(No Model.)

T. ARNDT.

VEGETABLE SLICER.

No. 404,883. Patented June 11, 1889.

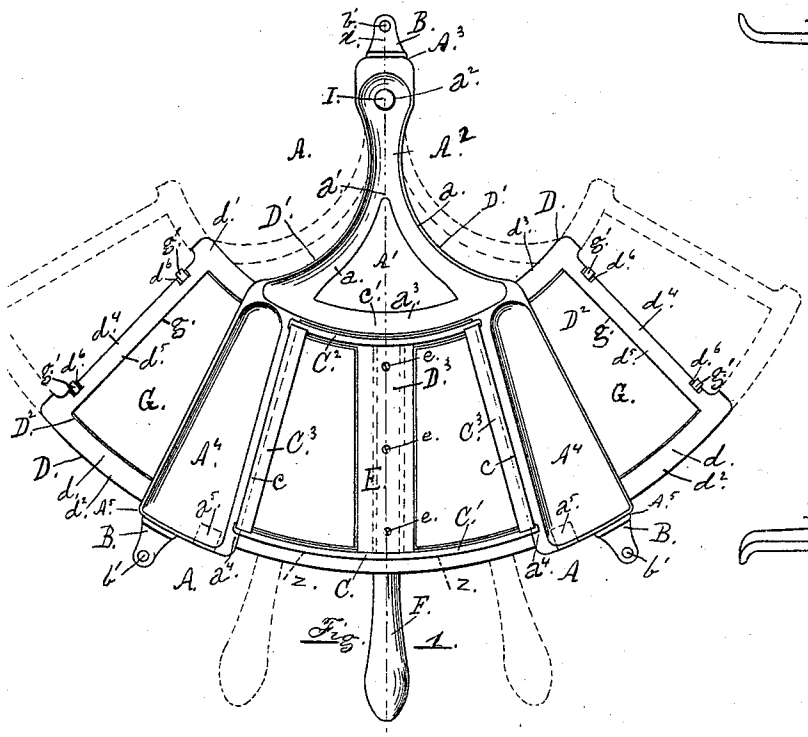


Fig. 1.

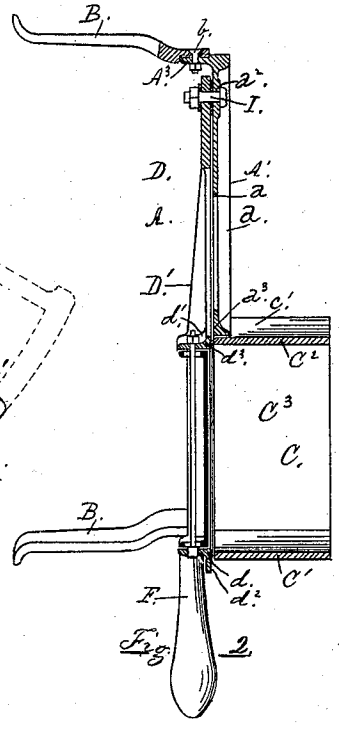


Fig. 2.

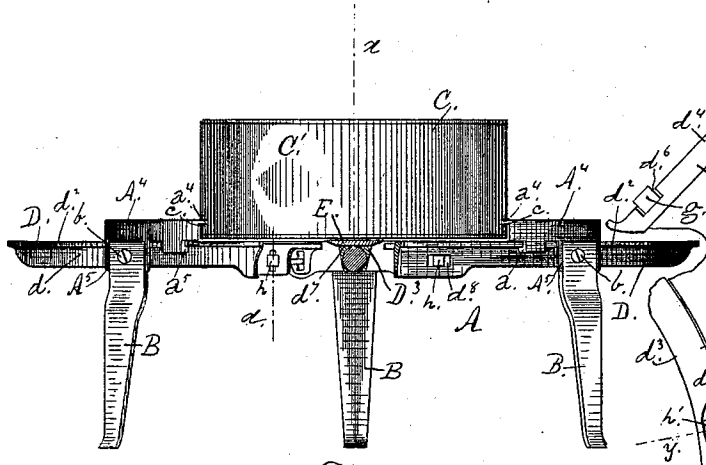


Fig. 3.

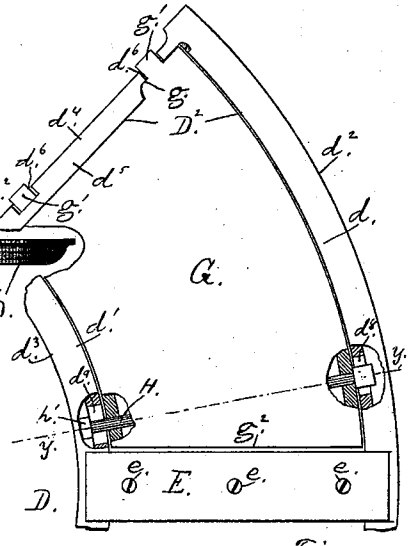


Fig. 4.

