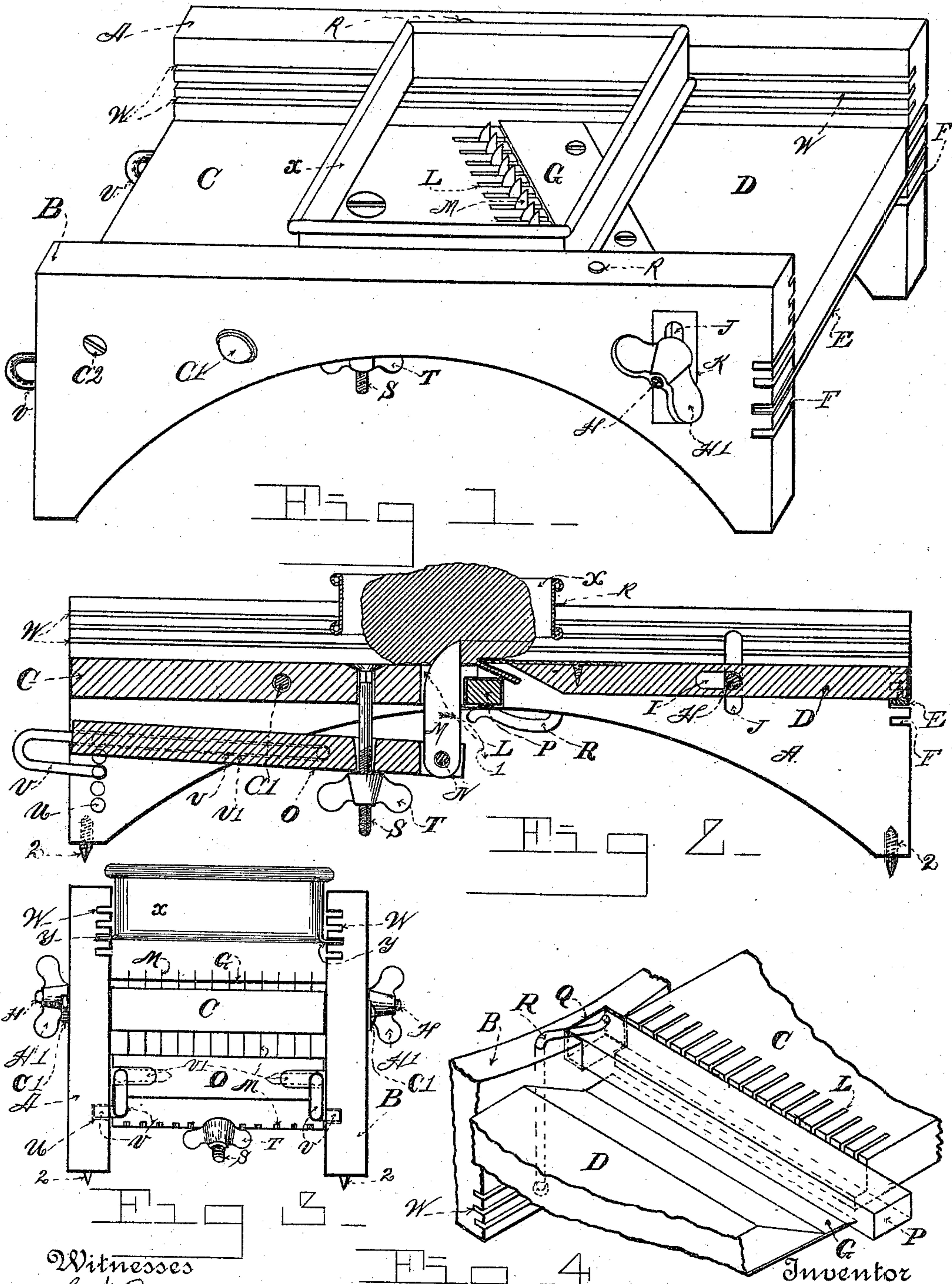


(No Model.)

L. J. KRAEMER.  
VEGETABLE CUTTER.

No. 537,831.

Patented Apr. 23, 1895.



Witnesses  
*Symund Leavick*  
*Frank Buhr*

Inventor  
*Lee Joseph Kraemer*  
By his Attorney  
*H. S. Bailey*



# UNITED STATES PATENT OFFICE.

LEE JOSEPH KRAEMER, OF DENVER, COLORADO.

## VEGETABLE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 537,831, dated April 23, 1895.

Application filed December 12, 1894. Serial No. 631,587. (No model.)

*To all whom it may concern:*

Be it known that I, LEE JOSEPH KRAEMER, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Vegetable-Cutters; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in machines for cutting into pieces vegetables and fruits, and particularly to machines for cutting up potatoes.

