

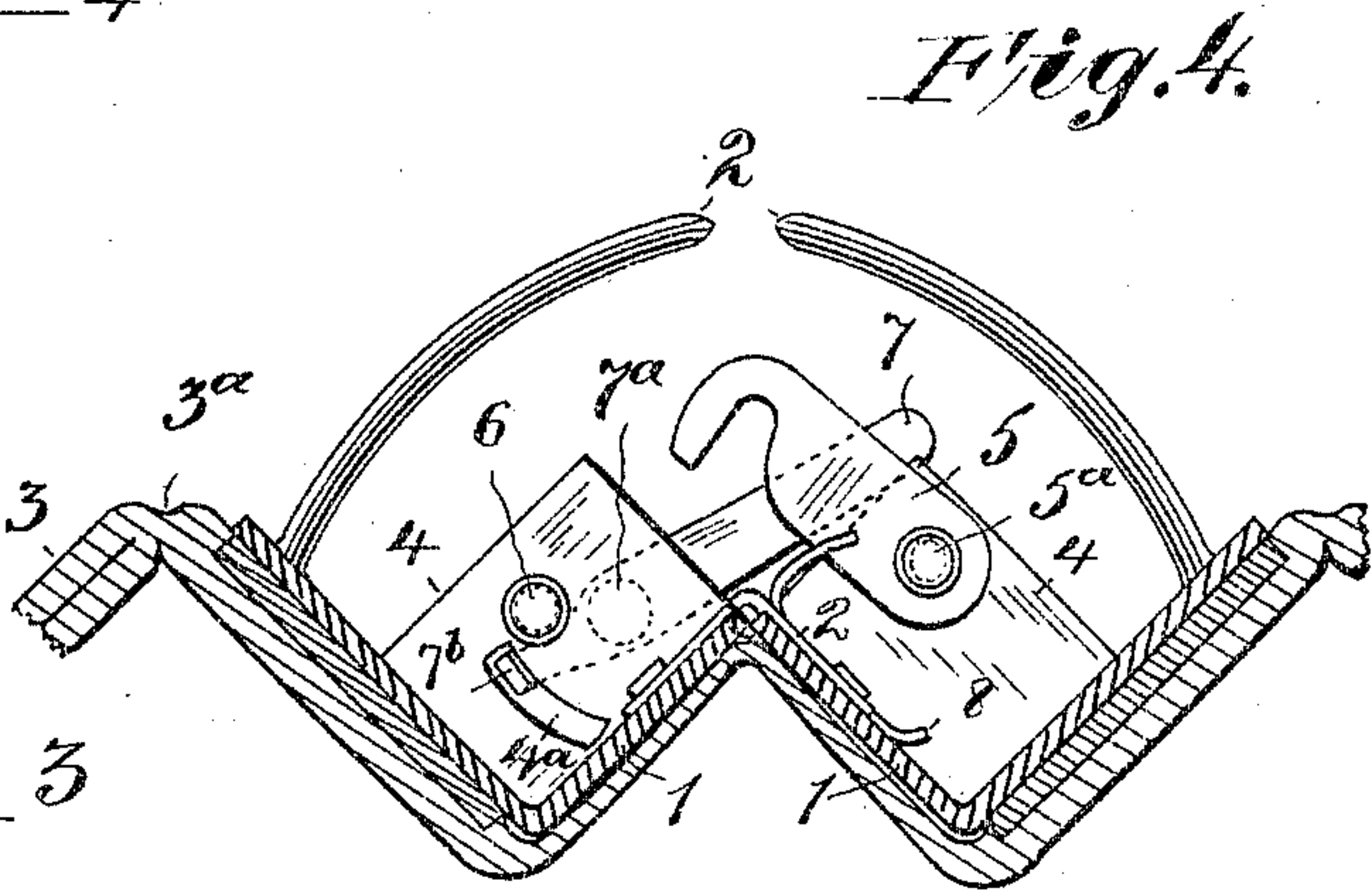
