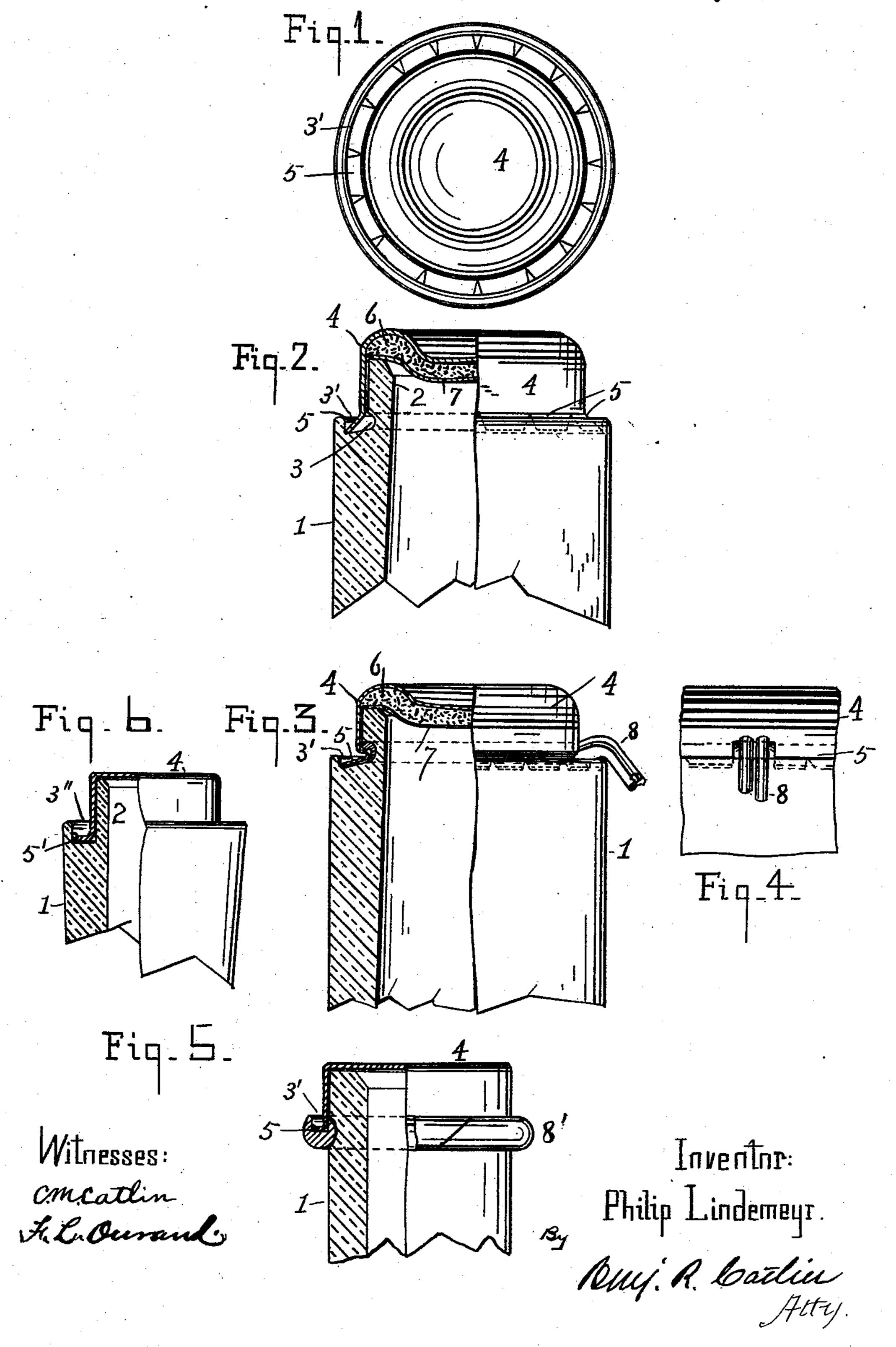
## P. LINDEMEYR. BOTTLE STOPPER.

No. 603,364.

Patented May 3, 1898.



## United States Patent Office.

PHILIP LINDEMEYR, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE MONARCH MANUFACTURING COMPANY OF BALTIMORE CITY.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 603,364, dated May 3, 1898.

Application filed December 18, 1897. Serial No. 662,501. (No model.)

