(No Model.) 2 Sheets—Sheet 1.

J. S. PATTEN.

VEGETABLE CUTTER.

No. 492,967. Patented Mar. 7, 1893.

Fig. 1.

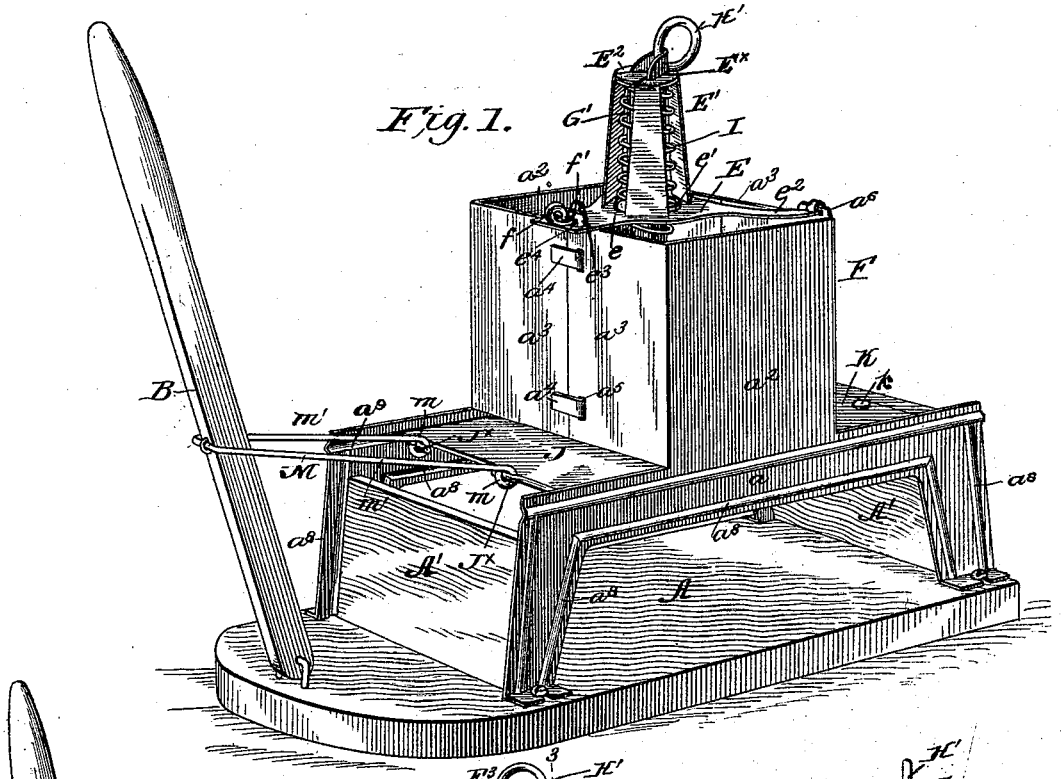


Fig. 2.

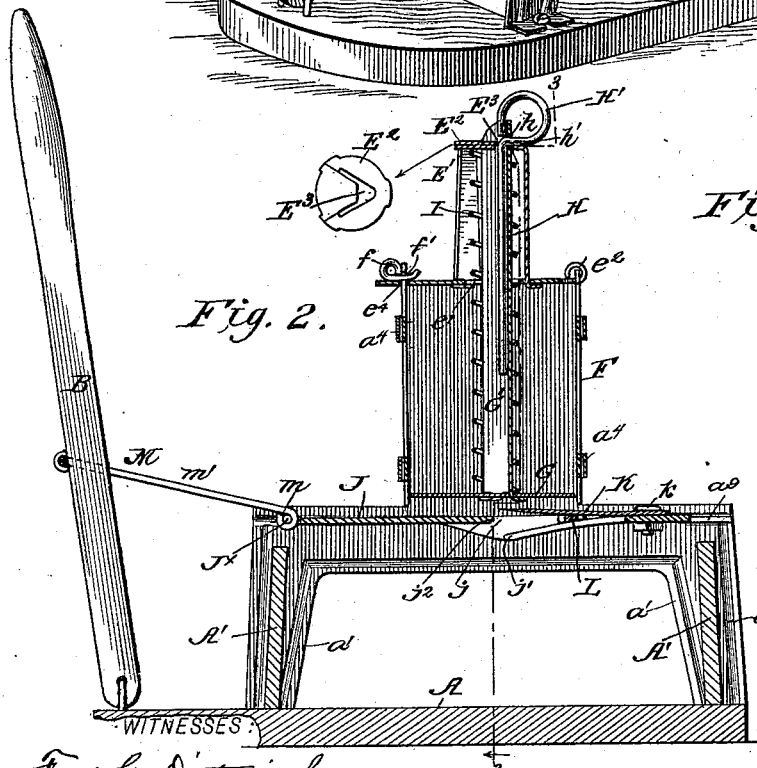
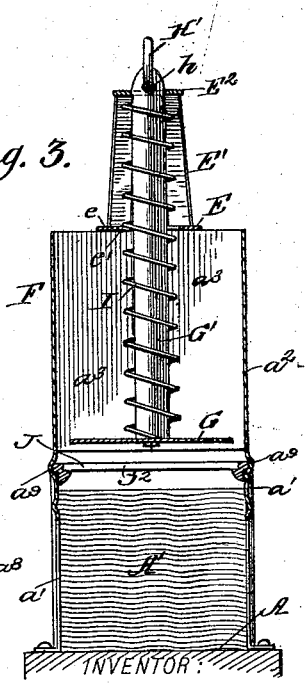


