

No. 785,599.

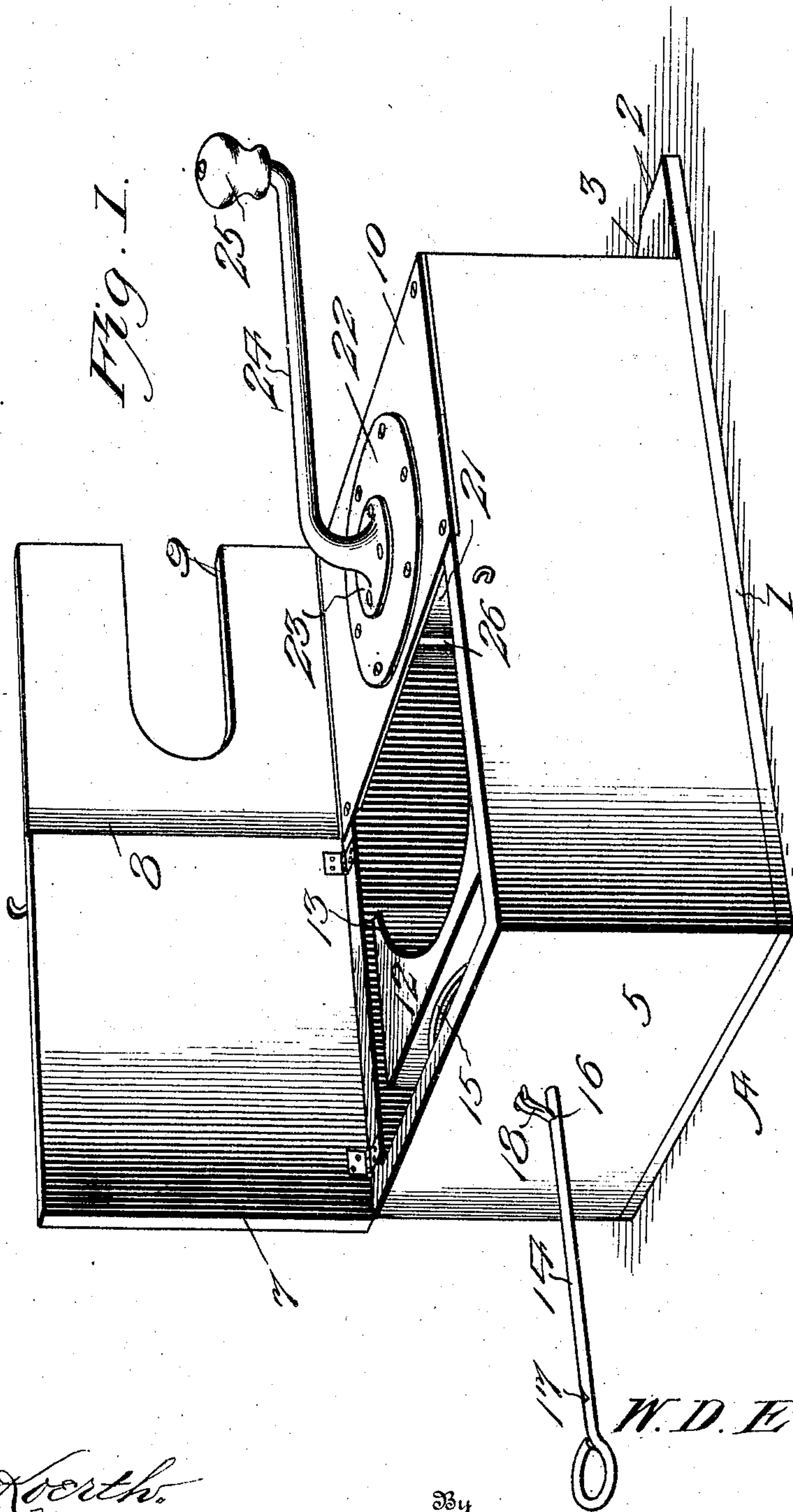
PATENTED MAR. 21, 1905.

W. D. EARL.

## VEGETABLE CUTTER.

APPLICATION FILED JUNE 22, 1904.

2 SHEETS—SHEET 1.



Witnesses

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Fig. 2.

