Sept. 11, 1928. 1,683,975

H. S. HORN

LOOSE LEAF BINDER

Filed July 23, 1927

Fig. 1.

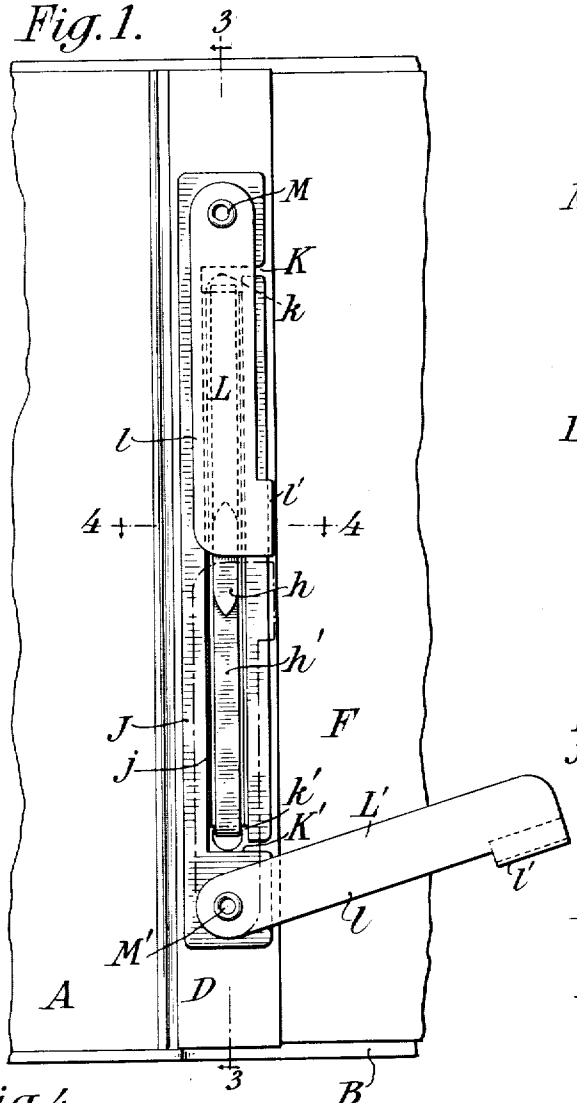


Fig. 2.

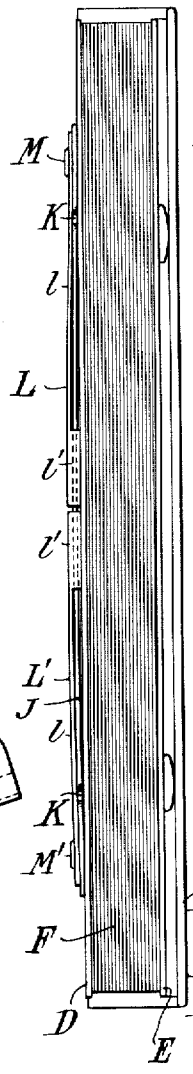


Fig. 3.

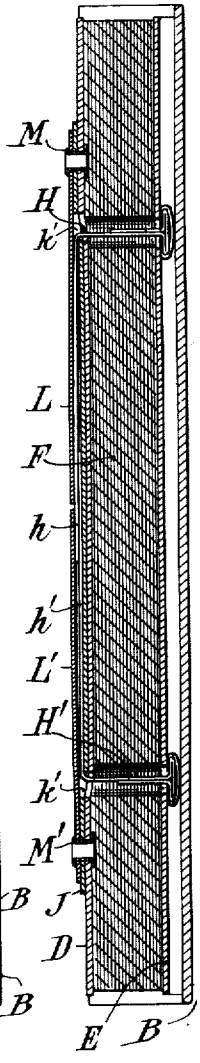
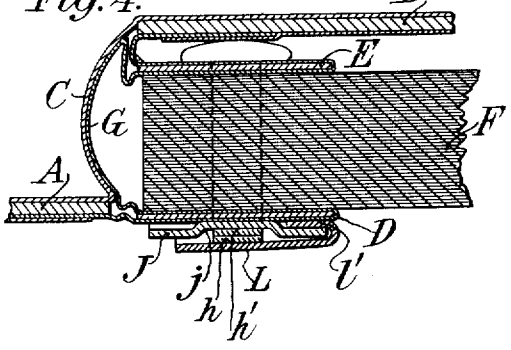


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY STANLEY HORN, OF SOUTH ORANGE, NEW JERSEY, ASSIGNOR TO W. C. HORN, BRO. & CO., OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

LOOSE-LEAF BINDER.

