No. 778,070. PATENTED DEC. 20, 1904.

W. P. PITT.

LOOSE LEAF BOOK.

APPLICATION FILED DEC. 1, 1903.

NO MODEL.

Fig. 6.

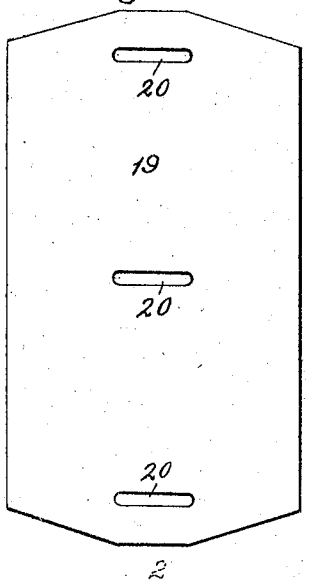


Fig. 1.

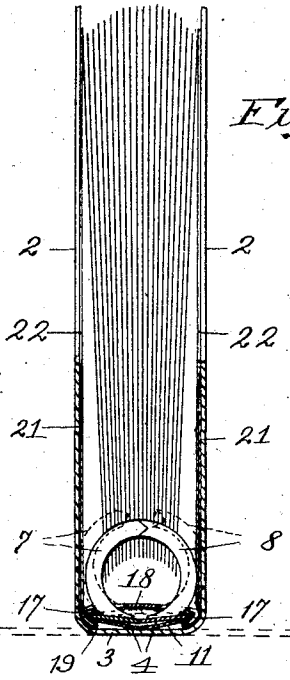


Fig. 2.

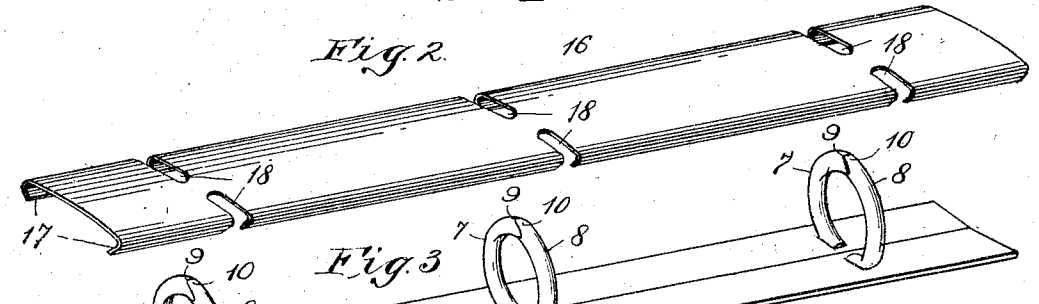


Fig. 3.

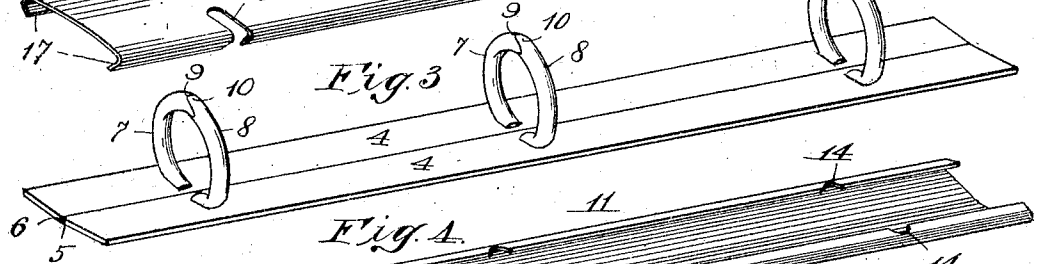
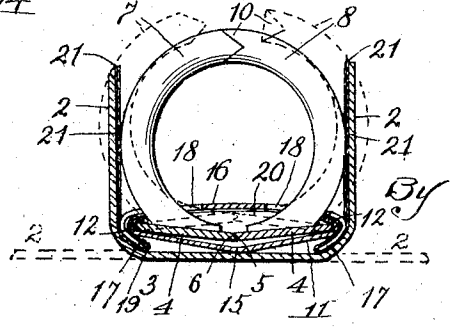


Fig. 4.

Fig. 5.





Witnesses:

A. M. Arthur

P. A. Hickey.

Inventor:

Wm. P. Pitt

By F. G. Fischer

Atty.

