

A. NITTINGER, Jr.
Meat-Choppers.

No. 157,213.

Patented Nov. 24, 1874.

FIG. 3.

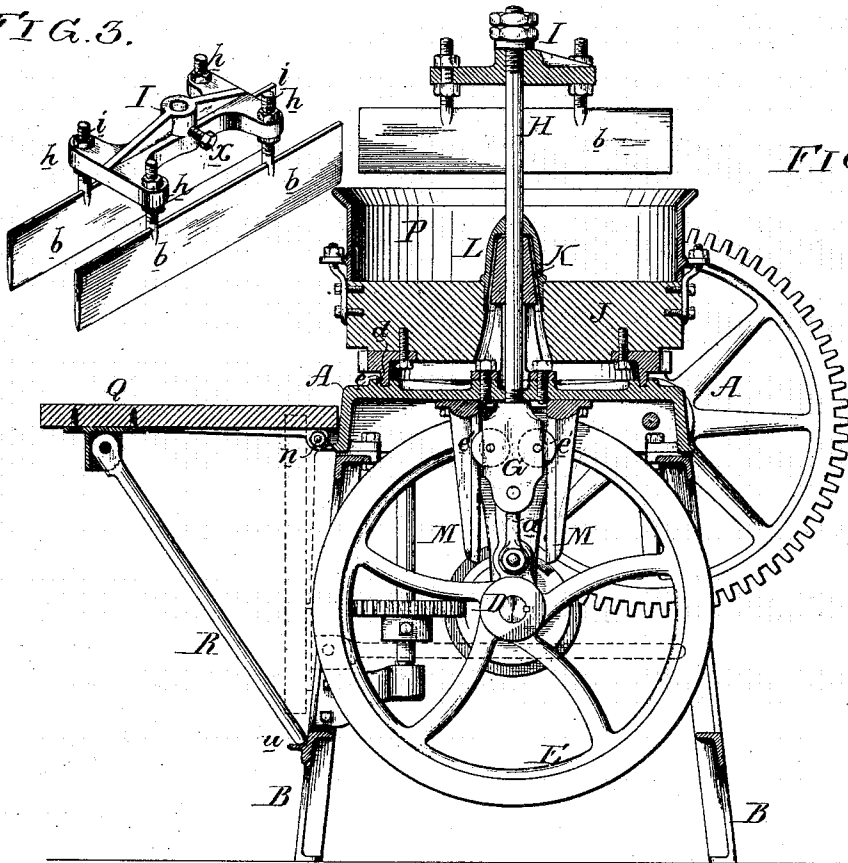


FIG. 1.

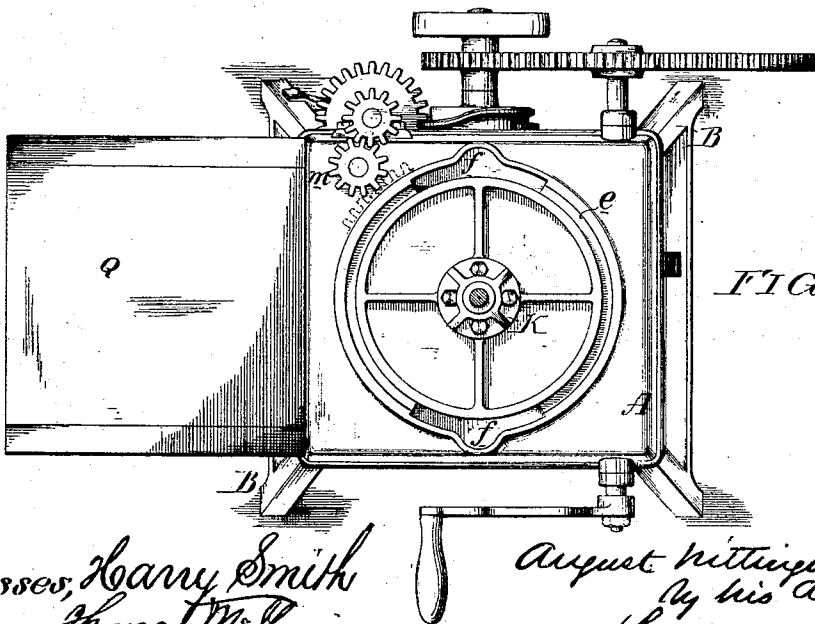


FIG. 2.

