

March 16, 1954

G. W. GWIN ET AL

2,672,182

CHILD'S AUXILIARY SERVING TRAY

Filed Nov. 15, 1952

Fig. 1

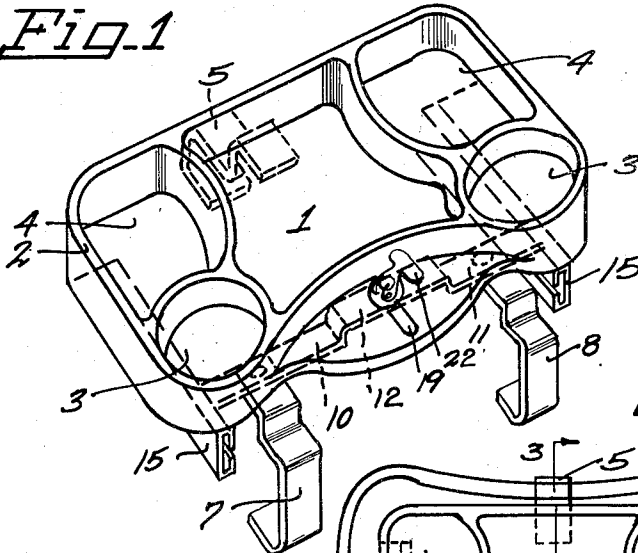


Fig. 2

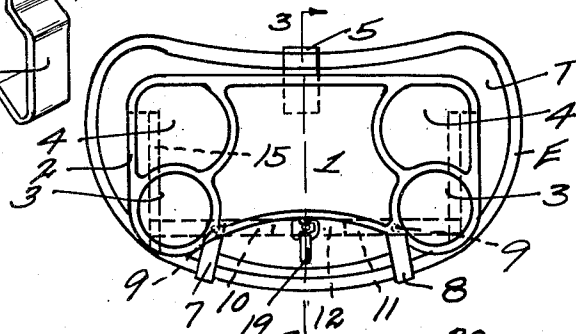


Fig. 3

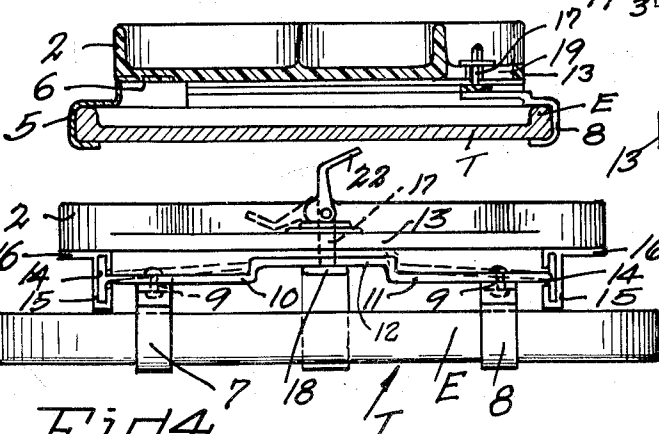


Fig. 4

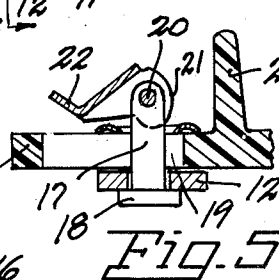


Fig. 5

George W. Gwin
Ruth M. Gwin
INVENTOR.

BY *Shm L. Fish*
ATTORNEY

UNITED STATES PATENT OFFICE

2,672,182

CHILD'S AUXILIARY SERVING TRAY

George W. Gwin and Ruth Marie Gwin,
Spokane, Wash.

Application November 15, 1952, Serial No. 320,728

5 Claims. (Cl. 155-127)

1

The present invention relates to a child's auxiliary serving tray, especially adapted for use with the standard type of serving tray that is customarily hinged to or pivotally mounted upon a child's high-chair. The standard type of high-chair tray is usually provided with an edge flange, and a plane top surface upon which the food, in containers is placed at serving time. The loosely arranged food-containers are frequently overturned and the food-content is spilled upon the high-chair tray with the result that the waste must be mopped up and the tray cleansed under difficult conditions.

