

G. F. HUDNALL.
 BINDER FOR LOOSE LEAVES.
 APPLICATION FILED APR. 30, 1909.

947,911.

Patented Feb. 1, 1910.

Fig. 1.

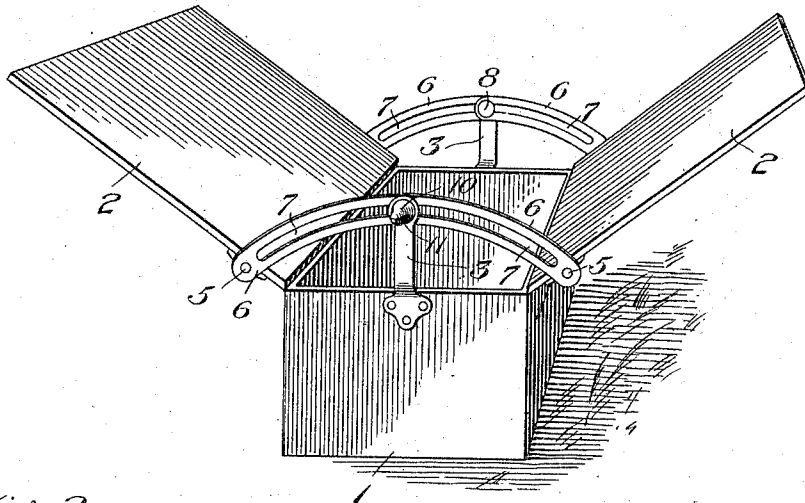


Fig. 2.

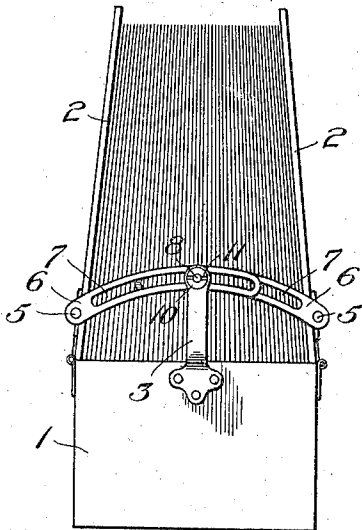


Fig. 3.

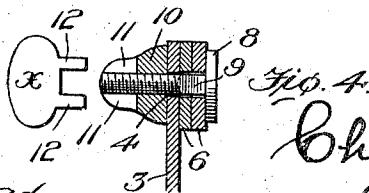
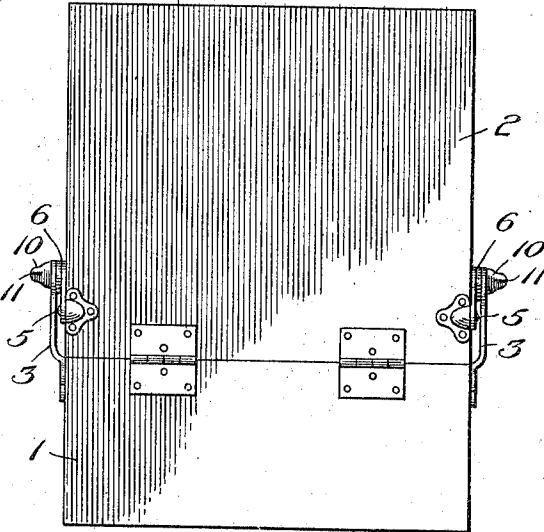


Fig. 4.

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UNITED STATES PATENT OFFICE.

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BINDER FOR LOOSE LEAVES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES F. HUDNALL, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Binders for Loose Leaves; and I do hereby declare the following to be a full clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to binders or loose leaf books, and has for its object the production of a device of this character designed, arranged and adapted to receive loose leaves, pages, signatures or pamphlets, and to securely, but detachably, retain them in an orderly and predetermined arrangement.

As a further object it contemplates and provides means for locking such leaves or pages in vertical position against accidental displacement; and also, certain novel features of construction, arrangement and combination of parts, whereby is produced a vertical binder for temporary or permanent use, of simplified, inexpensive and improved form.

As a further and special object this invention contemplates the production of a binder adapted and intended for use in conjunction with a posting or bookkeeping apparatus of my invention forming the subject-matter of a separate application for Letters Patent filed simultaneously herewith.

