May 27, 1958 H. D. DUNNAGAN 2,836,187

CANOPY STRUCTURE FOR TRAYS

Filed March 15, 1956 2 Sheets-Sheet 1

FIG. 1.

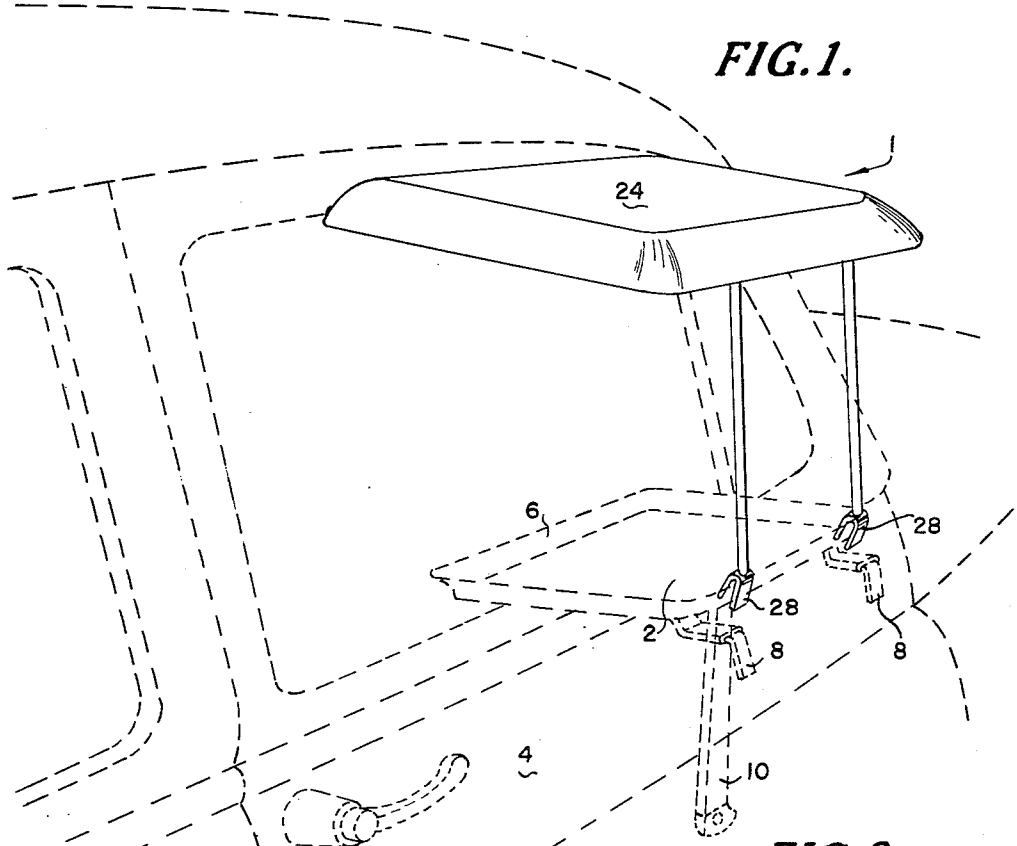
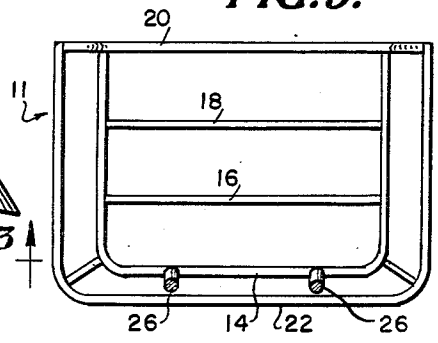


FIG. 3.



