

W. G. BELL.

Meat Cutter.

No. 45,788.

Patented Jan. 3, 1865.

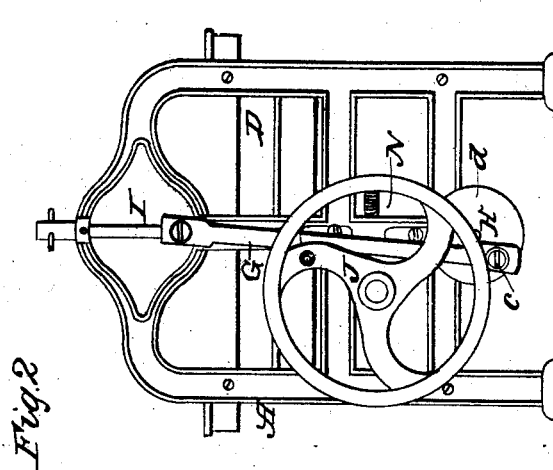


Fig. 2

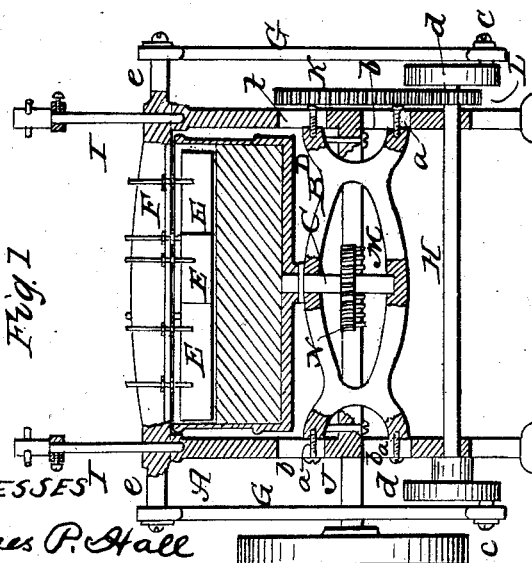


Fig. 1

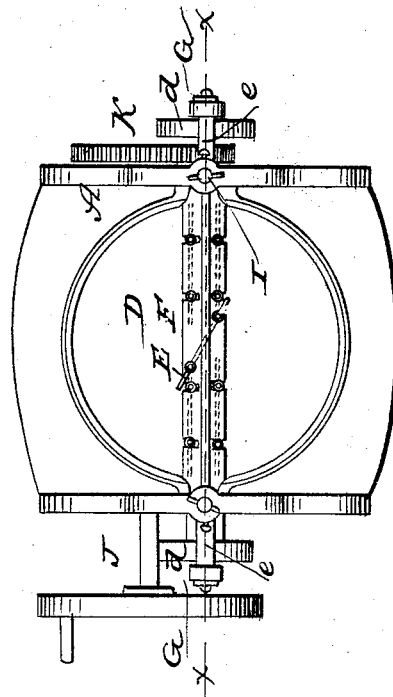


Fig. 3

WITNESSES
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WILLIAM G. BELL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO WM. G. BELL
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IMPROVED MEAT-CUTTER.

Specification forming part of Letters Patent No. 45,788, dated January 3, 1865.

To all whom it may concern :

Be it known that I, WILLIAM G. BELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Machine for Chopping Meat; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical central section of this invention taken in the plane indicated by the line *xx*, Fig. 3. Fig. 2 is a side elevation of the same. Fig. 3 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention consists in the employment or use of removable guides in combination with the cutter-head in such a manner that by withdrawing said guides the cutter-head can be turned upside down, and the knives can be cleaned and sharpened without removing them from the head, and the operation of introducing the meat to be chopped, and particularly that of removing the chopped meat from the machine, is considerably facilitated.

The invention consists, further, in making the block vertically adjustable and in steadying the same by a pin or shaft, which runs from the center of the block, and which has its bearings in a slotted bridge, which straddles the gear or worm wheel, by means of which a rotary motion is imparted to the block.

The invention consists, finally, in the use of an endless screw and worm-wheel, for the purpose of imparting a rotary motion to the block, thereby rendering the machine simpler than those of ordinary construction and reducing its cost.

A represents a frame, of cast-iron or other suitable material, which forms the bearings for the various shafts and working parts of my machine. The two side pieces of the frame are connected by a bridge, B, which is held in place by screws *a*, working in slots *b*, so that it can be adjusted up and down. This bridge forms the bearings for the vertical shaft C, which supports the block D, and by moving said bridge up or down the block can be adjusted to suit the knives E. Said knives are

secured to the head F, to which a rising-and-falling motion is imparted by two pitmen, G, which extend from eccentric wrist-pins *c*, inserted in disks *d*, on the horizontal shaft H, to gudgeons *e*, which extend from the head F beyond the side pieces of the frame A. Rods I, which are secured in the top part of the frame A, and pass through suitable holes in the head F, form the guides for the same, and these rods are held in place by set-screws or other suitable means so that they can be readily removed. If said rods are withdrawn, the head can be turned upside down to facilitate the operation of sharpening the knives, and also that of introducing the meat to be chopped, and of removing the chopped meat. The shaft H derives its motion from the driving-shaft J, on the end of which is mounted a gear wheel, K, that meshes in a pinion, L, on the shaft H. The proportion between the gear K and pinion L is such that the cutter-head makes several strokes for each revolution of the driving-shaft. An endless screw, M, mounted on the driving-shaft, gears in a worm-wheel, N, that is secured to the center-pin O of the block D, and by the action of this endless screw and worm-wheel a slow rotary motion is imparted to the block, so that the meat placed thereon is cut in all directions. This method of driving and supporting the block is much simpler than that of ordinary machines for the same purpose, in which the block is supported by a series of friction-wheels and driven by a toothed ring extending all round the case in which the block is secured. Furthermore, the construction of the entire machine is considerably simplified and the price of the machine is reduced.

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

1. The employment or use of movable guides I, in combination with the cutter-head F, substantially as and for the purpose set forth.

2. The endless screw M and worm-wheel N, applied in combination with the center-pin O, bridge B, and block D in the manner and for the purpose substantially as described.

WILLIAM G. BELL.

Witnesses:

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