Dec. 6, 1960 G. A. LYON, JR 2,963,197

TRAY AND METHOD OF MAKING SAME

Filed Feb. 3, 1958

Fig. 1

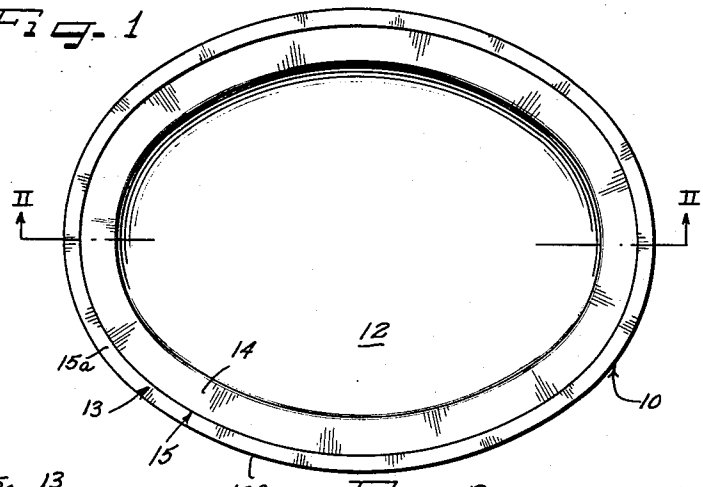


Fig. 2

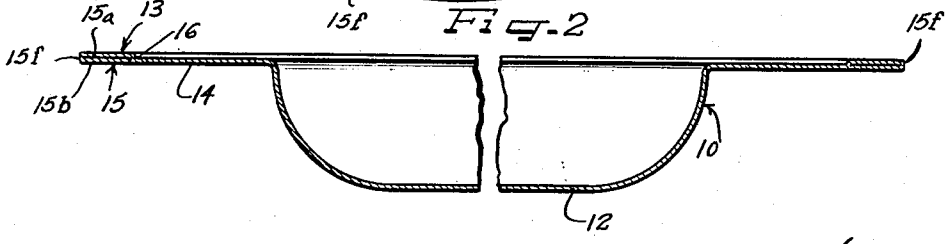


Fig. 3

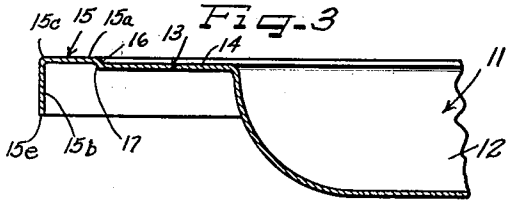


Fig. 4

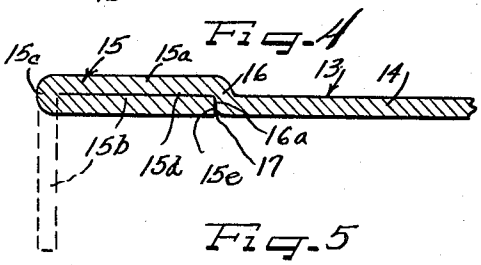


Fig. 6

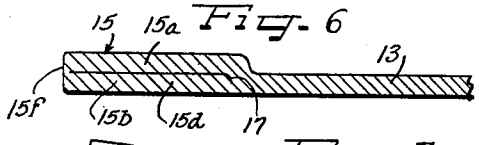


Fig. 5

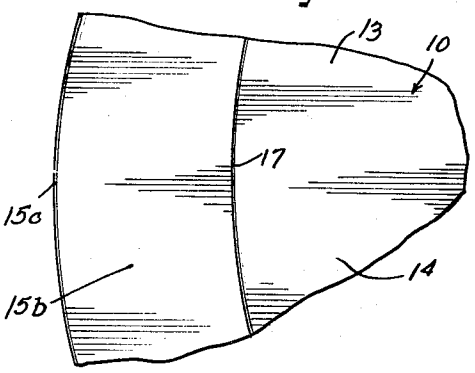
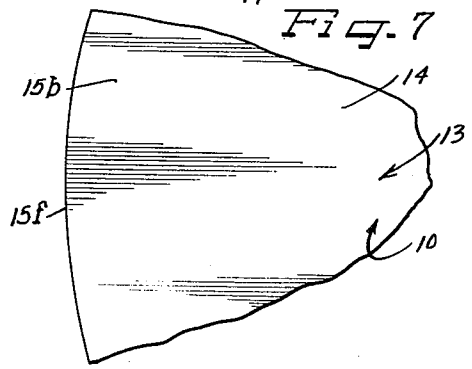


Fig. 7



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TRAY AND METHOD OF MAKING SAME

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6 Claims. (Cl. 220—74)

This invention relates generally to a tray construction and method of making same which tray may be used as a meat platter or for any other suitable purpose.

The tray is adapted to be manufactured from sheet metal stock from which tray blanks are cut and formed to shape. As is illustrated, the tray is dished and the margin of the tray has been particularly constructed according to certain features of the present invention. To this end, the margin has a peripheral edge comprised of a double thickness of metal which operates to greatly reinforce the tray structure and to increase its life span. The double thickness of metal at the margin is brought about by reverse bending the material at the periphery of the dished blank with the bent or deflected portion welded to an inner portion of the tray and thereafter abraded or buffed about the weld area to impart to the tray the appearance that the tray was cast or molded, and the like, as opposed to being made from relatively inexpensive sheet stock. In addition to the foregoing, by utilizing a U-shaped double thickness of metal at the tray margin, the peripheral edge of the tray may be ground or otherwise finished in a manner so as not to expose the parting line between the abutted legs of the U-shaped portion of the tray margin. By this expedient, the true construction of the tray may be effectively concealed while the tray margin may be considerably reinforced. Still another advantage of the present construction resides in the fact the extra thickness of metal is here disclosed as being utilized on the top side of the margin so that a greater volume of meat juices and the like may be contained over an enlarged area should they fall upon the tray margin inward of the double thickness of metal.