Application filed July 23, 1927. Serial No. 207,925.

The present invention relates to loose-leaf binders and the like of the type wherein the papers to be filed are threaded upon thongs or tongues and are effectively retained in position by a latching member whereby the ends of the tongues, after being bent down, are prevented from slackening or becoming loose and doing injury to the file papers and to the binder cover. In devices of this kind which are flexible and bendable, are attached to a member or wing on one of the binder covers and are receivable in slots in a member or wing on the other cover, over which member or wing they are bent down and held in place against accidental displacement by suitable means. To protect the slotted tongue-receiving member or wing against undue wear, it is usually provided with a metal guard plate having slots coinciding with those in the wing member on the guard plate, and which usually also carries the means for holding the tongues against accidental displacement. In prior devices of this kind these means are so constructed as to directly engage the filed papers and usually have protuberances, which, after repeated engagement with the binder cover, tend to damage the same.

According to the present invention I propose to simplify and improve the construction of the guard plate and the latching means so that all danger of injury to the filed papers and to the top cover of the binder is overcome. This I accomplish by so forming the guard plate and latching means that the latter in their operation and latching position are at all times free from engagement with the filed papers, and when in closed position will present a substantially smooth surface for engagement with the binder cover. The invention also includes other features of novelty which will be hereinafter more fully set forth.

In the accompanying drawings wherein I have shown a preferred construction of my loose leaf binder,

Figure 1 is a plan view of a portion of a loose leaf binder embodying my invention.

Fig. 2 is a side view of Fig. 1 viewed from the right thereof.

Fig. 3 is a section taken substantially along the lines 3—3 of Fig. 1.

Fig. 4 is a section taken substantially along the line 4—4 of Fig. 1.

Referring to the drawings let A and B indicate the covers of a loose leaf binder, which covers may be either rigid or semi-rigid, and as shown are provided with a conventional thin fabric covering. The covers are joined at their back by a flexible fabric strip which may be integral with the thin fabric covering extending over the faces of the cover members A and B, said flexible portion forming the back C of the binder. Carried by the binder covers are a pair of wing members D and E, between which the papers F to be filed are adapted to be clamped. As shown, these wing members are each enclosed in a thin fabric covering G, the ends of which are secured to the opposite covers and the central portion of which is secured to the back C to reinforce the same, there being sufficient play between the wing members, cover and back to allow for the independent movement of any of said members.

Carried by and extending through the wing member E is a pair of flexible tongued members H, H′ upon which the papers F to be filed are first threaded before being clamped between the wing members in a manner hereinafter to be made more apparent. Although tongued members are herein shown as being each formed with an enlarged head, it will be obvious that any form of flexible tongue member now commonly employed in binders of this type may be used. The tongued members H and H′ after being passed through the papers F are adapted to be received in lateral slots in the wing member D, after which they may be bent down over said wing member and held in place in such position. To protect the wing member D from wear, and especially the openings therein, said wing member is provided with a guard plate J, preferably formed of metal, said plate having lateral slots K and K′ coinciding with the slots in the wing member in which the tongues are received. The slots in the guard plate and wing member are also preferably incut, as shown at *k*, *k′* to better hold the tongues in bent-down position. The device as thus for described is substantially the same as that employed in the loose leaf binders now in common use.

According to the present invention, in order to protect the filed papers, and especially the top sheet thereof, against being injured through the engagement therewith

by the latching means, I have devised the novel guard plate and latching means herein disclosed. The guard plate J is preferably so formed that when mounted on the wing member one of its longitudinal edges will be in spaced relation thereto. As herein shown the guard member is formed of sheet metal having its central portion intermediate the longitudinal edges depressed or formed in the shape of a trough *j* extending from the slot K to the slot K′ adapted to accommodate the ends *h* and *h′* of the tongues after they are bent down over the guard plate. It will be apparent, however, that for the successful operation of the invention only one edge need be in spaced relation to the wing D.

The latching members are designated L and L′ and are preferably pivotally mounted on the guard plate through the medium of eyelets M and M′, which also serve to secure the guard plate to the wing member D. Each latching member consists of a flat arm *l*, an extension at one side of the free end of which is bent to form a hook or U-shaped portion *l′*, one arm of which, together with the flat arm *l*, is adapted to engage over the guard plate to hold the bent-down ends of the flexible tongues within the trough *j*, and the other arm of the U-shaped portion or hook being engageable between the spaced edge of the guard member and the wing member. Preferably the length of the latching members are such that in latching position their free ends assume a substantially abutting relationship and thereby provide a substantially smooth top surface for engagement with the underside of the top cover of the binder.

