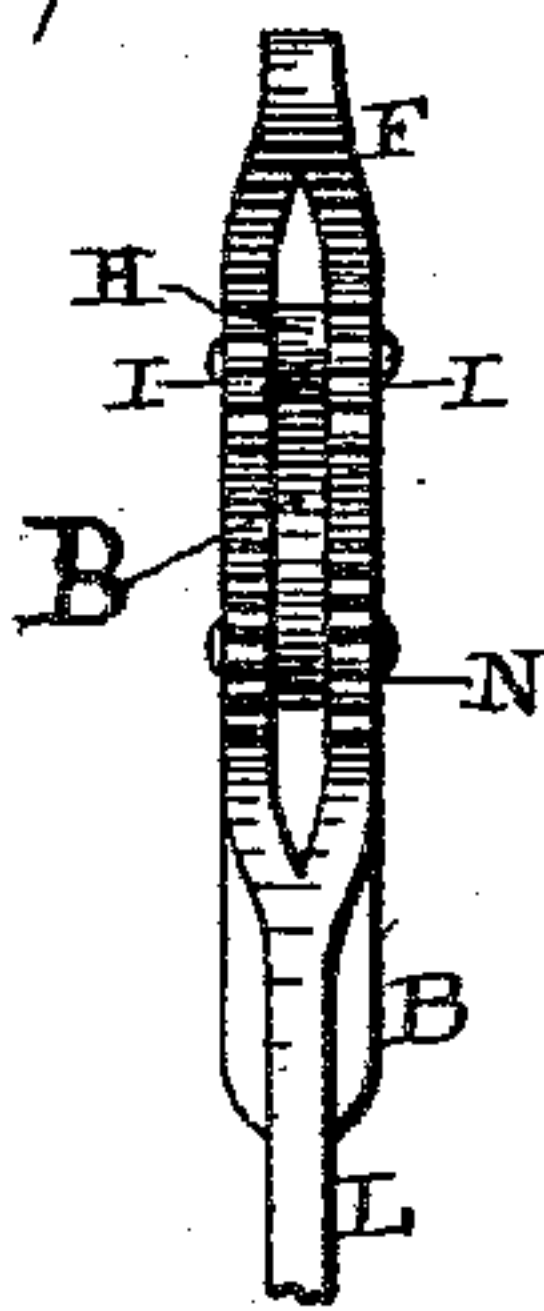


Fig. 3.



— Witnesses. —

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per
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UNITED STATES PATENT OFFICE.

BENNETT D. MARKS, OF LOUISVILLE, KENTUCKY.

BOTTLE-STOPPER FASTENER.

SPECIFICATION forming part of Letters Patent No. 281,199, dated July 10, 1883.

Application filed January 12, 1883. (Model.)

To all whom it may concern:

Be it known that I, BENNETT D. MARKS, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Bottle-Stopper Fasteners; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in bottle-stopper fasteners; and it consists, first, in the combination of the casting, which is secured to one side of the neck of the bottle in any suitable manner, a pivoted lever to which the stopper is fastened, and which is provided with cogs upon its inner end, with a pivoted operating-lever having cogs formed upon its upper end, whereby the lever which operates the stopper can be moved back and forth; second, in the combination of a casting, which is secured to the side of the neck of the bottle, the toothed lever, which operates the stopper, and the toothed operating-lever, and which has formed upon its inner corner a projection for forcing the lever which operates the stopper past its center, and thus locking it rigidly in position, so that it cannot be opened by the pressure of the fluid in the bottle.

The object of my invention is to provide both a lever which operates the stopper, and the operating hand-lever, with a double row of cogs, so that in case the teeth on one part should be broken the opposite side would continue to operate, and to so construct the parts that no moisture will get upon the joints, and thus form rust which will prevent them from operating.

Figure 1 is a side elevation of a bottle-stopper fastener embodying my invention, and showing the stopper closed. Fig. 2 is a similar view, showing the stopper open. Fig. 3 is a detail.

A represents a bottle of any suitable construction, and B a casting, which is secured thereto by means of the wire C. This casting will be formed in a single piece, and will have those points or projections around which the levers move project up into suitable recesses or sockets formed in the under side of the le-

ver, between the two rows of cogs or teeth, so that no moisture will be likely to get upon the pivotal joints, and thus cause them to rust. The lever F, which operates the stopper G, of any suitable construction, is pivoted upon the upper one of the projections H, (shown in dotted lines,) and the lower end of this lever is provided with the two sets or rows of cogs I. Two rows or sets of cogs are formed, so that in case one of the cogs should become broken or worn by constant use the cog upon the other side will continue to operate.

The operating hand-lever L, which may either be of the shape here shown or any other which may be preferred, also has a recess formed in its under side, so as to fit down over the lower point, N, of the casting upon which it is pivoted, and which lever also has a double row of cogs to mesh with the stopper-lever. The cogs upon this hand-lever do not extend evenly along the whole of its curved surfaces, for upon the inner corner is formed a suitable projection, O, which catches in the corresponding recess, P, made in the lower inner corner of the lever which operates the stopper. By this construction the hand-lever is made to pass its center after it has moved the stopper-lever as far as it can by means of the cogs or teeth, and then the projection O catches in the recess P and locks the two parts in position in such a manner that the pressure of the gas in the bottle cannot force the stopper open.

The stopper, instead of being made just wide enough to close the bottle, is made more or less concave on its under side, and is made slightly wider than the top of the bottle, so that it will project downward over the top edge a slight distance, as shown. By this means the top of the bottle is protected, so that it will not be broken or chipped by being struck by other bottles which are being returned to the box or case in which the bottles are kept.

By means of the construction shown the stopper, instead of being raised simply to a vertical position, is thrown backward from the neck of the bottle at such an angle that the bottle can be readily cleaned upon any of the well-known bottle-washers now in use.

The great advantage of the construction shown consists in the ease with which the stopper can be opened and closed, the security

of the lock which is formed, and in there being no operating parts which are likely to get out of order. The further advantage gained is that in case the bottle should be broken only
5 a single straight wire, which any inexperienced person can apply, is all that is needed to attach the stopper-fastener to another bottle.

Instead of the parts B being cast, they may be made of sheet metal and stamped into the
10 necessary form. This, however, is a mere detail of construction, as I do not limit myself to either castings or parts which are struck up.

Having thus described my invention, I claim—

15 1. In a bottle-stopper fastener, the combination of the lever for operating the stopper, and the hand-lever, with a suitable casting, which is applied to the neck of the bottle, the

two levers being provided with cogs or teeth upon their inner ends, substantially as shown. 20

2. In a bottle-stopper fastener, the combination of the casting, which is applied to the neck of the bottle, the toothed lever for operating the stopper, and the toothed hand-lever which engages therewith, the hand-lever being provided with a bulge or projection at its inner corner, to catch in a corresponding recess formed in the other lever, whereby the two parts are locked rigidly in position after they pass their centers, substantially as described. 25 30

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

B. D. MARKS.

Witnesses:

F. A. LEHMANN,

B. LEWIS BLACKFORD.