(No Model.)

S. C. NORRIS.

VEGETABLE SLICER.

No. 338,674. Patented Mar. 23, 1886.

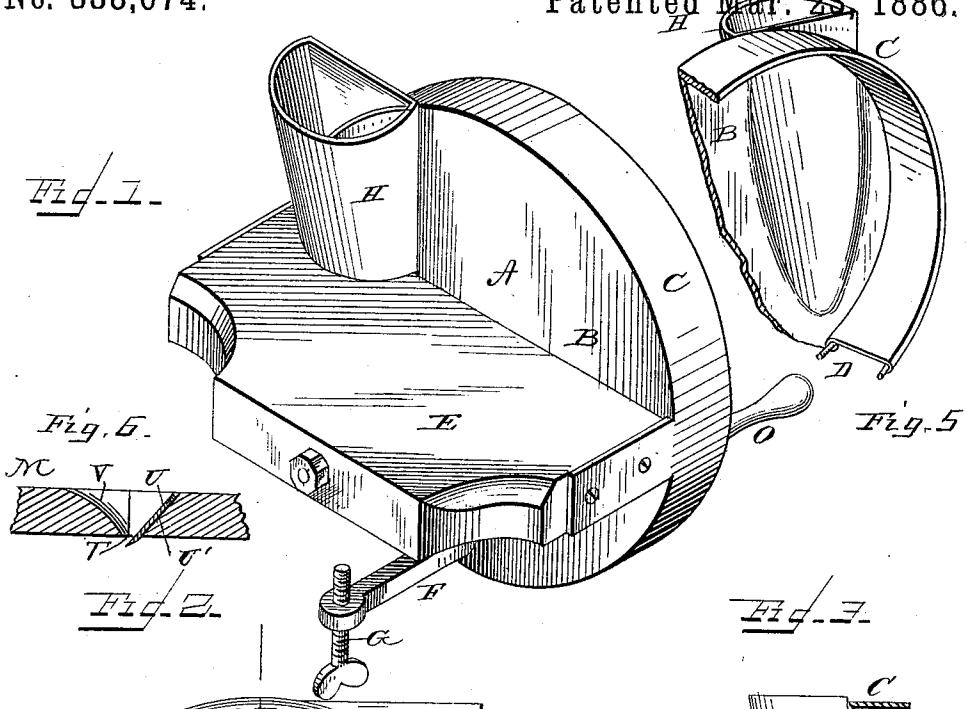


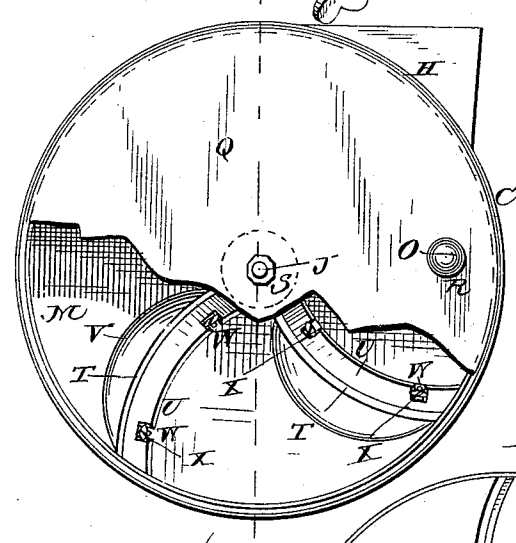
Fig. 1.

Fig. 5.

Fig. 6.

Fig. 2.

Fig. 3.



