(Model.)

J. F. RAKES.

APPLE PARER, CORER, AND SLICER.

No. 260,236. Patented June 27, 1882.

Fig: 1.

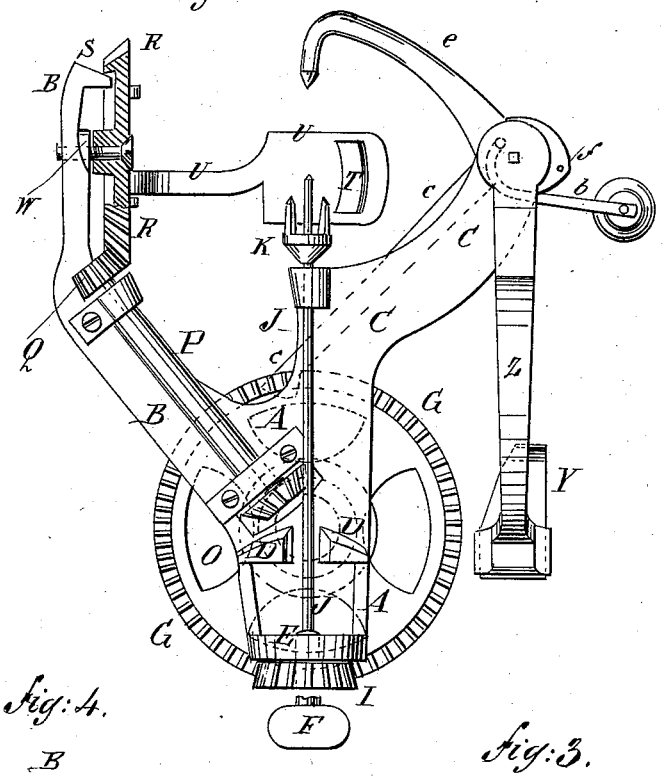


Fig: 2.

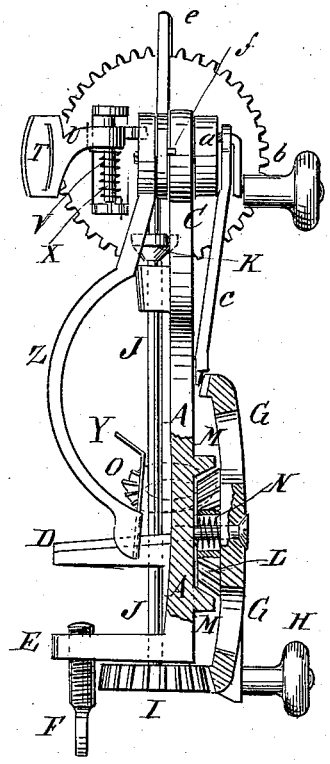


Fig: 4.

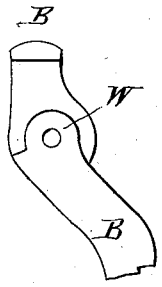


Fig: 3.

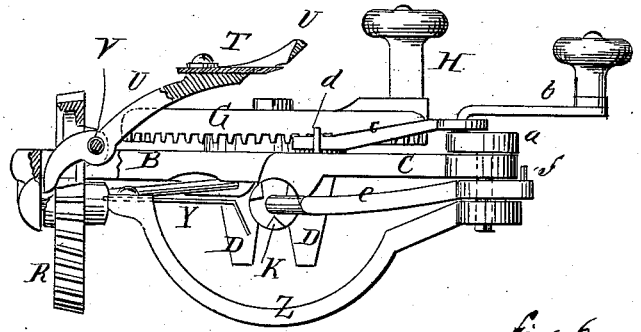


Fig: 5.

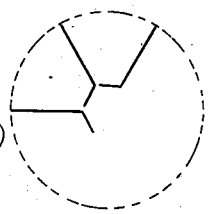
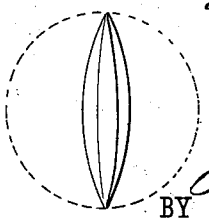


Fig: 6.



