Charles C. G. Armerling's

Improved Vegetable Cutter,

No. 119,733. Patented Oct. 10, 1871.

Fig 1

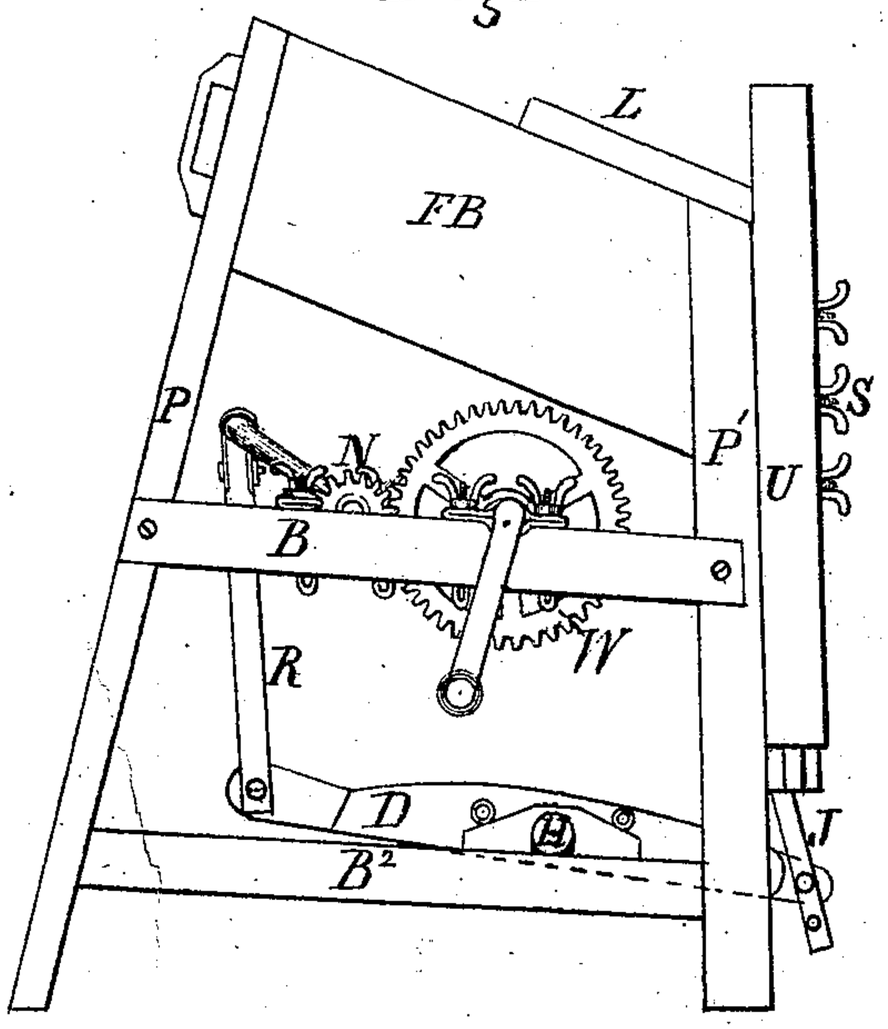


Fig 2

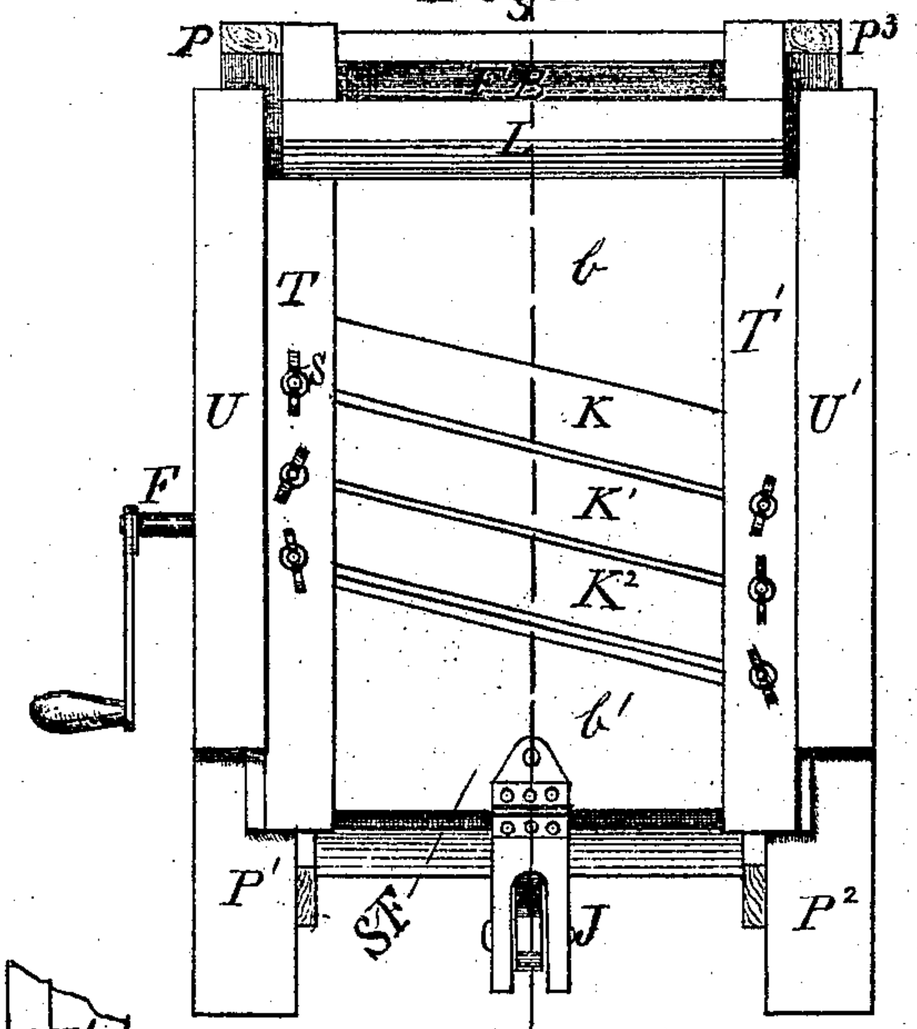


