Jan. 13, 1931. C. MATTHIAS 1,789,012

VEGETABLE CUTTER

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Fig. 1

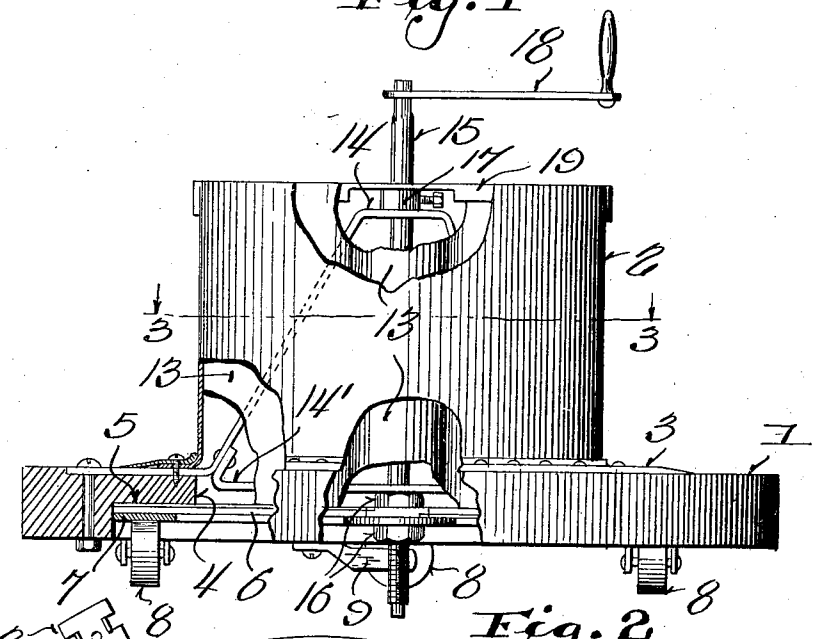
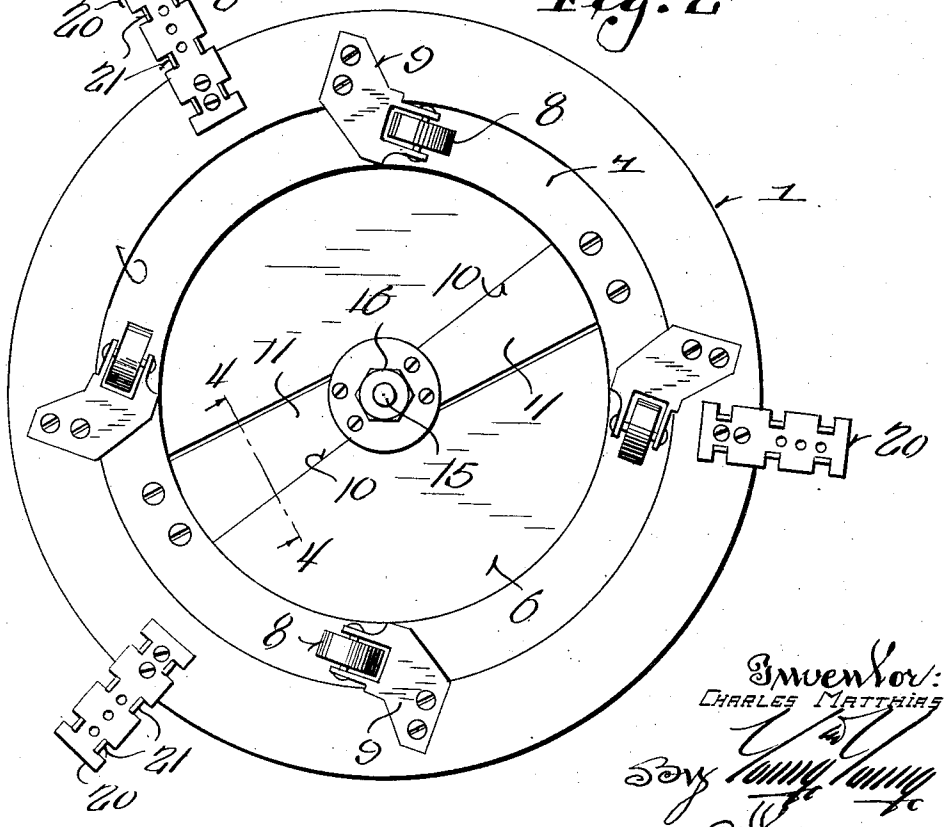


Fig. 2



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Fig. 3

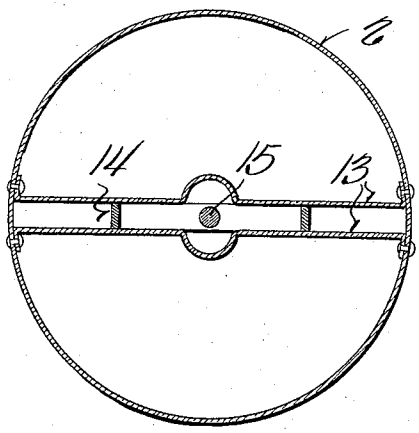


Fig. 4

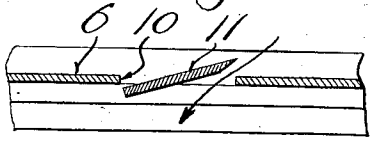
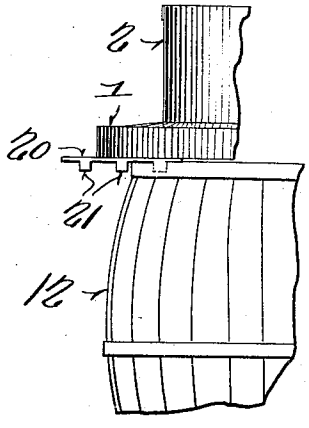


Fig. 5



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UNITED STATES PATENT OFFICE

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VEGETABLE CUTTER

Application filed August 2, 1929. Serial No. 382,922.

