(No Model.)

R. HÜBNER.

Meat Cutter.

No. 234,478. Patented Nov. 16, 1880.

Fig: 1.

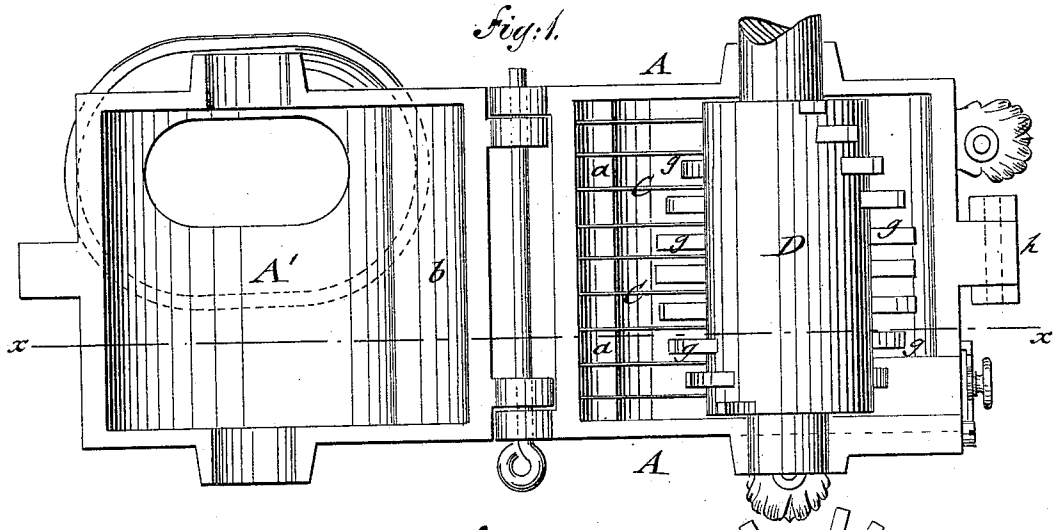


Fig: 2.

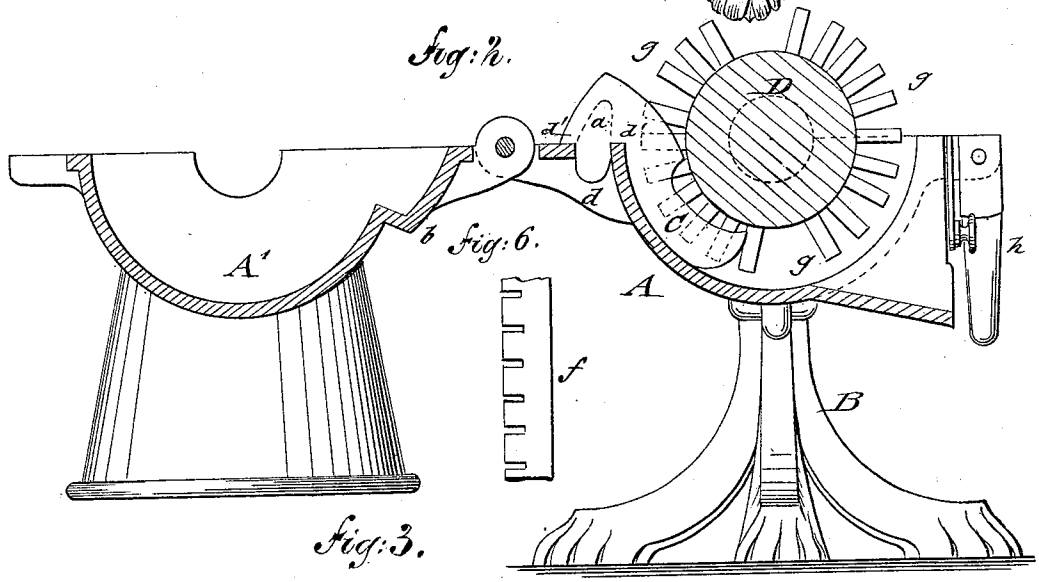


Fig: 6.

