J. F. HANLY.

POSTING TRAY FOR USE WITH LOOSE LEAF BINDERS.

APPLICATION FILED OCT. 20, 1919.

1,404,388.

Patented Jan. 24, 1922.

3 SHEETS—SHEET 1.

Fig. 1

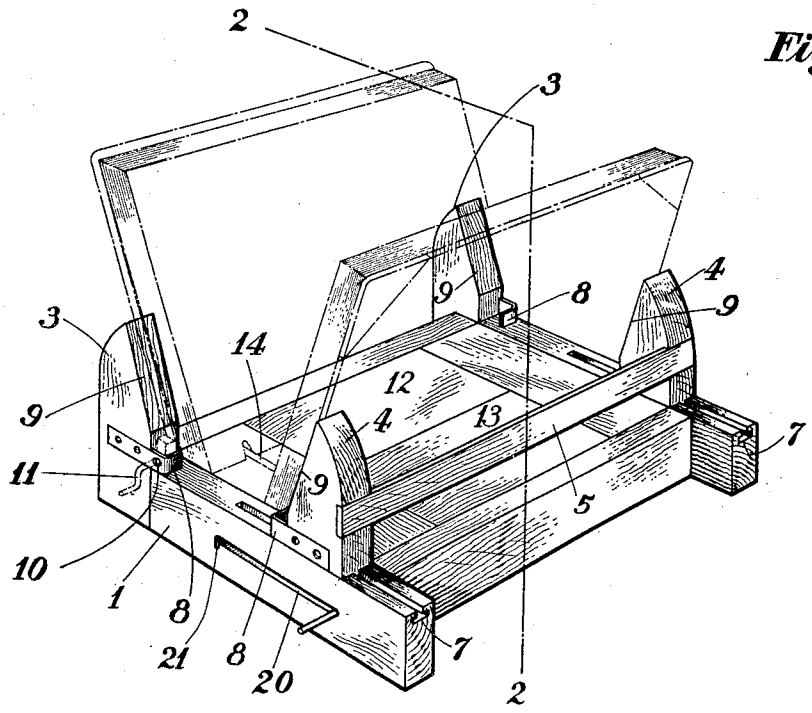
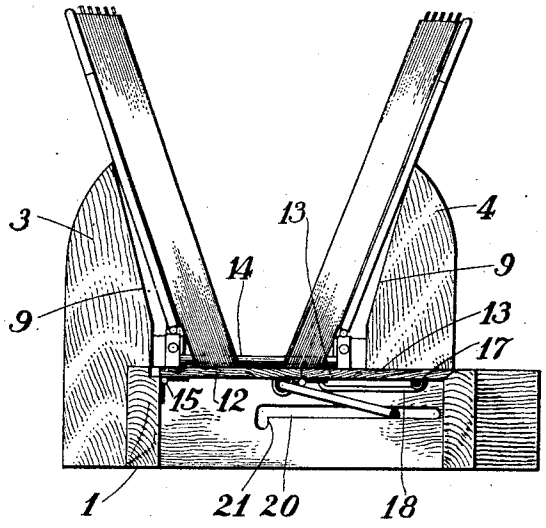


Fig. 2.



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3 SHEETS—SHEET 2.

Fig. 3

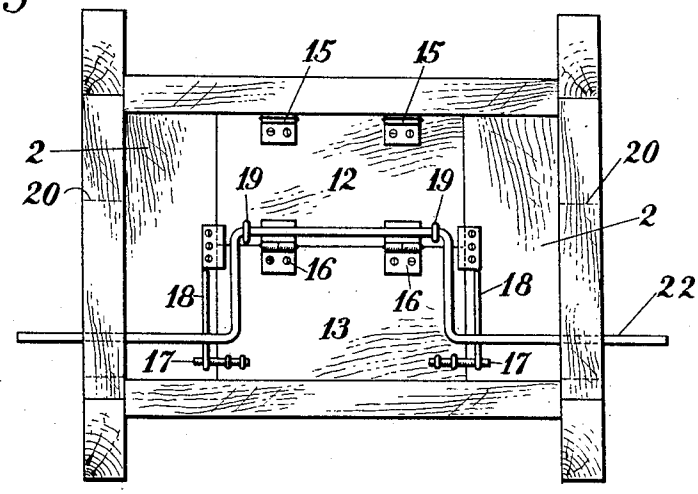
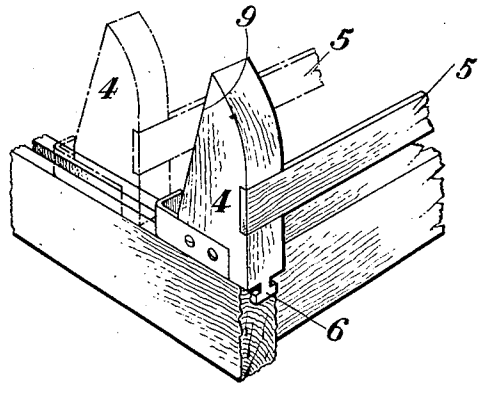


