May 23, 1950 M. ROSS 2,508,868

STATIONARY CUTTER WITH SCREW FED PLUNGER FOR CUTTING VEGETABLES

Filed April 2, 1947

FIG. 1.

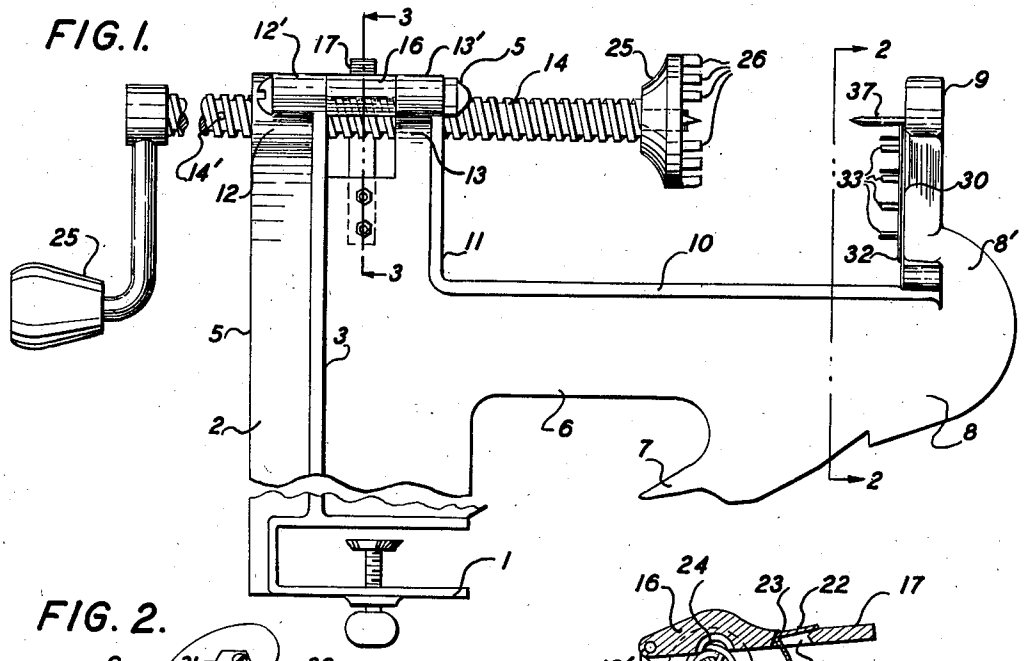


FIG. 2.

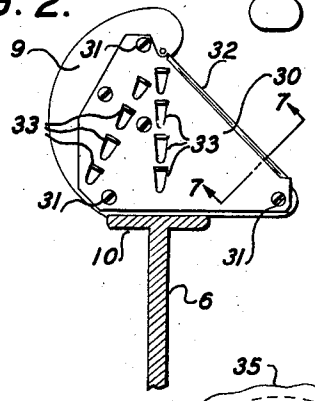


FIG. 7.

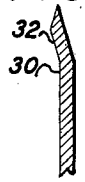


FIG. 3.

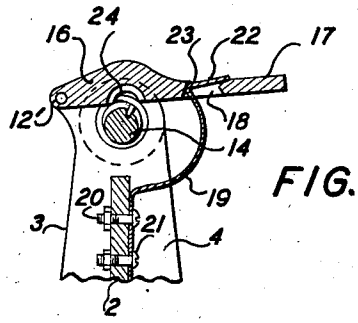


FIG. 5.

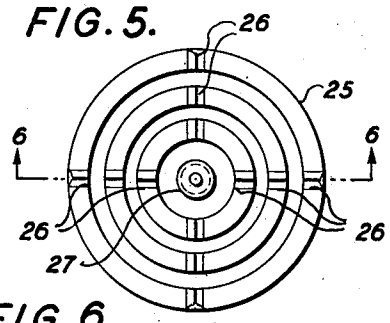


FIG. 4

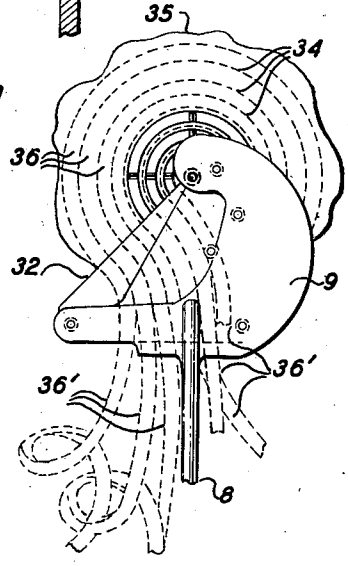
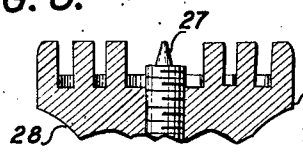


FIG. 6.