According to the objects of the present invention there is provided a new and improved serving tray construction and method of manufacturing the same.

According to another object of the present invention, a new and improved serving tray construction has been provided which may be manufactured from sheet stock and yet has the appearance of being cast or manufactured in some other more expensive manner.

A further object of the invention is to provide a new and improved food platter construction and method of manufacturing the same which lends itself to economical manufacture on a large production basis.

Yet another object of the present invention is to provide a new and improved method of manufacturing trays from sheet stock whereby a very low unit cost of manufacture may be maintained.

Other objects and features of the present invention will more fully become apparent in view of the following detailed description taken in conjunction with the accompanying drawings illustrating therein a single embodiment and in which:

Figure 1 is a plan view or a top elevation of a serving tray;

Figure 2 is an enlarged cross-sectional view taken substantially on the line II—II of Figure 1 looking in the direction indicated by the arrows;

Figure 3 is an enlarged fragmentary cross-sectional view illustrating the tray in a preliminary stage of formation;

Figure 4 is an enlarged fragmentary cross-sectional view in full and dotted lines illustrating a more subsequent stage of manufacture;

Figure 5 is an enlarged fragmentary bottom plan view of the outer margin of the partially completed tray or platter;

Figure 6 is an enlarged fragmentary cross-sectional view similar to Figure 4 only wherein the peripheral edge of the tray is machined or abraded and where the weld seam has been abraded; and

Figure 7 is an enlarged fragmentary bottom plan view highlighting the underside of the tray margin following the abrading operation whereby the weld line is concealed.

As shown on the drawings:

The reference numeral **10** in Figure 1 indicates generally my platter or tray construction. The platter **10** may be most economically manufactured from sheet stock such as stainless steel and the like. Initially, a dished blank **11** is cut from the strip stock and is formed in a manner hereinafter described in detail.

