

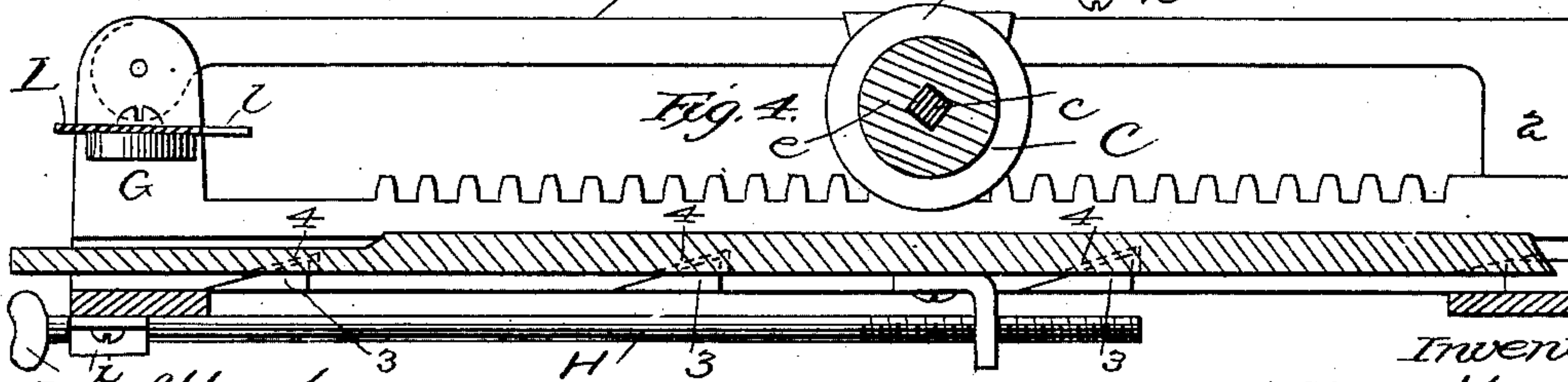
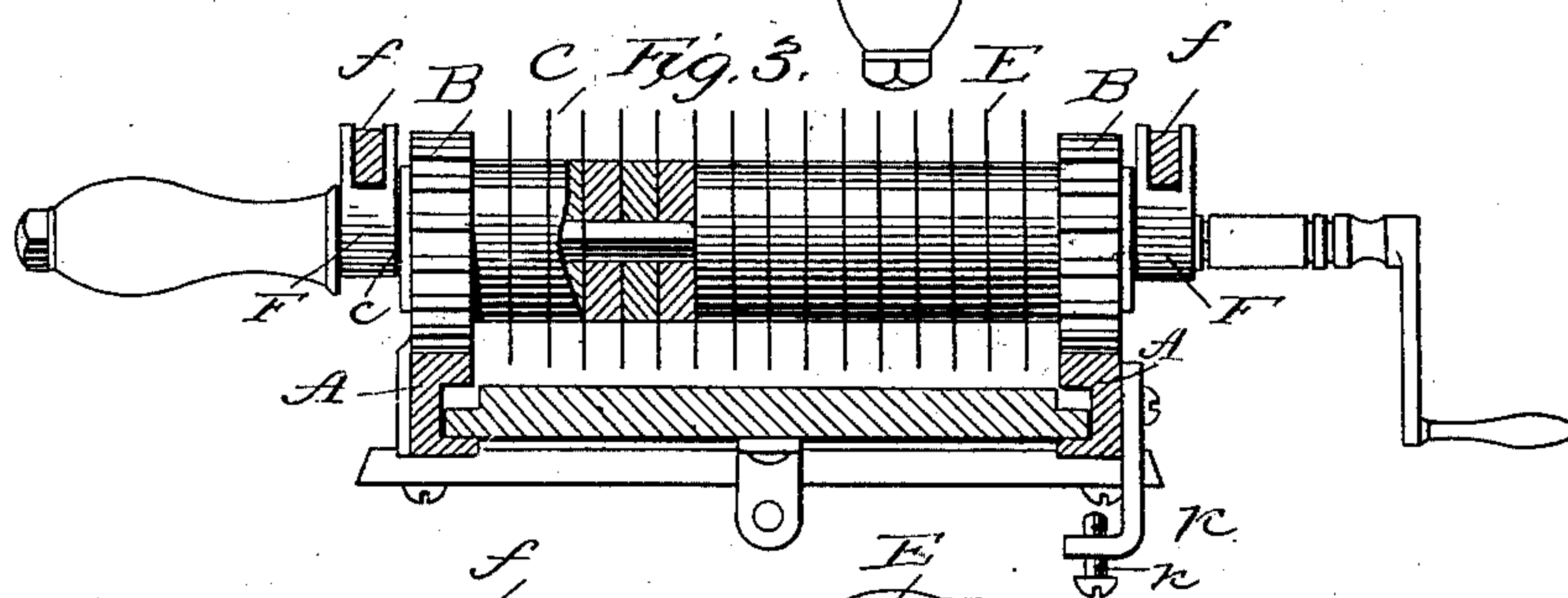
