March 29, 1955 G. L. SETMAN 2,704,974

TRAYS

Filed Feb. 13, 1952

FIG. 1

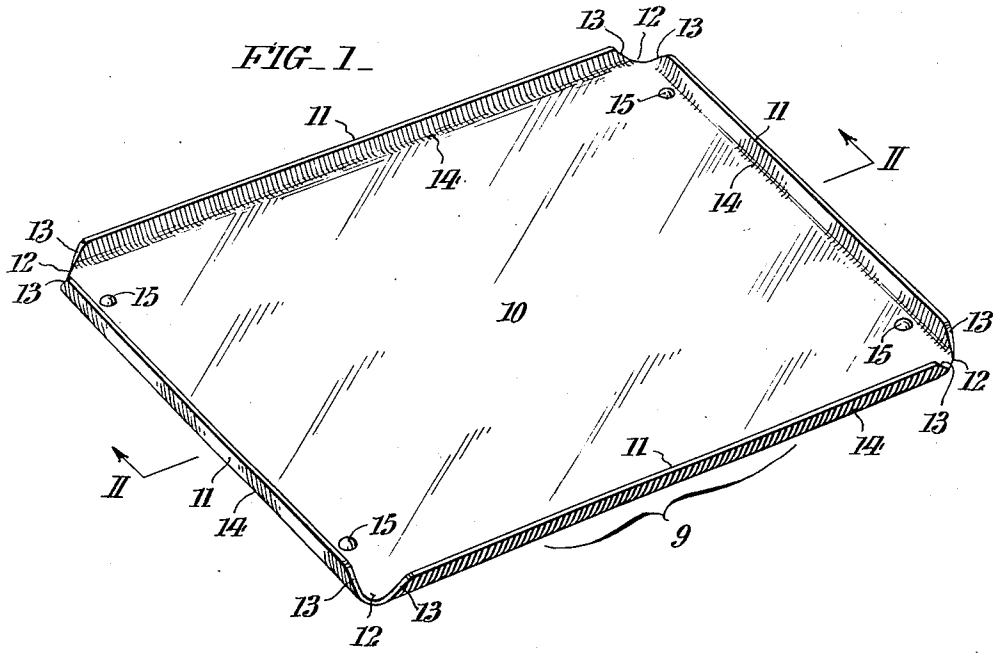


FIG. 2

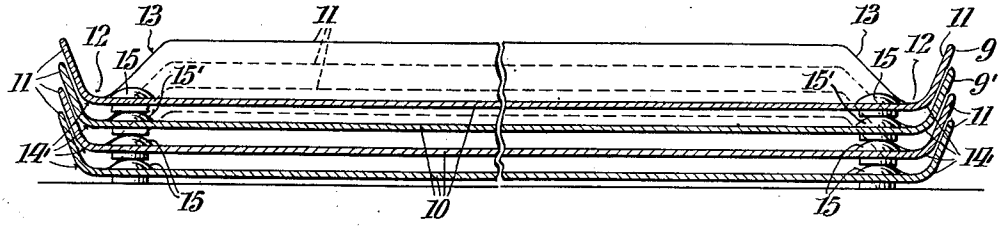


FIG. 3

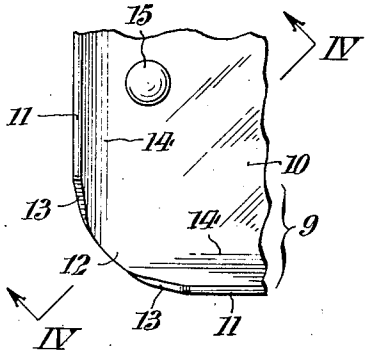
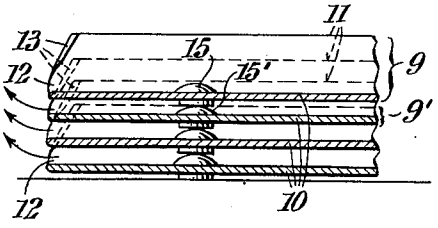


FIG. 4



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TRAYS

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1 Claim. (Cl. 99—422)

This invention relates to trays, having reference to trays of a type useful, for example, in restaurants or cafeterias in carrying and serving foods; or in bakeries in transporting or temporarily storing baked products, as well as pans in actual baking.

