Aug. 30, 1938. L. T. LE FEBURE ET AL 2,128,882

TRAY WITH DROP SIDE RAIL

Filed Dec. 14, 1937

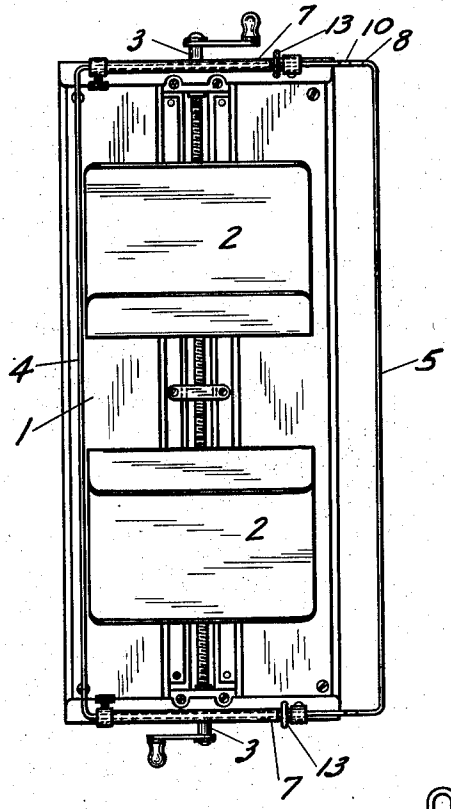


FIG-1

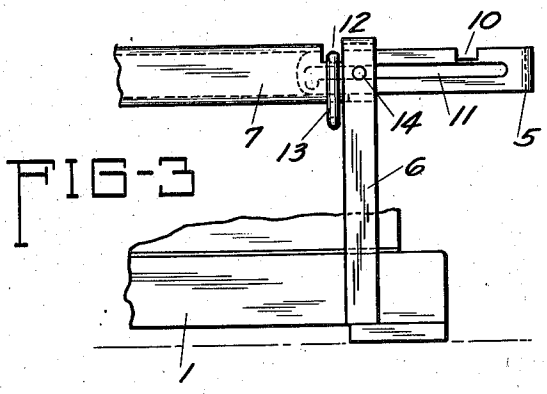


FIG-3

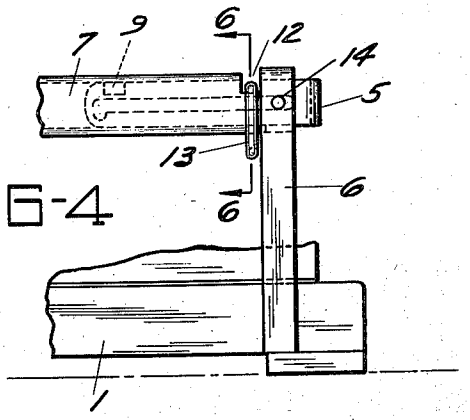


FIG-4

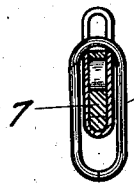


FIG-6

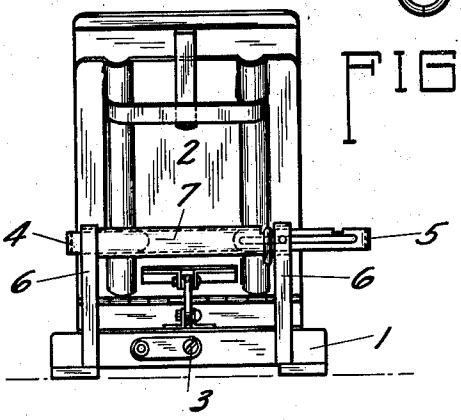


FIG-2

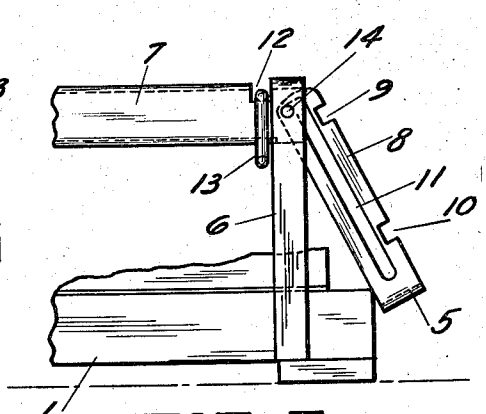


FIG-5

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TRAY WITH DROP SIDE RAIL

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8 Claims. (Cl. 211—10)

The present invention pertains to sorting and other trays and comprises among its objects the provision of a tray having an adjustable side rail for accommodation of papers of different sizes; the provision of a tray of the character indicated having an easily adjusted side rail; the provision of a tray of the character indicated in which the side rail may be easily gotten out of the way so that extra wide papers may be placed in the tray without bending or curling at the edges; the provision of a tray having an adjustable side rail which may be shifted readily from narrow to wide and from wide to narrow with a minimum of trouble and loss of time; and such further objects, advantages, and capabilities as will hereafter appear and as are inherent in the construction disclosed herein. Our invention further resides in the combination, construction, and arrangement of parts illustrated in the accompanying drawings and, while we have shown therein what is now regarded as the preferred embodiment of this invention, we desire the same to be understood as illustrative only and not to be interpreted in a limiting sense.

