

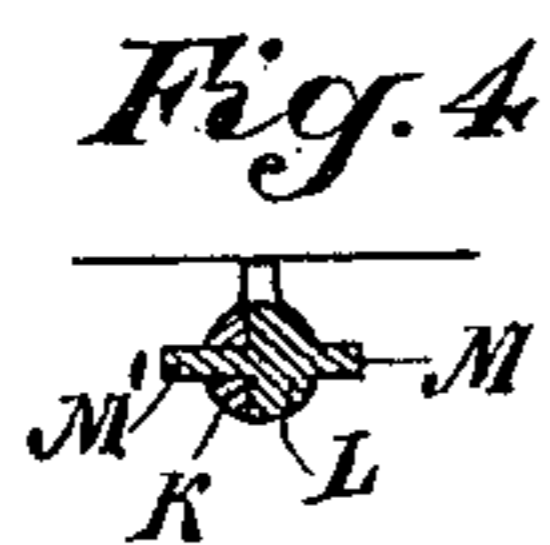
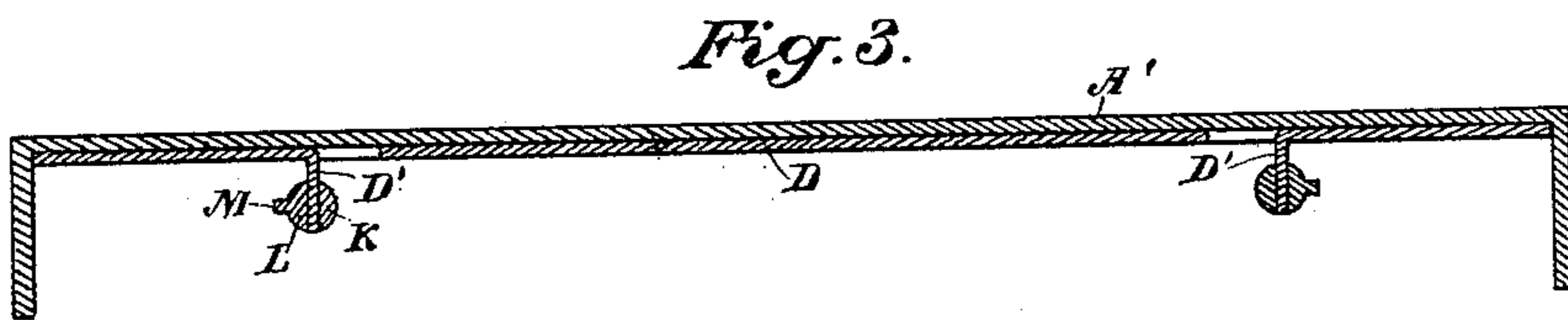
