(Model.)

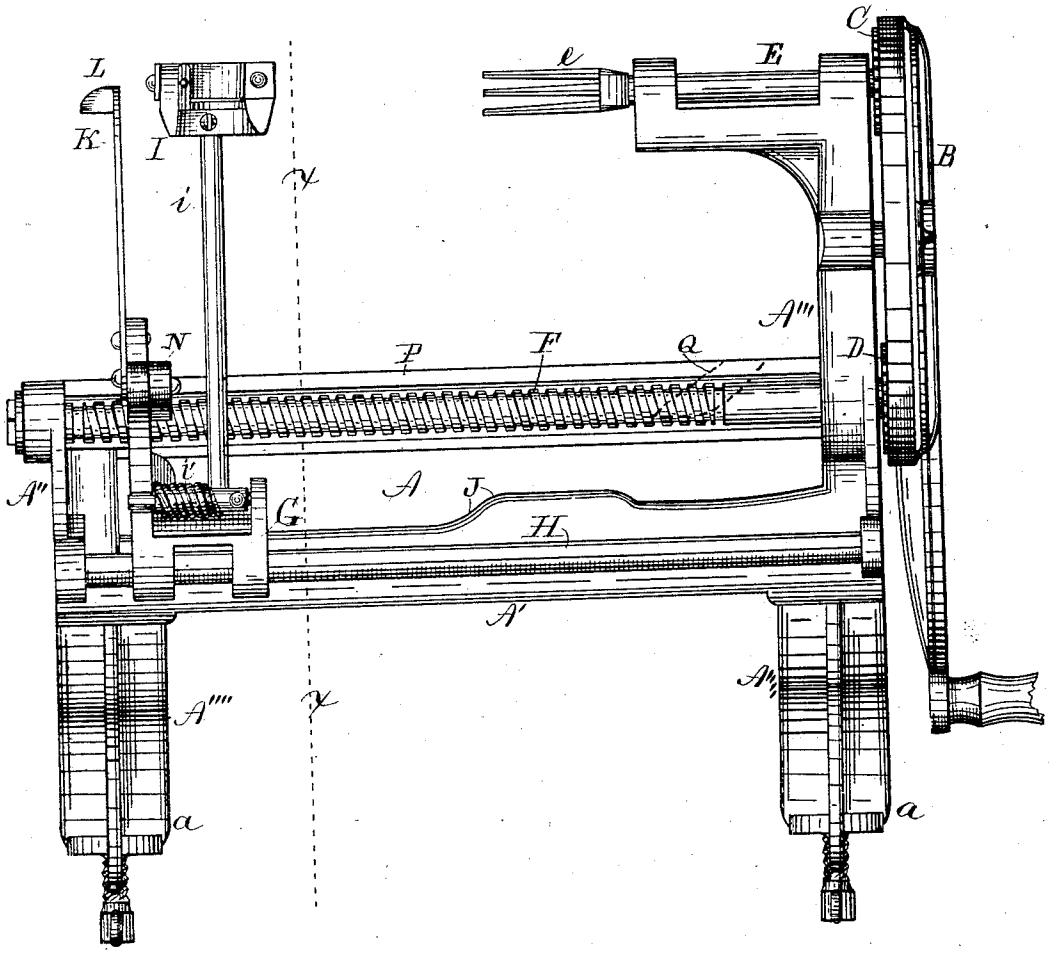
2 Sheets—Sheet 1.

D. H. GOODELL.

APPLE PARER.

No. 310,196. Patented Jan. 6, 1885.

Fig. 1.



Witnesses:
S. R. Richards.
Jas. Warner

Inventor:
David H. Goodell,
By W. B. Richards
Atty.

(Model.) 2 Sheets—Sheet 2.

D. H. GOODELL.

APPLE PARER.

No. 310,196. Patented Jan. 6, 1885.

Fig. 2.

