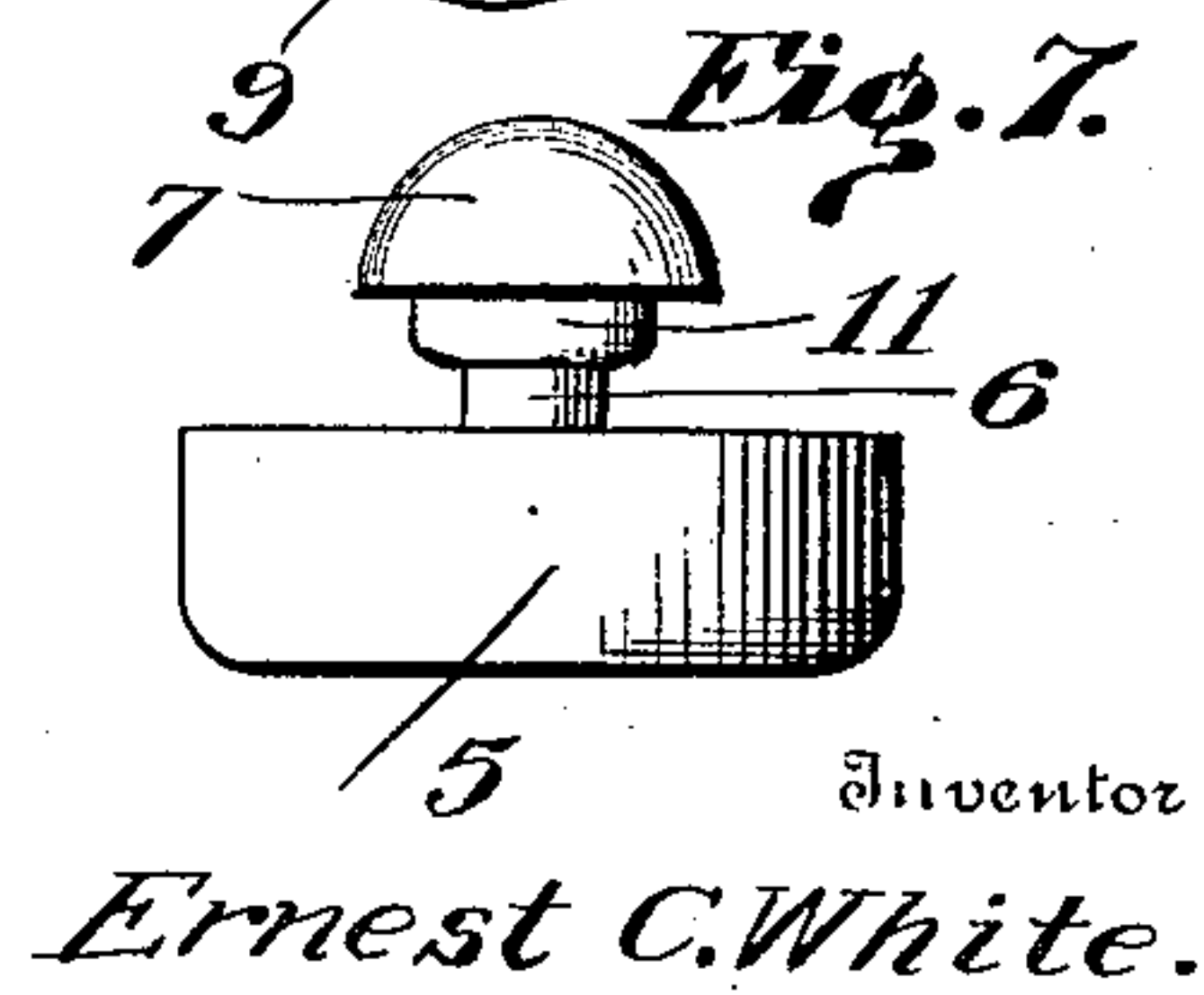