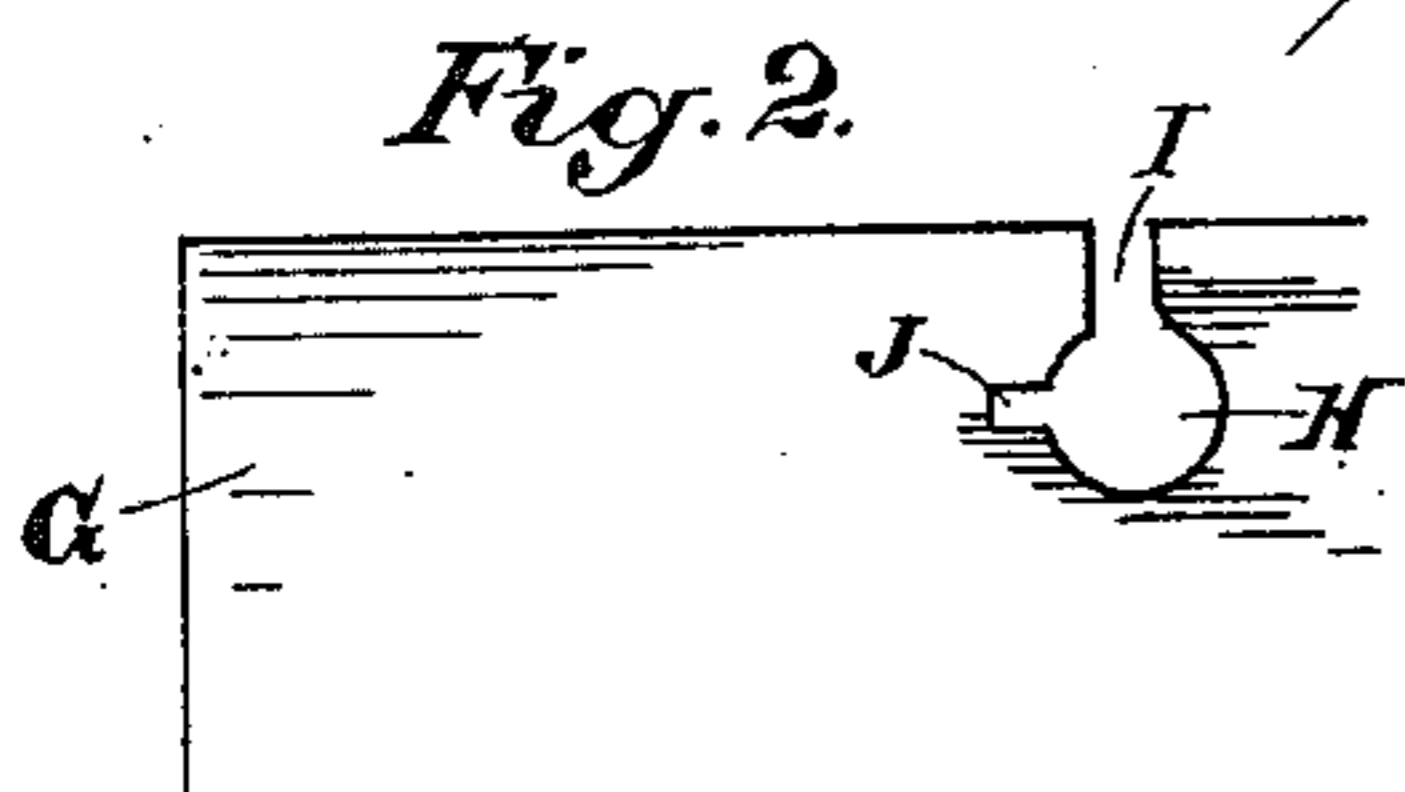
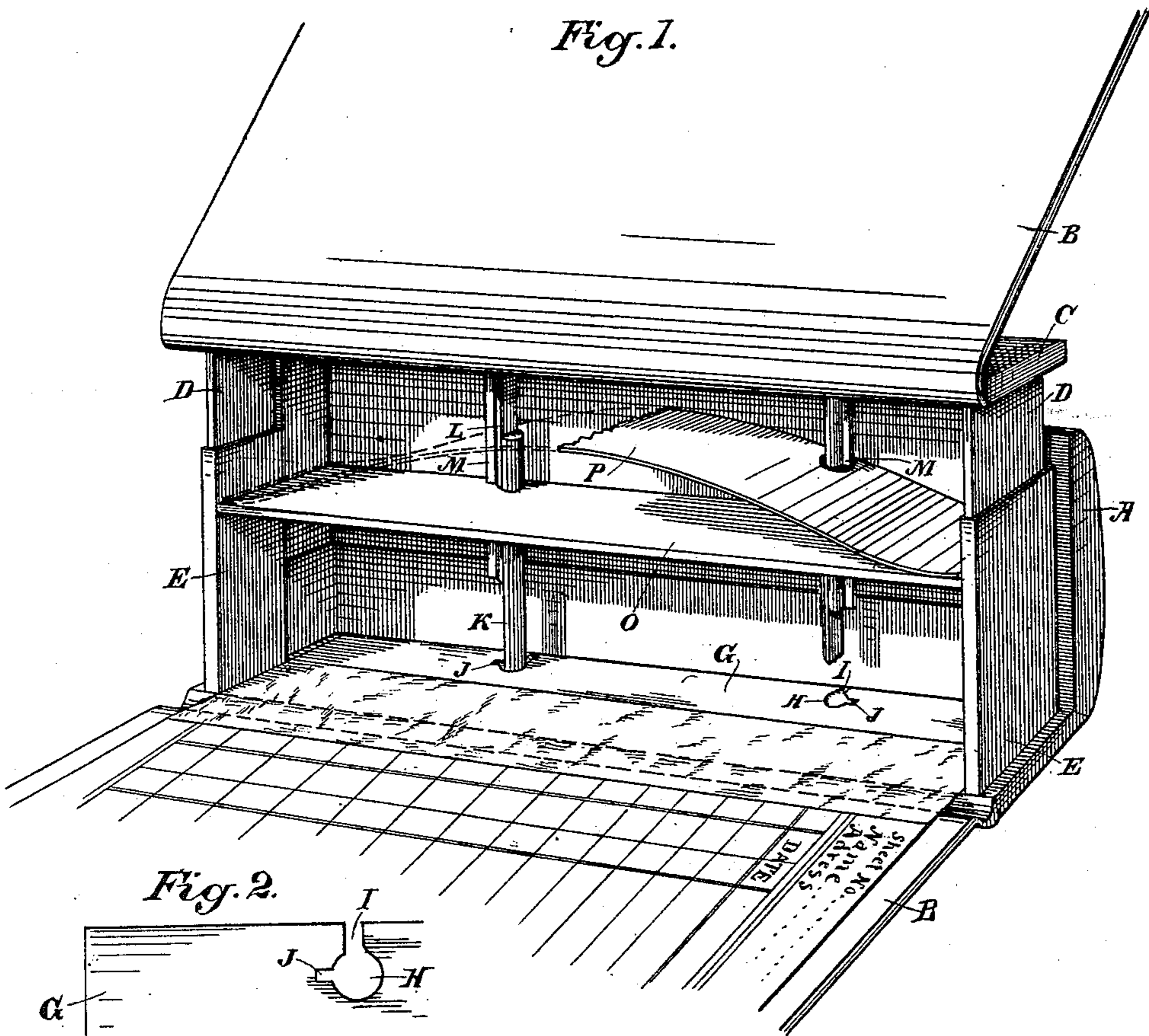
No. 632,392.

