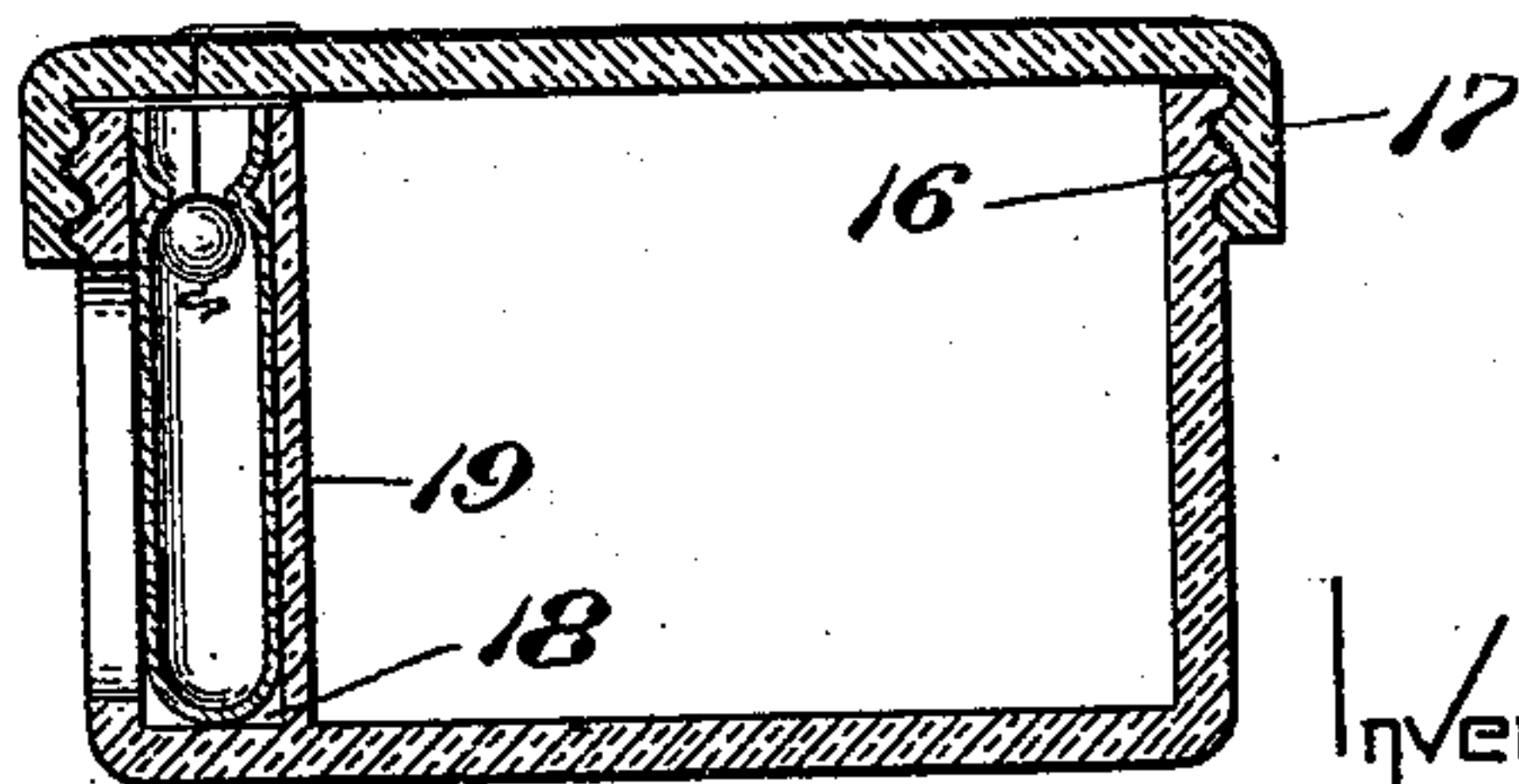