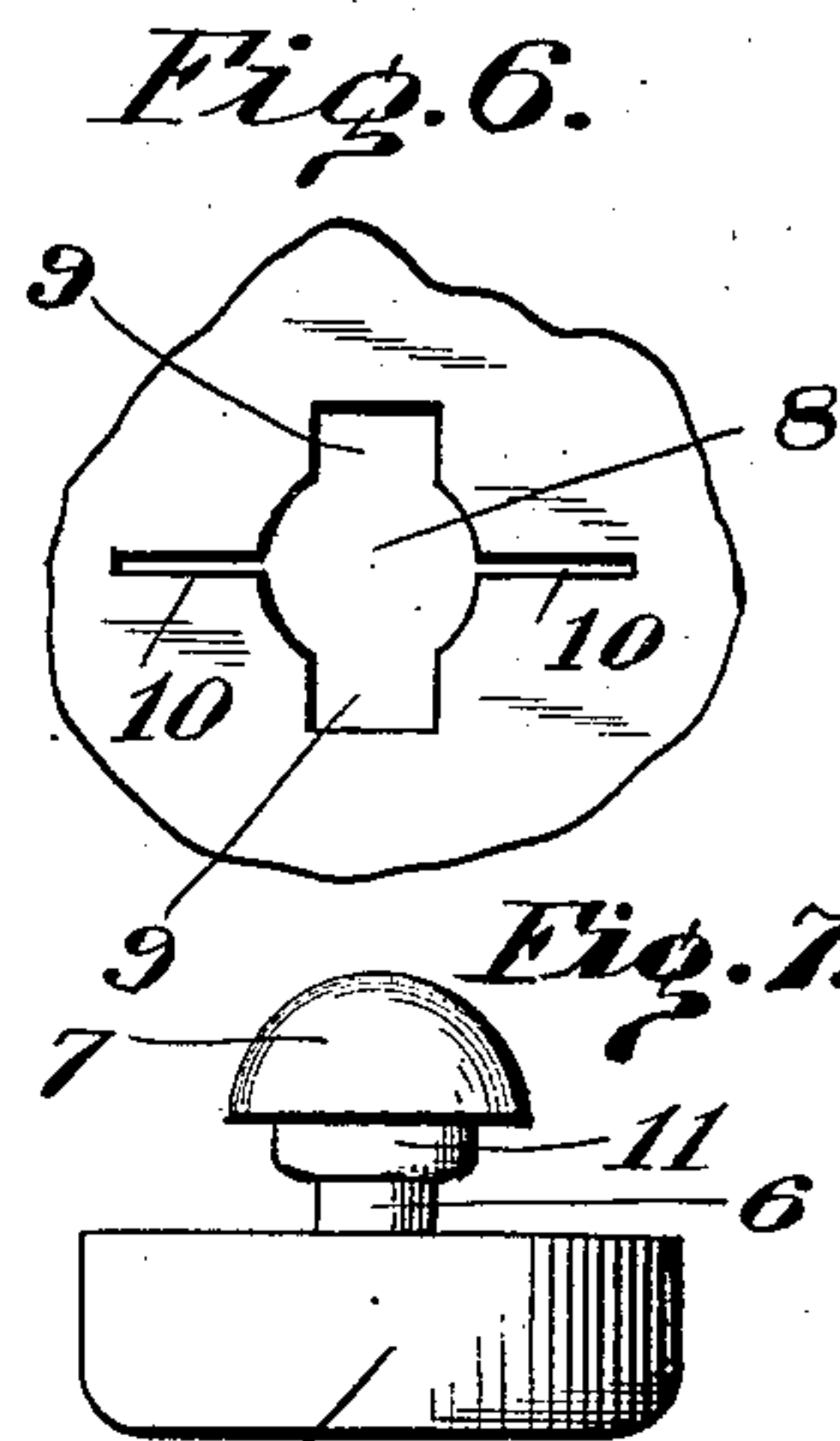
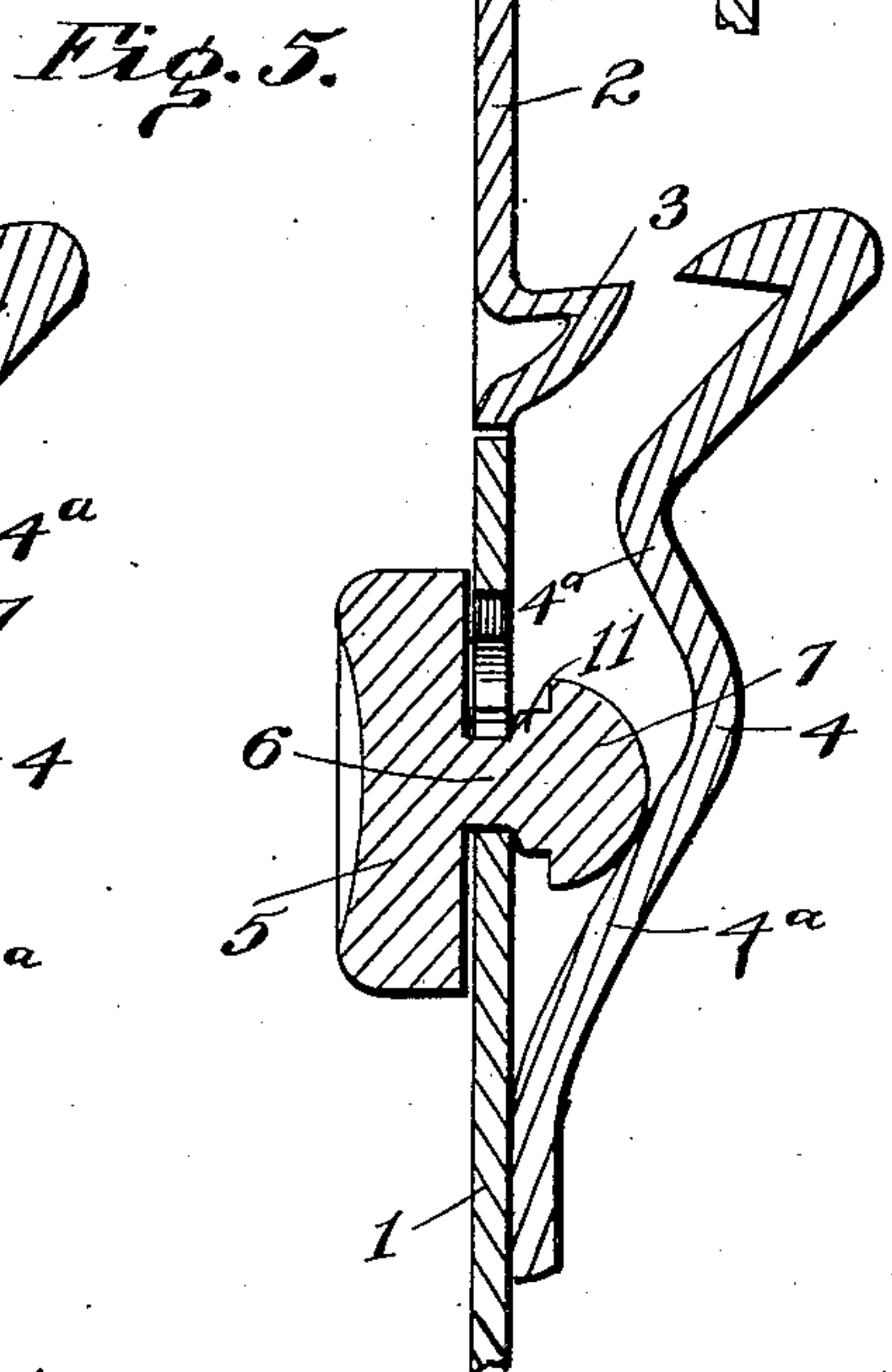
