

E. A. REINKE.
CATCH.
APPLICATION FILED OCT. 1, 1914.
1,160,758. Patented Nov. 16, 1915.

Fig. 1.

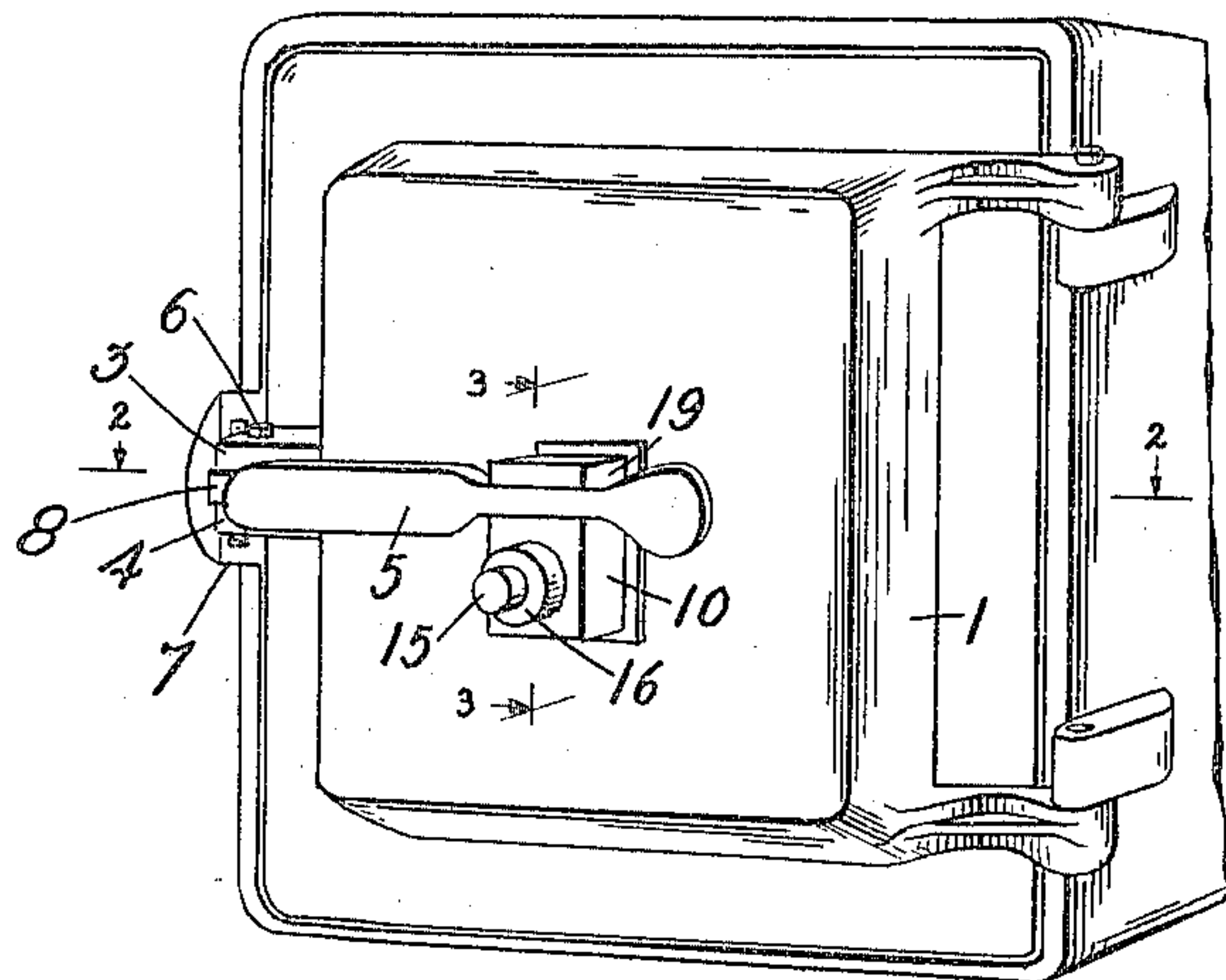


Fig. 2.

