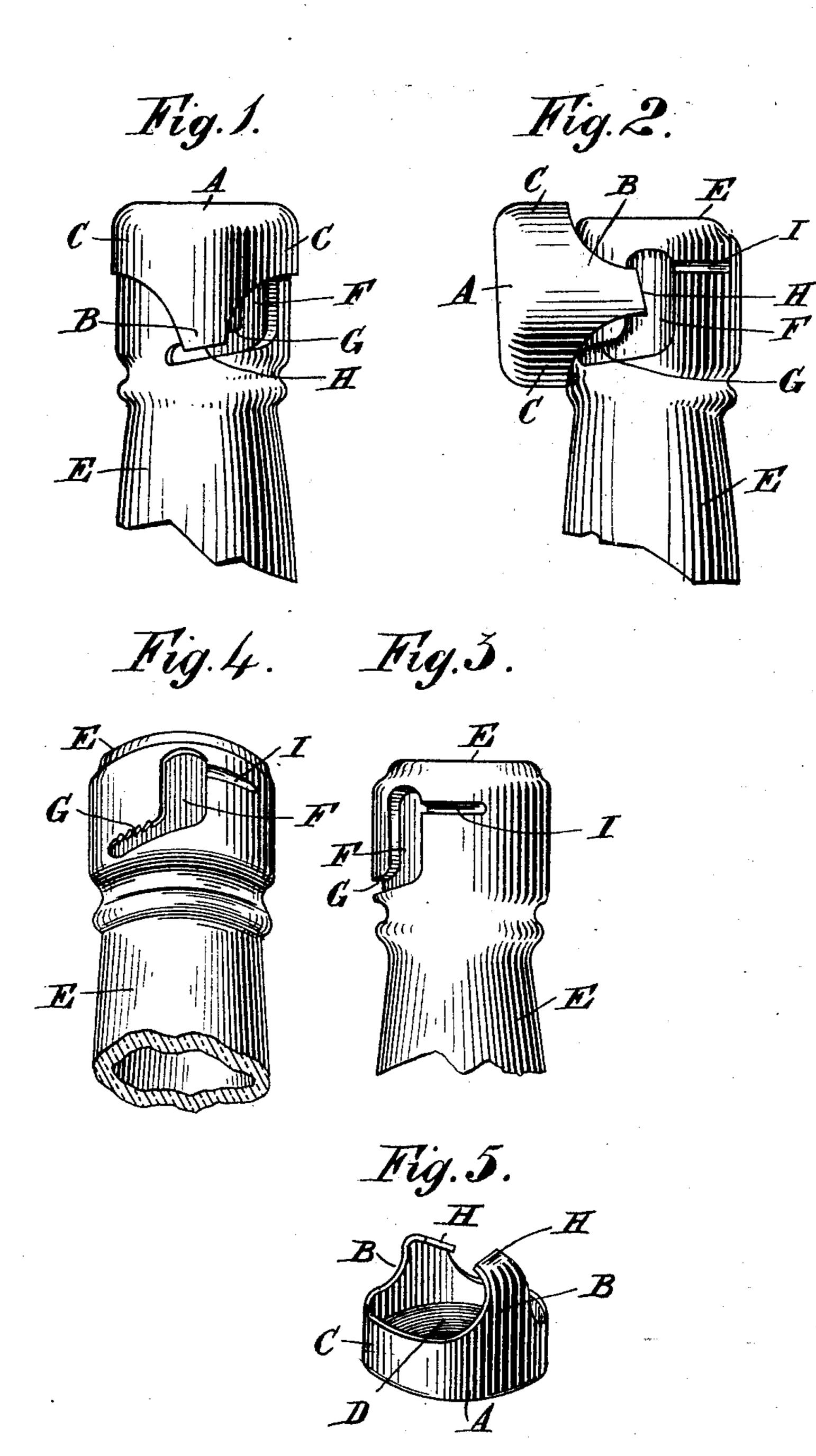
L. GROTE.

CAP OR STOPPER FOR BOTTLES OR OTHER RECEPTACLES.

(Application filed Sept. 5, 1902.)

(No Model.)



Witnesses ENLOGEREC. EThos Loftus

UNITED STATES PATENT OFFICE.

LUDWIG GROTE, OF TOTTENHAM, ENGLAND.

CAPOR STOPPER FOR BOTTLES OR OTHER RECEPTACLES.

SPECIFICATION forming part of Letters Patent No. 714,892, dated December 2, 1902.

Application filed September 5, 1902. Serial No. 122,220. (No model.)

