

H. E. HAWKINS.

LOOSE LEAF BOOK.

APPLICATION FILED MAY 3, 1907. RENEWED MAY 21, 1908.

907,596.

Patented Dec. 22, 1908.

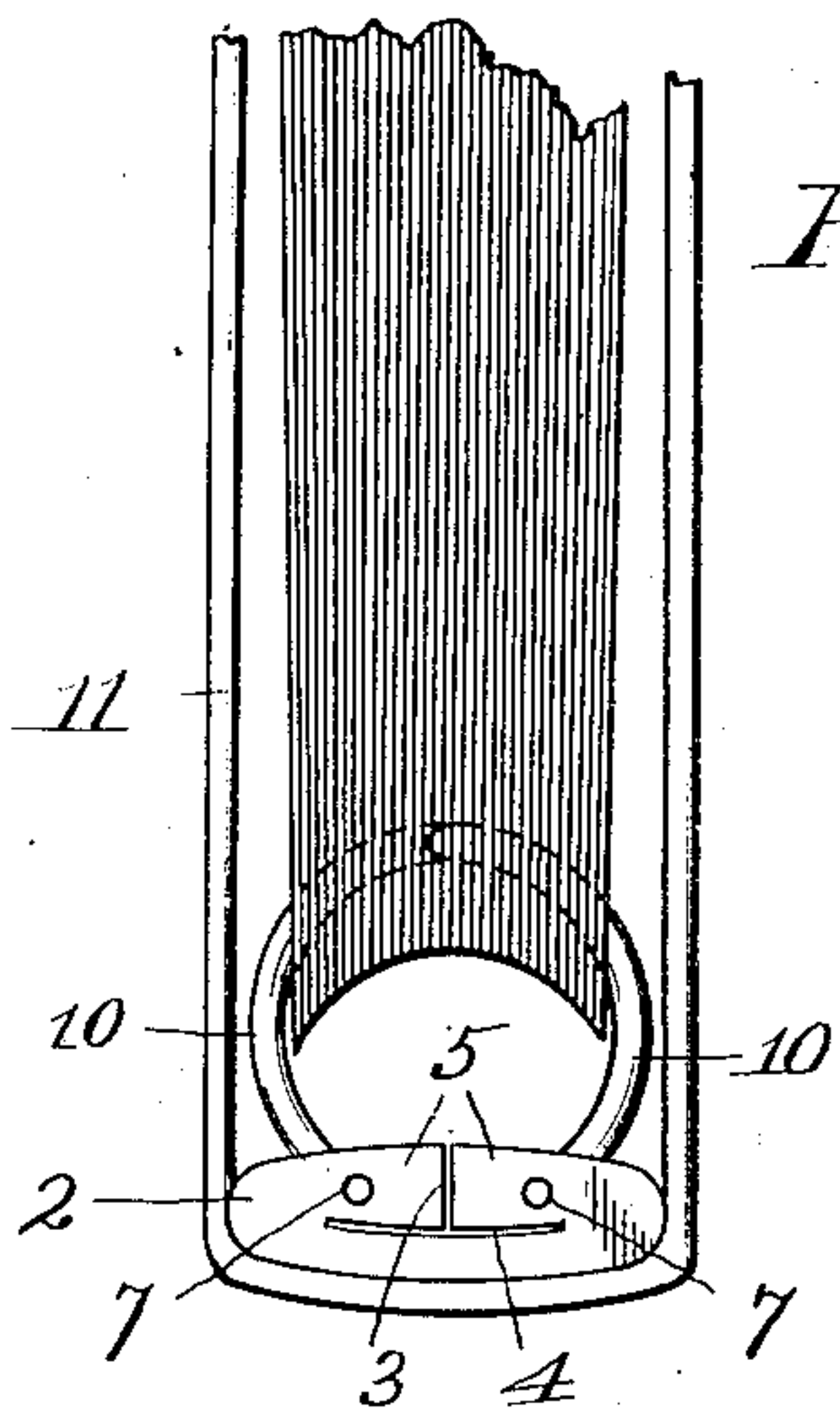


Fig. 1. Fig. 2.