In the drawing annexed hereto and forming a part hereof,

Fig. 1 represents a plan view of a tray embodying our invention and having a side rail extended;

Fig. 2 represents an end view of the structure illustrated in Fig. 1;

Fig. 3 represents a fragmentary end elevation of one corner of this tray;

Fig. 4 represents the same structure as shown in Fig. 3 but with the side rail moved inwardly to narrow position;

Fig. 5 represents the same structure as shown in Figs. 3 and 4 but with the side rail pulled out and dropped down to lowered position; and

Fig. 6 represents a cross section taken substantially along the plane indicated by the line 6—6, Fig. 4.

Reference will now be made in greater detail to the annexed drawing for a more complete description of this invention. We have chosen to illustrate this tray as having a bottom 1, follower blocks 2, adjustable lengthwise of the base by means of screws 3, and an adjustable side rail 4. Thus far, the structure is not novel. The novel part of our present invention is the side rail 5 and the means for adjusting same to various positions of adjustment.

Adjacent the corners of the base 1 are posts 6 which are connected in pairs by hollow crossbars 7 within which the arms 8 of the side rail 5 are slidable. These arms are provided in their upper edges with notches 9 and 10 and internally with longitudinal slots 11. A notch 12 is formed in each crossbar 7 adjacent a post 6 for the reception of a loop 13, slightly less in internal length than the maximum width of the bar 7, which loop surrounds the bar and is located in the notch 12. The structure is identical at the two ends of the tray and a description of one end will therefore be applicable to both. Since the loop 13 is less in length than the width of the bar, it is impossible for the loop to be accidentally displaced along the crossbar 7. When the two loops 13 are raised and the bar 5 is pulled outwardly, the bar may be adjusted into the position shown in Fig. 3 or that shown in Fig. 5. A pin 14 passes through the upper end portion of each post 6 and the slot 11 in the arm 8. As shown most clearly by dotted lines in Figs. 3 and 4, the slot 11 has an angular extension accommodating the pin 14 which passes through the post and arm.

Both sides of the tray may be constructed the same as the right side is here shown and it is therefore not to be understood that we intend the two sides to be constructed differently. It is believed that the construction and operation of this device will be clear from the description and drawing presented herewith.

It will of course be understood that the specific description of structure set forth above may be departed from without departing from the spirit of this invention as set forth in this specification and the appended claims.

Having now described our invention, we claim:

1. In a tray of the nature indicated having a base and upstanding end members, said end members having hollow crossbars, a side rail having longitudinally slotted end portions turned at substantially right angles to the longitudinal dimension of the rail, said end portions being slidable in the hollow crossbars and retained against removal therefrom by pins passing through the slots, each end portion having spaced notches in its upper edge for the reception of fastening means, each crossbar having a notch in its upper edge to cooperate with the notches in the upper edges of the said end portions, and holding means on said crossbars adapted to enter the cooperating notches in the crossbars and end portions and to cooperate therewith in holding the side rail in different adjusted positions.

2. A structure as defined by claim 1 in which the fastening means comprises a loop surround-

ing each hollow crossbar and located in the notch in said crossbar.

3. A structure as defined by claim 1 in which the fastening means comprises a loop surrounding each hollow crossbar and located in the notch in said crossbar, said loop having its internal opening of less length than the width of the crossbar.

4. In a tray having upstanding end posts adjacent its corners and approximately horizontal crossbars connecting the posts at the same end of the tray, a side rail adjustable away from and toward the longitudinal axial line of the tray, the end portions of the side rail being bent at substantially right angles to the body of the rail so as to extend horizontally into the crossbars, said crossbars and end portions having cooperating notches in their upper edges for coaction with holding devices, and a holding device on each crossbar to cooperate with said notches in holding the side rail in different positions of adjustment with relation to the body of the tray.

5. In a tray of the nature indicated, an adjustable side bar having its end portions bent transversely of the main body of the bar and longitudinally slotted, the upper edges of the end portions being provided with notches for the reception of holding means, said tray having at two opposite sides hollow bars within which the end portions of the side bar may slide, said hollow bars being notched for the reception of securing means, and securing means surrounding said hollow bars and located in the notches thereof, the size of the opening in the securing means being greater than the width of said end portions but less than the width of said bar whereby to permit said end portions to slide through said securing means but to prevent the securing means from becoming detached from the notches of said bars.

6. A structure as defined by claim 5 having holding means extending through the bars and the slots in the arms of the side bar to prevent removal of the side bar from the remainder of the tray.

7. In a tray of the character indicated, the combination of channeled end rails and a side rail, said side rail having its end portions bent at substantially a right angle to the body portion thereof, the end portions being slidable in the channels of the channeled end rails and each provided in an edge with spaced notches for the reception of holding means, each of said channeled end rails being provided with a notch for the reception of holding means to cooperate with the notches in the end portions and the end rails, and holding means cooperating with the notches of the notched members and the end portions to hold the side rail in different positions of adjustment.

8. In a tray of the character indicated, the combination of channeled end rails and a side rail, said side rail having its end portions bent at substantially a right angle to the body portion thereof, the end portions being slidable in the channels of the channeled end rails and each provided in an edge with spaced notches for the reception of holding means, each of said channeled end rails being provided with a notch for the reception of holding means to cooperate with selected notches in the end portions and the notches in the end rails, and holding means cooperating with the notches of the channeled end rails and selected notches of the end portions to hold the side rail in different positions of adjustment, the ends of the side rail being constructed to be drawn out beyond the holding means so that the side rail may be lowered into a non-obstructing position.

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