

E. L. Pratt,

Apple Parer.

N^o 43,955.

Patented Aug 23, 1864.

Fig. 2.

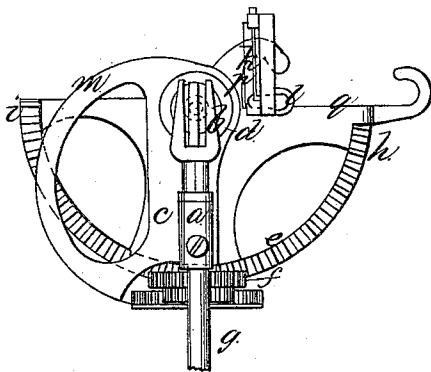
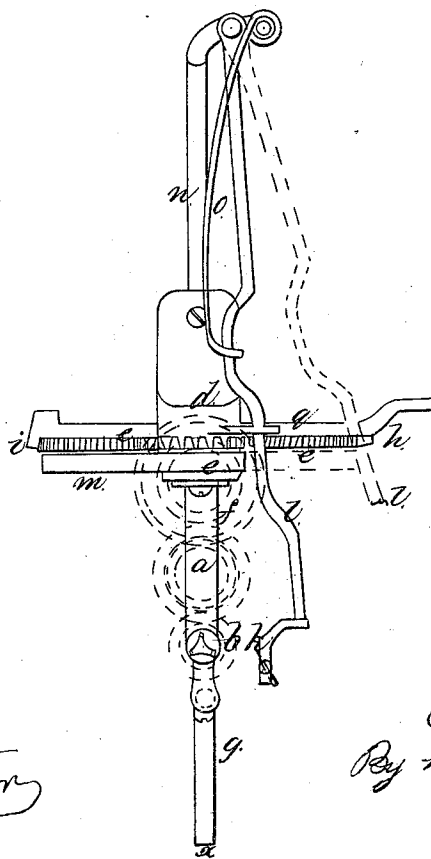


Fig. 1.



Witnesses:

*H. Gould
S. B. Kidder*

Inventor.

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By his Atty,
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UNITED STATES PATENT OFFICE.

E. L. PRATT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO GEORGE R. CARTER, OF SAME PLACE, AND D. H. GOODELL, OF ANTRIM, NEW HAMPSHIRE.

IMPROVED APPLE-PARER.

Specification forming part of Letters Patent No. 43,955, dated August 23, 1864.

To all whom it may concern:

Be it known that I, E. L. PRATT, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented new and useful Improvements in Apple-Parers; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention has reference to the construction of the well-known apple-parers which operate by giving the apple a rotary motion on the fork while the knife passes over the surface of the apple from end to end.

The invention consists in the details of construction of the mechanism, as will be readily understood from the following description and claims.

Figure 1 represents a plan of the machine, and Fig. 2 a front view of it.

a denotes the standard or arm, in which the fork *b* rotates, such arm extending from a plate, *c*, hung loosely to or upon a stationary bracket or bed-plate, *d*, which is secured to a table by a clamp screw in the ordinary manner. This bed plate has a stationary segmental rack or gear plate, *e*, of a semicircular form, extending from or forming part of it, and into this rack a pinion, *f*, meshes, said pinion rotating upon a pin extending from the swinging arm *a* and communicating motion (as said arm is rotated on the plate *e*) through a train of gears to the fork *b*, so that as the arm *a*, by its handle *g*, is swung around the rack *e* from the point *h* to the point *i* the fork shall be rotated sufficiently to bring the whole surface of the apple under the action of the paring-knife *k* by the combined rotation of the apple upon its axis and its semi-rotation around the knife. In this respect the machine does not differ essentially from some other segmental apple-parers, but in such other machines after paring the apple the fork and its gearing are carried back to their first position, whereas in this machine the rotation of the fork around the center *d* (or the center line, *d x*) is continued, the pinion *f* again meeting and connecting with the rack *e* in its forward or continuous movement, and it is in so making the machine with a segmental rack and a fork to make an entire revolution

around said rack, in the continuation of its circular path or a complete revolution around the axial line *d x*, that my invention partially consists. As the knife rod *l* is in the path of the fork-arm *a*, in order to enable the machine to thus operate, it is necessary to remove the rod beyond the path of rotation of the fork-arm and its fork, while they pass over the rack, which I accomplish as follows: Upon the inner end of the arm *a*, and perpendicular thereto, I place a cam, *m*, and when the paring operation is completed and the pinion *f* reaches the point *i*, the point on the cam-surface nearest to the center of rotation of the arm *a*, strikes the knife-rod *l*. This knife-rod is pivoted at its rear end to a stationary bar or extension, *n*, from the bed-plate *d*, as seen in Fig. 1, a spring, *o*, bearing against the arm *l* and holding the knife *k* up to the surface of the apple being pared. When the cam *m*, in its continuous rotation, strikes the arm *l*, it moves it laterally until when the pinion again approaches the first tooth, *h*, of the rack the cam will have carried the arm out into the position denoted by the dotted lines in said Fig. 1, and entirely beyond the path of rotation of the arm *a* and the fork *b* with the gearing on said arm. As or just before the pinion *f* meets the rack, the cam *m* passes beyond the rod and the spring *o* carries the arm *l* and its knife *k* back to their normal position, as seen in the drawings.

Another feature of my invention consists in so applying the knife rod that when the apple is placed upon the fork the apple shall make one or nearly one rotation on its axis (upon the fork) before the knife begins its outward movement radially from the center of rotation *d x* over the surface of the apple. This is effected by making a vertical extension in the inner end of the slot or guiding-surface over which the rod moves. This surface is generally made in the form of a slot leading radially and laterally from the center of rotation, said slot being only of width sufficient to allow the rod to move freely therein in a lateral direction. Instead of such construction, I make a vertical bearing-surface, *p*, at the inner end of the guideway *q*, which operates as follows: When the flat end of the apple is pushed up to the head of the fork, (the pinion *f* being at

the tooth *h*,) the arm *l* will be pressed up to or toward the head of the vertical surface *p*, and as the rotation commences the arm descends, carrying the cutting-point of the knife toward the center or stem of the apple in the first revolution or revolutions of the fork, and thus cutting toward the stem until the enlargement of the apple carries the knife outward on the surface *g*, whereas by the ordinary construction the knife either pares in the same line on the apple during the first series of revolutions of the fork, or immediately commences its outward movement and does not pare up to the stem.

I claim—

1. So constructing a segmental rack paring-machine that the fork revolves opposite the center of the rack, substantially as specified.

2. The employment of the cam *m* to throw the knife beyond the path of motion of the fork and gears, substantially as described.

3. The construction of the slot or bearing-surface over which the knife-rod moves for the purpose of paring to the center of the apple, as described.

Witnesses:

E. L. PRATT.

F. GOULD,

S. M. MCINTIRE.