No. 778,070. Patented December 20, 1904.

UNITED STATES PATENT OFFICE.

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

LOOSE-LEAF BOOK.

SPECIFICATION forming part of Letters Patent No. 778,070, dated December 20, 1904.

Application filed December 1, 1903. Serial No. 183,321.

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 Books, of which the following is a specification.

My invention relates to improvements in loose-leaf books provided with a cover and hooks for securing the loose leaves; and my object is to provide means whereby said hooks may be readily opened or closed by simply drawing their free ends apart or pressing them together, so that loose leaves may be quickly attached thereto or removed when desired.

A further object is to arrange the several parts of the device in such a manner that they may be readily secured to the back of the cover and to each other without the use of rivets or other permanent fastenings, so that when necessary they may be readily detached from each other and the cover to make repairs, &c.

The novel features of the invention reside in a pair of interlocking plates which carry the hooks and hold them in an open or closed position, a spring-plate which reliably holds the hook-plates from accidental movement when the hooks are in an open or closed position, and a retaining-plate which holds the hook-plates and spring-plate together.

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

Figure 1 represents an end view, partly in section, of a loose-leaf book provided with my improvements. Fig. 2 is a detail perspective view of the retaining-plate employed for holding the spring-plate and hook-plates together and to assist in securing the device to the back of the cover. Fig. 3 is a detail perspective view of the hook-plates in their operative position. Fig. 4 is a detail perspective view of the spring-plate employed to hold the hook-plates from accidental movement when the hooks are in an open or closed position and which in conjunction with the retaining-plate secure the device to the cover. Fig. 5 is a broken transverse section of the cover with the device secured thereto and showing the operation of the same by dotted lines. Fig. 6 is a reduced elevation of the slotted cloth for securing the device to the cover.

In said drawings like reference-numerals indicate similar parts.

1 designates the cover, composed, preferably, of leather and comprising sides 2, united by a back portion 3.

4 designates a pair of hook-plates, one of which has a marginal **V**-shape groove 5 in its inner longitudinal edge for the reception of a **V**-shape tongue 6, formed on the adjacent edge of the companion plate. Said plates are provided on their upper surface with a plurality of rigidly-secured segmental hooks 7 and 8, the former of which are provided at their upper ends with **V**-shape grooves 9 for the reception of **V**-shape tongues 10 on the free terminals of the companion members when the hooks are in a closed position. The hook-plates are reliably held from accidental movement when the hooks are in an open or closed position by a spring-plate 11, provided with marginal flanges 12 along its longitudinal sides, forming grooves 13 for the reception of the outer longitudinal edges of the hook-plates. Flanges 12 have marginal recesses 14 registering with the segmental hooks to permit the latter to open without contacting with the flanges. The spring-plate is depressed at its central longitudinal portion 15, so it may expand and contract and also to permit the depression of the interlocking edges of the hook-plates when the segmental hooks are closed.

When the hook-plates are slipped into position in the spring-plate, the latter is thereby slightly expanded, and consequently exerts compressive force on the plates, thereby reliably retaining their interlocking edges together and in an elevated or depressed position. When in the latter position, their downward movement is limited by the contacting terminals of the hooks, and when elevated their movement is limited by contact with the under side of a retaining-plate 16,

somewhat similar in form to the spring-plate. The retaining-plate is also composed, preferably, of spring metal and slightly arched at its longitudinal central portion. It is held in position upon the spring-plate by longitudinal flanges 17, which underlap the sides of the spring-plate, and it is provided with oppositely-disposed transverse open slots 18, which permit it to be attached or detached from the spring-plate without interfering with the hooks and the free movement of the latter.

In assembling the parts and securing the device to the back of the cover the hook-plates are placed together in the position shown in Fig. 3 and then slid longitudinally into grooves 13 until the hooks register with recesses 14. A piece of cloth 19, provided with slots 20 to slip over the hooks, is then placed in position upon the hook-plates, where it is reliably held by the retaining-plate secured to the spring-plate by engaging the latter with one of flanges 17 and springing out its opposite flange far enough to permit the latter to pass down and under the opposite side of the spring-plate. As the retaining-plate is slightly expanded when in position, flanges 17 will be drawn tightly beneath the spring-plate and hold the several parts reliably together until removed by hand. The sides 21 of the interposed cloth 19 are then pasted or otherwise secured to the inner surface of sides 2 and covered by paper or leather sheets 22 to give the inner surface of the cover a finished appearance.

