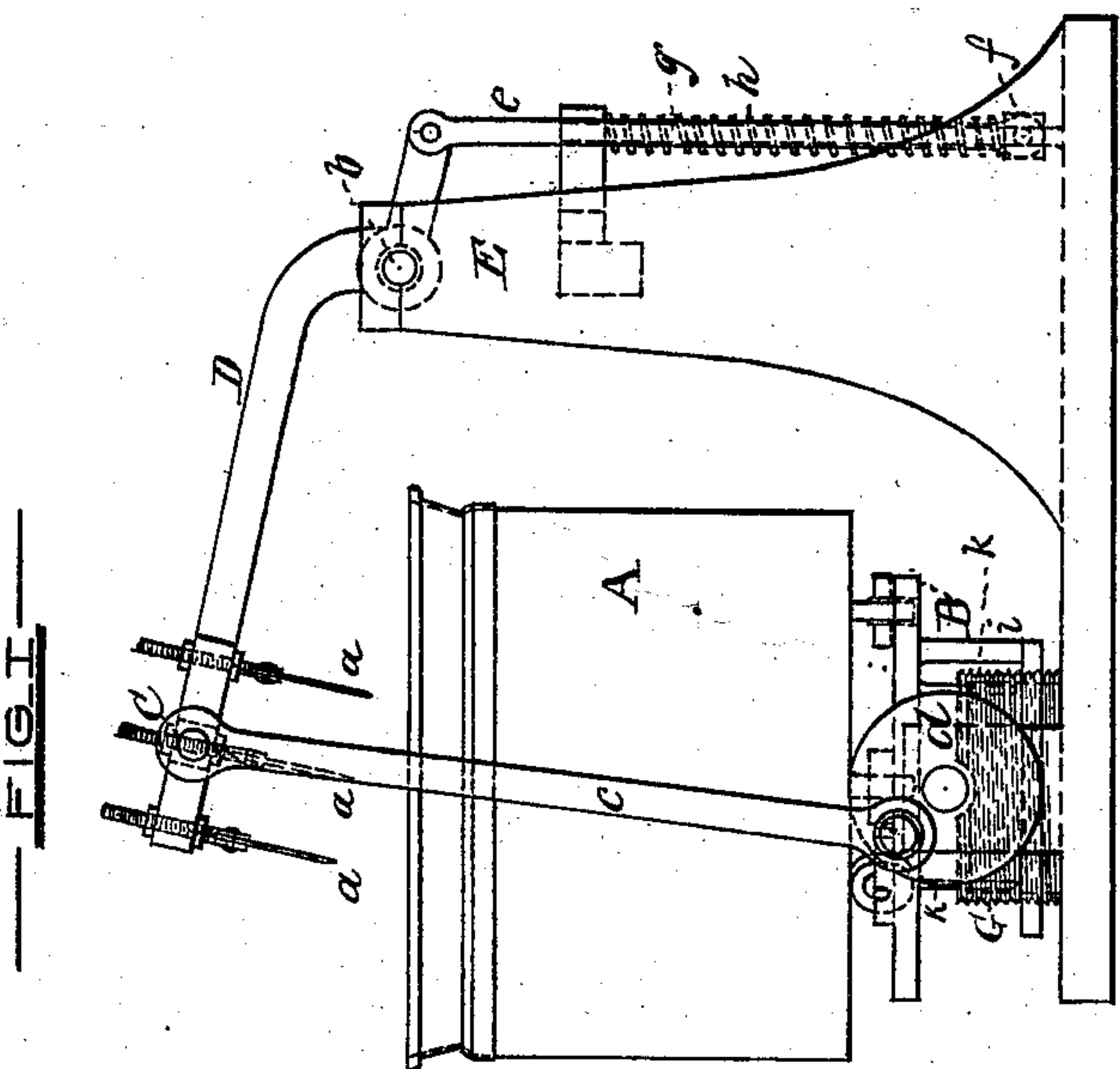
