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CAP REMOVER AND COVER.

PPLICATION FILED OCT. 12, 1914.

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By Ally of Durbois. Wilnesses. SAllynn Travell Roy G. Travece: -

UNITED STATES PATENT OFFICE.

FRANK REED FISHER, OF SPRINGFIELD, ILLINOIS.

CAP-REMOVER AND COVER.

1,154,751.

Specification of Letters Patent.

Patented Sept. 28, 1915.

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To all whom it may concern:

a citizen of the United States, residing at Springfield, in the county of Sangamon and State of Illinois, have invented a new and useful Cap-Remover and Cover, of which the following is a specification.

This invention relates to means for removing from milk bottles or other receptacles the sealed caps closing the bottles or receptacles, and certifying the date of filling and the quality of the contents, each of said sealing caps being secured by a ring or equivalent device surrounding the cap and 15 the receptacle and tightly binding the cap thereon to securely seal the receptacle.

The invention contemplates that the means for releasing the cap shall, in conjunction with the cap, serve as a holder to 20 hold the released cap on the bottle or receptacle with sufficient firmness to guard against contamination and to prevent the displacement of the cover and the spilling of the contents in case of the accidental 25 overturning of the bottle or receptacle.

It will be noted here that certified seals of the kind described usually disclose the name and address of the sealer, a certificate of the quality of the contents and the tests 30 to which it has been subjected and the day or date of sealing, and it is desirable that the data disclosed on the sealing cap shall not be concealed or obscured by the cover used in conjunction with the cap.

The purposes of the invention are to provide a combined cap-remover and cover so constructed and arranged when it is placed over and surrounding the cap, downward pressure or a quick blow with the hand 10 will force the binding ring or other device downwerd, thereby releasing the cap, and the cap will fit snugly within the remover so that when it is lifted the cap will come with it; to provide a combined cap remover 5 and cover, preferably of transparent material, and so constructed and arranged that the data inscribed on the cap may be viewed through the material of the cover and remover, if it be transparent, or may be o viewed through an opening in the cover and remover if it be of opaque material; and to provide a cap remover and cover so constructed and arranged that the used cap may be easily discharged from the remover. With these ends in view, my invention

consists in the novel features of construc-

tion and combinations of parts shown in the Be it known that I, Frank Reed Fisher, annexed drawing, to which reference is hereby made, and hereinafter particularly described and finally recited in the claims. 60

Figure 1—is a top plan of a cover and remover of preferred construction in place on a bottle or jar. Fig. 2—is a vertical section on the line X. X. of Fig. 1. Fig. 3 is an enlarged partial vertical section 65 through the cover and remover, designed to illustrate the mode of use. Fig. 4—is a top plan of a cap-remover and cover of modified construction; and Fig. 5—is a vertical section on the line Y. Y. of Fig. 4.

Similar reference characters designate

like parts in the different views.

The receptacle 1, the cap 2, and the binding ring or securing device 3 may be of any suitable material and of any approved con- 75 struction. I prefer however to use caps having inscriptions 2ª indicating the day on which the receptacle was sealed and the character of its contents certified.

In receptacles of the kind described the 80 binding device 3 binds the cap 2 firmly on the receptacle so that the cap cannot be removed while the binding device remains in place.

The cap-remover 4 is preferably of glass or 85 other transparent material in the form of an inverted cup having at its lower end a bead 4^a adapted to engage on the binding ring 3 to push the ring downward as hereinafter described, and having an upper bead 90 4^b strengthening the structure. The cap-remover also has a central opening 4° serving the double purpose of displaying part or all of the inscription on the cap and permitting the insertion of the thumb of the user, or 95 any suitable instrument, for discharging the cap from the remover as hereinafter described.

In the practical use of the appliance, the cap 2 having been previously placed on the 100 receptacle 1 and secured thereon by the securing device 3, the remover 4 will be placed above and around the cap in the position indicated by full lines in Fig. 3. The remover will then be pressed downward, or driven 105 downward by a quick blow of the hand, to the position indicated by dotted lines, and the downward movement of the remover will cause the ring or securing device to move downward and be withdrawn from the lower 110 part of the cap with which it was previously in contact, thereby releasing the cap; and

the same downward movement will cause the inner wall of the remover to engage on the outer surface of the cap, so that when the remover is lifted the cap adhering to the re-5 mover will be raised thereby and removed from the receptacle, and the remover and cap together will constitute a cover which may be placed on or removed from the receptacle at pleasure, while the contents of 10 the receptacle is being used.

When the cover is no longer needed, the cap may be discharged from the remover merely by inserting the thumb, or a suitable instrument, in the opening in the remover 15 and pressing against the top of the cap to force the cap out of the remover, and the remover may again be used as often as de-

sired, in conjunction with caps on other receptacles.

The remover of modified construction will now be described. The remover 4' is preferably of tin, but aluminum or other suitable opaque material may be used. The lower edge 4a' is shaped to engage on the securing 25 device 3' and is sufficiently rigid to prevent springing. The opening 4° is adapted to expose the inscription 2a' on the cap, and to facilitate the discharge of the cap as already described. The mode of use of the remover 30 of modified form is similar to the mode of use of the remover of preferred form.

The remover of the preferred form being transparent, exposes to view inscriptions occupying the entire upper surface of the cap. 35 The modified remover being opaque, exposes only so much of the inscription on the cap as may be visible through the opening in the

remover.

Desiring to avail myself of all equivalent constructions, I do not restrict my claims to 20 removers of the circular form shown and described, since it is obvious that polygonal removers 4' may be used in conjunction with polygonal receptacles 1', or receptacles having polygonal necks, caps and securing de- 45 vices, without departure from my invention. Neither do I restrict my claims to transparent removers, since it is obvious that opaque removers may be used within the scope of my invention.

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

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Letters Patent is:

1. The combination of a receptacle, a cap fitting on the receptacle, a securing device 55 securing the cap on the receptacle, and a cup-shaped remover adapted to surround and slide on the cap and adapted to disengage the securing device from the cap.

2. The combination of a receptacle, a cap 60 fitting on the receptacle, a securing device securing the cap on the receptacle, and a cup-shaped remover adapted to disengage the securing device from the cap and also adapted to engage with the cap to keep the 65 cap in the remover; the cap and the remover together serving as a removable cover for the receptacle.

In witness whereof I have hereunto signed my name at Springfield, Illinois, this 10

6th day of October, 1914.

FRANK REED FISHER.

Witnesses:

Joseph S. Thompson, CHARLES MULELE.