The primary object of the auxiliary tray is to provide a readily attachable tray, for desired use upon the high-chair tray, and upon which the foods may be arranged in an orderly and readily accessible manner to prevent spilling of the foods, and eliminate soiling of the high-chair tray. After use, the auxiliary tray may readily be detached from the high-chair tray, or support, carried to the usual sink, and washed or cleansed in usual manner to insure the required sanitary condition of the serving tray.

The invention consists in certain novel combinations and arrangements of parts whereby the novel tray, with facility, may be mounted upon and fixed to the high-chair tray, or a similar support, for use; and with equal facility the tray may be detached and removed, when desired, cleansed to maintain its sanitary condition, and then stowed away where it is readily accessible when needed.

In the accompanying drawings we have illustrated a physical embodiment of the principles of the invention, which the portable, auxiliary tray, is adapted for use with the tray of a high-chair as a support, but it will be understood that other means may be employed as a support for the tray, and various changes and alterations may be made in the illustrated mechanical structures of the drawings, within the scope of the appended claims, without departing from the principles of the invention.

Figure 1 is a perspective view of the tray.

Figure 2 is a top plan view on a smaller scale, showing the auxiliary tray mounted upon and clamped to the tray of a high-chair.

Figure 3 is an enlarged transverse sectional view, as at line 3-3 in Fig. 2.

Figure 4 is a front view in elevation with the auxiliary tray mounted upon the chair tray, and

Figure 5 is an enlarged fragmentary sectional view showing the manually operated locking means for the tray-clamps.

2

In order that the purpose and utility of the portable tray may readily be understood we have shown a standard type of high-chair tray T having an edge flange E, which, as here shown is employed as a support for the auxiliary tray, but it will be understood that the portable tray may be mounted upon and clamped to any other suitable support.

The portable tray of our invention, which may be fashioned of any suitable material, is preferably of rectangular shape and fashioned with a flat plane base or bottom 1 and a continuous upright edge flange or rim 2. This platter type of portable tray may be fashioned with cup-shaped wells or pockets 3, 3, for the reception of drinking glasses and similar utensils, and also with larger recesses or receptacles 4, 4, for serving different kinds of foods.

For use in detachably mounting and affixing the auxiliary tray on the illustrated chair tray as a support, the rear end of the tray is equipped with a centrally located, angular, clamp plate 5 that is affixed at 6 to the lower face of the tray and adapted to hook or fit over and under the rear edge of the chair tray to provide an anchor for the adjustable auxiliary tray as it is mounted on its support.

For co-action with this rear clamping plate or anchoring clamp member, a duplicate pair of adjustable and laterally spaced clamps or hooks 7 and 8 are suspended from the front portion of the tray, for opposed coaction with the rear clamp in engagement with the front edge of the tray.

The adjustable front clamps or hooks are each pivoted or hinged at 9, 9, to the respective flexible or resilient arms 10, 11, of a transversely extending draw-bar or locking bar 12 that is located beneath a flat front ledge 13 of the tray. The pivotal connection of the front clamps permits them to adapt themselves to the contour of the front edge of the tray in order that the three clamps may coact in rigidly securing the tray to its support.

At their respective ends the flexible arms 10, 11, of the locking bar, terminate in laterally spaced dual flat and upright heads 14, 14, and these heads are each slidably mounted in a slotted flat tubular guide or support as 15, 15, each having an attaching flange 16 that is affixed in suitable manner to the under side of the bottom or base 1 of the tray. These heads are slidably encased within the slotted tubular guides or channels in order that the locking bar, with its front clamps, may readily be adjusted toward or

away from the front of the tray, in adapting the auxiliary tray for use with chair-trays, or similar supports of varying fore and aft dimensions.

