(No Model.)

W. C. MILLER.

SLICING MACHINE.

No. 360,715. Patented Apr. 5, 1887.

Fig. 1.

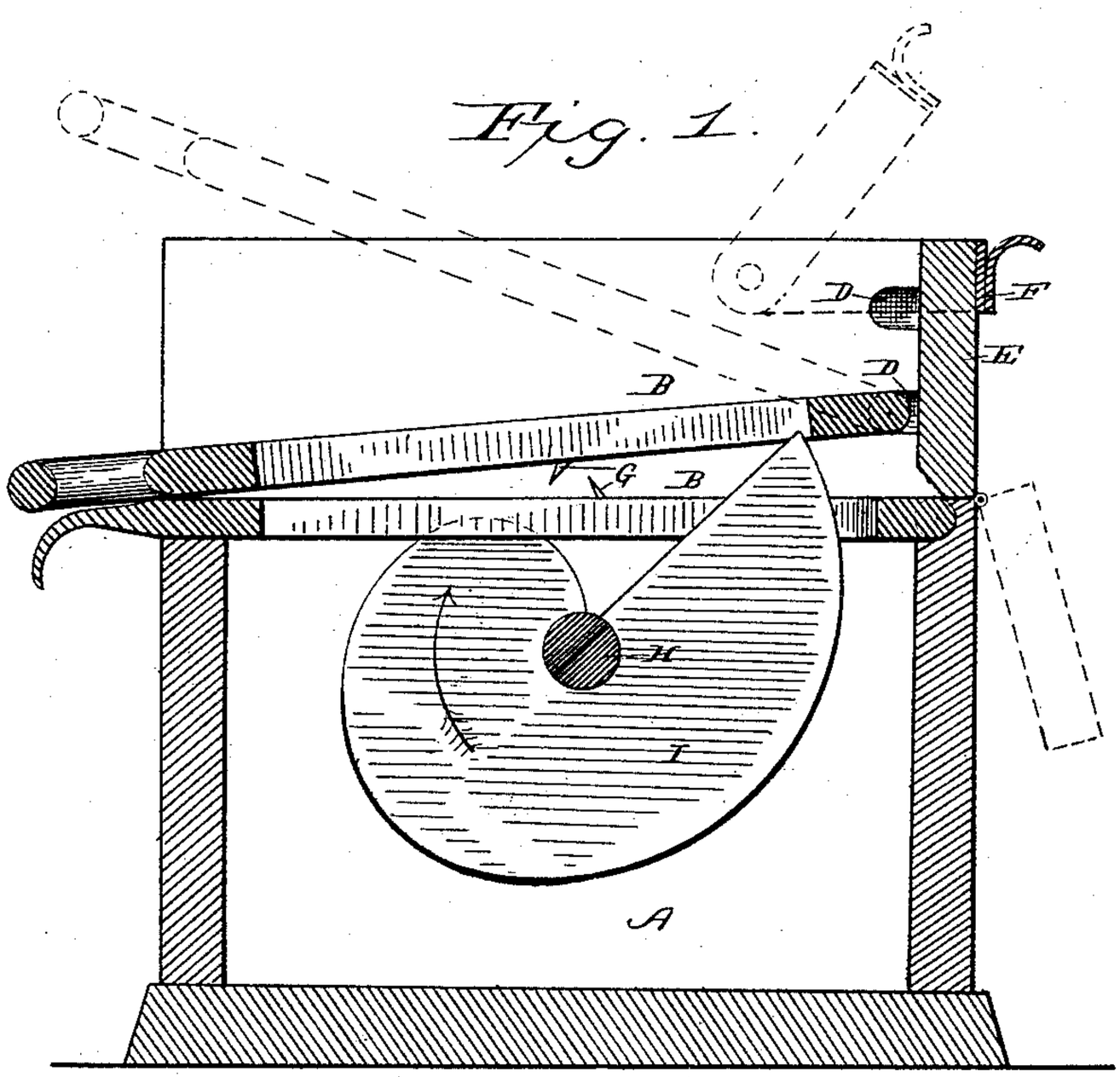


Fig. 2.