Fig: 3.

Fig: 4.

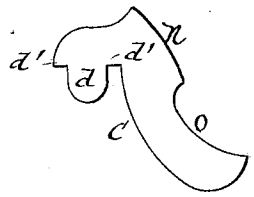
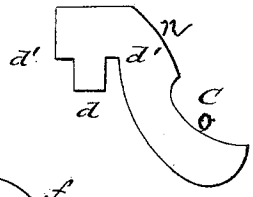
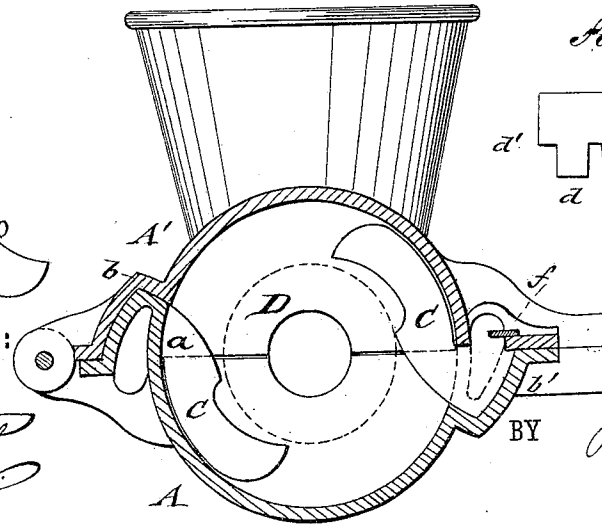


Fig: 5.





WITNESSES:

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ROBERT HÜBNER, OF BERLIN, PRUSSIA, GERMANY.

MEAT-CUTTER.

SPECIFICATION forming part of Letters Patent No. 234,478, dated November 16, 1880.

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

To all whom it may concern:

Be it known that I, ROBERT HÜBNER, a resident of the city of Berlin, in the Kingdom of Prussia, German Empire, have invented Improvements in Meat-Cutters, of which the following is a specification.

In all meat-cutters with interchangeable knives and revolving feed-cylinders heretofore employed the cutting-knives are secured either by special fastening devices or by stringing the knives to a rod, &c., all of which devices render the construction of the machines complicated, and require frequent repairs, besides making the handling of the same more difficult.

This invention is intended to avoid these objections by dispensing with the fastening devices referred to and constructing the casing of the cutter in such a manner, as hereinafter described, that the cutting-knives are securely retained in position in the machine by the simple closing of the casing and readily removed for sharpening or replacing by opening the casing.

In the accompanying drawings, Figure 1 represents a top view of my improved meat-cutter, shown with the casing in open position. Fig. 2 is a vertical longitudinal section of the same on line *x x*, Fig. 1, shown also in open position. Fig. 3 is a vertical transverse section of a meat-cutter with two rows of knives and with the cover closed. Figs. 4 and 5 are detail side views of different forms of cutting-knives, and Fig. 6 is a top view of a key employed for fastening the cutting-knives to the cover of the casing.

Similar letters of reference indicate corresponding parts.

The meat-cutters may be arranged either with one or with two rows of cutting-knives, Figs. 1 and 2 in the drawings showing the meat-cutter constructed with one, and Fig. 3 with two, rows of cutting-knives.

The exterior cylindrical casing, A, is supported on a suitable stand, B, the cover A′ being hinged to the lower half or section of the casing. The cover A′ is provided at one end with a supply-hopper for the meat, while at the opposite end of the lower casing a discharge-spout for the hashed mass is arranged. When the cutter is arranged with one row of knives the lower section of the casing A is provided at one side with a raised rib, *a*, which is either hollow or solid and cast in one piece with the casing, or separately therefrom and screwed thereto.