The dished tray blank **11** includes a central dished area or portion **12** which may be suitably embossed if desired to provide recesses for meat drippings and the like. At the outer periphery of the bowl or dished portion **12** is provided an annular marginal flange structure **13**. The flange structure **13** includes an inner marginal portion **14** and an outer prescribed flange structure **15**. The peripheral flange structure **15** has a generally U-shaped cross-section when formed to final shape as is apparent from Figures 2, 4, and 5 and wherein the legs are identified at **15***a*, **15***b*, and the junction of the legs at **15***c*.

During the formation of the tray blank **11** the leg **15***a* is partially offset out of the plane of the marginal portion **14** and is joined therewith by an inclined annular leg **16**. Generally at the same time the leg **15***b* is turned generally at right angles with respect to the leg **15***a*. The peripheral flange area is particularly divided in a manner whereby the length of the leg **15***b* is predetermined in a manner so that its outer edge **15***d* will be abuttingly engaged against the inclined annular leg **16** for purposes which will hereafter become apparent. Following the preliminary formation of the marginal area of the tray blank, the leg **15***b* is turned in a manner whereby it is disposed in a plane common to the inner marginal portion **14** and is abutted against the under surface of the leg portion **15***a* along parting line **15***d* so that the edge **15***e* is abutted against the inclined leg **16** at shoulder **16***a* along annular junction line **17**.

In order to maintain the leg **15***b* in abutment against the leg **15***a* and the edge **15***e* in abutment with the shoulder **16***a*, the leg **15***b* is preferably welded in assembly with the surface area it is abutted against as is shown in Figure 6. The welding process may be effectuated in any suitable manner such as by an electric arc welding type process and the like.

Either before or after the welding operation, the rounded outer marginal edge disposed at the bottom of the U as indicated at **15***c*, may be suitably ground or abraded flat as indicated at **15***f*. This grinding or abrading operation is controlled in a manner whereby a portion of the bottom of the U **15***c* is allowed to remain as a link between the legs **15***a* and **15***b* and whereby the portion is also allowed to remain to provide means for concealing the parting line **15***d*.

As is evident in Figure 5, the annular junction line **17**

is apparent from the bottom side of the tray and which junction line 17 is subsequently obscured by the weld between the edge 15*e* and the shoulder 16*a* (Figure 6). The final operation in the manufacture of my tray involves abrading or buffing the area of the weld in order to impart a smooth unblemished appearance to the underneath surface of the margin 13 in a manner as is shown in Figures 6 and 7. In view of the foregoing it will now be appreciated how a reinforced sheet metal tray may be provided and how the double flange tray margin construction may be effectively concealed to greatly enhance the overall appearance of the sheet metal tray.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. In a method of making a dish shaped sheet metal tray from a tray blank of sheet material having a thickened margin comprised of a double thickness of sheet metal and which is finished in a manner as to appear to be formed in some other more expensive manner, the steps of upsetting by laterally offsetting the marginal area of the sheet metal tray blank so that it lies in a plane laterally offset from the plane of the inner tray area disposed inwardly thereof and immediately adjacent thereto while folding and reverse bending the outermost peripheral area of the marginal area out of the plane of the marginal area and into the plane of the inner tray area disposed inwardly and immediately adjacent to the marginal area, welding the junction between the reverse bent peripheral area and the tray area disposed inwardly and immediately adjacent of the laterally offset marginal area, and abrading the welded seam area blending the outer surfaces of the tray at the locale of the weld.