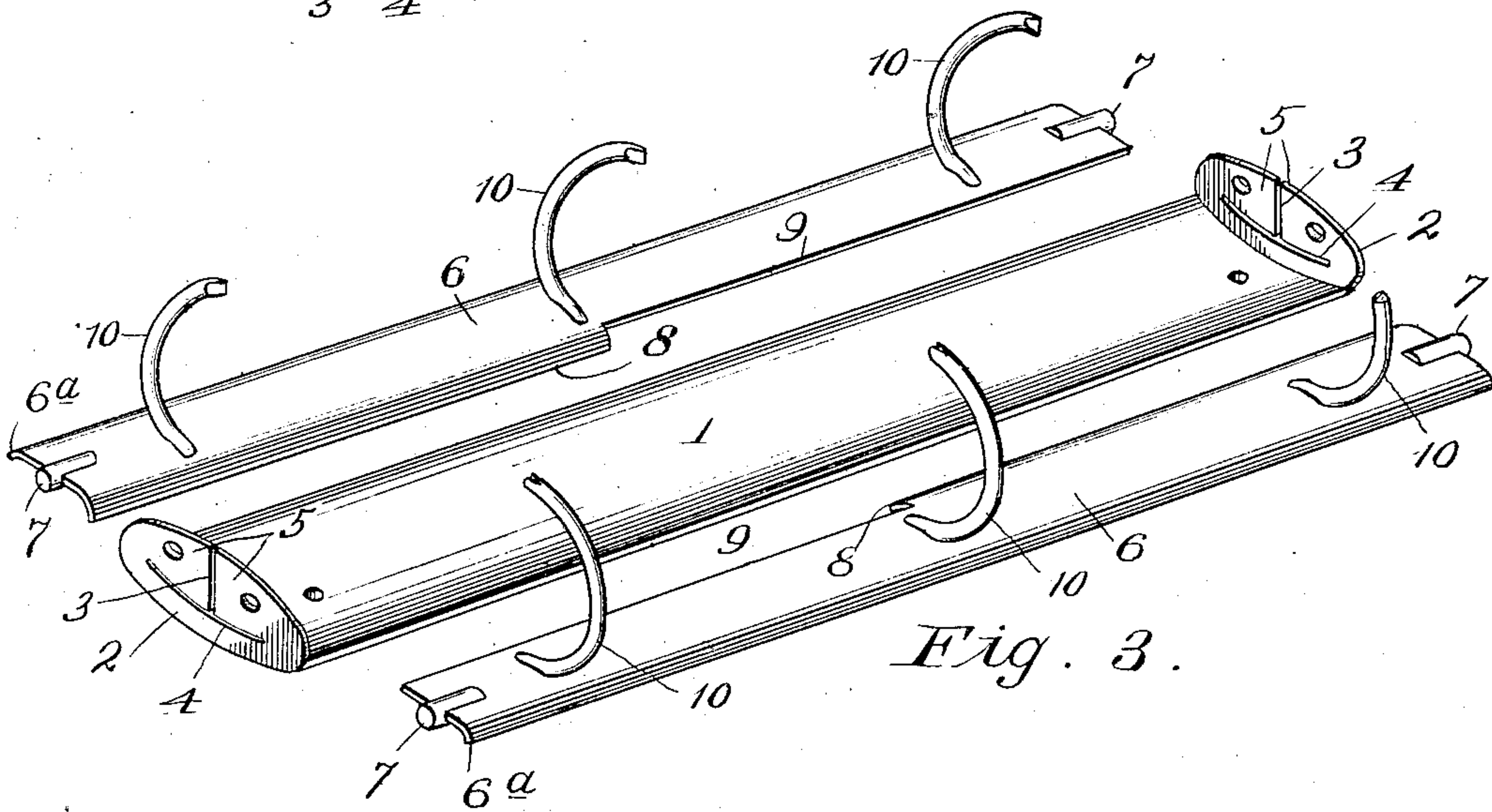
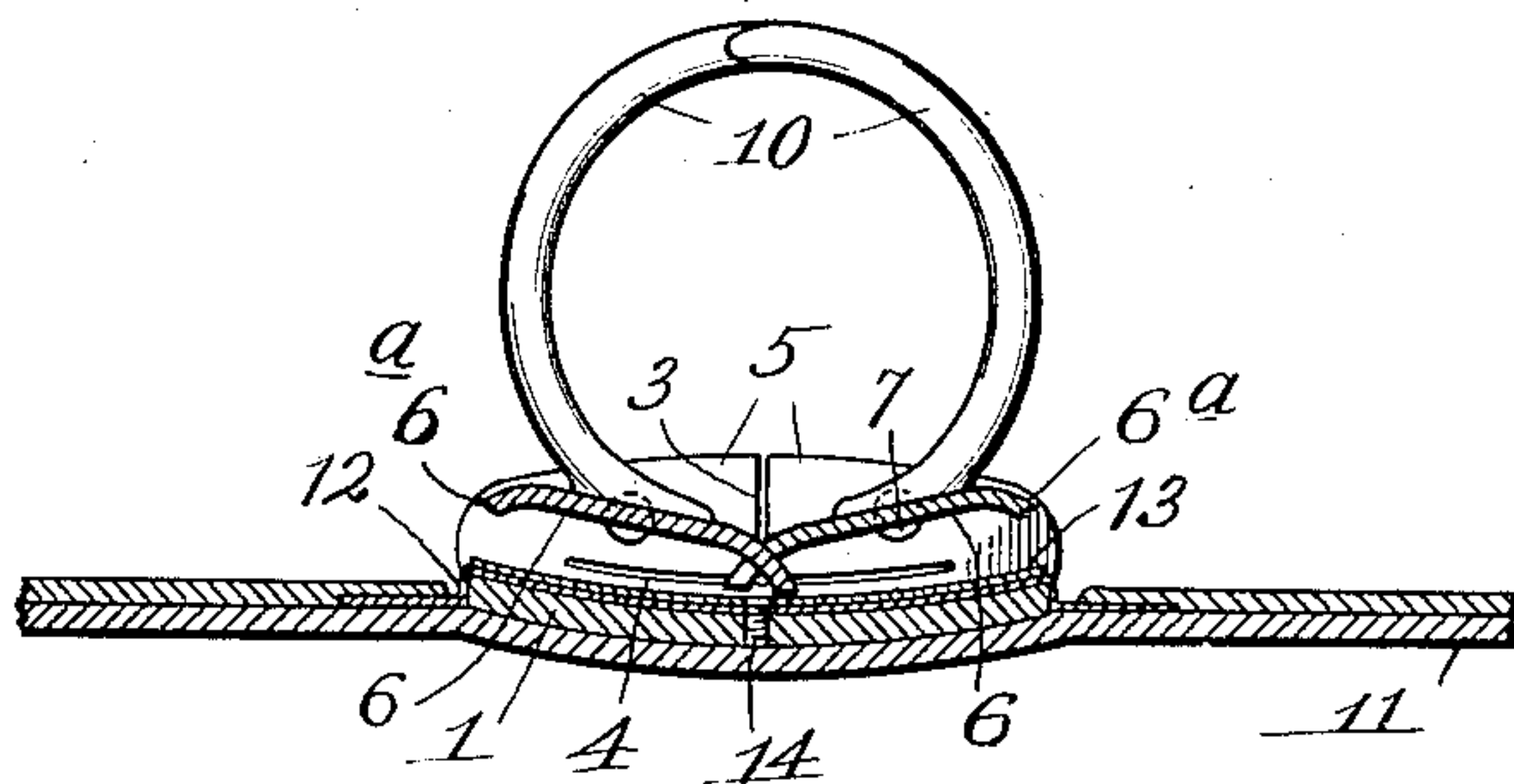


