March 3, 1959 J. L. McKNIGHT 2,875,920

TOBACCO BASKET REINFORCING MEANS

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Fig-1

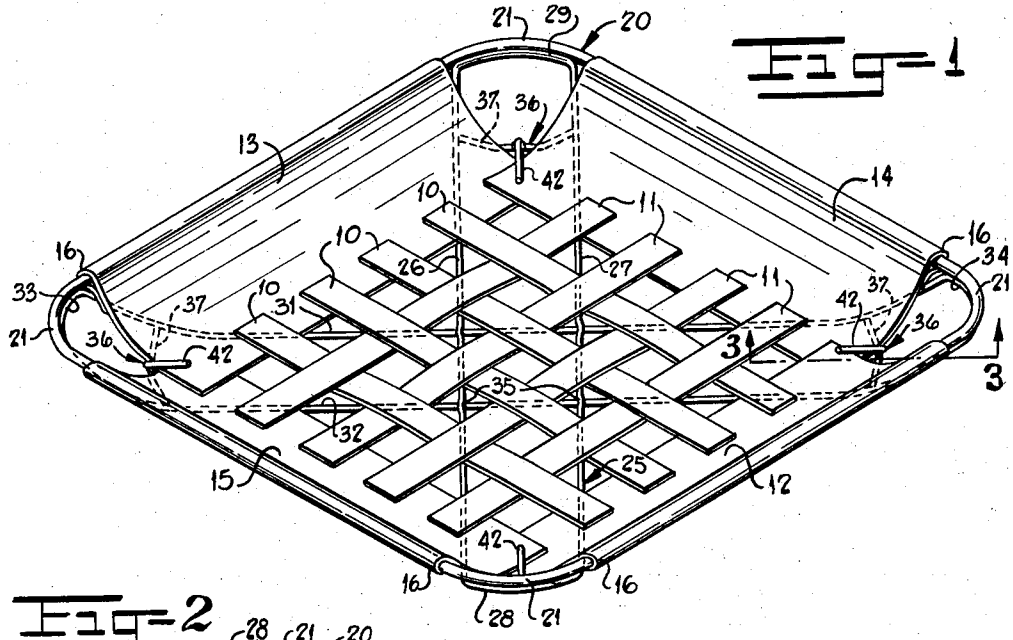
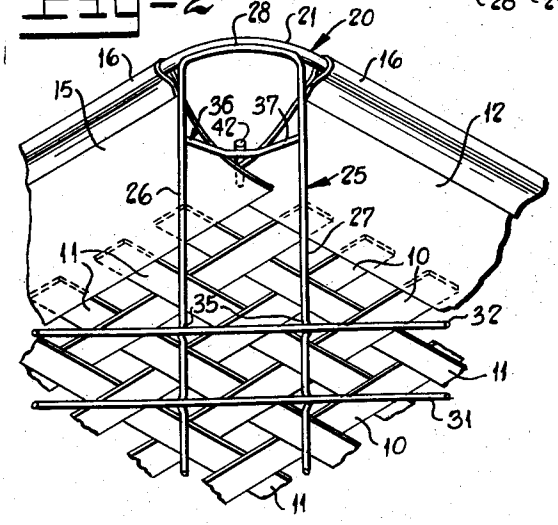


Fig-2



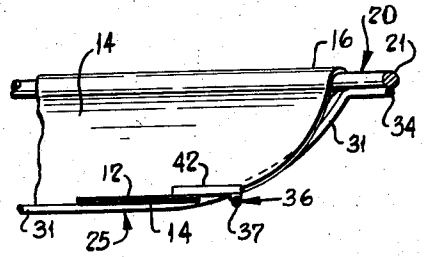


Fig-3

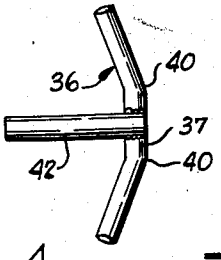


Fig-4

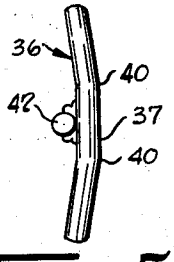


Fig-5

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2,875,920

TOBACCO BASKET REINFORCING MEANS

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7 Claims. (Cl. 220—83)

This invention relates to an improved reinforcing means for light weight metal tobacco baskets to provide additional support and rigidity to the basket. The improved reinforcing means is particularly adapted for use with baskets of the type shown in my United States Patent Nos. 2,726,010 and D–178,255.

