

Nov. 30, 1937.

J. H. PAGE

2,100,720

LETTER TRAY

Filed Jan. 11, 1937

2 Sheets-Sheet 1

Fig. 1

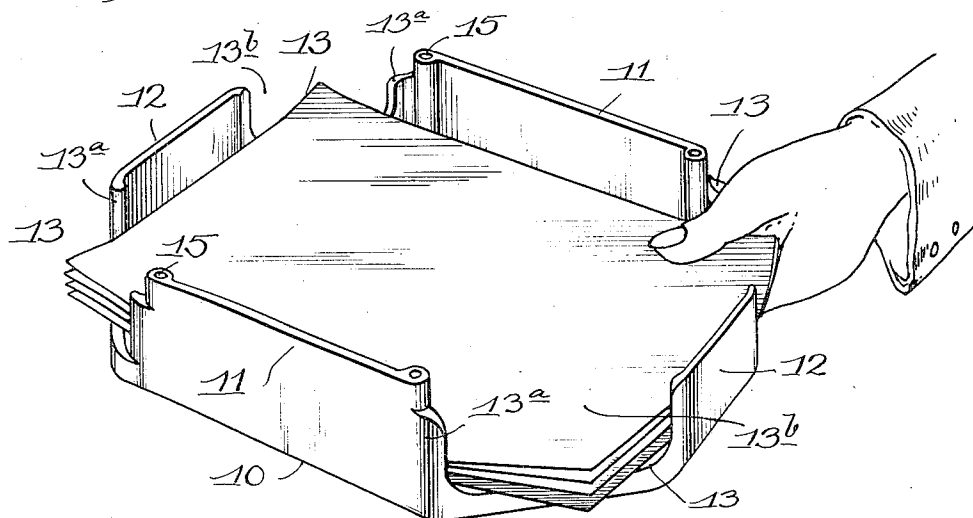
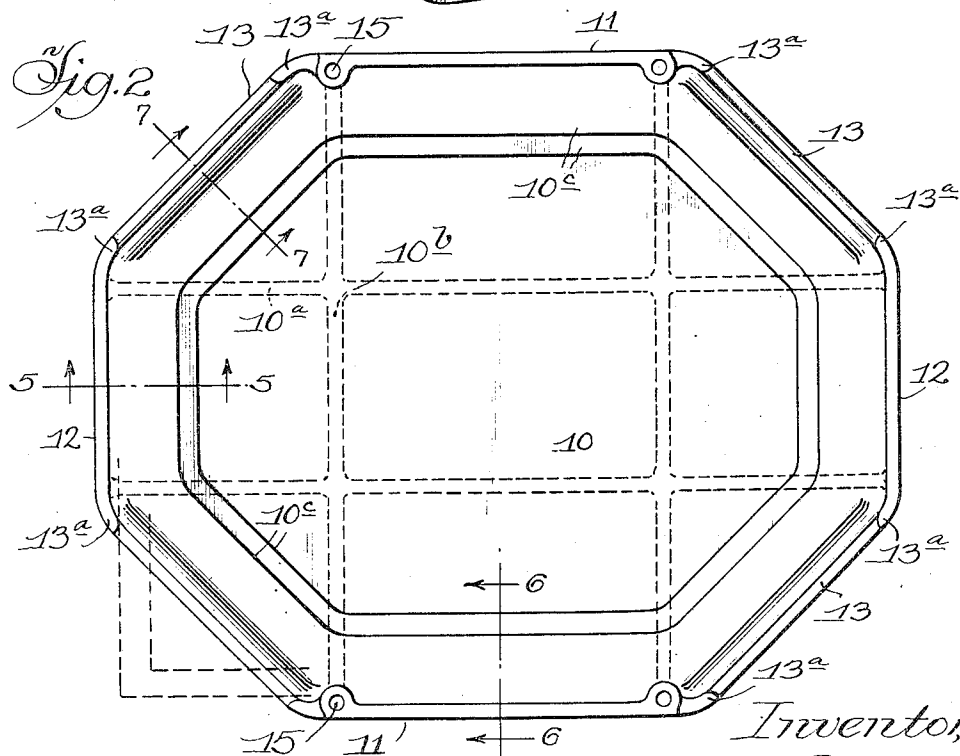


