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R. M. CONKLIN

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FRUIT SEVERING DEVICE

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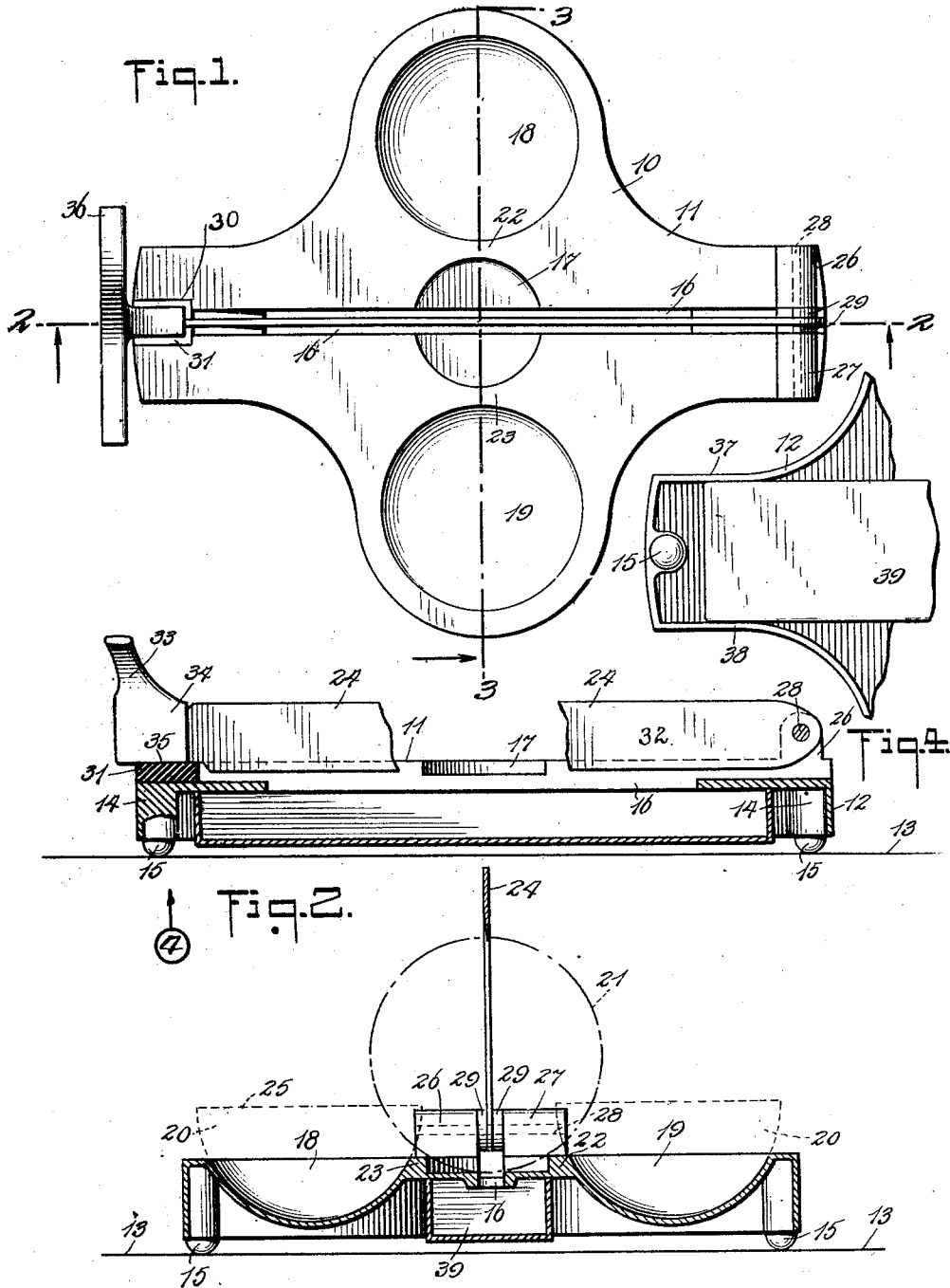


Fig. 3.

