

No. 787,309.

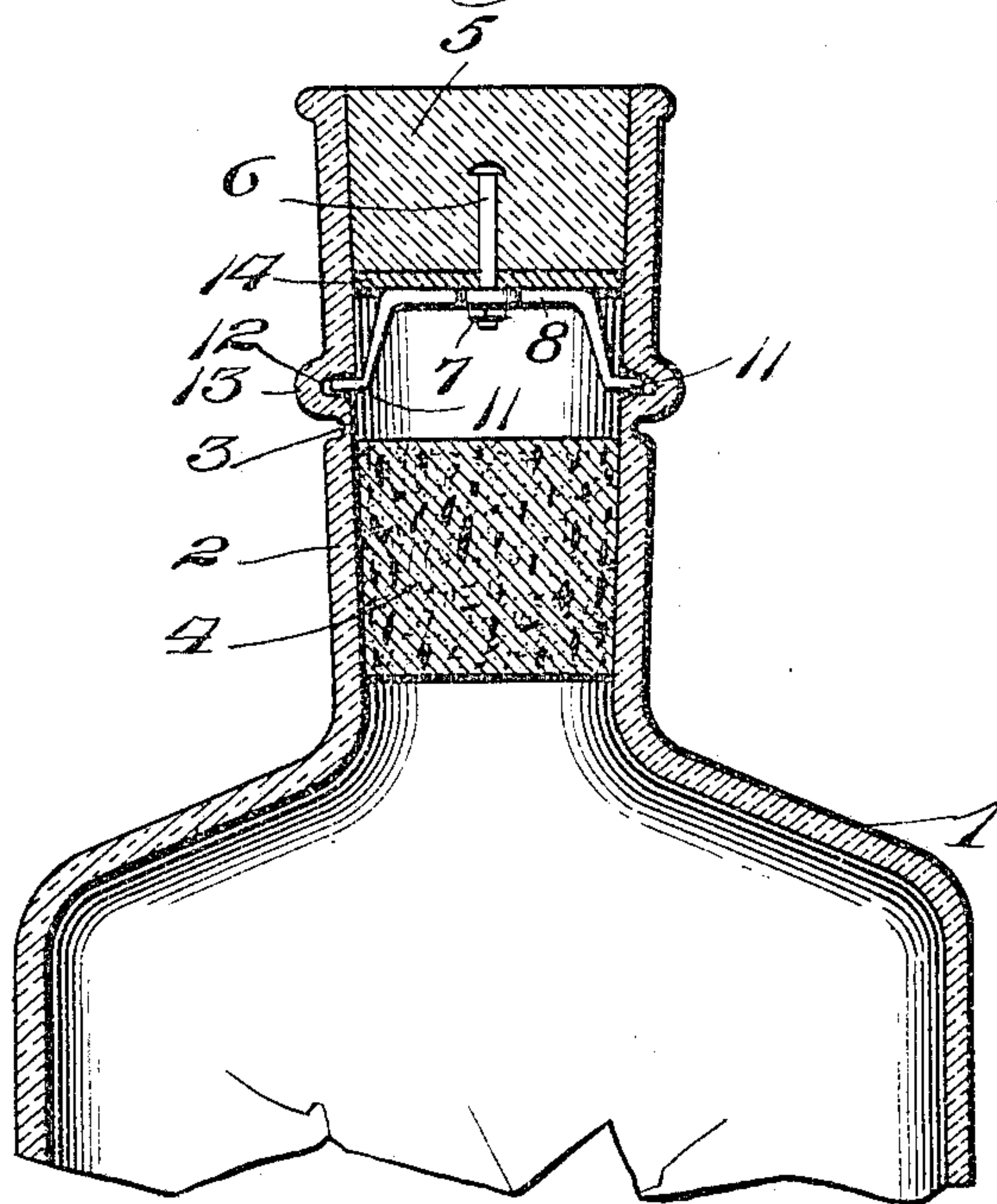
PATENTED APR. 11, 1905.