Fig. 2



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2 Sheets-Sheet 2

Fig. 3

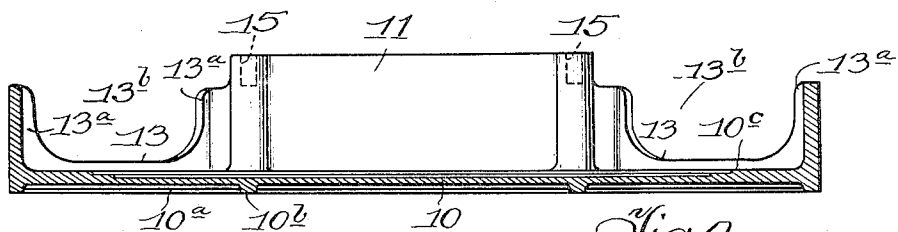
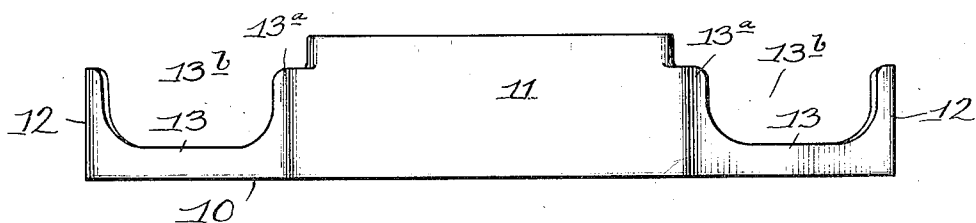


Fig. 4

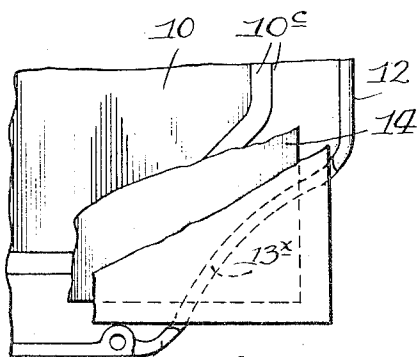
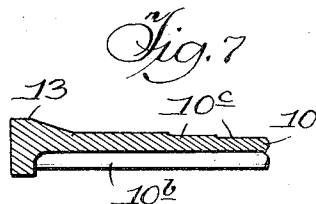
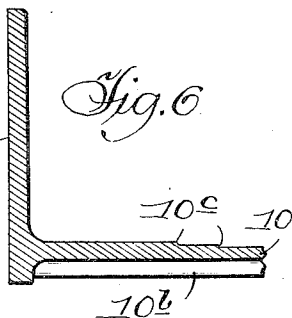
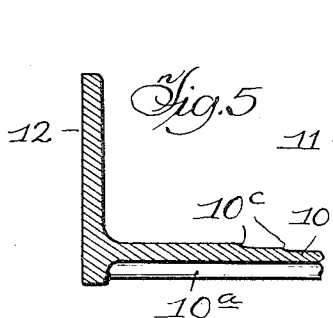


Fig. 8

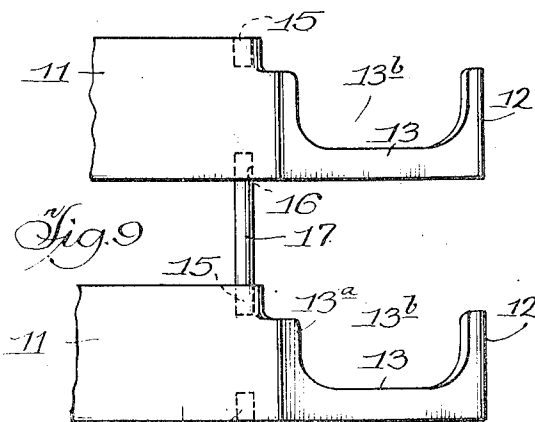


Fig. 9

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UNITED STATES PATENT OFFICE

2,100,720

LETTER TRAY

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Application January 11, 1937, Serial No. 120,031

9 Claims. (Cl. 206—72)

This invention relates to a type of letter tray, open at the top and comprising a bottom and upright walls, with openings in the walls and/or the bottom designed to facilitate the withdrawal of letters or papers from the tray.