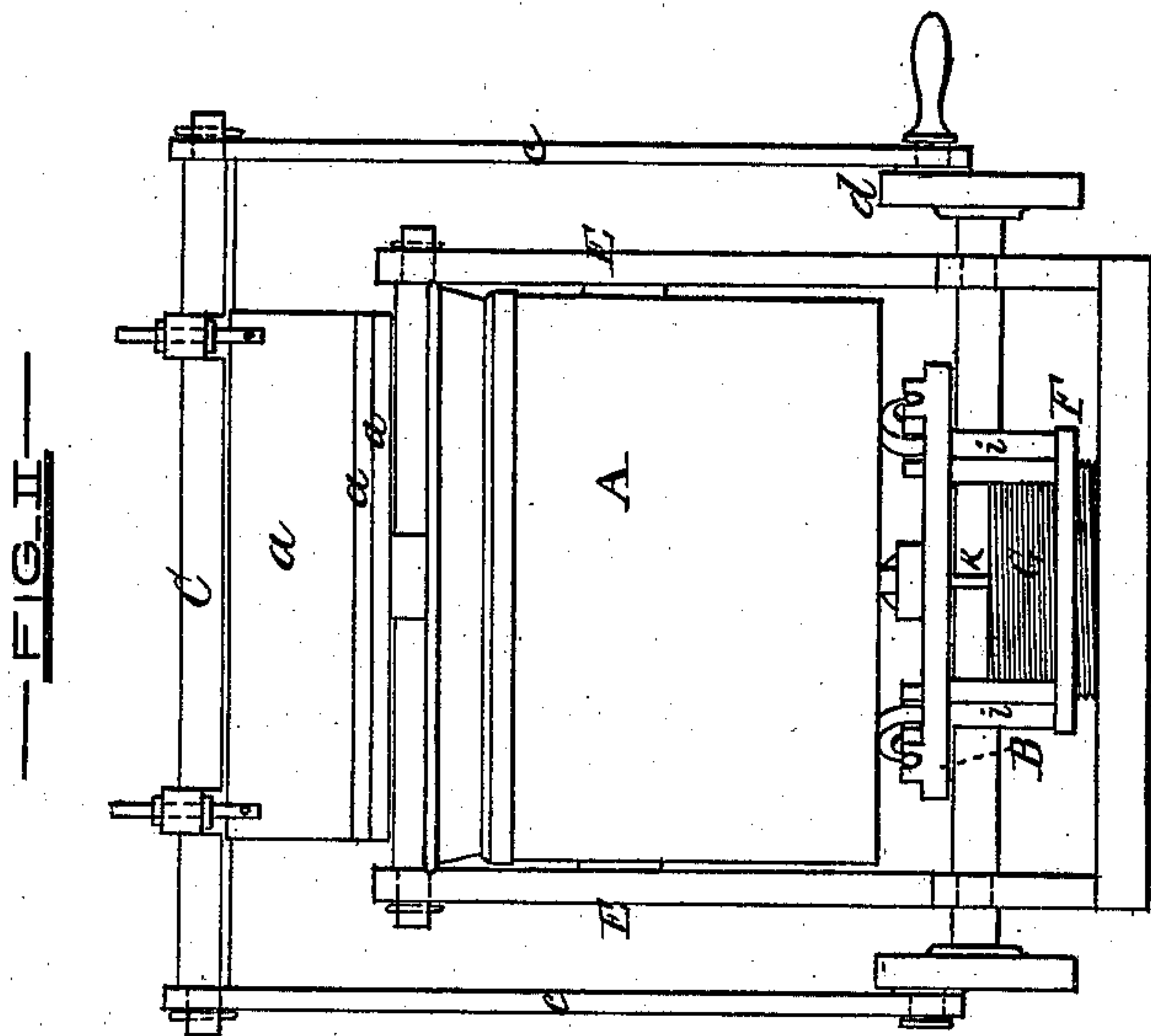


