

No. 712,753.

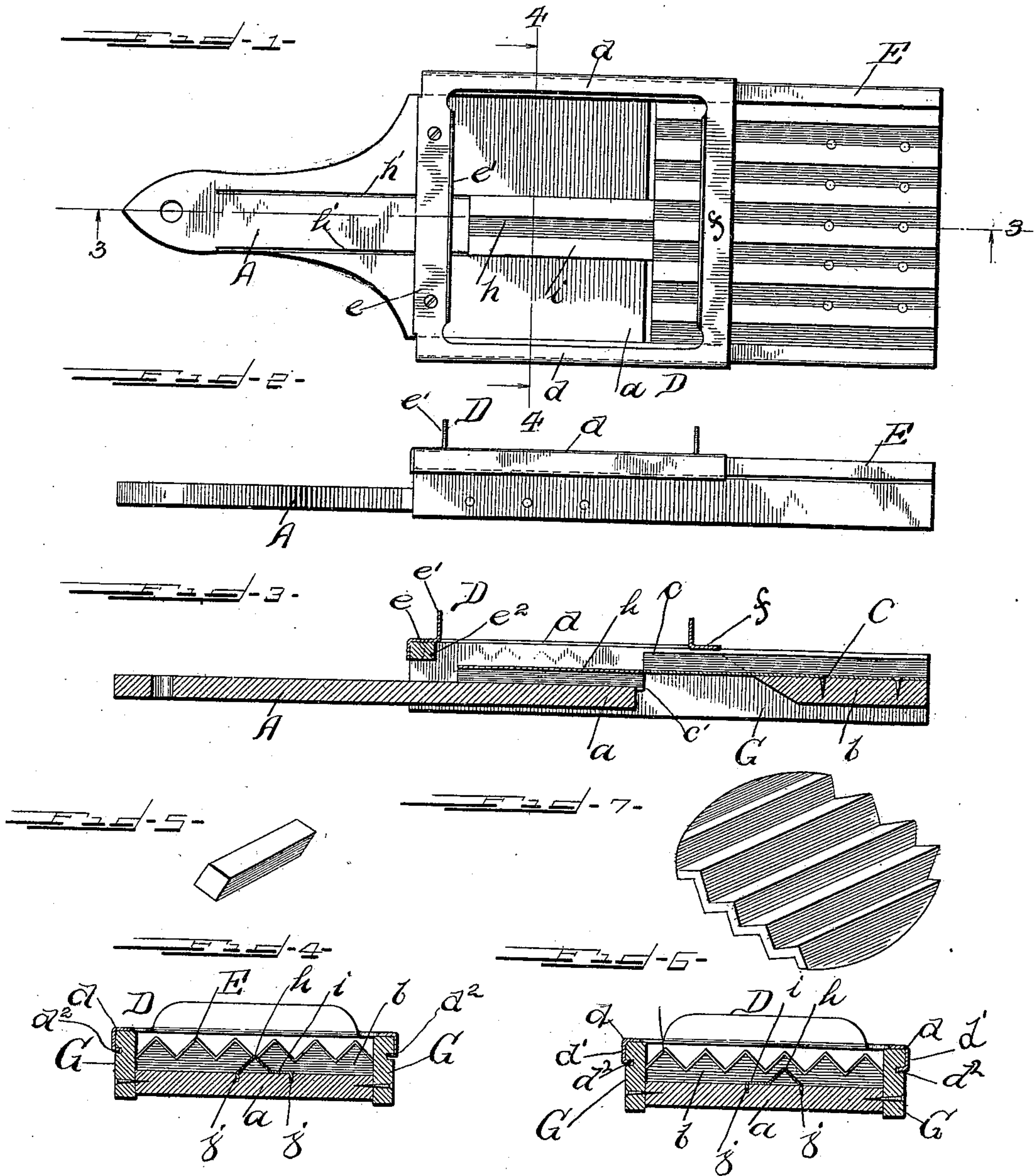
Patented Nov. 4, 1902.