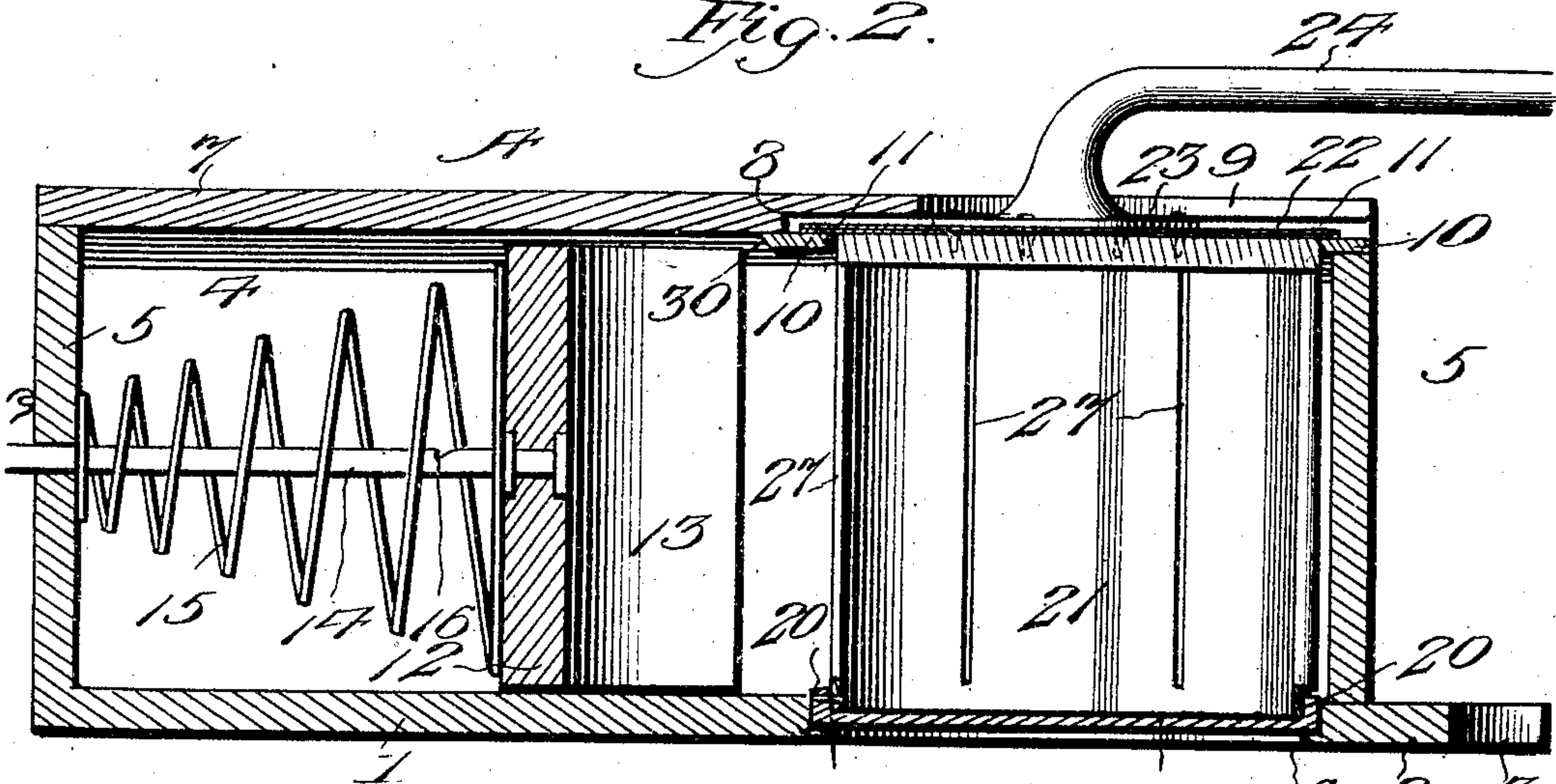


Fig. 3.