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JOHN F. RAKES, OF GREENUP COUNTY, KENTUCKY.

APPLE PARER, CORER, AND SLICER.

SPECIFICATION forming part of Letters Patent No. 260,236, dated June 27, 1882.

Application filed December 29, 1881. (Model.)

To all whom it may concern:

Be it known that I, JOHN F. RAKES, of the county of Greenup, and State of Kentucky, have invented a new and useful Improvement in Apple Parers, Slicers, and Corers, of which the following is a full, clear, and exact description.

Figure 1 is a rear elevation, partly in section, of my improvement. Fig. 2 is a side elevation of the same, partly in section. Fig. 3 is a plan view, partly in section, of the same. Fig. 4 is an elevation of an arm of the frame, showing the cam for guiding the paring-knife holder. Fig. 5 is a diagram showing the manner in which the apples are sliced and cored. Fig. 6 is a diagram showing the shape of the core.

The object of this invention is to facilitate the paring, slicing, and coring of apples.

The invention consists in an apple parer, slicer, and corer constructed with a fork and shaft, and their driving-gearing for holding and rotating the apple, a paring-knife, its holder, pivot, spring, and cam and the driving-gearing for paring the apple, the slicing-knife and its holder, the crank and crank-wheel and the pawl for slicing and coring the apple, and the bent arm for holding the core while the apple is being sliced and cored, as will be hereinafter fully described.

A represents the frame of the machine, which is made with an arm, B, projecting forward and upward, and an arm, C, projecting rearward and upward.

Upon the rear side of the frame A are formed two jaws, D E, to receive between them the edge of a table-top or other support. The upper jaw, D, is slotted to receive a shaft, hereinafter described, and the lower jaw, E, is provided with a hand-screw, F, for securing the machine to its support.

To the forward side of the frame A is pivoted a large beveled-gear wheel, G, to which is attached a crank, H, for convenience in turning it. At the lower edge of the wheel G its teeth mesh into the teeth of a gear-wheel, I, attached to the lower end of the shaft J, the lower part of which revolves in bearings in the lower jaw, E, of the clamp. The upper part of the shaft J revolves in bearings attached to an inwardly-projecting part of the arm C.

To the upper end of the shaft J is attached the fork K for holding the apple. The fork K is made with a center prong surrounded by three other prongs. The central prong, which may be the upper end of the shaft J, is made a little longer than the others to facilitate the centering of the apple upon the fork.

Upon the middle part of the inner side of the gear-wheel G is formed, or to it is rigidly attached, a small beveled-gear wheel, L, which is surrounded by a ring-flange, M, formed upon the frame A for the gear-wheel G to rest against and slide upon to keep the said gear-wheel steady.

N is a spring interposed between the gear-wheel L and the frame A to hold the gear-wheel G in any position into which it may be turned. The teeth of the gear-wheel L mesh into the teeth of a small beveled-gear wheel, O, attached to the lower end of a shaft, P, which revolves in bearings attached to the arm B, and has a small beveled-gear wheel, Q, attached to its upper end. The teeth of the beveled-gear wheel Q mesh into the teeth of the larger beveled-gear wheel R, journaled to the upright upper part of the arm B, and which is held steady by a projection, S, formed upon the upper end of the said arm B to rest against the side of the said wheel R, as shown in Fig. 1.

T is the paring-knife, which is secured adjustably to the holder U by screws or other suitable means, so that it can be moved forward as it wears. To the holder U, near its rear end, is attached a pivot, V, one end of which revolves in a bearing in a lug attached to or formed upon the gear-wheel R, and its other end revolves in a half-bearing in another lug formed upon or attached to the said gear-wheel R. The rear end of the holder U passes through a slot in the gear-wheel R, so as to come in contact with a guide or cam shoulder or flange, W, formed upon the arm B, to guide the knife T as the holder U is carried around by and with the wheel R. The holder U and the knife T are held forward against the apple by a spring, X, coiled around the pivot V, and attached at one end to the holder U and at the other end to the wheel R.