H. L. BAILEY.  
VEGETABLE SLICER.

(Application filed Feb. 14, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
J. B. Keir  
Ora D. Perry

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By Raymond & Barnett  
Attys

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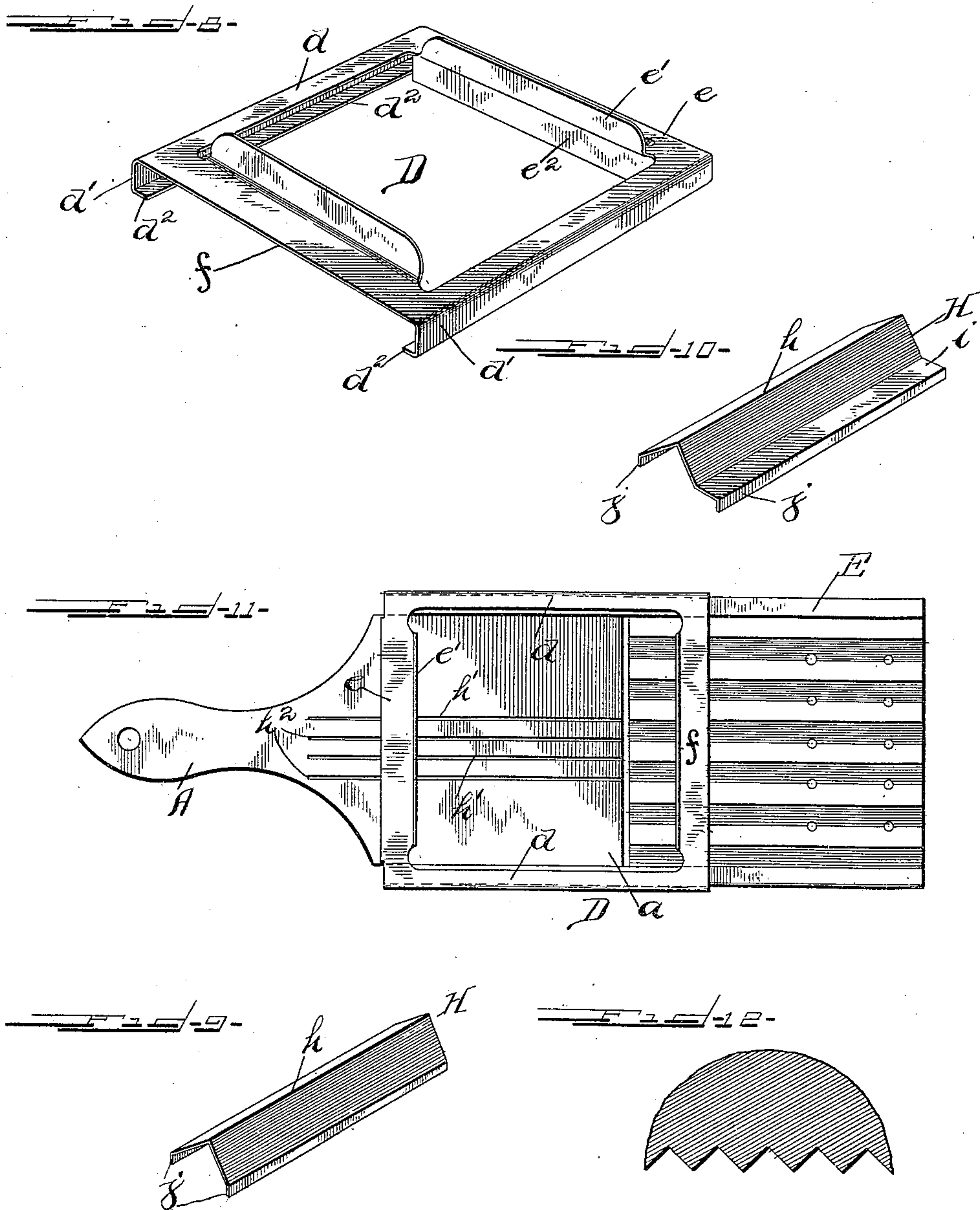
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# UNITED STATES PATENT OFFICE.

HERBERT L. BAILEY, OF CHICAGO, ILLINOIS, ASSIGNOR TO HANDY THINGS COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## VEGETABLE-SLICER.

