N. A. OCHILTREE.

DESK TRAY OR BASKET.

APPLICATION FILED OCT. 29, 1920.

1,408,026. Patented Feb. 28, 1922.

Fig. 1.

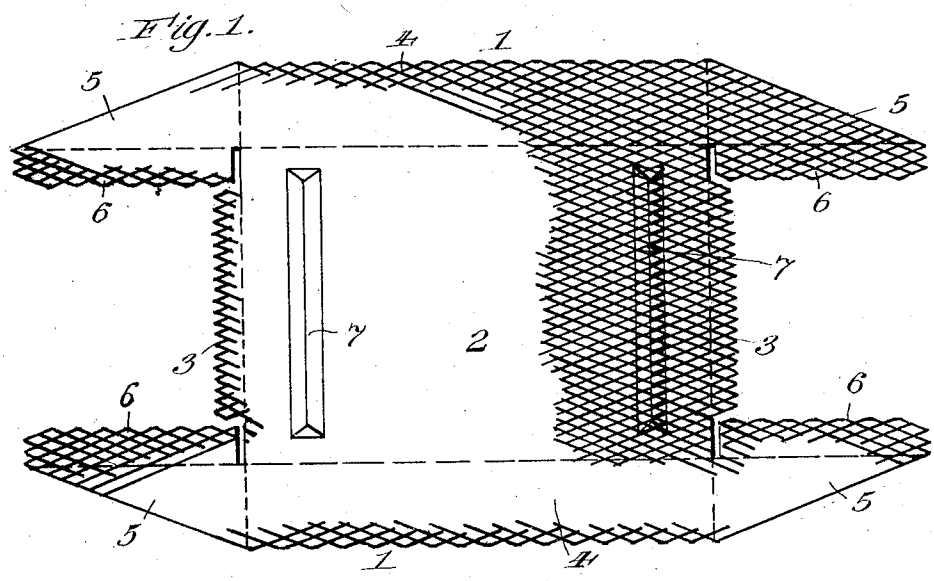


Fig. 2.

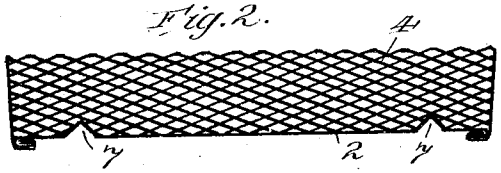


Fig. 3.

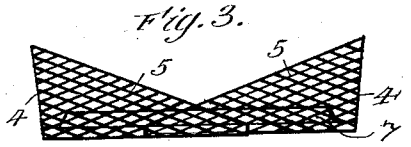


Fig. 7.

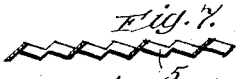


Fig. 4.

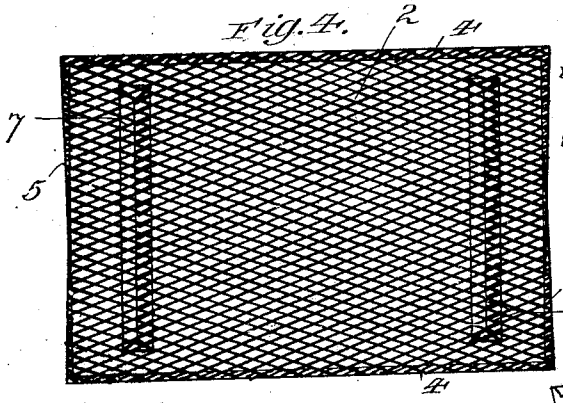


Fig. 6.

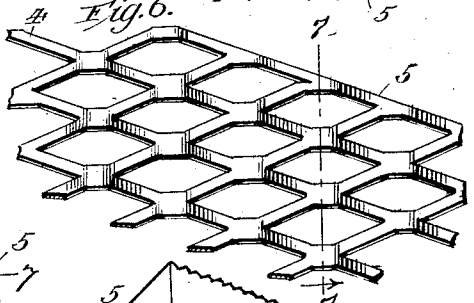


Fig. 5.