Fig. 3.



WITNESSES:

Fred G. Dieterich

W. D. Blondel.

INVENTOR:

James S. Patten.

BY Munn & Co

ATTORNEYS

(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

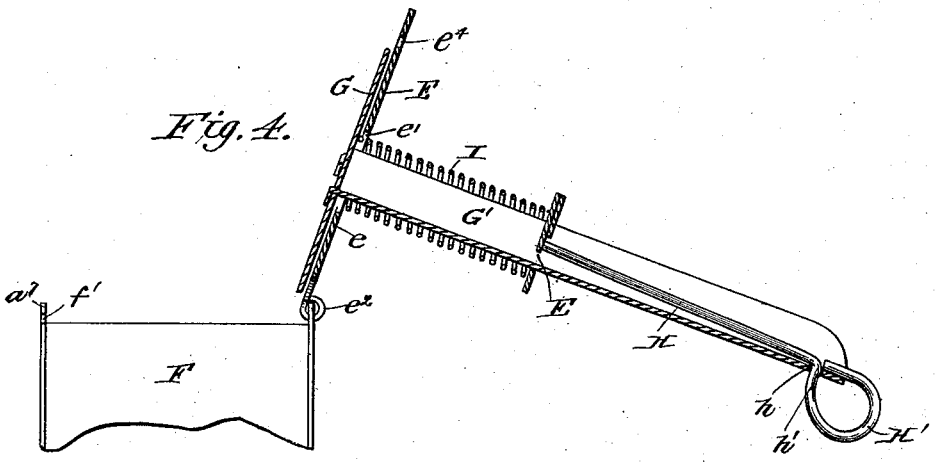


Fig. 5.

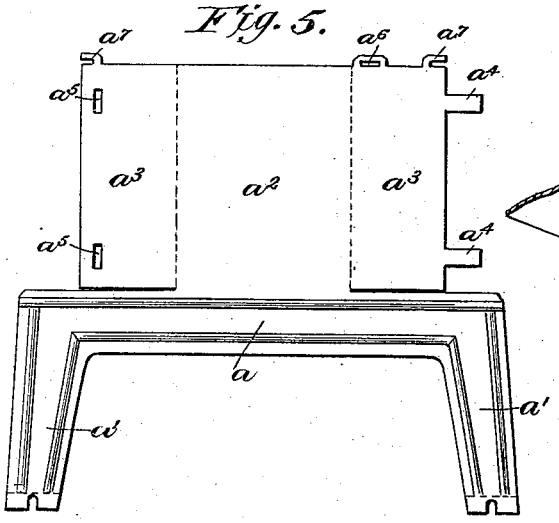


Fig. 6.

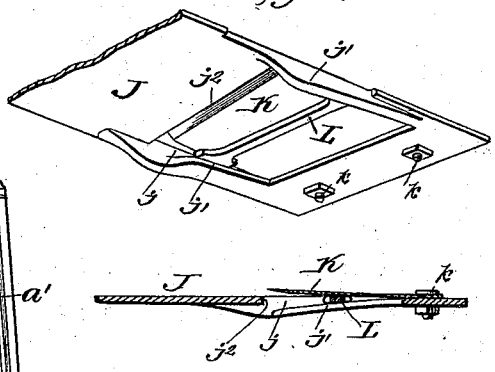
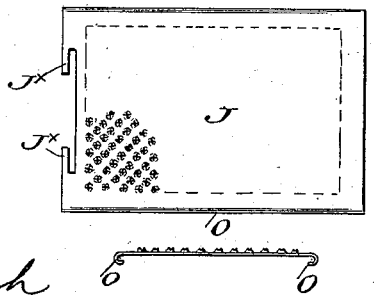


Fig. 7.



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INVENTOR:

James S. Patten.

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES S. PATTEN, OF BALTIMORE, MARYLAND.

