

(No Model.)

E. BOURNE.  
Meat Cutter.

No. 235,850.

Patented Dec. 28, 1880.

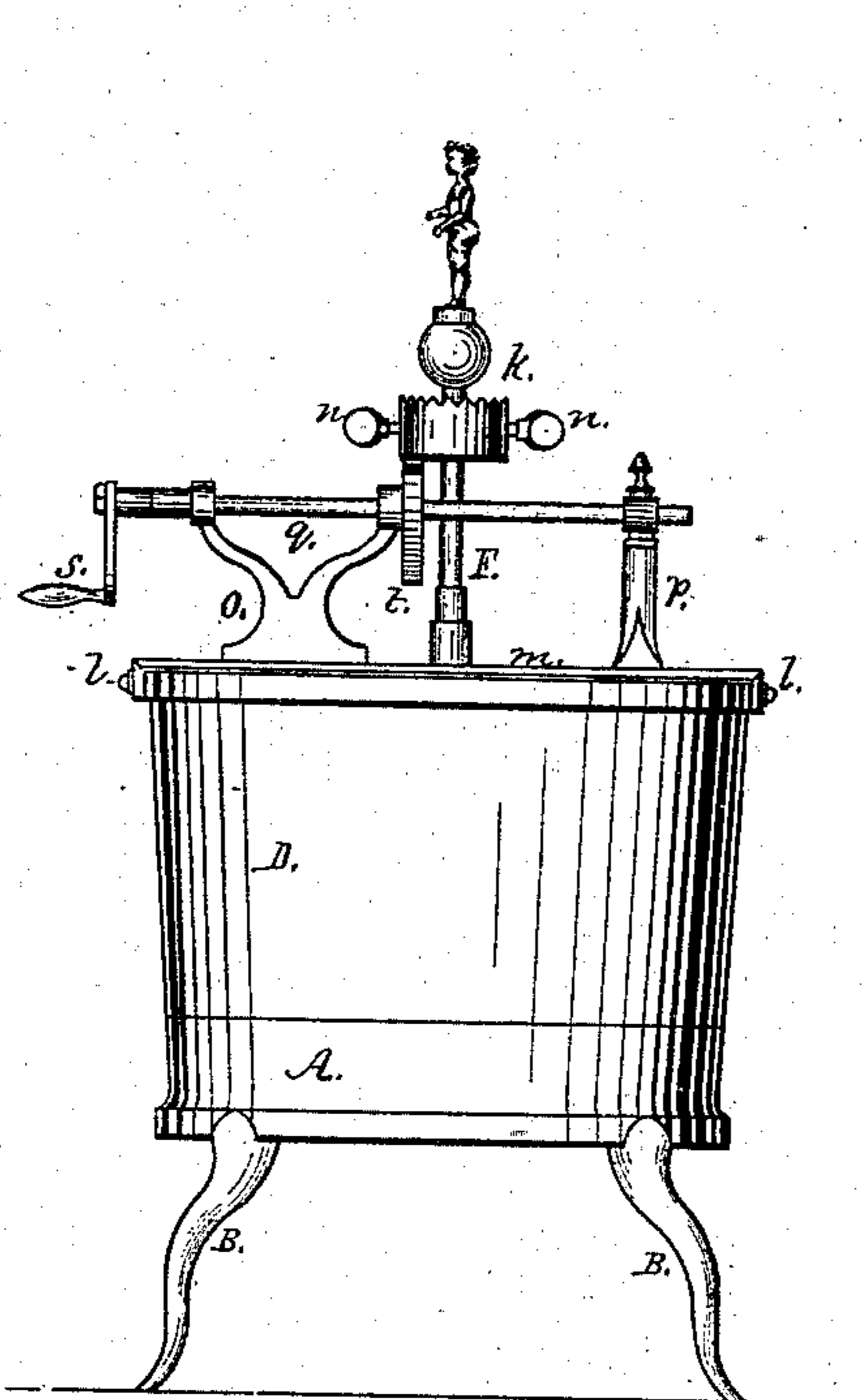


Fig. - 1.

