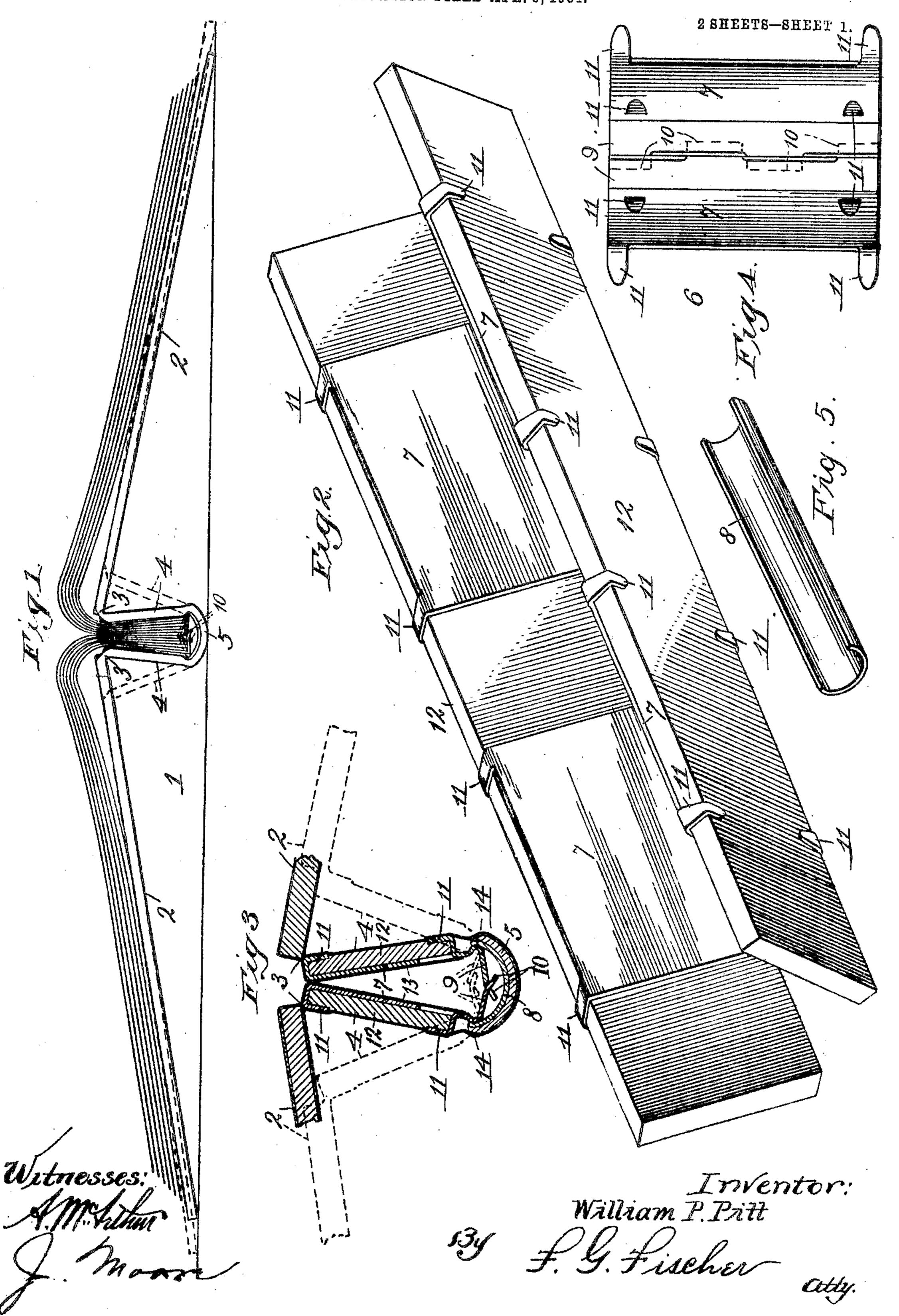
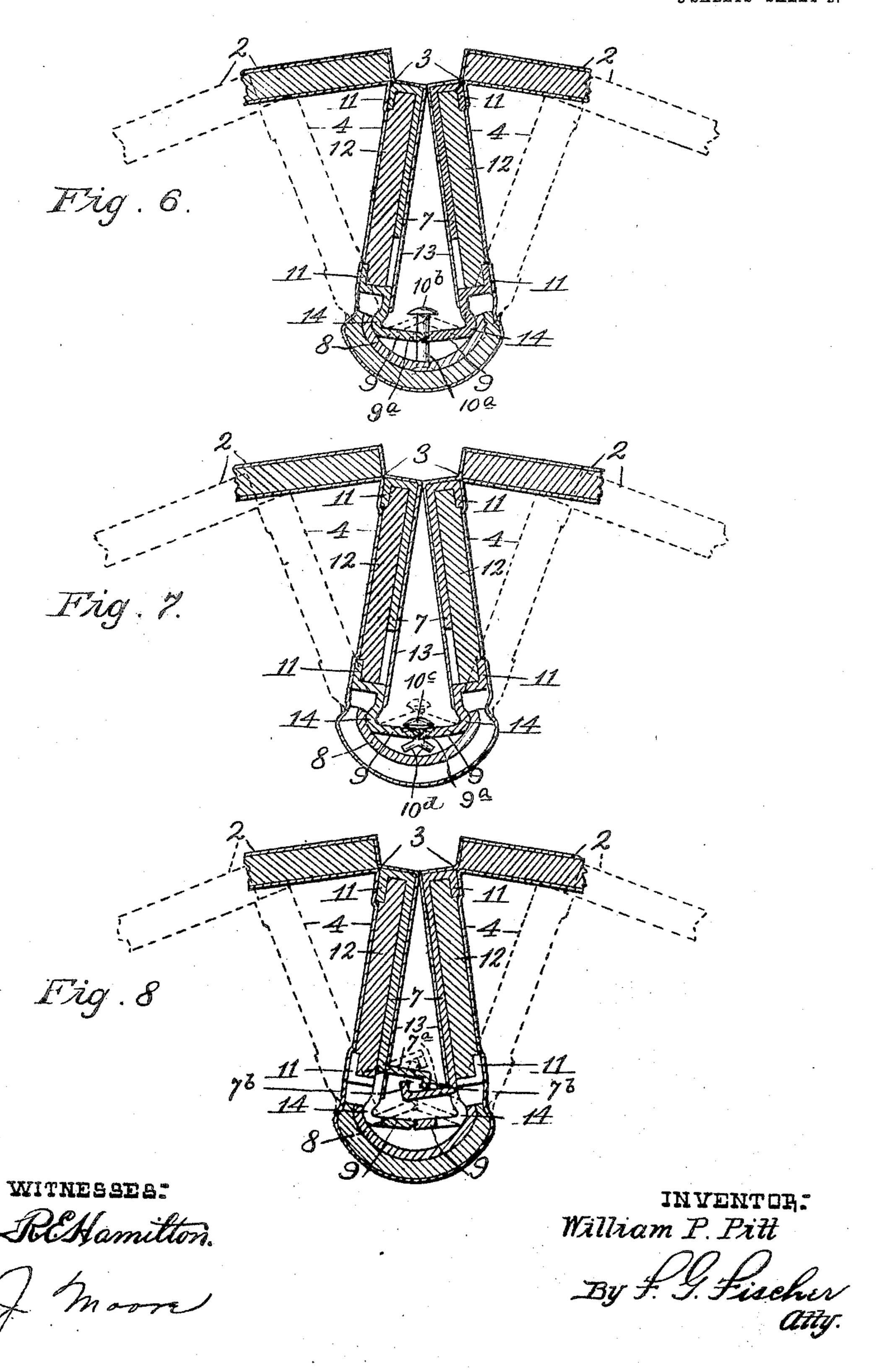
W. P. PITT.
LOOSE LEAF HOLDER.
APPLICATION FILED APR. 8, 1904.