VEGETABLE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 492,967, dated March 7, 1893.

Application filed May 17, 1892. Serial No. 433,374. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. PATTEN, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Vegetable-Cutters, of which the following is a specification.

My invention relates to that class of vegetable cutters in which a main supporting frame with a holder for receiving the vegetables, a reciprocating slicer knife, movable in the bottom of such holder and a presser or follower which serves to press the vegetable against the reciprocating cutter platen or frame, are employed.

My invention has for its object to provide a machine of this character, simple and cheap in its construction easily manipulated and effective for its desired purpose.

To these ends my invention consists in the novel arrangement and combination of parts, all of which are hereinafter fully described and claimed, reference being had to the accompanying drawings, in which

Figure 1 is a perspective view of my improved machine. Fig. 2, is a central longitudinal vertical section of the same. Fig. 3 is a cross section on the line 3—3 Fig. 2. Fig. 4 is a detail longitudinal section showing the follower raised and thrown back with its hinged supporting frame. Fig. 5, is a view of one of the blanks which forms one of the side pieces of the main frame and one half of the box or holder. Fig. 6, illustrates the cutter platen knife wedge and key mechanism. Fig. 7 illustrates a grater platen struck up from sheet metal.

Referring to the accompanying drawings A, indicates a suitable base board, upon the front end of which is pivotally supported the lower end of the operating lever B. The main frame consists of two side sections which are alike in form and which are stamped out of sheet metal into blanks one of which is shown in plan in Fig. 5. Such blank comprises a main or body portion a the depending legs a' the vertically extended rigid portion a^2 and the side wings a^3. Such wings a^3 have extended fingers a^4 and slots a^5 arranged on alternate ends as shown, they being also formed with vertically projecting apertured ears a^6 at their inner edges and with undercut ears a^7 at their outer edges. These blank side pieces are bent up to a form most clearly shown in Fig. 1, and their legs are secured to the base board A, in any suitable manner and their winged members a^3 bent inward at right angles, the extended fingers of one wing of one section, being passed through the slots of the adjacent wing of the opposite section and bent back to form locking members whereby the side pieces are joined and the open bottom vegetable box or holder formed, the side pieces being further braced by being nailed to the end cross boards A′.

To stiffen the side frames and add strength thereto they are pressed with a number of corrugations a^8 arranged as clearly shown in the drawings, one of such corrugations on each side piece being arranged at the upper edge of the body portion forming a longitudinal groove a^9 adapted to form a guide way for the reciprocating knife platen hereinafter referred to.

From the foregoing it will be readily seen that the main frame will, when constructed as described, embody the required elements of neatness, lightness and strength and can be constructed at a minimum cost.

E indicates a cross frame which comprises a base plate e having a central aperture e' and hinge arms e^2 which are hooked into the apertured ears a^6 at the upper end of the holder F and with a forwardly extending apertured locking member e^3 formed with an aperture e^4 which fits over the under cut ears a^7 on the box and is held locked thereto by a lock pin f which passes through a slot f' formed by the meeting ends of the under cut ears a^7 before referred to. Projected up from the base plate e is a pocket or housing E′ the upper end of which has a cross plate E^2 which has a > slot $e^\times$ formed with an enlargement E^3 for a purpose presently explained. The follower consists of the base or follower plate proper G, and the vertical stem or guide member G′. This member consists of a sheet metal stem > shaped in cross section the upper end of which fits in and is guided in the > slot in the cross plate E^2 it also fitting loosely in the central aperture e' of the plate e. It will be noticed by reference to Fig. 2 that the upper end of the stem projects slightly above the plate E^2 and in the angle of such extension is formed an aperture h through which

passes the neck h' of a combined lifting and locking rod H the lower or straight portion of which normally seats in the angle portion of the stem while its upper end is bent to form a ring or handle H'. It will also be noticed by reference to the aforesaid figure that when the follower plate is forced down to its down position by the coiled spring I, (disposed about its stem and between the plates G and E^2) such downward movement will be limited by the ring H' which rests against the plate E^2. This arrangement prevents any possibility of the follower plate G being forced down in contact with the reciprocating knife.

When it is desired to place the vegetable in the holder or to obtain access to the interior thereof for any purpose the follower is drawn upward by the lifting rod H and the spring compressed into the pocket portion formed by the frame E', such lifting being continued until the lower end of the rod H is pulled out of the enlarged aperture E^3 in the top plate E^2, when it is swung slightly forward to the position shown in Fig. 4. In this position it serves as a lock and holds the follower to its upper most position. The follower can then be readily swung back with the frame E and E' to the position (shown in Fig. 4) by simply removing the lock pin f.

