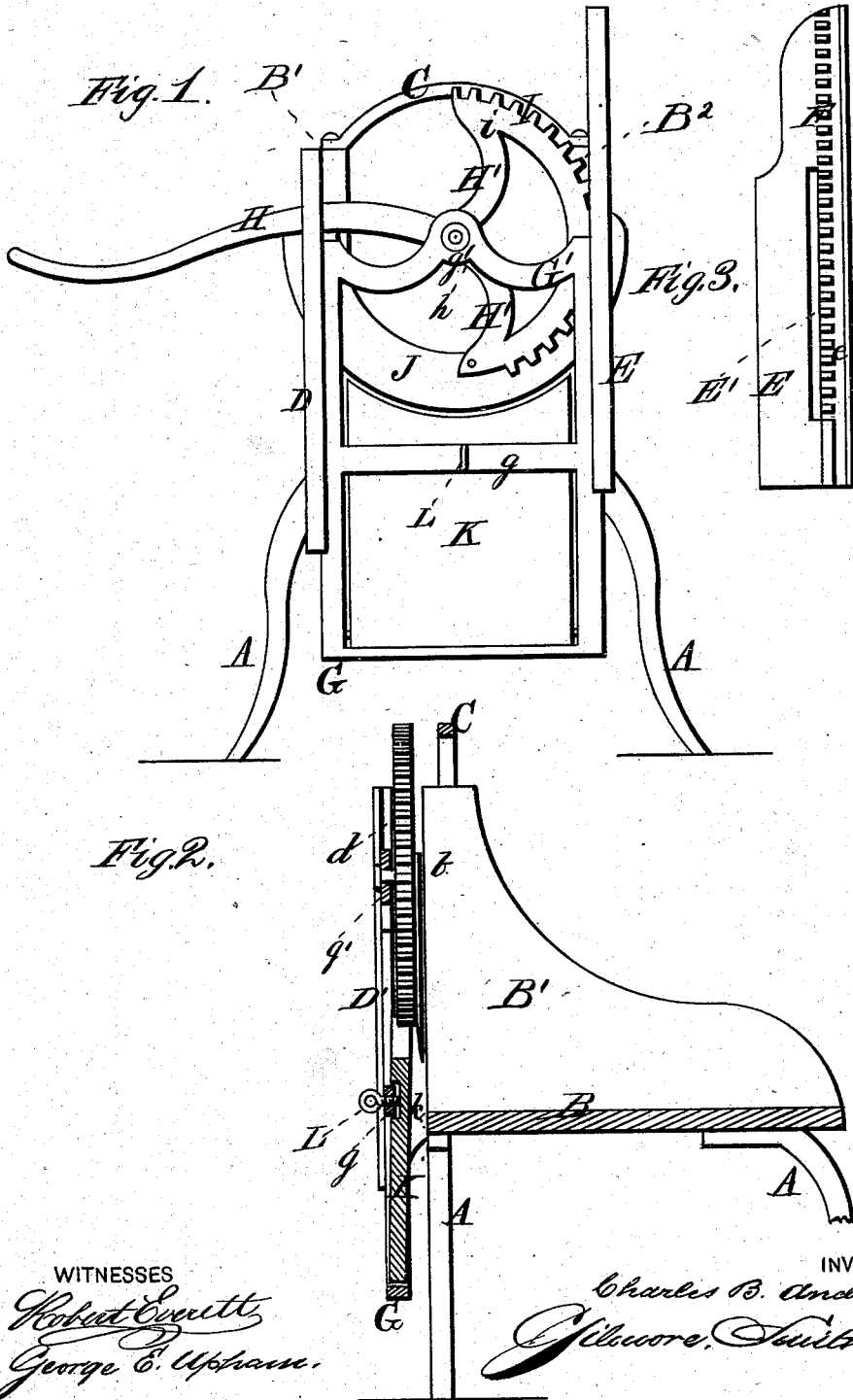


C. B. ANDREWS.
MEAT-CUTTER.

No. 186,515.

Patented Jan. 23. 1877.



WITNESSES
Robert Coville
George E. Upham

INVENTOR,
Charles B. Andrews
Jillmore, Smith & Co.

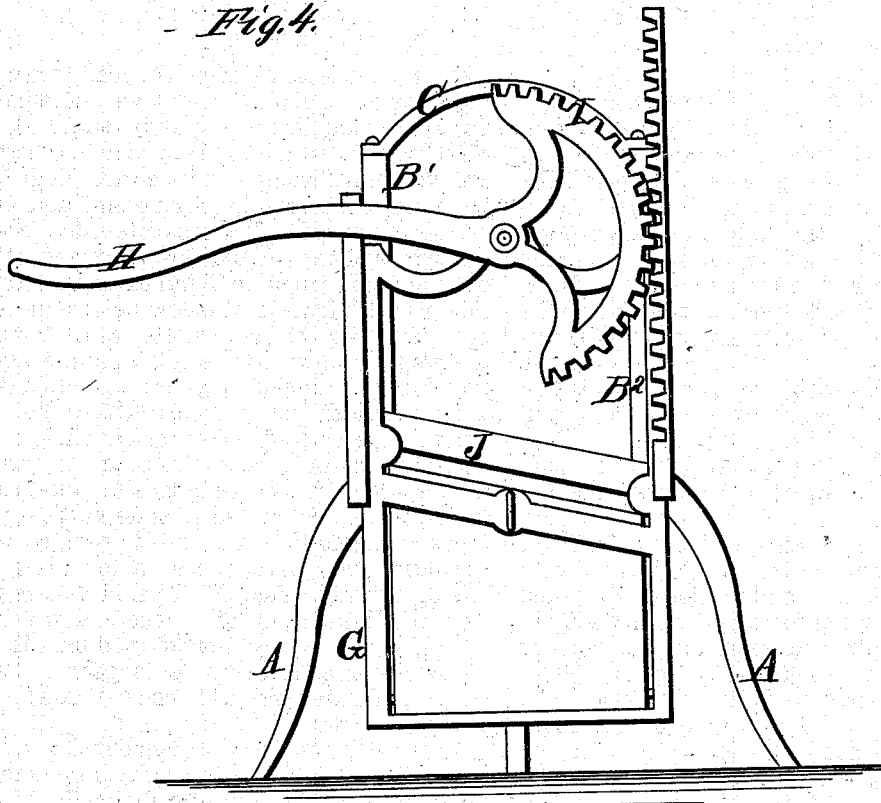
ATTORNEYS.