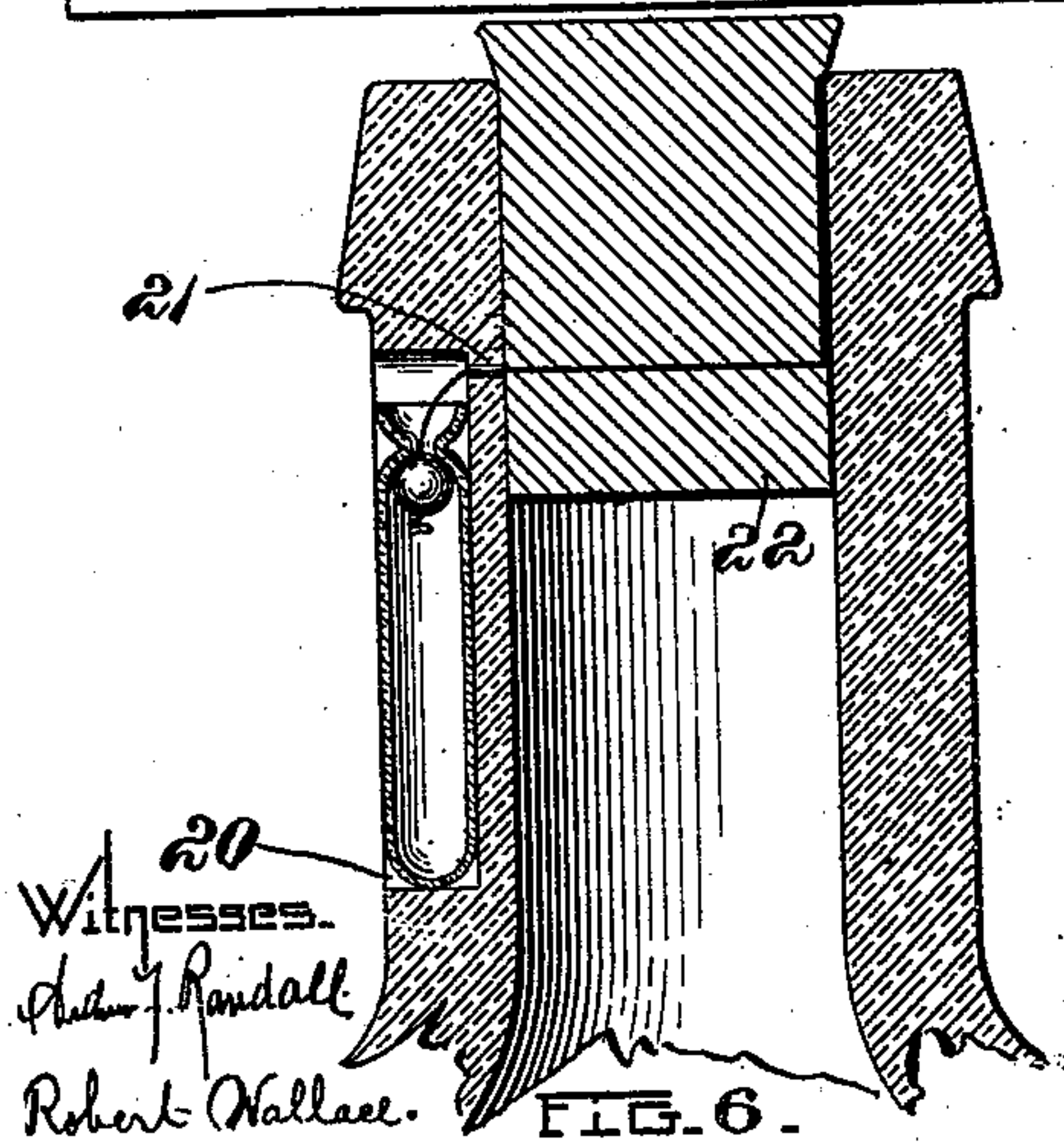
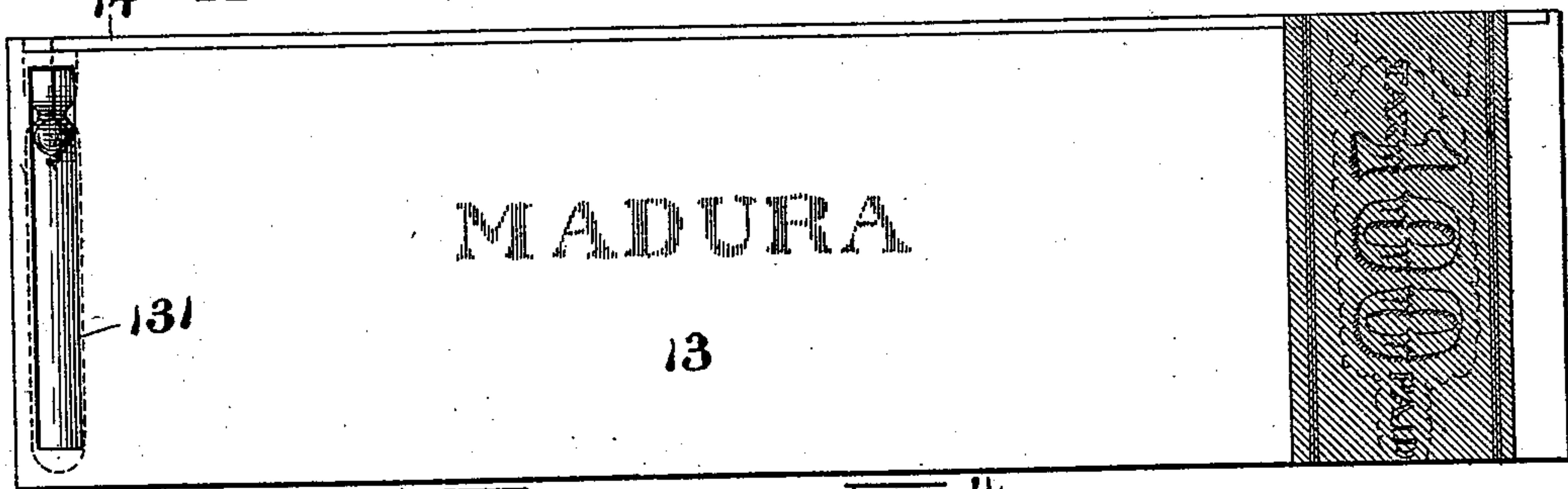