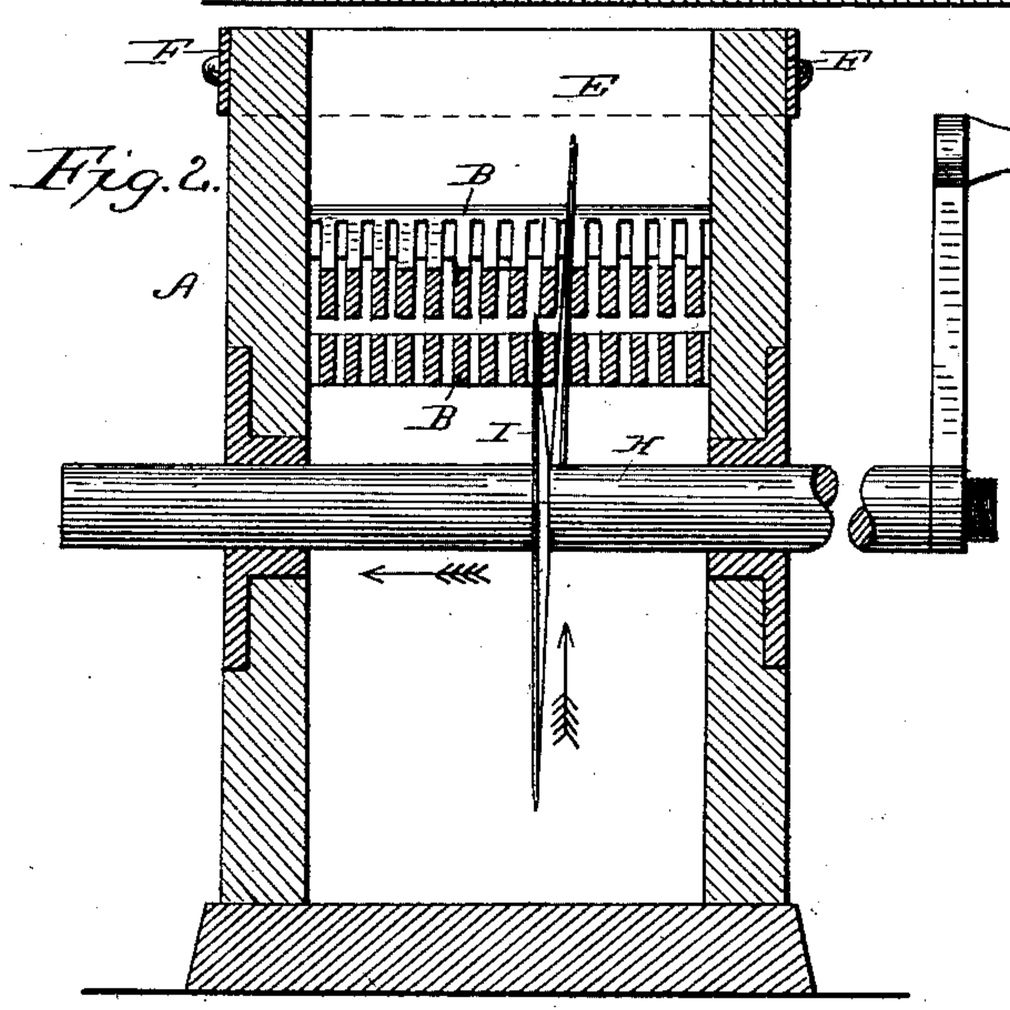
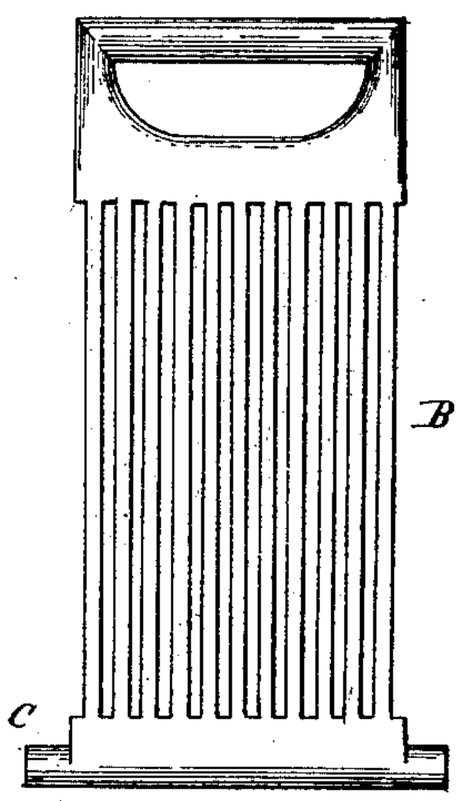


Fig. 3.



Witnesses
Chas. D. Davis
John C. Finch

Inventor
Walker C. Miller
By his Attorney
W. M. Alexander Jr

UNITED STATES PATENT OFFICE.

WALKER C. MILLER, OF WORTHAM, TEXAS.

SLICING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 360,715, dated April 5, 1887.

Application filed December 2, 1886. Serial No. 220,453. (No model.)

To all whom it may concern:

Be it known that I, WALKER C. MILLER, a citizen of the United States, residing at Wortham, in the county of Freestone and State of Texas, have invented certain new and useful Improvements in Slicing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to certain new and useful improvements in that class of slicing-machines in which a revolving cutting-blade is employed to perform the operation of slicing, and it is especially designed and adapted for slicing meats and analogous articles, as will be fully hereinafter set forth.

The invention consists, essentially, in the combination, with a suitable frame and slotted clamping or holding plates, which are adjustable with relation to each other in order to accommodate articles of varying thickness, of a revolving eccentric or cam shaped cutter having a spiral or volute edge and secured spirally upon a shaft which has its bearings in the frame of the machine, and which, when revolved through the medium of the said spirally-arranged cutter and the slotted clamping-plates, has an automatic lateral motion imparted to it, all arranged as and for the purposes more fully hereinafter set forth, and particularly pointed out in the claims.