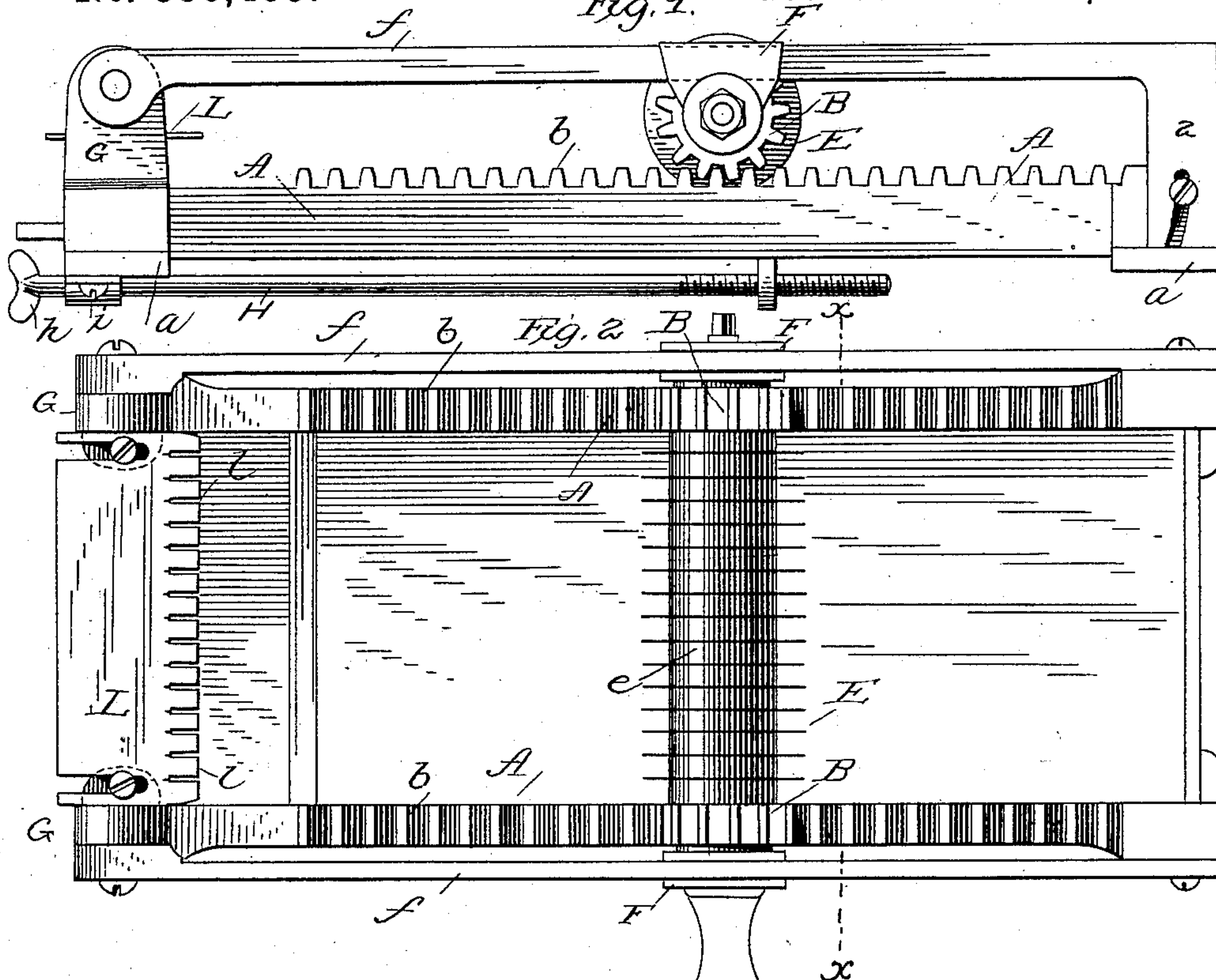
(No Model.)

