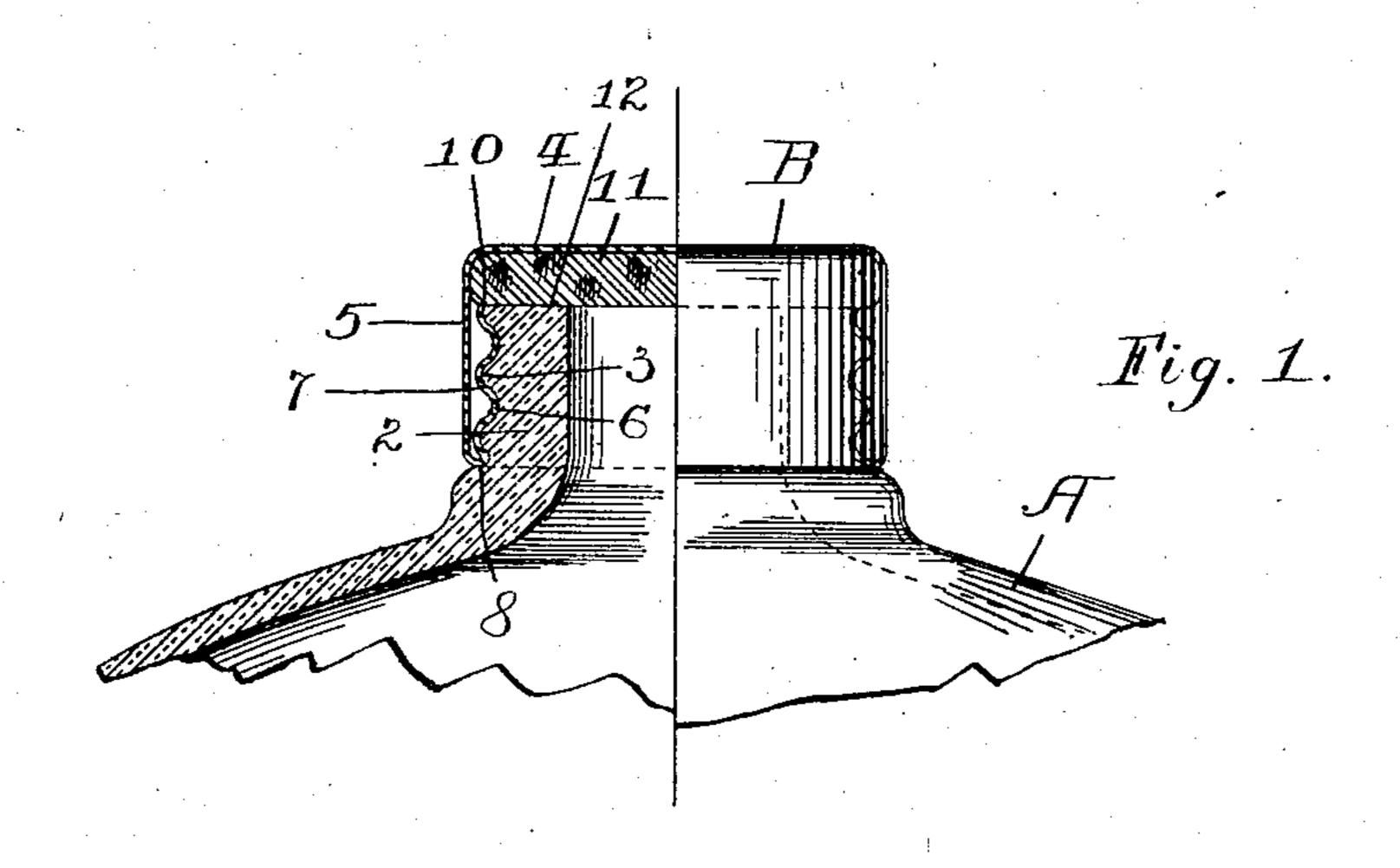
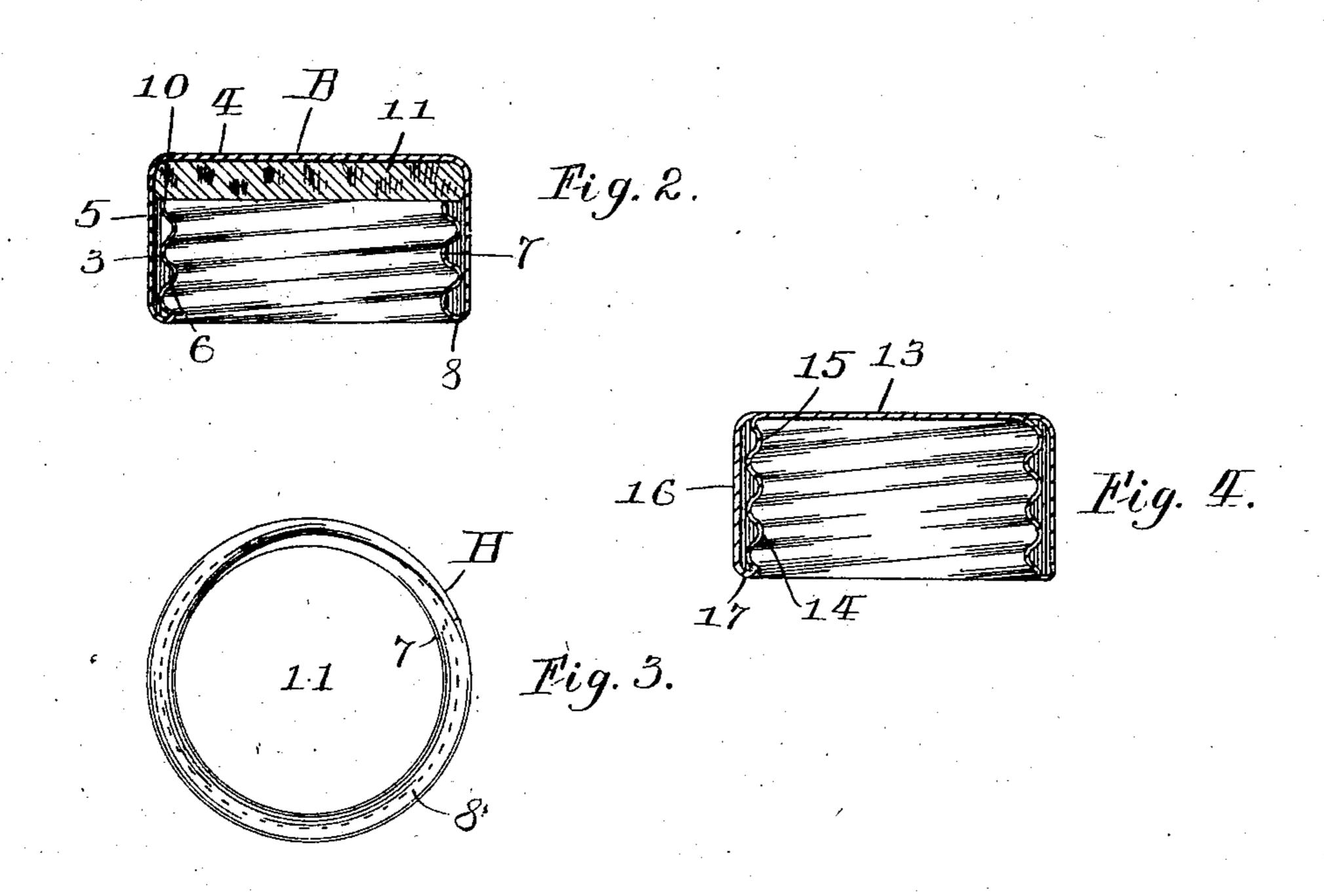
A. J. KEMPIEN. BOTTLE STOPPER. APPLICATION FILED AUG. 7, 1902.

