No. 825,360.

PATENTED JULY 10, 1906.

E. STRUPAT & E. BROSIUS.

NON-REFILLABLE BOTTLE.

APPLICATION FILED JULY 22, 1905.

Fig. 1

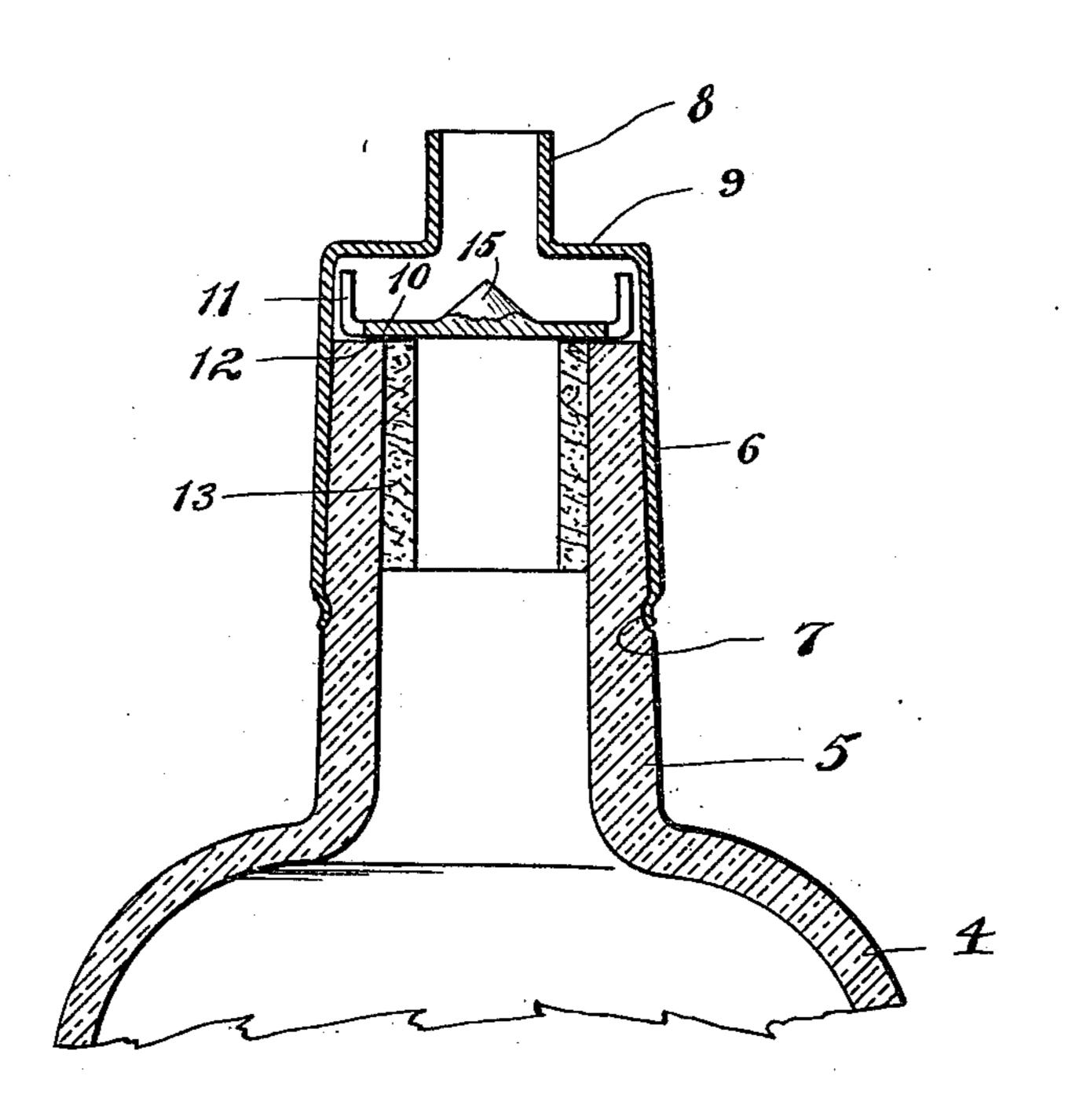


Fig. 2

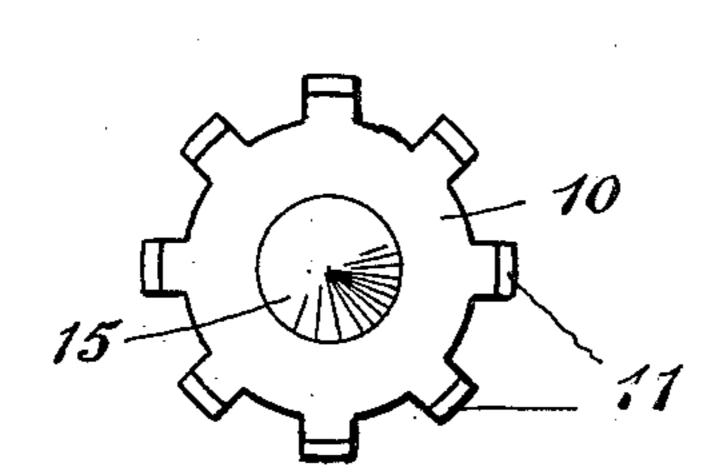
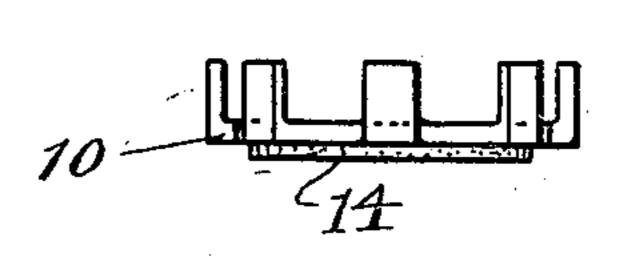


Fig. 3



Witnesses:

H. Rempath

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Wtt 4.