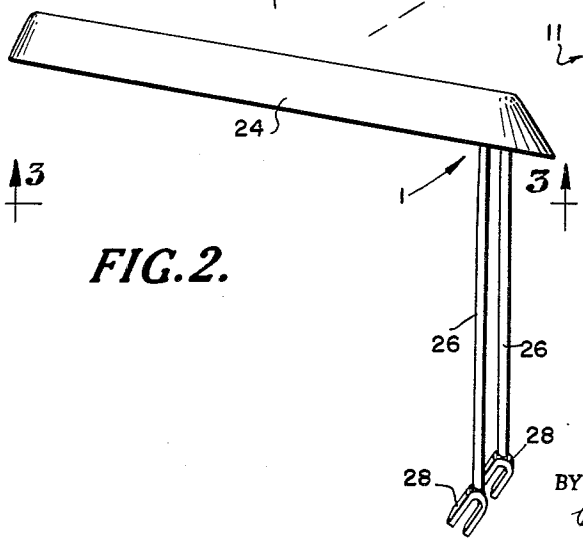


FIG. 2.

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May 27, 1958 H. D. DUNNAGAN 2,836,187

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Filed March 15, 1956 2 Sheets-Sheet 2

FIG. 4.

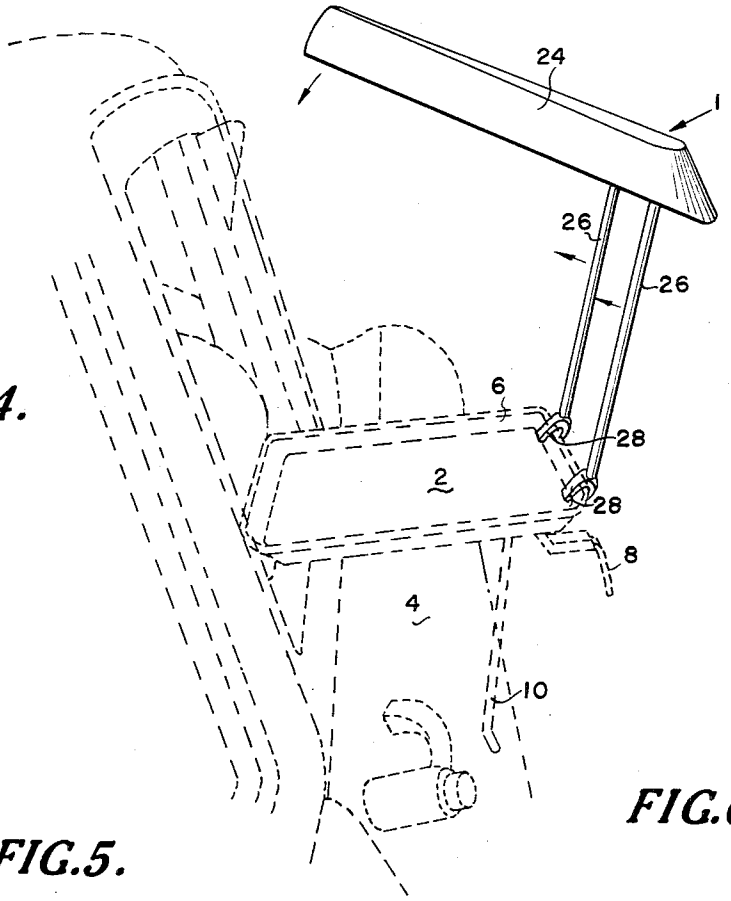


FIG. 5.

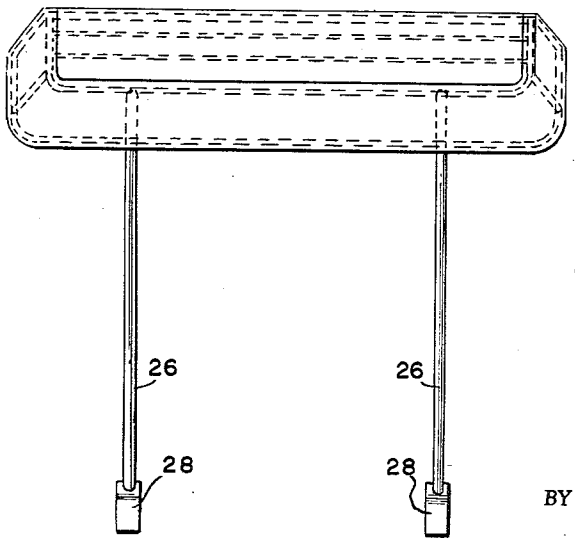
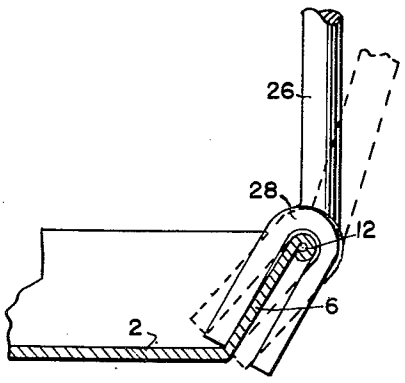


FIG. 6.