INVENTOR
 ROBERT M. CONKLIN
 BY
 Warren S. Orton
 ATTORNEY

UNITED STATES PATENT OFFICE

ROBERT M. CONKLIN, OF JERSEY CITY, NEW JERSEY

FRUIT-SEVERING DEVICE

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The invention relates to a device for severing spherical fruit, such as oranges and like articles.

The primary object of the invention is to provide a simplified fruit-severing device designed for use at soda fountains and other places where it is required that large numbers of oranges, lemons and the like be quickly halved for the preparation of drinks.

Among the other objects of the invention is to provide for the approximate centering of the object to be severed and the receiving of the severed halves in position readily accessible to the operator; to provide for the drainage of drippings from the severed fruit; to provide a construction which can be easily manipulated, which will be quiet in its operation and which will feature exposed parts which will render the article easily cleaned and in general which will feature the construction of a sanitary article at low production cost.

Various other objects and advantages of the invention will be in part obvious from an inspection of the accompanying drawings and in part will be more fully set forth in the following particular description of one form of mechanism embodying my invention, and the invention also consists in certain new and novel features of construction and combination of parts hereinafter set forth and claimed.

In the accompanying drawing:

Fig. 1 is a plan view looking down upon a preferred embodiment of the invention;

Figs. 2 and 3 are vertical sectional views taken respectively on the lines 2—2 and 3—3 of Fig. 1 looking in the directions indicated by the arrows and with parts of Fig. 2 broken away to show normally hidden structures; and

Fig. 4 is a plan view of the underside of the structure shown in Fig. 2 looking at the end in the direction indicated by the arrow numbered 4.

The device comprises primarily a casting 10 of metal, the upper side of which is enameled to enhance its sanitary appearance. The casting 10 includes a base plate 11 outlined by an integral depending wall 12 hav-

ing a depth sufficient to elevate the base plate some distance above the support indicated at 13. The wall 12 is thickened at four equidistant points to provide supporting feet 14 and the feet 14 are in turn provided with semi-spherical buttons 15 providing point contacts with the support 13.

When viewed in plan the base plate is somewhat in the form of an equal arm cross and is provided centrally of its longest dimension with a drainage slot 16 opening therethrough adjacent its central portion.

Considered in its other longest dimension transversely of the length of the slot 16 the base plate is provided with three recesses 17, 18 and 19 with their centers disposed in alignment and each of the recesses being circular in plan as shown in Fig. 1. The middle recess 17 is relatively shallow and is bisected by the slot 16. Each of the recesses 18 and 19 are semi-spherical and of a size to receive the severed halves 20 of the object 21 after the object has been cut as hereinafter described. The recess 17 constitutes a means for receiving the whole fruit or other object 21 shown in dot and dash line in Fig. 3 and for this reason is referred to hereinafter as a centering recess. The edges of the outer recesses 18 and 19 at their points adjacent the recess 17 are positioned relatively close to the recess 17 so as to form relatively sharp dividing ridges 22 and 23 which are disposed so that when the object 21 is severed as shown in Fig. 3, the cut halves will fall outwardly away from the severing knife 24 and fall into the recesses 18 and 19 with the severed sides 25 facing upwardly.

The base plate 11 is provided in prolongation of the slot 16 with two upstanding pivoting lugs 26 and 27 spaced apart on opposite sides of the slot and containing a removable pivot pin 28 to which is pivoted the knife 24. Washers 29 are positioned between the knife and the adjacent lugs to set the knife for operable movement in the plane of the slot. At the opposite end of the base plate 11 there is provided a square recess 30 in prolongation of the slot and a flat topped square of rubber 31 is replaceably positioned in the recess 30. The knife 24 comprises a knife blade 32 pref-

erably of stainless steel and a handle 33 at its free end. The handle is somewhat T-shaped in form and includes a central portion 34 the underside 35 of which is flat, relatively broad and provides an extensive engagement with the flat top of the rubber cushioning seat 31. The handle also includes two upstanding laterally extending horns 36 which provide a convenient grip extending across the fingers of the operator's hand and the parts are so disposed that the handle elevates the operator's hand above any possible contact with the top of the base plate.

