O. MOSES.

Meat Mincer.

No. 15,248. Patented July 1, 1856.

Fig. 2

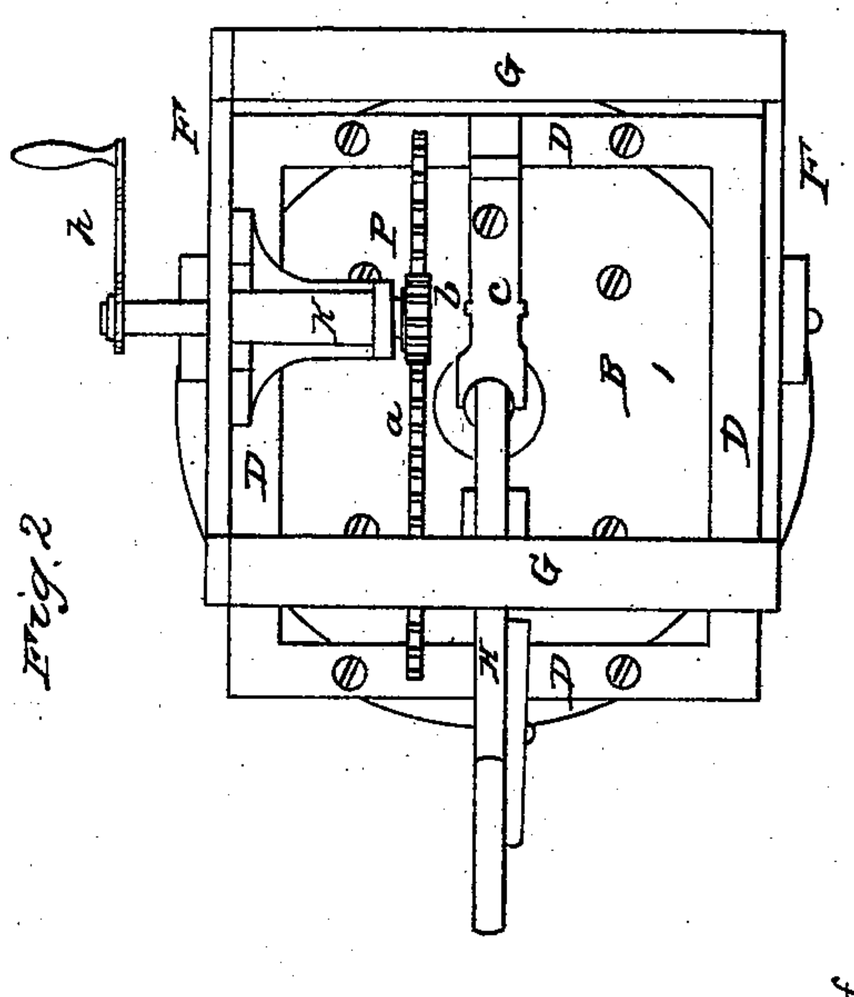


Fig. 4

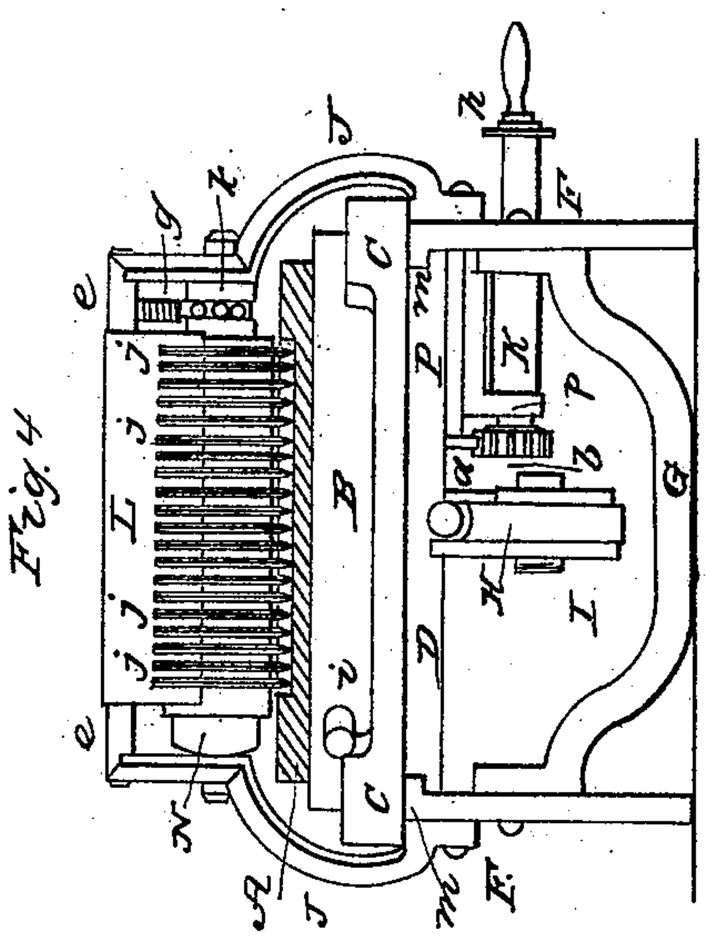


