

March 18, 1941.

T. A. HEARN ET AL

2,235,709

LETTER TRAY

Filed June 10, 1938

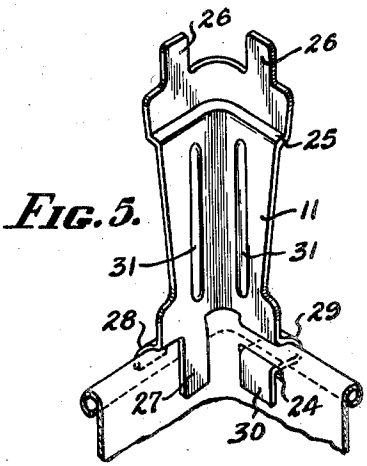


FIG. 5.

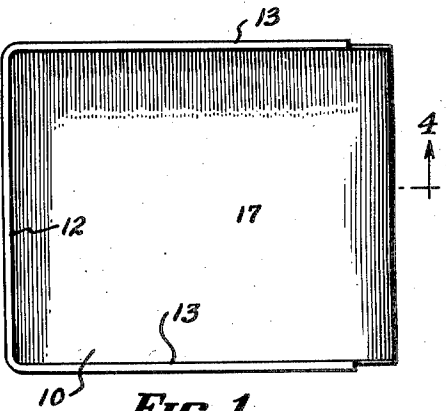


FIG. 1.

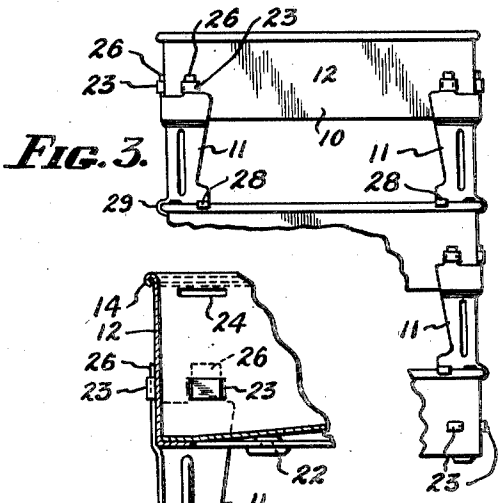


FIG. 3.

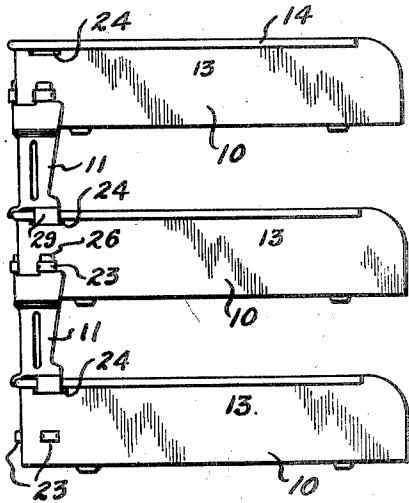


FIG. 2.

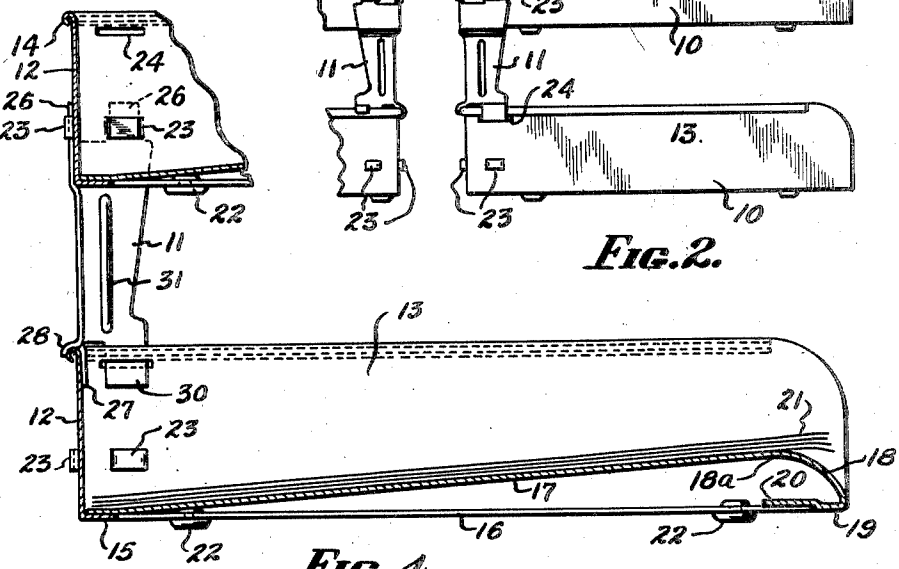


FIG. 4.

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2,235,709

LETTER TRAY

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Application June 10, 1938, Serial No. 213,018

1 Claim. (Cl. 206—73)

This invention relates to letter trays of the type used on desks in offices for holding various items of mail. There are various letter trays on the market today in which two or more trays are provided, one on top of the other, and it is to this general class of trays to which our invention is directed.

It is an object of our invention to provide a standard letter tray unit and a standard stacking member so that any desired number of trays may be stacked on top of each other by means of these stacking members.

It is another object of our invention to provide a tray construction in which there is maximum accessibility to the trays by virtue of the fact that the stacking members are disposed at the rear of the tray, while the spaces between the trays at the front are free from any obstruction.

It is another object of our invention to provide a tray in which the papers will be better held against accidental displacement while they will still be readily accessible to the hand.

To this end it is another object of our invention to provide a letter tray having a sloping bottom.

A further object of our invention is the provision of a letter tray assembly which is streamlined in appearance in accordance with the modern trend in office furniture design, which is simple to manufacture by virtue of the standard construction of the parts, and which is simple to assemble and disassemble, and rigid when in assembly by virtue of a novel construction of stacking members.