At opposite ends of the slot 16 the outlining wall is curved as shown in Fig. 4 to form opposing basin engaging walls 37 and 38. Positioned beneath the base plate and extending lengthwise of the slot is a catch basin 39 the ends of which have a frictionally tight fit between the walls 37 and 38. In this way the catch basin is secured to and removable from the device as a whole but may be quickly separated to permit the emptying of the catch basin.

In operation, the article to be severed is quickly positioned in the centering recess 17 with the knife elevated. It is not necessary to hold the object 21 as the circular conformation of the recess will tend to center the object with sufficient approximation to insure the substantial halving of the article. The knife is grasped preferably with the operator's fingers extending in pairs on opposite sides of the central portion 34 and the knife is lowered into the position shown in Fig. 2 and at the same time, the object is severed. The cushion provided by the rubber seat prevents any metallic clicking of the parts and insures a quiet operation of the device. Any dripping which may accumulate in the centering recess or in fact on any part of the base plate except the recesses 18 and 19 will drain through the slot and be received in the catch basin.

Should it be desired to clean the device the catch basin can be separated by a forceful pull thereon. The pivot pin may be removed thus releasing the knife and this leaves all of the parts exposed for easy cleansing.

I claim:

1. In a device for severing spherical fruit and the like, the combination of a casting including a base plate provided with an integral outlining wall depending from the plate, said wall having a plurality of thickened portions providing supporting feet for the device, the wall at opposite sides of the device having opposing portions extending parallel to each other and adapted to receive opposite ends of a catch basin, said base plate provided with a drainage slot adapted to discharge into the catch basin located by said opposing portions of the wall, said plate having depressions forming a central fruit centering recess bisected by said slot and two

outer spherical section recesses on opposite sides of the centering recess, said outer recesses disposed relatively close to the central recess and coacting therewith to form a pair of ridges therebetween and a severing knife pivotally mounted at one end and movable in a plane longitudinally of the slot for severing the fruit in the central recess.

2. In a fruit severing device, a one piece hollow casting including a top plate provided with a drainage slot, an outlining side wall, a pair of knife pivoting lugs spaced apart to provide a knife receiving clearance aligned with the slot in the top plate and said plate provided with three upwardly exposed recesses disposed in alignment transversely of the slot with the slot bisecting the middle recess.

3. In a fruit severing device, a one piece hollow casting including a top plate provided with a drainage slot, an outlining side wall, a pair of knife pivoting lugs spaced apart to provide a knife receiving clearance aligned with the slot in the top plate and said plate provided with three upwardly exposed recesses disposed in alignment transversely of the slot with the slot bisecting the middle recess and a knife pivotally mounted in the clearance between said lugs and movable in the plane of the slot.

4. A device for severing a spherical object, comprising a base plate provided on its upper face with an upwardly facing concaved circular recess outlined by a sharp circular edge constituting a means for centering and holding the spherical object on top of the plate and a knife pivotally mounted at one end to the base plate in spaced relation to the recess, extending diametrically across the recess bisecting said circular edge and guided for movement in a plane at right angles to the plane of the plate to pass through the centered object.

5. A device for severing a spherical object, comprising a base plate provided with three recesses in its top face disposed in alignment, the middle recess constituting a centering recess to receive the object to be severed and the outer recesses adapted to receive the severed halves of the object and a severing knife operable in a plane extending diametrically across the centering recess and transversely of the line of recesses.