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Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES B. ANDREWS, OF LEBANON, PENNSYLVANIA, ASSIGNOR OF PART OF HIS RIGHT TO SAMUEL HAUCK, JR., AND ALFRED B. HAUCK, OF SAME PLACE.

IMPROVEMENT IN MEAT-CUTTERS.

Specification forming part of Letters Patent No. 186,515, dated January 23, 1877; application filed July 29, 1876.

To all whom it may concern:

Be it known that I, CHARLES B. ANDREWS, of Lebanon, in the county of Lebanon and State of Pennsylvania, have invented a new and valuable Improvement in Meat Slicers or Cutters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front elevation of my meat-cutter, and Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is a detail view thereof. Fig. 4 is a front view of a modification of my meat-cutter.

This invention relates to meat-cutters for slicing or chipping dried beef, sausages, &c.; and it consists in the combination of a pivoted lever, carrying a segmental gear, with a fixed rack meshing into said gear, and with a knife or cutting-blade connected rigidly to said lever, either directly or indirectly; also, in a sash-frame and fixed guide-flanges for regulating the movements of said segmental gear-lever and knife, and affording a pivot for the same; also, in a loose panel or front piece, in combination with an adjusting-screw, for regulating the thickness of the chips or slices cut off; and, finally, in auxiliary devices, hereinafter particularly set forth.

In the accompanying drawings, A A designate the supporting legs or standards of my meat-cutter, and B the bottom piece of a wooden box or trough secured thereon. To bottom piece B are secured upright sides B¹ B², each of which is provided in front with upward extension *b*. As the front and back of said box are left open, the space between sides B¹ B² constitutes a passage or channel, through which the meat is passed to the cutting apparatus. C designates an arched metal brace-piece, extending across from B¹ to B².

To the front part of side piece B¹ I secure an upright metal plate, D, which extends below bottom piece B, and in front of side

piece B¹. It is also slotted vertically from the top to allow the play of a lever, hereinafter described, thus leaving a partly-detached, but rigid, vertical standard, D', which is centrally grooved at *d* throughout its entire length, so as to constitute a guide for a sash-frame hereinafter described. The opposite side piece B² has attached to it a plate, E, arranged somewhat similarly to plate D, but extending above side piece B², instead of below bottom piece B. Said plate E is vertically slotted at E', to allow the play of a part of the cutting-knife, and is grooved or channeled at *e*, (corresponding to *d*,) to form a guide for the sash-frame; but the inner flange of said groove or channel is cut away at regular intervals, so as to form a toothed rack, F. G designates a metal sash-frame, which is adapted to slide vertically in grooves or channels *d e*, and is provided with a middle cross-plate, *g*, and a top plate, G', having a central disk, *g'*. To said disk is pivoted the inner end of a lever, H, which is rigidly connected, by short curved bars H' H', with a semicircular or segmental gear, I. Parts H, H', and I are preferably constructed in one piece.

To lever H at *h*, and to segment I at *i*, I attach a semicircular knife or cutting-blade, J, which chips off the projecting ends of the meat as it is fed outward over bottom piece B.

The machine is operated by raising lever H, which allows the meat to be fed forward under the knife, and then depressing said lever, which, by means of the toothed rack and segmental gear, causes said knife to have a compound downward and rotary motion, cutting the fiber gradually and with the minimum resistance. The thickness of the slices cut-off is gaged by a loose panel, K, which is set into sash-frame G, and is protected from displacement by cross-plate *g*, and the front of bottom piece B. The space between said plate and said bottom piece is somewhat greater than the thickness of said panel, as shown at *k*, Fig. 2, and said panel is adjusted back and forward in said space by a thumb-screw, L, which works through cross-plate *g* of sash G.

Fig. 4 shows a modification of my device, in

which the knife or cutting-blade J is straight-edged and oblique, and is attached to the top of sash G, instead of to lever H and segment I, so that said knife cuts upward instead of downward. The other parts of the apparatus are constructed and arranged substantially as in the other figures.

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

1. In a meat-cutting apparatus, the combination of a fixed rack and guides with a vertically-sliding sash, a lever pivoted thereon, and carrying a segmental gear engaging with said rack, and a knife operated by said lever, substantially as and for the purpose set forth.

2. The combination of a lever, H, segmental gear I, semicircular knife J, and rack F, substantially as and for the purpose set forth.

3. The combination of an operating-lever,

having a vertically-movable pivot, a segmental gear attached to said lever, a knife operated thereby, and a fixed rack, substantially as and for the purpose set forth.

4. The combination of fine-slotted plate E, having rack F and channel *e*, with segmental gear I, sash G, and semicircular knife J, substantially as and for the purpose set forth.

5. The combination of plates having vertical guide-grooves *d* and *e* with sash C, rack F, pivoted lever H, segment I, and knife J, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES B. ANDREWS.

Witnesses:

L. F. HOUCK,
BASSLER BOYER.