Fig 3

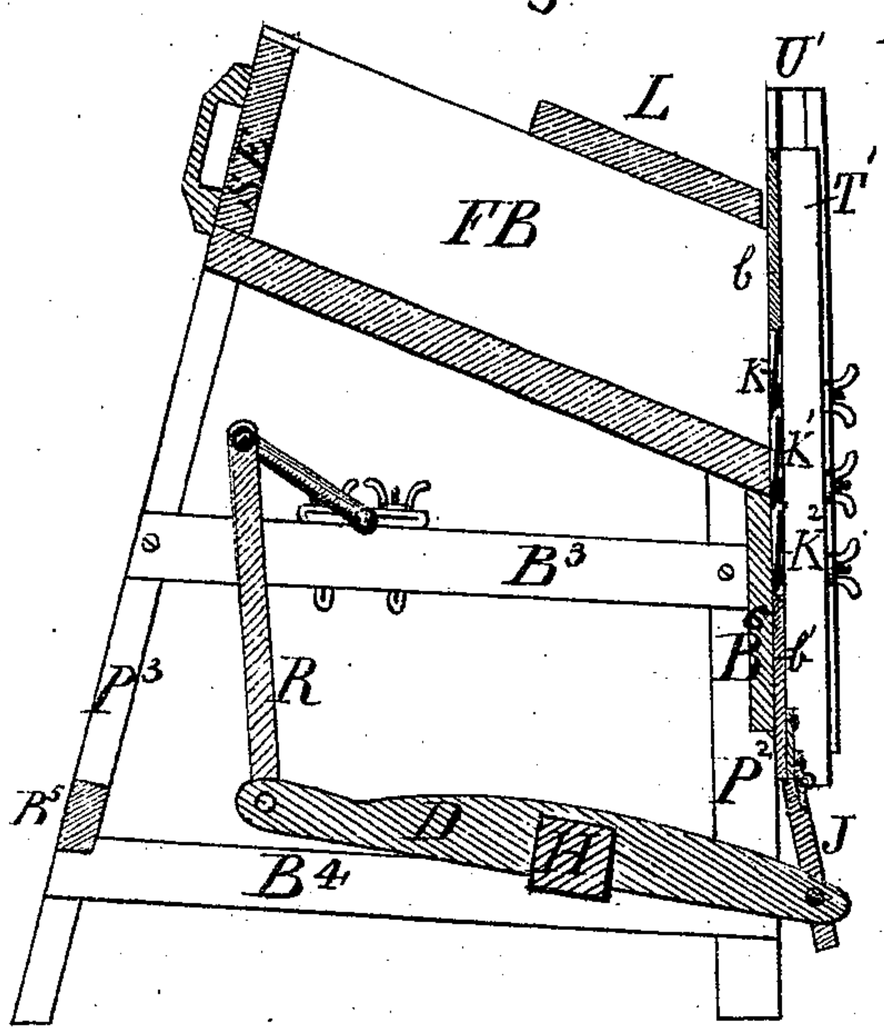


Fig 4

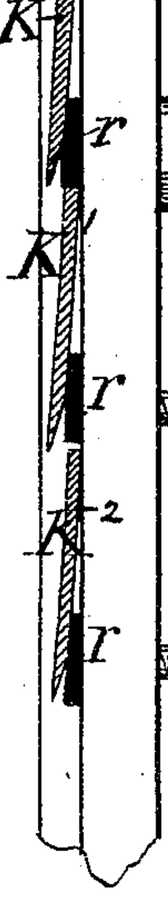
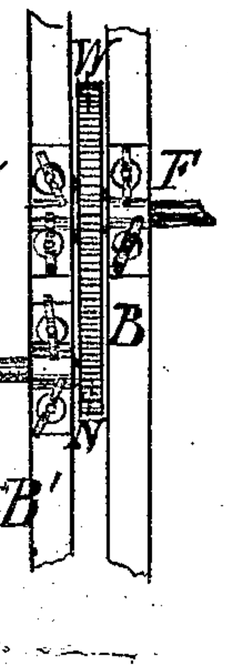


Fig 5



Witnesses

Wm B. L. Price

Frank Stout.