The chief aim of my invention is to provide a tray suitable for any or all of the above purposes which is light in weight yet sturdy against deformation incident to rough handling; which can be fabricated in quantity at small cost; which lends itself to compact nesting and stacking with others like it; and which, moreover, is devoid of crevices or pockets so as to be easily cleaned and kept free of accumulations of dirt and/or bacteria.

How the foregoing and other objects and advantages are realized in practice, will appear from the following detailed description of the attached drawings, wherein:

Fig. 1 is a perspective view of a tray conveniently embodying my invention.

Fig. 2 illustrates how multiple trays of my invention lend themselves to compact nesting and stacking, the trays being individually shown in longitudinal section taken as indicated by the angled arrows II—II in Fig. 1.

Fig. 3 is a fragmentary view in top plan of one of the corners of the tray drawn to a larger scale; and

Fig. 4 is a fragmentary view in section of the pile of the trays, taken as indicated by the angled arrows IV—IV in Fig. 3.

As herein exemplified, my improved tray, generally designated **9**, is of rectangular configuration, and characterized by having, along the sides of its bottom **10**, relatively narrow plain upstanding flanges **11** which are inclined outwardly at a slight angle to the vertical, and the upper edges of which terminate short of the tray corners, with consequent formation at the latter, of open voids **12**. The flanges **11** are trapezoidal in configuration, i. e. beveled off at substantially 45° at opposite ends as at **13**, the voids **12** thus becoming V-shaped, with elimination of sharp projections such as might cause injuries incident to handling of the tray. It is to be particularly noted that the flanges **11** merge, through liberal fillet roundings, with the tray bottom **10** as at **14**. Set into the tray bottom **10** somewhat inward of the voids **12** at the corner regions, are studs **15** in the form of "squeeze" rivets whereof the heads are comparatively flat but smoothly rounded, and whereof the shanks protrude somewhat below the tray bottom to serve as supporting feet.

For the sake of lightness and resistivity to corrosion,

I preferably fashion the tray, as by die stamping, from hard sheet aluminum which will not dent or become easily deformed incident to rough handling of the tray. When restricted to certain uses as hereinafter mentioned, the tray may be molded or pressed from suitable plastic material having the necessary strength and rigidity.

By virtue of the described construction, it will be seen that tray **9** will nest, when stacked with others like it as shown in Figs. 2 and 4, into the tray **9'** immediately beneath it. It will be further noted that tray **9** will be spaced from the subjacent tray **9'** in the stack by the protruding foot portions of the shanks of studs **15** which rest upon the rounded heads of the studs **15'** of said subjacent tray. Contiguous trays in the stack are thus prevented from sticking, with maintenance between them of an interval through which ventilation can take place, particularly at the voids **12**, for drying if the trays are stacked while still wet immediately after washing. Moreover, due to the truncations **12** at corners, the fillet roundings **14** between the bottom **10** and side flanges **11**, and the convexing of the heads of the studs **15**, pockets or crevices in which dirt or bacteria might accumulate, are positively precluded, the tray being thus easily cleaned and kept in a sanitary condition.

When the tray is used as a carrier in restaurants or cafeterias, any spilled liquids are readily poured away from the person of the holder through one of the corner voids **12**. When the tray is used as a baking pan, it should be of metal for capacity to withstand oven heat.

Having thus described my invention, I claim:

As a new article of manufacture a rectangular tray integrally fashioned from sheet metal or the like having a flat bottom with plain straight flat round edged flanges at its four sides, said flanges being roundingly mergent with the tray bottom and flared upwardly and separated by round bottomed V shaped voids at the tray corners, and the tray being provided with feet in the form of semi-spherical headed studs with cylindric shanks engaged downwardly through and protruding below the tray bottom at the corner regions whereby, when the tray is nested with similar trays, it is spaced from the tray beneath it by engagement of the protruding shanks of its studs with the heads of the studs of the latter tray.

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