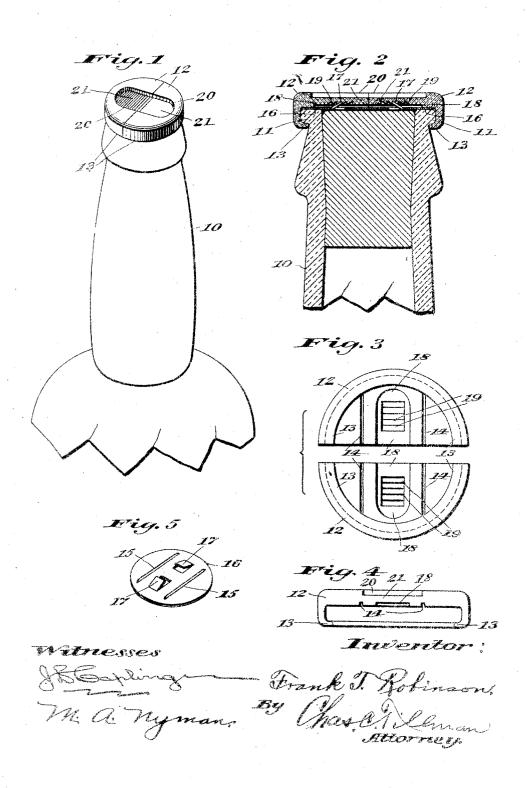
F. T. ROBINSON.

COMBINED METALLIC AND FRANGIBLE CAP FOR BOTTLES.

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UNITED STATES PATENT OFFICE.

FRANK T. ROBINSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO TWIN BOTTLE-CAP COMPANY.

COMBINED METALLIC AND FRANGIBLE CAP FOR BOTTLES.

No. 882.912.

Specification of Letters Patent.

Patented March 24, 1908.

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To all whom it may concern:

Be it known that I, FRANK T. ROBINSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of 5 Illinois, have invented certain new and useful Improvements in Combined Metallic and Frangible Caps for Bottles, of which the fol-

lowing is a specification.

This invention has relation to improve-16 ments in a closure for bottles and the like of the same type and for the same purposes, or for attaining the same objects, as the invention disclosed in a companion application Serial Number 354,505 for improvements in 15 combined metallic and frangible caps for bottles, for which I have executed an application of even date herewith, and it consists in certain peculiarities of the construction, novel arrangement, and operation of 20 the parts thereof, as will be hereinafter more fully set forth and specifically claimed.

As in the application above-referred to, the principal object of the invention is to provide simple and efficient means for the 25 closure of bottles and analogous vessels and for more securely retaining the corks or stoppers in bottles or other vessels, which may be readily applied to the mouth of the bottle or vessel without the use of an instrument, 30 and easily detached or removed therefrom.

In the accompanying drawing, which serves to illustrate the invention—Figure 1 is a perspective view of a portion of a bottle, showing a cap embodying my invention ap-35 plied thereto. Fig. 2 is an enlarged central vertical sectional view through the cap and neck of the bottle. Fig. 3 is an enlarged bottom plan view of the semi-circular members of the cap, showing them spaced apart. Fig. 40 4 is an inner edge view of one of said members; and Fig. 5 is a detached perspective view of the metallic guiding and holding disk.

Like numerals of reference, refer to corresponding parts throughout the different

views of the drawing.

In the present instance I have shown my improved cap applied to the neck 10 of a bottle, which, as usual, is provided with an annular bead 11 around its mouth or free end 50 for engagement with the two semi-circular members 12 of the cap, which are preferably made of porcelain, but may be formed of other suitable frangible material. Each of these members has its outer edge downturned and bent inwardly as at 13, to engage and underlie the bead 11 on the neck of the bottle l

or vessel, when moved towards each other. so as to cause their meeting edges, which, as shown in Figs. 1 and 3, are straight, to meet or be approximated. Each of the frangible 60 members 12 is formed on its lower surface with spaced apart grooves 14, located in parallelism with one another, and which grooves extend at right angles from the straight edge of each of the members 12, outwardly, to 65 near its periphery, and are for the purpose of receiving the ribs 15, which are located in parallelism on the upper surface of the meta lie disk 16, which is of sufficient size to cover or lie on the upper portion of the 70 mouth of the bottle or vessel. The ribs 15 on the disk 16 are of sufficient length so that one of their ends may engage the pair of grooves 14 on one of the members 12, while the other ends of said ribs may engage the 75 other pair of grooves on the other frangible member, so that when said frangible members are moved towards each other they will act as guides therefor and cause them to move in alinement with one another.