The reciprocating knife platen is preferably formed of cast metal, although it might be formed of sheet metal, stamped out in a manner presently more fully set forth.

The cast platen J has the usual discharge or knife opening j at the inner side edges of which are formed flanges j' inclined downwardly from the rear to the front.

K, indicates the knife blade which is of a size to almost cover the opening j, its rear end being secured to the platen by screws k, k, while its front end projects over the opening j to near its front edge j^2 as clearly shown in Fig. 2.

L indicates a wedge or key bar which is movable on the flanges j' and is adapted to be wedged under the front end of the knife blade. It will be readily seen that by moving the wedge up on the flange j' the front end of the blade will be proportionately raised, such operation providing for the different adjustments of the blade to cut the vegetable slices in different thicknesses. The front end of the cutter platen has cast or otherwise formed inwardly projecting lugs $J^\times$ $J^\times$ with which are adapted to engage the eyes m m on the outer ends of the spring arms m' m' of a yoke member M pivotally secured to the operating lever B as shown. By this construction the cutter platen can be quickly disconnected from the lever by pressing the arms m' inward until the eyes m become disengaged from the lugs $J^\times$ $J^\times$, after which the cutter platen can be quickly pulled out of the guide grooves and a grater platen inserted if desired.

In Fig. 7 I have shown a grater stamped from sheet metal, its longitudinal edges being turned under to form convexed guide flanges O adapted to fit the concaved guide grooves in the side pieces. In this construction the grater platen blank is also stamped with the inwardly projecting lugs $J^\times$ $J^\times$ as shown.

From the foregoing description taken in connection with the drawings the complete operation and advantages of my improved machine will be readily understood.

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

1. A vegetable cutter comprising a main frame, a vertically projected box or holder a reciprocating slicer knife operating in the bottom thereof, a spring actuated follower operating therein, formed with a vertical member, a cross bar on the box forming a guide for such member, and a lifting device loosely connected to such vertical member, constructed to act as a stop to limit the downward movement of such follower and as a lock to hold it to its elevated position substantially as described.

2. A vegetable cutter, in combination, a main frame having an open bottom box or holder, a cutter blade held to be reciprocated under the box, a spring depressed follower in such box, having a vertical member, a supplemental cross frame forming a guide for such member hinged at one side to the top of the box, and having a lock catch at its opposite side engaging the box, and a lifting device operating to elevate the follower and its vertical member, whereby such follower when elevated can be swung back with the hinged frame when it is released substantially as and for the purpose described.

3. In a vegetable slicer, in combination a vegetable box or holder having an open bottom, the follower operating therein, the reciprocating knife operating under the box, and the side frames formed of sheet metal and having corrugated or fluted strengthening ribs, one of such ribs being formed near the upper edge of each side frame whereby to form guide ways for the reciprocating knife substantially as and for the purpose described.

4. In a vegetable slicer substantially as described, a side blank formed of sheet metal and comprising the main or guide portion a, the leg portions a' having side extensions a^3 disconnected from the main portion a such extensions having locking members, all substantially as shown and described.

5. A main frame for vegetable slicing machines, formed in two sections, each section comprising a main or body portion formed with supporting legs, an upwardly extending rigid member, having opposite members bent inward at right angles to the rigid body, one of such members having projecting lock flanges and the other locking apertures, arranged substantially as shown, whereby the

two sections are adapted to be locked together, and the holder or box formed thereby as and for the purposes described.

6. In a vegetable cutter the combination with the main frame the reciprocating cutter and the box or holder formed with vertically projected apertured ears at one side and a locking lug at the opposite side, of a cross frame hinged at one end to the apertured ears its opposite end formed with an apertured lock member adapted to engage the lock lug on the box, a spring released follower operating in such box having a vertical stem supported on and guided in said cross frame, and means for elevating the follower and for swinging the frame back substantially as shown and described.

7. In a vegetable slicer, a reciprocating cutter comprising a main plate, formed with a transverse knife or discharge opening, downward extending integral portions having upper inclined guide ways, on the under face of the plate at each end of the knife opening, the knife, secured at one end to the plate, its free end projected over such opening and a transverse wedge member fitting between the free end of the knife and the aforesaid guide ways, all substantially as and for the purpose described.

8. In combination the main frame the open bottom vegetable box and the pivoted operating lever arranged substantially as shown, of the reciprocating knife frame held on the main frame under the vegetable box, formed with inwardly projecting lugs at its front end and a connecting yoke secured to the operating lever its inner ends formed of spring arms having eyes adapted to fit over the aforesaid projecting lugs when pressed inward substantially as and for the purpose described.

JAMES S. PATTEN.

Witnesses:
MORTON SCHAEFFER,
AMOS W. HART.