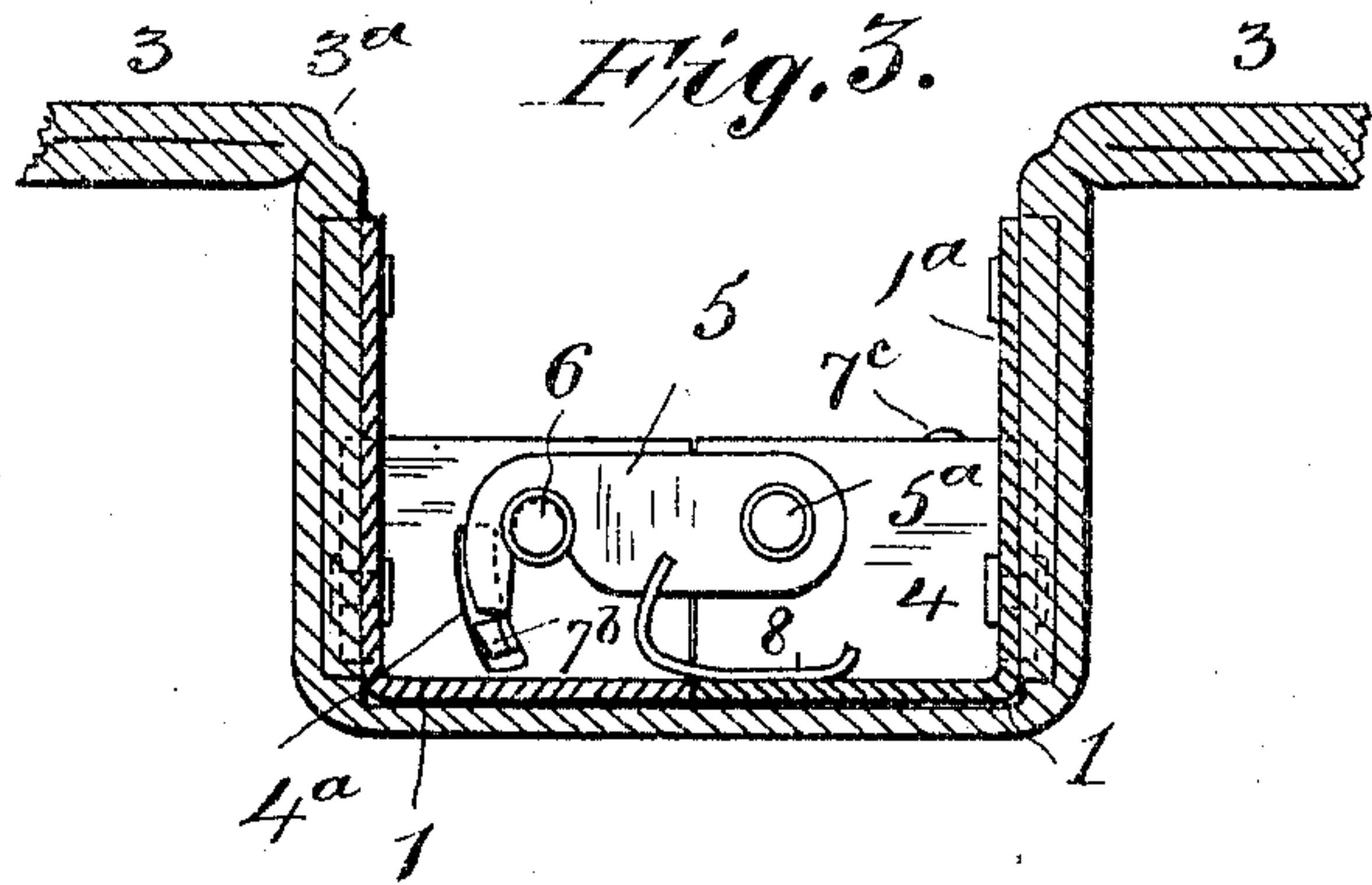
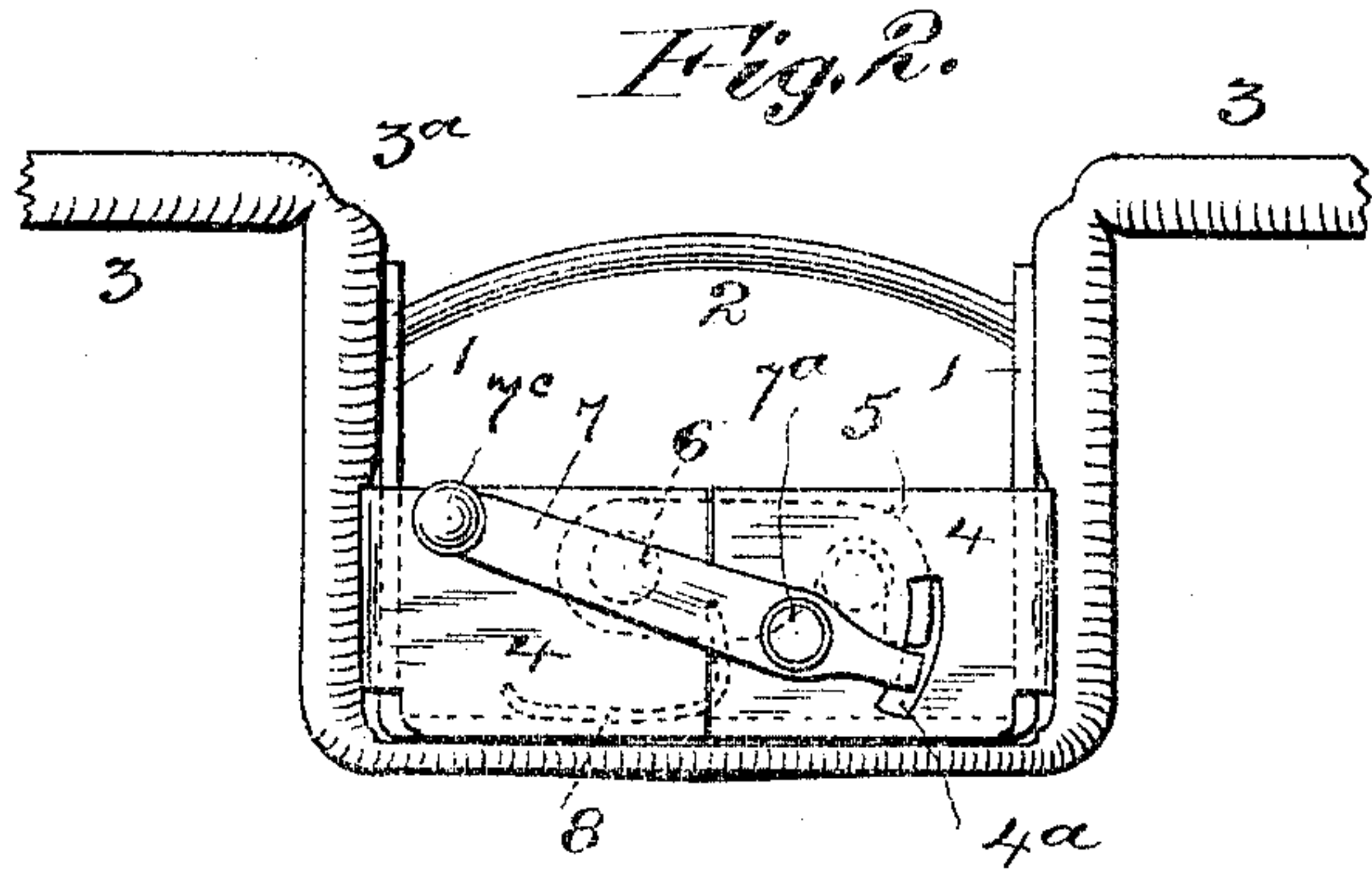