The above-mentioned patents disclose a light weight metal tobacco basket or tray which is particularly adapted for use in displaying tobacco as it is being sold and for storing tobacco in a tobacco warehouse or the like. It is important that each of these baskets weigh the same amount since the tobacco is customarily weighed and sold while in the baskets so that a difference in the weight of any basket will be reflected in the price paid for the tobacco. While it is important that the baskets be uniform in weight and made from a light weight material, it is also important that the concave shape of the basket not be destroyed during use to facilitate the arrangement and display of the tobacco on the basket and therefore the basket must be durable enough to withstand considerable abuse during use.

While the Patent No. 2,726,010 discloses a light weight basket which remains uniform in weight, it has been found to be too fragile if not carefully used and if dropped on its bottom and corners the basket will be damaged and the bottom bent out of shape. Additional supporting or bracing means are shown in the Patent No. D–178,255 and while this bracing means supports the bottom of the basket it is not fixed to the bottom of the basket and when upward pressure is applied to the bottom of the basket the bottom of the basket may become bent out of shape so that this support means offers adequate protection to the basket botton and corners in only one direction.

It is a primary object of this invention to provide an improved reinforcing means for the basket which includes the combination of a first reinforcing means connected to the frame of the basket and extending beneath the bottom of the basket for supporting the bottom in the event downward pressure is applied against the bottom of the basket and a second reinforcing means connected to the first means and engageable with the upper side of the bottom of the basket and adjacent each corner thereof, for reinforcing the bottom of the basket against upward pressure against the bottom of the basket.

It is another object of this invention to provide first and second reinforcing means for tobacco baskets which are of light weight material to add only a slight amount of weight to each basket and which reinforcing means will be uniform in weight to thus maintain each basket within a very close weight tolerance.

It is another object of this invention to provide reinforcing means for a tobacco basket which includes providing a first reinforcing means of light weight rod material which extends diagonally of the tobacco basket and follows closely the curvature of the bottom of the tobacco basket to receive the full impact of a blow from above

against the bottom of the basket, such as when the basket is stepped on while it is in an upright position. Second reinforcing means are also provided connected to the first reinforcing means, adjacent each corner of the basket, and which extend through the bottom of the basket to engage the upper edge of the light weight sheet material making up the bottom of the tobacco basket to hold the bottom of the basket against the first reinforcing means and support the bottom of the basket when pressure is directed against the bottom of the basket in an upward direction.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds, when taken in connection with the accompanying drawings, in which—

Figure 1 is an isometric view looking downwardly at a tobacco basket and showing the improved reinforcing means therewith;

Figure 2 is a fragmentary isometric view looking upwardly from beneath the basket, at the foremost corner of the basket in Figure 1 and showing the improved reinforcing means attached thereto;

Figure 3 is an enlarged vertical sectional view through one corner of the basket and being taken substantially along the line 3—3 in Figure 1;

Figure 4 is a plan view of one of the second reinforcing means, removed from the basket and the first reinforcing means;

Figure 5 is an end view of the second reinforcing means looking at the right-hand end of Figure 4.

Referring more specifically to the drawings, and more particularly to Figure 1, the body portion of the basket includes side walls and a bottom, the latter being formed from a plurality of longitudinally extending spaced substantially parallel slats or strips indicated at **10**, the slats **10** preferably being formed of metal. The slats **10** are loosely interwoven with a plurality of transversely extending spaced substantially parallel slats or strips **11** also preferably made from metal. Opposite ends of the longitudinal slats **10** are spot welded or otherwise suitably secured to the upper surfaces of substantially rectangularly-shaped arcuate side walls or panels **12** and **13**, and opposite ends of the transverse slats **11** are suitably secured to the upper surfaces of substantially rectangular arcuate panels or side walls **14** and **15**. It will be noted that each of the panels **12**, **13**, **14** and **15** are of substantially the same size and shape and each are curved outwardly and upwardly from the proximal ends of the slat members **10** and **11**. The upper edges of the panels are curved back upon themselves through a sufficient radius to form tubular portions **16** therein and the outer edges of the panel members **12**, **13**, **14** and **15** may be suitably secured to the body of the panels in any suitable manner, such as by spot welding.