Fig. 3.

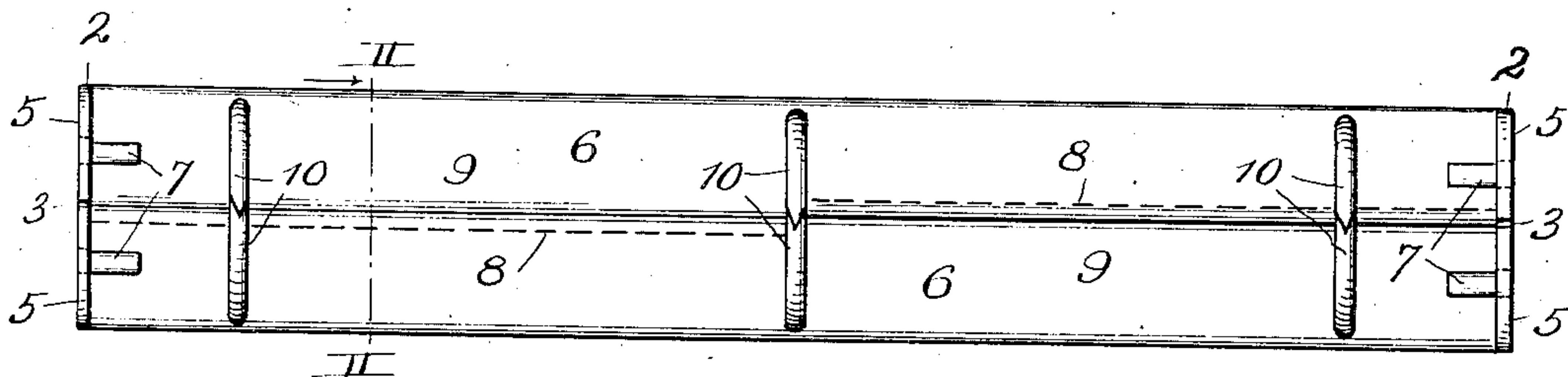


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

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LOOSE-LEAF BOOK.