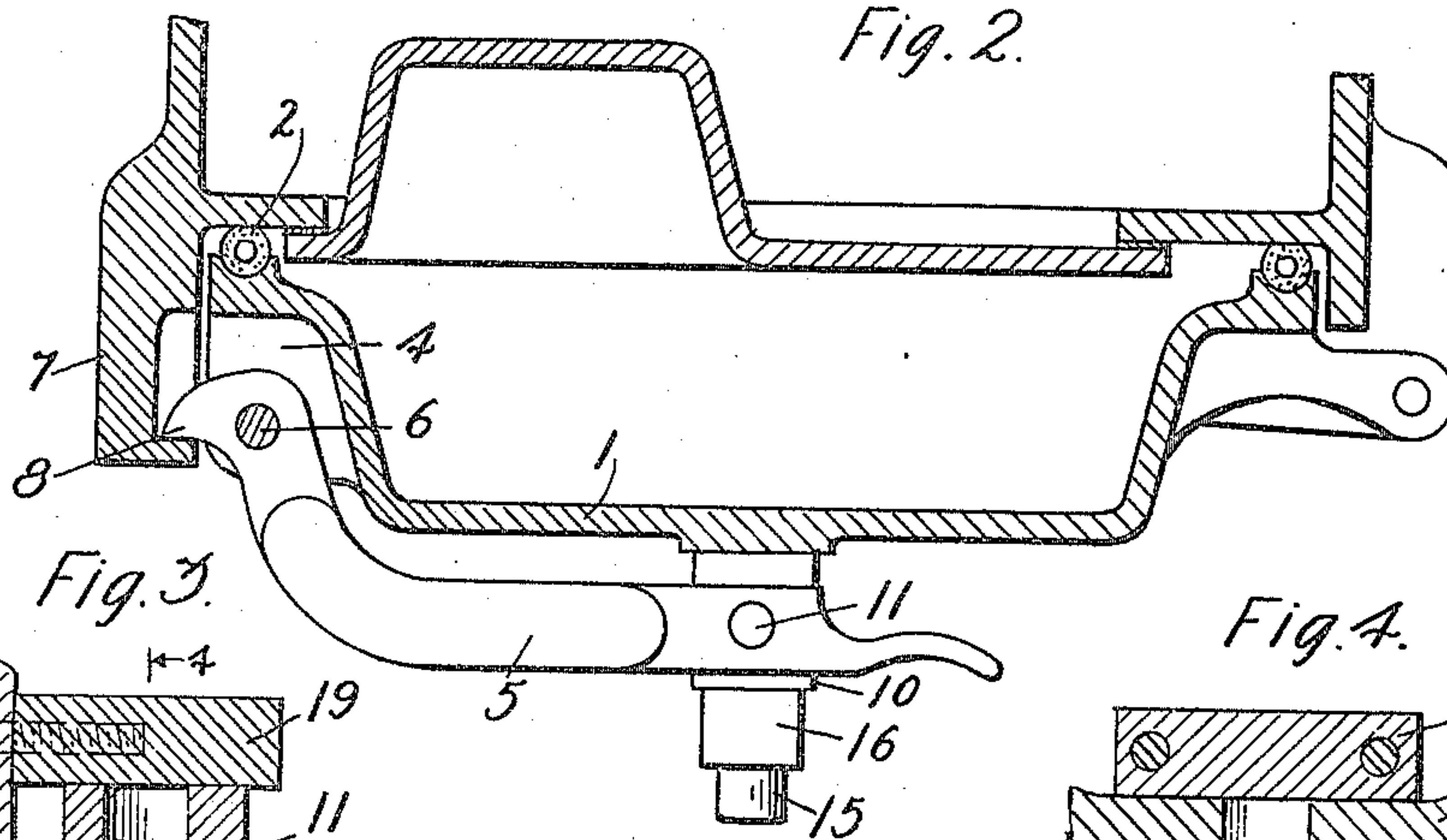


Fig. 3.