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CANOPY STRUCTURE FOR TRAYS

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Application March 15, 1956, Serial No. 571,807

1 Claim. (Cl. 135—5)

The present invention relates to new and useful improvements in a canopy structure that may be readily attached to and detached from a serving tray of the type used in "drive-in" restaurants whereby the food resting on the tray will be protected.

Heretofore it has been known to employ a protective covering or canopy for serving trays of the type referred to above, but such coverings or canopies were large and bulky making the serving tray unwieldy to transport. In addition, access to a tray so covered has proved inconvenient from either the outside or inside of the automobile. Because of these and other disadvantages of the prior art, the use of covers or canopies for "drive-in" serving trays has not been widely adopted.

It is, therefore, a principal object of the present invention to provide a canopy structure for "drive-in" serving trays which will overcome the aforementioned objections by being light in weight, simple in design and which will permit free access to the tray from any side thereof.

Another object of my invention is to design a canopy structure which may be removably attached to the type of serving trays now in use without the necessity of altering such trays.

Still another object of the present invention is to provide a canopy structure which will have a limited pivotal movement when removably attached to a serving tray whereby the canopy may be positioned to conform to the top portion of various types of automobile doors on which such trays may be mounted.

In carrying out the foregoing objects the canopy structure of my invention will add very little weight to the serving tray and may be securely retained thereon, thereby enabling the entire assembly to be easily carried about without any danger of the canopy structure becoming detached from the tray.

Other objects and advantages of my invention will be apparent from the following description and accompanying drawings, wherein:

Figure 1 is a perspective view of the canopy structure of the invention applied to a serving tray, which, in turn is shown attached to an automobile;

Figure 2 is a perspective view of the canopy structure, per se;

Figure 3 is a bottom plan view;

Figure 4 is another perspective view of the canopy structure applied to a serving tray which is attached to an automobile, with the canopy shown in an adjusted position;

Figure 5 is a side elevational view, and

Figure 6 is a fragmentary view of a serving tray and the means for attaching the canopy thereto.

Referring now to the accompanying drawings, and in particular to Figures 1 and 4, the invention comprises a canopy structure indicated generally by the reference numeral **1**, which is intended to be used in combination with a conventional "drive-in" serving tray **2**, the latter being attachable to a door of an automobile **4**.

The serving tray **2**, is of rectangular configuration comprising a peripheral, upstanding shoulder or edge **6**, two mounting legs **8** on each side of the tray, and a retractible supporting arm or bracket **10**. The upstanding shoulder **6** is usually inclined as shown, and is provided with a thickened lip or bead **12** at its outer end (as seen in Figure 6). The manner in which the tray is attached to an automobile door is illustrated in Figures 1 and 4, wherein the inner two legs **8** engage over the window sill of the automobile door while the supporting bracket **10** is placed against the side of the door to hold the tray in a horizontal position.

The canopy structure (as seen in Figure 3) includes a frame portion **11** preferably made of metal and comprises a central portion defined by a U-shaped member **14** having spaced, transverse rods **16**, **18**, **20** associated therewith. Connected to this member **14** of the central portion is a downwardly and outwardly disposed second U-shaped member **22**. As is best seen in Figure 3 these U-shaped members **14**, **22** form generally rectangular outlines with the rod **20**. A cover or canopy element **24** is stretched over the frame **11** and suitably connected thereto, for example, by means of adhesive strips or by a stitching or similar process. The canopy is preferably made of a substantially opaque, waterproof material such as canvas and may be attractively colored for esthetic purposes.

