Feb. 16, 1954 D. J. OLSON 2,669,379

PLATE PROVIDED WITH DEPENDING GRIPPING MEANS

Filed Aug. 3, 1950

FIG. 1

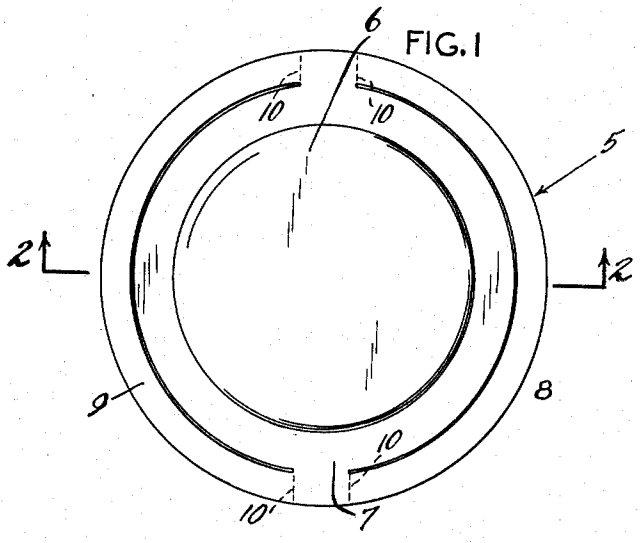


FIG. 2

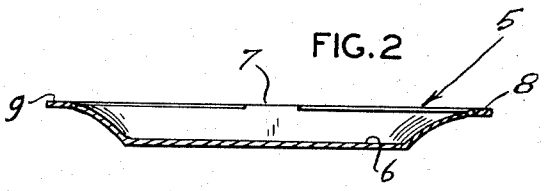


FIG. 3

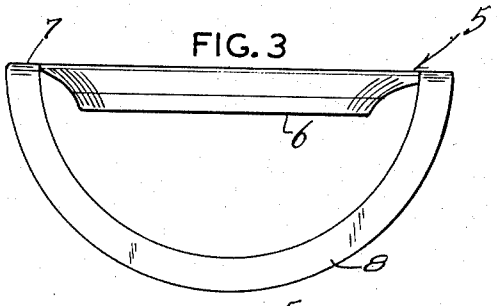
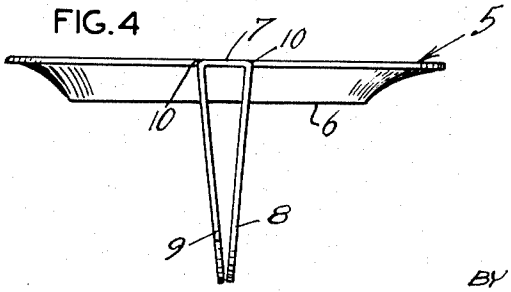


FIG. 4



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PLATE PROVIDED WITH DEPENDING GRIPPING MEANS

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2 Claims. (Cl. 229—1.5)

1

This invention relates generally to grippers for plates to permit the same to be securely held even though not supported on a flat surface.

In my co-pending application, Serial Number 160,129, entitled Holder for Paper Plates and the Like, I disclose a device for a similar purpose but have found that the disclosed structure, even though it operates satisfactorily, is somewhat expensive to manufacture. The structure disclosed herein is particularly designed for inexpensive manufacture and each plate incorporating my invention is designed to be produced from a single stamping operation.

It is an object of my present invention to provide a gripper for plates, such as disposable plates, which is adapted to be easily and inexpensively manufactured while providing depending means to permit the plate to be gripped between the knees of the used to prevent said plate from tipping or falling when used in automobiles such as at "drive-in" restaurants and at picnics and the like.

It is another object to provide a gripper particularly adapted for use with disposable plates and designed to be produced simultaneously with the forming of the plate by a single stamping operation and adapted to be compactly packaged while permitting extremely quick and easy positioning for plate gripping operation.

More specifically, it is an object to provide a plate gripper in the form of a depending gripping element adapted to be struck out of the rim portion of the plate and when in use adapted to be swung downwardly to produce an element positioned to be tightly gripped between the knees of the user.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to similar parts throughout the several views and in which:

Fig. 1 is a top plan view of a plate embodying my invention;

Fig. 2 is a vertical sectional view taken substantially along the line 2—2 of Fig. 1;

Fig. 3 is a side elevational view of the plate shown in Figs. 1 and 2 showing the gripping members in depending operative position; and

Fig. 4 is a front elevational view of the plate shown in Fig. 3.

As illustrated in the accompanying drawings, I provide an extremely simple, highly efficient article of manufacture constructed to form depending gripping means to permit the plate to

2

be stably supported in the lap of a user. In the form shown a conventional disposable plate, which is made from paper or other inexpensive disposable material, is illustrated and is designated as an entirety by the numeral 5. This plate 5 is of conventional shape and has a bottom 6 and an annular relatively wide rim portion 7, the outer portion of which is substantially flat in the form shown.

A pair of gripper elements in the form of struckout segments 8 and 9 are formed in opposed outer portions of the annular rim 7, as best shown in Fig. 1. These segments 8 and 9 are cut at least substantially free from the inner portion of the rim 7 to permit the same to be swung downwardly into operative position, as best shown in Figs. 3 and 4. The outer portions of the rim may be scored along the lines on which the gripper wings 8 and 9 are to be bent. These score lines are represented by the dotted lines of Fig. 1 and are designated by the numeral 10.

It will be seen that I have provided an extremely simple yet ingenious article of manufacture which may be compactly packaged when the gripping means are in normal retracted position but which provides gripping means adapted to be swung downwardly into depending relation below the bottom of the plate and produces a structure adapted to be constructed and formed from a single punching operation which will not materially increase the cost of producing these plates over the cost of producing conventional plates. As indicated in my above identified co-pending application, these plates are particularly adapted for use in "drive-in" restaurants and picnics where the users must hold the plate in their lap. The depending gripping means provides a secure anchoring structure adapted to be tightly gripped between the knees of a user to securely hold the plate and prevent the same from inadvertently tipping or sliding from the lap.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departing from the scope of my invention.

What I claim is:

1. A stabilized eating plate structure comprising a substantially conventional, disposable, paper-like plate including a central imperforate dished plate bottom and a raised annular rim surrounding said bottom, said raised annular rim having at least one arcuate slit therein the ends of which terminate at portions of said plate remote from each other and substantially along a

line through the center of the plate, said rim having crease lines therein aligned with each other and extending from the ends of said slit outwardly to the peripheral edge of the rim providing a hinge so that the rim portion outwardly of said slit can be bent downwardly about the hinge into depending relation to said central imperforate plate bottom to a position substantially perpendicularly related to the plate bottom thereby providing a gripping element adapted to be gripped between the knees of a user while the plate bottom is supported on the user's knees.

2. A stabilized eating plate structure comprising a substantially conventional, disposable, paper-like plate including a central imperforate dished plate bottom and a raised annular rim surrounding said bottom, said raised annular rim having a plurality of slits therein terminating in imperforate portions diametrically opposed to each other, said rim having a pair of crease lines therein aligned with each other and at each side of said imperforate portions and extending outwardly to the peripheral edge of said rim providing a pair of hinges so that the plate can be selectively utilized with the rim in its normal relationship with the plate bottom and also bent downwardly about the hinges into depending relation to said central imperforate plate bottom to a position substantially perpendicularly related to the plate bottom, thereby providing a gripping element adapted to be gripped between the knees of the user while the plate bottom is supported on the user's knees.

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