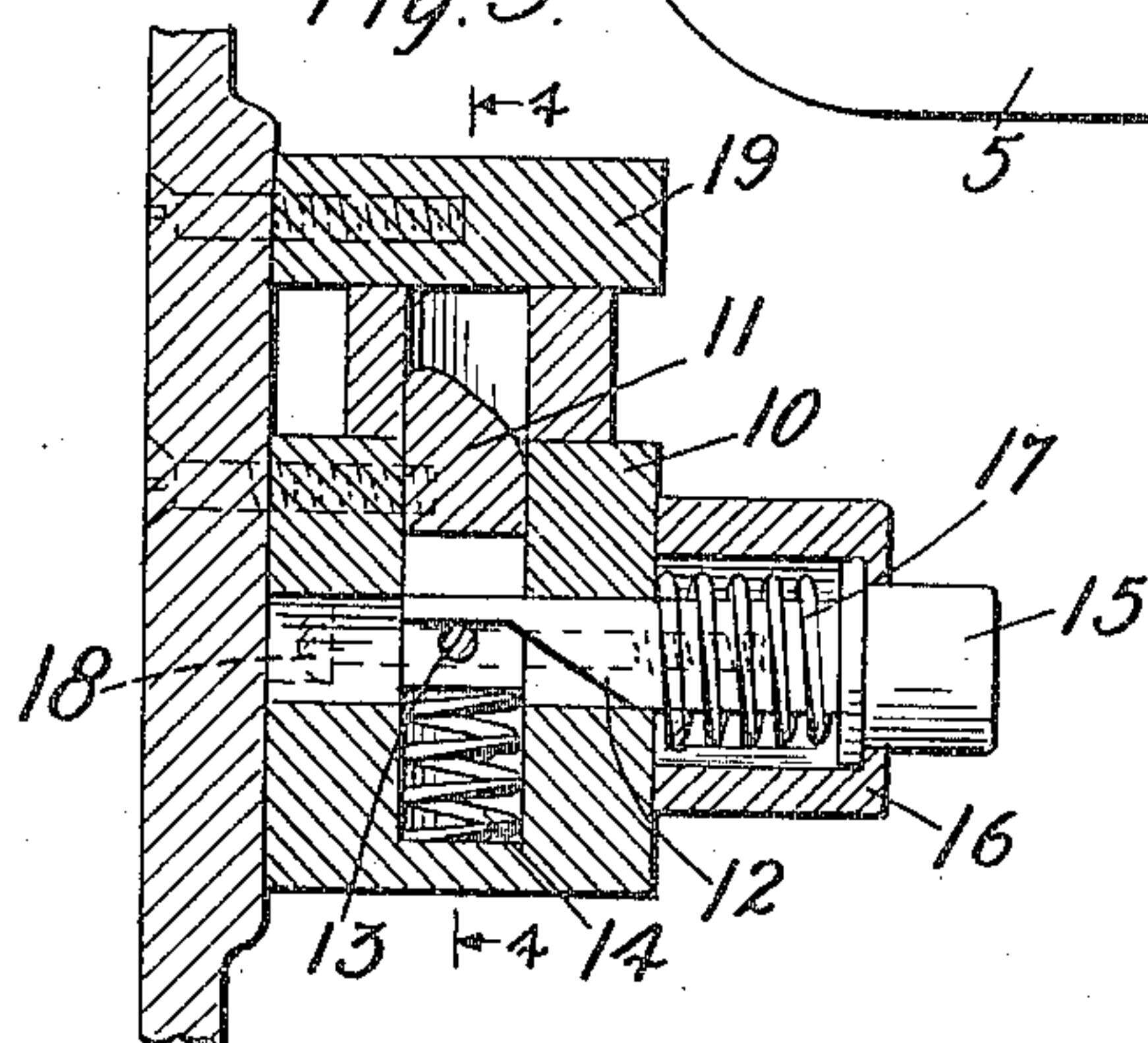