A continuous substantially rectangular frame member, preferably made from a metal rod, is broadly indicated at **20**, and forms the rim of the basket by extending through the tubular portion **16** of the arcuate panels **12**, **13**, **14** and **15**. It will be noted by referring to Figures 1 and 2, that the inner proximal corners of each of the panel members **12**, **13**, **14** and **15** overlap each other and are suitably secured together, as by spot welding and since only the inner corners of the panels **12**, **13**, **14** and **15** overlap, a V-shaped opening is formed at each corner of the basket. The V-shaped openings are spanned by curved portions indicated at **21** of the continuous frame member **20** which extends through the tubular portions **16** of each panel **12**, **13**, **14** and **15**. It is with this type of tobacco basket that the present invention is to be associated.

The improved reinforcing means for the tobacco

basket includes a first reinforcing means indicated broadly at **25** and including a first continuous light weight support member which extends diagonally from corner to corner of the tobacco basket. The first support member comprises a substantially parallel pair of rods **26** and **27** which follow the contour of the bottom of the basket and are joined at opposite ends by integral arcuate portions **28** and **29**. The arcuate portions **28** and **29** are bent to follow the contour of the curved corner **21** of the frame member **20** and are suitably secured thereto as by welding. A second support member extends from opposite corners of the tobacco basket and crosses the first support member in perpendicular relationship and comprises a pair of substantially parallel rods **31** and **32** which are joined at opposite ends by integral arcuate portions **33** and **34**. The arcuate portions **33** and **34** are bent to conform to the curved portions **21** of the frame member **20** and are suitably secured thereto as by welding.

In order that the bottom of the tobacco basket may be supported on a level horizontal plane by the rods **26, 27, 31** and **32**, the rods **26** and **27** are bent as at **35** to pass over the respective rods **31** and **32**. The bent portions **35** thus extend upwardly through the open mesh bottom of the basket and provide a level support along the upper surface of the rods **26, 27, 31** and **32** for support of the bottom of the tobacco basket. This first reinforcing means, including the rods **26, 27, 31** and **32**, provides suitable support against downward pressure on the bottom of the tobacco basket and will lend rigidity to the tobacco basket, but will not prevent the bottom of the basket from being moved upwardly away from supporting engagement with the rods **26, 27, 31** and **32** since the bottom of the basket is not connected to the first reinforcing means. The bottom of the basket cannot be welded to the rods **26, 27, 31** and **32** since the bottom is constructed of such light weight material that it would burn when welded.

The second reinforcing means includes a plurality of bridging members, broadly indicated at **36** (Figure 4), and each of which includes a brace member **37**, opposite ends of which are suitably connected to the inner surface of the rods **26, 27, 31** and **32** adjacent the openings at each corner of the tobacco basket. The brace member **37** may be curved throughout its length or bent as at **40** so that the medial portion thereof will engage a level surface, such as the floor, at approximately the same time as the bars **26, 27, 31** and **32** engage the surface (Figure 3). One end of a bottom hold-down rod **42** is fixedly secured to the medial portion of the brace member **37**, as by welding, and is disposed to lie in confining engagement with the overlapping portions of the panel members **12, 13, 14** and **15**, at their junctures. Since one of the bottom hold-down members **42** engage each corner of the bottom of the tobacco basket, the lower surface of the tobacco basket bottom will be firmly held against the upper surface of the support rods **26, 27, 31** and **32** even when upward pressure is applied against the bottom of the tobacco basket from beneath the basket.

It is thus seen that an improved reinforcing means for relatively light weight sheet metal tobacco baskets has been provided which support or reinforcing means is of relatively light weight material to lend rigidity to the frame work of the tobacco basket, to protect the light weight sheet metal basket from abuse during use and to provide support for the bottom of the tobacco basket in case of downward pressure on the bottom of the basket or upward pressure against the bottom of the tobacco basket.

