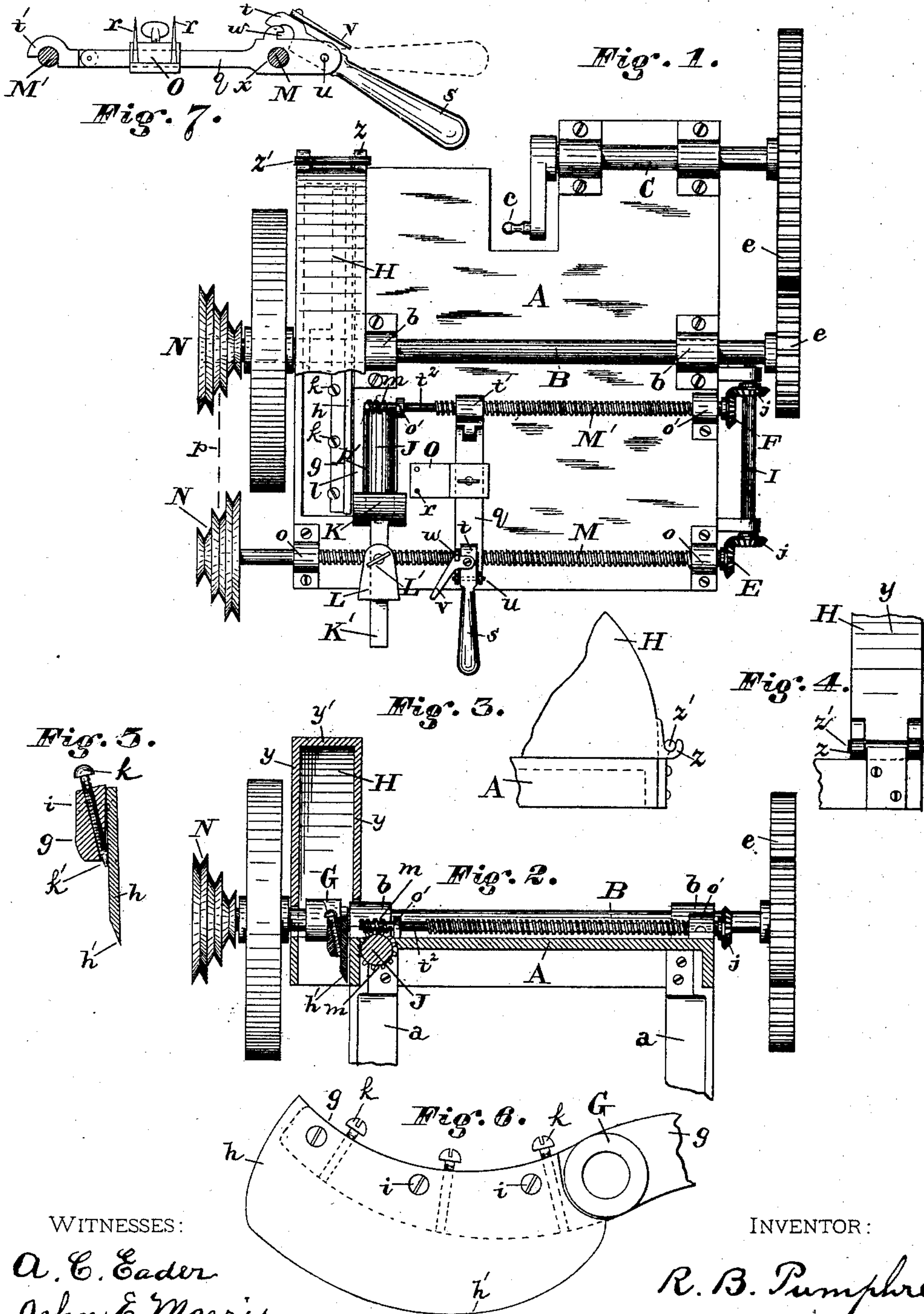


(No Model.)

R. B. PUMPHREY.
MEAT CUTTER.

No. 367,763.

Patented Aug. 2, 1887.



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MEAT-CUTTER.

SPECIFICATION forming part of Letters Patent No. 367,763, dated August 2, 1887.

Application filed April 30, 1887. Serial No. 236,661. (No model.)

To all whom it may concern:

Be it known that I, ROBERT B. PUMPHREY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Meat-Cutters, of which the following is a specification.

My invention relates to improvements in meat-cutters for slicing dried beef, and is illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the machine. Fig. 2 is a partial vertical section of the machine. Figs. 3 and 4 are details of a hinged hood. Figs. 5 and 6 are views showing the attachment and adjustment of the knives. Fig. 7 is a side view of the feed-bar.

The letter A designates a table supported on legs *a*; B, the main shaft turning in bearings *b* and driven by a gear-connection, *e*, with the drive-shaft C, which has a crank, *c*, to connect with a treadle. (Not shown.) Of course this drive-shaft may be set in motion by a hand-crank.

The cutter-head is mounted on the main shaft B, and comprises a hub, G, provided with wings *g*, and a blade, *h*, is attached to each wing by screws *i*, passed through the blade and into the side of the wing. Thus one flat side of the blade is in direct contact with one side of the wing *g*. Adjusting-screws *k* enter the wing at its back edge, the plane of which is at an angle with respect to the side with which the blade is in contact. These adjusting-screws *k* have tapered points *k'*, and pass through the wing in a slightly-inclined direction, so that said points incline toward the blade *h* and come in contact therewith, as shown in Fig. 5. By turning the screw *k* its tapered point *k'* is crowded against the side of the blade, and thereby the edge *h'* of the latter may be forced sidewise toward the stationary edge *l*, of the table-top. Thus the blades *h*, while held very firmly, may be adjusted with great nicety toward the stationary edge *l*.