Inventor

MARK ROSS

By Earl E. Moore

Attorney

Patented May 23, 1950 2,508,868

UNITED STATES PATENT OFFICE

2,508,868

STATIONARY CUTTER WITH SCREW FED PLUNGER FOR CUTTING VEGETABLES

Mark Ross, Los Angeles, Calif.

Application April 2, 1947, Serial No. 738,841

2 Claims. (Cl. 146—164)

1

This invention relates to a vegetable threader and the like, particularly for a device for making shoestring potatoes. The device, herein disclosed, is believed an improvement over any prior kind or type of vegetable threading device and that the art is materially advanced by this invention. Means are provided for evenly and neatly forming strings of the vegetable to be threaded. Means are provided for releasing the vegetable feeding means when the threading of the vegetable has been terminated, thus allowing the feeding means to be withdrawn and rapidly made ready for receiving another vegetable to be threaded. Particular designing has been incorporated with the device to save the cutting means from harm and undue wear without in any way interfering with the efficiency of the device.

One of the principal objects of this invention is to present a new and novel vegetable threading device or machine which is constructed of sturdy materials and designed to give long and lasting perfect service, and a device which is economical to make and manufacture.

Other objects, advantages and features of my invention will appear from the accompanying drawings, the subjoined detailed description, the preamble of these specifications and the appended claims.

Applicant is about to illustrate and describe one of the forms of his invention in order to teach one how to make and use the same, but it is to be understood that the drawings and description thereof are not to limit the invention in any sense whatsoever, except as limited by the appended claims.

In the drawings:

Fig. 1 is a side elevational view of the device, parts being broken away,

Fig. 2 is a partly sectional and partly elevational view thereof which is taken substantially along the line 2—2 of Fig. 1,

Fig. 3 is a vertical sectional view taken substantially along the line 3—3 of Fig. 1,

Fig. 4 is a front elevational view of a portion of the device showing how the potato threads when worked therein,

Fig. 5 is an enlarged elevational face view of just the rearward jaw of the device,

Fig. 6 is a sectional view taken substantially along the line 6—6 of Fig. 5, and

Fig. 7 is a detail taken substantially along line 7—7 of Fig. 2.

The main base and support of the device comprises any suitable table clamping means 1, a standard 2 having the side reenforcement ribs 3

2

and 4 and the rear rib 5. From the standard extends the integral horizontal member 6 which joins with the angular directed brace 7 to form a front cutter plate support 8. The upper part 8' is preferably curved, as shown, to give strength to the terminal of plate supporter 9. A T-ribbed reenforcement piece 10 strengthens the top of member 6, and a similar reenforcement rib 11 is provided for the upper forward part of the standard 2. The ribs 3 and 4 cooperate with the rear rib 5 to form a terminal and support a bearing boss 12 with a smooth bore, and the rib 11 and the top of the standard cooperate to form a terminal to support the bearing boss 13 with a smooth bore; these two bearing bosses forming a bifurcated bearing element to give support to the elongated threaded stem or feeder rod 14.

One side of the bosses 12 and 13, 12' and 13' respectively are bored and have a bolt 15 which is a pivot for a snap-on feeder element of unit 16. A short lever 17 extends from this element (see Fig. 3) which has an opening 18 to accommodate the top end of a curved ribbon-like spring member 19. The base of this spring member is secured to the top of the standard by the bolts 20 and 21, and the top end of this spring is shaped, as shown, to provide a lobe or catch end 22 and a latch portion 23. The feeder element has a half cylindrical recess 24 which is threaded to ride along the top of the threaded stem 14, and since the bores in the bosses 12 and 13 are not threaded, this element forces the stem to advance when the stem crank-like handle 25 is worked, providing the element 16 is snapped into position onto the threaded stem and held thereon under the latch end 23 of the spring. The pin or stud 14' at the rear end of the stem protrudes just enough in the valley between threads to positively engage the male thread portions of the recess 24; the reason for this construction is for the purpose of forcing the element 16 to release itself (as shown in Fig. 3) when the stem 14 reaches its most advanced position toward the support 9. Note, that the end 22 of the spring catches the lever 17 so that this element stays within bounds for easy manipulation.