UNITED STATES PATENT OFFICE.

EDUARD STRUPAT AND ERNST BROSIUS, OF CHICAGO, ILLINOIS.

NON-REFILLABLE BOTTLE.

No. 825,360.

Specification of Letters Patent.

Fatented July 10, 1906.

Application filed July 22, 1905. Serial No. 270,792.

To all whom it may concern:

and Ernst Brosius, citizens of the United States, and residents of Chicago, in the 5 county of Cook and State of Illinois, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

The objects of this invention are to pro-10 vide a simple and efficient device to prevent the unauthorized refilling of a bottle after the original contents have been discharged and to provide a device of this character which will be economical in construction and readily 15 adapted to be applied to bottles of ordinary types.

It consists in the novel features and combinations, which will be described and claimed hereinafter and which are shown in 20 the accompanying drawings, in which—

Figure 1 is a sectional view showing the neck of a bottle provided with our improved device. Fig. 2 is a detail view showing the valve or closing-disk, and Fig. 3 is a 25 side view showing the same provided with a \cdot washer.

According to our invention a bottle 4 of any ordinary or preferred type having a neck 5 is provided with a cap 6, which is adapted to 30 inclose the valve or stop device. The neck 5 is preferably provided with a groove 7, into which the metallic cap 6 is pressed or turned, so that the cap cannot be removed without breaking the neck of the bottle. The pro-35 prietor's name or trade-mark or the name of the contents of the bottle may be stamped or engraved on this cap, so that when the cap is removed the proprietor's name will not remain to designate the contents in case of an unwar-40 ranted refilling. The cap 6 is reduced at the upper end to form a discharge-tube or nozzle 8 and is provided with a shoulder or annular ring 9, which connects the cap with the tubular portion. The shoulder 9 is at a suf-45 ficient distance from the end of the bottle to | tle, of a cap secured to said neck, a shoulder allow for the insertion of the valve or clos- in said cap, a discharge-tube from said cap, a ing - disk 10 and for a certain amount of movement of said disk. The disk 10 is provided with peripheral upwardly-projecting fingers adapted to engage with said shoulder 50 fingers 11, which are adapted to engage with when the disk is raised from its seat. the shoulder 9 when the bottle is tipped to 2. A disk or valve for non-refillable bottles

Be it known that we, EDUARD STRUPAT | so proportioned that it will be impossible to reach with a wire or hook into the end of the 55 bottle to dislodge the disk 10 to allow the bottle to be refilled. The disk 10 seats upon the flat end 12 to the neck 5, and ordinarily this will form a sufficiently tight closure. However, an auxiliary tubular cork 13 may be in- 60 serted in the neck of the bottle, as shown in Fig. 1, to decrease the outlet area of the neck and to provide a better seat for the valve 10.

In the modification shown in Fig. 3 the valve or disk 10 is provided with a resilient 65 washer 14, which rests upon the neck of the

bottle when in normal position.

In order to prevent the disk or valve 10 from being drilled, we provide a conical. raised projection 15 at the center of said disk, 70 which will deflect any drill which is inserted through the tube 8 and will cause the same to be bent or broken. This projection may be formed integrally with the disk or may be made of a harder material and fastened 75 thereto.

The operation of our invention will be readily understood from the drawings and description. When the bottle is turned to pour out the contents, the valve 10 will be 80 pushed away from the end of the neck until the fingers 11 strike the shoulder 9. The liquid will then pass around the disk portion between the fingers 11 and out from the discharge-tube 8. Of course a temporary cork or 85 stopper, may be inserted in the tube 8 to hold the contents in the bottle. If it is attempted to pour liquid back into the bottle, the valve or disk 10 falls back and seats against the end of the neck and prevents the liquid 90 from entering the bottle.

Having thus described our invention, which we do not wish to limit to the exact form of construction or arrangement of parts shown and described, what we claim, and de- 95

sire to secure by Letters Patent, is— 1. The combination with the neck of a botclosing-disk engaging with the end of the 100 neck and provided with upwardly-projecting

discharge the contents to prevent the disk having projecting fingers and peripheral 105 from closing the outlet-tube 8. The parts are | notches in said disk between said finger so

that the liquid may pass through said disk

between the fingers.

3. A closing-disk or valve for non-refillable bottles having upwardly-projecting fingers around the outer periphery, and being provided with notches or openings in said disk between said fingers to allow the liquid to pass through said disk, and having a central

conical projection, as and for the purpose described.

EDUARD STRUPAT. ERNST BROSIUS.

Witnesses:

H. RENNPATH, C. B. HINEY.