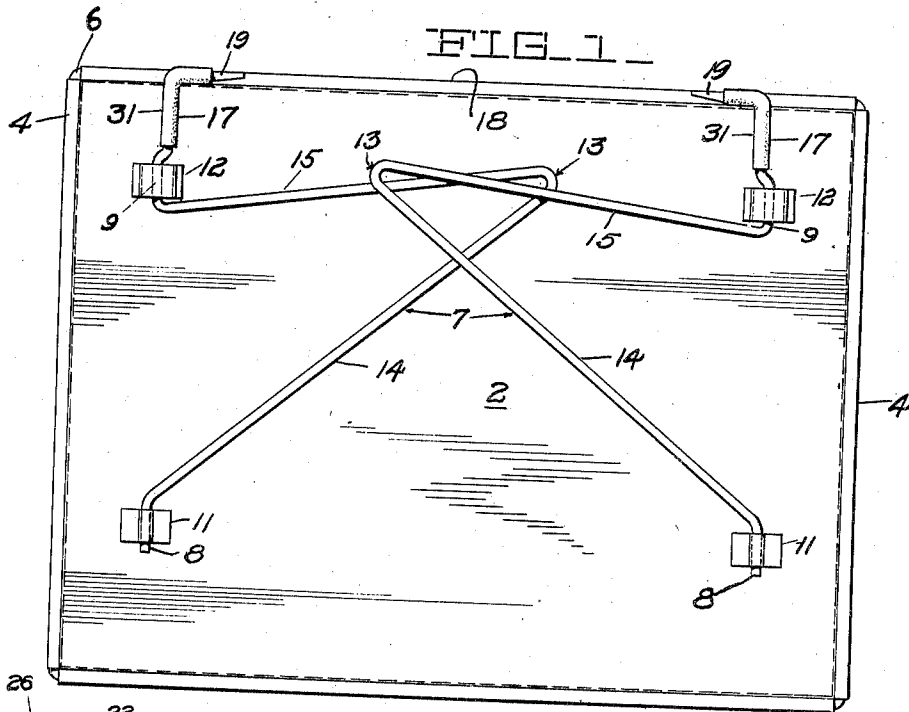
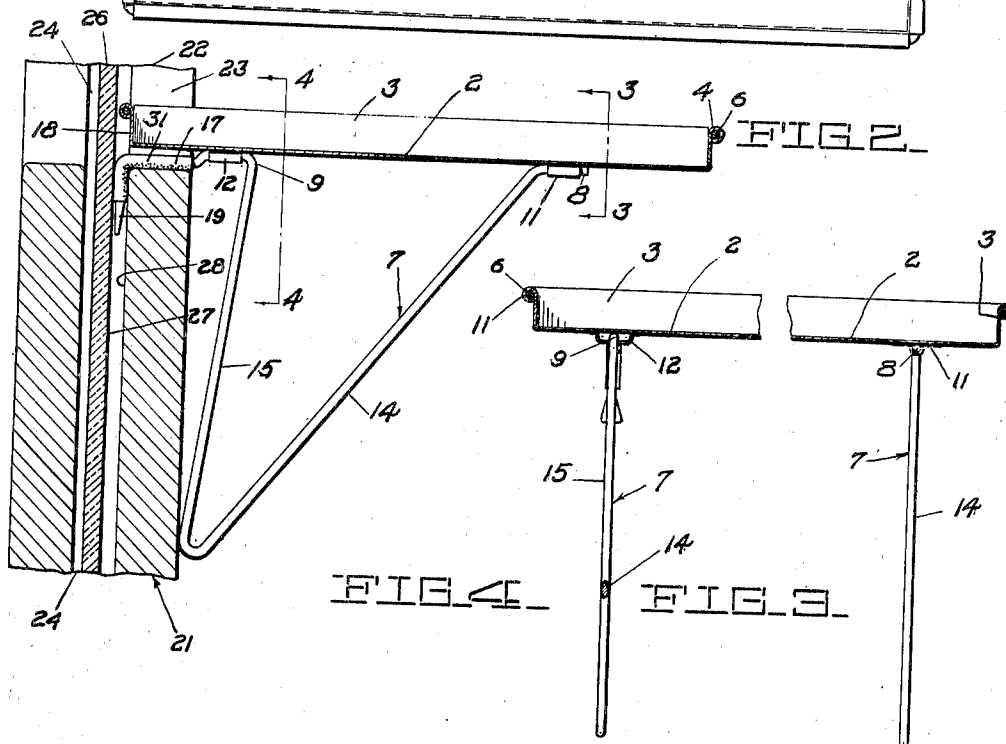