Fig. 4



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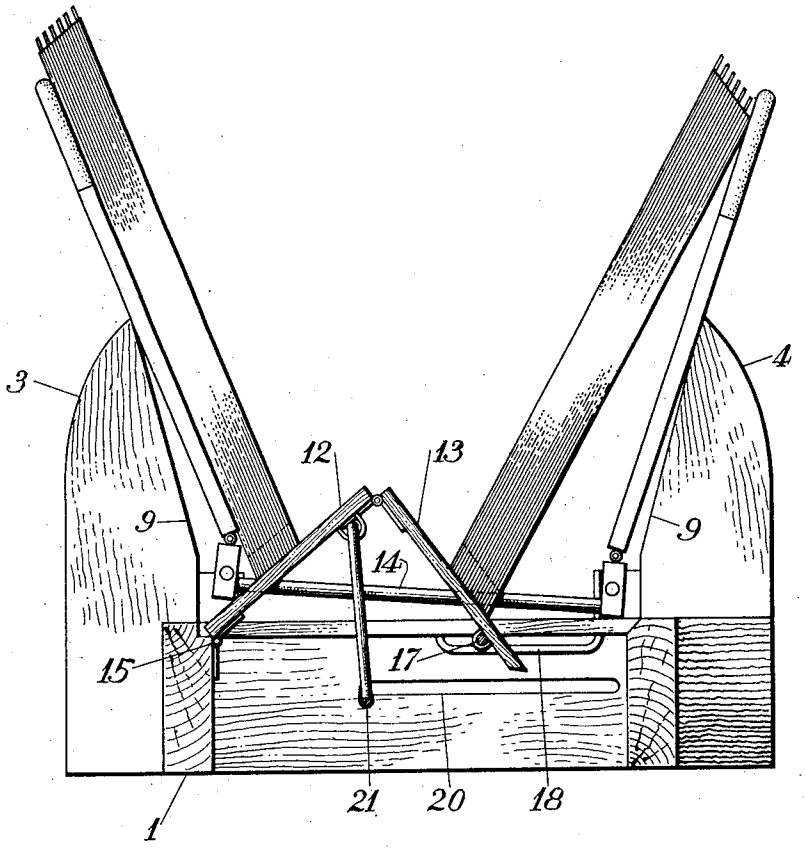
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3 SHEETS—SHEET 3.

Fig.5



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POSTING TRAY FOR USE WITH LOOSE-LEAF BINDERS.

1,404,388. Specification of Letters Patent. Patented Jan. 24, 1922.

Application filed October 20, 1919. Serial No. 331,832.

To all whom it may concern:

Be it known that I, JOSEPH F. HANLY, a citizen of the United States, residing in the city of New York, borough of Brooklyn, county of Kings, and State of New York, have invented a certain new and useful Posting Tray for Use in Posting Entries in Loose-Leaf Binders, of which the following is a specification.

The object of the present invention, speaking generally, is to provide a single or unitary device or structure which is equally applicable to both methods of posting, and one which is simple in construction, economical to manufacture, and efficient in operation.

A further object of the invention is to provide a device of this character which may be readily manipulated to fit loose-leaf binders of varying thicknesses, and may be readily adjusted to compensate for any number of leaves desired within a wide range of operation.

Another feature of the invention is embodied in means adjustable to move the leaves of the loose-leaf binder endwise and at an angle so as to project the leaves successively upwardly beyond one another for the purpose of facilitating the ready removal of any particular leaf, this feature being especially advantageous in carrying out alphabetical posting, and, moreover, to so construct the device that this feature may be readily eliminated for promiscuous posting, in carrying out which it would be a detriment rather than an assistance. A marked advantage of the compensating feature referred to resides in the fact that the leaves are all simultaneously and rapidly shifted to the positions described without any handling thereof whatsoever, and are easily returned to their normal positions when the posting is finished for the purpose of expediting their reassembling in the loose-leaf binder.