J. B. ADT.
MEAT-CHOPPER.

No. 174,176.

Patented Feb. 29, 1876.



WITNESSES.

H. A. Daniels

T. C. Smith

INVENTOR.

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UNITED STATES PATENT OFFICE.

JOHN B. ADT, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN MEAT-CHOPPERS.

Specification forming part of Letters Patent No. **174,176**, dated February 29, 1876; application filed November 3, 1875.

To all whom it may concern:

Be it known that I, JOHN B. ADT, of the city of Baltimore and State of Maryland, have invented certain new and useful Improvements in Meat-Choppers, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

In the machine of which my invention forms a part the mechanism for operating the knives consists of a cross-head, to which the said knives are secured, said cross-head being operated by means of rods and cranks, and guided by a vibratory counterbalanced lever, fastened rigidly thereto and pivoted to the frame.

The relation of the operating or chopping parts is such that the meat is struck with a dead blow, which gives the machine the greatest efficiency. The chopping-table is raised and revolved as hereinafter described.

In the further description of my invention which follows, due reference must be had to the accompanying drawing, forming a part of this specification, and in which—

Figure 1 is a side view of a meat-chopper embodying my improvements, and Fig. 2 an end view of the same.

Similar letters of reference indicate similar parts of the invention in all the views.

A is the chopping-block, resting upon suitable rollers on the table B. The block is guided in the revoluble movement to which it is subjected while in use by means of a pin projecting from the lower end thereof, and resting within an aperture in the center of the table B.

The revoluble movement before alluded to is obtained through the medium of feed-gear, which, as it forms no part of the present invention, is not shown or described.

The chopping-knives *a*, three of which are, preferably, used, are secured to the cross-head C, which is rigidly attached to the vibrating lever D, pivoted to the frame E at *b*. A reciprocating vibratory motion of the cross-

head C is obtained by means of the connecting-rods *c*, which connect the ends of the said cross-head with crank *d* or equivalent devices driven by steam or hand power.

The weight of the cross-head, knives *a*, and other attachments is counterbalanced by means of rods *e*, which attach the short arm of the lever D to a cross-bar, *f*, moving vertically upon a rod, *g*, the said cross-bar compressing a spring, *h*, in its upward motion. The force of the spring being slightly in excess of the weight of the cross-head and attachments, its action also tends to retain the same portion of the eyes in the connecting-rods in contact with the journals of the cross-head and crank-pins at all times, thereby preventing the noise usually made by machines in which the parts thereof have a rapid reciprocating motion.

The vertical adjustment of the chopping-block before alluded to is accomplished by means of the following-described mechanism, in combination with the plate B aforesaid: The plate B is provided with projections *i*, which rest upon a threaded flange, F, fitted to turn upon the threaded stand or base G, secured permanently to the base-plate of the machine.

Vertical motion of the plate B as the flange F is turned in the setting of the block is obtained by means of rods *k*, which extend from the lower side of the plate, and enter apertures in the face of the stand G. In turning the flange F to elevate or depress the block A, a common bar is inserted in holes in the edge of the flange.

The principal advantages of a meat-chopper constructed in accordance with my invention consist in that the number of wearing-parts is reduced, and their liability to disarrangement lessened; and that the various parts used in the operation of the knives offer little obstruction to the manipulation of the meat by the operator in charge of the machine.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In combination with the block A, the vi-

brating arm D, cross-head C, and knives *a*, rigidly connected thereto, and operated by side rods *c*, attached to the cross-head centrally of the series of knives, and driven by cranks or equivalent devices, the axis of which is in the central perpendicular of the block A, substantially as specified.

In testimony whereof I have hereunto subscribed my name this 30th day of October, A. D. 1875.

JOHN B. ADT.

Witnesses:

WM. T. HOWARD,

WM. W. TOWSON.