## UNITED STATES PATENT OFFICE.

LOUIS STREBEL, OF NEW YORK, N. Y.

## HEAD FOR BOTTLE-STOPPERS.

SPECIFICATION forming part of Letters Patent No. 725,505, dated April 14, 1903.

Application filed January 10, 1903. Serial No. 138,503. (No model.)

To all whom it may concern:

Be it known that I, LOUIS STREBEL, a citizen of the United States, residing in New York, borough of Bronx, and State of New York, 5 have invented certain new and useful Improvements in Heads for Bottle-Stoppers, of which the following is a specification.

This invention relates to an improved head for bottle-stoppers of that class in which a 10 stopper-carrying bail-wire and a locking-lever are connected pivotally with each other, said head permitting the quick and conven-ient assembling of the parts by the quick passing of the inwardly-bent end of the bailwire through the perforation in the head and the reliable centering of the head by the bailwire in the bottle-mouth; and for this purpose the invention consists of a head for bottle-stoppers having a rounded-off top portion 20 and a beaded shank below the same, said rounded-off top portion being provided with a diametrical perforation having conical outwardly-flaring ends, as will be fully described hereinafter and finally pointed out in the 25 claims.

In the accompanying drawings, Figure 1 is a front elevation of a bottle-stopper with my improved head. Fig. 2 is a side view of the head shown as detached from the bottle with 30 the bail-wire in position thereon. Fig. 3 is a vertical longitudinal section of Fig. 2. Fig. 4 is a similar section of the stopper-head, showing the bail-wire in the act of being passed through the perforation in the stopper-head; and Figs. 5 and 6 are respectively a side elevation and a vertical transverse section on line 6 6, Fig. 4, of the stopper-head.

Similar letters of reference indicate corre-

Referring to the drawings, a represents the head of a bottle-stopper of the well-known "lightning" type, and b the U-shaped bailwire which is passed through a diametrical perforation o in the head of the stopper and connected by its inwardly-bent ends b' with the eyes of a locking-lever C, pivoted to the neck-band or neck-wire d on the bottle-neck. The head a is provided at its lower part with a shank a', having a bead at its lower end for

upper portion of the head a is made of rounded-off or hemispherical shape, while its diametrical hole o is made circular at the point where the vertical transverse center plane of 55 the stopper-head intersects with the hole o and provided with outwardly-flaring conical portions o', that extend from the central circular portion through the head of the stopper, as shown clearly in Figs. 4 and 5. The out- 60 wardly-flaring portions o' of the hole o produce elongated oval-shaped openings and a slightly-convex bottom at both ends of the diametrical opening, the convex bottom serving, in connection with the circular center 65 portion of the perforation, to produce the proper centering of the bail-wire, so as to hold the stopper-head centrally on the bottle-mouth, while the outwardly-flaring portions o' of the perforation o permit the easy 70 insertion and quick passing of the inwardlybent end b' of the bail-wire through the head when assembling the parts of the stopper, as shown in dotted and full lines in Fig. 4. By the conical outwardly-flaring ends of the per- 75 foration o the inwardly-bent end of the bailwire can be readily passed through the head without weakening the top portion of the same. The stopper-head is preferably made of porcelain, the rounded-off surfaces at both 80 sides of the bail-wire permitting the printing of the firm-name, trade-mark, &c., on the sides of the head where the printed matter is not subjected to wear, which is not the case with the flat-top porcelain stopper-heads here-85. tofore in use, the printed tops of which are rapidly worn out by use.

My improved stopper-head is adapted for use with bottles having the well-known lightning stoppers or with bottles which are 90 filled with carbonated beverages in any of the approved bottle-filling machines, the improved head imparting a very neat and finished appearance to the stoppers, which are used for fermented or carbonated beverages 95 of all kinds.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The head a is provided at its lower part with a shank a', having a bead at its lower end for a beaded shank and a rounded-off top porattaching the rubber packing e thereto. The tion having a diametrical perforation, circu-

lar in shape at the center of the head and outwardly flaring at the ends, substantially as set forth:

2. A head for bottle-stoppers, provided with 5 a beaded shank, and a rounded-off top portion, said top portion having a diametrical perforation circular in shape at the center and outwardly flaring at the ends, the bottom of the diametrical perforation being slightly

convex from the center toward the ends, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

LOUIS STREBEL.

Witnesses:

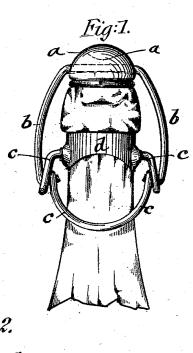
PAUL GOEPEL, HENRY J. SUHRBIER.

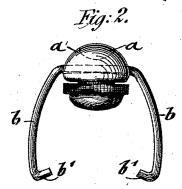
## L. STREBEL.

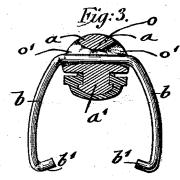
## HEAD FOR BOTTLE STOPPERS.

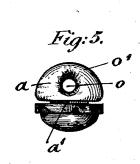
APPLICATION FILED JAN. 10, 1903.

NO MODEL.









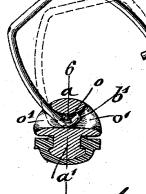
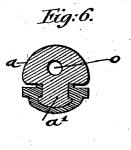


Fig:4.



Witnesses C.P. Goepet. Henry J. Suhshier

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