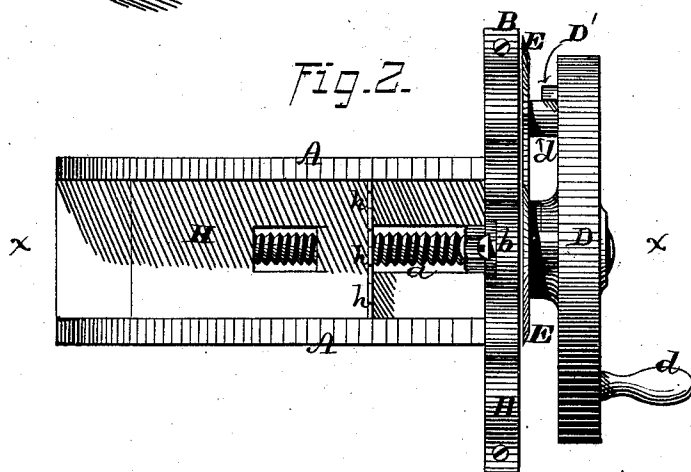
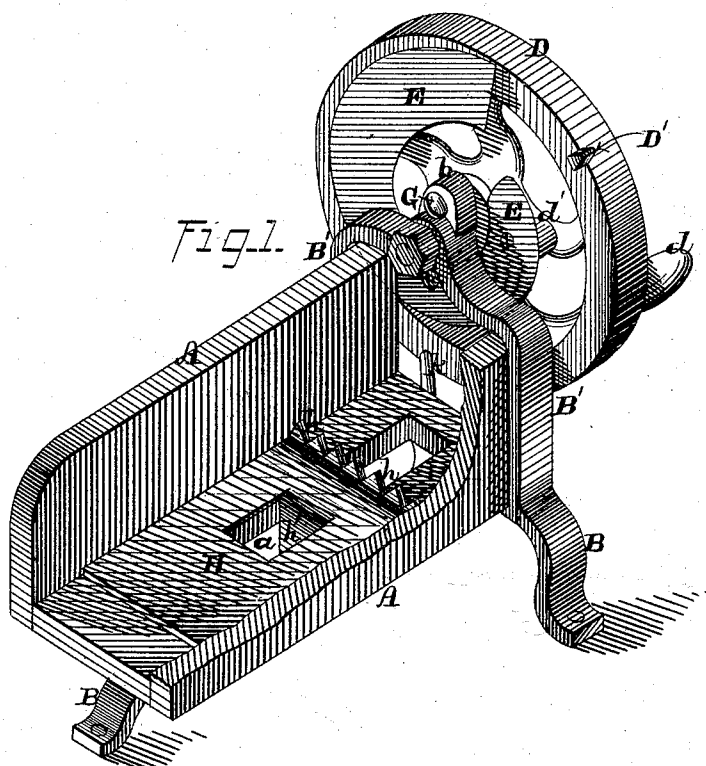


G. L. & J. B. CHADBORN.
MEAT-CUTTER.

No. 170,053.

Patented Nov. 16, 1875.



WITNESSES=
Jas. Hutchinson
John R. Young

INVENTOR.
G. L. and J. B. Chadborn, by
Prindle and Co. their Attys

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Fig. 3.