NO MODEL.





Witnesses: 6.M. Bresch L. L. Thanwald.

Inrention:

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United States Patent Office.

AUGUST J. KEMPIEN, OF ST. PAUL, MINNESOTA.

SPECIFICATION forming part of Letters Patent No. 725,970, dated April 21, 1903.

Application filed August 7, 1902. Serial No. 118,690. (No model.)

To all whom it may concern:

Be it known that I, AUGUST J. KEMPIEN, a citizen of the United States of America, and a resident of St. Paul, in the county of Ram-5 sey and State of Minnesota, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

My invention relates to improvements in 10 stoppers for bottles and other receptacles, and has for its object cheapness of construction and effectiveness in use.

Afurther object is to provide a stopper free

from outer corrugation.

To these ends my invention consists, primarily, of a cap having a threaded inner shell

and a casing inclosing said shell.

In the accompanying drawings, forming part of this specification, Figure 1 is a side 20 elevation, partly in section, of a bottle having my improved stopper thereon. Fig. 2 is a vertical section of my improved stopper. Fig. 3 is a plan view looking toward the lower end of the stopper, and Fig. 4 is a vertical 25 section of an alternate construction of the stopper.

In the drawings let A represent a receptacle, which for convenience in illustrating my invention is a bottle having the neck 2, which ing a washer 11, of cork or other suitable ma-

30 is exteriorly threaded at 3 to receive my improved stopper B. This stopper is preferably constructed of thin resilient non-corrosive sheet metal, such as aluminium or other suitable material, which is formed either by press-35 ing or spinning into a cap comprising the crown 4, the depending circular flange 5, forming an outer shell, an inner collar threaded at 7, and a shoulder 8 between said flange and collar. The collar 6, as shown, projects 40 deep into the capsule formed by the crown and flange, sufficient room being left for hold-

terial, between its inner edge 10 and the neck 2. By screwing the stopper tight upon the 45 neck of the bottle a close joint is formed, by

means of the spring engagement, between the threads on the stopper and neck, also between the washer 11 and the end 12 of the neck. The casing formed by the crown and flange which incloses the threaded inner portion 50

presents a plain outer surface.

In the alternate construction the crown 13 of the stopper is formed with the circular flange 14, which is threaded at 15 to engage the threads on the neck of the bottle. The end 16 55 of the flange (not threaded) is curved back at 17 to meet the base 13, as shown in the drawings. The end 16 thus forms a circular casing, which incloses the threads 15, and, like the preferred construction, presents a plain outer 60 surface covering the threads of the stopper.

Having described my invention, what I claim as new, and desire to protect by Letters

Patent, is—

1. A bottle-stopper, consisting of a capsule 65 having its flange turned back, forming a plain outer surface and a threaded inner surface, for the purpose of screwing onto the threaded neck of the bottle.

2. A bottle-stopper, consisting of a cap 70 made of a single piece of metal and formed with a threaded inner shell, and a washer between the end of said shell and the crown of said cap.

3. A bottle-stopper, consisting of a capsule 75 made of a single piece of material having a plain outer surface and provided with a

threaded inner shell.

4. A bottle-stopper, consisting of a capsule formed with a threaded flange, the end of 80 which is turned back and incloses said threads, and a spring connection between said flange and the crown of said capsule.

In testimony whereof I have signed my name to this specification in the presence of 85

two subscribing witnesses.

AUGUST J. KEMPIEN.

Witnesses:

E. M. Boesel, F. G. BRADBURY.