One object of the invention is to provide an improved tray of the said type which is of simple and economical construction, in which means providing the openings to facilitate the withdrawal of letters from the tray are so designed and formed with reference to its bottom and upright walls that the structural strength of the tray will not be reduced, but will rather be increased.

Another object of the invention is to provide in a tray of the kind means at the opening or openings where the letters are intended to be grasped, for raising the parts to be grasped sufficiently above the level of the desk or table on which the tray is placed, that ample room is left below the projecting edges of the letter or letters for insertion of the fingers and thumb without the necessity for legs on the bottom of the tray.

Another object of the invention is to produce a tray of the kind which has means presented about the openings for automatically centering the papers as and when they are tossed carelessly into the tray.

These and other objects of the invention will appear more clearly as I proceed with my specification.

In the drawings:—

Figure 1 is a perspective view of the improved tray showing in somewhat exaggerated form the manner in which the papers project from the tray and stand above the table or desk upon which it stands;

Figure 2 is a top plan view of the tray;

Figure 3 is a side elevation of the tray;

Figure 4 is a longitudinal central section through the tray;

Figures 5, 6 and 7 are fragmentary, detail vertical sections indicated, respectively, by the lines 5—5, 6—6 and 7—7 of Figure 2;

Figure 8 is a fragmentary top plan view of one corner of the tray showing a slight modification thereof; and

Figure 9 is a view showing in side elevation fragmentary parts of trays, the one supported above the other in spaced relation by rods interposed between them.

Referring now to that embodiment of the invention illustrated in the drawings:—The letter tray is preferably longer than it is wide and has a bottom wall 10, upright side walls 11, 11 and

upright end walls 12, 12. As shown, the bottom wall 10 is recessed on its bottom side and is there provided with transverse and longitudinal ribs as indicated at 10^a, 10^b. Said bottom wall is further reduced in thickness by means of several steps downward, as indicated at 10^c, from the side and end walls towards its center as shown in Figures 4 to 7, inclusive. This provides a light tray, without reducing its structural rigidity; and this construction is of particular advantage when the tray is made of Bakelite or some like substance permitting it to be formed in a mold.

The end walls 12, 12 and the side walls 11, 11 are made of lengths less, respectively, than the width and length of said tray, so that a space intervenes between each end of an end wall and the proximate end of a side wall. The bottom wall 10 terminates in this space, which is bridged by a low rib 13, rising from the margin of the bottom wall and having upright end wings 13^a, 13^a connected to the associated end and side walls. The edges of the wings 13^a, 13^a are curved towards each other as they approach the top edge of the rib 13 into which they merge. An upwardly opening wide aperture 13^b is thus defined by the rib 13 and its wings 13^a.

The ribs 13 and apertures 13^b may be provided between one or more pairs of associated end walls and side walls. As shown, and preferably, such ribs and apertures are formed adjacent to what would otherwise be the four corners of the tray, with the result that the tray is octagonal in plan view. This is of advantage because it permits of the approach to the tray from either side or either end to insert, remove or inspect papers.

The operation of, and the advantages of use of, the improved tray are as follows:—Papers placed in the tray will leave wide corner part or parts projecting through the wide aperture or apertures 13^b (defined by the low rib 13 and its end wings 13^a) well beyond the limit of the bottom wall 10 at said aperture or apertures. While the papers in the tray will lie flat in the main on said bottom wall, any corner part or parts of any and all papers projecting through an aperture 13^b will be deflected into an upwardly inclined plane by the said rib 13 so as to be held substantially above the surface upon which the tray rests, as shown in Figure 1. As a result, the papers may be grasped at a projecting corner, either singly or in numbers, for inspection or withdrawal. And papers thrown carelessly into the tray, without attention to their proper disposal therein, will have the edges of a corner part

or parts thereof engaged by one or the other of the downwardly converging edges of the end wings 13^a defining the end limits of an aperture 13^b to deflect them and cause them to assume a symmetrical position as to the walls of the tray.