SPECIFICATION forming part of Letters Patent No. 712,753, dated November 4, 1902.

Application filed February 14, 1901. Serial No. 47,350. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT L. BAILEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Vegetable-Slicers, of which the following is a specification.

My invention relates to improvements in vegetable-slicers in which the vegetable is sliced by being pressed against the cutting edge, and in its preferred form my invention especially relates to improvements in such slicers in which the vegetable is sliced by being pressed against a waved, corrugated, or fluted cutting edge.

The objects of my invention are, first, to provide means in combination with such a slicer to protect the fingers and thumbs of the operator from being brought in contact with the cutting edge; second, to provide an automatic stop for such protecting means which shall stop the movement of such means in the direction of such cutting edge whenever the cutting of a slice is completed; third, to provide an automatic gage for use in such a slicer when used in combination with a waved, corrugated, fluted, or similar cutting edge, whereby cuts and slices of uniform thickness may be produced, and, fourth, to provide such a gage or guide which may be reversed so as to automatically produce different kinds of cuts and slices, as may be required. These and such other objects as may hereinafter appear are attained by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a cutter embodying my improvements. Fig. 2 is a side elevation thereof. Fig. 3 is a central longitudinal section on the line 3 3 of Fig. 1. Fig. 4 is a cross-section on the line 4 4 of Fig. 1 with my automatic guide set in one position. Fig. 5 is a perspective view of the product made by the slicer, having the guide set as shown in Fig. 4. Fig. 6 is a cross-section, the same as that shown in Fig. 4, except that the automatic guide has been set so as to produce slices of the form shown in Fig. 7. Fig. 8 is a detail perspective of my improved finger and thumb protecting device. Fig. 9 is a perspective view of any automatic guide. Fig. 10 is a perspective view of the preferred

form of my new automatic guide or gage. Fig. 11 is a plan view of a slicer with the gage removed, and Fig. 12 shows a vegetable after it has been partially sliced away by the slicer shown in the other figures.

Similar letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A indicates a suitable base comprising the sections *a b*, there being a space between the opposing ends of said sections. Upon the upper surface of the section *b* is mounted the cutter or knife C, which may be conveniently formed of sheet metal of any suitable cross-section. The forward end of this cutter, constituting the cutting edge, projects over the space between the ends of the sections *a b*, leaving the space between the upper surface of the slicing bed or section *a* and the under surface of the cutting edge *c* through which the slices may pass one by one as they are cut. For purposes of simple slicing this cutting edge may be a perfectly straight edge; but a variety of slices and products may be obtained by making this edge of any desired irregular outline, having, for instance, the zigzag cross-section shown in Figs. 4 and 6 of the drawings.

The edges of the base A are provided with vertical side pieces G, extending longitudinally of the slicer. Slidably mounted upon these side pieces is the finger-protecting slide D, which comprises the side strips *d* and the end strip *e*, connecting said side strips, said side and end strips surrounding an opening adapted to freely receive the vegetable to be sliced. For the purpose of affording sufficient rigidity and keeping the slide in shape it is desirable, but not essential, that the side strips *d* be further connected by a second end strip *f* opposite to the end strip *e*. The side strips *d* are provided with downwardly-bent flanges *d'*. The lower edges of said flanges are then preferably bent inwardly to form the edges *d''*.

While the slide D may be slidably mounted upon the side pieces G without providing the inwardly-bent edges *d''*, it is obviously preferable that such edges should be provided to engage the side pieces G, as by loosely fitting into the longitudinal grooves *g*.



The end strip *e* of the slide *E* is provided with the upwardly-turned flange *e'*, against which the thumb of the operator will naturally be held in pushing the slide against the vegetable being sliced, this flange serving as a thumb-guard. To the inner side of the end strip *e* is secured a cutting block or stop *e<sup>2</sup>*, against which the cutting edge *c* strikes when the slide *D* reaches the end of its stroke, from which it is evident that the side block *e<sup>2</sup>* constitutes an abutment for pushing the vegetable to be sliced against the cutting edge *c* and between which and the cutting edge the vegetable is sliced.