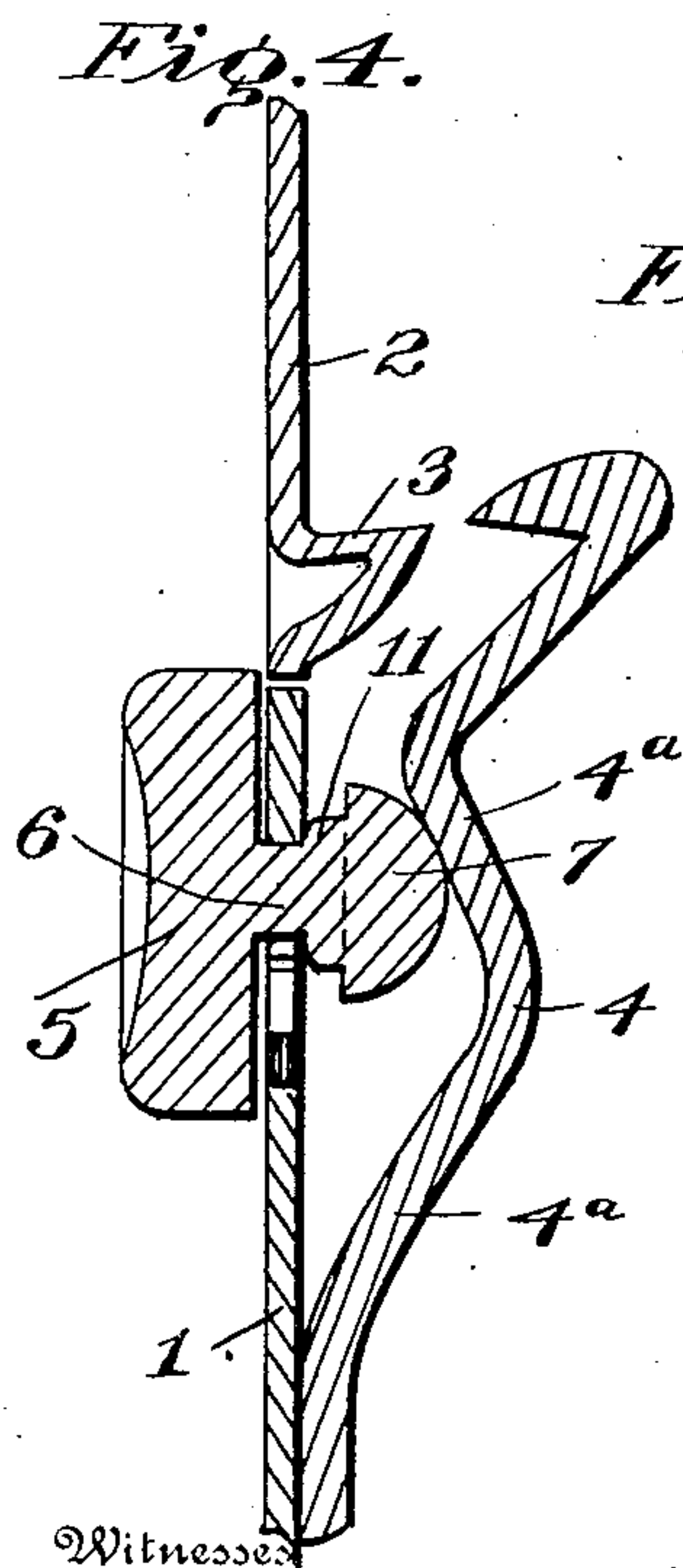