Depending from the inner U-shaped member **14** and connected to the bight thereof are a pair of upright supporting bars **26** terminating at their lower ends in bifurcations **28**. These bifurcations comprise U-shaped members which may be integral with the supporting bars or suitably connected thereto, as for example by welding. The parallel legs of these latter U-shaped members are preferably disposed at an acute angle to the axis of the bars **26**, as best seen in Figures 2 and 6. The U-shaped members **28** are adapted to be fitted over the upstanding edge **6** of the serving tray to removably support the canopy structure thereon. In this connection it should be noted that the distance between the parallel legs of the U-shaped members **28** is slightly greater than the width of the bead **12** on the edge of the tray to facilitate the engagement of these U-shaped members with the edge of the tray. The length of the legs of the members **28** is substantially the same as the inclined height of the tray edge as best seen in Figure 6 with the bight of each U-shaped member **28** converging inwardly to contact the sides of the bead.

With this arrangement the canopy structure may be swung or pivoted about the axis of the bead **12** through an angle delimited by two positions of the bars **26**. The first of these positions consists in having the free end of the inner leg of each U-shaped member contact the inner surface of the tray shoulder at the bottoms thereof to cooperate with the action of the bight of the U-shaped member engaging the bead **12** for retaining the canopy structure in this position (as seen in solid lines in Figure 6). In this position the supporting bars are disposed vertically and that part of the canopy frame opposite the bights of the U-shaped frame members **14**, **22** lies substantially in the same plane with the corresponding inner edge of the serving tray, as seen in Figure 1.

The other of these positions consists in having the free end of the outer leg of the U-shaped members **28** contact the outer surface of the tray shoulder and the supporting bars **26** are now disposed at an angle to the vertical, as seen in Figure 4 and in dotted lines in Figure 6.

It should be obvious that because of the pivotability of the canopy structure between the two positions defined above, such structure may be adjusted to accommodate the design of the door or roof of the car being served or to be used with different size trays wherein the canopy structure will be retained in any interme-

diate position by means of the outer rod 20 of the canopy frame resting against the top of the car door. It should be noted that due to the disposition of the center of gravity of the frame the latter will be urged to swing about the tray shoulder to the first position described hereinabove.

It will be obvious to those skilled in the art that any number of supporting bars 26 may be employed; two being shown for illustrative purposes only. If it is desired to use only one supporting bar, the lower end thereof could be branched into two parts extending laterally and downwardly and each terminating in a U-shaped member for engagement with the serving tray shoulder.

When the tray with the canopy attached is being transported with food and utensils thereon, the disposition of the center of gravity of the canopy structure will cause the structure to be securely retained on the tray with the supporting bars vertical and the free end of the inner leg of each U-shaped member 28 in tight frictional engagement with the lower inner surface of the tray shoulder. Such an arrangement assures against the possible dislodgement of the canopy structure from the tray when the combined device is being transported while permitting free access to the contents of the tray from any side thereof.

The outer U-shaped frame member 22 of the canopy structure may be connected to the remaining portion of the frame so as to be disposed closer to the plane of the tray, with the canopy, itself, correspondingly extending farther down towards the tray to produce a greater shielding from the sun and other elements.

Since the canopy structure is readily detachable from the tray, such structures may be stored in any convenient place on the drive-in lot where they may be handled by attendants and attached to trays after the latter have been mounted on an automobile as described above.

While preferred embodiments of my invention have been shown and described, it is to be understood that changes in the details of the construction and arrangement of parts may be resorted to without departing from the spirit and scope of my invention as defined in the appended claim.

I claim:

A canopy structure for a tray adapted to be horizontally mounted on an automobile window frame and provided with an upstanding shoulder, said structure including a canopy element, a pair of spaced supporting bars depending from said element, each of said bars having its lower end bifurcated to include spaced legs which are substantially parallel and separated from each other by a distance greater than the width of the upstanding shoulder of the tray, said legs being disposed at an acute angle to their respective bar and being so arranged with respect to each other as to loosely fit the tray shoulder so that the canopy element may be swung between a first position wherein the end portion of one leg of each of said bifurcated ends abuts one surface of the tray shoulder, and a second position wherein the end portion of the other leg of each of said bifurcated ends abuts the other surface of the tray shoulder.

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