After the rear clamp is anchored to the rear side of the support, the front clamps are adjusted to proper position and hooked over the front edge of the tray, and then the locking bar and front clamps are locked with relation to the tray to stabilize the latter. For this purpose we utilize an eccentric or cam device that may readily be manipulated, which includes an upright bearing post or pin 17 that passes down through a hole in the center of the locking bar 12, and the post is equipped with a lifting head 18 located beneath and bearing up against the lower face of the locking bar.

The post projects upwardly through a slot 19 of the ledge 13, and the slot is disposed in a plane parallel with the two laterally spaced supporting guides 15 of the tray.

In the upper free end of the post 17, at 20 an eccentric or cam-head 21 is pivoted and equipped with a small hand-lever 22 for operating the cam head. In Fig. 4 the cam-locking device is shown in full lines as released, and the dotted lines show the resilient or flexible arms, and the lever in locked position. In Fig. 5 the lever 22 has been turned downwardly to actuate the cam-head, thereby lifting the post 17 with its head 18 under the bar 12, and rigidly clamping the bar between the under face of the shelf or ledge 13 and the head of the post. In this manner the tray is rigidly clamped upon the chair-tray or other support.

In order to detach the tray from its support, the lever 22 is turned to uplifted position in Fig. 4, thus releasing the locking bar from its stationary position, the locking device is pushed or pulled toward the front edge of the shelf or ledge 13 with the post moving through the slot 19, the slide heads move along in their guides, and the front clamps are disengaged from the front edge of the support; and after the rear hook or clamp has been disengaged from the rear edge of the tray, the latter is removed from its support.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A serving tray having a rear anchoring clamp member affixed thereto and a pair of laterally spaced forwardly extending guide members fixed to the underside of the tray, the combination therewith of a flexible locking bar suspended beneath the tray with its ends slidably mounted in the guide members, a front pair of laterally spaced clamp members carried by the locking bar, and locking means mounted on and coacting with the tray for rigidly fastening the bar and front clamp members in locked position, whereby the tray may be detachably mounted upon a suitable support.

2. A serving tray having a rear anchoring-clamp and a pair of laterally spaced forwardly extending supports fixed at its under side, the combination therewith of a transversely extending flexible locking bar suspended beneath the tray with its opposite ends mounted on the supports, and locking means mounted on and coacting with the tray and locking bar for rigidly fastening the bar in locked position, and a front pair of laterally spaced clamps carried by the locking bar, for the purpose described.

3. In a serving tray as described, the combination with a rear clamp member fixed thereto and a pair of laterally spaced forwardly extending supports fixed to the underside of the tray, of a transversely extending flexible locking bar suspended beneath the tray with its ends mounted on said supports, a front pair of laterally spaced clamps each pivotally connected with the bar, and locking means mounted on and coacting with the bar and tray, whereby the tray may be detachably mounted upon a support.

4. In a serving tray as described, the combination with a rear clamp member fixed thereto and a pair of laterally spaced forwardly extending tubular and slotted supports affixed to the underside of the tray, of a transversely arranged flexible locking bar suspended beneath the tray, a slide-head rigid with each end of the bar and mounted in a support, a front pair of laterally spaced clamps each pivotally connected with the bar, and locking means mounted on and coacting with the bar and tray whereby the tray may be detachably mounted upon a suitable support.

5. A serving tray having a rear anchoring clamp and a pair of laterally spaced forwardly extending supports fixed at its under side, the combination therewith of a transversely extending flexible locking bar having its opposite ends mounted on the supports, a front pair of laterally spaced clamps carried by the bar, a central suspending post for the bar mounted in a slot of the tray, and a locking lever having a cam-head and pivoted in the upper end of the post for coaction with the bar and tray, whereby the tray may be detachably mounted upon suitable support.

GEORGE W. GWIN.
RUTH MARIE GWIN.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,453,186	Ruffin, Jr.	Apr. 24, 1923
1,385,615	McGinley	Nov. 1, 1932
1,921,463	Graham	Aug. 8, 1933

FOREIGN PATENTS

Number	Country	Date
67,983	Germany	Apr. 13, 1893