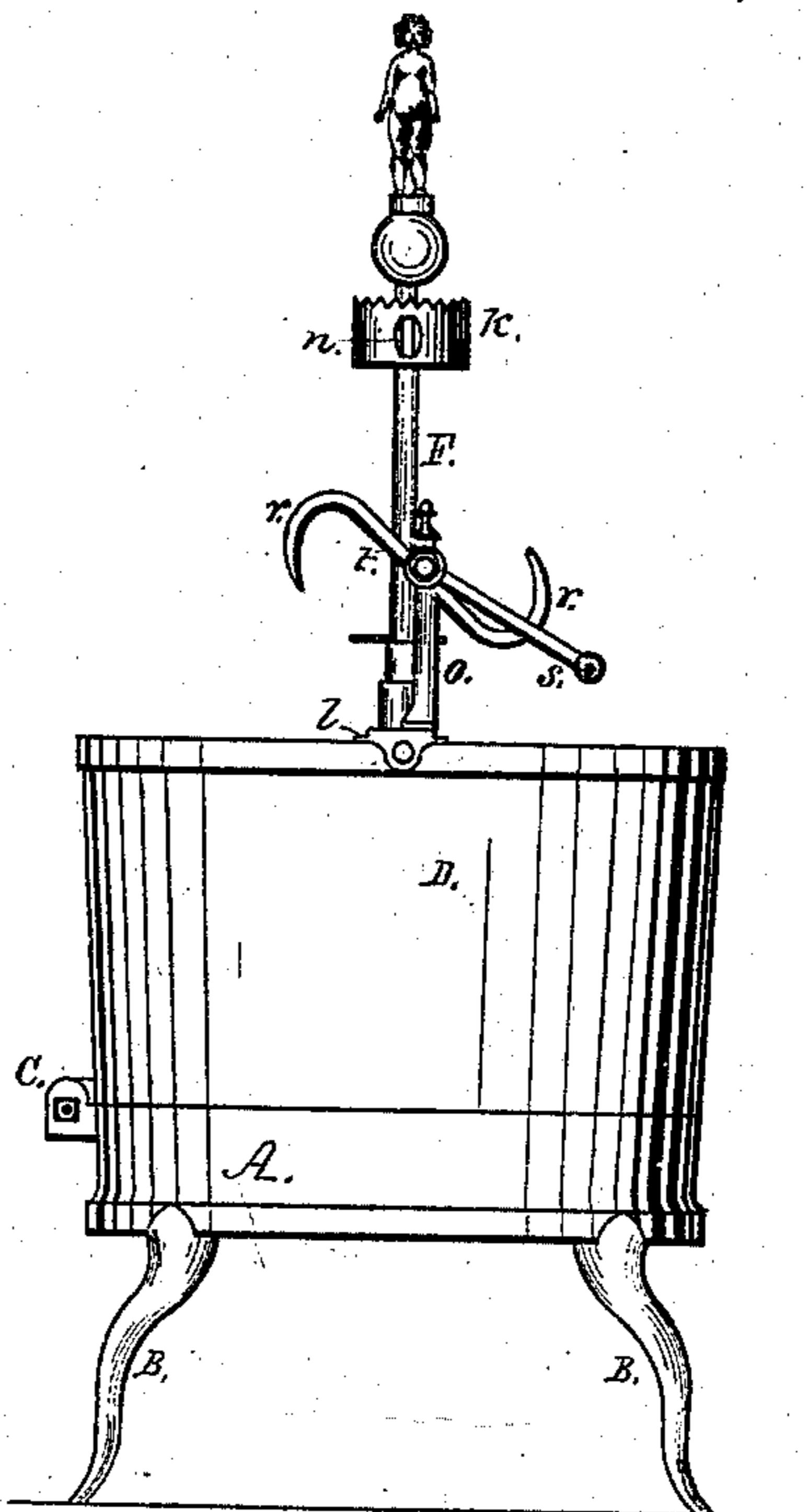


Fig. - 2.