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RHOMEW. S. GRAMAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

STATES PATENT OFFICE.

WILLIAM P. PITT, OF INDEPENDENCE, MISSOURI, ASSIGNOR TO THE IRVING-PITT MFG. CO., OF KANSAS CITY, MISSOURI.

LOOSE-LEAF HOLDER.

No. 797,746.

Specification of Letters Patent.

Patented Aug. 22, 1905.

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To all whom it may concern:

Be it known that I, WILLIAM P. PITT, a citizen of the United States, residing at Independence, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Loose-Leaf Holders, of which the following is a specification.

My invention relates to improvements in loose-leaf holders; and my object is to provide a device of this character with means for reliably holding loose leaves in place when the holder is in either an open or closed position. I attain this object by providing the back of the holder with one or more clamping-hinges which may be readily opened or closed for the reception or extraction of loose leaves by simply pulling the sides of the holder apart or pressing them together.

In the accompanying drawings, which illustrate the invention, Figure 1 represents an end view of a loose-leaf holder provided with my invention. Fig. 2 is a detail perspective view showing the arrangement of the hinges forming the important feature of my invention. Fig. 3 is an enlarged broken transverse section of the holder and one of the hinges in a closed position in full lines and open in dotted lines. Fig. 4 is an enlarged detail plan view of one of the hinges. Fig. 5 is a detail perspective view of a spring-plate employed to hold the clamping-hinge in an open or closed position. Figs. 6, 7, and 8 are enlarged broken. transverse sectional views of the holder provided with modified means for limiting the opening movement of the clamping-hinges.

In the drawings, 1 designates a loose-leaf holder consisting of flaps 2, hinged at 3 to form leaf-clamping members 4, united at their lower ends by a back 5.

