Sept. 15, 1953 V. W. ENSLEIN 2,651,926

FOOD TRAY FOR THE BLIND

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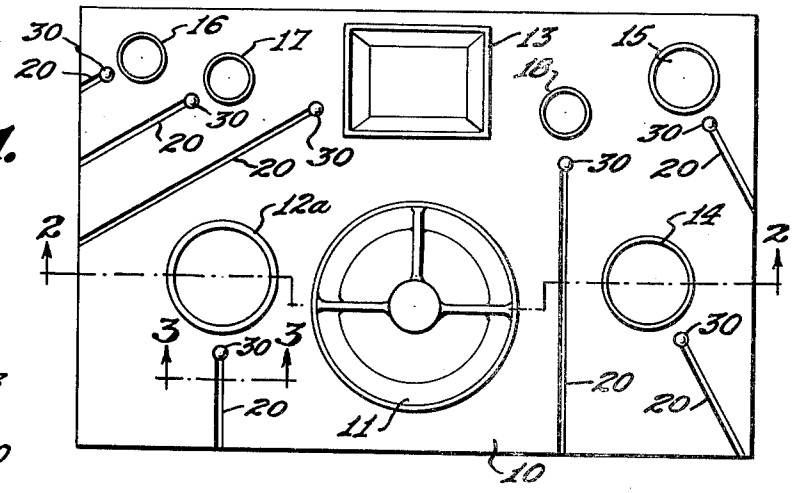


FIG. 1.

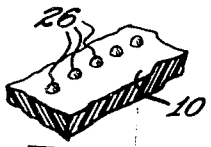


FIG. 9.

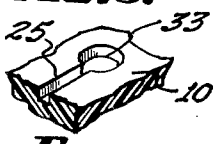


FIG. 8.

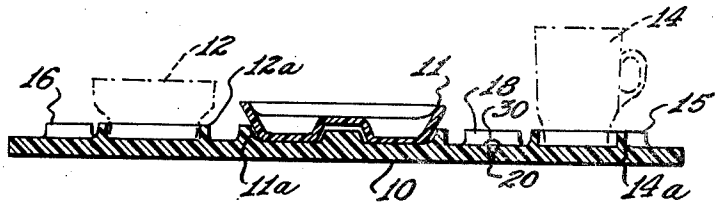


FIG. 2.

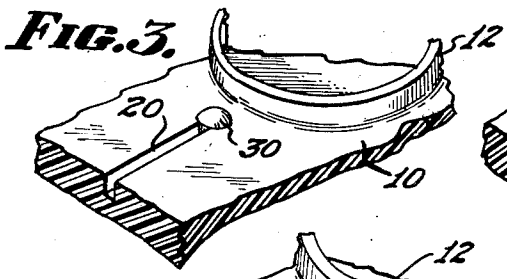


FIG. 3.

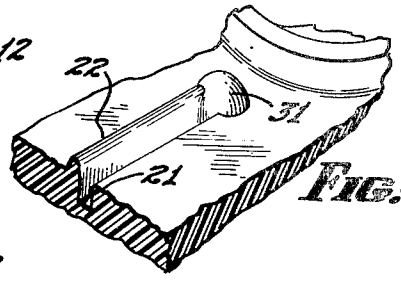


FIG. 4.

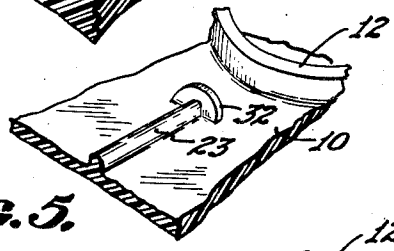


FIG. 5.

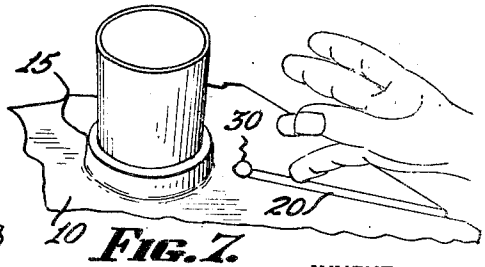


FIG. 7.

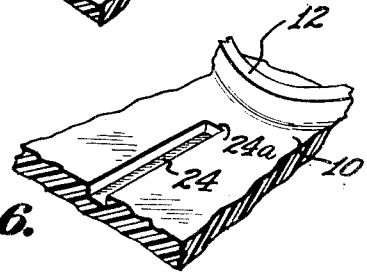


FIG. 6.

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FOOD TRAY FOR THE BLIND

Vincent W. Enslein, Cincinnati, Ohio

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4 Claims. (Cl. 65—53)

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This invention relates to a food tray for the blind, and more particularly to a tray which may be of standardized dimensions, and which will preferably have means to fix the position of the various food dishes, beverages and condiments, and which is provided with guide means whereby the blind user may unerringly reach for any of the dishes on said tray without the danger of spilling any of the items, and without the danger of accidentally putting his hand into one of the dishes.

Heretofore it has been known that a blind person can eat neatly and without difficulty if the food dishes are invariably placed before him in the same relative position. However, even when this is done the user will often inadvertently spill a glass of water or put his hand into a vegetable dish or the like because the exact position may not be the same as that to which he is accustomed, and because there is no way for him to guide his hand to the correct position. For these reasons blind people must either be fed or attended by someone to point out the dishes to him or food will be spilled.