For slicing with a straight edge or where uniformity or similarity of slices made with a corrugated edge is a matter of indifference the slicer is complete when the protecting-slide alone is mounted thereon, as shown in Fig. 11, and slices are cut with perfect safety to the hands of the operator by resting the vegetable to be sliced upon the upper surface of the section *a* and within the inclosed space in the slide *D*. The operator then rests his thumb against the thumb-guard *e'*, and with the fingers and palm of the hand resting upon the upper surface of the vegetable holds it in contact with the upper surface of sections *a* of the base *A*. When the operator then pushes against the outer side of the thumb-guard *e'*, the inner faces of the thumb-guard *e'* and of the cutting-block *e<sup>2</sup>* press the vegetable against the cutting edge *c* until said cutting edge strikes the cutting-blocks *e<sup>2</sup>*, whereupon the slice being completed falls through the slot *c'*, and the slide, with the vegetable therein, is drawn back to the original position and the operation repeated. When, however, a cutting edge of irregular cross-section is used, as shown in the drawings is desirable not only for the purpose of producing a pleasing product, but for the more practical purpose of producing a product of uniform thickness which may the more readily be properly prepared for the table, the under or cut side of the vegetable after a slice has been removed will appear in cross-section as shown in Fig. 12. Obviously unless great care is taken by the operator the corrugations of the next slice will not exactly correspond with the corrugations of the last preceding slice, and an uncertain product of varying thickness will result. Again, in producing cuts such as shown in Fig. 5, which indicates a section of potato prepared for "French-fry" potatoes, as distinguished from slices as shown in Fig. 7, it is exceedingly desirable that they shall be of uniform area in cross-section, although, of course, they will vary in length according to the size of the particular section of the vegetable from which each cut is produced. While this product can be obtained with the modified form of slicer, as shown in Fig. 11, by carefully moving the vegetable laterally a short distance after each slide, this is inevitably a very blind, slow, and uncertain operation and

even with the utmost care an uncertain product will be the result. To avoid these objections, I have provided the automatic reversible gage *H*, (shown in Fig. 10,) which consists of a stop mounted upon the upper surface of the section *a* and comprising a portion which corresponds in cross-section to one of the corrugations of the cutting edge *c*. For use in producing slices such, for instance, as shown in Fig. 7 it is only necessary that this guide shall correspond in cross-section to one of such corrugations and shall be suitably mounted upon the upper face of said section *a*, longitudinally thereof, and in front of said cutting edge, so that the apex of said guide if extended would be below and substantially parallel with the apex of any one of the convolutions of said cutting edge. On the other hand, if desired for use only in producing cuts such, for instance, as are shown in Fig. 5 the same simple form of guide may be used, provided it is mounted upon the upper surface of said section *a*, as shown in Fig. 4. Again, in order to provide such guide in its simplest form, so as to be interchangeably usable in the production either of such slices or of such sections, it is only necessary that it be mounted upon the upper surface of section *a* by any means by which it may be adjusted laterally on said board from the one to the other of said indicated portions—as, for instance, by providing its lower edges with downwardly-projecting flanges which shall fit within longitudinal slots, such as *h' h'*, for holding it in one position, from which it may be changed to another parallel set of slots *h<sup>2</sup> h<sup>2</sup>* in the modified form of slicer shown in Fig. 11 for holding it in the other position. The preferred form, however, of said guide, as shown in Fig. 10, comprises a portion *h*, corresponding in cross-section to one of the corrugations of the cutting edge *c*, a lateral flange *i*, extending longitudinally thereof at one side, and downwardly-turned edges *j*, which are adapted to fit in the single pair of parallel slots *h'* in the upper surface of the section *a*, Fig. 1. It will be seen that by reason of the flange *i* the width of the guide is made greater than the width of any one of the corrugations of the cutting edge, and the apex of the guide extends longitudinally thereof, but at one side of the center line of the guide. The total width of the guide when made in this form should be one and one-half times the width of a corrugation of the cutter *C*, and one of the slots *h* should be located so as to be below and parallel with the horizontal plane occupied by the apex of one of said corrugations, and the other of said parallel slots should be located below and parallel with the horizontal plane occupied by the lowest point of one of said corrugations. The said slots should be so spaced apart as to readily receive the downwardly-turned edges *j* of the guide *H*.