Features of the invention other than those specified will be apparent from the hereinafter detailed description taken in conjunction with the accompanying drawings.

In the accompanying drawings I have illustrated one practical embodiment of the invention, but the construction therein shown is to be understood as illustrative only, and not as defining the limits of the invention.

Figure 1 is a perspective view showing the preferred form of device of the present invention with a loose leaf binder associated therewith in phantom.

Figure 2 is a section taken in the plane of the line 2—2 of Figure 1.

Figure 3 is an underneath plan view of the device;

Figure 4 is a detail perspective of a fragment of the device; and

Figure 5 is a view corresponding to Figure 2 but showing the device as adapted for alphabetical posting.

Referring to the drawings 1 designates the base of the device which, in practice, may be made from wood or metal as desired but as here shown is constructed of wood. The base 1 is shown in the form of a frame, across the top of which is positioned a suitable floor or platform 2. At the back corners of the base the same is provided with fixed, rigid upstanding brackets or rests 3, while complementary rests or brackets 4 are mounted on the base for sliding movement toward and away from the brackets 3. To render the movable brackets 4 operable in unison, they are preferably connected by a rigid connecting strip 5.

To provide for the sliding movement of the brackets 4 each is provided along its bottom with a dovetail 6, and the base 1 is provided with guides 7 extending longitudinally adjacent its lateral edges, and the dovetails 6 fit into and are adapted to slide in the guides 7 for the purpose of directing the movements of the brackets 4 toward and away from the brackets 3. Adjacent the base of each of the brackets 3 and 4 is positioned a hooked shaped keeper 8, the function of which keepers are to collectively engage and support the covers of a loose leaf binder adapted to be associated with the device during the posting operations, and in order to facilitate the opening of the binder when thus held in position, the complementary faces of the brackets 3 and 4 are sloped off as at 9. When a book is held in the position described, the sloping faces of the brackets 3 and 4 will allow the book to assume a natural partially opened condition, as shown in Figures 1 and 2.

The device as thus far described may be used complete in making promiscuous postings and when so employed, its operation is as follows.

A loose leaf binder adjusted to tightly

grip the pages between its covers is positioned in the device, so that the lateral edges of one cover will be engaged by the keepers 8 of the brackets 3, while the lateral edges of the other cover will be engaged by the keepers 8 of the brackets 4, the brackets 4 having been pushed forwardly to partake of a distance from the bracket 3 substantially equal to the thickness of the book. One of the keepers 8 is provided with an aperture 10 through which the usual key 11 may be introduced as shown in Figure 1, for the purpose of loosening the binder of the book to allow the covers thereof to be drawn apart as shown in Figure 5, so that ready access may be had to the intermediate leaves. The device supporting the book in this open position or extended position is as shown in Figures 1 and 2, wherein the position of the brackets 4 relative to the bracket 3 will be entirely dependent upon the thickness of the book and the individual tastes of the operator depending upon whether he wishes greater or lesser space between the pages of the book. In carrying out the posting operations, the leaves of the book may be shifted from one side to the other to make the various positions in accordance with the well known promiscuous posting, and it will be noted particularly from Figure 2 that the upper edges of all of the leaves lie in substantially the same plane, so that any one may be readily removed to make an entry.

In alphabetical posting where the posting starts at the front of the book and progresses successively to the back of the book, the consecutive pages are, in practice, taken out in succession, the posting made and the pages returned, and in the device of the present invention means is provided for facilitating this consecutive handling of the pages. To this end, the floor or platform of the base 1 is provided, intermediate its lateral edges with pivoted sections 12 and 13 which may be elevated through the employment of suitable means to shift the pages of the book edgewise with respect to one another to render them more accessible for withdrawal. As shown, the pivoted sections 12 and 13 occupy the medial portion of the device and are of less width than the distance between the tie rods 14 of a binder. The section 12 is hinged or otherwise pivoted at 15 to the base while its opposite edge is hinged or otherwise pivoted at 16 to the adjacent edge of the section 13, while the free end of the section 13 is provided with laterally extending trunnions 17 which project into guides 18, mounted on the bottom of the platform 2, all as clearly shown in Figures 2, 3 and 5. Fixed on the under side of section 12 adjacent its edge which is pivotally secured to the section 13 are a pair of bearings 19 and in the opposite lateral sides of the base are formed slots 20 which terminate at their forward ends in depressions 21. An offset rod or crank 22 extends transversely of the device through the bearings 19 and through the slots 20 in such manner that the opposite ends of the rod or crank project beyond the sides of the device as shown in Figures 1 and 3.

