

(No Model.)

F. W. RUSSELL.

MEANS FOR WITHDRAWING CORKS OR BUNGS FROM BOTTLES, CASKS, &c.

No. 273,897.

Patented Mar. 13, 1883.

Fig. 1.

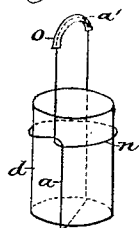


Fig. 2.

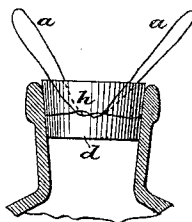


Fig. 3.

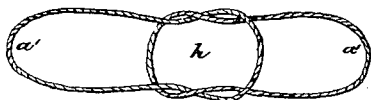


Fig. 4.

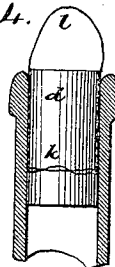


Fig. 5.

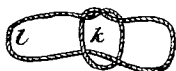
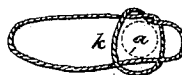


Fig. 6.



Attest:

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# UNITED STATES PATENT OFFICE.

FREDERICK W. RUSSELL, OF LONDON, ENGLAND.

MEANS FOR WITHDRAWING CORKS OR BUNGS FROM BOTTLES, CASKS, &c.

SPECIFICATION forming part of Letters Patent No. 273,897, dated March 13, 1883.

Application filed December 27, 1882. (No model.) Patented in England February 8, 1881, No. 541.

To all whom it may concern:

Beit known that I, FREDERICK W. RUSSELL, a subject of the Queen of England, residing in the city of London, England, have invented certain new and useful Improvements in Means for Withdrawing Corks or Bungs from Bottles, Casks, or other Vessels, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The invention relates to improved means for withdrawing or extracting corks or bungs from bottles, jars, casks, and such like vessels, the said means being combined with the cork or bung, so as to be always in readiness for the withdrawal of the same without the necessity of employing a corkscrew or equivalent device, it being one object of the invention to produce a cork or bung of this class which shall be especially adapted for use in ink, mucilage, and other analogous bottles and receptacles, where it is necessary to frequently remove and restore the cork or stopper while using the contents of the bottle or receptacle. This is accomplished in the present invention by the employment of a cord, wire, or tape inserted in place in the act of corking, and passing either around or beneath, and around the cork or bung, and between it and the sides of the mouth or bung-hole of the bottle, jar, cask, or other vessel, at two or more opposite sides of the cork or bung, a bight or loop of the cord, tape, or wire being allowed to project for the purpose of being seized in order to lift out or withdraw the cork or bung.

One great advantage of the present invention is that the corks are not damaged in the act of withdrawal, and are consequently adapted to be again used. Moreover, the bottles retain their ordinary appearance, and can be sealed and capsuled as usual without the capsule being interfered with or spoiled in appearance.

The extractor may be a cord, string, tape, wire, or catgut, but when used for vessels containing liquids I have found, after much experiment, that to avoid cutting into the cork and occasioning leakage, it is preferable to employ a cord made of flax, which material possesses the necessary strength with pliability,

lies flat when in place, and does not cut the cork.

The extractor may be applied in various ways, as shown in the accompanying drawings, in which—

Figure 1 is an elevation of a cork or bung provided with an extractor embodying the present invention in one of its forms. Fig. 2 is a vertical section of the neck of a bottle, showing the cork provided with a modified form of the extractor inserted in position. Fig. 3 is a diagram illustrating the extractor of Fig. 2. Fig. 4 is a view similar to Fig. 2, but showing still another form of the extractor; and Figs. 5 and 6 are diagrams illustrating the extractor of Fig. 4.

In said drawings, *d* represents a cork or bung of the usual shape, and composed of any of the materials commonly employed for such purposes. This cork or bung is provided with an extractor, *a*, of twine, tape, wire, or other suitable material, which passes, around the lower end of the cork or bung, and extends a short distance above its upper end, forming a loop or bight, *a'*, through which the user can pass one or more of his fingers in the act of extracting the cork. It will be seen that by reason of the extracting-cord passing around the lower end of the cork, all liability of the latter's being pulled apart or otherwise broken is avoided, no matter how weak the material of which it is composed. In order to prevent the extracting-cord from falling off the cork or bung when the latter is removed from the mouth of the bottle or the bung-hole, a retaining-band *n*, is provided, which encircles the cork or bung at a point near its upper end and engages with the extractor, so as to hold it in position. The band *n* is formed by making the extracting-cord of sufficient length to permit one of its strands to be doubled upon itself and passed around the cork, as shown in Fig. 1.

The cord or wire of which the extractor is composed, is of such small size that the pressure against the mouth of the bottle or the sides of the bung-hole will embed it in the body of the cork or bung to such an extent that it will not interfere with the tightness of the joint.

A cork provided with an extractor of this character can readily be inserted in the mouth of an ordinary bottle, and can easily be removed and reinserted as often as may be required while using the contents of the bottle.

As already stated the cord or wire of which the extractor is formed is of small size, which fact renders the finger of the user liable to be cut in withdrawing the cork or bung. To prevent this the bight *a'* may be wrapped, as shown at *o* in Fig. 1, with a piece of thin sheet-lead or other soft flexible material, which will so enlarge the cord or wire at that point as to avoid all danger of cutting. In the structure shown in Fig. 2, two endless pieces of cord, *a*, are inserted, one within the other, to form a noose or slip at *h*, (see Fig. 3,) which encircles the cork or bung on which it is tightened by pulling on the two bights *a' a'*. These bights, when the cork is driven in the bottle, project therefrom at opposite sides, and may be doubled down flat and waxed or capsuled, so that the bottle will retain its ordinary appearance and yet be provided with the means of extracting the cork, which are not visible. Fig. 4 shows a similar arrangement, in which one endless piece of cord is simply twisted once on itself and formed into a loop at *k*, (see Fig. 5,) in which the cork *d* is inserted. The bight *l* is then pulled tight, (see Fig. 6,) causing the loop *k* to close firmly on the cork. The bight

*l*, when the cork is inserted, is led up between the cork and the bottle and projects at top. In all the arrangements the bight for withdrawing the cork may be laid flat and the bottle waxed or capsuled as usual.

What I claim is—

1. The combination, with the cork or bung *d*, of the extracting-cord *a*, arranged to pass around the circumference of the cork or bung and form a bight, *a'*, above the same, substantially as described.

2. The combination, with the cork or bung *d*, of the extracting-cord *a*, arranged to pass around the former and form a bight, *a'*, above the same, said bight being provided with a wrapping, *o*, substantially as described.

3. The combination, with the cork or bung *d*, of the extracting-cord *a*, arranged to pass around the bottom and the circumference of said cork or bung and form a bight, *a'*, above the same, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

F. W. RUSSELL.

Witnesses:

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