The objects of my machine are, first, to provide a machine that will cut potatoes into the numerous different sizes and shapes in which they are at the present time prepared for the table; second, to provide a vegetable cutter which can be quickly adjusted to cut vegetables and fruits into even slices, strips or other forms; third, to provide a simple and cheap manually operating vegetable cutter of large capacity. I attain these objects by the mechanism illustrated and described in the accompanying drawings and specification, in which—

Figure 1 represents a perspective view of my improved vegetable cutter. Fig. 2 represents a longitudinal sectional elevation of the same. Fig. 3 represents an end elevation of the same. Fig. 4 represents a fragment in perspective.

Similar letters and figures of reference refer to similar parts throughout the several views.

Referring to Fig. 1, A and B represent the sides of the machine which is preferably constructed mostly of hard wood, and C a horizontal partition or table which is secured between the sides at one end by the bolt C' which passes transversely through the table and sides and binds them all together, and also by the screws C<sup>2</sup>. The inner edge of the said table is preferably cut at an oblique angle with the sides. A knife-plate D fits the space between the said sides at the opposite end and is adjustable vertically between them in-

dependent of the table C. The inner edge of this plate is also cut obliquely to correspond to the oblique edge of the table C and it is arranged so that a space intervenes between them.

The plate is provided at its outer edge with a blade of metal E which is attached to it. This blade projects on either side of the plate and fits into the slots F, a number of which are cut into the sides. The plate can be raised or lowered in relation to the stationary table by moving it from one slot to another. On the inner oblique end of said plate I secure a cutting knife G, arranging it to extend close to the edge of the table C. This knife is also set parallel with the oblique edge of the table and plate, which gives the article to be cut a shearing movement against its edge as it is reciprocated in the machine.

Intermediate of the knife and the outer end of the plate E, I place transversely through it and the sides a rod H, which is threaded at both ends. I use thumb-nuts H' on the threaded ends, as these admit of manipulation without a wrench. The hole I, in the plate, through which the threaded rod passes is elongated laterally in order to enable the plate to be moved back on it far enough to disengage the blade from the slots F without removing the rod. The threaded rod passes through vertical slots J, made in the side of the machine. Metal washers K are set into the sides to receive the pressure of the thumb-nuts and protect the wood. The slots J enable the plate and threaded rod to be raised or lowered vertically between the sides by loosening the thumb-nuts. The table C is provided at its inner edge with a plurality of slots L spaced a short distance apart, through each of which extends vertically a knife M. These knives are pivoted to a pin N which passes through them and through a plate O, which is also provided with slots in line with those in the table C. The knives are pivoted in the slots of the plate.

A cross-bar P extends across the backs of the knives from the sides A and B and forms an abutment for them to bear against, which prevents their being carried against the edge of the knife G by a vegetable being drawn through them. This cross-bar P rests in re-



cesses Q formed in the bottoms of the sides, as shown in Fig. 4, which is a bottom view of a fragment of the machine. This view shows but one side B, but both sides are provided with recesses. The edge of the table is rabbeted to allow the cross-bar to extend under its edge to the knives.

In Fig. 4 the cross-bar, and the knife G and adjacent parts are represented as arranged at right angles to the side B, but they are preferably arranged obliquely as in Fig. 1. The cross-bar P is held in place by two pins R, one in each side, the lower ends of which are bent at right angles and are adapted to bear on it with resilient action.

The plate O is adjustably supported adjacent to the vertical knives M to the table C by a bolt S. This bolt passes down through the table and plate. Its threaded end is provided with a thumb-nut T. By means of this bolt and nut the vertical knives are raised or lowered through the table C and are thereby adjusted for cutting depth. The opposite end is removably pivoted to a row of holes U formed on the inside face of the sides by springs V. These springs are preferably formed of round spring wire. Pieces of wire of sufficient length to secure a good spring are seated in grooves V' cut in the side edges of the plate. The inner end of the wire is bent at right angles and extends into the plate. The outer end extends beyond the machine and is curved downward and returned to the sides, forming a loop, and this end is bent outward at right angles and extends into the holes U. By pressing the ends of the springs together and disengaging the ends from the holes they are in, this end of the plate may be adjusted vertically independent of the opposite end.

The inner faces of the sides A and B above the table C are provided with a number of grooves W, which extend throughout their length. These grooves are adapted to support reciprocally a carriage X. This carriage consists of a square box or hopper made preferably of galvanized iron or tin. Its upper edges and lower end edges are rolled over. Its lower side edges are turned outward at right angles, thereby forming lips Y which extend into one of the grooves on one side and into the opposite parallel groove of the other side. By the use of several grooves the carriage can be moved from one to another, and can be placed close to the knives or at a distance above them, depending on the size of the vegetables to be cut.