In the normal position of the parts the sections 12 and 13 lie flush with the floor or platform 2 of the device as shown in Figures 1 and 2, and this is the position of which the parts partake while carrying out promiscuous posting. However, when alphabetical posting is to be practised, the projecting ends of the rod 22 are grasped and forced inwardly, until they fall into the depressions 21 during which operation the section 12 will be tilted upwardly causing the section 13 to be similarly tilted with an opposite inclination until the sections 12 and 13 assume the positions shown in Figure 5. This operation may be carried out while the loose leaf binder is in position as hereinbefore described with the tie members 14 of the binder released, so that when the sections are tilted the leaves of the binder are free to slide upwardly over one another so that each successive leaf will be projected upwardly beyond the preceding leaf, as shown at 23 in Figure 5. At the conclusion of the posting operation the rod 22 is freed from the depressions 21 and allowed to return to its normal position for the purpose of depressing the sections 12 and 13.

When the posting of either type is finished, and it is desired to move the book from the device, the operator merely forces the section 4 forwardly thereby collapsing the book and forcing the pages and covers into close proximity, the key 11 is then inserted through the aperture 10 and the binder locked in closed position, whereupon the key is removed allowing the binder to be readily lifted out of the device.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is:

1. A posting tray embodying a base, fixed and movable rests cooperating with said base for engaging and supporting the covers of a loose leaf binder, the movable rest being shiftable on the base toward and away from the fixed rest and a tiltable platform associated with the base and operable entirely independently of the rests in combination with means for tilting the platform, while the rests remain stationary, for the purpose of shifting the pages of the binder to render them more accessible.

2. A posting tray embodying a base, a fixed rest on one side of the base, a movable rest guided for movement toward and away from the fixed rest, a tiltable platform associated with the base and underlying a

book adapted to be supported between the fixed and movable rests, and means for tilting the platform, while the rests remain stationary, for the purpose of shifting the leaves of the book edgewise with respect to one another for the purpose of rendering them more accessible.

3. A posting tray embodying a base, fixed rests upstanding at one side of the base and movable rests upstanding from the base and guided for movement toward and away from the fixed rests, means associated with the rests for supporting a loose leaf binder in co-operative relation thereto, a tiltable platform associated with the base, and means for tilting the platform, while the rests remain stationary, for the purpose of shifting the leaves of the binder edgewise with respect to one another to render them more accessible.

4. A posting tray embodying a base, fixed and movable rests associated with the base, the movable rests being guided for movement toward and away from the fixed rests, a tiltable platform associated with the base and underlying the leaves of the loose leaf binder supported between the rests, said tiltable platform embodying a pair of pivoted sections, and means for tilting the pivoted sections into positions to assume opposite inclination, while the rests remain stationary, for the purpose of shifting the leaves of the binder edgewise with respect to one another to render them more readily accessible.

5. A posting tray embodying a base, provided with means for supporting the covers of a loose leaf binder in substantially upstanding position, a tiltable leaf supporting platform associated with said base and underlying the loose leaf binder, said tiltable platform embodying a pair of pivoted sections mounted on the base independently of the means for supporting the covers of the binder, and means for tilting the pivoted sections into opposite inclinations for the purpose of shifting the leaves of the binder edgewise with respect to one another to render them more readily accessible.

6. A posting tray embodying a base, provided with means for supporting the covers of a loose leaf binder in substantially upstanding position, a tiltable leaf supporting platform associated with said base and positioned beneath the binder, said tiltable platform embodying a plurality of pivoted sections, means for guiding the pivoted sections of the platform during their pivotal movement and means for pivotally moving the platform into an inclined position beneath the leaves of the binder, while the means for supporting the covers remains stationary, for the purpose of shifting said leaves edgewise with respect to one another to render them more readily accessible.

7. A posting tray embodying a base, provided with a pair of fixed rests adapted to support one cover of a loose leaf binder, a pair of movable rests, guided for movement toward and away from the fixed rests and adapted to support the other cover of the binder to hold the same in partially opened condition between the rests, a tiltable platform associated with the base independently of the rests for supporting the leaves of the binder, said platform embodying a pair of pivoted sections, an off set rod associated with the base and cooperating with the pivoted sections for tilting them into opposite inclination for the purpose of shifting the leaves edgewise with respect to one another to render them more readily accessible while the rests remain stationary.

In testimony whereof, I have signed my name to this specification.

JOSEPH F. HANLY.