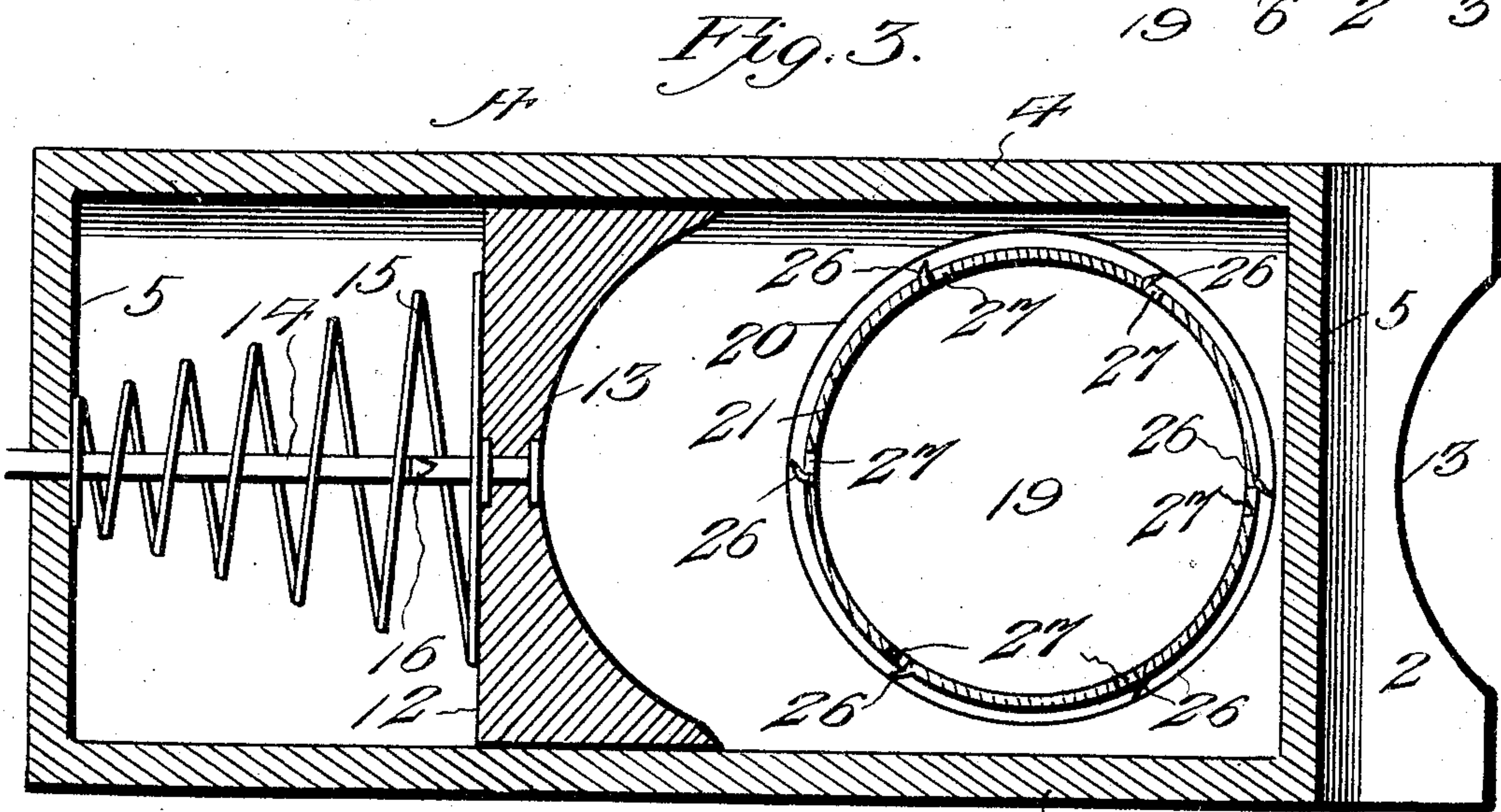


Fig. 4.