6. In a device for severing spherically shaped fruit and the like, the combination of a base plate provided with a pair of upwardly facing fixedly spaced apart, semi-spherical recesses to receive the severed halves of the fruit after it has been cut, and a pivotally mounted severing knife movable in a plane between the recesses and bisecting a line connecting the centers of said recesses, and the edges of the recesses adjacent said plane being positioned close to the same whereby the severed halves will tend to fall

over away from each other and from the knife and be received in said recesses with their severed sides facing upwardly.

7. In a device for severing spherically shaped fruit and the like, the combination of a base plate provided with three recesses, all circular in plan, disposed in alignment and forming a pair of relatively sharp ridges between the central recess and each of the outer recesses and a severing knife mounted for operative movement in a plane extending diametrically of the center recess and spaced equidistant from both ridges.

8. A device for severing fruit and the like, comprising a base plate provided with a long drainage slot opening therethrough and confined within the outlines of the plate, and said top also provided with an upwardly facing centering recess adapted to receive and locate on top of the base plate the fruit to be severed, said recess opening into said slot and said slot extending diametrically of the recess and projecting beyond the outline thereof, and a knife for severing the fruit located in the recess and said knife mounted for movement in a plane extending longitudinally of the slot and bisecting said recess.

9. A device for severing fruit and the like, comprising a base plate having a drainage opening therein, said base plate provided with a down turned outlining flange forming an open bottom hollow structure, and a readily removable catch basin secured to and carried by said device beneath the base plate and within said hollow structure for receiving the discharge through said slot.

10. A device for severing fruit or the like, comprising a base plate having oppositely disposed depending walls and having a drainage opening therein, a catch basin having a frictional fit between said walls and secured thereby to the base plate and adapted to receive liquids drained into the same through said opening.

11. A device for severing fruit or the like, comprising a base plate provided with a drainage outlet, a drip basin secured to the device beneath the base plate and open to receive the drip through the outlet, said base plate with the basin removed providing easy access to both sides to facilitate cleaning, and a knife pivoted to the base plate for severing the fruit on top of the base plate.

12. In a device of the class described, the combination of a base plate provided with a slot, a flat knife cushioning device fitted in the plate in prolongation of and at one end of the slot and flush with the top of the plate, a knife movable in the plane of the slot having one end pivoted to the plate and having adjacent its free end a flat cushion engaging face adapted to engage the cushioning device at the limit of its downstroke and the cutting edge of the knife disposed in said

slot and protected by the plate when in engagement with said cushioning device.

13. In a device of the class described, the combination of a base plate provided with a recess in its top face, a rubber pad fitted in said recess and a knife pivoted to the plate and provided with a broad flat pad engaging face adapted to rest normally on said rubber pad and said plate coacting with the cutting edge of the knife to prevent exposure of said cutting edge when the knife is in its normal position engaging said rubber pad.

14. In a device of the class described, the combination of a base plate, a knife pivoted at one end to the base plate and provided at its free end with a handle T-shaped in plan having a central base supported portion to which the knife blade is secured and having two outstanding upwardly curved horns projecting laterally of the plane of the blade and spaced a distance above the bottom of the central portion to prevent a hand engaging the horns from contacting with any surface on which the central portion rests.

15. In a device of the class described, the combination of a base plate, a knife pivoted at one end to the base plate and provided at its free end with a handle T-shaped in plan having a central portion to which the knife blade is secured and having two outstanding horns projecting laterally of the plane of the blade, the underside of the central portion being flat and providing a relatively broad base for the free end of the knife adapted to provide a wide area of engagement with a knife cushioning device.

16. A fruit severing device, comprising a base plate, a knife pivoted at one end to the plate for movement in a vertical plane through the fruit, and said plate provided on opposite sides of said plane with upwardly facing depressed portions forming spherical section recesses fixedly spaced apart and adapted to receive the severed halves of the fruit.

Signed at New York, in the county of New York, and State of New York, this 14th day of October A. D. 1927.

ROBERT M. CONKLIN.