

# UNITED STATES PATENT OFFICE.

HENRY BARRETT, OF HAMPTON, ENGLAND.

STOPPING OR CLOSING BOTTLES, JARS, AND SIMILAR VESSELS.

SPECIFICATION forming part of Letters Patent No. 230,605, dated August 3, 1880.

Application filed May 18, 1880. (No model.) Patented in England October 16, 1879.

*To all whom it may concern:*

Be it known that I, HENRY BARRETT, of Hampton, in the county of Middlesex, England, have invented new and useful Improvements in

5 Stopping or Closing Bottles, Jars, and Similar Vessels, (for which I have obtained a patent in Great Britain, No. 4,184, bearing date October 16, 1879,) of which the following is a

10 This invention relates to simple, cheap, and efficient means for closing or stopping bottles containing beer, wine, or other liquid, whether gaseous or otherwise, also applicable to closing jars and similar vessels by the use of stop-

15 pers of an improved construction, allowing of the bottles or other vessels being easily opened.

I form the interior of the neck of the bottle or other vessel with a quick coarse female screw-thread, and the stopper is formed with

20 a corresponding male screw made of any suitable plastic material. The said male screw is formed with a head or cap, and in a recess in or below the shoulder of which I place a seat-

25 ing or packing of cork, india-rubber, or of combined cork and india-rubber.

The said stopper may be perforated with one or more holes passing from the bottom thereof to the periphery, just beneath the shoulder, for the purpose hereinafter described, and when

30 the stopper is used with bottles containing aerated or gaseous liquids it may be advantageous to form the stopper with a central valve opening downward.

If the stopper is to be fastened to the bottle, this may be effected by molding a piece of wire

35 in the head of the stopper, the ends of such wire being bent downward and connected hingewise to two half-rings on the neck of the bottle under the rim, and which can turn on

40 or around the neck of the bottle.

To fill a bottle provided with a stopper constructed as hereinbefore described, the stopper is partly screwed into the neck of the bottle.

The bottle is then placed in the filling-machine,

45 and the beer, wine, or other liquid will pass into the bottle through the hereinbefore-described holes or perforations in the stopper.

As soon as the bottle is sufficiently full the bottle is partly turned, whereby the stopper is

50 screwed down, and the elastic seat therein

bears tightly on the top of the mouth of the bottle and forms a close and air-tight joint.

To enable the bottle to be turned so as to close the stopper, the filling or bottling machine is provided with a lever, a cam, or gearing operated by the treadle of the machine or otherwise, according to the construction of machine employed.

To open the bottle it is merely necessary to turn or unscrew the stopper, and the contents, or part of the contents, of the bottle may be poured out, and the stopper may be screwed back into its seat or not, as required.

My improved stoppers are made of plastic material, of any required shape or design on the upper part, and may be stamped with a name, device, or trade-mark, as required, and bottles so stoppered would not require capsules.

In order to make my invention better understood, I will now proceed to describe the same by reference to the accompanying drawings, in which—

Figure 1 is a sectional elevation of a screw-stopper and bottle-neck constructed according to my improvements, and Fig. 2 is a sectional view of the stopper.

A represents the neck of the bottle, the interior of which is formed with a quick coarse female screw-thread, *a*, such screw-thread *a* commencing a short distance below the top of the neck, the portion of the neck *b* above the screw-thread being formed of a conical shape, the base of the cone being upward.

B is the stopper, which is formed with a male screw-thread, *c*, corresponding with the screw-thread *a* in the bottle-neck. The angle of the conical part *d* of the stopper above the thread *c* is greater than the angle of the conical part *b* of the neck, so as to leave an angular space between this part of the stopper and the conical part of the neck, as shown.

*f* is the head or cap of the stopper. *g* is the seating or packing, consisting of a ring of vulcanized india-rubber or other suitable material, such as cork, or combined cork and india-rubber, and such ring *g* is placed in a groove at the bottom part of the conical portion of the stopper, as shown.

If a stopper of this construction be placed

in the mouth of a bottle formed to receive it, as shown in Fig. 1, and about half a turn be given to the stopper, (or to the bottle,) the stopper will be driven home—that is to say, a  
5 tight joint will be formed by means of the seating *g* being tightly compressed between the conical portion of the bottle and the stopper.

The dotted lines, Fig. 1, show the holes which are sometimes made in the stopper.

10 Having thus described my said invention and the manner of performing the same, I wish it to be understood that I lay no claim to the employment of a simple screw-stopper and bottle, as such have been before proposed to  
15 be used; but

What I do claim is—

The described means for stoppering bottles, the same consisting of a stopper formed with a cone having a quick coarse male screw-thread, and having an elastic seating placed  
20 on the cone, in combination with a bottle the interior of the neck of which is formed with a female screw-thread and with a female cone of an angle different from that of the conical  
25 part of the stopper, as and for the purposes shown and described.

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Witnesses:

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(No Model.)

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Stopping or Closing Bottle, Jar, and similar Vessels.  
No. 230,605.

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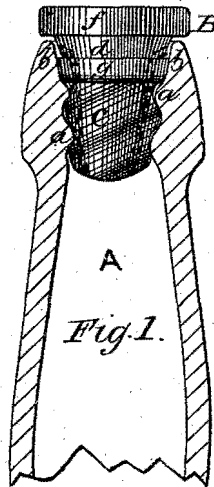
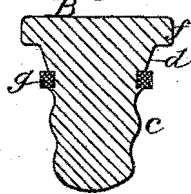


Fig. 2.



Witnesses.

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