2. In a method of making a dish shaped sheet metal tray from a tray blank of sheet material having a thickened margin comprised of a double thickness of sheet metal and which is finished in a manner as to appear to be formed in some other more expensive manner, the steps of upsetting by laterally offsetting the marginal area of the sheet metal tray blank so that it lies in a plane laterally offset from the plane of the inner tray area disposed inwardly thereof and immediately adjacent thereto while reverse bending the outermost peripheral area of the marginal area out of the plane of the marginal area and into the plane of the inner tray area disposed inwardly and immediately adjacent to the marginal area and while contemporaneously abutting the reverse bent peripheral area adjacent the offset marginal area leaving the bend at the outer marginal edge of the tray, welding the junction between the reverse bent peripheral area and the tray area disposed inwardly and immediately adjacent of the laterally offset marginal area, abrading the welded seam area blending the outer surfaces of the tray at the locale of the weld and abrading the outer marginal edge of the tray flat with the parting line between the peripheral and offset marginal areas remaining concealed inwardly of the flat edge surface.

3. In a method of making a dish shaped sheet metal tray from a tray blank of sheet material having a thickened margin comprised of a double thickness of sheet metal and which is finished in a manner as to appear to be formed in some other more expensive manner, the steps of upsetting by laterally offsetting the marginal area of the sheet metal tray blank so that it lies in an offset plane laterally offset from the plane of the inner tray area disposed inwardly thereof and immediately adjacent thereto while folding and reverse bending the outermost peripheral area of the marginal area out of the offset plane of the marginal area and into the plane of the inner tray area disposed inwardly and immediately adjacent to the marginal area while contemporaneously abutting the reverse bent peripheral area against marginal area in superimposed relation, welding the junction between the reverse bent peripheral area and the tray area disposed inwardly and immediately adjacent of the laterally offset marginal area, and abrading the welded seam area to blend the outer surfaces of the welded areas.

4. A serving tray comprised of a dished piece of sheet metal with the dished piece of sheet metal including an integral depending marginal flange area, the marginal flange area comprising a marginal flange and a peripheral flange structure connected thereto, said peripheral flange structure including U-shaped upper and lower superimposed legs with one of the legs offset vertically from the plane of the marginal flange area and with the bottom of the U comprising the outer marginal edge of the tray, said legs being abutted along their length, one of the legs having its inner end formed integral with the marginal flange and together comprising a fragment of the dished piece of sheet metal from which the tray is formed, the other of the legs lying in the same plane as the marginal flange, and a weld joint joining the other of the legs and the marginal flange with the surface area of the weld joint seam being smoothed in a manner obliterating the weld joint seam.

5. A serving tray comprised of a dished piece of sheet metal with the dished piece of sheet metal including an integral depending marginal flange area, the marginal flange area comprising a marginal flange and a peripheral flange structure connected thereto, said peripheral flange structure including U-shaped upper and lower superimposed legs, one of the legs being offset from the plane of the marginal flange area and with the bottom of the U comprising an outer marginal edge of the tray, said legs being abutted along their length inwardly of the bottom of the U and having a parting line therebetween, one of the legs having its inner end formed integral with the marginal flange and together comprising a fragment of the dished piece of sheet metal from which the tray is formed, the other of the legs lying in the same plane as the marginal flange and a weld joint between the other of the legs and the marginal flange with the surface area of the weld joint being smoothed in a manner obliterating the weld joint, the outer marginal edge of the tray being generally flat with the parting line being concealed by and disposed inwardly of the bottom of the U.

6. A serving tray comprised of a piece of sheet metal with the piece of sheet metal including an integral depending marginal flange area, the flange area being peripherally bounded by an annular marginal edge, the marginal flange area comprising a marginal flange and a peripheral flange structure connected thereto, said peripheral flange structure including U-shaped upper and lower superimposed legs with one of the legs offset vertically from the plane of the marginal flange area and with the bottom of the U comprising the outer marginal edge of the tray, said legs being abutted along their length, one of the legs having its inner end formed integral with the marginal flange and together comprising a fragment of the dished piece of sheet metal from which the tray is formed, the other of the legs lying in the same plane as the marginal flange, and a weld joint joining the other of the legs and the marginal flange with the surface area of the weld joint seam being smoothed in a manner obliterating the weld joint seam.

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