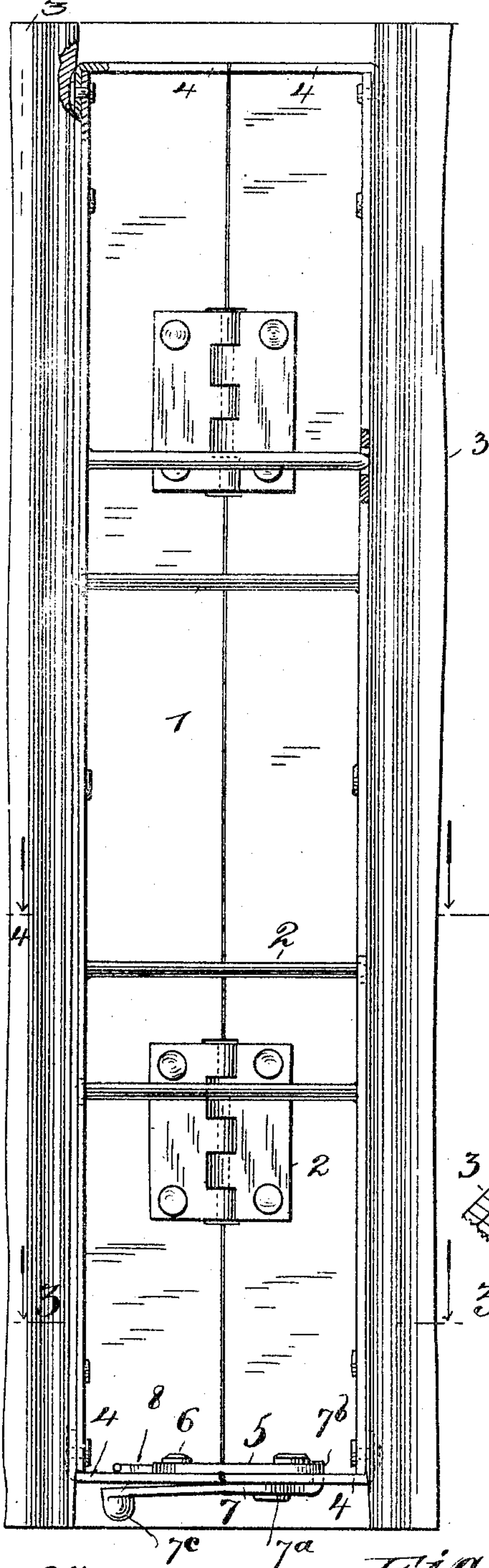
No. 776,432.