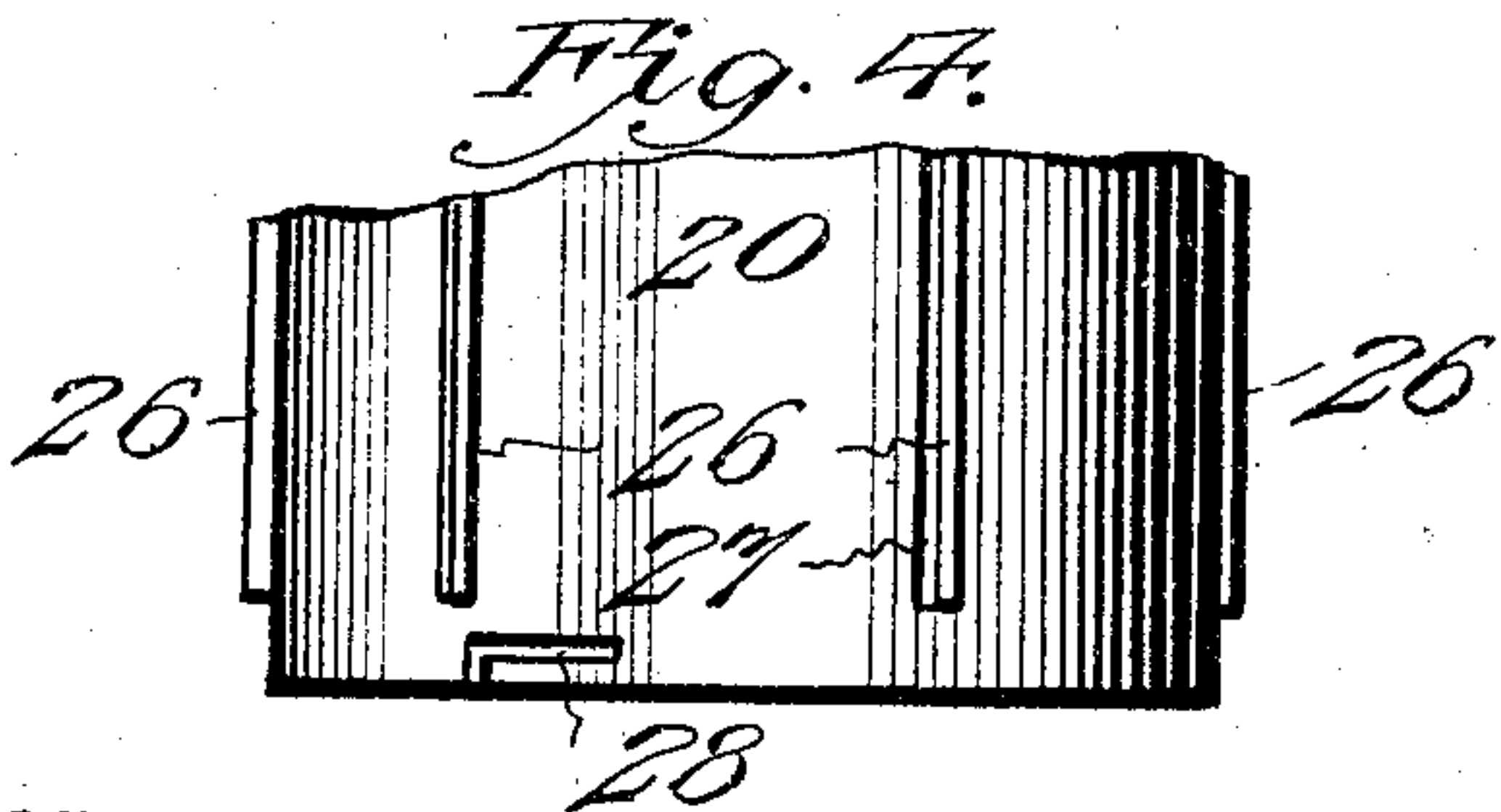


Fig. 5.



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## UNITED STATES PATENT OFFICE.

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## VEGETABLE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 785,599, dated March 21, 1905.

Application filed June 22, 1904. Serial No. 213,701.

*To all whom it may concern:*

Be it known that I, WARD D. EARL, a citizen of the United States, residing at Lead, in the county of Lawrence and State of South Dakota, have invented new and useful Improvements in Vegetable-Cutters, of which the following is a specification.

My invention relates to improvements in vegetable-cutters of the rotary type; and the object is to simplify and improve the existing art by providing a simply-constructed, efficiently-operating, and durable machine in use for the purposes intended.

The invention embodies a casing or receptacle, a positively-acting follower to push the vegetables into contact with the knives, a rotary cutting-cylinder, and means to rotate the cylinder, as will be hereinafter specified.

The invention also consists in the novel construction of parts and their assemblage and aggroupment in operative combination, as will be stated hereinafter and the alleged novelty particularly pointed out and distinctly claimed.

I have fully and clearly illustrated the improvements in the annexed drawings, to be taken as a part of this specification, and wherein—

Figure 1 is a perspective view of the complete apparatus or device, showing all the parts as in operative relation. Fig. 2 is a vertical longitudinal section through the casing or box and the follower, showing the expanding spring as having pushed the follower well forward in its movements. Fig. 3 is a horizontal section through the casing, the follower, and the cylinder, all in operative relation. Fig. 4 is a side view in elevation of a portion of the cutting-cylinder, showing the bayonet locking-slot which locks the cylinder to the bottom cap. Fig. 5 is a bottom plan view of a portion of the bottom cap, showing the locking-pin which engages with the bayonet-slot in the cylinder.

In the drawings the same parts appearing in the different figures are designated by like reference-notations.

Referring to the drawings, A designates a suitable box and receptacle of an oblong rectangular shape and of such dimensions and

capacity as will suit it for the purposes required. This box consists of a bottom 1, which extends beyond the one end of the box, as at 2, the extension being formed with a circular recess 3, so that the operator may stand closer to the box when lifting the cylinder out of the box to empty it of the cut product. The sides 4 and ends 5 are made of such length and height as may be required to adapt the box to the capacity required. In the bottom of the box at the cylinder end is formed a circular flanged opening 6, wherein and whereon the lower end of the cylinder is rev- olubly seated when in operation. To one of the sides of the box is hinged a lid or cover 7, which is rabbeted at 8 and from this point is extended in alinement with the depth of the rabbet to the end, so as to sit down on the cover-plate which sits over the cylinder portion of the box. The rabbeted portion of the lid or cover is formed with a broad longitudinal opening or slot 9, so that the lid may be turned down on the box and lifted therefrom without interfering with the cylinder-crank. On the portion of the casing occupied by the cutting-cylinder is secured a plate 10, formed with a circular opening 11, in which the cylinder rotates.