In the drawings and specification there has been set forth a preferred embodiment of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the claims.

I claim:

1. In a tobacco basket having a deformable light weight foraminated sheet metal bottom and a rectangular rigid frame, said bottom supported by said frame and depending from said frame and having openings adjacent each corner of said frame, the combination therewith of first reinforcing means connected to said frame at each corner and passing diagonally across the outer surface of said bottom and engageable throughout its length with the bottom, and second reinforcing means fixed on said first reinforcing means and extending through the openings and over the edge of the bottom to engage the inner surface of said basket and limit movement of said bottom away from said first reinforcing means.

2. In a tobacco basket having a deformable light weight foraminated sheet metal bottom and a rectangular rigid frame, said bottom supported by said frame and depending from said frame and having openings adjacent each corner of said frame, the combination therewith of first reinforcing means connected to said frame at each corner and passing diagonally across the outer surface of said bottom and engaging the contour of said bottom throughout its length, bracing members fixed on said first reinforcing means, and bottom support rods fixed on said bracing members and extending through the openings and over the edge of the bottom adjacent each corner of said basket to engage the inner surface of said basket and limit movement of said bottom away from said first reinforcing means.

3. In a tobacco basket having a deformable bottom and a rectangular frame, said bottom supported by said frame and depending from said frame, the combination therewith of first reinforcing means connected to the corners of said frame and engaging the contour of the outer surface of said bottom, bracing members fixed on said first reinforcing means adjacent each corner of said bottom, and bottom support rods fixed on said bracing members and extending over the edge of the bottom in engagement with the inner surface of said bottom.

4. In a tobacco basket having a flat foraminated bottom formed from a plurality of substantially parallel slats extending in one direction and a plurality of substantially parallel second slats extending in at least one other direction and interwoven with the first slats, a first pair of rectangular panels secured at their proximal edges to opposite ends of the slats extending in one direction, a second pair of panels secured at their proximal edges to opposite ends of the second slats extending in said other direction, each of said panels being of arcuate cross-section configuration and curving outwardly and upwardly away from said bottom and then being bent downwardly and inwardly adjacent their respective outer edges to form a tubular channel, a rigid bar circumscribing said panels, and said rigid bar being confined within said tubular channels, the first pair of panels having the inner corners secured to the inner corners of the second pair of panels, the rigid bar having rounded exposed corners serving as handles for the basket, the proximal edges of adjacent panels and the rounded exposed corners of the rigid bar defining unobstructed openings therebetween, and the configuration of said panels being such that they constitute a gently rising continuation of the foraminated flat bottom whereby said panels and the openings therebetween may be utilized for the storage and ventilation of tobacco positioned on the bottom of the basket, the combination therewith of first bottom reinforcing means connected to said rigid bar at each corner and passing diagonally across the bottom of said basket while engaging the bottom throughout its length, and second reinforcing means fixed on said first reinforcing means and extending through said openings formed between the proximal ends of adjacent panels at each corner of said basket and over the edge of the panels adjacent the openings to engage the inner surface of said basket and limit

movement of said bottom away from said first reinforcing means.

5. In a structure according to claim 4 wherein said first bottom reinforcing means comprises a first pair of substantially parallel rods connected to first diagonally opposed corners of said rigid bar, and a second pair of substantially parallel rods connected to the second diagonally opposed corners of said rigid bar.

6. In a structure according to claim 5 wherein said second reinforcing means comprising bracing members fixed between said parallel rods and adjacent the openings at each corner, and bottom hold-down members fixed on said bracing members and engageable with the inner corners of said panels.

7. In a tobacco basket having a deformable light weight sheet metal rectangular body portion and a supporting frame circumscribing the body portion, said body portion having openings therein at opposed corners

bordered by the frame and the body portion, the combination therewith of first reinforcing means connected to said frame at each of said corners and extending across the outer surface of the body portion between the opposed corners, and second reinforcing means fixed on said first reinforcing means adjacent the corners and extending through the openings and over the edge of the body portion in overlying relation to the inner surface of the body portion.

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