Fig. 5

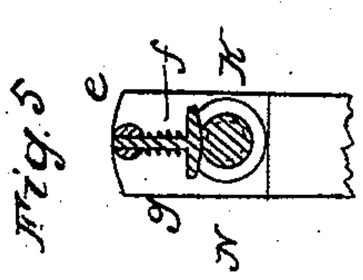


Fig. 1

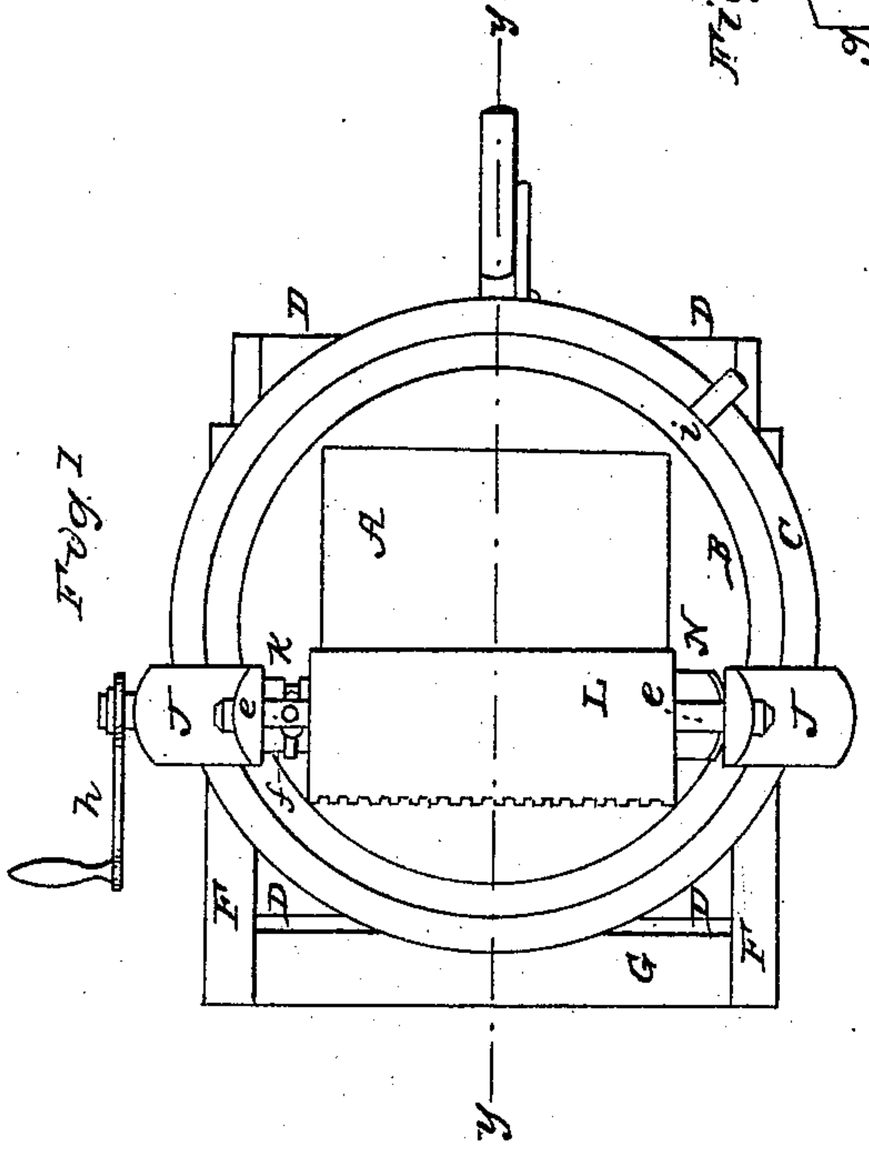
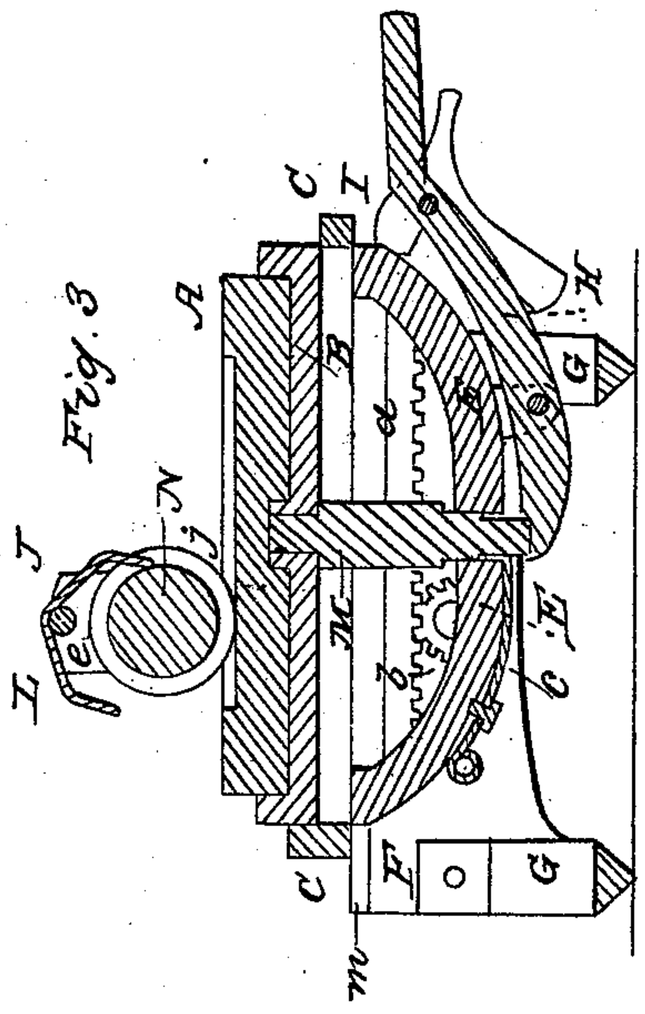


