(No Model.)

E. S. HARPST.

COMBINED VEGETABLE SLICER AND GRATER.

No. 522,756. Patented July 10, 1894.

Fig. 1.

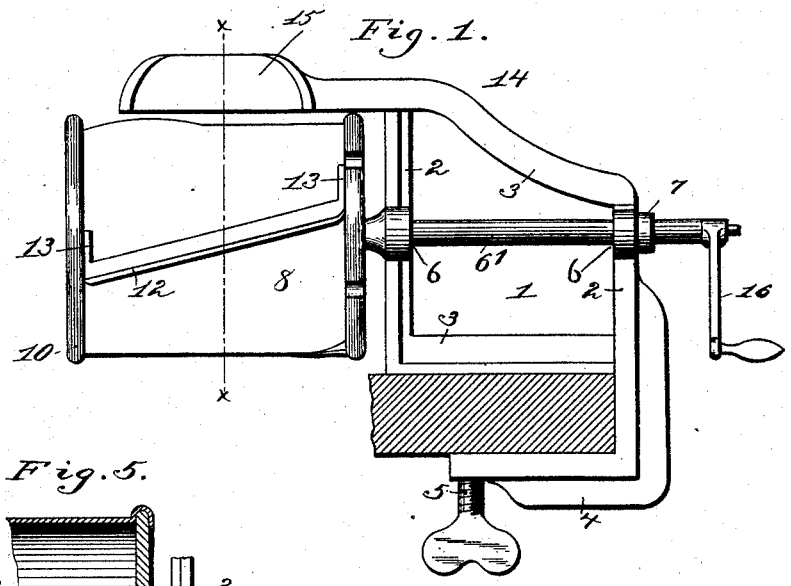


Fig. 5.

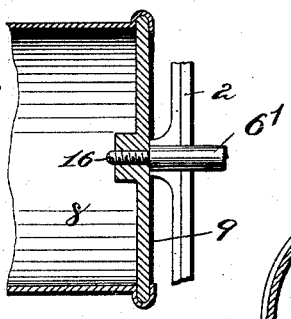


Fig. 2.

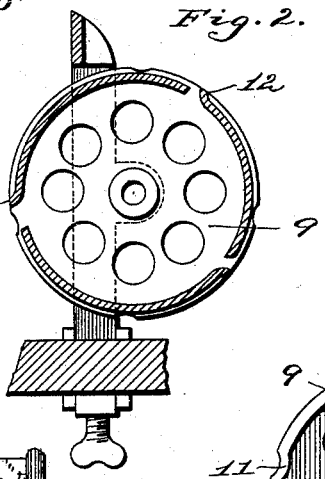


Fig. 4.

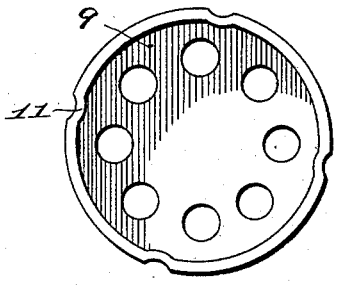
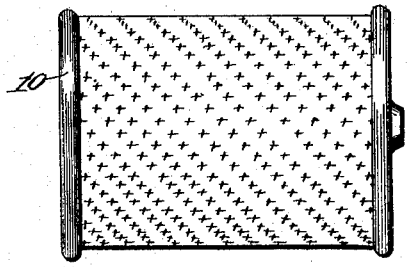


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDGAR S. HARPST, OF TYLER, TEXAS, ASSIGNOR TO FRANKLIN L. DE SHONG, OF SAME PLACE.

COMBINED VEGETABLE SLICER AND GRATER.

SPECIFICATION forming part of Letters Patent No. 522,756, dated July 10, 1894.

Application filed December 11, 1893. Serial No. 493,376. (No model.)

To all whom it may concern:

Be it known that I, EDGAR S. HARPST, a citizen of the United States, residing at Tyler, in the county of Smith and State of Texas, have invented certain new and useful Improvements in a Combined Vegetable Slicer and Grater; 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.