M is a revoluble feed-screw, which is held in bearing-boxes *o*, and revolved from the shaft B, through the medium of a belt, (indicated by a broken line,) *p*, and a pair of cone-pulleys, N. By shifting the belt on the cone-pulleys the speed of the revolving screw may be increased or decreased. At one end of

the feed-screw, M, is a beveled pinion, E. A second feed-screw, M', parallel with the first one, turns in bearings *o'*, and at one end has a beveled pinion, F. A shaft, I, is provided at each end with beveled pinions *j*, which gear with the pinions E and F, respectively, on the two feed-screws. Thus the movement of one screw is communicated to the other.

The meat carrier consists of a plate, O, having prongs *r*, and fastened to a feed-bar, *q*, having a hand-grasp, *s*, by which said feed-bar may be moved back. Each end of the feed-bar *q* has a half-nut, (designated *t* and *t'*, respectively.) One half nut, *t*, is in position to rest on one of the feed-screws, M, and the second half-nut, *t'*, is in position to rest upon the other feed-screw, M'. The pronged plate O is between the two half-nuts. The effect of this arrangement is that when the two feed-screws turn, the meat-carrier *q O r* goes steadily forward without one end of the feed-bar lagging back.

The feed-bar hand-grasp *s* is pivoted, and thereby made to serve other functions than that of merely moving back the feed-bar. This hand-grasp is made integral with one of the half-nuts, *t*, before referred to, and a pivot, *u*, connects it with the end of the feed-bar *q*, as shown in Figs. 1 and 7. Normally the weight of the pivoted hand-grasp *s* will cause it to tilt down and keep the half-nut *t* elevated and disengaged from the feed-screw M, as indicated in Fig. 7. A latch, *v*, is pivoted on the hand-grasp *s*, and engages with a slot-catch, *w*, on the end of the feed-bar *q*. When the latch *v* is engaged, the hand-grasp will be held in an elevated position and the half-nut *t* engaged with the feed-screw M.

It will be seen that the feed-bar *q* has at that end to which the hand-grasp *s* is pivoted a hole, *x*, occupied by the feed-screw M, and this hole is larger than the feed-screw, so that said feed-bar may be moved freely along the screw. The half-nut *t'* at the other end of the feed-bar is preferably pivoted thereto, as shown, and its action on the feed-screw M' ceases when it reaches the unthreaded part *t''* thereof, near the end.

A feed-roller, J, has position in a recess, *p'*, in the table-top A, close to the stationary cutting-edge *l*. This feed-roller is driven by a

worm-gear, *m*, connecting it with the feed-screw *M'*. It will thus be seen that movement of the feed-screws causes the meat-carrier *O* to advance toward the cutters, and also imparts rotary motion to the feed-roller *J*. This feed-roller keeps the lower surface of the meat, which is close to the cutters, fed up properly and presents it in good shape to the cutters.

An adjustable meat-guide, *K*, has a shank, *K'*, which passes horizontally through a bearing, *L*, fixed to the table. A set-screw, *L'*, secures the shank and guide wherever desired. This side guide keeps the meat from moving away from the revolving cutter-blades.

A detachable hood, *H*, fits down over the cutter and rests on top of the table. This hood has two vertical walls, *y*, and a top, *y'*, inclosing the space between said walls. The cutter-blades revolve in this space. Of course one of the walls *y* has an opening large enough for the meat to have access to the cutter. This opening is not shown, but is in proximity to the feed-roller *J*, and will be readily understood. A disconnecting hinge is provided at one end of the hood, whereby the hood may be raised and also entirely detached. This hinge consists of the open hooks *z*, attached to one part, and the fixed lug *z'* on the other part to engage with the hooks. It is immaterial, of course, which part has the open hooks and which the fixed lugs. In the present instance the former are on the hood and the latter on the table. By this hinge the hood may be taken off at any time.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a meat-cutting machine, the combination, with the cutters mounted on a revoluble shaft, of the herein described feed mechanism comprising the two parallel feed-screws *M M'*,

having a connection with said revoluble shaft and each provided with a bevel-pinion, a shaft, *I*, having pinions *j* gearing therewith, and a meat-carrier on a feed-bar, *q*, provided at each end with half-nuts *t t'*, which engage with the said feed-screws.

2. In a meat-cutting machine, the combination, with the cutters mounted on a revoluble shaft, of two parallel feed-screws, *M M'*, connecting mechanism between the said revoluble shaft and feed-screws, a feed-bar, *q*, extending from one of said feed-screws to the other and having nuts which engage therewith, and a meat-carrier plate, *O*, secured to the feed-bar between the said two feed-screws.

3. In a meat-cutting machine, the combination, with the cutters mounted on a revoluble shaft, of a feed-screw, *M*, connecting mechanism between the said revoluble shaft and feed-screws, a feed-bar extending in a direction crosswise of said feed screw and loosely connected therewith to permit it to be moved freely along the screw, and provided with a slot-catch, *w*, a hand-grasp, *s*, pivoted to the said feed-bar and having a half-nut, *t*, for engagement with the aforesaid feed-screw, and a latch, *v*, pivoted on the said hand-grasp for engagement with the said slot-catch.

4. In a meat-cutting machine, the combination, with the cutters, of a feed-screw, a meat-carrier bar actuated by said feed-screw, feed-roller *J*, having position in the table-top close to the cutters, and a worm-gear connecting the said feed-screw and feed-roller.

In testimony whereof I affix my signature in the presence of two witnesses.

ROBERT B. PUMPHREY.

Witnesses:

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