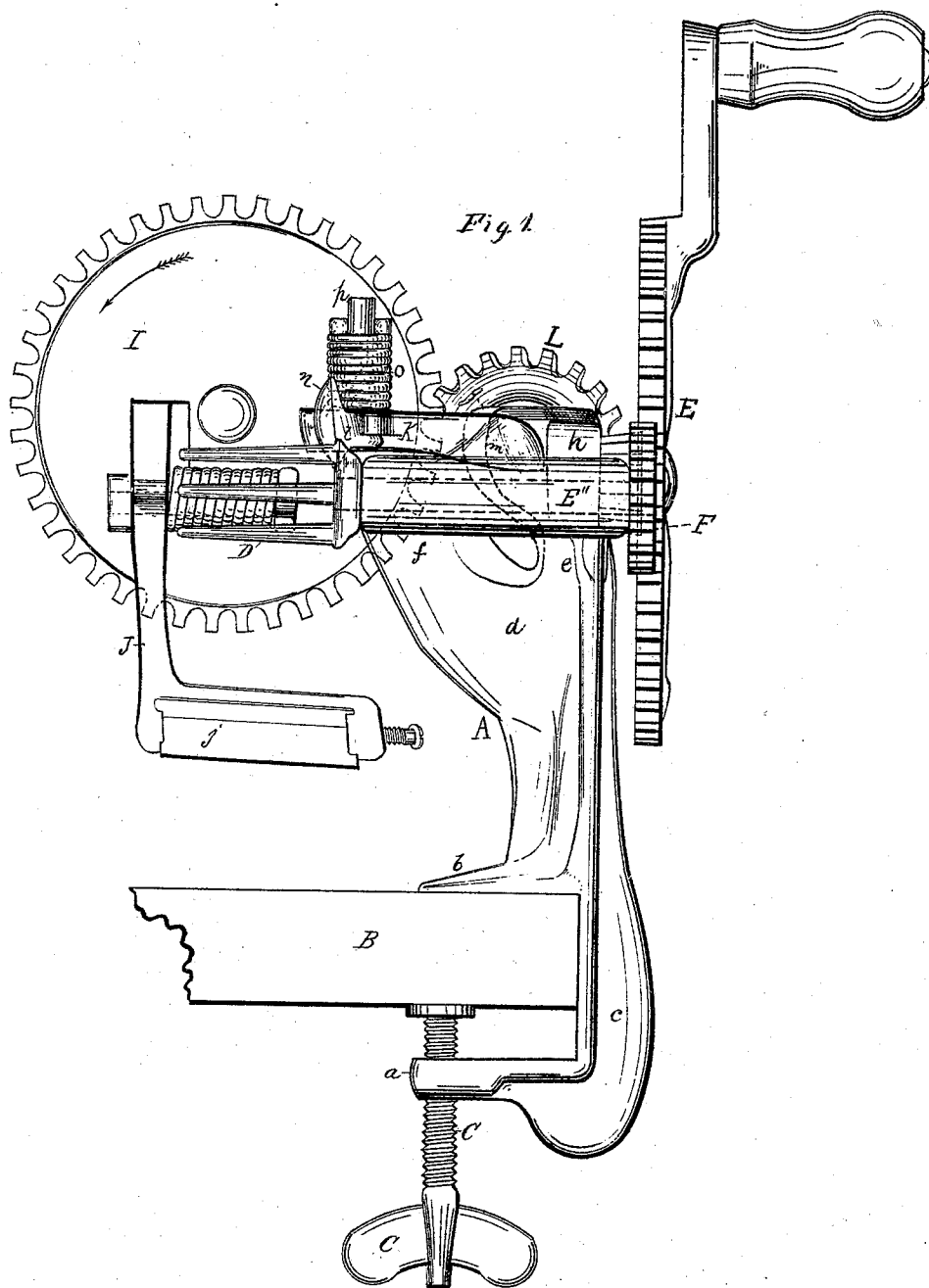


F. W. HUDSON.
Apple-Parers.

No. 147,559.

Patented Feb. 17, 1874.



WITNESSES:

C. H. Merriam

Harry W. Hudson

INVENTOR:

Frederick W. Hudson

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2 Sheets--Sheet 2.

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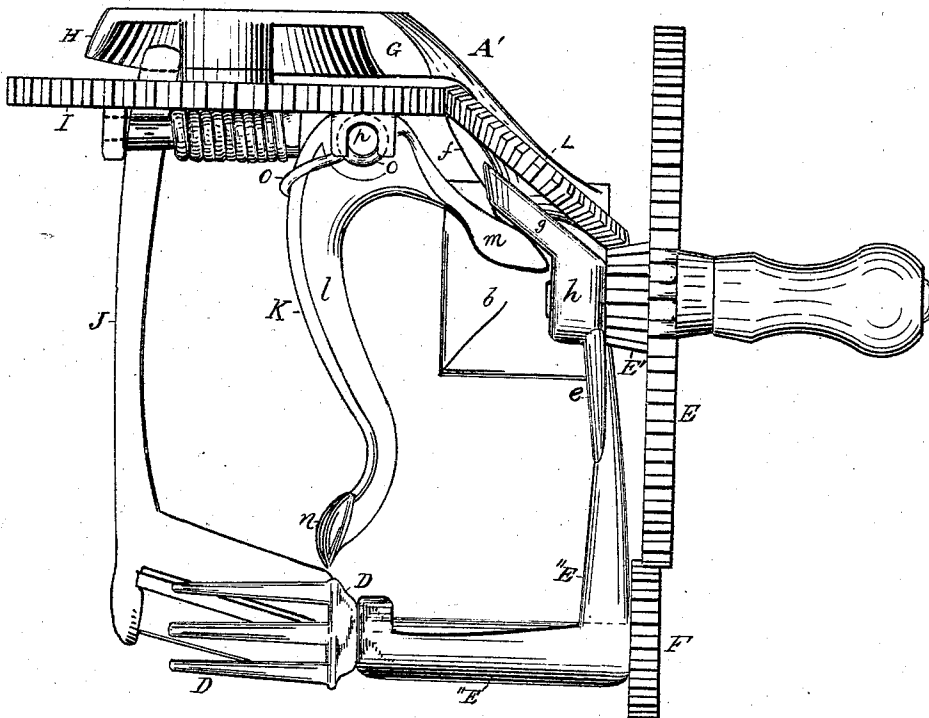