Witnesses, Harry Smith
Thomas McLean

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UNITED STATES PATENT OFFICE.

AUGUST NITTINGER, JR., OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MEAT-CHOPPERS.

Specification forming part of Letters Patent No. **157,213**, dated November 24, 1874; application filed January 21, 1874.

To all whom it may concern:

Be it known that I, AUGUST NITTINGER, Jr., of Philadelphia, Pennsylvania, have invented an Improved Meat-Chopping Machine, of which the following is a specification:

My invention relates to meat-chopping machines in which vertically-reciprocating knives operate in conjunction with a rotating chopping-block; and the objects of my invention are, first, to diminish friction in driving the reciprocating rod which carries the knives; and, second, to provide a continuously-lubricated bearing for the rotating chopping-block; which objects I attain by the mechanism illustrated in the section, Figure 1, plan view, Fig. 2, and perspective view, Fig. 3, of the accompanying drawing.

The frame-work of the machine consists of a table, A, supported on suitable legs or standards, B, and in suitable bearings in the frame turns the driving-shaft D, carrying a fly-wheel, E, a crank-pin on the hub of which is connected by a link, a, to the cross-head G, to which is secured a rod, H, having at its upper end a cross-head, I, carrying the adjustable chopping-knives C, referred to hereafter.

The cross-head G has anti-friction rollers, e', adapted to guides M, secured to the under side of the table A, so that the reciprocation of the cross-head G, consequent upon the rotation of the driving-shaft, may be accompanied with as little friction as possible.

J is the chopping-block, to the under side of which is secured the annular rib d, adapted to an annular groove, e, in the table A. (See Fig. 2.)

This groove or annular channel is not of the same depth throughout, but communicates at one or more points (two, in the present instance) with deeper pockets, f, containing supplies of oil, so that as the annular rib rotates in the groove it will continuously convey from the pockets sufficient oil to insure proper lubrication.

The rod H passes through and is guided by a central stand, K, secured to the table A, the upper portion of this stand, which projects above the chopping-block, being contained within a cover, L, secured to the said

block, so as to prevent the escape of particles of meat through the center of the block and the access of such meat to the standard K.

The cross-head I, best observed in the perspective view, Fig. 3, is vertically adjustable on the rod H, and can be secured after the adjustment by a set-screw, X, and from each side of the cross-head project two lugs, h h, each pair of lugs carrying a knife, b, and each knife having two screw-rods, i, passing through the said lugs, and furnished above and below with nuts, so that the knives can be readily adjusted in the cross-head, while the latter with its knives can be easily adjusted on the rod H.

This plan of adjusting the knives, both in respect to each other and to the surface of the chopping-block, is an important feature of my invention, as one by which the best cutting effect of the knives can always be attained.

A trough, P, for keeping the meat within proper limits on the chopping-block, is secured to the latter, and on the edge of the annular rib d, on the under side of the chopping-block, are teeth for receiving those of a pinion, m, which may be driven from the shaft D through the medium of any suitable system of gearing, that shown in the drawing forming no part of my present invention.

A platform, Q, is hinged, at h, to one edge of the table A, and to the under side of this platform, near the outer edge of the same, is hinged the upper end of a diagonal rod, R, the lower end of which rests upon a ledge, w, on one of the stands B of the frame. This platform serves to support a vessel, into which the chopped meat can be deposited; but when the platform is not required for this purpose, and when the machine has to be moved about from place to place, the rod R may be detached from its ledge, the platform lowered, and both platform and rod arranged in the position shown by dotted lines in Fig. 1.

I claim as my invention—

1. The combination, in a meat-chopper, of the rod H, carrying the knives, the block G, secured to the lower end of the rod, and pro-

vided with rollers *e' e'*, the guides M M, and crank-shaft connected by the arm *a* to the block G, all as set forth.

2. The combination of the rotating block J, its annular rib *d*, the groove *e*, for receiving said rib, and pockets *f f*, communicating with said groove, all as specified.

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

AUGUST NITTINGER, JR.

Witnesses:

WM. A. STEEL,

HARRY SMITH.