Fig. 3



UNITED STATES PATENT OFFICE.

OREN MOSES, OF MALONE, NEW YORK.

MACHINE FOR MINCING MEAT.

Specification of Letters Patent No. 15,248, dated July 1, 1856.

To all whom it may concern:

Be it known that I, OREN MOSES, of Malone, in the county of Franklin and State of New York, have invented a new and Improved Machine for Mincing Meat; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figure 1 being a top view of said machine; Fig. 2, a bottom view thereof; Fig. 3, a vertical section, in the line *y*, *y*, of Fig. 1; Fig. 4, a side elevation of said machine with the exception of the cutting-box, which is shown in section; and Fig. 5 is a representation of a portion of the machine in detail.

Similar letters indicate like parts in all the figures.

The operating parts of my meat mincing machine are supported by a frame composed of the sides F, F, and the curved connecting end pieces G, G. The said sides F, F, of the supporting frame, have flanches *m*, *m*, projecting inward from their upper edges—as shown in Fig. 4,—which flanches fit accurately into rabbets in the sides of a rectangular frame D, which is placed below them and which is retained in that position in consequence of its being secured to the ring C, that rests upon the upper surfaces of the frame sides F, F, and of their flanches *m*, *m*. The said ring C, receives a metallic cup B, which rests upon the angles of the rectangular frame D, and which receives within it the wooden cutting box A. A handle *i*, projects from the front side of the metallic cup B, into a recess in the upper edge of the ring C; which recess is of sufficient length to enable a quarter of a revolution to be imparted to said cup by moving its handle *i*, from one end of said recess to the other.