Fig. 2.

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FREDERICK W. HUDSON, OF LEOMINSTER, MASSACHUSETTS.

IMPROVEMENT IN APPLE-PARERS.

Specification forming part of Letters Patent No. 147,559, dated February 17, 1874; application filed December 22, 1873.

To all whom it may concern:

Be it known that I, FREDERICK W. HUDSON, of Leominster, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Apple-Parers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings which form a part of this specification, and in which—

Figure 1 represents a side view or elevation of the improved apple-parer, and Fig. 2 represents a top or plan view.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it in detail.

The machine or mechanism in question embodies certain improvements on a device for similar purposes, for which Letters Patent of the United States were granted me, No. 124,272, dated March 5, 1872; and consists, first, in an improved frame for supporting the various working parts of the parer, as will be hereafter fully described; and, second, in the combination, with the main frame and apple knocking-off arm, of certain stationary fixed parts for supporting the journals of one of the intermediate gears, and giving the requisite motion at the proper time, to the apple-knocking-off device, as will be hereafter described.

In the drawing, the part marked A represents the metal supporting-frame, which frame is secured to the corner of the table B by means of a set-screw, C, combined with the projecting part *a* of said frame, by which means binding the table-leaf firmly with and against the broad and flat clamping-piece *b* of frame A. Though, perhaps, not an essential feature of the improved machine, this mode of fastening is somewhat different, as respects the material parts to that resorted to in the old device, in which two bearing-lugs resting on the top surface of the table are employed. Frame-piece A is an upright metal casting, rising vertically from the lower end, *c*, and spreading out into an irregularly-flattened part, *d*, which part *d* deflects off into four distinct parts, *e f g h*. The former part, *e*, projects straight out in front as a broad, flat, and narrow shoulder, which ends as an angular arm, *E'*, supporting bearings for the apple-support-

ing fork D, revolved by pinion F, geared with driving-gear E, as in the old device. Part *f* extends up and back from the part *d*, being lengthened out into an angular arm, *A'*, provided with a guide-rim case, G H, for supporting the bearing or shaft of upright knife-arm gear I, and for properly operating said knife-arm J in connection with it. These latter parts do not essentially differ in construction or operation from those in the old device; but knife-arm gear I is operated or revolved by an intermediate and beveled gear, L, arranged on the projecting ear *g* of the supporting-frame, at such a distance and angle of inclination with respect to driving-gear E, as to mesh into a small pinion, *E'*, of said driving-gear E, which latter turns on a shaft supported by part *h* of supporting-frame. Thus by dispensing with two gears employed in the old device, as well as a contiguous shoulder to them of the supporting-frame, such a considerable space is gained as to most effectually prevent all juice, parings, or chips from clogging or otherwise hindering the perfect operation of the machine; besides, the mechanism is rendered simpler and stronger thereby, and the knife-arm, furthermore, has plenty of room to move round on its gear F without danger of obstruction.

In addition to the improvements already cited and described, I have arranged on knife-arm gear F, an apple-knocking-off device, K, which device consists of an angular lever having two arms, *l m*, curved and distorted from a regular or even shape, the former of which arms curves and projects straight out to within such a distance of the apple on supporting-fork D, as to come in contact with it after completing a revolution with the knife-arm gear I. The end of said arm *l* is a bulge or rounded and convex part, *n*. Said lever turns on a pivot, *p*, incased in a spiral spring, *o*, one end of which spring passes round the rear portion of the arm *l*, while the other end of the said spring is passed through a small hole in gear-plate I, and is secured by being bent against its back side or face.

Gear I, and combined knife-arm J, and apple-knocking-off device K, revolve in a direction indicated by the arrow, the paring-knife *j* doing its work in passing over the top of the

apple, and moving away from it in passing beneath it, and during this latter movement of knife-arm J, arm *m* of knocking-off device K slides onto and over projections *f* and *g*, of frame A, thereby raising arm *l* of the same device toward and forcing it against the apple and knocking it off of the supporting-fork. Immediately after this action is accomplished, arm *m* slides off of projection *g* onto and over gear L, and finally assumes its original position as governed by spring *o*.

It is unnecessary to comment on the practical utility of the machine as it now stands, As heretofore stated, all parts of the machine are preserved in a neat and clean condition.

The knocking-off device does its work most perfectly, saving much time, and, besides, making the operation of the machine complete.

Having described my improved apple-paring machine, what I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. The apple-paring frame A, constructed as described, provided with projections *e*, *E'*, *f*, *A'*, *g*, and *h*, substantially as described, and for the purposes set forth.

2. The combination, with the frame A and arm *m* of the apple-knocking-off device, of the projections *f* and *g*, substantially as and for the purposes set forth.

FREDERICK W. HUDSON.

Witnesses:

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