D. E. VAN HORN.

MEAT TENDERER.

No. 336,455.

Fig. 1. Patented Feb. 16, 1886.



Attest
Halter Donaldson
J. L. Middleton

Inventor
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Atty's

UNITED STATES PATENT OFFICE.

DAVID E. VAN HORN, OF ELKHART, INDIANA.

MEAT-TENDERER.

SPECIFICATION forming part of Letters Patent No. 336,455, dated February 16, 1886.

Application filed August 27, 1885. Serial No. 175,480. (No model.)

To all whom it may concern:

Be it known that I, DAVID E. VAN HORN, of Elkhart, in the county of Elkhart and State of Indiana, have invented a new and useful Improvement in Meat-Tenderers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improved device for preparing meat for cooking, which is of that class adapted to operate more particularly upon steaks, and in which a roller having on its axis disk-shaped knives is caused to traverse the meat and make parallel cuts into its surface.

In the accompanying drawings, Figure 1 is a side elevation of my device; Fig. 2, a plan view of the same; Fig. 3, a section on line *xx* of Fig. 2; and Fig. 4 is a longitudinal section through the device.

In these drawings, *A A* represent the sides of the supporting-frame. These sides are connected at each end by cross-bars *a a*, which, with the sides, form a hollow frame to support the wooden bed on which the meat rests. The tops of these sides are formed with teeth into a rack-bar, *b*, on which run pinions *B*. These pinions are fixed on the shaft *c* of the rotary cutter *C*, so that as the cutter is turned it advances over the meat. The cutter is composed of disks *e* and circular knives *E*, of sheet-steel, slipped laterally on the shaft between the pinions. The disks *e* may be of wood, and are of a thickness to give the desired thickness between the knives. The shaft of the cutter is preferably square or equivalent polygonal-shaped, so that the knives and pinions will not turn thereon. The knives are of larger diameter than the pinions, so that as the cutter advances over the bed the knives operate with a drawn cut upon the meat.

In order that the cutter may be moved properly and evenly over the bed, I provide guide-bars *f f*, supported above and substantially parallel with the rack-bars, and upon these bars slotted pieces *F*, in the lower parts of which the shafts of the cutter-roller is journaled. The guide-bars are pivoted at one end of the machine to standards *G*, preferably cast on the end of the side pieces, *A*. The guide-bars at the other end are provided with downwardly-extending arms *2*, which are slotted at the lower ends, and through these slots pass the screws which hold them to the other ends of

the side bars of the frame. By means of these screws and slots the guide-bars are made vertically adjustable, and they may be lifted in order to remove the cutters. The bed of the machine rests on incline lugs *3*, preferably cast on the inner face and lower edges of the side bars of the frame. The bottom of the bed is formed with corresponding inclines, *4*, which bear upon the inclines of the slots, so that as the bed is shifted endwise movement is given to the bed by means of a rod, *H*, having a thumb-piece, *h*, at one end and working into a collar, *i*, on the cross-piece of the frame, which prevents the rod from advancing. The other end of the rod is threaded, and passes through a nut attached to the under side of the bed, so that by turning the rod the bed is shifted longitudinally.

On one side of the frame, and pivoted to the side bar, are clamps *K*, having thumb-screws *k*, whereby the apparatus may be clamped to the table or bench.

I have shown the cutter-roller as provided on one end with a handle, which may be loose on the shaft, and at the other end with a crank; but handles or other devices for moving the roller may be provided at both ends.

At one end of the machine I have provided a cleaning-comb, *L*, the teeth of which, *l*, are adapted to enter the spaces between the knives and to reach each separate disk, whereby any meat or other substance adhering to the knives or disk is scraped off. This comb is attached to lugs on the standards by means of screws, which pass through slots in the comb, whereby the comb is made adjustable toward or from the knives. The rack-teeth do not extend to the position of the comb, but cease a short distance before reaching that point, in order that the gears of the roller may be removed entirely from the rack and revolved to clean the cutting-knives. This could not be done if the rack were close up to the comb. Two or more of these combs may be used, if desired, at different points than shown.

I am aware that heretofore a cutter having disks turning in fixed bearings, with a bed movable on rack-bars, is not new, and also that it is not new to provide a masticator having a roller adapted to travel in suitable guides the length of the bed, the bed and the periphery of the roller being corrugated to act upon the

meat; and I do not broadly claim such a construction as my invention.

The construction of the cutters and the disk and the shaft renders it easy to separate the
5 knives from the shaft for the purpose of sharpening and repairing them when worn out. This can be easily done by removing one of the pinions and separating the shaft and pivots and by replacing them in the same manner.

10 I claim as my invention—

1. In combination with the frame having rack-bars, the supporting-bed and revolving cutter, its pinions and guide-pieces, and the
15 guide-bars *f*, pivoted at one end and having guiding-slots at the opposite end, substantially as described.

2. In a meat-tenderer, the combination of the bed having a cut-away portion at one end, the rack-bars terminating at said cut-away portion, the guide-bars, the cutting-roller 20 journaled in the guiding-pieces *F*, pinions on said roller gearing with the rack-bars, and the comb *l*, supported beyond the end of the rack-bars, substantially as described.

In testimony whereof I have signed my name 25 to this specification in the presence of two subscribing witnesses.

DAVID E. VAN HORN.

Witnesses:

ORVILLE T. CHAMBERLAIN,
PERRY L. TURNER.