Dec. 27, 1932. H. W. MOORE 1,891,997

VEGETABLE SLICER

Filed Jan. 31, 1931

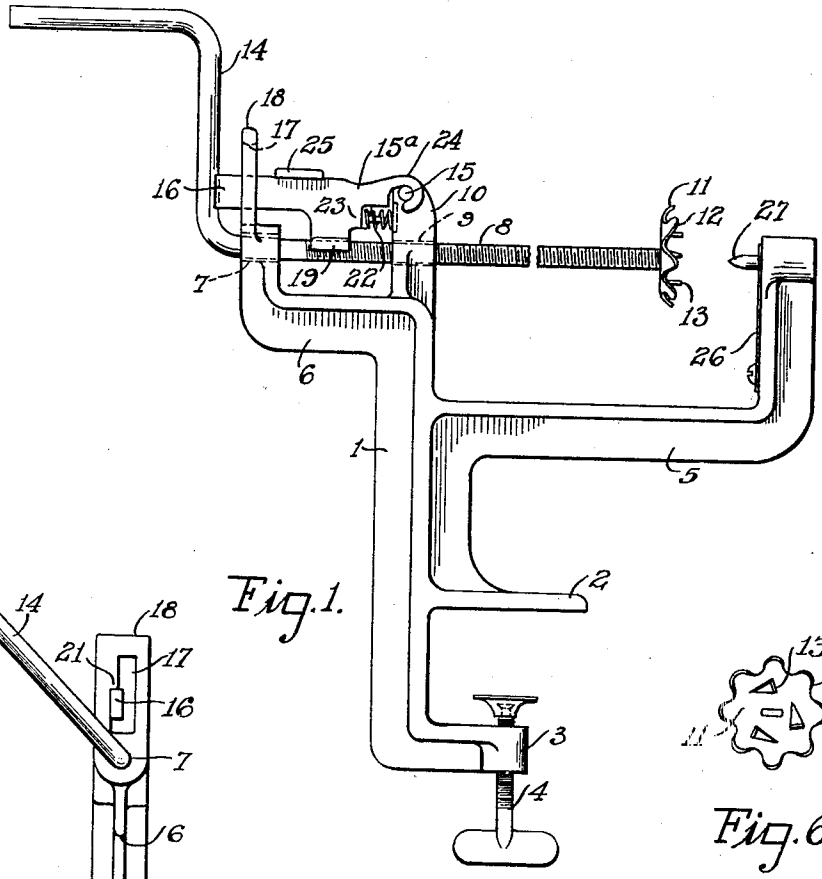


Fig. 1.

Fig. 4.

Fig. 6

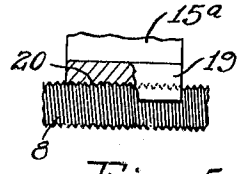


Fig. 5.

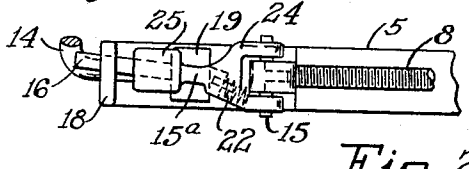


Fig. 2.

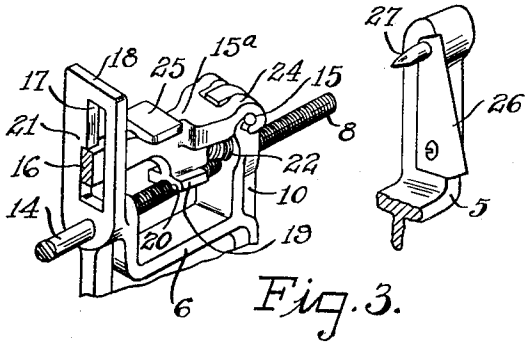


Fig. 3.

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UNITED STATES PATENT OFFICE

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VEGETABLE SLICER

Application filed January 31, 1931. Serial No. 512,668.

This invention relates to new and useful improvements in slicers for vegetables, fruits and the like and has as its principal object a device of simplified construction and economical cost of manufacture.

Another important object of my invention is to provide a simple automatic means to disengage the feed mechanism when the latter has advanced the maximum distance.

It is still another object of my invention to provide a stamped metal cup on the feed mechanism that will assist in centering the vegetable or food being sliced and also provide a driving connection with the latter.

Other important and incidental objects of my invention will be brought out in the following specification and subjoined claims.

In the accompanying drawing, Figure 1 is a side view of my improved vegetable slicer. Figure 2 is a plan view of a portion of the device. Figure 3 is a perspective view of the release and cutting mechanism. Figure 4 is an end view of the release mechanism. Figure 5 is a detail view of the feed mechanism. And Figure 6 is a view of the vegetable holder.

Referring now to the drawing, the numeral 1 indicates a frame structure for my device, including a laterally extended foot member 2, positioned above and parallel with another laterally extending member 3. The latter receives a clamp screw 4, to securely attach the frame structure to a table top or other ledge. (See Figure 1.)

Above the member 2 the frame is of Y formation and has extending above the clamp member an inverted L shaped support 5 for the cutting blade and center. Oppositely disposed to the support 5 is another inverted L shaped support 6 for the feed mechanism.

