A. B. GOOD.

Meat-Cutter.

No. 165,443.

Patented July 13, 1875.

Fig. 1

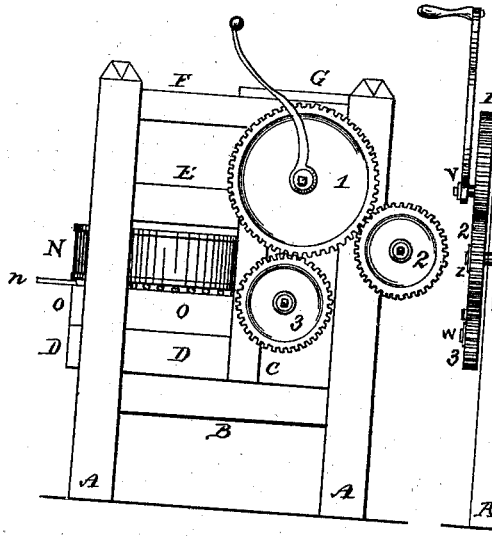


Fig. 2.

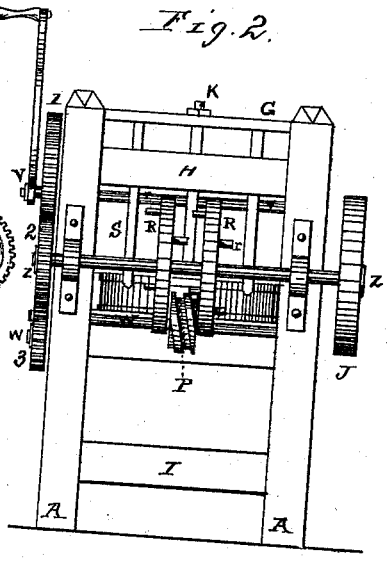


Fig. 3.

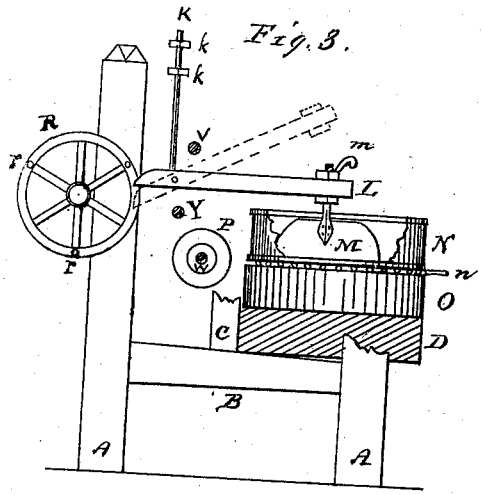
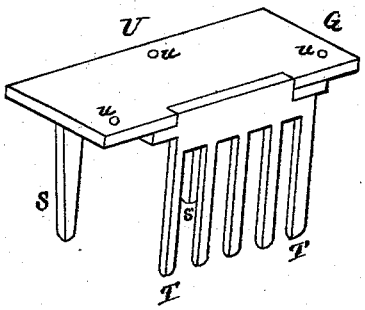


Fig. 4



WITNESSES.

Wm. Kirkpatrick

Jacob Stauffer

INVENTOR.

Abraham B. Good,

UNITED STATES PATENT OFFICE.

ABRAHAM B. GOOD, OF CONESTOGA, PENNSYLVANIA.

IMPROVEMENT IN MEAT-CUTTERS.

Specification forming part of Letters Patent No. **165,443**, dated July 13, 1875; application filed June 24, 1875.

To all whom it may concern:

Be it known that I, ABRAHAM B. GOOD, of Conestoga, in the county of Lancaster, State of Pennsylvania, have invented certain Improvements in a certain class of Meat-Chopping Machines, of which the following is a specification:

This improvement relates to that class of chopping-machines provided with a block and case, revolved by a screw-gear, lifters that depress the heels of the levers or chopper-arms, operated by a crank-handle, and cogged gearing. The novelty consists in providing a resisting-bar, upon which the ends of the levers are made to impinge when the machine is run with a speed that imparts a momentum, so as to cause a rebound, which imparts as great or greater force to the choppers than when powerful springs are used. This obviates the use of separate springs, with their constant pressure to be overcome in raising the choppers. Springs are readily impaired and increase the labor; so that, by this arrangement and construction of the parts, I get not only a compact, strong, and cheap machine, but one that requires much less power to perform the same work.

The accompanying drawings illustrate the construction and arrangement of the parts, with letters of reference marked thereon, so that a brief description will enable those skilled in the art to make and use the same, in which—

Figure 1 shows a side elevation with the cogged gearing in place; Fig. 2, the rear or end elevation, showing the shafts, &c., and the lifting-wheels. Fig. 3 is designed to show the relative position of the five shafts and chopping arrangement; Fig. 4, the top and attached guide bars.

The frame-work is stout and compact. The four corner-posts A are of equal height. The cross-pieces B I E F H form the bearings and supports of an ordinary base-block, D, for the revolving block O and its case N. The choppers M, with their handles L, are on a fulcrum-rod, X, which rod can be withdrawn, and the choppers with their handles or levers removed; or for ordinary purposes the four or more choppers can be elevated, and held up out of the way of the cylinder-case, by inserting a rod under them so that its ends rest upon the side pieces E; in all of which I claim no novelty, nor as regards the gearing and lifting device to raise the choppers. Across the top is a combined table, G, secured by screws or bolts, and provided with pendent guide-pieces S S and T T, (shown by Fig. 4,) which separate the lever-handles, and prevent lateral motion. There is also a rod, K, secured to said top by jam-nuts *k*, which has an eye on its lower end, through which the fulcrum-rod X passes, as well as through the lever-handles L. In order to support said rod centrally, and prevent bending by the force of the blow, there are five parallel cross-bars or shafts in close proximity. The upper V supports the handled driving-wheel 1. The next is the fulcrum-shaft X; below it the resisting-bar Y; also the shaft W, which supports the cog-wheel 3, and screw P, to revolve the block. The fifth, or outer shaft Z, supports the cog-wheel 2 on one end, and the fly-wheel J at the other end, and two or more lifting-wheels, R, between them, with their pegs *r* on each side. Thus it differs in the arrangement of the parts, to secure strength and compactness. The main feature, however, consists in the use of what I call a resisting-bar, Y, whether rigid or elastic, so placed that when the machine is turned slowly the heels or extended ends of the lever-handles do not come in contact with said bar, so that the specific weight or gravitating force of the choppers act simply. But when, as the general rule is, great speed is given, the momentum carries the heels of the lever-arms or handles with considerable force against the resisting-bar, impinging upon it so as to rebound with an acquired force as great if not greater than that produced by a powerful spring. Thus I do away with the springs in common use resting upon the lever-arms, so that the force of their pressure must be overcome in raising or depressing said levers, adding greatly to the power required, and increasing the labor to operate the same to that amount. By the use of this bar I not only obviate the use of separate springs, so liable to break or lose their power, but gain an equal or greater acting force without resistance to the action or elevation of the choppers.

I am not aware that such a device was ever before employed, substantially as and for the purpose described.

Therefore, what I claim as my improvement in the foregoing-described machine is—

The combination of the knife-carrying levers L, and the arresting-bar Y, arranged and operated substantially as and for the purpose specified.

ABRAHAM B. GOOD.

Witnesses:
W. B. WILEY,
JACOB STAUFFER.