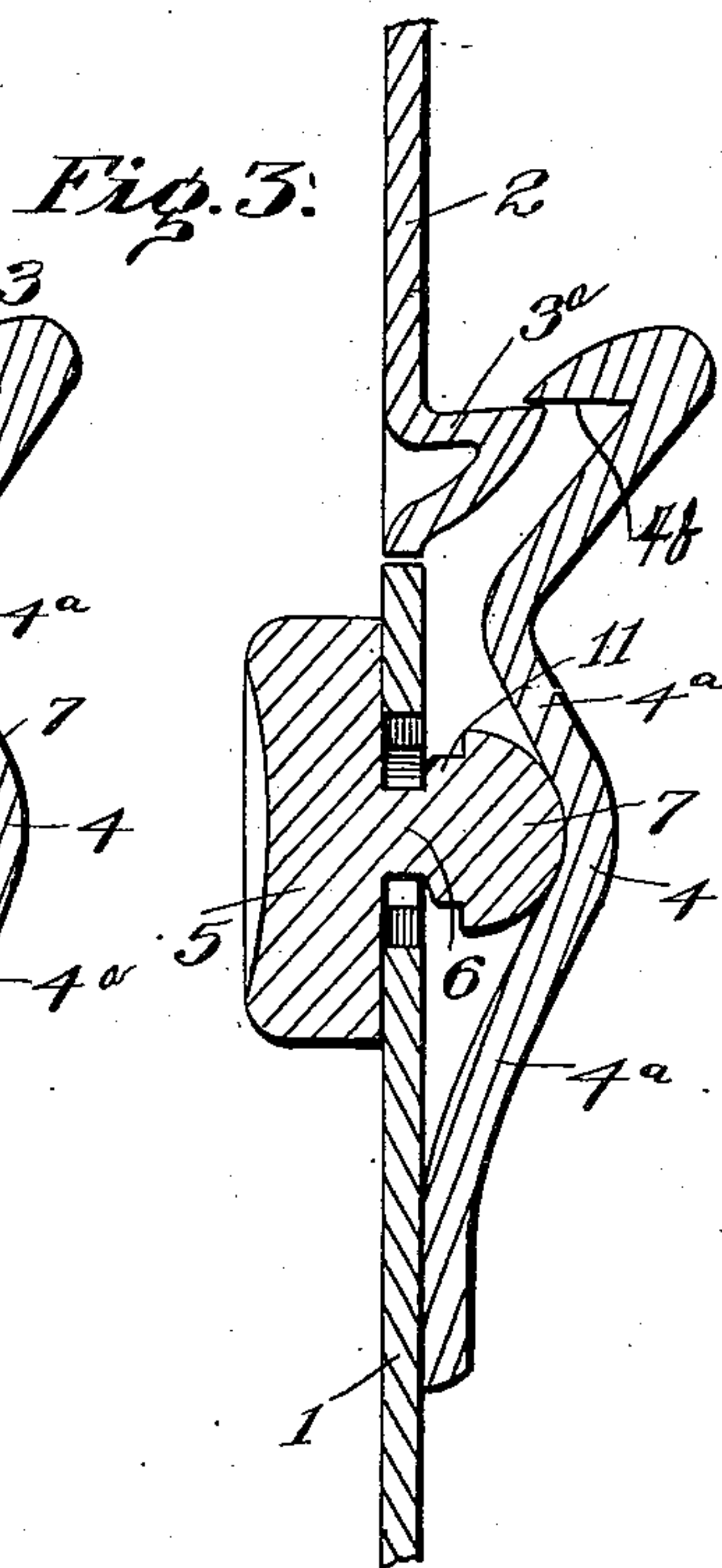
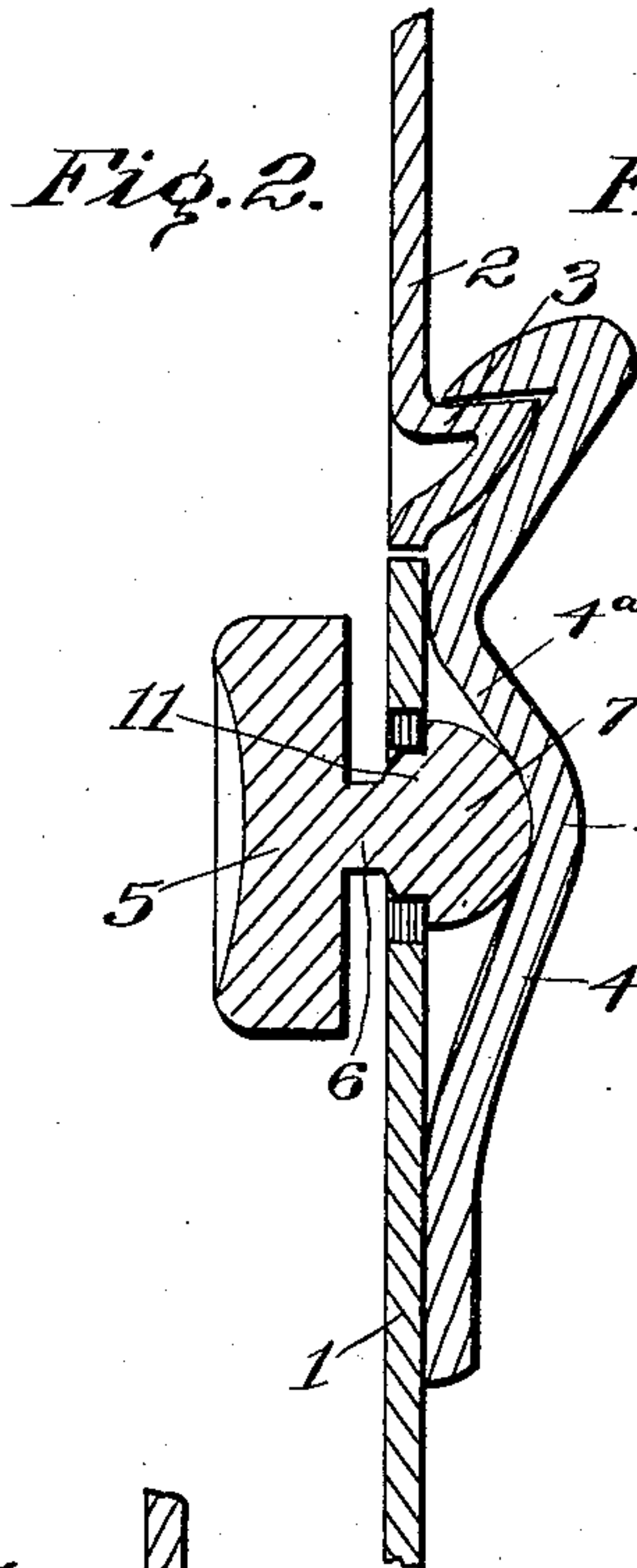