To use the slicer shown, with the guide in its preferred form, the operator first cuts a



slice from the vegetable without using the guide. The vegetable will then appear in cross-section substantially as shown in Fig. 12. If he desires to produce such a cut as shown in Fig. 5, he then places the guide in the slots *h* and in the position shown in Fig. 4 and placing the cut face of the vegetable upon the upper surface of the base A, so one of the corrugations thereof will fit over the guide H. This will bring the vegetable in position, so that the end of the apex of each corrugation previously cut therein will be opposite the lowest points in the corrugations of the cutting edge, and the slide D being operated in the manner hereinbefore described the vegetable is cut into a number of pieces, such as is shown in Fig. 5, which drop through the slots *c'*, and as the slide and vegetable are drawn back into the original position the newly-cut face of the vegetable drops down to the upper surface of the section *a* of the base A, and the guide fitting into one of the corrugations, as before, again automatically and exactly sets the vegetable for the next cut, and so the operation is repeated until the entire vegetable has been cut up in this manner. If the operator now wishes to make slices such, for instance, as is shown in Fig. 7, he lifts the guide out of the slots *h*, reverses it end for end, and replaces it in the slots in the position shown in Fig. 6. This brings the apex of the guide in a plane below and parallel with the plane occupied by the apex of one of the corrugations of the cutting end. If the sliced surface of the vegetable is now placed in the slicer, as before, the guide again fits into one of the corrugations cut on the sliced face of the vegetable and automatically adjusts the vegetable so that the apexes of the corrugations cut therein shall be in the same plane as the apex of the guide, and the cut surface of the vegetable will be below brought parallel with the under surface of the edge of the cutter C. The slide D being now operated as before, the vegetable is pushed against the cutting edge and a slice such as that shown in Fig. 7 is cut and falls through the slot *c'*, the slide is drawn back, the newly-cut surface of the vegetable drops to the bed of the cutter, and the slicing operation is repeated until completed.

A convenient means of taking care of the guide H when not in use is afforded by extending the guide-slots *h'* back toward the end of the handle of the slicer. The guide may then be slid back in these slots and out of the way, so that the slicer may be used without the guide.

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

1. The combination in a vegetable-slicer, of a knife having a waved or corrugated cutting edge, a slicing-bed, a movable guide corresponding in cross-section to one of the corrugations of the cutting edge of said knife, adapted to be mounted upon said slicing-bed opposite to said cutting edge, and means on said slicing-bed for engaging said guide in different positions so that said guide is adjustable in a direction across the face of said cutting edge, substantially as described.

2. The combination in a vegetable-slicer, of a knife having a waved or corrugated cutting edge, a slicing-bed, an adjustable guide adapted to be mounted upon said slicing-bed opposite to said cutting edge said guide comprising a portion corresponding in cross-section to one of the corrugations of said cutting edge, a flange extending from one side of said guide, and means on said flange for engaging said slicing-bed in different positions, substantially as described.

3. In a vegetable-slicer, the combination with a knife having a waved or corrugated cutting edge, of a slicing-bed, a guide mounted upon said slicing-bed opposite to said cutting edge and laterally movable across said slicing-bed, said guide having its upper edge substantially in a plane with the under edges of the corrugations of said cutting edge, substantially as described.

4. In a vegetable-slicer, the combination with the base portion, of a waved or corrugated cutting edge mounted on said slicer in a different but parallel plane with said base portion, and a guide mounted upon said base portion opposite to said cutting edge and corresponding in cross-section to one of the corrugations of said cutting edge, said guide being adapted to be set at will either in a plane parallel with the plane of said cutting edge or in a plane offsetting the same.

5. In a vegetable-slicer, the combination with a knife having a corrugated edge, of a slicing-bed, a movable guide comprising a portion substantially corresponding in cross-section to one of the corrugations of said cutting edge, a lateral flange on said guide, a lip on said flange, and depressions in said slicing-bed for engaging said lip, substantially as described.

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Witnesses:

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