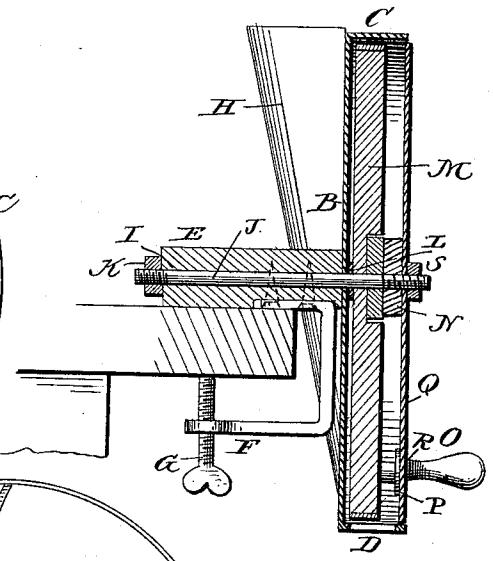
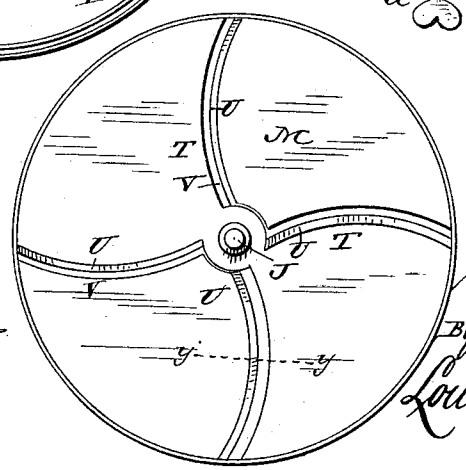


Fig. 4.



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UNITED STATES PATENT OFFICE.

SCHUYLER COLFAX NORRIS, OF SOUTH WHITLEY, ASSIGNOR OF ONE-HALF TO JOHN S. MILLER, OF WARSAW, INDIANA.

VEGETABLE-SLICER.

SPECIFICATION forming part of Letters Patent No. 338,674, dated March 23, 1886.

Application filed November 23, 1885. Serial No. 183,729. (No model.)

To all whom it may concern:

Be it known that I, SCHUYLER COLFAX NORRIS, a citizen of the United States, and a resident of South Whitley, in the county of Whitley and State of Indiana, have invented certain new and useful Improvements in Vegetable-Slicers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved vegetable-cutter. Fig. 2 is a side view of the same, showing the covering-disk broken away to expose the cutters. Fig. 3 is an axial sectional view of the machine. Fig. 4 is a detail view of the cutter-disk. Fig. 5 is a reduced detail view taken from the inner side of the vertical circular plate herein described; and Fig. 6 is a sectional view taken on line *y y*, Fig. 4 of the drawings.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of vegetable-cutters in which the vegetable to be cut is fed against a revolving disk provided with slots having cutters secured at one edge; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a flat cylindrical casing open at one end, and consisting of a circular plate, B, and a narrow rim or flange, C, having an opening, D, at its lowermost point, the casing being placed vertically and having a horizontal plate, E, projecting from its outer side at right angles to the said side. This horizontal plate is formed with a downwardly-projecting bracket, F, in the outwardly-bent end of which a set-screw or clamping-screw, G, turns, which screw may bear with its upper end against the under side of a table, plate, or shelf, upon the upper side of which the horizontal plate rests, the said plate and the screw clamping the table or shelf. The vertical circular plate is formed with an aperture extending downward and tapering, over which aperture is secured a tapering feed-chute, H, into which the vegetables to be cut may be placed, and the downwardly-tapering aperture is preferably formed with rounded edges. The center of the horizontal plate is formed with a horizontal transverse bearing, I, registering with the center of the circular disk, and a shaft, J, is journaled in this bearing. The outer end of this shaft is provided with a nut, K, which bears against the outer end of the bearing, and at the inner end of the bearing the shaft is provided with a collar, L. The cutter-disk M is clamped between the collar L of the shaft J and a nut, N, which is secured upon the shaft near its outer end, and the cutter-disk is provided with a crank or handle, O, which is formed with a disk or collar, P, at such a point that the outer surface of this collar on the handle is in the same vertical plane as the outer face of the nut N, for the purpose herein specified.

