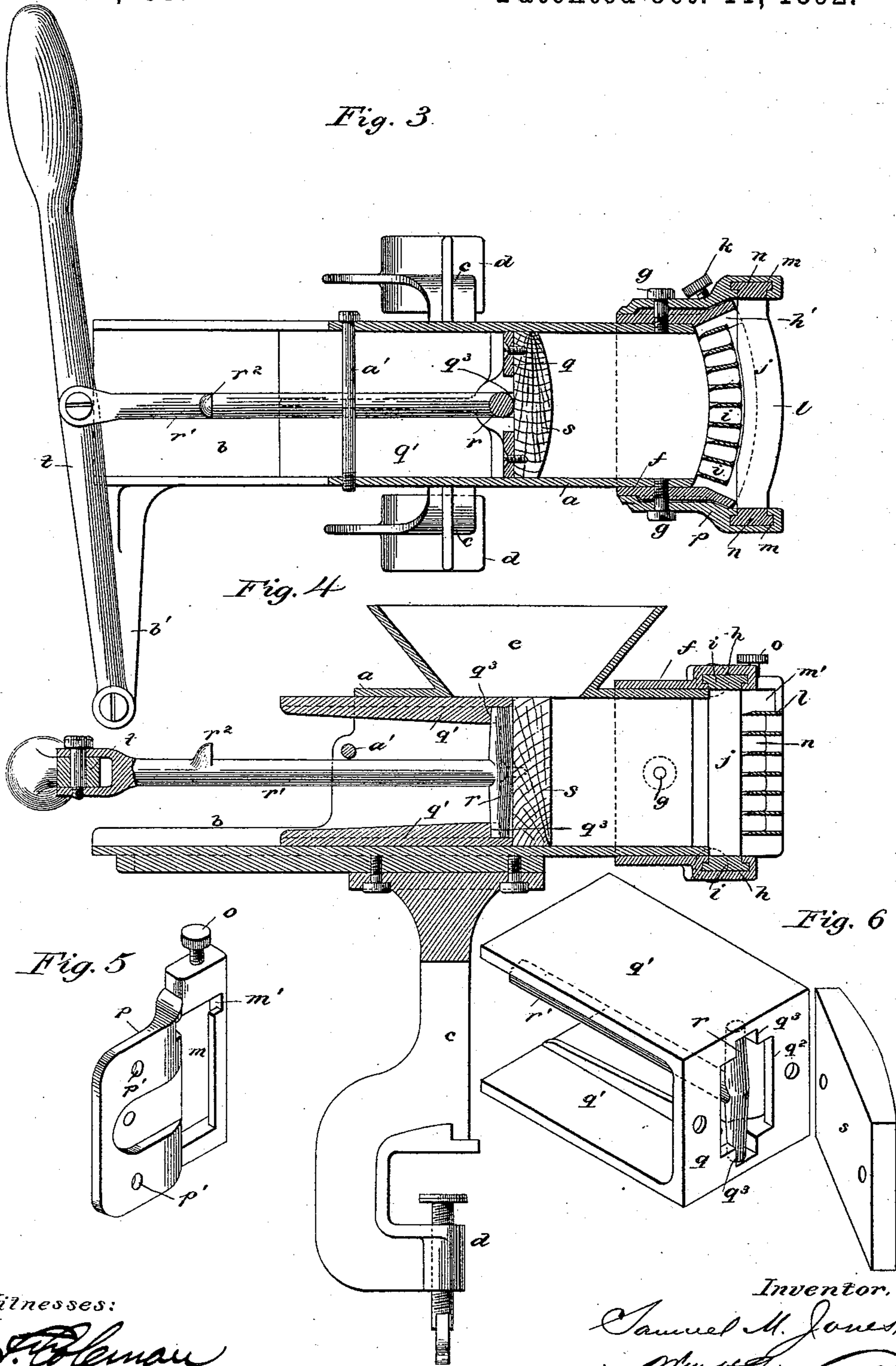


S. M. JONES.
FRUIT OR VEGETABLE SLICER.

No. 484,155.

Patented Oct. 11, 1892.



Witnesses:
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UNITED STATES PATENT OFFICE.

SAMUEL M. JONES, OF SPRINGFIELD, MASSACHUSETTS.

FRUIT OR VEGETABLE SLICER.

SPECIFICATION forming part of Letters Patent No. 484,155, dated October 11, 1892.

Application filed March 11, 1892. Serial No. 424,530. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL M. JONES, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented a certain new and useful Improvement in Fruit or Vegetable Slicers, of which the following is a full, clear, and exact description.

This invention relates to that class of vegetable and fruit cutters by which the substance is sliced or cut up into convenient pieces for cooking.

One feature of the invention is the cutter-head, made removable at pleasure for cleaning and other purposes, and provided with two sets of knives, one of which sets of knives may be used independently of the other or the two used jointly; and another feature of the invention is the connection of the plunger-rod and plunger for forcing the substance to and through the knives.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a plan view showing both sets of knives in position. Fig. 2 is a front elevation showing but one set of knives. Figs. 3 and 4 are respectively horizontal and vertical sections of the machine having two sets of knives, as in Fig. 1. Fig. 5 is a perspective view of part of the head for the independent knives, and Fig. 6 is a perspective of the plunger.