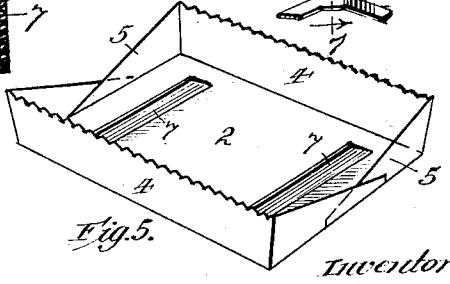


Fig. 8.

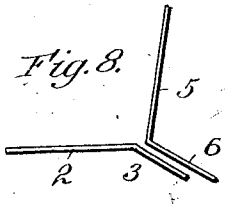


Fig. 9.

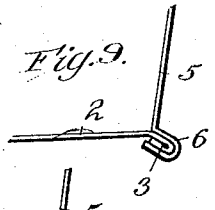
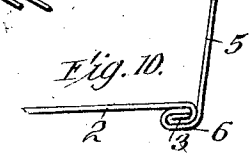


Fig. 10.



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UNITED STATES PATENT OFFICE.

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DESK TRAY OR BASKET.

1,408,026. Specification of Letters Patent. Patented Feb. 28, 1922.

Application filed October 29, 1920. Serial No. 420,410.

To all whom it may concern:

Be it known that I, NED A. OCHILTREE, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Desk Trays or Baskets, of which the following is a specification.

This invention pertains to desk trays or baskets for letters and like papers, and consists in a novel manner of forming the same, preferably of "expanded metal", and in providing the same with ribs, cross bars, or elevations near the ends or sides of the bottom, to facilitate grasping the ends or sides of the sheets preparatory to removing them from the receptacle.

The invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a plan view of a blank cut from what is commonly known to the trade and public as expanded metal, and suitable for the formation of a tray or basket;

Fig. 2, a sectional view of a tray formed by proper folding or manipulation of such a blank;

Fig. 3, an end view of the same;

Fig. 4, a top plan view of the tray;

Fig. 5, a perspective view in outline, showing the completed tray and indicating the folding lines;

Fig. 6, a perspective view of a small section of the expanded metal, showing the meshes of about the actual or preferred dimensions in the drawing as filed and before reduction of the drawing to patent size;

Fig. 7, a sectional view taken on the line 7—7 of Fig. 6; and

Figs. 8, 9 and 10, diagrammatic views illustrating the preferred manner of folding the overlapping end and bottom sections of the blank to form a joint and permanent connection.

Trays or baskets for desk use, to receive letters and other loose sheets, are commonly made of wood, of woven or interlaced wire, or of usual basket materials, and of somewhat variant form and dimensions. As hitherto constructed, such receptacles have been open to one or more of the objections that they are lacking in strength suitable to withstand the frequent and somewhat rough handling to which they are often subjected; that the sheets placed therein are liable to enter between crossing wires, reeds, or strands of fiber or other material of which the receptacles are made, with consequent tearing of the sheets; or that, in the case of wooden structures, they come apart through atmospheric changes and conditions, which cause swelling or shrinkage of the wood, and separation of the glued or cemented parts. With all such receptacles as the same have heretofore been made, so far as I am aware, it has been difficult to pass a finger or fingers beneath the papers preparatory to lifting or removing them, the sheets lying close to the bottom and extending to or nearly to the upright walls of the tray or basket.

To obviate these several defects, I preferably construct my tray or basket of so-called expanded metal, produced by forming slits in sheet metal along parallel lines, those of one line alternating with or overlapping those of proximate lines, and stretching or drawing out the metal in a direction perpendicular to such slits. The metal thus treated presents a series of regularly spaced, diamond-shaped openings symmetrically arranged, as illustrated in Fig. 6 of the drawings. It is quite light, very strong, and at the same time inexpensive. It presents no crossing or overlying strands, wires, or strips of any kind between which papers might enter and be held, and hence eliminates one objectionable feature of wire and basket-work trays or receptacles.

To facilitate the lifting of sheets, the bottom of the tray is provided near one or more of the boundary lines of its bottom with a raised rib, which, supporting the sheet or sheets near one end or side, permits the proximate edge to be thrown upward through slight downward pressure thereon at the opposite side of such rib. The rib may be pressed up from the material forming the bottom, where suitable to such treatment; or it may be made of wood, metal or other material and secured in place. In practice I prefer to provide two such ribs, one near either end of the tray, but their number and arrangement may be varied without departing from the spirit and scope of my invention.