No. 907,596.

Specification of Letters Patent.

Patented Dec. 22, 1908.

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To all whom it may concern:

Be it known that I, HAROLD E. HAWKINS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Loose-Leaf Books, of which the following is a specification.

My invention relates to improvements in loose-leaf books, and my objects are first, to provide a device whereby separate leaves may be removed or replaced with convenience and despatch, and second, to provide one with but few parts which may be readily assembled for use or taken apart to repair or replace worn or broken parts.

One of the important features resides in arranging the hook-carrying members of the book in such manner that they will perform the function of holding the books either closed or open, hence separate springs for performing this function are dispensed with.

In order that the invention may be readily understood reference will now be made to the accompanying drawing, in which:

Figure 1 represents a broken end view of my improved loose-leaf book in a closed condition. Fig. 2 is a cross-section of same on the plane of line II—II of Fig. 4, with the book in an open condition. Fig. 3 is a perspective of the frame and the hook-carrying members detached from each other. Fig. 4 is a plan of said parts assembled.

1 designates the frame which is slightly convex in cross-section to give the back of the book a rounded appearance. Said frame is provided with upturned ends 2, having vertical slits 3 communicating with curved or horizontal slits 4. All of said slits render the bearing members 5 of the upturned ends slightly resilient, so that they may spring apart as hereinafter described.

6 designates two hook-carrying members provided at their ends with trunnions 7, which are rockingly mounted in the bearing members 5 of the upturned ends 2. Each member 6 has a downwardly curved resilient lip 8, extending about one-half the length of its inner side, see Fig. 3. Said lips are alternately arranged so that the lip on one member will underlie the companion member, as shown in Fig. 2. The straight inner edges 9 of hook-carrying members 6 engage the upper surface of lips 8 and thus hold the engaging edges of said members either in a depressed

or a raised position, so that the members will in turn reliably hold the segmental hooks 10, carried thereby, either closed or open.

The resiliently engaging edges of the hook-carrying members will be assisted in holding the hooks either closed or open by the resilient bearing members 5 of the frame, which bearing members will be forced slightly apart during the opening or closing operation of the hooks, and then spring toward each other at the completion of said operation.

While it is desirable to have the bearing members 5 resilient, this is by no means essential, as the resilient lips 8 and edges 9 are sufficient to reliably hold the hooks either open or closed. The opening movement of the hooks 10 is limited by the downturned outer edges 6^a of the hook-carrying members contacting either with the frame or a retaining-plate, hereinafter described.

11 designates the cover which is secured to the back of the frame by a strip of hair-cloth or other suitable material 12, secured to the frame by a retaining-plate 13, which is secured by screws or rivets 14 to said frame.

Having thus described my invention, what I claim is:—

1. In a device of the character described, a frame, and two hook-carrying members rockingly mounted therein, said members having resilient inner sides engaging each other for the purpose described.

2. In a device of the character described, a frame, and two hook-carrying members rockingly mounted therein, each member being provided with a resilient lip yieldingly engaging the other member.

3. In a device of the character described, a frame, two resilient hook-carrying members yieldingly engaging each other, and trunnions on the ends of said members mounted in the frame.

4. In a device of the character described, a frame having upturned ends, and two hook-carrying members rockingly mounted in said ends, said members having resilient inner sides engaging each other for the purpose described.

5. In a device of the character described, a frame having resilient upturned ends, and two hook-carrying members rockingly mounted in said ends, said members having resilient inner sides engaging each other for the purpose described.

6. In a device of the character described, a

frame; and two hook-carrying members rockingly mounted therein and resiliently engaging each other, said members having downturned outer edges adapted to contact with the frame and limit the opening movement of the hooks.

7. In a device of the character described, a frame, two hook-carrying members rockingly mounted therein, said members having resilient inner sides engaging each other for the purpose described, a cover at the back of the frame, fabric for securing said cover to the frame, and a retaining-plate for securing said fabric to the frame.

8. In a device of the character described, a frame having resilient upturned ends, and

two hook-carrying members rockingly mounted in said ends, said members having resilient inner sides engaging each other for the purpose described.

9. In a device of the character described, a frame, and two hook-carrying members rockingly mounted therein, said members having alternately arranged resilient lips engaging their inner sides.

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

HAROLD E. HAWKINS.

Witnesses:

F. G. FISCHER.

M. Cox.