Charles C. G. Armerling
Inventor

UNITED STATES PATENT OFFICE.

CHARLES C. G. ARMERLING, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN VEGETABLE-CUTTERS.

Specification forming part of Letters Patent No. 119,733, dated October 10, 1871.

To all whom it may concern:

Be it known that I, CHARLES C. G. ARMERLING, of the city and county of Philadelphia, Pennsylvania, have invented an Improved Vegetable-Cutter, of which the following is a specification:

The object of my invention is to provide a simple and effectual machine for cutting vegetables rapidly. To accomplish the above I employ a frame-work, in the center of which are placed rods and levers, which connect with and give motion to a vertical sliding frame working flush against the box or trough of the machine. This sliding frame is provided with a series of knives, as will be more fully described hereafter. Motion is given to the levers by means of gearing.

In the accompanying drawing, Figure 1 is a side view of my invention. Fig. 2 is a front view of my invention, showing position of the knives. Fig. 3 is a sectional view of same on the line A B, Fig. 2. Fig. 4 is a detached and enlarged sectional view of the sliding frame, showing the arrangement of the knives, rubber cushions, and set-screws for regulating knives. Fig. 5 is a detached and top view of the upper braces, showing the arrangement of the shaft and gearing secured thereon.

The frame-work of my machine is composed of four posts, P, P^1, P^2, and P^3, which are placed at an angle so as to incline inward at the top. On the sides and ends of the posts, and at proper distances, are secured braces B, B^1, B^2, B^3, B^4, B^5, and B^6. On the upper part of the frame is arranged a feeding-box, F B, on the back part of which is a sliding end, S E, provided with a handle for pressing the vegetable to be cut against the knives. A portion of the feeding-box F B is covered by a lid, L. On the front part of the posts P^1 and P^2 are secured grooved uprights U and U′. Fitting and sliding freely in the grooves of said uprights is a sliding frame, S F, composed of the tongued uprights T and T′, braced at the top and bottom by the triangular-shaped braces *b* and *b′*. Fastened on the back of the uprights T and T′, so as to come flush with the front of the feeding-box F B, is a series of knives, K, K^1, and K^2, said knives being secured at the upper part by means of rivets and screws, and at the lower part by means of set-screws S, in order to gauge the knives to suit the thickness of slices of the vegetable to be cut. On the under and lower part of the knives are placed pieces of rubber, *r*, to act as a spring and press the lower part of the knives off from the uprights T and T′. In the center and on the lower part of the sliding frame S F is hinged a toggle-joint, J, in which is pivoted a treadle, D, the said treadle being centered and swinging on a shaft, H, working in suitable bearings secured on the braces B^2 and B^4. Between the braces B and B^1, and revolving on the shaft F, which works in a suitable journal-box and bearing, is placed a geared wheel, W, which imparts motion to the pinion N secured on the end of the shaft M. The said shaft also works in suitable journal-boxes and bearings secured on the braces B and B^3. On the end of the treadle D is pivoted a lever, R, and the opposite end of said lever encircles and is connected to the center of the shaft M by means of a metallic band.

The vegetable to be cut is placed in the feed-box F B. The sliding end S E is now pressed against the vegetable, which brings it (the vegetable) up against the sliding frame S F. The machine is now put in operation by means of the crank on the end of the shaft F. The crank on being turned imparts motion to the wheel W and communicates it to the pinion N on the end of the shaft M. The said shaft now revolves and raises and lowers the lever R, which in turn rocks the treadle D on the shaft H and communicates a direct up-and-down motion to the sliding frame S F by being connected to the toggle-joint J in the center of said frame. The knives K, K^1, and K^2 are regulated to cut any thickness of slices of the vegetables by means of the set-screws S. The rapid ascending and descending of the frame S F will cut the vegetables very rapidly and effectually.

If desired, a fly-wheel can be placed on the end of the shaft F to insure a more rapid motion.

I do not claim, broadly, the sliding frame or knives attached thereto, as I am aware that the same has been used for cutting-boxes; neither do I claim separately the mechanical movement for operating the same.

Having thus described my invention, its construction and operation, what I claim, and desire to secure by Letters Patent, is—

The arrangement of the sliding frame S F, knives K, K^1, and K^2, rubber cushion *r*, set-screws S, joint J, treadle D, shaft H, lever R, shaft M, pinion N, wheel W, shaft F, feed-box F B, and sliding end S E, all combined and operating as specified.

CHARLES C. G. ARMERLING.

Witnesses:

WM. B. L. PRICE,

FRANK STOUT.