W. REITZ.

Improvement in Meat-Choppers.

No. 130,745. Patented Aug. 20, 1872.

Fig. 1.

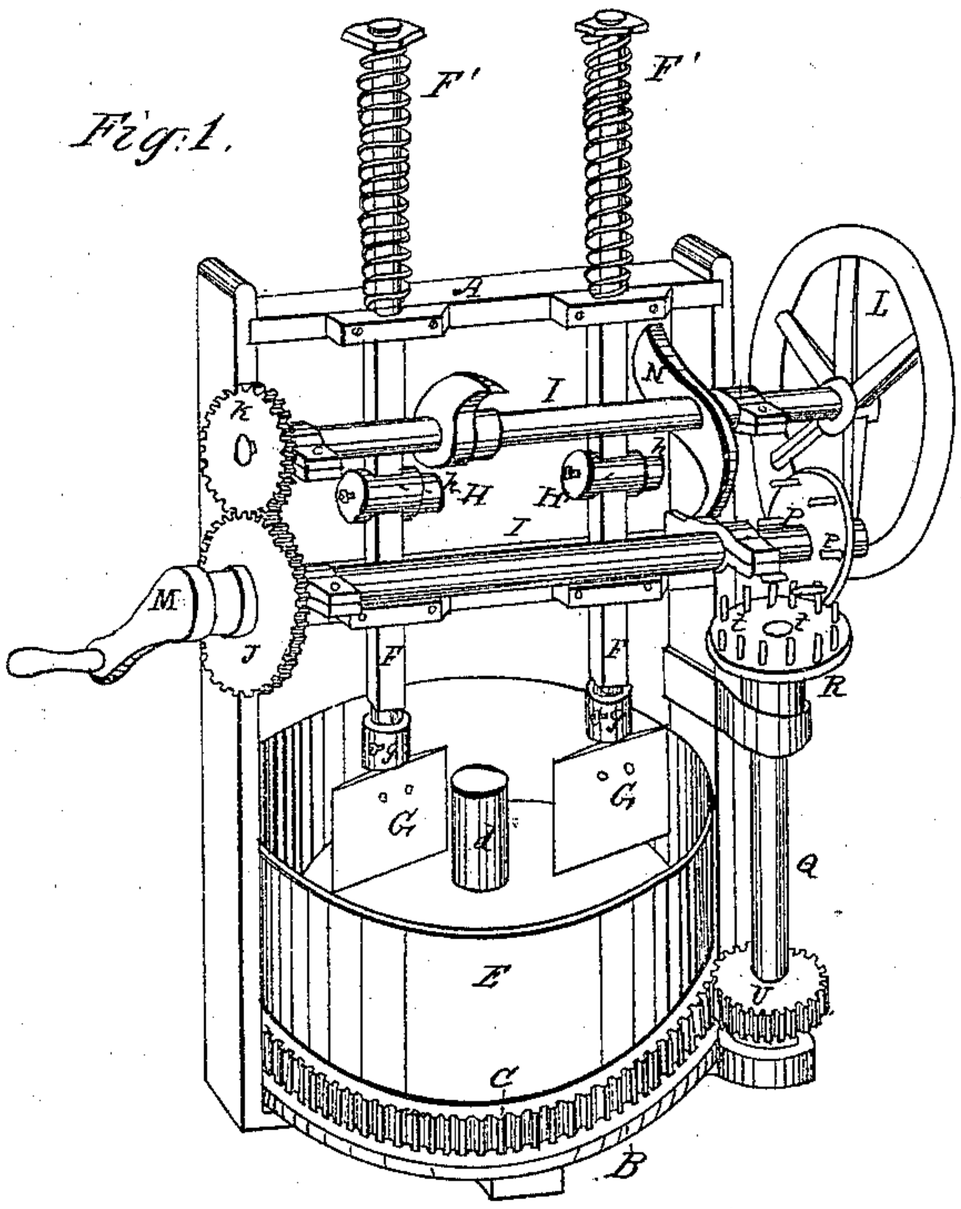
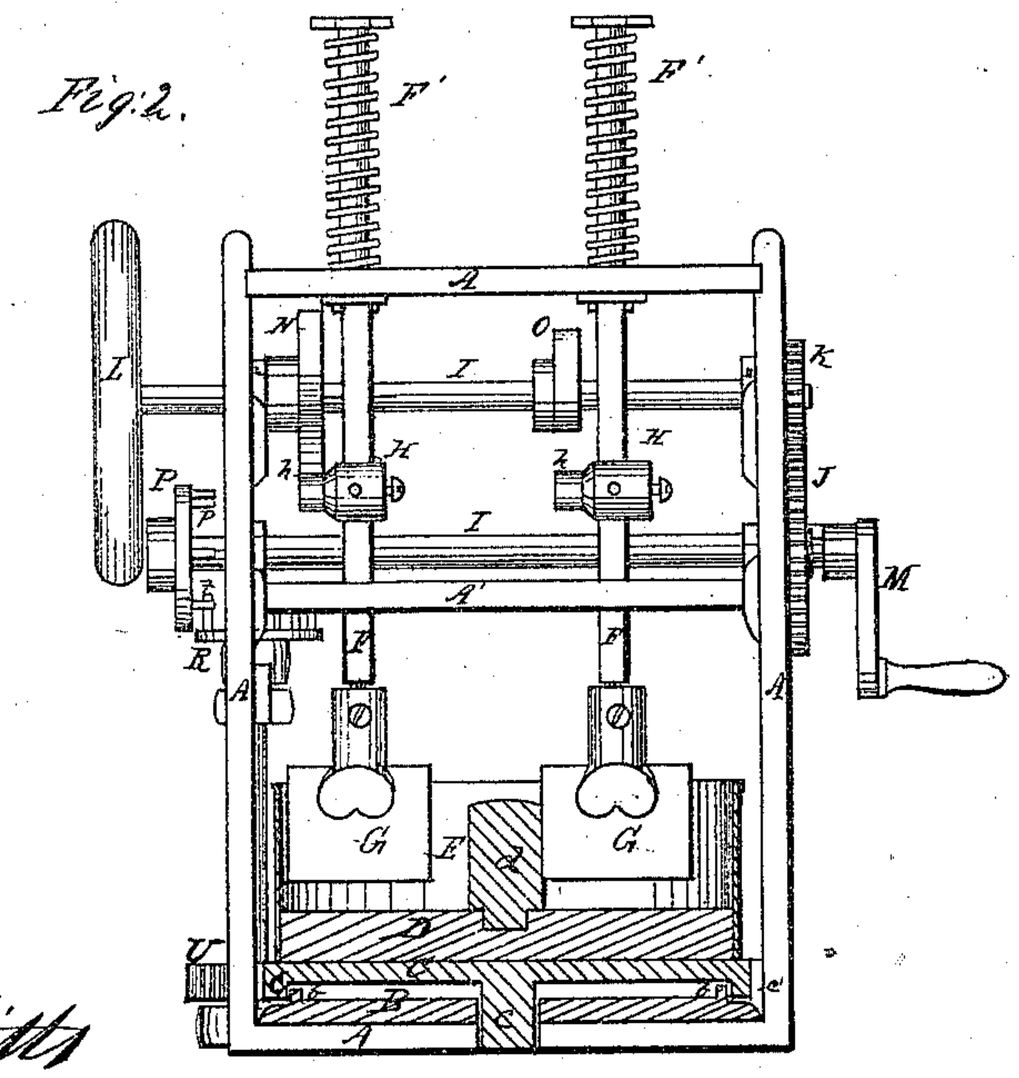