My invention has relation to a "combined vegetable slicer and grater," and it consists in the construction and novel arrangement of its parts as hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

The objects of my invention are to provide a simple and inexpensive device for readily slicing vegetables and fruits; further, to so construct my device that it may be readily used for grating horse-radish, cocoanut, &c.; further to so construct the device that it may be readily attached to or detached from a table when in or out of use; further to so construct the device that vegetables or fruits may be cut in slices of any desired thickness without necessitating the removal of the knives or the vertical adjustment of the fruit or vegetable holder.

In the drawings: Figure 1 is a side view of a slicer embodying my invention. Fig. 2 is a transverse view on the line x, x, of Fig. 1. Fig. 3 is a detail view of the grating cylinder. Fig. 4 is an end view of the slicing cylinder, and Fig. 5, is a sectional view of one end of the cylinder and head piece; and a perspective view of the shaft and its reduced screw-threaded portion, and also a part of the outer vertical arm.

Referring to the accompanying drawings in which like numerals indicate corresponding parts in all the views 1, designates the main frame consisting of the vertical arms 2, united at their upper and lower ends by the transverse bars 3, and as will be noticed the outer vertical arm is provided with a foot 4, placed at right angles to said arm, and has in its outer end a screw-threaded opening in which fits and works a thumb-screw 5, whereby the device may be readily attached to a table or the like when it is desired to use the machine. Near the upper ends of the vertical arms are formed bearings 6, in which is journaled shaft 6′, having at one end an annular flange 7, abutting against the outer face of the outer vertical arm of the main frame; the opposite end of the shaft is reduced and screw-threaded upon which screw-threaded portion the cylinder hereinafter described may be readily secured.

In constructing the cutting or slicing cylinder 8, I prefer to make the same of sheet steel formed upon a cast or malleable iron head 9, and at the outer or open end of the cylinder I form an annular head 10, which strengthens said end and preserves the contour of the cylinder. The head 9, is provided on its periphery with indentations 11, as shown in Fig. 4, by means of which the cylinder is secured to the head and prevented from turning thereon. At suitable and regular intervals in the cylinder are formed diagonal openings, one edge of which is given a slight outward bend as shown in Fig. 2, and beveled to form a cutting edge 12, as shown. At each end of the diagonal slots are formed the kerfs 13, which permit of the opposite sides of the spiral slots being formed into spring tongues for a purpose presently explained.

Formed integral with the main frame is the forwardly extending arm 14, which is provided at its outer end with the concavity 15, designed to hold the fruit or vegetable when being sliced. The shaft 6′, is provided at its outer or free end with a crank portion 16, by means of which the cylinders are revolved.

In Fig. 3, I have shown a grating cylinder which may be readily mounted upon the shaft 6′, when it is desired to grate cocoanut or the like, the cutting cylinder 8, having been previously removed.

The operation of my improved slicer and grater taken in connection with the above description and accompanying drawings may be briefly described as follows: The device having been secured upon the table or the like and it is desired to slice a vegetable or fruit by holding either with one hand in the concavity of the arm 14, which is immediately above the cylinder and turning the crank with the other hand will cause the cutting

cylinder to revolve and cut the vegetables or fruit in slices. Should it at any time be desired to cut thicker slices by pressing down upon the article being sliced will force the spring tongues on the cylinder inward and permit of the slices being cut thicker.

By removing the cutting cylinder and securing upon the screw-threaded end of the shaft 6′, the grating cylinder, horse radish, cocoanut, &c., may be grated.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a combination slicer and grater, the combination with the main frame, having vertical arms provided with suitable bearings, and a screw threaded foot extending at right angles to said arms; of a shaft journaled in said bearings provided with an annular flange and a reduced screw-threaded portion, the cylinder constructed of sheet steel having formed integral therewith cutting knives and spring tongues whereby different thicknesses of slices are cut and the concaved holder above the cylinder, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDGAR S. HARPST.

Witnesses:
H. J. McINTOSH,
I. N. CROSS.