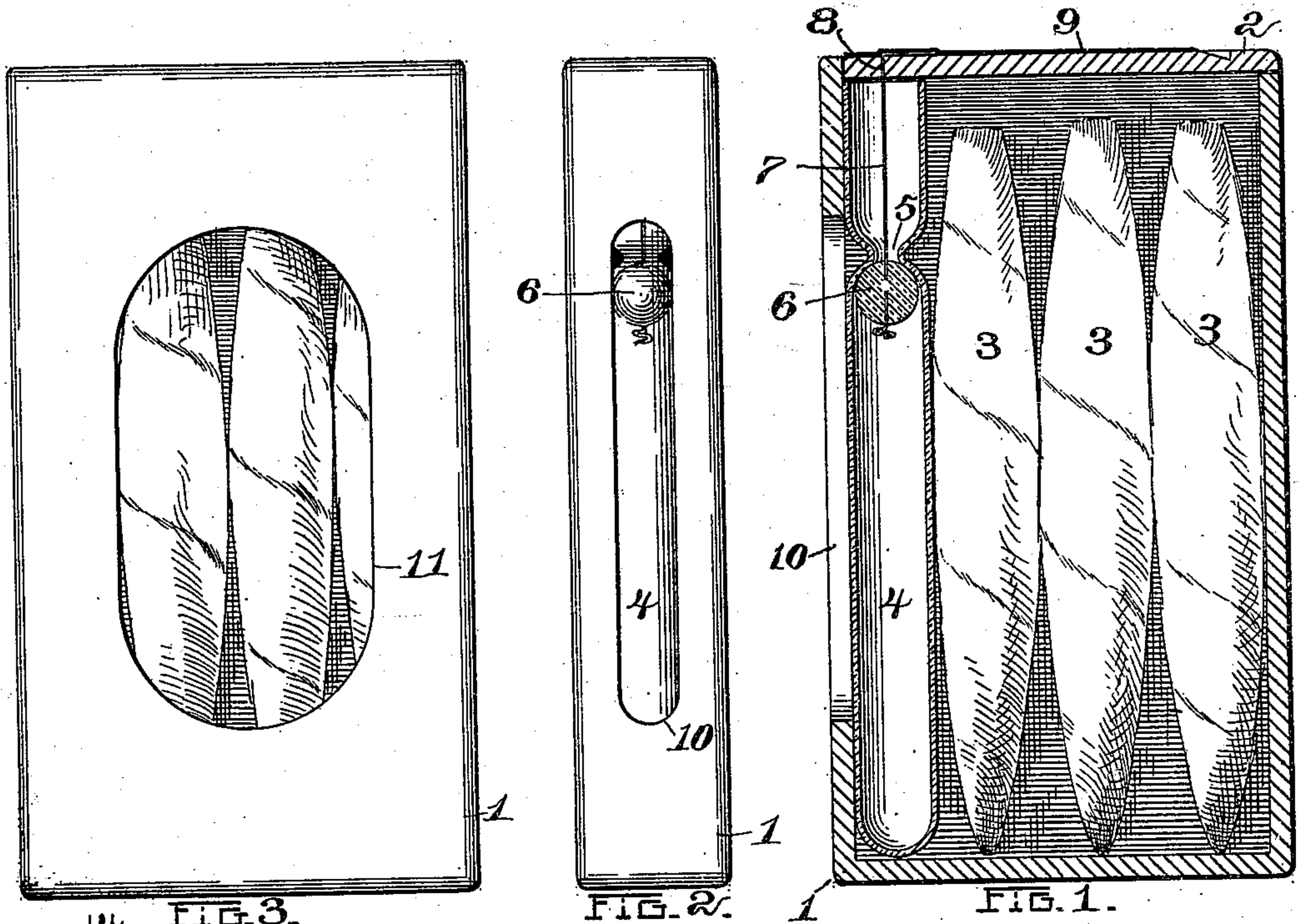