Referring again to the drawings, 1 indicates a blank suitable for formation of a tray or basket, the same comprising a central rectangular portion 2, which latter constitutes the bottom of the receptacle, with short projecting ends 3 to aid in joining the bottom and ends; two longitudinal sections

4, to form the upstanding side walls; and two substantially triangular extensions 5 of each side section 4, one at either end, said extensions to be folded or overlapped and united with the projecting ends 3 to form the ends and unite the parts. The blank 1 is folded along the dotted lines shown in Fig. 1, the side sections 4 being turned upward to an approximately vertical position, the projecting ends 3 of the bottom being bent slightly downward as in Fig. 8, the ends or extensions 5 being swung inward to overlap each other and the free edges 6 thereof being bent to position parallel with the ends 3, as shown in Fig. 8, after which the edges 3 and 6 are rolled or coiled together as shown in Figs. 9 and 10, to produce a close and firm joint.

In the drawings I have shown two transverse ribs 7, one near either end of the bottom, and both raised or projecting upward therefrom. Each rib serves to hold the papers up and off the bottom of the tray or basket. If the papers be light and fairly stiff, they may be bodily held up from the bottom, but if several sheets be laid one upon another, or if the paper be light and limp, or if subjected to slight pressure, it will fall to the bottom on the side of the rib away from the nearest wall of the receptacle, thereby canting upward the edge of the sheet or sheets, and enabling the same to be grasped with ease and certainty.

In the drawings I have represented the ribs 7 as formed by pressing or bending upward the metal of the bottom in the form of an inverted V, and this is the preferred construction. I believe myself the first, however, to provide such a tray or receptacle with a rib or projection rising from its bottom to support flat sheets and facilitate the presentation of their free edges to the fingers and thumb of one desiring to lift or remove the sheets, and it is obvious that the same may be made in any convenient way and of any suitable form, continuous or interrupted, so long as the capabilities indicated are retained.

As indicated in Figs. 1 and 2, the blank is cut in such a way or along such lines of the expanded metal as to produce a sort of zigzag for the sides 4, while the end sections 5 have straight, smooth edges, and it will further be noted that owing to the triangular form of the end sections 5 there is a lowering of the end walls toward the midwidth of the tray, which facilitates the grasping of the sheets at such point. On the other hand, the ends rise to the height of the sides where ends and sides meet, and hence the sheets are as effectively held against slipping off at the ends as at the sides.

It will be noted that under the described construction all soldered and riveted joints or connections are avoided, and a very strong and serviceable tray is produced at small cost.

Having thus described my invention what I claim is:—

1. A portable desk tray having its bottom provided with a raised support for papers, located in proximity to one of the boundaries of said bottom, and rising sufficiently above the general level of the bottom to cause the edge of a paper lying within the basket to project upward from the bottom in convenient position to be grasped, the proximate wall parallel with said support being cut away at its mid portion to afford unobstructed access to the upturned ends of papers lying upon the support.

2. A blank for the formation of a desk tray, comprising a bottom section of rectangular form having short end projections, side wall portions having their outer edges parallel with the bottom section for a distance co-extensive with the length of such bottom section proper, and extending in substantially triangular form beyond said bottom, the hypotenuse of each triangle being on the outer side, and there being a free inner edge extending inward beyond the side boundaries of the bottom and detached from the bottom section to the extent of such inward extension.

3. A desk tray formed of a single piece of material cut to produce a blank having a bottom with short end projections, side wall portions, and end extensions with free edges, said blank having the side and end portions turned upward to approximately vertical position and the end extensions overlapped, the parts being retained in such folded positions by rolling or curling together the projecting bottom ends and free edges of the end extensions.

4. As a new article of manufacture, a desk tray formed of a single sheet of expanded metal, and comprising a flat rectangular bottom, upturned side walls, and end walls, the latter decreasing in height from the side walls toward the midwidth of the basket, and the bottom being formed with upwardly projecting cross ribs near its ends.

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

NED A. OCHILTREE.