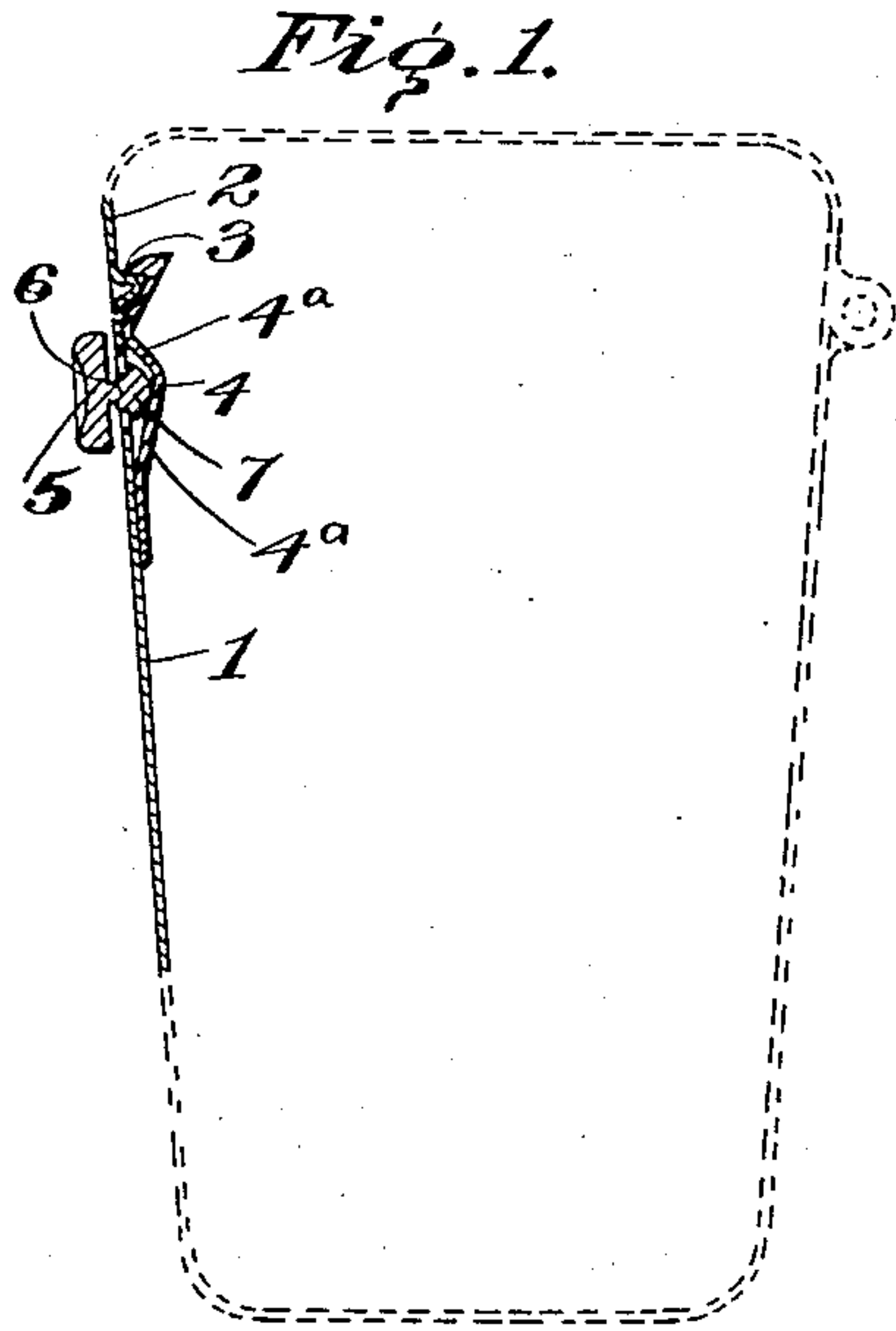