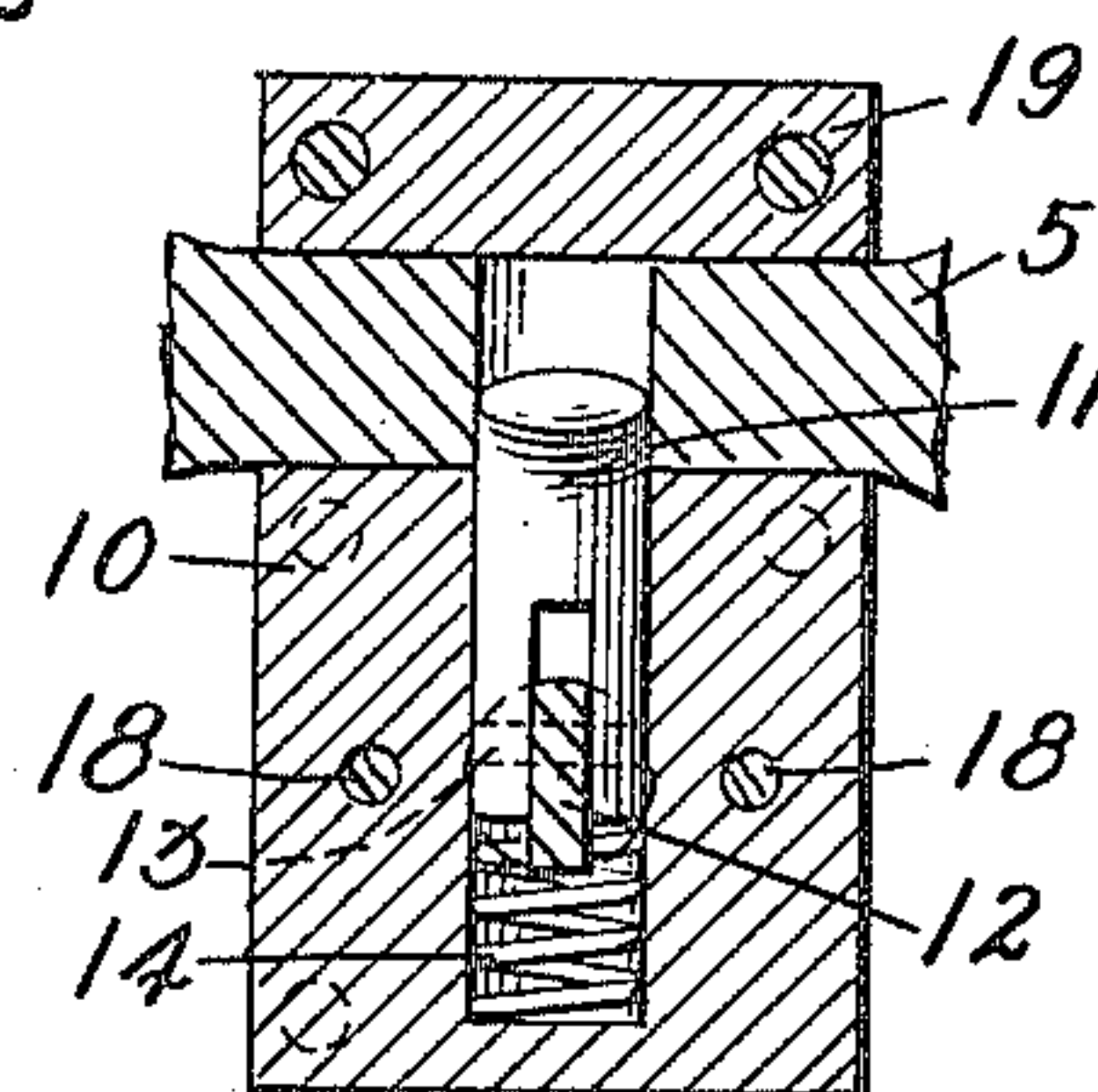


