

No. 762,818.

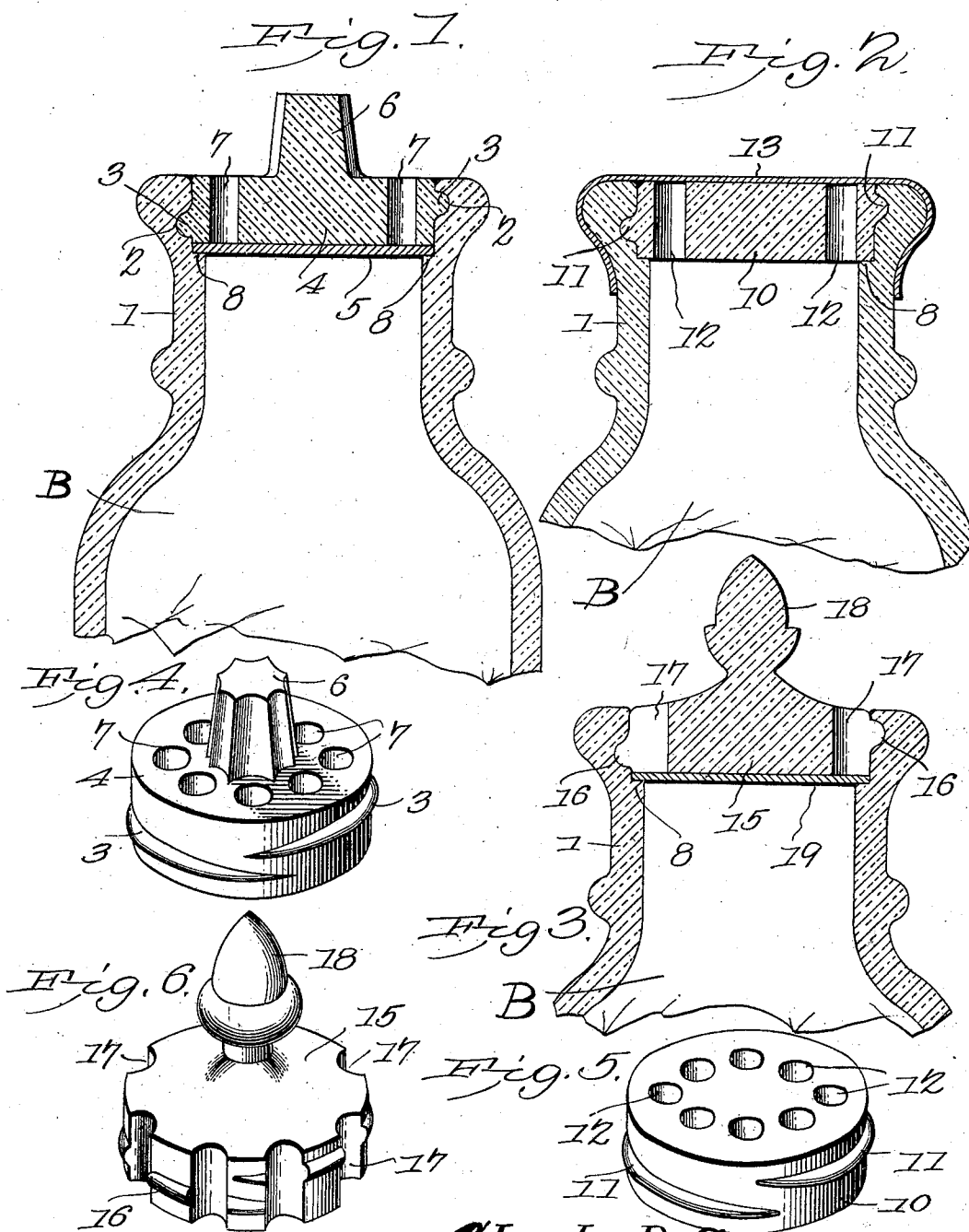
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COMBINED STOPPER AND SPRINKLER FOR BOTTLES.

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NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

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COMBINED STOPPER AND SPRINKLER FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 762,818, dated June 14, 1904.

Application filed October 6, 1903. Serial No. 175,972. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. GARWOOD, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented a new and useful Combined Stopper and Sprinkler for Bottles, of which the following is a specification.

This invention relates to a combined stopper and sprinkler for bottles and jars.

The object of the invention is to provide an improved stopper of glass for use with jars or bottles containing powdered materials—such as tooth-powder, face-powder, and the like—and provided with openings through which the powder contained in the jar or bottle may be readily sprinkled when it is required for use.

A common method of closing cans, boxes, bottles, and jars containing powders of the above-mentioned character is to use a cap of metal having perforations therein and secured upon or otherwise fastened to the receptacle containing the powder. Metal caps employed for this purpose are more or less objectionable, because they are usually corrodible and because they cause the condensation of moisture upon the surface thereof, which tends to dampen the powder and cause it to clog the perforations in the cap. The metal caps are also expensive and usually unsightly.