In the casing is slidably arranged a follower 12, extending vertically substantially the height of the box, as seen in the drawings, and having a concaved working face 13. To the back of the follower is secured one end of a rod 14, extending through the end piece of the box and is slidable in the aperture through which it passes. On the rod 14, between the end of the box and the back of the follower, is arranged an expansible spring 15, the spirals of which decrease in diameter from the base to the outer end, as shown, so that when the follower is drawn back and the spring is collapsed the spirals lie in coils about each other, and thus the spring occupies but little space when compressed, as indicated in Fig. 1 of the drawings. In the rod 14 are made two notches 16 17, which are engaged by a pawl 18, pivotally hung to the outer face of the end of the box. The notch 16 is engaged by the pawl when the follower is drawn back, as seen in Fig. 1 of the drawings, wherein the spring is compressed



and so remains until the pawl is released, when the spring becomes immediately active and pushes the follower forward, with the contents of the box, into engagement with the knives of the cylinder. The notch 17 is so positioned in the rod that when the follower is pushed into close proximity to the knives it will be engaged by the pawl and the further progress of the follower stopped, thus preventing contact of the follower with the knives.

On the flange 6 of the circular hole in the bottom of the box is revolubly seated a circular plate or disk 19, formed with a vertical annular flange 20, wherein is seated and secured the knife-cylinder 21, reaching vertically into the circular opening in the plate 10, with its end flush with the upper surface of said plate, and has secured to the upper end a circular plate 22, the perimetral edge of which overhangs the cylinder and lies on the plate 10, as indicated in the drawings. In the center of the plate 22 is secured a plate 23, from which rises the conical base of the actuating-crank 24, provided with a hand-knob 25. In the cylinder are positioned a suitable number of slicing-knives 26, vertically arranged, and at their bases are the usual slots 27, through which the cut material passes in the usual manner. The cylinder and the bottom 19 are detachably locked together by means of a bayonet-slot 28 in the base of the cylinder and a pin 29 in the flange 20 of the bottom. The plate 10 is beveled off, as at 30, at the front end, so that the follower will not be interrupted in its forward movement at that point.

The cylinder may be used with or without the bottom 19. If used without the bottom, a suitable receptacle is set under the opening in the bottom to receive the cut material. If the cylinder is used with the bottom in place, the material as cut falls into the cylinder, as usual, and when the supply cut is sufficient the cylinder is lifted out and the bottom taken off and the material discharged.

The use and operation of the machine may be stated as follows: The lid is first raised, as seen in Fig. 1 of the drawings. Then the follower is drawn back and secured by the pawl. The material to be cut is then arranged in the

box between the follower and the cylinder. The lid is then closed and fastened by such fastening means as may be provided. Then the pawl is disengaged. The spring presses the follower forward with the material into engagement with the knives. The crank is then revolved, communicating rotation to the cylinder, which movement brings the knives into engagement with the material and the cutting proceeds.

The machine is a safe one, owing to the feed being automatic and the knives well concealed and shielded in the box under the plate 10. The action of the machine is efficient and speedy and is especially adapted for cutting cabbage into slaw; but it may be profitably used for slicing any solid vegetable.

Having described my invention, I claim—

A vegetable-cutter comprising an oblong rectangular box, formed with a flanged circular opening in its bottom, a follower vertically disposed in the box and having a vertical concave front face, a rod secured to the back of the follower and slidably projected through the end of the box and formed with notches at determined distances, a pawl secured to the box to engage the notches of the rod and hold it at the outer and the inner limit of its movement, a conical spiral spring on the rod bearing with its larger or base spiral against the back of the follower and its apex spiral against the end of the box, a bottom cap revolubly seated in the flanged opening of the bottom of the box, a cutting-cylinder detachably locked to the bottom cap, a top plate on the box formed with a circular opening into which the upper end of the cutting-cylinder projects, a circular plate secured to the upper end of the cutting-cylinder with its perimetral edge extending over on the top plate, a crank secured to the circular plate, and cutting-knives vertically disposed in the cylinder.

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

WARD D. EARL.

Witnesses:

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