T. W. RUSSELL.

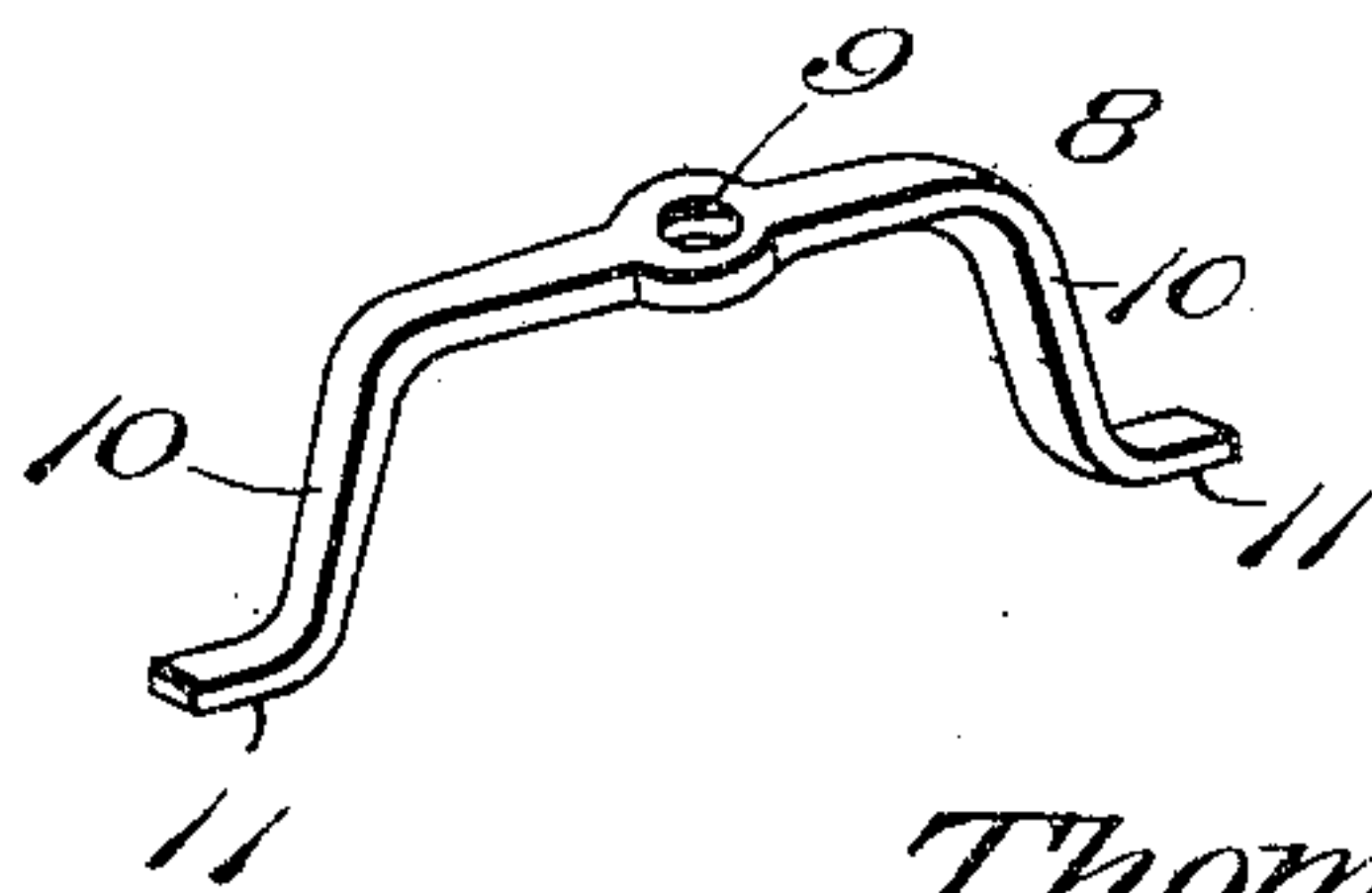
BOTTLE.

APPLICATION FILED JULY 8, 1904.

*Fig 1.*



*Fig 2*



Inventor

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Witnesses

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# UNITED STATES PATENT OFFICE.

THOMAS W. RUSSELL, OF STORRS, MONTANA.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 787,309, dated April 11, 1905.

Application filed July 8, 1904. Serial No. 215,768.

*To all whom it may concern:*

Be it known that I, THOMAS W. RUSSELL, a citizen of the Dominion of Canada, residing at Storrs, in the county of Gallatin and State of Montana, have invented new and useful Improvements in Bottles, of which the following is a specification.