Fig. 2.



Witnesses

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WILLIAM REITZ, OF CLEVELAND, OHIO.

IMPROVEMENT IN MEAT-CHOPPERS.

Specification forming part of Letters Patent No. **130,745**, dated August 20, 1872.

SPECIFICATION.

I, WILLIAM REITZ, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Meat-Chopper, of which the following is a specification:

This invention relates to the construction of a meat-chopping machine having two chopping-knives, so arranged that each works independently of the other, one near the central part of the chopping-tub, and the other at the circumference or outer part of the tub. The outer chopping-knife, also, has double the rapidity of motion. This machine is made adjustable in all of its essential parts, and the knives are easily removed and replaced. The objects of this construction are to render the machine easily operated, readily cleaned, (and the knives easily removed for sharpening or readjustment,) and capable of doing a greater amount of work in a given time than machines having but one chopping-knife.

In the drawing, Figure 1 is a perspective view of my improved machine. Fig. 2 is a side elevation, reverse side, and having the tub and base in section.

A is a frame, of wood or other suitable material, in the lower part of which is placed a chopping-tub, and in the upper part the mechanism for operating the knives. In the bottom of the frame A is fixed, by bolts or screws, a circular bed-plate, B, having an annular rim or flange, *b*, near its circumference. Placed above the bed-plate B is a second plate, C, having a central pin, *c*, fitting in a hole in the center of the bed-plate B, also having a flange, *c'*, at its circumference, fitting over the rim *b*. The outer edge or periphery is provided with gear-teeth, by which it is rotated. Lying on the plate C is a board, D, which forms the bottom of the tub, and is fastened to it by screws. At its center is a post, *d*. A sheet-metal cylinder, E, fits over the board D, which forms the chopping-tub. Fitted in suitable boxes in the cross-bars A' of the frame are two upright shafts, F F, which are square, as they are not intended to rotate, but have an up-and-down motion, their upper ends extending up through the frame, and are provided with spiral springs F', for drawing them upward. To the lower ends of the said shafts F F are attached chopping-knives G G, which are provided with sockets and set-screws *g g*, by which they may be removed or adjusted. Fixed on the shafts F F, between the two cross-bars A', are adjustable slides H H, having friction-rollers *h h* attached to them, for a purpose hereinafter shown. To the two upright posts A A are fixed the bearings for two rotating shafts, I I, which are connected by gear-wheels J and K, the lower shaft having a crank, M, for imparting motion to it, which is transmitted through the gear-wheels J K to the upper shaft. This shaft is also provided with a balance-wheel, L. On the upper shaft are placed two cams, N and O, which, in the revolutions of the shaft bear onto the friction-rollers *h h*, and force the shafts F F downward. The cam N is double, or has two arms, while cam O has but one, by which it gives double the movement to the shaft which it operates. On the end of the lower shaft I is a wheel, P, having six pins, *p*, projecting from its inside face. Below this wheel stands an upright shaft, Q, working in bearings attached to the frame A, and having a wheel, R, on its upper end, and which is also armed with twelve pins, *t t*. This wheel and shaft are rotated by the wheel P, the pins *p* and *t* acting like gear-teeth. The lower end of the shaft Q is provided with a pinion, U, which gears with the rotating bed-plate C, and by which the tub is rotated.

The shafts F F, it will be observed, are placed so that the one operated by the cam O works near the center of the tub, while the other works near the circumference, and has two movements to the central one's one. This makes the chopping more evenly done, and greatly facilitates the work.

Power may be applied by hand to the crank M, as the machine works very easy; or, if a large amount of work is to be done, a pulley may be attached instead of the crank, and steam-power applied.

I claim—

The knives G, upright shafts F F, and springs F', adjustable slides H H having friction-rollers *h h*, in combination with the rotating shaft I having the double cams N and single cam O, the shaft I, the gear-wheels J K, and balance-wheel L, as described, and for the purpose set forth.

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Witnesses:

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