It is an object of the present invention to provide a tray by means of which a blind person can eat a meal without assistance of any kind, and with absolute safety against spillage or the like. It is a further object of the invention to provide such a tray which will be simple in manufacture and therefore inexpensive, and which can be standardized and adopted throughout the country and throughout the world so that a blind person no matter where he eats may use such a tray and eat his meal with confidence and without danger of spillage.

These and other objects of the invention which will be pointed out in greater detail hereinafter, or which will be apparent to one skilled in the art upon reading these specifications, I accomplish by that certain construction and arrangement of parts of which I shall now describe exemplary embodiments.

Reference is made to the drawings forming a part hereof, and in which:

Figure 1 is a plan view of an exemplary tray according to the invention;

Figure 2 is a cross sectional view thereof taken on the line 2—2 of Figure 1;

Figure 3 is a fragmentary perspective view taken more or less on the line 3—3 of Figure 1;

Figures 4, 5, 6, 8 and 9 are views similar to Figure 3 showing modified structures;

Figure 7 is a fragmentary perspective view showing the manner in which the invention is used.

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Briefly in the practice of the invention I provide a tray which may be of molded plastic or light gauge aluminum or the like, which is provided with means to fix the position of the various food items including beverages, condiments and the like. Associated with these various fixing means I provide guide means commencing at one of the edges of the tray and leading toward the respective fixing means so that the user may guide his hand up to the food dish he wishes to consume.

Referring now to the drawings, a tray is generally indicated at 10, a main dish is shown at 11, a vegetable dish at 12, a dessert dish at 13, a tea or coffee cup at 14, a water glass position at 15, and condiment positions as for salt and pepper at 16 and 17. A position for a butter plate is indicated at 18. The main dish 11 is maintained in place by a position fixing element in the form of a ridge 11*a*, the vegetable dish 12 is positioned by means of a similar element 12*a*, the coffee cup 14 is positioned by a similar element 14*a*.

The guide means are tactile in nature so that the user may feel his way to the dish position by means of his hand, as best seen for example, in Figure 7. The guide elements may take any one of a number of forms. Thus, in Figure 3 I have indicated a groove 20; in Fig. 4 a groove 21 having a raised edge or ridge 22; in Fig. 5 I have indicated a simple ridge 23; in Fig. 6 a groove 24; in Fig. 8 a groove 25; and in Fig. 9 a series of bumps 26. In the embodiment of Fig. 1 grooves have been used as indicated at 20.

It will be clear that the guide elements may stop short of the means which fix the position of the dish so that the end of the guide means will indicate to the user that his hand is in the proper position. Thus, in Fig. 6 the groove 24 simply terminates, as at 24*a*, and when the user's finger reaches the wall 24*a* he knows that his hand is in the correct position to grasp the dish held in the means 12.

Similarly, in Fig. 9 the series of bumps 26 will terminate short of the respective dish positioning means so that the user will know that when he comes to the end of the series of bumps his hand is in the proper position. The same may be true of a guiding element in the form of a ridge.

I prefer, however, to provide warning means in association with each of the guide elements to clearly indicate to the user that his hand is in the correct position. The warning means may also take a variety of forms. In Figs. 1 and 3 the warning means is constituted by a hump 30,

Thus, the user will slide a little finger of the appropriate hand along the groove **20** until it abuts the bump **30**, at which point his hand will be in the proper position to grasp the particular dish in question.

In the embodiment of Figure 4 I have shown a hump **31** associated with the slot **21** having the raised edge **22**. In Figure 6, as pointed out above, the end wall **24***a* of the groove **24** serves as a warning means. In Fig. 5, I have shown an enlargement **32** of the ridge in the form of an enlarged hump for the same purpose. In the example of Fig. 8, I have shown an enlargement in the groove at **33** in the form of a hole which can readily be felt by the blind user.

It will be understood that the tray **10** instead of having members such as those indicated at **11***a*, **12***a*, **14***a*, **15**, **18**, **16** and **17**, may simply be molded to provide the dishes in the tray itself. It would only be necessary to provide means to fix the position of the coffee or tea cup and the water glass. All other dishes could be formed as depressions in the tray itself. The members **16** and **17** would of course have to be provided for salt and pepper shakers. It will therefore be understood that the term "means to fix the position of the various food dishes, including beverages and condiments" is intended to cover a situation where the means to fix the position is constituted by a depression forming the dish itself.

It will be clear that numerous modifications may be made without departing from the spirit of the invention, and I therefore do not intend to limit myself except as set forth in the claims which follow.

Having now fully described my invention what I claim as new and desire to secure by Letters Patent, is:

1. A meal holding plaque for the blind, having a plurality of dish receiving holding means fixed in relation to said plaque in suitable spaced relation to each other, and tracks originating at peripheral edges of said plaque and extending across the upper surface of said plaque toward, but not touching, respective ones of said dish receiving holding means.

2. A structure according to claim 1 wherein said tracks comprise grooves depressed below the upper surface of the plaque.

3. A structure according to claim 1 wherein each of said tracks terminates in a warning abutment at its inner end.

4. A structure according to claim 3 wherein said tracks comprise grooves depressed below the upper surface of a plaque and said warning abutments are enlarged depressions in the upper surface of said plaque.

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