No. 832,284.

PATENTED OCT. 2, 1906.

E. C. WHITE.  
FASTENER FOR RECEPTACLES.  
APPLICATION FILED JULY 10, 1905.



Witnesses

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# UNITED STATES PATENT OFFICE.

ERNEST C. WHITE, OF LIBERTY, NEW YORK.

## FASTENER FOR RECEPTACLES.

No. 832,284.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed July 10, 1905. Serial No. 269,096.

*To all whom it may concern:*

Be it known that I, ERNEST C. WHITE, a citizen of the United States, residing at Liberty, in the county of Sullivan and State of New York, have invented certain new and useful Improvements in Fasteners for Receptacles, of which the following is a specification.

This invention embodies a novel form of locking-catch for covers of flasks, boxes, or receptacles of any kind.

The object of the invention is to provide a catch of this type affording protection against accidental disengagement thereof from the keeper with which it coöperates and operable by an unlocking device in such manner as to afford the protection above mentioned.

In carrying out the invention the unlocking device by which the catch is actuated to effect its release necessitates movement in two directions in order to effect disengagement of the catch, and for this reason likelihood of accidental release or disengagement is remote, as the combined movement of the unlocking device cannot be effected by accident, though admitting of ready performance upon manipulation thereof by the operator.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a view showing a receptacle in dotted lines, a portion of the receptacle being shown in section in full lines and the invention applied to this portion. Fig. 2 is an enlarged view showing more clearly the locking-catch and operating parts in positions assumed thereby when the receptacle is closed. Fig. 3 is a view in section similar to Fig. 2, the unlocking device having been pushed inwardly as when initially operated preparatory to disengaging the catch. Figs. 4 and 5 are similar views showing the catch disengaged by the unlocking device, the latter being at opposite limits of movement to accomplish such disengagement. Fig. 6 is a broken view in elevation showing the formation of the socket receiving the head of the unlocking device. Fig. 7 is a detail view of the unlocking device alone.

Corresponding and like parts are referred

to in the following description and indicated in all the views of the drawings by the same reference characters.

In the drawings the numeral 1 designates the body of the receptacle, and 2 the cover thereof, the latter having a suitable keeper 3, with which the catch 4 is adapted to engage. The catch 4 is provided at one end with a hook or finger 4<sup>b</sup>, which is designed to engage a shoulder 3<sup>a</sup> on the keeper to effect locking engagement between the two parts. The catch 4 is a spring-catch and is attached near one end to the receptacle 1 in any substantial way, the spring tendency of the catch being such as to normally hold the same in engagement with the keeper 3. The body of the catch 4 is curved between the ends thereof to form oppositely-extending inclined portions 4<sup>a</sup>, constituting cams virtually, the portions 4<sup>a</sup> coacting with an unlocking device 5 in the actual manipulation of the parts of the device.

