June 6, 1967 L. J. COWAN 3,323,673

MATERIAL HANDLING BASKET

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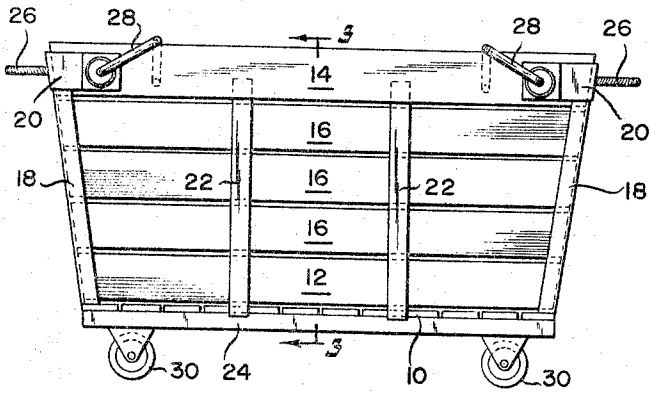


Fig. 1

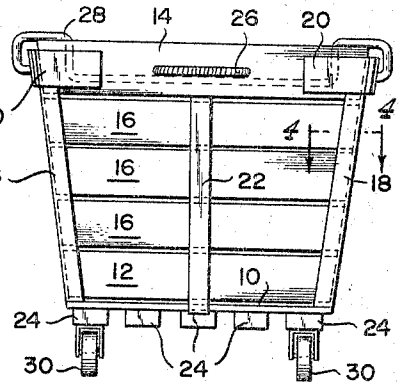
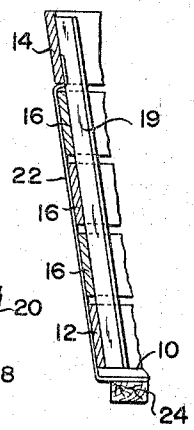
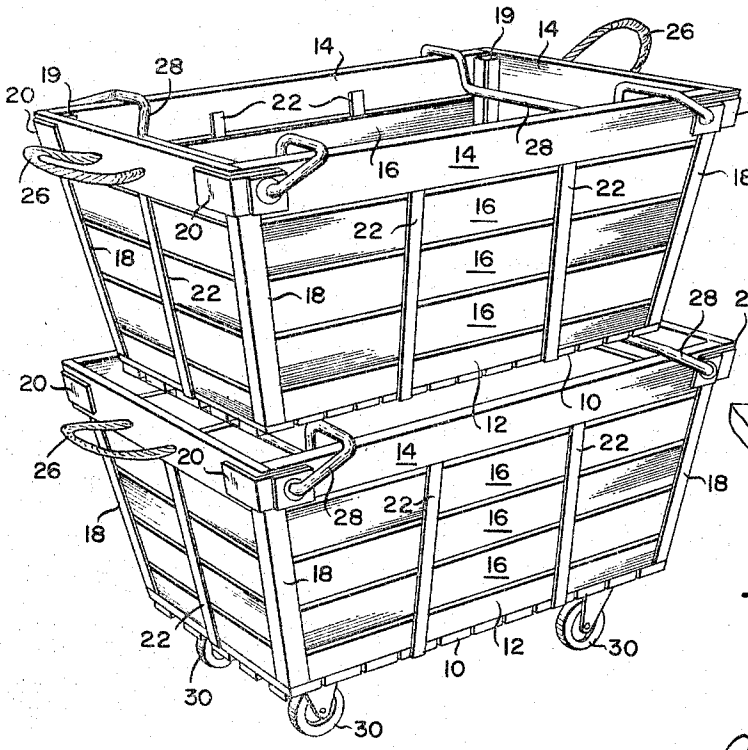


Fig. 2

Fig. 5

Fig. 3





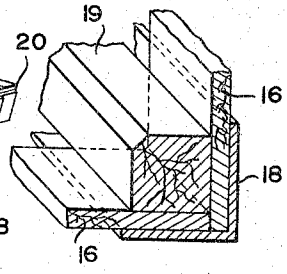


Fig. 4

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MATERIAL HANDLING BASKET

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This invention relates to baskets, especially for the handling of foodstuffs, although they may used for the handling of any material where a strong and sturdy nestable basket is desirable. Baskets of this type receive rough handling and for the most part are continuously used until finally they give out. When used for the movement of foods, especially meats, the baskets are sterilized by steam cleaning, and bleached, periodically, even though they are used with paper liners. Furthermore, the basket must hold 200 pounds of meat and be able to withstand the forces incident to dropping same from the tail gates of delivery trucks.

It is therefore the principal object of the present invention to provide a basket, designed and constructed for the purpose of storing and/or transporting heavy materials or food products, which is rigid, sturdy and movable with comparative ease.

Another object of the invention is the provision of means in combination with the basket for nesting the baskets when not in use for the conservation of storage space.

There are other objects and advantages of the structure of my basket which will appear to those versed in the art from the following description thereof when considered in connection with the accompanying drawing forming part of this application and wherein like reference characters indicate like parts:

FIG. 1 is a side elevation of my improved basket;

FIG. 2 is an end elevation of FIG. 1;

FIG. 3 is a section on line 3—3 of FIG. 1 through one side wall of the basket.

FIG. 4 is a section on line 4—4 of FIG. 2; and

FIG. 5 is a perspective view of a pair of baskets as they would appear nested for storage purposes.