(No Model.)

W. H. & W. B. RAND.  
DETECTIVE SEAL FOR PACKAGES.

No. 547,806.

Patented Oct. 15, 1895.



Waldron H. Rand  
William B. Rand  
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# UNITED STATES PATENT OFFICE.

WALDRON H. RAND AND WILLIAM B. RAND, OF BOSTON, MASSACHUSETTS,  
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MAINE.

## DETECTIVE SEAL FOR PACKAGES.

SPECIFICATION forming part of Letters Patent No. 547,806, dated October 15, 1895.

Application filed January 9, 1895. Serial No. 534,315. (No model.)

*To all whom it may concern:*

Be it known that we, WALDRON H. RAND and WILLIAM B. RAND, citizens of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Detective Seals for Packages, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention consists in a detective device or seal of novel and improved character, which hereinafter is fully and clearly explained and afterward is particularly pointed out and distinctly defined in the claims at the close of this specification, which will serve to indicate whether or not a bottle, box, or other holder or receptacle of vendible goods or commodities has been opened since the time it was filled and sealed by the manufacturer or dealer by whom the package was made up and prepared for sale.

The object of the invention is to guard against loss to manufacturers and dealers, as well as fraud and imposition upon the public, through the dishonest practice of collecting bottles, &c., bearing the marks, labels, &c., which are employed by a particular dealer or manufacturer in connection with his wares or preparations, after such bottles, &c., have been emptied of their original contents by the purchasers thereof and refilling them with wares or preparations of different origin or quality.

In the drawings, Figure 1 shows in transverse section a package having our invention applied thereto. Fig. 2 is a view in elevation looking from the left-hand side in Fig. 1. Fig. 3 is a view in side elevation of the said package. Figs. 4, 5, and 6 show different applications of the invention.

Letters Patent of the United States were granted to us on May 22, 1894, No. 520,219, for a detective device or seal for bottles and the like. The latter invention was designed more particularly to guard against the refilling of bottles, and, as described and claimed in the said patent, it consists in the combination, with a bottle and the cork or closure thereof, of a seal connected with the said cork

or closure by an attachment which suspends the said seal in the neck or upper portion of the said bottle and which is broken or disconnected by the removal of the said cork or closure, so as thereby to allow the said seal to descend in the bottle. Our present invention is designed as an improvement upon the said invention of our prior patent and enables detective seals like those shown and described in the said patent to be applied generally to packages of vendible goods and commodities and where the device as presented in the former patent cannot be used. As presented in our former patent the seal was suspended simply in the bottle itself, and the suspensory device was connected with the closure in the neck or mouth of the bottle. This is sufficient and satisfactory where the bottle has transparent sides, enabling the seal to be seen from the exterior, and where the contents of the bottle are liquid. As will be perceived, however, as the invention is presented in the said patent it is not fitted for use in connection with bottles having opaque walls or bottles containing non-liquid substances—such as powders, pills, &c.—or boxes and the like. Our present aim is to provide for the use of a detective seal in these latter connections.

The characteristic features of our present invention are, first, an independent chamber or cell, of any suitable material or materials, which is provided in or on or applied to a holder or receptacle for goods or commodities in a manner which leaves the cell, in part at least, visible from the exterior of the holder or receptacle; second, a movable object or telltale within said cell, and, third, a holding or suspensory device, whereby the said object or telltale is given a definite position within the cell, the said holding or suspensory device being connected with the seal or closure of the holder or receptacle in such manner that the removal of the said seal or closure in opening the holder or receptacle for the first time disconnects or withdraws the said device, it being impossible thereafter to secure the movable object or telltale in the original manner.



The invention is shown in the drawings applied to the various boxes and bottles and is intended for use in a great variety of connections.