In use, the binder device of the present invention is substantially the same as the conventional loose leaf binders of this general type, but has the advantage thereover in that, during the latching and unlatching operations and at all other times when the binder has filed papers therein, the latching members are maintained out of engagement with said filed papers, thereby preventing injury being done thereto. This advantage, although of substantial value, it will be apparent, is accomplished in an exceedingly simple manner without the expediture of either additional time or material in the production of the binder.

While I have shown and described a preferred embodiment of my invention it will be apparent to those skilled in the art that modifications of the precise construction herein disclosed may be resorted to without departing from the spirit of the invention.

What I claim is:

1. A loose leaf binder or the like comprising a pair of connected members adapted to clamp filed papers therebetween, a flexible tongue carried by one of the members, a guard plate carried by the other member, said guard plate having a slot to receive the flexible tongue and a latching member pivotally carried by the guard plate having a part adapted to engage over the face of the guard plate and a part to engage under the face thereof to hold the tongue against displacement after it is bent down over the guard plate, said engaging parts of the latching member being at all times out of engagement with the filed papers.

2. A loose leaf binder or the like comprising a pair of connected members adapted to clamp filed papers therebetween, a flexible tongue carried by one of the members, a guard plate carried by the other member, said guard plate having a slot to receive the flexible tongue and a depressed portion extending longitudinally of the guard plate to receive said tongue after it is bent down, and pivotally mounted means movable relatively to the guard plate adapted to engage over and under the face thereof to hold the tongue against displacement after it is bent down over the guard plate, said means when engaging the guard plate being out of engagement with the filed papers.

3. A loose leaf binder or the like comprising a pair of connected members adapted to clamp filed papers therebetween, a flexible tongue carried by one of the members, a guard plate carried by the other member, said guard plate having a slot to receive the flexible tongue, a member pivotally mounted on the guard plate, said member having a substantially U-shaped portion, one arm of which is adapted to engage over the guard plate and hold the tongue thereover in bent-down position, and the other arm of the U-shaped portion being engageable between the guard plate and the member by which the guard plate is carried.

4. A loose leaf binder or the like, comprising a pair of covers each carrying a wing member between which the filed papers are adapted to be clamped, flexible tongues attached to one wing member adapted to hold the papers to be filed, a guard plate, attached to the other wing members, formed with slots adapted to receive the flexible tongues, said guard plate having a longitudinally extending trough formed by depressing a portion of the guard plate to accommodate the tongues after they are bent down, latching members pivotally carried by the guard plate said latching members having substantially U-shaped portions, one arm of which is adapted to engage over the top of the guard plate to hold the bent-down tongues in the trough, and the other arm of the U-shaped portions being engageable between the guard plate and the wing member to which it is attached.

5. A loose leaf binder or the like, comprising a pair of covers each carrying a wing member between which the filed papers are

adapted to be clamped, flexible tongues attached to one wing member adapted to hold the papers to be filed, a guard plate, attached to the other wing members, formed with slots adapted to receive the flexible tongues, said guard plate having a trough extending longitudinally thereof between the slots therein, said trough being formed by depressing a portion of the guard plate leaving a free edge adapted to be in spaced relation to the wing member, latching members movable relatively to the guard plate having parts adapted to engage over the face of the guard plate to hold the tongues against displacement after they are bent down into the trough in said guard plate, and parts engaging between the free edge on the guard plate and the wing member to which it is attached.

In witness whereof I have hereunto signed my name.

HENRY STANLEY HORN.

CERTIFICATE OF CORRECTION.

Patent No. 1,683,975. Granted September 11, 1928, to

HENRY STANLEY HORN.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 1, line 10, after the word "kind" insert the words "the tongues"; same page, line 103, for the word "for" read "far"; page 2, line 113, claim 4, for "members" read "member"; and the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 9th day of October, A. D. 1928.

M. J. Moore,
Acting Commissioner of Patents.

(Seal)

adapted to be clamped, flexible tongues attached to one wing member adapted to hold the papers to be filed, a guard plate, attached to the other wing members, formed with slots adapted to receive the flexible tongues, said guard plate having a trough extending longitudinally thereof between the slots therein, said trough being formed by depressing a portion of the guard plate leaving a free edge adapted to be in spaced relation to the wing member, latching members movable relatively to the guard plate having parts adapted to engage over the face of the guard plate to hold the tongues against displacement after they are bent down into the trough in said guard plate, and parts engaging between the free edge on the guard plate and the wing member to which it is attached.

In witness whereof I have hereunto signed my name.

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