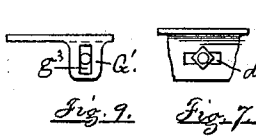


Fig. 9. Fig. 7.

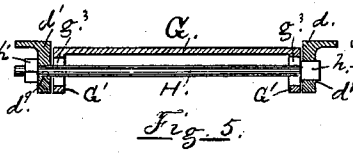


Fig. 5.

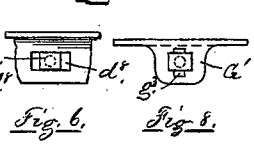


Fig. 6. Fig. 8.

Witnesses:
H. Keeler
Reuben Becker

Inventor
Theophilus Arndt
By
D. H. Roulper & Co
Attorneys.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

THEOPHILUS ARNDT, OF FLORIN, PENNSYLVANIA.

VEGETABLE-SLICER.

SPECIFICATION forming part of Letters Patent No. 404,883, dated June 11, 1889.

Application filed October 18, 1887. Renewed November 20, 1888. Serial No. 291,414. (No model.)

To all whom it may concern:

Be it known that I, THEOPHILUS ARNDT, of Florin, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Vegetable-Slicers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

I have invented a new and useful machine for chipping or slicing vegetables.

My invention relates to that class of slicing-machines having a two-edged knife or blade fastened diametrically to the radius of a circular sector fulcrumed at its center to the apex of an angle of a triangular frame, being an equilateral triangle in form and having at each angle a leg or foot to support the machine. The feet may be fastened by means of screws to a table or board to keep the machine in place while in operation. The outer edge of this sector is furnished with a rim or flange, which slides freely in two guides attached at proper places to the triangular frame. Extending diametrically outward from the curve of this sector is a suitable handle, by which the sector is moved backward and forward, putting into reciprocal action the two edges of the knife or cutter while in the operation of slicing or chipping. In the surface of this sector, on each side of the knife or cutter, are placed guide-plates, which are adjustable horizontally and vertically to determine the thickness of the slice or chip at pleasure, these plates serving also as a bottom to keep the vegetables in the hopper, which is placed on top of the triangular frame, so as to bring its contents in proper position to receive the action of the two-edged knife or cutter while in process of slicing or chipping, said hopper being adjusted by means of grooves cut near the lower edge on the outer surface of its two straight or lateral faces, to receive ribs or feathers extending along the inner edges of two sides of the triangular frame, and held in place by a turn-button attached to its back, so as to embrace an upwardly-extending rim of the frame.

My invention will be more readily understood by reference to the several illustrations in the accompanying drawings, similar letters referring to similar parts throughout the several views.

Figure 1 is a top or plan view of my invention; Fig. 2, a longitudinal vertical section through the line $x\ x\ x$, Figs. 1 and 3; Fig. 3, a front elevation of Fig. 1, with the handle and a portion of the front sectoral rim indicated by the line $z\ z$, Fig. 1, removed; Fig. 4, a plan of a portion of the reciprocating sector, with the knife or cutter and a bottom or guide-plate in place, and portions of the sector and plate removed to show the adjusting slots and bolt viewed from above; Fig. 5, a transverse vertical section through the line $y\ y$, Fig. 4; Fig. 6, an elevation of a portion of the front sectoral rim, showing horizontal slot and bolt-head in place; Fig. 7, an elevation of a portion of the rear sectoral rim, showing horizontal slot, bolt end, and nut in place; Fig. 8, an elevation of a front guide-plate lug, showing vertical slot and bolt-head in place; and Fig. 9, an elevation of a rear guide-plate lug, showing vertical slot and bolt end in place, with the nut removed.

My invention, Figs. 1, 2, and 3, consists of a triangular frame A, having sectoral portion A′, whose radial sides $a\ a$, curving inward, meet at a' and form an arm A^2, which, extending beyond the center a^2, terminates in a downwardly-extending lug A^3, the forward ends of the radial sides $a\ a$ being connected by a curved side a^3, and extending forward a proper distance, and widening gradually, are arms or sides $A^4\ A^4$, having along their inner upper edges ribs or feathers $a^4\ a^4$, and under their front edges downwardly-extending lugs $A^5\ A^5$ and inwardly-extending guide-lugs a^5 a^5. To the lugs A^3 and $A^5\ A^5$ are attached by bolts $b\ b\ b$ suitable legs B B B, which may be fastened by screws $b'\ b'\ b'$ to a table or board, if desired. A suitable quadrilateral box or hopper C has two curved sides, front C′, back C^2, and two straight sides $C^3\ C^3$, radially situated, having cut in their outer faces, near the lower edges, grooves or channels $c\ c$, which receive the ribs or feathers $a^4\ a^4$, when said hopper is placed in position, being held there by a suitable turn-button c', placed centrally near the bottom of the curved back C^2 and embracing the upper edge of the curved