Patented Sept. 5, 1899.

S. ADLER.
LOOSE LEAF BINDER AND LEDGER.

(Application filed Jan. 23, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

SOLOMON ADLER, OF SAN FRANCISCO, CALIFORNIA.

LOOSE-LEAF BINDER AND LEDGER.

SPECIFICATION forming part of Letters Patent No. 632,392, dated September 5, 1899.

Application filed January 23, 1899. Serial No. 703,123. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON ADLER, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Loose-Leaf Binders and Ledgers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in temporary binders of that class which are especially designed to contain removable leaves and which are made to form ledgers and other like books where it may be desired to temporarily bind together and lock the leaves in place, but at the same time provide a means by which the leaves may be removed by the proper persons when desired.

It consists, essentially, of a two-part back, the parts slidable and closable upon each other, with sectional guides and holding-stems, one part of each being fixed to one of the movable parts of the back, said stems being provided with interlocking projecting flanges which engage with corresponding openings and slots made in the leaves, whereby the leaves may be easily inserted when the parts are separated and immovably locked in place when the parts have been closed together.

It also provides for the increase or decrease of the number of leaves which may be placed within the back and details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a general view of my device. Fig. 2 is a detail of a sheet. Fig. 3 shows a modification for guiding the parts. Figs. 4 and 5 show various forms of stems.

My book or binder comprises a stiff back A and covers B, hinged thereto and closable at right angles therewith in the manner of the covers of a book. One of these covers is hinged directly to the back portion A and the other to a movable plate C, which is guided with relation to the part A, so that it may be moved outwardly or inwardly—that is, to or from the opposite cover to increase or diminish the space between the sides of the back. The part C is guided with relation to the back A either by plates D, which are slidable in corresponding adjacent plates E,

fixed at each end of the back and standing at right angles thereto, or, as shown in Fig. 3, the central portions of the back A', which are here shown made of metal, may have flanges projecting inwardly to serve as guides, as shown at D'. As here shown, the back A is formed with end channels E, and the part C has a plate extending inside of the back and bent upon each side to form the slides D, which enter the channels E, so that this part may be moved to or from the main portion of the back A and be properly guided in its movements.

The peculiarity of my ledger-leaves consists in an essentially stiff strip G, to which the leaf proper is connected, and this strip has circular holes H made through it, with slots I extending from the holes to the rear edge of the strip. Other slots J extend from the holes H at right angles with the slots I either on one or both sides, as may be preferred.

K are pins or standards, the lower ends of which are permanently fixed to one side of the back A and extend toward the part C. These stems K are cut away so as to form a segment having one side curved and the other flat. From the part C corresponding segmental stems L project downward, so that their flat faces fit against the flat faces of the stems K, and when the two lie together they form a complete cylindrical stem. From one side of each of these semistems project the strips or flanges M, which coincide in position with the slots J in the stiff strips G, which form the inner edges of the sheets.