5 Having reference to Figs. 1, 2, and 3, 1 is a box having a removable lid or cover 2, and 3 3 are cigars placed within the said box, the whole constituting a package which is intended to be sold intact to a purchaser. The  
10 said box is shown as just large enough to hold three cigars, but may be made of a size suitable for holding any other desired number. The lid 2 slides into place in well-known manner, but may be made to open and close  
15 in any other way that is preferred. At 4 is shown a detective cell placed within the box, it being immovably secured in place, as by cement, and preferably consisting of a glass tube with open top, closed bottom, and con-  
20 stricted or obstructed passage 5. Any other form or character of opening of small size may be provided in said tube. At 6 is a ball within the cell, below the constriction in the upper part of the latter, it being held against  
25 or in proximity to the said constriction by a suspensory device consisting of a wire 7, the lower end of the latter passing into the open upper end of the cell through the passage 5 and also through a hole in ball 6 and having  
30 a coil or coils below the ball to prevent the withdrawal of said end until after some force has been exercised. Any other approved manner of combining the ball or other object and the holding or suspensory device may be  
35 adopted. The upper end of wire 7 is shown passed through a small hole 8 in the cover or lid 2 and a short portion thereof bent over onto the upper surface of the said cover or lid. Upon said surface a label 9 is pasted,  
40 which overlies and conceals the said hole and bent-over end of the wire. When the cover or lid is withdrawn, the upper end of wire 7 will hold fast thereto, and hence the lower end of the wire will be withdrawn from the  
45 ball, the coils below the latter straightening out under the pull upon the wire, thereby freeing the ball. A hole or opening 10 is made in the adjacent side of the box to expose the cell and its contained ball to view  
50 from the outside of the box. (See Fig. 2.) The opening 11, Fig. 3, may be formed in one of the sides of the box, if desired, to expose its contents to view.

Fig. 4 shows our invention applied to an ordinary cigar-box 13, the outer end of the wire  
55 being secured to the hinged cover 14 of said box, so that the said wire shall be withdrawn from the ball or other object in the cell when the said cover is raised in opening the box  
60 the first time. 131 is a hole in the side of the box to expose the cell to view from the exterior.

Fig. 5 shows a box or jar, of glass, molded to shape and suitable for holding salve, pills, pow-

der, and the like. The upper end of the body 65 of said box or jar is threaded exteriorly, as at 16, and 17 is a cap or cover, which is interiorly threaded to fit and screw upon said upper end of the box. 18 is a pocket, which is pro-  
70 duced within the body of the box or jar in the operation of pressing the latter by forming a wall 19, that is joined to the interior of the side and bottom of the body. In this pocket is placed a detective cell such as has  
75 been described, as clearly shown in Fig. 5, the cell being secured in place by a suitable cement. The outer end of the wire extending from the cell is passed through a hole in the cap or cover, and after the latter has been  
80 screwed down into place the free extremity of the wire is secured in some suitable manner, as by cementing a label or the like over the same. In the operation of removing the cap or cover the wire will be withdrawn from  
85 the ball or other object within the cell, as afore said. The cell and its contained ball or other object are visible through the transparent wall or shell of the body of the box or jar or through a slit in said side.

Fig. 6 shows the manner in which the inven- 90 tion may be applied to the neck of a large bottle. In this figure a pocket 20 is produced in the exterior of the bottle-neck by making an indentation in said exterior just above the  
95 shoulder, where the neck joins the body of the bottle. A hole 21 is formed through the neck. A cell, such as has been described, is placed in the pocket and cemented in place, and the end of the wire is passed through the hole 21 and connected with the cork or other closure  
100 22 of the bottle.

The foregoing examples are merely illustrative of the connections in which our invention may be used and of the manner of  
105 applying the same, and hence we do not confine ourselves to what we have shown, inasmuch as the invention may be employed in many other connections and the manner of making application thereof may be greatly  
110 varied.

A distinguishing characteristic of the present invention is the fact that the chamber or cell containing the telltale is independent  
115 of the goods-containing cavity or chamber of the package—that is, is additional to the latter.

What we claim is—

1. The combination with a receptacle or holder for vendible goods or commodities having a seal or closure, of an independent  
120 cell, a movable object within the cell, and means for holding said object in a given position within the cell, said means having connection with the seal or closure and being disconnected or withdrawn by the opening of  
125 the said seal or closure, substantially as described.

2. The combination with a receptacle or

holder for vendible goods or commodities  
having a seal or closure, of an independent  
cell with obstructed or contracted opening, a  
movable object within the cell, and a suspen-  
5 sory means for said object connected with  
said seal or closure and disconnected or with-  
drawn by the opening of the latter, substan-  
tially as described.

In testimony whereof we affix our signa-  
tures in presence of two witnesses.

WALDRON H. RAND.  
WILLIAM B. RAND.

Witnesses:

CHAS. F. RANDALL,  
WM. A. MACLEOD.