This invention pertains to vegetable cutters, and more particularly to a light, portable, and comparatively inexpensive apparatus for household use in cutting or shredding cabbage and the like, such as is necessary in making sauer kraut.

Incidental to the foregoing, a more specific object resides in the provision of a portable receptacle which may be placed over the top of a conventional tub or vat and provided with a partition for dividing a vegetable receiving compartment or hopper to hold the vegetables stationary as the cutters are rotated.

A still further object resides in the provision of an apparatus of the foregoing character in which the receiving hopper is provided with a rotatable bottom which carries the cutting knives.

Another object resides in the provision of supporting means to permit the cutter to be positioned upon vats or tubs of various sizes.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claim, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claim.

In the accompanying drawings is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

In the drawings, Figure 1 is an elevation of a cutter constructed in accordance with the present invention, with parts broken away and in section to more clearly illustrate structural details;

Figure 2 is a bottom plan view;

Figure 3 is a transverse section taken on the line 3—3 of Figure 1;

Figure 4 is a detail section of one of the cutters, taken on the line 4—4 of Figure 2; and

Figure 5 is a fragmentary elevational detail illustrating the application of the cutter to a barrel or vat.

Referring now more particularly to the accompanying drawings, the numeral 1 designates an annular base on which is mounted a cylindrical hopper 2, secured to the base by a retaining flange 3.

As best shown in Figure 1, the base 1 is provided with a central annular opening 4 of substantially the same diameter as the hopper 2, and adjacent the opening 4 the base is cut away at its bottom face to provide an annular recess 5, in which is mounted an annular bottom plate 6. Secured to the under face of the bottom 6, adjacent its periphery, is an annular track 7 which is engaged by rollers 8 carried by the brackets 9 secured to the bottom of the base 1. It will thus be seen that the bottom 6 is rotatably held in engagement with the base 1, thus providing a closure for the bottom of the hopper 2.

As best seen in Figure 2, the bottom 6 is provided with opposed radial openings 10 in which are positioned cutter knives 11, the cutting edge of which projects above the top surface of the bottom to effect the cutting operation to be hereinafter described.

It will also be noted that the knives 11 are slightly inclined; thus as the vegetables are cut or shredded, the same will pass through the openings 10, as indicated by the arrow in Figure 4, and into the vat or tub 12.

Secured to the interior of the hopper 2 is a pair of vertical partition plates 13 which serve to divide the hopper into two compartments and hold the vegetables against rotation within the hopper, as the bottom 6 and cutters 11 are rotated. As best seen in Figure 3, the partitions 13 are slightly spaced apart to receive a bracket 14 secured to the base 1.

The bracket 14 serves as a bearing for the upper end of the shaft 15, the lower end of which is secured to the bottom plate 6 by means of nuts 16 threaded thereon upon opposite sides of the bottom. A transverse brace 14′ also serves as a bearing for the lower end of the shaft 15, which insures proper alignment of the bottom 6 with the annular recess 5 formed in the base. By

means of the locking nuts 16, obviously, the bottom 6 may be vertically adjusted on the shaft 15 to insure a snug engagement with the base 1.

A retaining collar 17, secured to the shaft 15 and engaging the bracket 14, serves as an additional support for the bottom 6. A manipulating handle 18 secured to the top of the shaft 15 serves to rotate the bottom and cutting knives heretofore described. As indicated in Figure 1, the space between the partitions 13 is covered by a closure plate 19, thus preventing vegetables from entering the space upon delivering the same to the hopper.

As best shown in Figures 2 and 5, the base 1 has secured to its bottom face at spaced intervals brackets 20, each of which is provided with spaced lugs 21 formed by punching out tongues of the plate. Thus when the cutter is placed upon the tub or vat 12, the top edge of the latter will be engaged between the lugs 21 to securely hold the cutter on the tub, as the same is being operated. Obviously, the spaced lugs will permit mounting of the cutter upon tubs or vats of various diameters.

In operation, the vegetables, such as cabbage, are fed into the hopper 2 upon opposite sides of the partition plates 3 and upon rotation of the shaft 15, the bottom 6 will be rotated upon the rollers 8, and the knives carried thereby will engage the vegetables which are held against rotation by the partition plates, and will shred or cut the same into particles of any desired size.

From the foregoing description taken in connection with the drawings, it will be quite apparent that a very simple and inexpensive vegetable cutter has been provided which materially facilitates the cutting of such vegetables as cabbage, for the making of sauer kraut, and which can be readily transported from one vat to another, when desired.

It will also be appreciated that by the provision of a pair of opposed cutting knives and the division of the hopper into two compartments, the speed of the cutting operation is materially reduced, in that two cuts are made during each rotation of the bottom 6.

While I have shown and described manual means for operating the cutter, it will be readily understood that various forms of power drives may be employed without departing from the invention.

I claim:

A vegetable cutter comprising a cylindrical hopper, an annular base provided with a central opening of substantially the same diameter as the hopper, a pair of spaced vertically disposed partition plates arranged within said hopper, a U-shaped bracket arranged within the hopper and having its ends secured to the base, said bracket being disposed between the partition plates and having an opening in its intermediate portion, a transverse brace member having its ends secured to the bracket adjacent the ends of said bracket, a central vertical shaft journalled in the opening in the bracket, a disc-like bottom member normally closing the central opening in the base, means for securing the bottom member to said shaft, said bottom being provided with opposed radial openings, knives positioned within said openings and carried by said bottom and rollers carried by said base for supporting said bottom.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

CHARLES MATTHIAS.