The present invention will be hereinafter particularly described and pointed out by the claims following.

In the accompanying drawings which form part of this application for Letters Patent, and whereon like characters refer to corresponding parts in the several views: Figure 1 represents in perspective the invention in its entirety, wide open and ready for the reception of loose leaves or pages, Fig. 2 is an end view of binder in closed and locked position containing a full supply of leaves or pages, Fig. 3 is a side elevation of binder showing one cover, closed as in Fig. 2, and, Fig. 4 is a detached detail view, showing one locking screw and nut, and one suitable key for locking said parts together.

Reference being had to the drawings and characters thereon, 1 indicates the binder body of rectangular or box-like form, having at both sides oppositely hinged covers 2, 2, and at each end upwardly extending op-

positely arranged standards or guide-arms 3, 3 each perforated at 4, 4 for purposes that will hereinafter appear.

Secured to opposite edges of both covers 2, 2, by preference near the lower edge thereof, are outwardly projecting pintles 5, 5 and 5, 5 arranged in pairs, as best shown by Fig. 3. To each pair of pintles 5, 5 are pivotally connected corresponding segmental racks 6, 6 each configured by curved guide slots 7, 7, as best shown by Figs. 1 and 2. It will be noted, however, that said racks and slots, either or both of them, may be of any other form and configuration without in the least departing from my invention or materially altering their use and operation.

Projecting outwardly through each set of slots 7 in their respective racks 6 and guide arms 3, at opposite ends of the structure, are locking screws 8, flattened as at 9 (Fig. 4) to prevent rotation, and equipped with locking nuts 10, as shown. Nuts 10 are perforated as at 11, 11 on either side of their longitudinal center for the reception of key-pins 12, 12, of a suitable locking key α , as shown by Fig. 4. Obviously, keys α for the purpose stated may be indefinitely varied in shape, and the pins 12, or equivalent locking means, may likewise be variously shaped and positioned so long as they are adapted to properly engage and rotate nuts 10 one way or the other to lock or unlock the co-acting parts.

This being a description of my invention in its preferred form of construction, its use and operation are self-evident, being such as are common to loose leaf binders generally, a practical example of such use being that of receiving and containing the leaves for several books of a bookkeeping system. In this connection I employ a separate binder for each book of original entry and each ledger. Entries being made in due course upon detached appropriate pages or leaves, said leaves are introduced into the proper binder in alphabetical arrangement, where they are supported for ready reference by covers 2, 2. When, however, it is desired to close the binders, covers 2, 2 are brought together as in Fig. 2, and thereupon securely locked upon contents of the binder by a turn of one or both nuts 10 by agency of key α . With binders embodying the present invention it will also be noted that weight of the leaves or pages is carried by

racks 6 and their co-acting screws 8 and nuts 10, when in use and occupying the position indicated by Fig. 1, thus relieving the cover-hinges of strain, and limiting the degree to which said covers may be opened or spread.

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

10 1. In a vertical binder for loose leaves the combination with a body portion comprising bottom side and end walls, of covers hinged to two of said walls, and a sliding connection between said covers, substantially as described.

15 2. In a vertical binder for loose leaves the combination with a body portion, a vertical standard at one end of said body portion, superposed covers hinged to the sides of said body, and racks slidingly connecting said covers guided in the standard aforesaid, substantially as described.

20 3. In a vertical binder for loose leaves the combination with a body portion, vertical standards at opposite ends of said body portion, superposed covers hinged to the sides of said body, racks slidingly connecting said covers at both ends, and means for locking

each set of racks in predetermined position, substantially as described.

30 4. In a vertical binder for loose leaves the combination with a body portion, a vertical standard at one end of said body portion, covers hinged to the sides of the structure, slotted racks slidingly connecting said covers, and a locking screw projecting through the slots of said racks to bind them in position upon the standard aforesaid, substantially as described.

40 5. In a vertical binder for loose leaves the combination with a body portion, a vertical standard secured to said body portion, covers hinged to the sides of the structure, slotted segmental racks slidingly connecting said covers, a locking screw projecting through said rack-slots and the adjacent standard, and a nut threaded upon said screw for binding said racks and standard in any predetermined position, substantially as described.

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

CHARLES F. HUDNALL.

Witnesses:

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