The operation is as follows: The vegetables or fruits to be cut up are placed in the carriage as shown in Fig. 2. The carriage is then reciprocated in the grooves by hand over the knives. The hand is held so as to press and hold the articles down against the table and knives. The vertical knives M cut the articles into strips, while the knife G cuts them into slices. The vertical knives are spaced about one eighth inch apart, and if it is de-

sired to cut potatoes into what are called shoe-strings, that is, into strips about an eighth of an inch square, the horizontal knife G should be set and secured by the thumb-nuts H' at that distance above the table C. Then if the potato is moved over the knives by the carriage it will be cut into strips one eighth inch square. These strips can also be made one quarter inch square by setting the horizontal knife at this height above the table C and by dropping out every other one of the vertical knives which can be done by taking out the cross-bar P and swinging them down in the direction of the arrow 1 in Fig. 2. The remaining knives should then be raised one quarter inch above the table C. By various adjustments potatoes can be cut a number of varying thicknesses and widths, such as one half or three eighths inches, or five eighths or three quarters inches square, or one eighth by one half inch, one quarter by one half inch, one half by three quarters, &c. By dropping all of the vertical knives below the table C, whole slices of any thickness can be cut. By dropping out one half of the knives in the width of the machine and leaving the balance about one eighth inch above the table and the horizontal knife at the same height, if a potato is then moved into the knives about one half through it, and then moved back and reversed end for end, and moved again into the knives, but not quite half through it and again moved back and then moved to the other side from which the knives have been removed and then passed over the horizontal knife, the slice will then be cut clear and the slice obtained will have string ends and a solid center. When this is fried the ends will curl in various directions, producing a style much used by caterers to decorate dishes.

With this machine a much larger amount of work can be done than by hand, and it will also do the work much better than it can be done by hand. Apples, cucumbers and pickles can be sliced with it, and carrots, parsnips, pickles and similar shaped articles can be cut into strips.

In the bottom of the corners of the sides I secure in a convenient manner, sharp points 2, which are adapted to be pressed into the top of a table or board for the purpose of preventing the machine from slipping about while being used.

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

1. In a vegetable cutter the combination with the sides and table of a horizontal slicing knife adjustably secured adjacent to the table in the path of the vegetables, a plate pivotally and adjustably secured to said sides at one end below said table by springs embedded in slots formed on its side edges and extending beyond the side for a finger catch and formed and adapted to resiliently enter a vertical row of holes formed in said sides whereby this end of said plate may be raised and low-



ered in relation to said table, a row of slots spaced an even distance apart in the opposite end of said plate, knives of suitable form pivoted in said slots and extending up through similar slots in the edge of said table, a rabbet formed in the edge of said table, a cross-bar detachably secured in said sides and fitting said rabbeted edge of the table adapted to hold said vertical knives in said slots and from contact with said horizontal knife, and means substantially as herein described for adjusting said vertical knives for cutting depth, as herein set forth.

2. In a vegetable cutter the combination with the sides and table, a vertical knife carrying plate pivoted below said table and carrying a plurality of knives spaced an even distance apart and arranged to extend through suitable slots in said table, a row of holes vertically arranged on the inner faces of said sides, springs resiliently embedded in slots formed in the side edges of said plate, and extending beyond said sides to form finger holes and returned to said sides and bent at an angle to enter said hole, whereby said knife-plate is pivoted and adjusted vertically in relation to said table at its outer end, and a bolt and thumb-nut arranged through said table and plate for adjusting the height of said knives above said table, substantially as described.

3. In a vegetable cutter the combination with the sides and table of a slicing knife secured to a plate having a blade of metal secured thereto at or near its outer end and projecting beyond it on either side, a plural-

ity of slots in the ends of said sides in line with one another adapted to receive the ends of said blade and thereby hold said plate and knife approximately level with the top of said table, and further adapted to regulate the vertical position of said knife and plate above said table, a rod threaded at both ends arranged transversely through said plate and sides and adapted to move with said plate vertically, and a thumb-nut on each end of said rod in contact with said sides whereby said plate and knife may be adjustably bolted to said sides in any desired cutting position, as specified.

4. In a vegetable cutter the combination with the sides, a table secured between them about midway of their height and extending partially through their length, having its inner end edge cut to stand at an oblique angle to them a rabbet cut in its edge, a row of slots spaced an even distance apart cut in its edge parallel to its length, a plurality of stripping knives spaced an even distance apart pivoted in an adjustable plate below said table to swing upward into said table slots, and a bar removably secured in the bottom of said sides adapted to fit into the rabbeted edge of the table and hold and retain the said knives in practically a vertical position, substantially as set forth.

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

LEE JOSEPH KRAEMER.

Witnesses:

SIGMUND LEAVICK,  
FRANK BUHR.