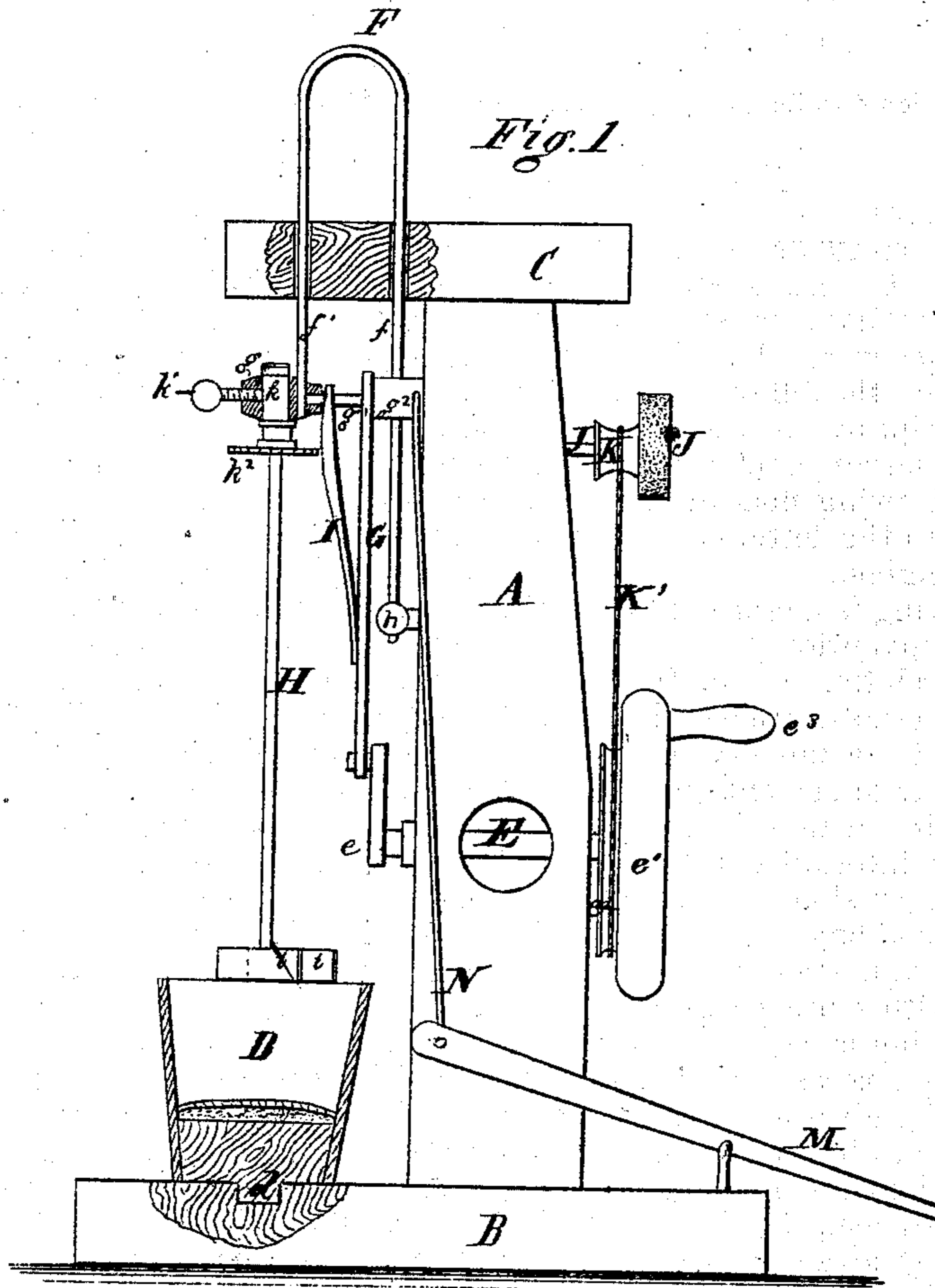


N. T. WORTHLEY.

Improvement in Meat Choppers.

No. 120,359.

Patented Oct. 24, 1871.



Witnesses
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UNITED STATES PATENT OFFICE.

NATHANIEL TRUE WORTHLEY, BRUNSWICK, MAINE.

IMPROVEMENT IN MEAT-CHOPPERS.

Specification forming part of Letters Patent No. 120,359, dated October 24, 1871.

To all whom it may concern:

Be it known that I, NATHANIEL TRUE WORTHLEY, of Brunswick, in the county of Cumberland and State of Maine, have invented a new and valuable Improvement in Meat-Choppers; and I hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side elevation of my invention.

This invention has relation to an improved mechanical motor for actuating meat-choppers, churn-dashers, &c.; and the novelty consists in the construction and arrangement of devices, hereinafter described, by means of which a vertical reciprocating and intermittent rotary motion is given to an upright shaft.

Referring to the accompanying drawing, A represents a standard supported on a horizontal sill, B, and provided with a projecting beam, C. D represents a tub having a central projection, *d*, on its bottom, fitting a recess cut in the sill B to hold it steady. E indicates a rotary shaft horizontally arranged in the standard A, and holding on its outer and inner ends, respectively, a crank, *e*, and a fly-wheel, *e*¹. The latter is formed with a circular grooved flange, *e*², on its inner face, and is provided with a crank-arm, *e*³, to operate it by. F designates a rod, bent to the form of an inverted U, one of whose legs is longer than the other. *f* represents the long and *f'* the short leg. To the end of the latter is secured a head-block, *g*, from which projects a shaft, *g*¹, one end of which is attached to a collar, *g*², secured to the leg *f*. The legs *f* *f'* are arranged to slide up and down through vertical holes cut in the bracket C. The shaft *g*¹ is connected to a crank, *e*, by means of a pitman, G, through the medium of which reciprocating vertical motion is given to the rod F and its connections.

The leg *f* slides through a bracket, *h*, projecting from the standard A, and serving as a guide and strengthener to said leg. H indicates a vertical shaft, to which it is designed to give reciprocating vertical and intermittent rotary motion. It is armed with a pair of curved cutters or choppers, *i*, secured to its lower end. On its upper end is a loose sleeve, *k*, which fits an aperture formed through the bracket *g*, and is held therein by means of a thumb-screw, *k*¹. Below this sleeve a toothed wheel, *k*², is secured to the shaft H, and is given an intermittent motion by means of a spring, I, which is secured at one end to the pitman G, and is formed with a beveled edge, to engage with the teeth of the wheel *k*². The lateral vibration of the pitman renders the actuation of this wheel, by the means described, intermittent. The upper end of the spring I is bent to rest on the shaft *g*¹. M represents a treadle hinged to the sill B, and coupled to the collar *g*² by means of a rod, N. This treadle is to be used when foot-power is desired instead of hand-power, or together with it.

I claim as my invention—

1. The combination of the rotary shaft H, wheel *k*², spring I, pitman G, and crank-shaft E, as and for the purpose set forth.

2. The rod F, head-block *g*, screw *k*¹, pitman G, and shaft E, in combination with the shaft H, provided with the toothed wheel *k*², and loose collar *k*, as and for the purpose set forth.

3. The treadle M, hinged to the sill B, and connected to the collar *g*² by the rod N, in combination with the shaft E, pitman G, and rod F, as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

NATHANIEL TRUE WORTHLEY.

Witnesses:

C. C. HUMPHREYS,
O. L. STROUT.

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