PATENTED NOV. 29. 1904.

E. L. SHIPMAN.
BINDER.

APPLICATION FILED MAY 21, 1904.

NO MODEL.



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BINDER.

SPECIFICATION forming part of Letters Patent No. 776,432, dated November 29, 1904.

Application filed May 21, 1904. Serial No. 209,026. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. SHIPMAN, a citizen of the United States, residing in New York city, borough of Manhattan, State of New York, have invented certain new and useful Improvements in Binders, of which the following is a specification.

This invention relates to improvements in binders of the class commonly called "loose-leaf" binders or ledgers; and it has for its object to provide a strong and durable structure capable of ready operation and efficient in use.

The invention comprises the novel details of improvement more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a plan view of the inside of a binder embodying my invention, the covers being partly broken away. Fig. 2 is an end view thereof looking from the lower portion of Fig. 1. Fig. 3 is a cross-section on the line 3 3 in Fig. 1 looking in the direction of the arrows, showing the binder closed; and Fig. 4 is a similar view on the line 4 4 in Fig. 1, showing the binder opened.

Similar numerals of reference indicate corresponding parts in the several views.

The binder shown is of the form known as the "divided-back" binder and is provided with rigid corner-pieces 1 1, pivoted together, as by hinges 2, which corner-pieces are shown in the form of metal plates or strips bent at right angles or in L shape, providing when the parts are closed a channel to receive the margins of papers.