To all whom it may concern:

Be it known that I, LUDWIG GROTE, a subject of the Emperor of Germany, residing at 6 Garrick Villas, Mount Pleasant road, Tottenham, Middlesex, England, have invented certain new and useful Improvements in Caps or Stoppers for Bottles or other Receptacles, of which the following is a specification.

This invention relates to caps or stoppers to for bottles and other receptacles, and has for its object to provide a cap or stopper which is secured to the neck of the bottle in the simplest manner and in such a way that when removed from the mouth of the bottle it shall yet be connected to the neck, so that its accidental removal is precluded. The same cap or stopper may thereby be continuously used, it being only necessary to have the parts rinsed or cleansed after the removal, for example, of a cork washer fixed within the cap or stopper before the refilling of the bottle is effected.

The invention contemplates the provision of the cap or stopper with downwardly-protruding arms which engage with bayonet-slots formed upon the top of the bottle-neck, the arrangement being such that the cap or stopper may be removed from the mouth of the neck and placed perpendicular thereto. While then placed upon the mouth of the bottle and rotated the extremities of the downwardly-projecting arms engage with the inclined or spiral parts of the bayonet-slots, which may be serrated, so as to bring the cap or stopper firmly down upon the edge of the bottle.

My invention will be clearly understood by reference to the annexed drawings, in which—Figure 1 is an elevation of a portion of a bottle-neck with the stopper or cap in position and the bottle-mouth closed. Fig. 2 is an elevation of a portion of a bottle-neck with the cap or stopper released and the bottle-mouth open, the cap or stopper still being connected to the bottle. Fig. 3 is a different view of a bottle-neck to show the slot for allowing of removal of the cap or stopper. Fig. 4 is a perspective elevation of a bottle-neck to show the serrations on the inclined wall of the bayonet-slot. Fig. 5 is a perspective ele-

In carrying the invention into effect in the provision of a cap or stopper for a bottle I

stamp the cap or stopper A, Fig. 5, from tin or other sheet metal, the cap being provided with downwardly-projecting arms B. The 55 lower edge C of the cap or stopper and the arms B preferably have substantially circular formation to conform with the curvature of the neck of the bottle when it is placed in position transversely to the axis of the neck. 60 Within the crown of the cap I insert a washer D, of cork or other suitable material, upon which the top of the neck may embed itself. I form in the outside of the head E of the bottle bayonet-slots F, oppositely disposed and 65 having the upper edge G of their inclined parts preferably roughened, serrated, or provided with a number of teeth (see Fig. 4) for engaging with oppositely-angled inwardlyturned extremities H of the arms B of the 70 cap, so that when the latter is turned the inclination of the edge of the slot will cause it to be firmly pressed against the top of the bottle, and the roughening serrations of teeth thereon will serve to retain the cap A in po- 75 sition until it is forcibly turned around for removal.

At the top of one of the bayonet-slots F a groove I is provided, through which the extremity of one of the arms B of the cap may 80 be sprung out when it is desired to remove the cap A from the bottle; but it will be understood that when the cap A is removed from the mouth, as in Fig. 2, it is securely retained upon the bottle-neck, and its accidental loss 85 or displacement is precluded.

It will be understood that it is contemplated to form the bayonet-slots at the top of the neck of the bottle and molded in the glass; but instead of this the top may be conveniently provided with a separate collar provided with bayonet-slots for fixture upon the neck by suitable means.

What I claim, and desire to secure by Letters Patent, is—

1. The combination with a cap or stopper of sheet metal having a lower edge and downwardly-projecting arms of a substantially circular formation and inwardly-turned extremities, and a washer of cork or like material within said lower edge, of a bottle or like receptacle having its head provided externally with a pair of oppositely-disposed bayonet-slots having inclined lower portions which

engage with said inwardly-turned extremities to fasten the cap or stopper, and a groove at the top of one of the bayonet-slots through which one of said extremities may be sprung 5 out for detaching the cap or stopper, sub-

stantially as hereinbefore specified.

2. The combination of a sheet-metal cap or stopper having a lower edge and downwardlyprojecting arms of a substantially circular 10 formation and inwardly-turned extremities constructed with opposite angles, a washer of cork or like material within said lower edge, and a bottle or like receptacle having its i

head provided externally with a pair of oppositely-disposed bayonet-slots having in- 15 clined lower portions the upper edges of which are roughened or serrated to interlock with said extremities of the cap or stopper, substantially as hereinbefore specified.

In testimony whereof I have hereunto set 20 my hand in presence of two subscribing wit-

nesses.

LUDWIG GROTE.

Witnesses:

PERCY E. MATTOCKS, H. MAYKELS.