These and other objects of our invention, which will be pointed out hereinafter, or which will be apparent to one skilled in the art upon reading the specification, we accomplish by that certain construction and arrangement of parts of which we shall now describe an exemplary embodiment.

Reference is now made to the drawing forming a part hereof, and in which

Figure 1 is a plan view of one of the letter trays.

Figure 2 is a side elevation of three trays stacked together.

Figure 3 is a partial rear elevation of the same.

Figure 4 is a longitudinal cross sectional view taken along the line 4—4 of Figure 1, showing how the stacking member is fitted to two superposed trays.

Figure 5 is a perspective view of a stacking member showing how it is connected to the lower of two trays.

Briefly in the practice of our invention we provide a number of letter trays, indicated generally at 10, and a number of stacking members, indicated generally at 11, by means of which two or more trays may be stacked upon each other.

Each tray, according to our invention, comprises a back and side walls indicated at 12 and 13 respectively, formed from a single piece of sheet metal and provided with a stiffening bead 14 along the top edges. The members 12 and 13 are provided at their lower edges with inturned flanges 15 and 16 respectively which provide connecting means for the bottom of the trays indicated generally at 17. The bottom member at the rear is attached to the flange 15 as by spot welding or the like, and slopes upwardly toward the front of the tray where it gradually curves downward as indicated at 18 and is provided with an inturned flange 19 having an offset portion 20. This offset portion 20 rests upon and is fastened to the two side flanges 16, as by spot welding or the like. The curvature 18 preferably commences at a point generally indicated at 18a, which is slightly short of the length of the paper to be used with the tray. For example, in a tray designed for 8½ inch by 11 inch letter paper the point 18a might be 10 inches or 10½ inches from the back wall 12 of the tray. It will be clear from Figure 4 that the papers indicated generally at 21 project outwardly beyond the flat portion 17 so that they may easily be gripped with the fingers, and it will also be clear that, by virtue of the sloping construction of the bottom member, the paper will tend to gravitate backwardly downwardly to the vertical rear wall 12 of the tray so that they will not be so likely to be displaced by draughts or the like. Rubber foot members 22 may be provided if desired and fastened to the side flanges 16 by any desired means.

At the two rear corners of the tray, the back and side walls 12 and 13 are provided with outwardly extending straps indicated generally at 23. These may be provided by simply making two parallel slits and forcing the portion of the wall between the slits outwardly. As will be clear from the drawing, one of these portions 23 is provided in each side wall near the rear corners of the tray, and two are provided in the rear wall, one at each corner of the tray.

Just below the bead 14 slits 24 are provided in the two side walls substantially in a vertical line with the members 23. However, we prefer to provide no such slit 24 in the rear wall of the

tray. The purpose of the portions 23 and 24 will be described hereinafter.

- Referring now to Figure 5, we have shown in detail a stacking element 11. Generally speaking, this may be a piece of angle iron having an offset 25 near the top and provided with two tongues 26, one on each side of the angle. The tongues 26, as will be clear from the other drawing pass under the portions 23 so that a tray 10 is securely held above the offset 25 by co-action between the members 23 and 26. At the lower end of the member 11 we provide on one side of the angle a downwardly extending lip 27, and an outwardly and downwardly turned, curved flange 28 which is adapted to fit over the bead 14 while the lip 27 is adapted to extend downwardly inside the rear wall of the tray. On the other side of the angle we provide a U-shaped bead 29 terminating in a downwardly turned portion 30. The portion 29 is adapted to seat over and around the bead 14 in the side wall and extend through the slot 24 with the portion 30 extending downwardly on the inside of the side wall 13. We prefer to form the stacking members 11 to be narrower at the bottom than at the top, so as to give to the assembly a streamlined appearance. Strengthening beads 31 may be provided in the angles of the stacking members if desired.
- From the foregoing description it will be clear that several trays may be stacked upon each other by inserting a member 30 through a slot 24 and then tilting the member 11 until the lip 27 extends down through the inside of the rear wall, and the member 28 rests upon the bead 14 of the rear wall. Another such stacking member is erected on the other corner of the tray, and a second tray may then be stacked upon the first by causing the members 26 of the stacking elements to enter the portions 23 of a second tray.

It will also be seen that we have provided a desk tray construction in which all the parts are standardized. Each tray is exactly like every other tray, and each set of stacking members is

just like every other set of stacking members. It will, of course, be understood that it is within the scope of our invention to make all the stacking irons exactly identical, although we prefer to make rights and lefts in order to provide a more symmetrical appearance. The only change which would be necessary would be to reverse the portions 27 and 28, and the portions 29 and 30 at the lower end of the stacking members, and to change the location of one of the slots 24. It will also be seen that the front of the assembly of trays is absolutely clear and not obstructed by any stacking members so that letters may be thrown into a tray from the side as well as from the front, and that letters thrown into a tray will be held therein by virtue of the slope construction of the bottom members. If desired, for extra rigidity, it is within the scope of our invention to provide stacking elements at all four corners, although in such case, the freedom from obstruction at the front of the tray must be sacrificed.

Having now fully described our invention, what we claim as new and desire to secure by Letters Patent is:

A letter tray for papers of a certain length comprising side walls and a back wall formed from a single piece of sheet metal, the front of said tray being open, said walls having inturned flanges along the lower edges substantially in a common plane, and a bottom member comprising a sheet of metal flat over a major portion of its area, said portion being of a length short of said paper length and said member being gradually curved downwardly at the front end thereof, said front end being provided with an inturned flange which is secured to the front portion of the flanges of the side walls and the rear edge of said bottom member being secured to the flange of the back wall, whereby said bottom will slope downwardly toward the rear of said tray.

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