To all whom it may concern:

Be it known that I, PHILIP LINDEMEYR, a resident of Baltimore, in the State of Maryland, have invented certain new and useful 5 Improvements in Bottle-Stoppers; 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 the same.

The invention relates to cap-stoppers for bottles, and has for its object to increase the economy and efficiency of such devices; and it consists in the construction hereinafter de-

scribed and pointed out.

In the accompanying drawings, Figure 1 is a plan of the cap and bottle-neck. Fig. 2 is a partial vertical section of the same. Fig. 3 is a similar view showing an additional device. Fig. 4 is a partial elevation of the same. 20 Fig. 5 is a partial section showing a modification, and Fig. 6 is a partial vertical section of another form on a reduced scale.

Numeral 1 denotes the neck of a bottle, having a portion 2 reduced in external diameter.

3 denotes a depression formed at the junction of the two parts of the neck. As shown in Figs. 2 and 3, this undercut depression has

a continuation or groove 3'.

4 denotes a metal cap fitting the reduced 30 portion of the bottle-neck and having fingers 5 crowded into the depression or seat 3 and held between its outer and inner walls, as indicated in the drawings. These fingers are indicated in Fig. 1 in considerable numbers; 35 but the number of them is immaterial.

6 denotes a wax packing, and 7 a cover for the packing, consisting, preferably, of parchment-paper. This packing and paper or any equivalent packing having been placed in the 40 cap the latter is forced onto the end of the neck, and its fingers 5 are crowded or sprung by the walls thereof and hold the cap upon the bottle-neck.

In some cases a stripping-wire 8 (see Figs.

3 and 4) is placed in the groove 3'.

In Fig. 5 a modified stripping-wire 8' is shown provided with a seat for the foot of the cap-flange and adapted to hold the cap on 50 the bottle. The bottom of the flange is

manner as when said seat or depression is formed in the glass solely. In this case it is only necessary to groove or inwardly incline the exterior of the wall of the neck sufficiently 55 to hold the wire, the latter serving to receive and hold the metal fingers or flange crowded into the seat.

Another form of bottle-neck, including a seat or depression and adapted to receive the 60 foot of the cap, is shown in Fig. 6, which form is considered preferable under most conditions. It avoids the undercut groove. Preferably the sides of the depression 3" will be approximately parallel and sufficiently deep 65 and wide to receive the foot or bottom of the cap-flange 5' when bent, substantially as shown in said figure. This flange is slitted or notched to enable it to be more easily pressed into its seat in the bottle-neck. The 70 ends of the spring-fingers formed by this slitting or notching of the cap-flange will when they are sprung into their seat in the groove bear against the outer wall of the groove, and they can be then easily sprung out of the 75

Having described my invention, I claim--1. In combination a bottle provided with a groove having a vertical wall outside the circumference of the neck, a cap having a flange 80 extended below the mouth and laterally embracing the bottle-neck on its exterior, said flange being provided with fingers sprung into the groove and having their outer ends bearing against the outer vertical wall of the 85 same and their inner ends against the opposite wall of the groove, substantially as described.

same by a stripping-wire or other means.

2. In combination a bottle provided with a groove having a vertical wall outside the cir- 90 cumference of the neck, a cap having a flange extended below the mouth and laterally eminto the depression in manner to be engaged | bracing the bottle-neck on its exterior, said flange being provided with fingers sprung into the groove and having their outer ends 95 bearing against the outer vertical wall of the same and their inner ends against the opposite wall of the groove, and a packing covering the mouth of the bottle substantially as described.

3. In combination a bottle provided with a sprung into the seat in substantially the same | groove having a vertical wall outside the cir-

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cumference of the neck, a cap having a flange extended below the mouth and laterally embracing the bottle-neck on its exterior, said flange being provided with fingers sprung into the groove and having their outer ends bearing against the outer vertical wall of the same and their inner ends against the opposite wall of the groove, said groove being formed in a wire secured to the bottle-neck, substantially as described.

4. In combination a bottle provided with a groove having a vertical wall outside the circumference of the neck, a cap having a flange extended below the mouth and laterally em-

bracing the bottle-neck on its exterior, said 15 flange being provided with fingers sprung into the groove and having their outer ends bearing against the outer vertical wall of the same and their inner ends against the opposite wall of the groove, and a stripping-wire, 20 substantially as described.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

PHILIP LINDEMEYR.

Witnesses:

FRANK D. BLACKISTONE, BENJ. R. CATLIN.