A box *a*, preferably rectangular in cross-section, has the slideway *b*, standard *c*, with clamps *d*, for securing the cutter to the edge of a table, and a hopper *e*, opening into said box. The cutter-head consists of a four-sided frame *f*, adapted to be slipped over the end of the box *a* and to be secured thereto removably by screws *g*. The top and bottom of this head are made with the undercut grooves *h*, which are described on an arc of a circle, and in these grooves are secured the spacing-blocks *i* (shaped substantially as shown in Fig. 4) for the knives or cutters *j*. The knives and spacing-blocks are held together by adjusting-screws *k*, and by means of these screws the spacing of the knives may be varied, so as to cut various thicknesses. The grooves are cut away at *h'*, Fig. 2, for the insertion and removal of the spacing-blocks and knives. The knives are set on the radii of the circle upon which

the grooves are described, so as to have their backs farther apart than their cutting-edges, and thereby facilitate the egress and discharge of the cut substance. The cutter-head is made removable for cleaning and other purposes. A second set of knives *l* is arranged in undercut grooves *m* with spacing-blocks *n* and adjusting-screws *o*, and said grooves are constructed in cheek-pieces *p*, (see details, Fig. 5,) which may be connected only by the knives, or they may be rigidly connected by bridge-pieces. The grooves *m* in said cheek-pieces are provided with the cut-away inlets *m'* for the knives and spacing-blocks. The cheek-pieces may be fitted over the sides of the cutter-head and secured thereto solely by the screws *g* or by screws passed through the openings *p'*, or both. The knives *l* are arranged at right angles to or, in other words, crosswise of the knives *j* and so cut the slices of knives *j* into cubes, and because these knives *l* are arranged crosswise of knives *j* they are herein designated "cross-knives." These cross-knives, with their cheek-pieces and appurtenances, are herein referred to also as the "independent" cutter-head. Now, obviously, the knives *j* may be used alone for cutting vegetables, &c., into strips or slices.

The plunger (see Fig. 6 for details) is composed of a metallic body *q*, having wings *q'* *q''* to fit and slide in the box *a*. The body *q* is cut away in front at *q²* and provided with open-ended recesses *q³* *q³* at top and bottom to form bearing-boxes for the journals *r* of the plunger or connecting-rod *r'*, so that the plunger-rod and plunger may be readily connected and disconnected without the intervention of pins, screws, or other devices liable to work loose. The body of the plunger is provided with a face *s*, secured thereto by screws or otherwise, and which face serves, also, to complete the connection of the plunger and its rod. This face is made of wood or other substance which will not injure the knives by contact therewith, and its leading end is curved conformably with the arc in which the knives *j* are arranged. The plunger-rod is jointed to an operating-lever *t*, which is fulcrumed on a lateral extension *b'* of the slideway *b*; but if the machine is to be driven by power then the plunger-rod will be connected with suitable power appliances. A

cross pin or screw a' of the box with which the plunger comes in contact limits the return of the plunger and also limits the stroke of the plunger by the lug r^2 on the plunger-rod coming in contact therewith. The plunger may be readily removed for cleansing by removing the cross pin or screw a' .

The operation consists in feeding the substance to be sliced or cut into the box through the hopper and then forcing it up to and through the knives by means of the plunger. If only knives j be employed, the substance will be cut into strips or slices, while if the cross-knives be employed also then the stuff will be cut into cubes.

It is obvious that the main cutter-head may have its knives arranged up and down, as shown, or crosswise, as desired or convenient.

By the term "vegetable-cutter" used in this specification and the claims hereof I mean not to exclude all uses to which the machine may be put.

What I claim is—

1. A vegetable-cutter having a receiving-box and plunger, combined with a cutter-head composed of a four-sided frame containing the cutters or knives and adapted to be slipped over the end of the box and removably screwed thereto, substantially as described.

2. A cutter-head for vegetable-cutters, com-

posed of a box, a series of knives arranged in said box, movable spacing-blocks interposed between said knives at opposite ends of the knives, and adjusting-screws applied sidewise to said blocks, substantially as described.

3. A cutter-head for vegetable-cutters, having its top and bottom provided with the undercut grooves h , movable spacing-blocks arranged therein, knives secured between such spacing-blocks, and adjusting-screws applied sidewise to such blocks, substantially as and for the purpose described.

4. In a vegetable-cutter, the combination, with a removable cutter-head, of an independent cutter-head composed of cheek-pieces p , provided with grooves in which the knives and spacing-blocks are arranged and adapted to be applied to such removable cutter-head at pleasure, substantially as described.

5. In a vegetable-cutter, the plunger having a body cut away and recessed at its forward portion, combined with a plunger-rod having journals fitted in said recesses, and a face-piece, substantially as described.

In testimony whereof I have hereunto set my hand this 9th day of March, A. D. 1892.

SAMUEL M. JONES.

Witnesses:

A. K. T. CAREY,
AUG. C. CAREY.