The invention is fully illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical longitudinal sectional view of my device; Fig. 2, a vertical transverse sectional view of the same, and Fig. 3 a detail plan view of one of the clamping-plates.

Referring to the accompanying drawings by letter, A designates a frame or box, the sides of which are somewhat extended above the end pieces, as shown. Between the said extended side pieces of the box the longitudinally-slotted cast-metal clamping-plates B are pivotally secured and adapted to work vertically, they being approximately equal in width to the distance between the side pieces of the box.

The rear ends of the clamping-plates have cast integral with them laterally-projecting spindles or lugs C, which are adapted to rest in recesses or notches D, made in the interior of the rear edges of the side pieces of the box, and thereby pivotally secure the clamping-plates in place. The rear end of the lower clamping-plate rests, also, in a groove in the upper edge of the rear end piece of the box, and its forward end rests upon the upper edge of the front end piece of the box.

The number of notches D in the rear edge of the side pieces of the box, for the reception of the lugs on the clamping-plates, may be varied as the exigencies of the case may require, the object of thus providing a number of notches being to provide for varying thicknesses of the articles being sliced. The forward ends of the clamping-plates are provided with suitable handles, by which they are easily manipulated.

Hinged to the upper edge of the rear end piece of the box, and extending up flush with the upper edges of the side pieces thereof, is a hinged door or plate, E, which serves to hold the clamping-plates in place in the notches D, but still allows them a vertical pivotal movement. This door is held in position by a yoke, F, which is pivoted to the sides of the box, and is adapted to embrace the upper end of the door.

The contiguous faces of the clamping-plates may be provided with sharpened lugs G, which will enter the article clamped between the plates and serve to hold the same while being sliced.

Extending transversely of the box, and resting in bearings in the sides thereof, is the cutter-shaft H, which is about double the width of the box in length, and has secured upon one of its ends a crank by which it may be revolved.

Secured rigidly upon this shaft in the box A is the cutter or knife I, the shape of which is approximately that of a cam or an eccentric, so that when it is revolved in the direction of the arrow shown in Figs. 1 and 2 a draw cut will be obtained, the advantages of which are well known.

The cutter I is arranged and secured spirally upon its shaft, and has a spiral or volute edge, as shown in Fig. 2 of the drawings, so that when it is revolved in the direction indicated by the arrows in the drawings it will automatically advance from one pair of slots in the clamps to the next in order, and so on across

the box, carrying the shaft with it, as indicated by the arrow in Fig. 2.

It will be obvious that the longitudinal slots in the lower clamping-plate must register with those of the upper plate, in order that the cutter-blade may pass freely therethrough.

The article to be sliced is placed upon the lower plate, and is there securely held by a slight pressure of the hand upon the upper plate. After inserting the article in this manner, the shaft containing the cutter is revolved, (it first having been drawn to the side of the box next to the crank,) which action will cause the cutter to pass up through the slots in the plates and through the article between the plates, and the cutter will by its peculiar spiral or volute shaped edge advance from one pair or series of slots in the said plates to the next in order, and so on across the box, as is manifest. After each such operation, the slotted plates are elevated sufficiently to allow the cutter to be drawn to one side of the box, and thereby place it in readiness for another operation.

When it is desired to remove the slotted plates, the door E is thrown down, the yoke F having been first raised, as shown in dotted lines in the drawings.

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

1. In a slicing-machine, the combination of a revoluble and endwise-movable shaft, a cutter having a spiral or volute edge and secured upon said shaft, and slotted clamping-plates, substantially as described.

2. In a slicing-machine, a revoluble and endwise-movable shaft and a cutter having a spiral or volute edge secured upon said shaft, combined with slotted clamping-plates pivoted to the machine-frame, substantially as described.

3. In a slicing-machine, a revoluble and endwise-movable shaft and a cutter having a spiral or volute edge secured upon said shaft, combined with slotted clamping-plates and means for adjusting said plates, substantially as described.

4. In a slicing-machine, a revoluble shaft and a cutter having a spiral or volute edge and secured upon said shaft, combined with pivoted and adjustable slotted clamping-plates, the knife revolving in the slots in the plates, whereby a lateral movement is given to the shaft, substantially as described.

5. In a slicing-machine, the combination of the revoluble shaft, a cutter having a spiral or volute edge and secured upon said shaft, with a box having recesses in its rear end, and slotted clamping-plates provided with laterally-projecting lugs to rest in the said recesses, substantially as described.

6. In a slicing-machine, the combination, with a box or frame, a revoluble shaft, and a cutter secured upon said shaft having a spiral or volute edge, of slotted clamping-plates pivotally secured in recesses in the box and a hinged door secured in place by a yoke, substantially as described.

7. In a slicer, a revoluble shaft and a cutter secured upon said shaft and having a spiral or volute edge, combined with slotted clamping-plates provided with teeth on their contiguous faces, substantially as described.

8. In a slicer, a revoluble shaft and a cam or eccentric shaped cutter secured upon said shaft and having a spiral or volute edge, combined with slotted clamping-plates, substantially as described.

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

WALKER C. MILLER.

Witnesses:
J. W. HEASLET,
SALLY RAMSLER.