Referring now to the drawings in detail, it will be seen that the basket of this invention is of the stacking type with sides and ends that flare outwardly and upwardly from the rectangular bottom indicated generally at **10**. This bottom is constructed of transverse slats, slightly spaced, which are of hard wood, for the most part of rugged elm, and secured at their ends to the bottom rails **12—12** of the sides, the end bottom slats also being secured to the bottom rails of the ends of the basket. The bottom rails of the sides and ends of the basket overlap at the corners and are secured together. These bottom rails are of heavier hard wood material, the same as the four top rails **14—14** of said sides and ends. A plurality of intermediate slightly spaced slats **16** fill the space between the top and bottom rails and are likewise joined together securely at their ends. These intermediate slats **16** are not of as heavy material as the top and bottom rails but extend to the corners and are secured at their ends to the corresponding slats of the sides and ends of the basket. The side edges of all side and end slats and rails are made with a one-sixteenth inch radius on all four corners for smoother and splinter-free handling. Metal corner reinforcements **18** of angle iron construction are provided which extend on the four corners of the basket from the under edges of the top rails to the upper edges of the bottom rails. The ends of the flanges of the reinforcements **18** are cut off at a slight incline so as to snugly fit the edges of the rails and compensate for the flare of the sides and ends of the basket. The

reinforcements are secured to the ends of the slats and rails by rivets for sturdiness of construction.

Inside the basket at the four corners thereof are wooden corner posts which are square in cross section except that the innermost corner is chamfered as indicated clearly in FIGURE 4. The top side and end rails **14** are secured to the side and end faces of the corner posts and the end of the end rail overlaps the end of the side rail and are secured to the corner posts. The bottom margin of the side face of the post is cut away or rabbeted to receive about one-half the width of the end margin of the side rail **12**. The end margin of the end rail is rabbeted so as to overlap the end face of the corner post and the end edge of the side rail **12** and is secured to said post. The intermediate slats **16** overlap the corner posts, and the ends of the end slat **16** overlap the end edges of the corresponding side slats **16** and are secured to the corner posts.

The corners of the top rails are reinforced by corner reinforcements which are in the form of metal angles **20** extending around the corners of the top and bottom rails and cut so that the edges are parallel with the edges of the rails. These angles **20** are also riveted to the rails of the basket.

Intermediate of the corners of the basket are a plurality of narrow metal straps **22** which extend transversely over the intermediate slats **16** and are riveted thereto as shown. The upper ends of these straps pass inwardly between the top rail and the adjacent intermediate slat **16** and are then turned upwardly against the inner surface of the top rail where they are riveted thereto. The lower ends of these straps **22** are turned under the lower edges of the bottom slats between the bottom slats and skids and secured thereto. These straps hold the slats **16** rigidly in place and with the corner reinforcements provide exceptional rigidity and long life to the basket.

Furthermore, there are provided five parallel spaced wooden skids **24** on the bottom of the basket, two of which are metal covered and which skids contribute to the mobility of the invention. These skids extend from end to end of the baskets.

Any suitable form of handles are provided for convenient handling of the basket, such as the rope handles **26**, said handles being attached to the upper rails of the opposite ends of the basket.

For the purpose of permitting the improved baskets to be stacked one upon another when loaded, my improved basket is provided with stacking units **28**, one at each end of the top portion of the basket, which units extend transversely across the basket adjacent the ends thereof. These units comprise metal rods, the opposite ends of which are pivotally secured in journals on the metal corner reinforcements **20**. Each end of the units, inwardly from its pivotal connection with the basket, is bent downwardly a short distance and then extends across the basket, forming a sort of cradle on which the bottom of a nesting basket may rest. When the baskets are not nested, the rods are pivoted so that they extend from side to side of the basket outside of the upper end rail, to not interfere with the loading or unloading thereof.

Caster wheels as indicated at **30** may or may not be provided for mobility and ease of handling.

From the above it is obvious that there has been provided a very strong, sturdy basket having long life even under the extreme abuse to which such material handling baskets are subjected, and which may be stacked in either filled or empty position for conservation of storage space.

I claim:

1. A rigid material handling basket comprising a bottom and upwardly diverging side and end walls, said bot-

tom, side and end walls comprised of spaced slats, secured at their ends, metal reinforcing angles enclosing the meeting edges of said slats on the outer corners thereof, the flanges of said angles being secured by fastening means extending through said flanges and slats, the upper slats provided with external corner reinforcements, stacking members pivotally secured at their opposite ends in said external corner reinforcements and positionable in a first position extending across the basket adjacent the ends thereof or a second position extending outside the basket adjacent the ends thereof, and reinforcing straps intermediate said corner reinforcements extending across the side and end slats, between the upper two slats and secured at their upper ends to the inner faces of the upper slats, the lower ends of each of said straps being secured to the end of a bottom slat.

2. A basket as defined in claim 1, and corner posts on the inside corners of said basket, said side and end slats being secured at their ends to each other and to said corner posts.

3. A basket as defined in claim 1, said bottom composed of transverse slats secured at their ends to the bottom edges of the lower side slats and a plurality of spaced longitudinal skids secured to said bottom slats.

4. A rigid material handling basket comprising a bottom and upwardly diverging side and end walls, said bottom, side and end walls comprised of spaced slats, corner posts at the inner corners of said basket, said slats being secured to said posts, metal reinforcing angles enclosing the meeting edges of said slats on the outer corners thereof and extending between the upper and lower slats, fastening means securing said flanges and ends of said slats to said posts, a plurality of spaced longitudinal skids secured to the bottom of said basket, the outer two of said skids being metal clad, a plurality of reinforcing straps extending across said slats, the upper ends thereof extending between the upper two slats and secured to the inner surface of said upper slats, and the lower ends of said reinforcing straps extending between said bottom and outer skids and secured thereto, reinforcing corner angles about the corners of said upper slats, and stacking members pivoted in said corners and extending in a first position transversely of said basket adjacent the inner ends of said basket, to support a superposed basket thereon, and in a second position transversely of said basket adjacent the outer ends of said basket.

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