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SERVING TRAY

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SERVING TRAY

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5 Claims. (Cl. 311—22)

The invention relates to a food serving tray arranged to be removably supported on the interior of an automobile.

5 An object of the invention is to provide a tray of the character described which may be removably supported on the window frame at the inside of an automobile door regardless of whether the window is in open or closed position.

10 Another object of the invention is to provide a tray of the character described having means which may be extended to permit attachment of the tray to, and support of the tray on the door of an automobile without danger of marring any of the parts of the door, and which may be folded compactly against the tray when the latter is not in use.

15 A further object of the invention is to provide foldable brackets for the tray which may be formed of a single piece of wire, will provide full and complete attachment and support of the tray on the door, and may be readily applied to the tray body after the entire fabricating and finishing operations both of the tray and brackets have been fully completed.

20 The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

25 Referring to said drawing:

30 Figure 1 is a bottom view of a tray with the supporting brackets folded against the latter as when the tray is not in use.

35 Figure 2 is a vertical sectional view of a tray and a portion of an automobile door showing the tray operatively positioned upon the door.

40 Figure 3 is a fragmentary vertical sectional view taken at right angles to Figure 2, the plane of the section being indicated by the line 3—3 of Figure 2.

45 Figure 4 is a fragmentary sectional view similar to Figure 3 taken on the plane of line 4—4 of Figure 2.

50 As illustrated in the drawing, the tray of our invention comprises a body or plate 2, preferably formed of sheet metal and having at the margins thereof upwardly extending flanges 3 with outwardly rolled beads 4 at their free extremity. Desirably a re-enforcing wire 6 extends com-

pletely around the tray and is confined within the beads 4.

Positioned on the underside of the tray body is a pair of brackets 7 which are preferably formed of relatively heavy wire so as to be substantially 5 form retaining. Each of the brackets is formed with axially aligned portions 8 and 9 which engage respectively in bearing clips 11 and 12, welded or otherwise fixed or provided on the body at the under side thereof. The brackets are positioned 10 on the body with the axis of the portions 8 and 9 of one bracket substantially parallel to the axis of the corresponding portions of the other bracket, and with said portions of the different brackets extending substantially parallel 15 and close to the adjacent side edges of the tray. The portions 8 of the brackets form one end of the latter, while the portions 9 form an intermediate section of the brackets, and between said portions each bracket is provided with a loop 20 13 which connects such portions and comprises angularly related sections 14 and 15. At the free end or extremity of the axial portions 9 each bracket is formed with an intermediate portion 17 which extends from the associated bearing 25 clip to what may be termed the rear edge 18 of the tray. Extending from the free end of the portion 17 and in angular relation thereto is an end portion or projection 19 of the bracket. Desirably all portions of each bracket are coplanar, 30 however in the plane of the bracket the projection 19 and the loop 13 extend generally perpendicularly to the axial portions 8 and 9.

As previously explained, the tray of our invention is designed for use on the inside of a so-called 35 closed type of automobile and is arranged to be applied to and supported on the inner side of one of the automobile doors. As is well known, the conventional automobile door, such as is here illustrated at 21, is formed with a window frame 40 22 defining an opening 23 and having a space 24 in which a window-glass 25 is guided for vertical movement. The glass is of less thickness than the space 24 so as to insure free sliding movement of the glass, and ordinarily, marginal pads 45 are provided between the glass and the opposed surfaces of the door or frame defining the space 24. As will be clear from the drawing, a portion of the space 24 is thus left free between the inner side 27 of the glass and the surface 28 of 50 the inside panel of the door or frame. In the present embodiment of the invention the device is designed to make use of the free portion of the space 24 for anchoring the tray in operative position.