The rib 13, with its wings 13^a, may extend in a straight line connecting the associated side and end walls, as shown in Figures 1 and 2; or, again, it may be curved inwardly as shown in Figure 8 at 13^x. The inwardly curved formation will be of advantage in trays where it is necessary to accommodate sheets of considerable variations in size, since it will permit the corner of a sheet of smaller size, as at 14, to project more beyond the rib than it would if the rib were straight.

At the ends of the side walls 11 are provided upwardly opening sockets 15 and corresponding aligned, downwardly opening sockets 16 in the bottom wall for the reception of the usual spacing or supporting rod 17, by means of which two or more trays may be supported one above the other, as shown in Figure 9. By thus placing the sockets for these rods and also by making the end walls 12 lower than the side walls 11, ample room is provided between the trays for insertion of papers when in stacked relation.

Another advantage of a tray of the construction herein-described is that with the apertures 13^b disposed at the corners, when the trays are inverted, one upon another in slightly offset position (as when packing for shipment), two trays will occupy but little more space than one tray; and in addition, the trays will be more strongly braced than when packed one on top of the other, each in upright position.

While in describing the invention I have referred to certain details and arrangement of parts, it will be understood that the invention is not limited thereto except as may be pointed out in the appended claims.

I claim as my invention:—

1. A paper tray having a bottom wall and upright side and end walls, a side wall and an end wall being less in length, respectively, than the length and width of the tray to leave a space between their proximate ends, said bottom wall terminating in said space, and a low upright rib rising from said bottom wall, bridging said space and being connected to said proximate wall ends.

2. A paper tray having a bottom wall and upright side and end walls, a side wall and an end wall being less in length, respectively, than the length and width of the tray to leave a space between their proximate ends, said bottom wall terminating in said space in a line connecting said proximate wall ends, and a low upright rib rising from said bottom wall at said line, said bottom wall bridging said space and having end wings connected to said proximate wall ends.

3. A paper tray having a bottom wall and upright side and end walls, a side wall and an end wall being less in length, respectively, than the length and width of the tray to leave a space between their proximate ends, said bottom wall terminating in said space, and a low upright rib

rising from said bottom wall and having upright end wings, bridging said space and being connected to said proximate wall ends, the proximate edges of said end wings being curved towards each other as they approach said rib.

4. A paper tray having a bottom wall and upright side and end walls, a side wall and an end wall being less in length, respectively, than the length and width of the tray to leave a space between their proximate ends, said bottom wall terminating in said space, and a low upright rib rising from said bottom wall, bridging said space and being connected to said proximate wall ends, said rib being curved inwardly and away from the vertical plane of said proximate wall ends.

5. A paper tray having a bottom wall and upright side and end walls, the side walls and end walls being less in length, respectively, than the length and width of the tray to leave spaces between their proximate ends, said bottom wall terminating in said spaces, and low upright ribs rising from said bottom wall, bridging said spaces and being connected to the associated proximate wall ends.

6. A paper tray having a bottom wall and upright side and end walls, said side walls being of greater depth than said end walls, the side walls and end walls being less in length, respectively, than the length and width of the tray to leave spaces between their proximate ends, said bottom wall terminating in said spaces, and low upright ribs rising from said bottom wall, bridging said spaces and being connected to the associated proximate wall ends.

7. A paper tray having a bottom wall and upright side and end walls, said side walls being of greater depth than said end walls, the side walls and end walls being less in length, respectively, than the length and width of the tray to leave spaces between their proximate ends, said bottom wall terminating in said spaces, and low upright ribs rising from said bottom wall and having upright end wings bridging said spaces and being connected to the associated proximate wall ends.

8. A paper tray having a bottom wall and upright side and end walls, a side wall and an end wall being less in length, respectively, than the length and width of the tray to leave a space between their proximate ends, said bottom wall terminating in said space, and end wings connected to said proximate wall ends projecting into said space, said end wings being curved towards each other as they approach the said bottom wall.

9. A paper tray having a bottom wall and upright side and end walls, said side walls being of greater depth than one end wall, the side walls and the said end wall being less in length, respectively, than the length and width of the tray to leave spaces between the ends of said end wall and the proximate ends of said side walls, said bottom wall terminating in said spaces, and low upright ribs rising from said bottom wall, bridging said spaces and being connected to the associated proximate wall ends.

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