Y is the slicing-knife, the forward end of which is bent to one side at an angle, as shown

in Figs. 1, 2, and 3, (best seen in the latter,) so that when the body of the knife Y makes a radial cut the said bent end will separate the slice from the core, as illustrated by the diagram in Fig. 5, leaving the core in oval form, as shown in the diagram in Fig. 6. The knife Y is secured to the holder Z adjustably by slots and screws or other suitable means, so that the said knife can be adjusted as the size of the cores in the apples to be operated upon may require. The holder Z is curved, as shown in Figs. 2 and 3, so that it can pass around the apple upon the fork K. The rear end of the holder Z is attached to the axle of the crank-wheel *a*, which axle works in a bearing in the end of the arm C.

To the wheel *a* is attached the crank *b*, by means of which the said crank-wheel *a* is operated to revolve the holder Z and cause the knife Y to slice and core the apples.

To the crank *b* is pivoted the shank of a pawl, *c*, the engaging end of which engages with the teeth of the gear-wheel G and rotates the said gear-wheel, the relative size of the circle described by the crank *b* and the circumference of the said gear-wheel G being such that each revolution of the said crank will turn the fork-shaft and fork through one-eighth of a revolution.

The machine can be constructed to cut each apple into more or less pieces than eight, if desired. The pawl *c* is kept in place upon the gear-wheel G by a stop-pin, *d*, attached to the frame A.

e is a bar, the forward end of which is curved downward so as to be in line with the central prong of the fork K, to rest upon the apple at the upper end of its core, to steady and support the core while the apple is being sliced. The shank of the bar *e* works upon the axle of the crank-wheel *a*, between the shank of the knife-holder Z and the end of the arm C. The rear end of the shank of the bar *e* projects, and to it is attached a stop-pin, *f*, which, when the bar *e* is thrown back, strikes against the arm C and prevents the said bar *e* from being thrown back too far.

In using the machine an apple is placed upon the fork K and the gear-wheel G is turned by means of the crank H, which gives motion to the gear-wheel R. The movement of the gear-wheel R carries the holder U over the apple, which, in connection with the revolution of the shaft J and fork K, brings the paring-knife T in contact with all parts of the surface of the said apple and pares it thoroughly. When the apple is pared the machine is stopped with the knife-holder U in such a position as to be out of the way of the slicing and coring knife, which is then operated by turning the crank *b*. When the apple is sliced and cored the core is removed from the fork K, another apple is placed upon the said fork K, and the operation is repeated.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An apple parer, slicer, and corer constructed substantially as herein shown and described, consisting of the frame A B C, the fork K and its shaft J, the paring-knife T and its holder U, the slicing and coring knife Y and its holder Z, the holding-bar *e* and the pawl *c*, and the driving mechanism, as set forth.

2. In an apple parer, slicer, and corer, the combination, with the frame A B C, the gear-wheels G I, the shaft J, and the fork K, of the gear-wheels L O Q R, the shaft P, the paring-knife T and its holder U, pivot V, spring X, and cam W, substantially as herein shown and described, whereby the apple is pared and rotated upon the fork, as set forth.

3. In an apple parer, slicer, and corer, the combination, with the frame A B C, the gear-wheels G I, the shaft J, and the fork K, of the slicing and coring knife Y, the holder Z, the crank *b* and crank-wheel *a*, and the pawl *c*, substantially as herein shown and described, whereby the apple is sliced and cored, as set forth.

4. In an apple parer, slicer, and corer, the combination, with the frame A B C and the fork K, shaft J, and gear-wheels G I, of the bent holding-bar *e*, substantially as herein shown and described, whereby the core is held while the apple is being sliced and cored, as set forth.

JOHN FRANKLIN RAKES.

Witnesses:
W. R. WALKER,
R. B. TOOPS.