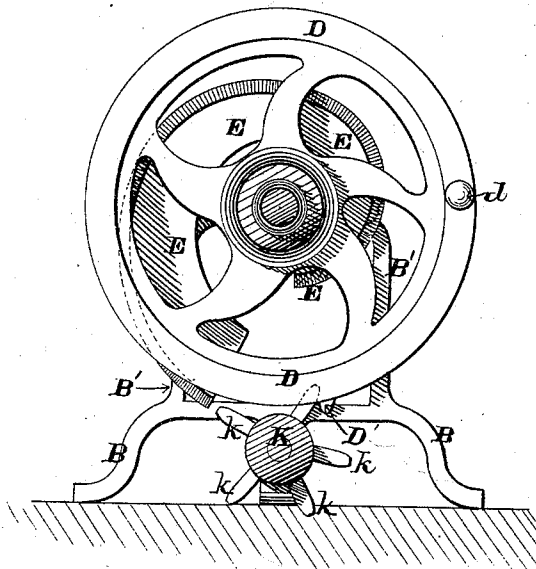
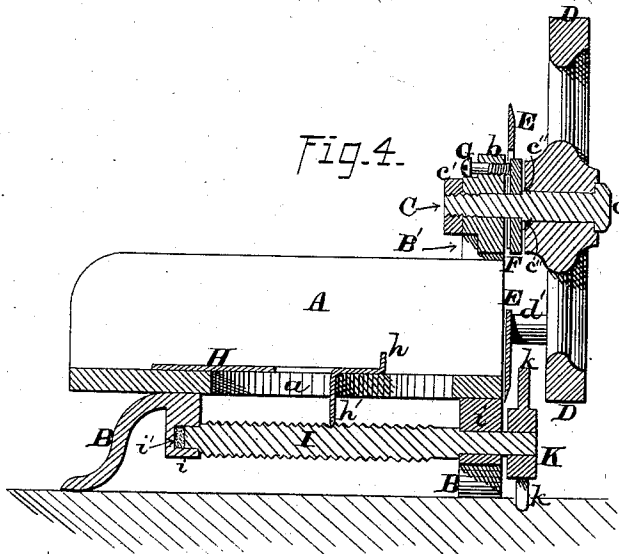


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE L. CHADBORN AND JOHN B. CHADBORN, OF NEWBURG, N. Y.

IMPROVEMENT IN MEAT-CUTTERS.

Specification forming part of Letters Patent No. **170,053**, dated November 16, 1875; application filed September 9, 1875.

To all whom it may concern:

Be it known that we, GEORGE L. CHADBORN and JOHN B. CHADBORN, of Newburg, in the county of Orange and in the State of New York, have invented certain new and useful Improvements in Meat-Cutters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of our improved device. Fig. 2 is a plan view of the upper side of the same. Fig. 3 is an elevation of its front end, and Fig. 4 is a vertical longitudinal section upon line *xx* of Figs. 2 and 3.

Letters of like name and kind refer to like parts in each of the figures.

The design of our invention is to increase the efficiency and ease of operation of a meat-cutter; and to this end it consists principally in the means employed for adjusting the cutter toward or from the end of the cutting-box, substantially as and for the purpose hereinafter shown. It consists, further, in the peculiar construction of the false or movable bottom, substantially as and for the purpose hereinafter set forth. It consists, further, in the means employed for operating the movable bottom, substantially as and for the purpose hereinafter shown and described. It consists, finally, in the means employed for preventing too free motion of the feed-screw, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents a box, which has parallel vertical sides, is open at its upper side and ends, and is supported upon or by means of suitable legs B and B, that are placed at its ends. From the front legs B and B extend upward two standards, B' and B', which inclose the edge of the front end of the box A, and above said box extend inward and are united. At the upper end of the united standards B' and B' is formed a bearing, B'', for and within which is loosely fitted a stud, C, that upon its outer end is provided with a head, *c*, while upon its inner threaded end, which projects through said bearing, is placed a nut, *c'*. Upon the stud C, between its head *c* and the bearing B'', is journaled a balance-wheel, D, which, at its outer side is provided with a handle, *d*, and upon its inner side has