6 designates my improved clamping-hinge, comprising three members struck from sheet metal and consisting of a pair of plates 7, held together and in an open or closed position by a spring-plate 8. Plates 7 are preferably rectangular in form and provided at their lower ends with integral portions 9, extending transversely at right angles thereto and having alternately-arranged tongues 10, the tongues on each underlapping the opposing member, as clearly shown in Figs. 3 and 4. Plates 7 are provided at their upper corners and near their lower corners with integral lugs 11, which are bent around the upper and lower edges of strips 12, preferably composed of stiff mate-

rial—such as wood, leather, &c.—which are reliably held in contact with the outer surface of plates 7 by the lugs. These strips are employed to connect the hinges, as shown in Fig. 2, and when covered with cloth or leather 13 are thereby flexibly secured to flaps 2, as shown in Fig. 3, and form clamping members 4 for engaging the loose leaves, as shown in Fig. 1.

14 designates outwardly-curved shoulders extending the full length of plates 7 and formed at the juncture of the latter with transverse portions 9 to form a hinge connection with the opposite sides of spring-plate 8, which are curved for that purpose. Spring-plate 8 is made segmental in cross-section to render it resilient and is slightly expanded when shoulders 14 are placed in engagement with the opposite sides thereof, so it will exert a compressive force on said shoulders, and thereby reliably retain members 4 in an open or closed position. When said members are in a closed position, they engage the loose leaves with sufficient friction to reliably retain them in the holder, and when said members are drawn to an open position they are held in said position by the compressive force of the spring-plate, leaving both hands free to insert or extract the leaves. The closing movement of members 4 is limited by their upper adjacent corners contacting with each other or with the loose leaves, while their opening movement is limited by the underlapping tongues 10 engaging the under sides of transverse portions 9, as shown by dotted lines, Fig. 3. While I have shown two hinges connected by strips, it is obvious that said strips may be dispensed with by employing one long hinge.

In Fig. 6 tongues 10 are dispensed with and a pin 10° substituted for limiting the opening movement of the hinges. Said pin is riveted to the central portion of the spring-plate 8, from which it extends upwardly through marginal recess 9^a in the abutting edges of transverse portions 9 and is provided with a head 10^b, against which the abutting edges of said transverse portions contact, and thus limit the opening movement of the hinges. The abutting edges of transverse portions 9 are held from accidental disengagement by the V-shaped edge of one engaging the Vshaped groove in the edge of the opposing

member.

In Fig. 7 the opening movement of the hinges is limited by a headed pin 10°, loosely carried by transverse portions 9 and provided at its lower end with diverging members 10°, which abut against the under side of the transverse portions when the hinge is opened, and thereby limit the latter's movement.

In Fig. 8 side plates 7 have inwardly-extending arms 7^a terminating in oppositelyturned hooks 7^b, which engage when the hinge is opened, and thus limit the latter's move-

ment.

From the above description it is apparent that I have produced a device which is simple and durable in construction, easy to operate, and thoroughly effective for the purpose intended.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. In a loose-leaf holder, a clamping-hinge consisting of side plates, inwardly-extending transverse portions abutting at their inner longitudinal edges and formed integral with said side plates, alternately-arranged tongues on the abutting edges of said transverse portions the tongues on each extending obliquely and terminating beneath the opposing member, and a resilient member which engages and holds the side plates together and in an open or closed position.

2. In a loose-leaf holder, a clamping-hinge consisting of side plates having transverse portions, curved shoulders formed at the juncture of the plates with the transverse portions, tongues on the adjacent edges of the transverse portions arranged so the tongues on each will lap the opposing member and limit the

opening movement of the hinge, and a spring-

plate having inwardly-curved sides which snugly fit the shoulders on the plates and hold the latter in an open or closed position.

3. A loose-leaf holder consisting of a pair of clamping-hinges each having a pair of side plates provided with abutting transverse portions, curved shoulders formed at the juncture of the plates with the transverse portions, a spring-plate connecting the shoulders of each pair of side plates, strips connecting the hinges, flaps connected to the strips, and a back covering the spring-plates and secured to the strips, substantially as shown and described.

4. A loose-leaf holder comprising a pair of clamping-hinges each having a pair of rectangular side plates provided at their upper corners and near their lower corners with lugs, abutting transverse portions formed integral with the side plates, tongues on the abutting edges of the transverse portions arranged so the tongues on each will lap the opposing member and limit the opening movement of the hinges, curved shoulders formed at the juncture of the side plates with the transverse portions, spring-plates having curved sides to operatively receive the shoulders on the side plates, a pair of strips secured to the side plates by the lugs on the latter, flaps connected to the strips, and a back covering the spring-plates and secured to the strips.

In testimony whereof I affix my signature in

the presence of two witnesses.

Witnesses:

J. W. Boling, F. G. Fischer.