

A CUTTER FOR FOODSTUFFS

The present invention relates to a household utensil for reducing the size of fruits, vegetable or similar foodstuffs, in particular to a household utensil wherein the said foodstuffs can be reduced to varying shapes and sizes.

In known devices of the kind described, there is provided a working plate with a cutting edge positioned marginally above the horizontal plane of the working plate. The position of the cutting edge in relation to the working plate is fixed in a pre-determined manner. In some prior art models, the cutting edge is replaceable; cutting edges of different shapes can be fitted in position. The prior art models are only capable of cutting or slicing fruits, vegetables or other similar foodstuff into planar slices the thickness of the slice depending on the height of the cutting edge from the working plate. Although it is possible to obtain either substantially smooth or wavy surfaces on one side of sliced part, it was not possible to slice the said sliced part in the opposite direction.

The present invention can provide a cutter which facilitates the slicing of the foodstuff to be cut into longitudinal strips in one continuous motion.

The invention provides

a cutter for

foodstuffs comprising a cutting edge, a guide plate extending away from the cutting edge to define a path to the cutting edge for foodstuff to be cut and a plurality of sets of cutting ribs disposed across the guide plate and rotatably mounted so that any one set of the plurality of sets of cutting ribs is moveable into and out of the path through slits in the guide plate.

The present invention may provide a cutter for fruits, vegetables and the like comprising a first plate, a second plate positioned adjacent and a pre-determined height above the first plate. The second plate includes a cutting edge mounted at the starting edge. The relative heights of the first plate and the second plate adjustable. The first plate includes a plurality of slits positioned in the direction of movement of the item to be cut, and a rotatable cylinder mounted beneath the slits. The cylinder includes a plurality of series of cutting ribs mounted perpendicular to the surface of the cylinder wherein the rotation of the cylinder enables the first plate to be reversibly raised above the cutting edge, or one series of the plurality of series of cutting ribs to be introduced through the slits ; the position of the cylinder being lockable in position at any one pre-determined position. When the first plate is lower than the surface of the second plate, a planar slice of the item to be cut is produced. When the series of cutting ribs is above the surface of the first plate, a series of strips of the said items are produced.

Advantageously the length of the slits in the first plate are dimensioned to accommodate the rotational movement of the cutting ribs. In the preferred embodiment the surface of the first and second plates are grooved in the longitudinal direction to facilitate the unidirectional movement of the item to be cut along the longitudinal axis of the cutter.

The free end of the second plate is preferably serrated to facilitate the production of patterned margin of the item that is cut. The side walls bordering the second plate also include at least a pair of grooves to enable the positioning of the cutter on the side edges of a container vessel.

The invention will be more clearly described by reference to an embodiment of the invention by way of example only,

clearly illustrated in the following diagrams in

which :

Fig. 1 is a perspective view of an embodiment of the invention.

Fig. 2 is a perspective view of the rotatable cylinder (shown detached from the cutter assembly, with the knob also separated).

Referring now to the drawings, in Figs 1 to 2, a cutter (10) includes a first guide plate (12) and a second cutting plate with (14) a cutting edge (20). The first plate (12) includes a plurality of slits (16) at one end. The length of the slits along the first plate is dimensioned to enable cutting ribs (18) to rotate about their mounting. In a equilibrium rest position, the first plate is an inclined plane in relation to the level of the cutting edge (20). One end of the first plate

(12) is preferably integrally fastened to the side panels (22) of the cutter. The other end of the first plate (12) is free. As the cylinder (24) is rotated about its axis the free end of the first plate is moved above the level of the cutting edge. The cutting edge (20), preferably a razor like blade, is mounted on one edge of the second plate (14), preferably at a slight off right angle position in relation to the longitudinal axis of the side panels (22). The terminal end of the second plate (14) includes a serrated edge or other shapes (26) to facilitate cutting of the fruits or vegetables or other foodstuffs into a pre-determined pattern.

Each side panel (22) preferably includes a groove (27) at mid-portion between the cutting edge and the serrated edge. The groove (27) facilitates the positioning of the cutter on the side walls of a container that receives the cut fruit or vegetables.

The cylinder includes a plurality of series of cutting ribs (18), preferably of uniform size, arranged in such a manner that when the cylinder is rotated, one series of cutting ribs at a time passes through the slits (16). The cylinder (24) is mounted on a shaft (28) off the central longitudinal axis. The shaft (28) is rotatably mounted on the side panels (22) so that when the shaft is rotated the free end of the first

plate (12) is moved from a first rest position to a second position wherein the free end is above the level of the cutting edge (20). One end of the shaft (28) includes a control knob (30) which is designed to rotate the shaft along its longitudinal axis and to lock and unlock the shaft at pre-determined position along its axis of rotation.

The present embodiment of the invention as illustrated depicts two series of cutting-ribs. It is possible to include additional series of cutting ribs on the cylinder if desired.

The operation of the invention in use will now be described. If only a flat wide planar slice of the fruit or vegetable is required, the free end of the first plate (12) is fixed at a position below the cutting edge. The vertical distance between the free end and the cutting edge (20) would substantially be the thickness of the sliced piece. As the vertical distance between the free end and the cutting edge is adjustable it is possible to slice fruits or vegetables of varying thickness.

To obtain strips of fruits or vegetables, one series of the cutting ribs (18) is rotated above the slits (16). When the fruit is slid along the longitudinal direction, the cutting ribs first make a series of slits in the fruit. Thereafter the

fruit is sliced by the cutting edge, thereby producing longitudinal strips of fruit or vegetable, which drops beneath the second plate (14). The width of the longitudinal strip would be determined by the distance between the adjacent cutting ribs (18).

The cut longitudinal strips can if desired be cut into smaller strips by using the serrated edge (26).

To guide the fruit or vegetable along the plates, the plates includes a plurality of wavy ridges in the direction of the longitudinal axis of the cutter. The edges of the side panels (22) are above the planar level of the plates, so as to keep the fruit or vegetable to be cut within the plates when the same is being cut.

Claims:

1. A cutter for foodstuffs comprising a cutting edge, a guide plate extending away from the cutting edge to define a path to the cutting edge for foodstuff to be cut and a plurality of sets of cutting ribs disposed across the guide plate and rotatably mounted so that any one set of the plurality of sets of cutting ribs is moveable into and out of the path through slits in the guide plate.
2. A cutter according to claim 1 in which the plurality of sets of cutting ribs are on a cylinder rotatably mounted beneath the slits in the guide plate so that rotation of the cylinder introduces one set of cutting ribs at a time into the path.
3. A cutter according to claim 2 in which the cylinder is lockable in a position where one set of cutting ribs protrudes through the slits in the guide plate to interfere with an item passing along the path, or in a position where no ribs protrude through the slits and there is no interference with an item passing along the path.
4. A cutter according to claim 2 or 3 in which the perpendicular spacing between the end of the guide plate adjacent the cutting edge and the cutting edge is adjustable on rotation of the cylinder.
5. A cutter according to any preceding claim in which the cutting edge is mounted at one end of a cutting plate which has a second cutting edge on the end of the cutting plate opposite the first cutting edge.
6. A cutter according to claim 5 in which the cutting plate is attached to two side walls, each of which is secured to the end of the guide plate away from the cutting edge, and in which the bottom of each side wall has a groove located between the cutting edge and the end of the cutting plate away from the cutting edge.



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7. A cutter according to claim 5 or 6 in which the guide plate and cutting plate do not overlap each other.

8. A cutter substantially as hereinbefore described with reference to the accompanying drawings.

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