three or more horizontally-projecting studs, *d'* and *d'*, to which are attached a knife or cutter, E, that vertically is flat, while in side elevation said cutter has a scroll shape, with the smallest portion of its coil near the center of said wheel. The face of the cutter E, adjacent to the end of the cutter-box, is plane, while upon its outer face is formed the necessary bevel for giving to its edge the requisite sharpness to enable the same to perform the desired office. It is intended that the cutter E shall pass as near to the metal-shod end of the box A as is practicable without injury, and in order to enable said cutter to be so adjusted the following-described mechanism is employed: A loose collar, F, is placed upon the stud C, between the hub of the balance-wheel D and the contiguous end of the bearing B'', and inside of the inner end of the cutter E, where its outer side rests against a shoulder, *c''*, that is formed by reducing the inner portion of said stud. Three set-screws, G and G, pass horizontally through suitable lugs *b* and *b*, that are formed at equidistant points around said bearing B'', and have their points bear upon the inner face of said collar. The office performed by the set-screws G and G is to limit the motion of the balance-wheel D and cutter E toward the cutting-box, while by use of the nut *c'* said parts can be drawn in such direction as far as permitted by said set-screws, so that by slackening the latter, and turning up upon said nut, said cutter can be caused to approach said box end with any degree of closeness. Within the bottom of the box A is placed a false bottom or slide, H, which loosely fills the same laterally, and at its forward end is provided with a series of vertical spurs, *h* and *h*. Near the forward end of the loose bottom H, at its transverse center, is provided a vertical arm, *h'*, that extends downward through a longitudinal slot, *a*, that is formed in the bottom of the box A, and at its lower end corresponds to and fits over the upper side of a screw, I, which screw extends horizontally and longitudinally beneath said box, and is journaled within suitable bearings *i* and *i*. The weight of the false bottom H causes its arm *h'* to remain in engagement with the screw I, so that by the rotation of the latter in a forward direction said bottom will be

correspondingly moved. Motion is imparted to the screw I by means of a star or sprocket wheel, K, which is attached to its forward end, and a lug, D', that is secured to or upon the inner face of the balance-wheel D, and at each revolution of the latter engages with and moves forward one tooth or spur, *k*, of said wheel K. Within the rear bearing *i* of the feed-screw I is placed a rubber or other spring, *i'*, which bears against the end of the journal of said screw, and prevents the same from moving forward with too much freedom.

The device is now complete, and operates as follows: The piece of meat to be cut is placed over and pressed down upon the spurs of the movable bottom, and said bottom raised from engagement with the feed-screw, and moved forward until said meat is in contact with the inner face of the cutter, after which, by rotating the balance-wheel, said cutter at every revolution will remove a slice from said meat as the latter is fed forward each time by the intermittent partial revolution of said screw. From the peculiar shape of the cutter it will be seen that a drawing cut is produced at its point of contact with the meat, the edge of said cutter being moved across the same, and moved downward at the same time, the operation being precisely similar in effect to that of a knife in the hands of a skilled carver.

When run rapidly the balance-wheel strikes the star-wheel with such force that if it were not for the spring place within the rear bearing of the feed-screw said screw would revolve with such freedom as to cause said star-wheel to be moved by its own momentum beyond the point where said balance-wheel ceased its engagement therewith.

Having thus fully set forth the nature and merits of our invention, what we claim as new is—

1. In combination with the pivotal bearing-pin C, made longitudinally adjustable within the lug B', and with the washer F, surrounding said pin between its shoulder *c* and said lug, the nut *c'*, arranged to draw said bearing-pin inward, and the set-screws G and G, arranged to press said washer and pin outward, substantially as and for the purpose shown.

2. The false or movable bottom H, fitted loosely to, and moved longitudinally within, the box A, and provided at its end with the spurs *h* and *h*, substantially as and for the purpose set forth.

3. In combination with the false or movable bottom H, provided with the downward-extending arm *h'*, the screw I, journaled beneath the box A, and provided with the star-wheel K, and the lug D', attached to the balance-wheel, and engaging with said star-wheel, substantially as and for the purpose shown and described.

4. In combination with the screw I and its bearing *i*, the spring *i'*, placed within the latter, and bearing against the end of said screw, substantially as and for the purpose specified.

In testimony that we claim the foregoing we have hereunto set our hands this 6th day of September, 1875.

GEO. L. CHADBORN.
JOHN B. CHADBORN.

Witnesses:

SEWARD N. ROUND,
GILBERT G. CARPENTER.