The support 6 is provided with a clearance hole 7 for the feed screw 8 positioned in parallelism with the members 2 and 3. The screw 8 is adapted to pass through another clearance hole 9 in the middle portion of a latch support 10 that is integral with the frame structure 1, between the supports 5 and 6.

The feed screw 8 is threaded throughout its horizontal length and has attached to its one end a stamped metal cup 11. This cup has a scalloped periphery 12 and extending into its outer cupped face, a series of pointed prongs 13, that are punched from the center portion of the latter, to form a driving connection with the vegetable being sliced, to insure its rotation with the feed screw as the latter is advanced. (See Figure 6.) The other end of the feed screw 8 is formed to L shape beyond the support 7 to provide a crank 14 for rotating the screw.

Fulcrumed on a pin 15 in the upper part of the support 10 is a horizontal latch bar 15ª whose free end 16 projects through a vertical slot 17 in a latch plate 18 that is integral with and extends upwardly from the support 7.

Secured to the lower face of the latch bar 15ª near its center is a foot portion 19 that is provided with a threaded semicircular recess 20 to co-act with the threaded portion of the feed screw 8. When the threaded recess 20 is brought into engagement with the threaded feed screw, the latch bar will be engaged by a projection 21 within the slot 17 of the plate 18. The latch bar 15ª is forced into this projection by a compression spring 22 that is positioned between the support 10 and a boss 23 on the latch bar 15ª below its fulcrum point.

This spring, as shown at Figure 2, is positioned in angular relation to the axis of the latch bar to thus facilitate the engagement of the latter with the projection 21. Also its position below the fulcrum pin will force the latch bar upward when it is disengaged from the projection 21, and thus release the threaded recess 20 from engagement with the feed screw.

At its fulcrumed end the latch bar 15ª is provided with a forked end 24 to receive the support 10 and each side of the fork is of hook formation to permit its being placed over the fulcrum pin without removing the latter. When thus placed over the pin, it will be held in place by the spring 22.

The top surface of the latch bar 15ª is also provided with a finger piece 25 upon which a slight pressure is exerted to force the latch

bar downward until it is engaged by the projection 21. (See Figures 1—3 and 4.)

Attached to the inside face of the vertical portion of the support 5 is a cutting blade 26 whose sharpened edge is presented to the vegetable as it is rotated about a centering pin 27 mounted in the end of the support 5 and in alinement with the feed screw 8.

Now, when it is desired to slice a vegetable or fruit, it is first forced onto the pin 27 and the feed screw 8 is advanced until the cup 11 and prongs 13 engage the opposite side of the object. The latch bar is then depressed until the latter is engaged by the projection 21.

As the crank 14 is revolved the vegetable will be rotated against the knife edge for the slicing operation. After the feed screw and cup 11 have advanced the maximum distance, when the cup is close to the pin 26, then the radial arm of the crank 14 will strike the end 16 of the latch bar 15^a and carry it out of engagement with the projection 21. Through the action of the spring, the latch bar will raise the threaded recess away from the feed screw and permit the latter to be freely withdrawn to insert another vegetable.

From the foregoing description it is easily apparent that I have provided a simplified vegetable slicer of economical manufacture, that will securely hold and rotate the vegetable as it is sliced and automatically permit the withdrawal of the feed mechanism after the slicing operation.

Having described my invention, I claim:

1. A device of the type described comprising a frame of Y formation, a horizontal prong secured to one arm of the Y, a knife also secured to said arm, an upright member secured to the opposite arm of said Y to form with said opposite arm a U shaped support, a feed screw slidable through said support toward said prong, means carried by the forward end of said screw to support and rotate a vegetable slicer, a latch bar pivoted at one end to the upright member, a stop carried by the said opposite arm of the Y, to hold the latch bar down, a recessed threaded projection on the latch bar to engage the feed screw when said bar is under the stop, a handle on the inner end of the feed screw to engage and release the latch bar from the stop, and a compression spring between the upright member and the under surface of the latch bar.

2. A device of the type described comprising a frame of Y formation, a horizontal prong secured to one arm of the Y, a knife also secured to said arm, an upright member secured to the opposite arm of said Y to form with said opposite arm a U-shaped support, a feed screw slidable through said U-shaped support toward said prong, means carried by the forward end of said screw to support and rotate a vegetable slicer, a latch bar pivoted to the upright member, a latch plate extending upwardly from the said opposite arm of the Y, and formed with a vertical slot through which the free end of the latch bar projects, a foot portion on said latch lever, formed with a threaded semi-circular recess to contact said feed screw, a transverse lug projecting into the vertical slot in the latch plate, to hold the recessed foot portion of the latch bar against the feed screw when the free end of said bar is under said projection, a handle on the inner end of said screw, adapted to engage and release the latch bar from said lug when the handle reaches the inner end of its movement, a boss on the lower portion of the latch bar, and a compression spring between the upright member and the boss on the latch bar.

In testimony whereof I have hereunto set my hand this 30th day of January, 1931.

HARRY W. MOORE.