The unlocking device 5 consists of a knob or button constituting a handle and from which projects a short stem 6, at the outer end of which is formed a semicircular head 7. The head 7 has its outer side in contact with the inner side of the catch 4 and longitudinal movement of the unlocking device 5 will carry the head 7 longitudinally of the catch in contact therewith, such movement causing the catch to be disengaged from the keeper 3. The unlocking device 5 is designed to remain permanently upon the receptacle, and to affix the same thereto the head 7 is passed through an opening 8 in a side of the receptacle 1, said opening having slots 9 extending therefrom at opposite points. The side of the receptacle 1 adjacent the opening 8 is formed with slits 10, which admit of springing the head 7 of the unlocking device 5 through the opening 8, said head being slightly larger than the opening. The slots 9 are formed so as to contact with the locking part on the stem 6 of the unlocking device 5, said locking part being a shoulder 11 at the inner side of the head 7. The shoulder 11 is of a diameter about equal to the diameter of the opening 8, while the stem 6 is of a width about equal to the width of the slots 9. The spring tendency of the catch 4 is such as to normally tend to hold the unlocking device 5 in the inoperative position shown in Fig. 2 or with the shoulder 11 in the opening 8, it not being adapted for slidable movement either up or



down when said shoulder 11 is in such position. When the shoulder 11 is in the opening 8, the head 7 rests at the point where the inclined portions 4<sup>a</sup> of the catch 4 meet, and when the catch 4 bears against the head 7 it normally tends to force the head into this position, as shown in Fig. 2. By pressing the handle of the unlocking device 5 inwardly or toward the catch 4, however, the shoulder 11 is displaced from the opening 8 and the unlocking device 5 may be moved upwardly or downwardly by slidable movement so that the stem 6 will be forced into either of the slots 9, according to the direction of movement. On forcing the unlocking device into a position such that the stem 6 enters one of the slots 9, it will be seen that the head 7 will ride along one of the inclined portions 4<sup>a</sup> of the catch 4 and the cam action produced in this way forces the catch out of engagement with the keeper 3, as shown most clearly in Figs. 4 and 5 of the drawings. When forced out of engagement with the keeper 3, the catch 4 readily admits of opening the receptacle 1. As soon as the unlocking device 5 is released, however, the spring-pressure of the catch 4 against the head 7 tends to force said head to the point at which the inclines 4<sup>a</sup> meet, or, in other words, the catch 4 automatically restores the unlocking device to its normal position with the shoulder 11 in the opening 8 and inoperative to actuate the catch save by forcing said unlocking device inwardly again, as described hereinbefore.

In carrying out the principles of my invention, the construction of which has been hereinbefore set forth, the hook or finger 4<sup>b</sup> of the spring-catch 4 is so proportionately related to the shoulder 3<sup>a</sup> of the keeper 3 and to the initial or inwardly-pressed movement of the unlocking device that such movement will not effect the complete release of the catch, but will merely effect a partial release thereof and will cause the catch to move only to a position where its hook or finger 4<sup>b</sup> is still in engagement with the shoulder 3<sup>a</sup> of the keeper 3. This will be best understood by reference to Figs. 2 and 3 of the accompanying drawings. In Fig. 2 it will be noticed that the catch 4 is in full engagement with the keeper and that the unlocking device is pressed by the catch so that its shoulder 11 is received in the opening 8 and is thereby held in inoperative position. Now to effect a full release of the catch it is necessary, first, to press inwardly upon the handle of the unlocking device until said knob or handle engages the adjacent wall of the receptacle which forms a lock or stop for the inward movement of the unlocking device. The position then taken by the unlocking device is shown in Fig. 3. Here it will be seen that this inward pressing of the unlocking device to effect a release of the shoulder 11 from the opening 8 has moved

the catch 4 only far enough to effect a partial disengagement between its hook or finger 4<sup>b</sup> and the shoulder 3<sup>a</sup> of the keeper 3. The cover cannot yet be raised. To effect a complete release of the locking-catch 4, the unlocking device must be slid in one direction or another while it is still in the inwardly-pressed position, as has been before described. Hence it will be noticed, first, that the latch holds the unlocking device in an inoperative position, where it is impossible to move it up or down or in any direction to effect the complete release of the catch; second, that it is first necessary to press the unlocking device inwardly to effect a partial release of the catch, and, third, that it is then necessary to move the unlocking device in still another direction to effect the complete disengagement of the catch from its keeper. It is thus to be understood that my invention provides sure means for preventing the accidental release of the locking-catch, because the combined movement necessary to effect the complete release of the catch is manifestly unlikely to be effected by accident, although its performance in actual use by proper manipulation may readily be accomplished. The locking-catch aforesaid is extremely simple in its construction and prevents all likelihood of accidental opening of the receptacle with provision for quick intentional opening under proper manipulation, the advantages of the foregoing being obvious and of no small importance. The locking-catch in its principle may of course be applied in various ways in securing parts together.