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

EUGENE A. REINKE, OF ROCHESTER, NEW YORK, ASSIGNOR TO STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

CATCH.

1,160,758.

Specification of Letters Patent.

Patented Nov. 16, 1915.

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To all whom it may concern:

Be it known that I, EUGENE A. REINKE, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Catches, of which the following is a full, clear, concise, and exact description.

This invention relates to improvements in door catches for use on mine telephones and the like.

The object of this invention is the provision of a catch which will serve with a lever-like action to force the door of the telephone case firmly against its jamb, so as to seal the telephone box against moisture and gas.

Another object of this invention is to provide positive and adequate means for holding the catch lever in its operative position, and further means to readily release the catch lever when it is desired to open the telephone box, the releasing means for the catch lever being positioned so that it can be operated by the thumb of the operator's hand when grasping the lever.

This invention is illustrated in the accompanying drawing, in which—

Figure 1 shows the catch applied to the door of a mine telephone; Fig. 2 is a section through the door of Fig. 1 on the line 2—2 thereof. Fig. 3 is a vertical section through the lever retaining and releasing mechanism, taken on the line 3—3 of Fig. 1; and Fig. 4 is a vertical section through the lever retaining and releasing mechanism taken on line 4—4 of Fig. 3.

The door 1, which is preferably provided with a sealing cushion 2, carries a pair of parallel lugs 3 and 4, between which the catch lever 5 is supported by means of the fulcrum pin 6, which passes through openings in the two lugs 3 and 4, and the catch lever 5. The frame of the box is provided with an extension 7, having a cavity on the side adjacent the door into which the tip 8 of the catch lever 5 may be projected, but out of which the tip will be drawn by swinging the catch lever 5 about its pivot 6, to a position at substantially right angles to that illustrated in Fig. 2.

It is evident that the catch lever 5 will have a tendency to spring out of the position shown in Fig. 2, due to the resilience of the compressed sealing cushion 2. In order to prevent this reactive movement of

the lever, a catch retaining and releasing mechanism is provided, as illustrated in Figs. 3 and 4. This mechanism comprises a block 10, having intersecting holes drilled therein. A reciprocating cylindrical latch member 11 is mounted in one of the holes in the block 10, this latch member being slotted at one end so as to embrace the flattened end of the cam member 12, which is adapted to reciprocate in the other of the holes in the block 10. A pin 13 passes through the slotted portion of the latch member 11, and is held against the face of the reciprocating cam 12 by means of a spring 14, which abuts the end of the latch member 11, and the bottom of the hole in which it reciprocates. The outer end of the reciprocating cam 12 is provided with a press button 15, working through a cylindrical opening in a cap 16, which is secured to the block 10 by screws 18, having their heads countersunk in the back of the block 10, and forms a housing for the spring 17, which acts to maintain the cam 12 and the associated press button 15 in their outward position. The face of the cam 12 is so shaped that upon the inward movement of the press button 15 and cam 12, the latch member 11 will be drawn into the block 10, through the engagement of the cam 12 with the pin 13, which passes through the slotted portion of the latch member 11.

The catch lever 5 is provided near its free end with an opening which is brought into alinement with the end of the latch member 11, when the lever is swung into parallelism with the face of the box door. The end of the latch 11 is preferably beveled so that when the lever 5 is pressed against the latch, the latter will be reciprocated against the pressure of its spring 14, thus obviating the necessity of pressing the button 15 in closing the box.

In order to guide the end of the lever 5, a second block 19 is secured to the door at just sufficient distance from the block 10 to permit the lever 5 to pass freely between the two blocks. Attention is directed to the relative positions of the handle portion of the lever 5 and the button 15. In order to open the door of the telephone case, it is merely necessary to grasp the handle portion of the lever 5 with the right hand press the button 15 with the thumb of that hand and move the handle 5 through substan-

tially 90°. In grasping the lever the fingers of that hand are placed over and in back of the handle portion of the lever while the thumb assumes its natural position extending downwardly to the left immediately over the button 15. In order to again close and seal the telephone box, the handle 5 need merely be swung back and pressed firmly toward the door of the box, whereupon it will be retained until the button 15 is again pressed.

Although this invention is shown and described with reference to a particular type of telephone box, and with reference to certain specific details of construction, I do not wish to be unduly limited thereto, many modifications being possible without departing from the spirit or scope of the invention.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

What I claim is:

A catch for hinged doors comprising a lever pivoted to the door and provided at its free end with a handle portion, latching devices carried by the door for holding the lever in closed position, and a push button 25 for causing the latching devices to release said lever, said push button being located at one side of the lever so that it is disposed directly beneath the extended thumb of the operator's hand when grasping the lever 30 handle.

Signed by me at Rochester, county of Monroe, and State of New York, in the presence of two witnesses.

EUGENE A. REINKE.

Witnesses:

M. B. CRAWFORD,
J. S. GIBSON.