When the device is in use, the hooks are normally retained in a closed position by the compressive action of the spring-plate upon the hook-plates, the interlocking edges of which latter are thereby held in the depressed position. (Shown in Fig. 5.) To insert or extract a leaf, the hooks are grasped near their upper ends and drawn apart until the interlocking edges of the hook-plates contact with the retaining-plate, as indicated by dotted lines in Figs. 1 and 5, where they are reliably held, leaving both hands free to handle the leaf and again close the hooks by pressing the latter together.

Ordinarily the spring-plate will exert sufficient pressure on the hook-plates to hold their interlocking ends together, and consequently a slight space is left between the side of the spring-plate and the retaining-plate, as shown in Fig. 5, to permit independent expansion of the spring-plate; but if greater pressure is found desirable said space may be omitted, so the expansion of the spring-plate will also cause the expansion of the retaining-plate.

From the above description it is apparent that I have produced a device which is simple in construction, easy to manipulate, and thoroughly effective for the purpose intended, and while I have illustrated and described the preferred form I reserve the right to make such changes in the arrangement and construction of parts as properly fall within the scope of the appended claims.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a device of the character described, a plurality of interlocking hook-carrying plates adapted to hold the hooks in an open or closed position, a spring-plate engaging the hook-plates and adapted to secure them from accidental movement when the hooks are in an open or closed position, and means for reliably holding the hook-plates and the spring-plate together.

2. In a device of the character described, a plurality of hook-carrying plates having interlocking edges and adapted to hold the hooks in an open or closed position, a spring-plate engaging the hook-plates and adapted to secure them from accidental movement when the hooks are in an open or closed position, and means for reliably holding the hook-plates and the spring-plate together.

3. In a device of the character described, a hook-carrying plate provided with a groove in one of its longitudinal edges, a second hook-carrying plate provided with a longitudinal tongue which pivotally engages the groove in the first-mentioned plate so the hook-plates may be operated to open and close the hooks, a spring-plate engaging the hook-plates and adapted to secure them from accidental movement when the hooks are in an open or closed position, and means for reliably holding the hook-plates and the spring-plate together.

4. In a device of the character described, a plurality of hook-carrying plates arranged with their inner edges operatively connected, a spring-plate embracing one side and the outer edge of the hook-plates and adapted to secure them from accidental movement when the hooks are in an open or closed position, and means for reliably holding the hook-plates and the spring-plate together.

5. In a device of the character described, a plurality of hook-carrying plates having their adjacent edges detachably and operatively arranged, a spring-plate detachably connected to the hook-plates and adapted to secure them from accidental movement when the hooks are in an open or closed position, and means for reliably holding the hook-plates and the spring-plate together.

6. In a device of the character described, a plurality of hook-carrying plates having their inner edges operatively connected, a spring-plate with marginal flanges to engage the outer edge of the hook-plates, and means for reliably holding the hook-plates and the spring-plate together.

7. In a device of the character described, a plurality of hook-carrying plates provided

with interlocking edges, a spring-plate provided with marginal recessed flanges to engage the outer edges of the hook-plates and permit the hooks to open, and means for detachably holding the hook-plates and the spring-plate together.

8. In a device of the character described, a plurality of hook-carrying plates having their adjacent edges operatively connected, a spring-plate for holding the hook-plates from accidental movement when the hooks are in an open or closed position, and a retaining-plate for holding the hook-plates and the spring-plate together.

9. In a device of the character described, a pair of hook-carrying plates having their inner edges operatively connected, a spring-plate for holding the hook-plates from accidental movement when the hooks are in an open or closed position, and a slotted retaining-plate provided with marginal flanges for engaging the spring-plate.

10. In a device of the character described, a cover, a pair of hook-carrying plates having their inner edges operatively connected, a spring-plate for holding the hook-plates from accidental movement when the hooks are in an open or closed position, a slotted retaining-plate provided with marginal flanges for engaging the spring-plate, and a strip of cloth arranged with its central portion interposed between the spring-plate and the retaining-plate and adapted to be secured at its opposite sides to the cover.

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

WILLIAM P. PITT.

Witnesses:

J. W. BOLING,

F. G. FISCHER.