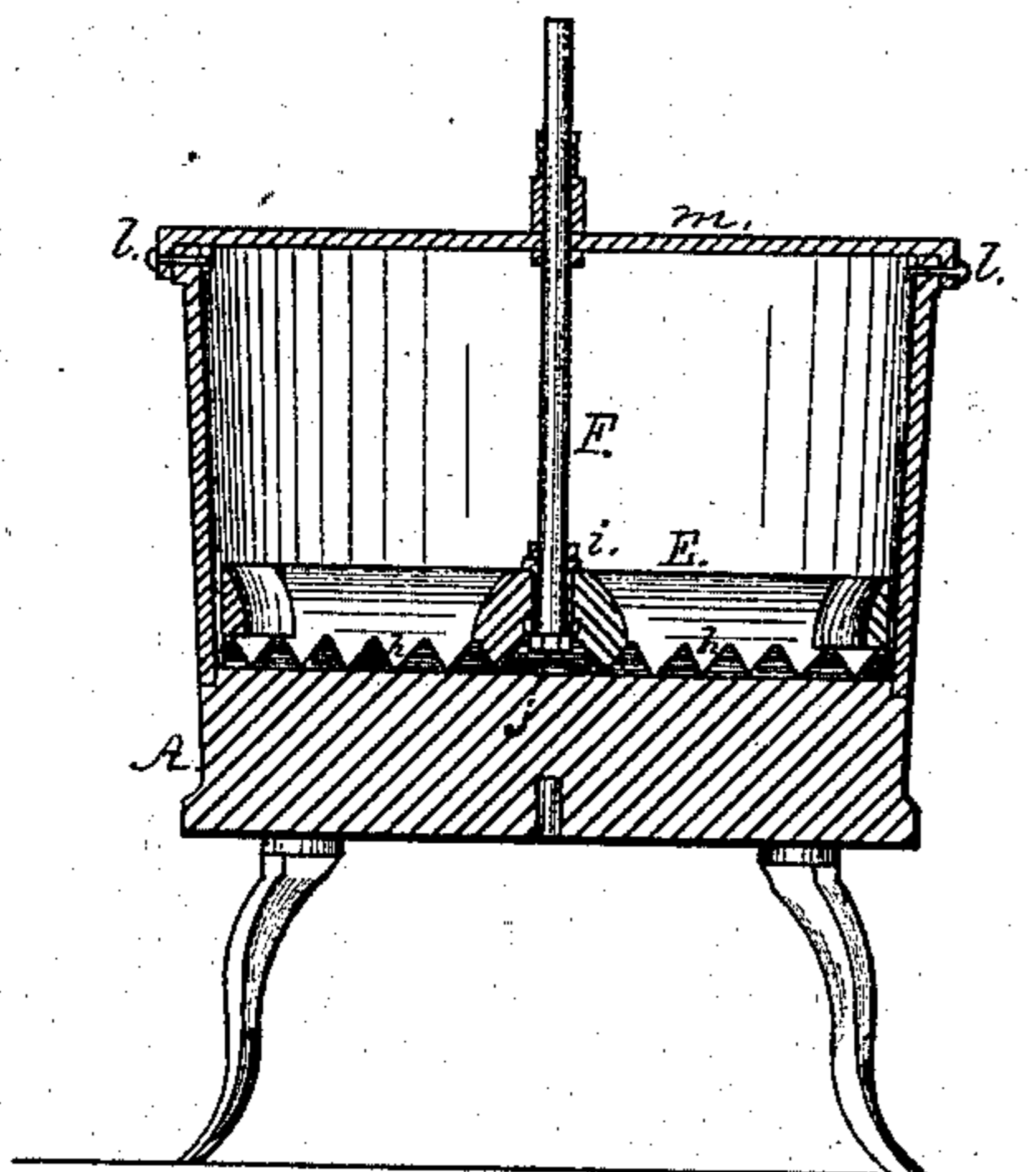


Fig. - 3.