The cover A′ has, above the rib *a*, a bulge, *b*, which corresponds in size to the rib *a*. This bulging portion *b* fits on the rib *a* and serves for the purpose of securing the knives C in position, which are set into vertical recesses or slots of the ribs by means of downwardly-extending round or rectangular projections or tongues *d*, supported steadily therein by seats *d′ d′* on both sides of the tongues. The upper portion of the cutting-knives has the same shape as the profile of the rib *a*, so that on closing the cover A′ the bulging portion of the same bears firmly on the top part of the knives and retains them rigidly in position in the recessed rib. On opening the cover the knives may be readily lifted out of the rib for being sharpened or replaced.

It is obvious that the rib *a* may receive any desired outline or profile, to which the upper part of the knives as well as the bulge of the cover have to conform. In Figs. 4 and 5 two different forms of the knife are shown.

In larger machines two rows of knives, one on each side of the casing, have to be employed. The second row of knives is secured in inverted position to a rib of the cover and locked by a corresponding bulge, *b′*, of the lower part of casing A. In this case it is necessary, for preventing the dropping out of the knives when closing the cover, to fasten them with a recessed key, *f*, (shown in Figs. 3 and 6,) which key enters into small recesses of the tongues of the knives.

The cutting-edge of each knife is divided, by an angular front projection, *e*, into two parts, of which the upper is convex, the lower of concave shape, so as to produce two cutting-edges in each knife and increase thereby the cutting action of the knives upon the meat to be hashed. The upper or primary cutting-edge *n* is adapted to take the full depth of cut between the casing and the cylinder, while the edge *o* constitutes a secondary or supplementary cutting-edge, which acts again upon more or less of the material after it has passed and been acted upon by the primary cutting-edge.

The meat is fed through the machine and exposed to the action of the knives by a revolving feed-cylinder, D, having spirally-arranged studs or teeth *g*, which teeth pass inter-

mediately and between the knives and force every part of the meat against the cutting-edges of the same, so that it is finally discharged in a perfectly-hashed state at the exit-spout.

The cover is locked to the lower part of the casing by means of a reliable fastening device, *h*.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a meat-cutter, a divided casing one part of which is provided with a raised rib, *a*, having a series of slots adapted to receive knives, and the other part of which is provided with a bulging projection, *b*, fitting over said rib and adapted to hold the knives therein, substantially as described.

2. In a meat-cutter, a divided casing one part of which is provided with a raised rib, *a*, having a series of slots adapted to receive knives and ledges upon either side of said slots, and the other part of which is provided with a bulging projection, *b*, fitting over said rib and holding the knives therein, substantially as described.

3. The combination, in a meat-cutter, of a semi-cylindrical cover having a raised recessed rib at one side thereof and integral therewith, detachable knives having projecting tongues inserted in said rib, a key or plate, *f*, locking the knives to said cover, and a semi-cylindrical casing having a bulging portion adapted to fit over the knives and rib when the said cover is closed, substantially as described.

4. A knife for meat-cutters, having the primary cutting-edge *n*, the secondary cutting-edge *o*, and a curved back adapted to fit the casing, substantially as described.

5. A cutting-knife for meat-cutters, provided with a laterally-projecting shank at one end, at right angles, or nearly so, to the body of the knife, said shank being provided with a downwardly-projecting tongue at right angles thereto, the back of said knife being curved, whereby it is adapted to fit and rest against the interior of the cylindrical casing when placed in position in the machine, substantially as described.

6. A cutting-knife for meat-cutters, provided with a laterally-projecting shank at one end, at right angles, or nearly so, to the body of the knife, said shank being provided with a downwardly-projecting tongue at right angles thereto, and with a seat upon each side of said tongue, the back of said knife being curved, whereby it is adapted to fit and rest against the interior of the cylindrical casing when placed in position in the machine, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT HÜBNER.

Witnesses:
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CARL FEHLERT.