Q indicates a covering-disk, which closes the outer end of the cylinder A, the said disk being provided with a central aperture, which fits upon the outer end of the shaft J, and with a second aperture near its rim, through which the outer portion of the handle O projects, the disk, which is of nearly the same diameter as the opening end of the flat cylindrical casing A, being secured in position by means of a nut, S, secured upon the outer screw-threaded end of the shaft J, the inner face of the disk Q bearing against the outer faces of the nut N and the collar P of the handle O, these two bearing-points being in the same plane, and thereby causing the disk Q to lie in a plane perfectly parallel with the solid back of the casing A and the cutter-disk M, as will be readily understood. The cutting-disk is formed with a number of radiating-slots, T, which may be either straight or curved, and which are formed with beveled edges, one edge, U′, to which the cutter-blades U are secured, being preferably steeper than the other edge, V, which is beveled at a more acute angle. The cutter-blades U are formed with transverse slots or notches W in their rear edges, and are secured to the beveled edge U′ of the cutter-disk by means of set-screws X, which pass through the said slots into the disk, and bear with their heads against the edges of the said slots, which are preferably beveled, as shown, and it will be seen that by this arrangement the blades may be adjusted on the said set-screws, so as

to regulate the thickness of the slices cut from the vegetables. The cutter-disk is preferably made in two or more pieces, according to the number of slots which are desired for the cutting-blades, the disk being shown in the drawings formed in two sections or pieces, each of the said sections being reduced on one side at its central portion to permit the said sections to overlap each other, as clearly shown in Fig. 3 of the drawings. It will now be seen that when a vegetable is placed into the feed chute or hopper it will by its gravity sink toward the lower end of the same, and as the cutter-disk is revolved by means of its crank-pin the cutters will slice the vegetable and the slices will pass through the slots in the disk into the space between the cutter-disk and the covering-disk, where they will be carried between the disks toward the aperture in the lower portion of the rim, through which aperture they will drop out into a receptacle, which may be placed under the aperture.

It will be seen that by having the covering-plate revolving with the cutter-disk the sliced vegetable will be always carried toward the discharge-opening, preventing any possibility of choking the same or of the sliced vegetable remaining within the casing, which might happen if the covering-plate formed a part of the casing.

The cutters may be moved in or out upon the set-screws, so as to enable the operator to cut the slices of any desired thickness, as well as for the purpose of taking up wear of the blades, and by having the collar interposed between the cutter-disk and the circular disk of the casing the blades cannot come in contact with the said disk and thus become blunted, the cutters slicing the vegetable by simply striking against the same in revolving.

The slots in the cutter-disk and consequently in the cutters may be either curved, as shown in the drawings, or straight, the curved cutters being most preferable, and if the slots and cutters are straight they are not placed radially, but at an angle to the radii of the disk.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a vegetable-slicer, the combination of a cylindrical casing having the feed-opening arranged as described, and having an aperture in the lowermost point of its rim, a revolving cutter-disk having slots provided with cutters, and a circular covering-disk secured to the cutter-disk and revolving with the same and fitting in the open end of the cylindrical casing, as and for the purpose shown and set forth.

2. In a vegetable-slicer, the combination of a cylindrical casing having the feed-opening arranged as described, and having a downwardly-tapering feed-hopper in the upper portion of its closed end, and having a discharge-aperture in the lowermost portion of its rim, a revolving cutter-disk having radiating slots provided with inclined cutter-blades at their edges, and a covering-disk secured to the cutter-disk at a distance from the same and fitting in the open end of the casing, as and for the purpose shown and set forth.

3. In a vegetable-slicer, the combination of a flat cylindrical casing formed with a tapering feed-hopper at the upper portion of its closed end, and with a discharge-aperture in the lowermost portion of its rim, and having a diagonal laterally-projecting plate at the outer face of its closed end provided with a clamping bracket and screw, a shaft journaled centrally in the closed end of the casing, a cutter-disk secured upon the said shaft and having curved radiating slots with beveled edges and provided with a laterally-projecting crank-pin formed with a collar, curved cutter-blades having slots in their back edges secured upon the beveled edges of the slots by screw-bolts in their slots, and a covering-disk secured upon the shaft a distance from the cutter-disk and having an aperture for the crank-pin resting upon the collar of the said crank-pin and covering the open end of the casing, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

SCHUYLER COLFAX NORRIS.

Witnesses:
LUCIUS B. MCKINLEY,
JOHN H. BRUBAKER.