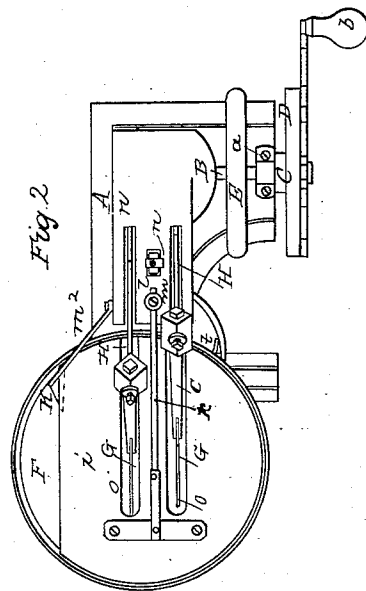
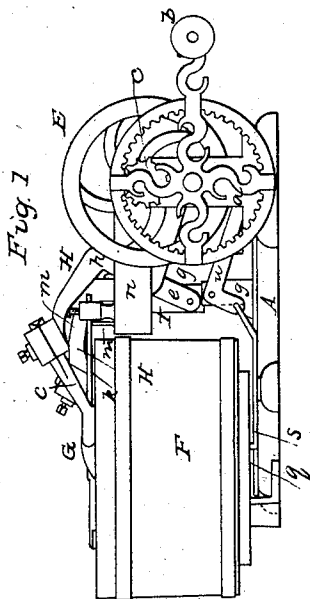
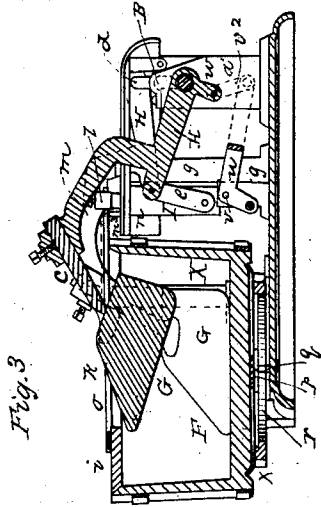


C. A. FOSTER.
Meat Chopper.

No. 55,414.

Patented June 5, 1866.



WITNESSES
Samuel H. Osborn
George Andrews

INVENTOR
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UNITED STATES PATENT OFFICE.

CALVIN A. FOSTER, OF WINCHENDON, MASSACHUSETTS, ASSIGNOR TO A. F. SPAULDING AND S. M. SCOTT, OF SAME PLACE.

IMPROVED MEAT-CHOPPER.

Specification forming part of Letters Patent No. 55,414, dated June 5, 1866.

To all whom it may concern:

Be it known that I, CALVIN A. FOSTER, of Winchendon, in the county of Worcester and State of Massachusetts, have invented an Improved Machine for Chopping Meat; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation; Fig. 2, a top view, and Fig. 3 a longitudinal section of it.

This machine in some respects is analogous to those on which Letters Patent No. 46,153 and No. 48,734 were granted to Alfred F. Spaulding and Salmon M. Scott, although in other particulars it is essentially different from them, the principal analogous features being a rotary tub, two chopping-knives, and a plow, and a cap or cover to the tub.

The present invention has reference mainly to the raising of the knives or the same and the plow and guard out of and above the tub in an expeditious manner, in order to enable access to be readily had to its contents, or the tub to be removed from its supporting and revolving mechanism.

In the drawings, A denotes the sustaining-frame of the machine, and B the main or driving shaft, which receives rotary motion by means of a pinion, C, which engages with an internal gear, D, applied to and so as to turn on a projection extending from one of the posts *a a'* of the frame. There is a fly-wheel, E, fixed on the driving-shaft. By turning the gear D by the hand of a person when grasping a crank, *b*, extending from such gear, the driving-shaft will be put in revolution.

F is the tub, and G G the two chopping-knives. Each of such knives in its operation is moved up and down and forward and backward within the tub, whereby it is made to cut with a drawing stroke any meat when in the tub. The shank *c* of each knife is fastened in one of two bent levers or carriers, H H, formed as shown in the drawings. At its rear end each of the said levers is jointed to one of two cranks, *d d*, extending from the driving-shaft, one of such cranks being what is termed a "bell-crank." At or near its middle each of the carriers is also jointed to the upper end of one of the rocker-arms, *e e*, whose lower ends are jointed to a raising-arm, I, formed as represented, and so hinged at its rear end to the

shaft-post *a'* as to be capable of being turned up in a vertical plane. When down in its lowermost position the arm rests on a step or bearing, *f*. A post, *g*, extends upward from the frame A, and when the raising-arm is on the stop *f* such post *g* projects through an aperture made in the said arm. A turn-button, *h*, applied to the upper end of the said post, serves to enable the arm to be held down upon the step.

The cap or cover *i* of the tub is also secured to the raising-arm by means of a rod, *k*, extending from the cover and into a post, *l*, raised on the arm, such rod being fastened to the post by a set-screw, *m*, screwed into it.

The plow K of the tub is also attached to an arm, *m'*, extending from the raising-arm or inserted in a socket applied to it, or to a guard-plate, *n*, attached to the said raising-arm.

From the above it will be seen that when the raising-arm is elevated off the step *f* such arm will not only raise the knives and the plow out of the tub, but at the same time will raise the segmental cover *i* away from the tub, so as to uncover it. The said cover is to be formed with slots or passages *o o* for the knife shanks to go through. The tub is supported on a cross, *p*, which revolves on a pivot, *q*, and has an interior ratchet, *r*, fixed to its under side concentrically with the pivot *q*. A draw-pawl, *s*, applied to the ratchet and pressed toward it by a spring, *t*, and arranged as represented, has its rear end jointed to the shorter arm of a bent lever, *u*, which turns vertically on a fulcrum, *v*, extended from the post *g*. The longer arm of the lever *u* is jointed to the connector *v'*, which in turn is jointed to an arm, *w*, projecting from one of the carriers, H H. While the said carrier is in movement it will put in action the tub-rotating mechanism, whereby an intermittent rotative movement will be imparted to the tub.

A small stud, *x*, extends down from the bottom of the tub, and by contact with the edge of one of the arms of the cross causes the cross while in revolution to revolve the tub.

I claim as my invention in the said improved meat-chopping machine the following, viz:

1. The combination of the raising-arm I with either or both the knives and the operative mechanism and supporting-frame thereof.

2. The combination as well as the arrange-

ment of the post *g* and its turn-button *h*, or the equivalent thereof, with the frame *A*, and the raising-arm *I*, and one or more knives, *G G*, and mechanism to operate such knife or knives, substantially as described.

3. The operative mechanism of each knife *G*, the same consisting of the knife-carrier *H*, the vibratory arm *e*, and the rotary crank *d*, arranged substantially as specified.

4. The application of the tub-cover to the raising-arm *I*, so as to be lifted off the tub thereby when such arm is in the act of being elevated, substantially as set forth.

5. The application of the plow *K* to the raising-arm *I*, so as to be lifted out of the tub there-

by when such arm is in the act of being raised, as explained.

6. The mechanism for imparting to the tub an intermittent rotative motion and enabling the tub to be separated from the cross of such mechanism, the same consisting of the stud *x*, the cross, or their equivalents, the internal ratchet *r*, the pawl *s*, the bent lever *u*, the connector *v*², and the arm *w* projecting from the carrier, as set forth.

CALVIN A. FOSTER.

Witnesses:

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