Between the ribs 15 the disk 16 is formed or provided with upwardly extending and inwardly inclined projections 17, which are preferably formed integral with the disk 16 and will have a certain degree of resiliency, 85 thus normally holding them in an inclined position, as shown in Fig. 5 of the drawing. Between the grooves 14 of each of the members 12, each of said members is formed on its lower surface with a diametrically dis- 90 posed depression or recess 18, which extends from its straight edge outwardly, and the upper surface of each of said recesses is formed or provided with a series of upwardly and inwardly beveled teeth 19 to engage the 95 catches or projections 17 on the disk 16 when the frangible members 12 are moved towards each other. Each of the members 12 is formed on its upper surface with a diametrically disposed recess 20, which are pref- 100 erably located directly above and in register with the recesses 18 on the lower surfaces of said members, on which surfaces the teeth or serrations are located, thus forming quite thin horizontal partitions 21, which may be 105 the cap from the bottle. From the foregoing and by reference to the

easily broken when it is desired to remove

drawing it will be readily understood and clearly seen that by placing the disk 16 on 110 the top of the bettle or vessel 10, as shown in Fig. 2 of the drawing, the members 12 may

be placed on said disk so that the grooves 14 the lower surfaces thereof will engage the ribs 15 on the disk, when by moving the members 12 towards each other, it is apparent that the beveled teeth 19 on each of the members 12 will pass over the catches or projections 17 until the straight edges of the frangible members meet or are closely approximated, or until the downturned or in-10 wardly extended portions 13 of the members 12 engage the bead 11 of the bottle or vessel, when the catches 17 will engage the teeth 19, thereby preventing the members 12 being separated or the cap removed from the ves-15 sel without destroying the same, which may be done by means of a slight tap or stroke on the partitions 21, which, being made of frangible material and integral with the members 12, will be broken.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters-Patent, is-

1. A cap for bottles and the like, comprising a disk having on its upper surface spaced 25 apart and upwardly and inwardly inclined catches, and two frangible members each having its outer edge downturned and bent inwardly and provided on its lower surface with means to slidably engage the lisk and 30 also with teeth to engage the catches on the

2. A cap for bottles and the like, comprising a metallic disk having on its upper surface a pair of spaced apart ribs and provided 35 between said ribs with upwardly and inwardly inclined spaced apart catches, and two frangible members each having its outer edge downturned and bent inwardly and provided on its lower surface with grooves to receive the ribs on the disk and also pro- 40 vided between said grooves with teeth to en-

gage the catches on the disk.

3. A cap for bottles and the like, comprising a disk having on its upper surface a pair of spaced apart ribs located in parallelism 45 and provided between said ribs with spaced apart and upwardly and inwardly inclined catches, and two frangible members each having its outer edge downturned and bent inwardly and provided on its upper and 50 lower surfaces with depressions, the lower surfaces of each of said members having a pair of parallel grooves to receive the ribs on the disk and between said grooves teeth to engage the catches on the disk.

4. A cap for bottles and the like, comprising a metallic disk having on its upper surface a pair of spaced apart ribs located in. parallelism with one another and also provided between said ribs with upwardly and 60 inwardly inclined catches, and two frangible members each having its outer edge downturned and bent inwardly and provided on its upper and lower surfaces with diametrically disposed recesses located one above the 65 other, each of said members having on its lower surface a pair of spaced apart grooves located in parallelism with one another to receive the ribs on the disk and between said grooves a series of downwardly and out- 70 wardly inclined teeth to engage the catches

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Witnesses:

on the disk.

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