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

1. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts; constructed so that the movement of said unlocking device in one direction will effect a partial release of the catch from its keeper, and a subsequent movement of said unlocking device in another direction will effect a complete release of the catch from its keeper.

2. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts and designed to move said catch from the keeper; constructed so that an initial movement of said unlocking device will move the catch to effect a partial release of the same from its keeper, and a further movement of the unlocking device in another direction will effect the complete release of the catch from its keeper, the arrangement being such that the



second movement of the unlocking device is prevented preparatory to the first movement thereof.

3. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts and arranged to be moved inwardly against the catch to partially release the same from said keeper and to be subsequently moved in another direction against said catch to completely disengage the same from its keeper.

4. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts and in engagement with said catch, said unlocking device being arranged to have a limited inward movement against the catch to partially release the same from said keeper and arranged to be subsequently moved in another direction against said catch to completely disengage the same from said keeper.

5. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts and arranged to be moved in one direction against the catch to partially release the same from said keeper and to be further moved in another direction against said catch to completely disengage the same from said keeper, and constructed so that the engagement of the catch and unlocking device will prevent the further or subsequent movement of the unlocking device preparatory to its first movement.

6. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts in engagement with said catch and normally held thereby in an inoperative position; constructed so that a movement of said unlocking device against the catch in two different directions only will effect the release of said catch from its keeper.

7. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts and arranged to be pressed inwardly against the catch to partially release the same from said keeper and to be subsequently moved in an-

other direction against the catch to completely disengage the same from said keeper, the parts being so arranged that the last-named movement of the unlocking device is only possible while it is pressed inwardly against the catch.

8. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, a handle mounted in one of said parts and a head carried by the handle for actuating the catch, the catch having oppositely-extending inclines coacting with the said head.

9. A fastener for receptacles, combining with parts to be locked together one of said parts being provided with a keeper and the other of said parts having a catch designed for engagement with said keeper, a handle mounted in one of said parts, a head carried by the handle for actuating the catch, the catch having oppositely-extending inclines coacting with the head of the handle, the head being movable along either incline of the catch, and said handle having a locking part for holding the same normally in an inoperative position for disengaging the catch.

10. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a spring-catch designed for engagement with said keeper, a handle mounted in one of said parts, a stem projected from the handle and formed with a head engaging the catch for actuating the same, the catch having an incline to coact with the head of the handle and a locking-shoulder on the stem for normally preventing the handle from disengaging the catch when said handle is initially moved.

11. A receptacle having parts arranged to be locked together and provided on one of said parts with a keeper and in another of said parts with an opening and a slot communicating therewith, a catch secured to one of said parts and designed to engage said keeper, and an unlocking device provided with a head in engagement with said catch, with a stem fitting in said slot, with a shoulder designed to fit in said opening, and an actuating button or handle, as and for the purpose set forth.

12. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the other of said parts being provided with a catch for said keeper and an opening formed with a communicating slot, an unlocking device mounted in one of said parts and comprising an actuating-handle, a stem projected from the handle and designed to fit the said slot, a locking-shoulder on the stem said shoulder being designed to fit the said open-



ing, and a head formed on the stem and arranged for operative engagement with said catch.

13. A fastener for receptacles, combining 5 with parts to be locked together, one of said parts being provided with a keeper and another of said parts with a spring-catch for engagement with said keeper and an opening and a slot communicating with said opening, 10 an unlocking device comprising an actuating-handle, a stem designed to move in said slot, a locking part or shoulder designed to fit said opening, and a head for engagement with 15 said catch, whereby the catch will tend to press the unlocking device so that its locking part or shoulder will enter said opening, as and for the purpose set forth.

14. A fastener for receptacles, combining 20 with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a catch provided with a finger designed for engagement with said keeper, an unlocking device mounted in one of said parts and arranged to be pressed 25 inwardly against said catch to partially release the same from said keeper and to be subsequently moved in another direction against said catch to completely disengage the same from its keeper.

30 15. A fastener for receptacles, combining with parts to be locked together, one of said parts being provided with a keeper and the

other of said parts having a catch designed for engagement with said keeper, an unlocking device mounted in one of said parts and 35 arranged to be pressed inwardly against said catch to partially release the same from said keeper and to be subsequently moved in another direction against said catch to completely disengage the same from said keeper, 40 the catch being arranged to automatically return the unlocking device to its initial position.

16. A fastener for receptacles, combining 45 with parts to be locked together, one of said parts being provided with a keeper and the other of said parts having a spring-catch designed for engagement with said keeper, an unlocking device mounted in one of said parts and arranged to be pressed inwardly 50 against said spring-catch to partially release the same from said keeper and to be subsequently moved in another direction against said catch to completely disengage the same from said keeper, the catch being arranged to 55 automatically return said unlocking device to its initial position.

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

ERNEST C. WHITE. [L. S.]

Witnesses:

NIAL CURREY,  
MABEL WINNER.