When it is desired to make up the book, the parts forming the back are separated by sliding the part C with relation to the back A, and the segmental stems L are correspondingly caused to slide with relation to the fixed segmental stems K, being lifted up so that at the bottom only the thickness of the segments K remain. This allows the strips G, forming the rear edges of the sheets, to be slipped over these segmental pieces, as the slots I are of sufficient width, taken with the elasticity of the strips G, to allow them to thus slip over these segments. When a sufficient number of sheets have thus been placed in the back, the parts are moved together, so that the segments L, sliding upon their segments K, will

close down at the bottom and form complete cylindrical pins, which thus fill the holes H in the strips G. At the same time the projecting strips M enter the transverse slots J and form a lock, which will prevent the removal of any leaf after the parts have been closed together. When the parts have thus been closed, the telescoping or movable portions of the back may be locked together by any suitable locking device and key such as may be used for this purpose.

In order to accommodate a greater or less number of leaves as the book increases in size, I have shown a plate O, having holes made through it and slidable upon the stems K L, and a bow-spring P has holes made through it to fit these stems and allow for the compression of the spring. The ends of this spring press upon the ends of the plate O, while the center or arched portion contacts with the part C, so that when the latter is pressed down after the leaves have been inserted the plate O will be pressed against the leaves which are in the book, and thus hold them firmly in place. As additional leaves are inserted the spring yields, allowing the plate O to rise and accommodate itself to the additional number of leaves.

I have here shown a single projecting strip M; but it will be understood that the strips may be extended upon opposite sides of the segmental post L and extended through slots in the posts K, as shown at M' in Fig. 4, so as to project beyond them, in which case the strips G would have slots J, similar to those shown, made upon the opposite side of the holes H, and the lock would be yet more secure; but the principle of operation in either case is the same.

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

1. A temporary binder or loose-leaf ledger comprising a chambered back having a cover hinged at one side, a guided plate carrying the opposite cover and movable with relation to the back to increase or diminish the distance between the covers, fixed and movable segmental posts having flat faces slidable upon each other, sheets adapted to fit within said back and covers having strips along the rear edge with holes which fit upon and are closed by the posts when the latter are closed together, and slots formed through the rear edges of the strips connecting with the holes and adapted to slip over one of the segments when companion segments are separated.

2. In a temporary binder or loose-leaved ledger, a chambered back having a cover hinged to one edge, a guided plate carrying the other cover and movable with relation to the back to increase or diminish the distance between the covers, segmental posts fixed

within one side of the back projecting toward the movable plate, corresponding segmental posts fixed to the movable plate with their flat faces slidable upon the opposing posts and forming complete cylinders when closed together, ledger-leaves having strips forming the back edges with holes made through them adapted to fit the cylindrical posts when the latter are closed together, slots made from the holes to the rear edges of the leaves whereby the leaves may be removed from a single segment when the other portion of the post has been withdrawn therefrom, other slots connecting with the openings at right angles with the first-mentioned slots and strips projecting from the movable segments of the posts adapted to engage with said slots and lock the leaves in place when the parts are closed together.

3. In a temporary binder and loose-leaved ledger of the character described, a chambered back having one cover hinged to it, a plate carrying the other cover guided and slidable with relation to the back and first-named cover, segmental posts fixed respectively in the opposing parts of the back and moving plate and slidable upon each other, one or more flanged plates carried by and projecting from one of the segments at right angles with their meeting faces, ledger-leaves having circular holes made in the back edges to conform to the shape of the complete post and having slots opening from said holes to the rear edges, and other slots at right angles therewith coincident with the projecting strips of the movable segment, and a spring-pressed plate by which the leaves are clamped in place when the back is closed and locked.

4. A temporary binder or loose-leaved ledger consisting of segmental posts fixed in opposite sides of the binder, with their flat faces movable upon each other whereby the thickness of the posts is diminished to allow the leaves to be removed therefrom or increased to fill the holes in the leaves and tongues projecting from one of the segments at right angles with their meeting faces and serving to lock the leaves when the parts are closed together.

5. Leaves for a temporary binder or ledger having circular holes made in the rear edges with slots opening from said holes through the rear edges and other slots projecting radially at right angles therewith whereby said leaves may be permanently locked within the binder.

In witness whereof I have hereunto set my hand.

SOLOMON ADLER.

Witnesses:

S. H. NOURSE,
GEO. H. STRONG.