The forward end of the stem 14 has secured thereto a jaw member 25 (see Figs. 5 and 6 for details) which has a plurality of outstanding projections or vegetable piercing and holding triangular studs 26 which are arranged in rows, as shown, and spaced apart in their respective rows for a definite purpose to be revealed later. The center point of the jaw has a pointed element 27 which is fixed to an adjustable screw 28 that is meshed with the threads of a bore 29 so that

the screw can be adjusted to various positions by rotating it and hence determine the amount of projection of the point **27**.

The support **9** has removably fixed thereto a jaw and cutter plate **30**, configurated as shown in Fig. 2, which is secured to the support by the plurality of screws **31**. One edge **32** thereof is sharp to form a knife and turned at a slight angle, note Fig. 7, so as to engage the vegetable to be cut. A plurality of blades or cutting projections **33** are turned outwardly from the plate **30**, as shown, and have their right edges, as seen in Fig. 2, sharpened so as to readily and neatly cut into the vegetable and provide the circular cuts indicated at **34** in the potato **35**, see Fig. 4. The blades **33** provide the circular rows of potato portions **36** which do not emerge as strings **36'** until these rows are engaged by the knife **32** as the potato advances by operation of the handle **25**.

The blades **33** are spaced, as shown, and this spacing is accurately predetermined in agreement with the row spacings of the holding studs **26** on the jaw **25**, the spacing being such that when the two jaws come close together, as at the time the cutting of the vegetable is terminated, the studs **26** pass freely between the blades **33** so that there is no interference whatever and hence the blades are not injured and can, therefore, give long service. A pointed stud **37** is provided and fixed to the support **9** which acts as a holder and pivot point for the vegetable to be threaded, that is, made into strings, such as, for instance, the well known shoestring potatoes.

It is, of course, understood that various changes and modifications may be made in the details of form, style, design and construction of the whole or any part of the specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the limitations clearly expressed in the following claims.

Having thus described my invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In a device for threading potatoes and other solid-like foods, the device having a base with means for attaching it to a working surface, spaced apart upstanding terminals from the base wherein one of the terminals is bifurcated to form a pair of alined smooth bearings designed to allow a threaded stem to neatly slide therethrough, a plate fixed to the other terminal having cutting projections faced toward the said bearings, a shiftable threaded stem positioned in the said bearings, one end of the stem having means for rotating it and the other end having means for engaging the potato to be threaded, a cover pivoted parallel with the threaded stem and attached to the bearing terminal with threads therein and adapted to engage the threaded stem so that the means engaging the potato can be forced toward the plate, the projections from the plate being integral therewith and alined in a plurality of rows in angular relation, a straight edge to one side of the plate which is sharp and bent inwardly at a slight angle, the cover having its threads in a semi-cylindrical recess, this cover having a perforation with a latching edge at its top, a curved spring having its bottom sharply bent to form a dog which passes through the perforation and engages the latching edge and another portion thereof.

2. In a device for threading potatoes and the like, a base having means for attaching it to a working surface, spaced apart upstanding terminals from the base, one of the terminals having a bifurcated form to present alined smooth bearings which permit a threaded stem to slide freely therethrough, a plate fixed to the other terminal and which has cutting projections faced toward the said bearings, an elongated shiftable threaded stem positioned in the said bearings, one end of the stem having means for rotating it and the other end having means for engaging the potato to be threaded, a cover hinged to the bifurcated terminal and arranged to swing about an axis which is parallel with the stem, the cover having threads in a semi-cylindrical recess which are adapted to engage the threads of the stem, the projections from the plate being arranged in a plurality of angularly extending rows, a straight edge to one side of the plate having a sharp edge and which is bent inwardly at a slight angle, the cover having an extended portion with a perforation therein having spaced apart edges, a curved spring fixed to a portion of the bifurcated terminal and bent to form a dog at one end thereof which is positioned in the said perforation with portions thereof engaging said edges of the perforation, the end of the stem near the means for rotating it having protruded means for engaging the cover for releasing it from the dog end of the spring.

MARK ROSS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,891,997	Moore	Dec. 27, 1932
2,012,507	Gustin	Aug. 27, 1935
2,156,645	Waller	May 2, 1939
2,464,993	Ross	Mar. 22, 1949

FOREIGN PATENTS

Number	Country	Date
331,703	Great Britain	July 10, 1930