As will be clear from the drawing the brackets may be rotated in the clips 11 and 12 from the folded position shown in Figure 1 to the extended position shown in Figure 2. As will also be clear from Figures 1 and 2 the projection 19 is flattened in the direction substantially parallel to the rear edge of the tray and in this way insertion of such projection within the free portion of the space 24 may be readily effected and regardless of whether the glass is in an open or closed position. With the projection 19 fully extended into the space 24, the intermediate portion 17 will rest upon the surface of the frame or door which defines the bottom edge of the opening, and at the same time, the portion 15 of the loop 13 will engage the inner side of the door at a point well down from said opening. It will thus be clear that the projection 19 serves to effectively anchor the tray to the door, while the loop 13 provides a firm brace for the tray. The tray, as will be clear from Figure 2, desirably extends practically up to the projection 19, and in this way a maximum size tray may be used with a minimum protrusion into the car interior. In order to avoid any possibility of marring the surface of the glass or the door, a covering 31 of cushioning material such as felt or rubber, is placed about the projection and intermediate portion 17, and preferably the portion 17 is offset from the portion 9 so as to accommodate the covering and insure a complete space between the bottom of the tray and the door surface.

By reference to Figure 1, it will be seen that while the clip 11 provides a bearing substantially of the same shape and size as the bracket stock, the clip 12 provides a bearing which is widened in the general plane of the tray. In view of this construction any portion of the bracket engaged in the clip 12 is permitted a limited amount of relative transverse movement therein, and thus notwithstanding the many bends in the bracket, by taking advantage of the general resiliency of the bracket structure, the bracket may be readily threaded through the clip 12 to position the portions 8 and 9 in their respective bearings. As will be readily understood this feature of the device is of considerable importance, since it permits the complete fabrication and enameling or other finishing operation of both the tray and brackets before assembling these members.

We claim:

1. A serving tray for automobiles and the like comprising, an article-supporting plate, a one-piece bracket formed of wire and having coaxial spaced portions connected by portions angularly related to each other and to said first portions, said bracket having at one extremity a portion spaced from and extending substantially parallel to said second portions, and means secured to said plate and providing a pivotal bearing for said coaxial portions, said second portions and

said third mentioned portion being movable from a position substantially flat against said plate to a position in angular relation to the plate.

2. A serving tray for automobile doors having a window frame and a window glass therein, comprising an article supporting plate, a supporting bracket for said plate formed of a single piece of wire and comprising spaced coaxial portions positioned along the under side of the plate, a loop connecting said portions and extending substantially perpendicular thereto, an end portion extending substantially parallel to said loop, and an intermediate portion offset from one of said coaxial portions and interposed therebetween and said end portion, and spaced journal members on said plate providing a pivotal mounting for said coaxial portions.

3. In a serving tray of the character described, an article supporting plate, supporting brackets for said plate each comprising coaxial portions, a loop connecting and arranged in angular relation with said portions, a bearing member for one coaxial portion being formed to permit transverse displacement of said portion therein, and a bearing member for the other of said coaxial portions holding same against transverse but permitting longitudinal displacement thereof in said member, said loop formed and arranged to urge said coaxial portions apart when engaged in said bearings.

4. A serving tray for automobile doors having a window frame and a window glass therein, comprising an article supporting plate, a pivoted supporting bracket for said plate comprising spaced coaxial pivotal portions positioned adjacent to the under side of the plate, a loop connecting said pivotal portions, the plane of said loop being substantially perpendicular to the plane of the plate when said loop is in open position, an end portion extending substantially in the plane of said loop, and an intermediate portion interposed between said loop and said end portion, and spaced supporting members on said plate providing a pivotal mounting for said pivotal portions.

5. A serving tray for automobile doors having a window frame and a window glass therein, comprising an article supporting plate, a pivoted supporting bracket for said plate comprising spaced journals positioned adjacent the under side of the plate, an open loop connecting said journals, the plane of said loop being substantially perpendicular to the plane of the plate when said loop is in open position, a projection extending substantially in the plane of said open loop, and an intermediate portion interposed between said loop and said end portion, and spaced bearings on said plate providing a pivotal mounting for said journal portions.

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