This invention relates to bottles, the object of the invention being to provide a bottle and a stopper adapted to be used in connection therewith whereby when the stopper is properly inserted in the neck of the bottle the latter is permanently sealed and access to the contents thereof is rendered impractical, except by breaking the neck of the bottle and so mutilating and changing the appearance of the same as to reveal the fact that the original seal of the bottle has been broken, thus warning purchasers and preventing the reuse or refilling of the bottle with spurious goods.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, as herein fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a central vertical section through the neck portion of a bottle, illustrating the present invention. Fig. 2 is a detail perspective view of the catch or lock which holds the stopper in position.

Like reference-numerals designate corresponding parts in both figures of the drawings.

Referring to the drawings, 1 designates a bottle provided with a neck 2, of suitable length and made tapering lengthwise to provide a tapering bore which is largest at the outer end of the neck and which gradually decreases in size toward the inner end, where it joins the body of the bottle, as clearly shown in Fig. 1.

At a point about midway the length of the neck the latter is exteriorly grooved or weakened, as shown at 3, so that by striking the neck a sharp blow the upper portion thereof beyond the breaking-groove 3 will be detached from the remainder of the neck. Below the breaking-groove 3 the neck is of sufficient length to receive an ordinary stopper 4,

of cork, rubber, or other material, which will prevent the fragments of glass from falling into the bottle.

An outer stopper 5, of glass or other hard material, is inserted in the upper or outer portion of the neck, as shown in Fig. 1, said stopper 5 fitting the outer portion of the neck accurately. Embedded in the stopper 5 is an anchor-bolt 6, which is preferably inserted therein at the time of molding the stopper. Said bolt projects beyond the lower extremity or face of the stopper, where it is threaded to receive a nut 7, by means of which a spring-catch 8 is secured to the stopper, said catch being provided with a central opening 9 to receive the bolt 6 and being further provided with oppositely-projecting spring-arms 10, the extremities of which are turned outward, as shown at 11, to form engaging portions, which are adapted as the stopper is pressed into the neck to snap outward into engagement with notches 12, formed in the inner surface of the neck, the notched portions of the neck being reinforced or thickened, as shown at 13, to compensate for weakening the neck by the formation of the notches 12.

Between the stopper 5 and the spring-catch 9 is interposed a packing disk or washer 14, of leather, rubber, or other suitable material, said packing-washer being of slightly larger diameter than the inner end of the stopper 5, so as to bear at all times against the inner surface of the bottle-neck and form a liquid and air tight joint, and thereby effectively seal the neck.

After inserting the cork 4 the stopper 5, carrying the spring-catch 8, is inserted in the neck and pushed downward until the outer end of the stopper 5 lies flush with the outer edge of the neck. When the stopper reaches this point, the engaging portions 11 of the spring-catch 8 snap into the notches 12, and thus lock the stopper 5 against further inward movement and also prevent the withdrawal and extraction of said stopper. To get access to the contents of the bottle, a sharp blow is struck against the outer portion of the neck of the bottle, which has the effect of fracturing the neck in line with its weakest point,

which is the breaking-groove 3. The inner cork stopper 4 may then be removed by means of a corkscrew or in any other convenient manner. It will thus be seen that in getting  
5 access to the contents of the bottle a portion of the bottle-neck must necessarily be removed, thus changing or altering the original appearance of the bottle and giving notice to the purchasing public.

10 Having thus described the invention, what is claimed as new is—

1. A bottle having a tapering and inwardly-contracting bore in the neck thereof and also provided with a breaking-groove and notches,  
15 a tapered stopper of hard material inserted in the neck, a spring-catch secured to the inner end of the stopper and having engaging portions adapted to snap into said notches, and a packing-disk held between the spring-catch  
20 and the stopper, and having a diameter in ex-

cess of that of the inner end of the stopper, substantially as described.

2. A bottle having a tapering and inwardly-contracting bore in the neck thereof and also provided with a breaking-groove and a notch, 2. a correspondingly-tapered stopper of hard material inserted in the neck, a packing-disk secured to the inner end of the stopper and having a diameter in excess of the inner end of the stopper, and a catch permanently secured 3. to said stopper and extending inward beyond the packing-disk, said catch being adapted to snap into the said notch and interlock with the bottle-neck, substantially as described.

In testimony whereof I affix my signature in 3. presence of two witnesses.

THOMAS W. RUSSELL.

Witnesses:

JOHN WILLIAM DAVIS,  
ROBERT VICARS.