The present invention has for its object the production of a cap in which all of the objectionable features inherent in the metal caps commonly used are absent and which are thoroughly aseptic and cleanly.

In describing the invention reference will be had to the accompanying drawings, in which are illustrated several different forms of embodiment of the invention all capable of carrying the same into practical operation.

In the drawings, Figure 1 is a view in vertical section through the neck and stopper of a bottle provided with the preferred form of stopper and sprinkler. Fig. 2 is a similar view of a modified form of the invention, and Fig. 3 is a similar view of another modified form of the invention. Figs. 4, 5, and 6 are detail views of the stoppers shown in Figs. 1, 2, and 3, respectively.

Referring to the drawings, in which corre-

sponding parts are designated by similar characters of reference, B designates the bottle, provided with a neck 1 of comparatively large diameter to facilitate the passage of dry materials therethrough. In the upper portion of the neck 1 are provided two or more threads 2 for engagement with a thread 3 formed on the stopper 4. The stopper 4 consists of a disk on whose periphery the thread 3 is formed and a stem or handle 6, which is preferably fluted at its periphery and extends upward from the disk sufficiently to afford a convenient means of turning the stopper to remove it from the neck of the bottle. The disk 5 is pierced by a plurality of perforations 7, arranged in a ring about the base of the stem or handle 6 and of sufficient diameter to permit powdered materials to pass through them without clogging.

In packaging powdered materials for sale in bottles provided with stoppers of the character just described it will be necessary to provide some form of seal to prevent the escape of the powdered materials through the openings in the stopper, with resulting waste. The preferred form of seal consists of a small disk 5, of paper or other cheap impervious material of light character, which rests in the neck 1 of the bottle upon a shoulder 8, arranged therein just below the stopper 4.

In the form of the invention shown in Fig. 2 the bottle is shown as constructed in the manner above described; but the stopper 10 is unprovided with a handle and consists simply of a disk having a thread 11 and provided with perforations 12 for the escape of the materials contained in the bottle or jar. With this form of the stopper the preferred form of seal is a paper cap 13, which is pasted over the top of the bottle after the stopper has been inserted thereinto. In this form of the invention the occasion for removing the stopper at any time does not exist, as the openings are sufficiently large to insure the escape through the stopper of a sufficient quantity of the contents of the bottle, and, if desired, the stopper may be cemented into the bottle after the bottle has been filled, and the bottle will then be non-refillable.

In the form of the invention shown in Fig. 3 the bottle is of the form already described; but the stopper consists of a disk 15, provided at its periphery with thread-segments 16 and 5 intervening grooves 17 for the escape of the powdered contents of the bottle. On top of the disk there is a handle 18 of ornamental design, which projects farther above the surface of the disk than the handle in the preferred form of the invention and presents a 10 somewhat more pleasing appearance. The form of seal used with the stopper shown in Fig. 3 is a disk 19, similar to that used with the preferred form of stopper. The only objection to which this modified form of the invention is subject is that some of the powdered 15 contents in the bottle will lodge upon the stopper when the bottle is shaken to sprinkle powder therefrom, and so it will be necessary to remove the powder adherent to the stopper 20 after each use of the bottle if it is desired to preserve the attractive appearance of the package.

I am aware that previous to my invention 25 bottles and jars have been provided with perforated stoppers for various purposes, but so far as I am aware such stoppers have never been made in the form employed by me and have never been adapted for use in sprinkling 30 powdered material from bottles.

The advantages of the improved form of stopper and sprinkler over the ordinary metallic cap will be clearly seen by even a casual inspection of the drawings. The appearance 35 of the bottle provided with my improved form of stopper is much more attractive than that of one provided with the usual perforated metal cap. The stopper is more aseptic, is

less apt to become clogged by accumulation of powder in the perforations, and is much 40 cheaper to manufacture.

While I have described and shown the preferred forms of embodiment of the invention, it will be obvious that various changes in the exact structure may be resorted to without departing from the spirit of the invention or 45 sacrificing its advantages. Hence I do not desire to be limited to the exact form shown, but reserve the right to make changes within the scope of the appended claims. 50

Having thus described the construction and use of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with an internally-threaded bottle-neck having an internal shoulder below the threads, of a stopper consisting of an externally-threaded glass disk having a plurality of openings therein, and a seal of suitable material disposed across the openings 55 in said disk. 60

2. The combination with a bottle-neck having an internal shoulder and internal threads above said shoulder, of a stopper consisting of an externally-threaded glass disk having a plurality of openings therein, and a seal in the form of a disk of suitable non-porous material 65 disposed between said stopper and the internal shoulder of said bottle-neck.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 70 the presence of two witnesses.

CHARLES B. GARWOOD.

Witnesses:

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