The meat is operated upon within the box A, by means of a series of disk-cutters *i*, *i*, arranged at a suitable distance from each other upon a shaft N. The journals of the shaft N, work in apertures in the curved arms J, J, which rise from the sides F, F, of the supporting frame.

A shaft M, descends from the center of the metallic cup B, and passes through an aperture in the curved support E, which descends from the ends of the rectangular frame D. A lever H, is pivoted to ears descending from the support E, and in such a position that the inner end of said lever passes under the inner end of the shaft M, and the outer end of said lever projects beyond the machine a sufficient distance to enable it to be taken hold of for the purpose of elevating or depressing the metallic cup B, and the cutting box A, for the purpose hereinafter set forth.

A reciprocating movement is imparted to the cutting box and to the parts with which it is connected, by means of the crank-shaft K, the pinion *b*, on the inner end of said shaft, and the rack-bar *a*, which is connected to the under side of the rectangular frame D. The crank shaft K, passes through an aperture in the right hand side F, of the frame of the machine, and the inner end of said shaft is received into an aperture in the inner end of an arm *p*, which is secured to the said right hand side of the frame of the machine.

A catch I, pivoted to one side of the lever H, enables the metallic cup B, and the cutting box A, to be retained in so elevated a position as to bring the bottom of the cutting box in contact with the disk cutters *i*, *i*, on the cylinder N. When the catch I, is detached from its hold upon the side of the rectangular frame D, the weight of the cup B, and of the cutting box A, will cause them to descend to their lowest position, and enable the rectangular frame D, to be run out to the right or to the left, a sufficient distance to enable the contents of the cutting box to be easily removed therefrom. Above the shaft N, of the cutting cylinder, the shaft *e*, of a reciprocating cleaning comb L, works in apertures in the curved arms J, J. The shank of the segments *f*, which is inclosed within the spring *g*, passes freely through an aperture in the said shaft *e;* and the said segment is forced downward by said spring *g*, into an annular groove *k*, near one end of the shaft N, of the cutting cylinder. The bottom of the said groove *k*, being roughened, it will be perceived that when the cutting cylinder is rotated, the teeth of the comb L, will be forced down between the edges of the disks on the ascending side of the cylinder and held in that position a sufficient length of time to remove the meat that may accumulate between said cutting disks.

The operation of my meat cutting machine, is as follows. The cutting box is elevated into the position represented in Fig. 3, and there retained by the catch I, on the

lever H; then after the said cutting box is supplied with the requisite quantity of meat to be minced, a reciprocating movement is imparted to the cutting box by turning the crank-shaft K, first in one direction until one end of said box is brought against the cutting cylinder, and then reversing the movement of said shaft and rotating it until the opposite end of said box is brought in contact with the cutting cylinder. As often as may be deemed necessary, the cutting box must be allowed to descend and its position be changed, by taking hold of the handle *i*, and imparting a quarter of a revolution to the cup B, and then be elevated again, for the purpose of causing the action of the cutting disks to be at right angles to their former movements every time that the position of the cutting box is thus changed. When the meat in the cutting box has been minced sufficiently fine, the box is allowed to descend to its lowest position, when it can be readily run forward or backward a sufficient distance to be easily removed from the machine. The narrow flanch, or bead, at the lower end of the vertical shaft M, and the spring *c*, which is secured to the under side of the bearing E, and acts against the journal of said shaft, prevents the shaft from being detached from the said bearing E, without first removing the said spring *c*, from its retaining position.

What I claim as my invention and desire to secure by Letters Patent, is—

1. The combination of the cutting box A, with the cutting cylinder and with the other parts of the machine in such a manner that the position of said box can be readily lowered, partially revolved and then elevated again, for the purpose causing the reciprocating movements of said box to so act upon the disks of the cutting cylinder as to make them cut in transverse directions within said cutting box, substantially as herein set forth.

2. I also claim the combination of the comb L, and its shaft *e*, with the shaft of the cutting cylinder in such a manner as to cause the teeth of said comb to act between the cutting disks on the rising side of the cutting cylinder, substantially as herein set forth.

The above specification of my improved meat-mincing-machine signed and witnessed this 3rd day of May 1856.

OREN MOSES.

Witnesses:
Z. C. Robbins,
Fred. Mathys.