side a^3. A reciprocating sector D, taking the general form of the frame A, consists of a portion D′, similar in shape and size to the portion A′ of the frame A, to the forward side of which is attached a platform D^2, a portion of which is shown more at large in Fig. 4, consisting of a frame formed by two circular sides, front d, back d', both L-shaped in cross-section, having the vertex of the angle along their inner upper edges, forming external horizontal flanges d^2 and d^3, the entire length of both the front and rear curved sides d and d' both being of sufficient length to admit of a proper reciprocal action to the sector D. These curved sides d and d' have their extremities joined by two straight sides d^4 d^4, radially placed, being also L-shaped in cross-section, but having the vertex of the angle along their upper outer edges, forming horizontal flanges d^5 d^5, extending inward. Immediately under these flanges d^5, and near the extremities of the sides d^4 and through their vertical portions, are rectangular holes or slots d^6 d^6 d^6 d^6, to receive lugs or points of the bottom guide-plates, to be hereinafter described. These curved sides d and d' are joined transversely in the middle by a four-sided knife piece or block D^3, having its top and bottom faces horizontal and its sides tapering toward the bottom, having its widest face d^7 uppermost and a little below the surface of the horizontal flanges d^2 and d^3. On this face d^7, and longitudinally with the block D^3, is fastened a two-edged knife or cutter E, also shown enlarged in Fig. 4 by screws e, the cutter E being considerably wider than the face d^7 of the block D^3. Extending outward from the middle of the curved side d, and underneath the external flange d^2, is attached a handle F, in line with the knife-block D^3, by means of which the sector is moved in reciprocal action, making the two-edged knife E a double cutter.

At proper distances from and on each side of the knife-block D^3, through the vertical portions of the curved sides d and d', are horizontal slots d^8 and d^9, (shown enlarged in Figs. 4, 5, 6, and 7), the slot d^8 receiving the head (shown enlarged in Fig. 6) and the slot d^9 (shown enlarged in Fig. 7) the nut end of the adjusting-bolt, to be hereinafter described.

The knife-block D^3 forms in the platform D^2 two equal openings, in which are placed flat bottom or gage plates G G, (shown enlarged, top view, in Fig. 4 and vertical cross-section in Fig. 5,) conforming in size and shape with the frame of the platform D^2, having near the extremities of their straight edges g g horizontal lugs or points g' g' g' g', which pass through the holes or slots d^6 d^6 d^6 d^6, before alluded to, and keep in place the distant ends of the gage-plates G G, permitting horizontal motion in and out. Near the straight edges g^2 g^2, and flush with the curved sides, front, and back, but underneath the gage-plates G G, are downwardly-extending lugs G′ G′ G′ G′, (enlarged elevation shown in Figs. 8 and 9,) having in them vertical slots g^3 g^3 g^3 g^3, to receive the adjusting-bolt, to be hereinafter described, allowing vertical adjustment, by which the thickness of the slice or chip may be regulated at pleasure. An adjusting or clamp bolt H, having a square head h, of sufficient depth and larger than the width of the vertical slot g^3 in the lug G′, but fitting vertically the horizontal slot d^8, is passed through the horizontal slot d^8, the vertical slots g^3 g^3, and out through the horizontal slot d^9, and, by means of a suitable nut h', put on the threaded end, and the plate G, adjusted as to height, is clamped against the rear side d', the bolt-head h pressing against the lug G′ and firmly held in place. The reciprocating sector D, being completed, as described, is fulcrumed at the center to the under side of the frame A at a^2 by a bolt I, the forward edge of a horizontal flange d^2 resting on the guide-lugs a^5 a^5.

The operation of my invention is as follows: The device having been attached to a table or board, as before mentioned, the gage-plates G G, adjusted as to the thickness of the slice or chip by means of the bolt H, the horizontal slots d^8 and d^9, the vertical slots g^3 and g^3, and the nut h', and vegetable matter placed in the hopper C, the sector D is put in reciprocal action by pushing the handle F backward and forward, as indicated by dotted lines in Fig. 1.

Having described my machine and its operation, what I desire to claim and wish to secure by Letters Patent of the United States is—

In a vegetable-slicing machine, the combination of the frame A, having ribs a^4, the hopper C, having grooves c, and the turn-button c', with the reciprocating sector D, provided with the two-edged cutter E, the bottom guide-plates G, vertically adjustable in said sector, and the handle F, said sector D being fulcrumed to the under side of the frame A at a^2 and adapted to reciprocate under the hopper C by means of the handle F, substantially as set forth.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

THEOPHILUS ARNDT.

Witnesses:
W. J. FORDNEY,
J. S. BITNER.