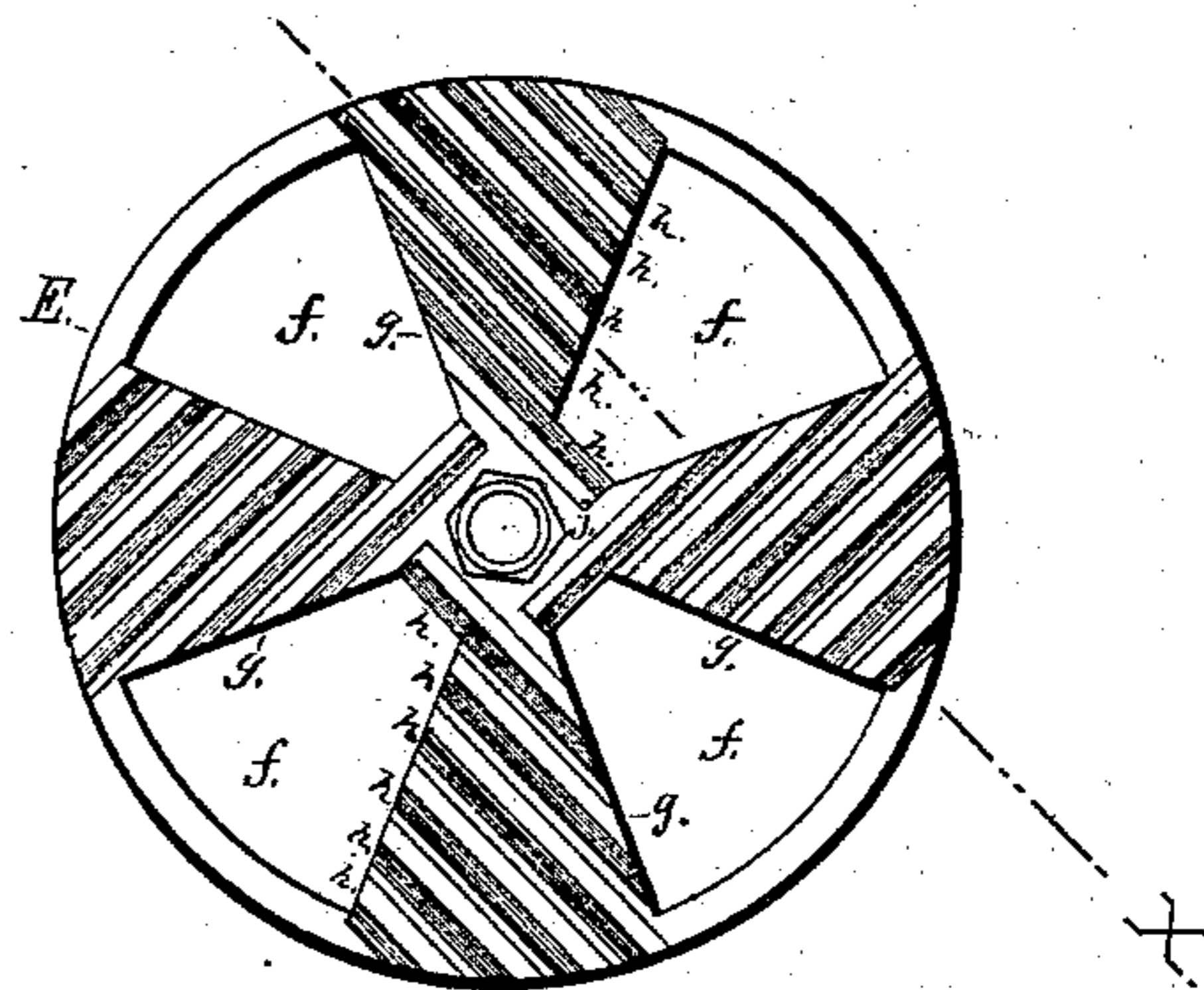


Fig. - 4.



Fig. - 5.

WITNESSES:

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## MEAT-CUTTER.

SPECIFICATION forming part of Letters Patent No. 235,850, dated December 28, 1880.

Application filed May 4, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD BOURNE, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Meat-Cutters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in meat-cutters; and it consists in a cutting-block mounted upon legs, and a hopper or case hinged to said cutting-block, and within the said hopper or case a cutting-disk having openings through it, and the cutting-face of said disk furnished with a series of cutters arranged longitudinally in an oblique angle to the axis of said cutting-disk, to which is imparted a vertical and intermittent rotating motion.