At 2 are indicated curved prongs or pins secured rigidly to the side members 1^a, adapted to spread apart to receive papers between them when the divided back is opened, as in Fig. 4, and to receive and hold the papers when the divided back is closed. (See Fig. 2.) To the rigid members 1 of the back are attached covers 3, flexible or hinged, as at 3^a, in any well-known manner.

The means I have shown for holding the members 1 of the divided back firmly closed and for releasing the same are as follows: At the ends of the rigid members 1 are secured

webs or cross-pieces 4, which may be separate pieces riveted to the webs 4 or made integral therewith, which webs extend transversely of said members and close the ends of the channel between the same when the back is shut, as in Figs. 2 and 3. To one of the webs 4 is pivoted a hook or latch 5, adapted to engage a pin or stud 6 on the opposite member to hold the members of the back firmly closed, as in Fig. 3.

At 7 is indicated a lever or arm shown pivoted, as at 7^a, upon the web 4 opposite the one carrying the stud 6 and also shown located on the side of the webs 4 opposite the latch 5, (see Fig. 1,) said lever serving to operate latch 5. The lever 7, as at one end 7^b, is adapted to engage the free end of latch 5, so as to lift said latch from its pin or stud 6 to release the members of the back when lever 7 is pushed, and for this purpose I have shown the bent end 7^b of lever 7 as projecting through a slot 4^a in web 4, so as to engage the free end of latch 5. (See Figs. 1 and 3.) By preference I provide a spring tending to hold the latch 5 down upon the pin or stud 6, and to this end I have shown a spring 8 projecting from the latch 5 and bent under the pivot 5^a thereof, so as to bear upon the adjacent member 1, the position and curvature of said spring being such as to cause the latch 5 to normally maintain a position adapted to cause the slotted portion of the latch to engage said pin or stud 6 for holding the member closed. (See Fig. 3.) The lever 7 may have a thumb-piece 7^c for convenience in rocking the same, and said lever is shown extending parallel with the web 4, that is opposite the web that carries the pivot 7^a.

When the binder is to be used, the lever 7 is rocked by pressing down its thumb-piece 7^c, thereby raising its bent end 7^b, which in turn lifts the latch 5 from stud 6, whereupon the divided back may be opened, as in Fig. 4, to permit the insertion of papers between the ends of the prongs 2. To close the divided back for use, it is merely necessary to press the parts together, whereupon the latch 5 will slide over the stud 6 and prevent the back from swinging on its hinges, as in Fig. 3.

The device is strong in construction, simple in operation, effective in use, and not liable to get out of order. Changes may be made in the details of arrangement shown and described without departing from the spirit of my invention.

Having now described my invention, what I claim is—

1. A binder comprising back members hinged together, webs connected with and extending transversely of said members, a latch pivotally connected with one web, a coacting stud on the other web, and a lever carried by one of the members adapted to release the latch from the stud, substantially as described.

2. A binder comprising back members hinged together and having webs extending between the members, a latch pivotally carried by one web, a stud carried by the other web, and a lever pivotally carried by one web and having a bent portion to operate the latch, substantially as described.

3. A binder comprising back members hinged together and having webs extending between the members, a latch pivotally carried by one web, a stud carried by the other web, and a lever pivotally carried by the web that carries the stud, said lever having a projecting portion passing through a slot in the web to operate the latch, substantially as described.

4. A binder comprising back members hinged together, a latch carried by one member, a web carried by the other member and provided with a slot, a stud carried by said web to receive said latch, and a lever pivotally carried by said web and extending substantially parallel with the latch and having a projecting portion passing through said slot to engage the latch, substantially as described.

5. A binder comprising back members hinged together, a latch extending transversely of said members and pivotally carried by one member, a stud carried by the other member to receive the latch, and a lever pivotally supported by one member and extending transversely of the members and substantially parallel with the latch, said lever having a projection to release the latch, substantially as described.

6. A binder comprising back members hinged together, a stud carried by one member, a latch carried by the other member and having a spring passing under the pivot of the latch and bearing against said member arranged to hold the latch in a normal position of engagement with said stud, and a lever to operate said latch, substantially as described.

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