To enable others skilled in the art with which my invention is most nearly connected to make and use it, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figures 1 and 2 represent side elevations of my improvement in meat-cutters. Fig. 3 is a vertical section of the same. Fig. 4 is a face view of the cutting-disk. Fig. 5 is a section of the same at line *x* of Fig. 4.

In the accompanying drawings, A represents the cutting disk or block, which is mounted upon legs B. To this cutting-block is hinged, at C, a hopper or case, D, within which is arranged a cutting-disk, E, having openings *f* and cutting-faces *g*, on which are arranged a series of cutters, *h*, which are longitudinally arranged obliquely to the axis of said cutting-disk, as shown in Fig. 4.

To the cutting-disk E is secured, by means of screw-nuts *i* and *j*, a vertical shaft, F, which passes through the cross-piece *m*, secured at *l* to the hopper or case D. On the upper part of the vertical shaft F is arranged an adjustable lift-piece, *k*, which is held in the desired position on said shaft by means of set-screws *n*.

To the cross-piece *m* are secured the journal-bearings *o* *p* for the crank-shaft *q*, on which is

secured an S-shaped eccentric, *t*, the curved ends *r* of which act against the under side of the lift-piece *k*.

The skillful mechanic, from the foregoing description, and by reference to the accompanying drawings, will readily understand the construction of the several parts and the relation they bear to each other. I will therefore proceed to describe the operation, which is as follows:

The meat to be reduced to what is known as "sausage-meat" or "mince-meat" is cut into pieces of a pound or more in weight, so that the pieces will pass through the openings *f* of the cutting-disk E. The operator then draws up the cutting-disk, passing the piece of meat to be cut fine through the openings *f* of the disk, and when a sufficient quantity is charged on the cutting-block A the operator lowers the disk preparatory to commencing the cutting operation; or the operator may turn the hopper or case D back on its hinges C, and place the meat to be cut on the cutting-block A, and then turn the hopper or case into the position shown in Figs. 1, 2, and 3, and proceed with the operation of cutting, which is as follows: The operator, by means of the crank *s*, revolves the crank-shaft *q*, which will revolve the eccentric *t*, the curved ends *r* of which, coming in contact with the under side of the lift-piece *k*, will lift the cutting-disk, at the same time rotating it, which rotation will turn the meat by the lateral twisting action of the cutters in their upward movement. The eccentric *t* having lifted the cutting-disk E to the highest point and rotated it, the curved ends *r* will pass from under the lift-piece *k* and allow the cutting-disk E to drop with the force and speed due to its specific gravity, and thus the several parts act until the meat is cut sufficiently fine for the purpose desired. The operator then turns back the hopper or case D on its hinges C and removes the fine-cut meat. The hopper-case is then turned back to the position shown in Figs. 1, 2, and 3. The machine is then ready to receive another charge of coarse meat.

The force of the stroke of the cutting-disk

and its cutters will depend upon its weight. Therefore it should be made heavy, but not so heavy as to cause the machine to be laborious in the working of it.

5 The intermittent rotary motion of the cutting-disk is an important feature in the machine, for it slowly and evenly turns the meat, and this turning of the meat, combined with the oblique position of the cutters with relation to the axis of the cutting-disk and the  
10 constantly - changing position of the cutters, subjects the meat on the block A to a thorough cutting process.

Having thus described my improvement,  
15 what I claim as of my invention is—

1. A meat-cutter consisting of a cutting-

block with a hopper or case hinged thereto and a cutting-disk furnished with openings and cutters arranged obliquely to the axis of said disk, to which is imparted a vertical and in- 20  
termittent rotary motion, substantially as herein described, and for the purpose set forth.

2. In a meat-cutter, the cutting-block A and hopper or case D, in combination with the cutting-disk E, shaft F, furnished with an adjust- 25  
able lift-piece, *k*, and the operating mechanism, substantially as herein described, and for the purpose set forth.

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Witnesses:

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