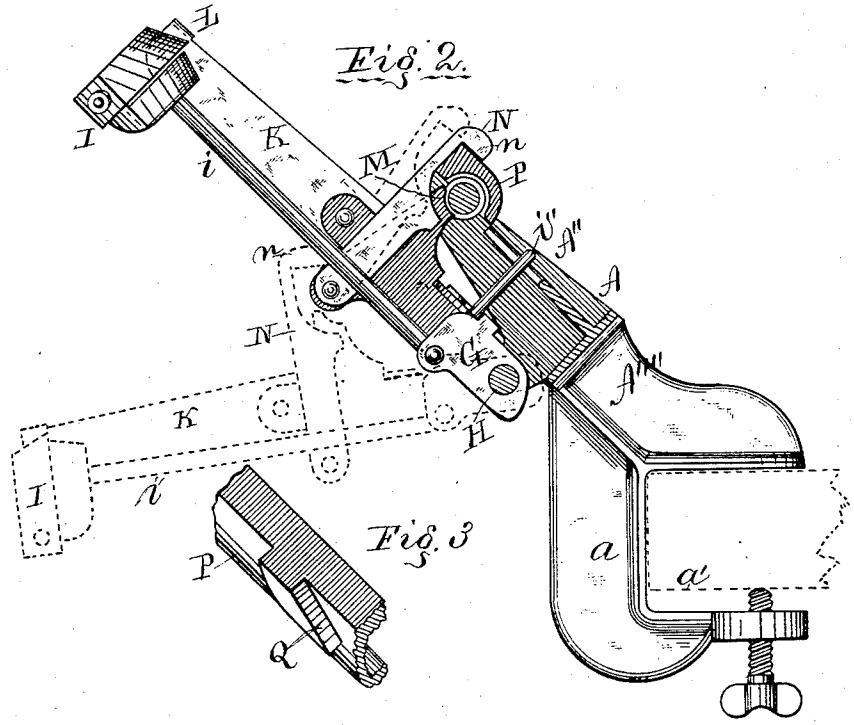
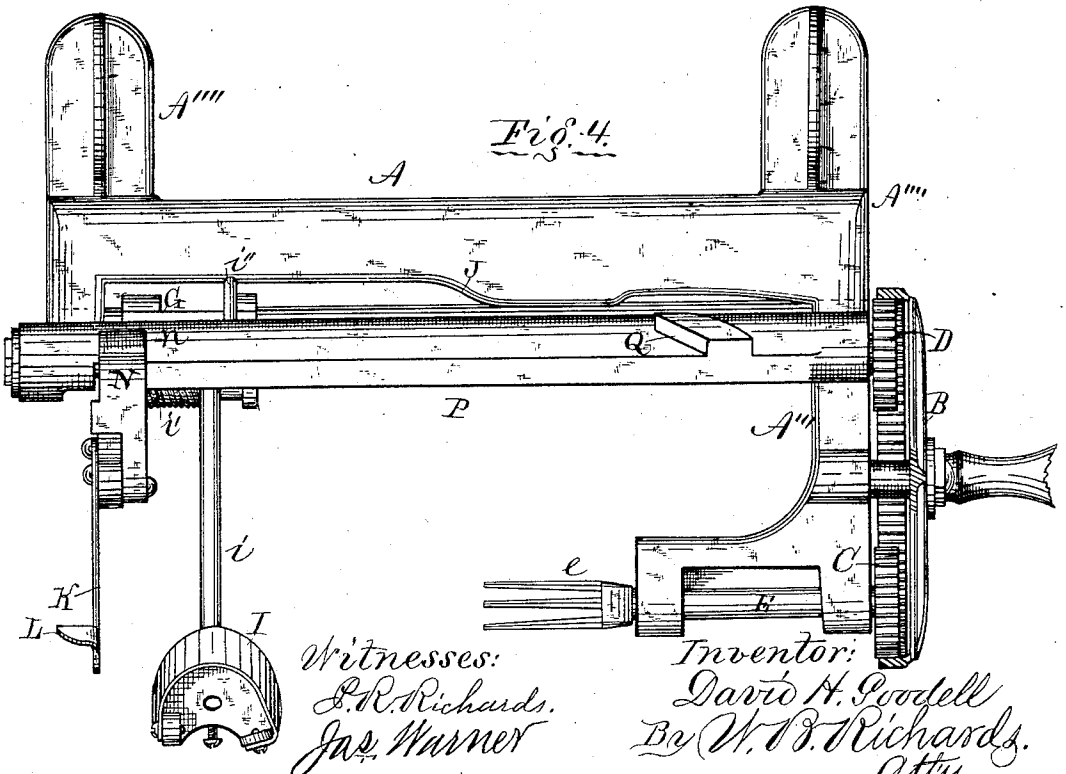


Fig. 3.

Fig. 4.



Witnesses:
P. R. Richards.
Jas. Warner

Inventor:
David H. Goodell
By W. B. Richards.
Atty.

UNITED STATES PATENT OFFICE.

DAVID H. GOODELL, OF ANTRIM, NEW HAMPSHIRE, ASSIGNOR TO THE GOODELL COMPANY, OF SAME PLACE.

APPLE-PARER.

SPECIFICATION forming part of Letters Patent No. 310,196, dated January 6, 1885.

Application filed October 31, 1882. (Model.)

To all whom it may concern:

Be it known that I, DAVID H. GOODELL, a citizen of the United States, residing at Antrim, in the county of Hillsborough and State of New Hampshire, 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 invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a side elevation. Fig. 2 is a sectional elevation in the line *x x* in Fig. 1. Fig. 3 is a detail in perspective of a short section of the slide-bar. Fig. 4 is a top plan partly in section.

This invention relates to that class of apple paring, coring, and slicing machines in which the apple is rotated by a fork-shaft, parallel with which fork-shaft the paring, coring, and slicing knives are fed by a screw, with which screw a segment-nut connected with said knives is held in contact by a latch which is automatically released by a cam, to allow the knives to swing away from the apple and the fork-shaft by the action of their own gravity, and in which the paring-knife, while traversed past the apple by the same feed-screw as the coring and slicing knife, is connected with a spring which permits the paring-knife, to yield from, while it is held thereby in contact with, the apple during the semi-orbital revolution of said paring-knife around the same, as in the reissue patent to D. H. Whittemore, No. 9,774, which shows a machine of the class referred to.

In paring-machines of the class referred to as heretofore constructed the latch which holds the paring, coring, and slicing knives in their proper paths during their operation on the apple has engaged with or slid upon the feed-screw shaft, thereby subjecting the shaft and the latch also to excessive wear, or else has slid upon a bar arranged at some distance from and in the opposite side of the fork-shaft from the feed-screw; and the object of a principal feature in my invention is to remedy this defect by providing a bar upon which the latch may not only slide, but which also acts as a guard to protect the feed-screw.

In embodying my invention of the slide-bar for the latch in a practical machine, I have devised further improvements, which are hereinafter described, and set forth in the claims hereto annexed.

The construction and relative arrangement of the parts of the improvements and the adjacent parts of the general machine in which said improvements may be incorporated are hereinafter described by reference-letters, the same letter designating the same part in all the figures, and are as follows:

A is the frame, consisting of base A′, upwardly-projecting standards A″ A‴, and lower standards, A⁗, each lower standard provided with a clamp, *a*, by which the machine may be secured to a table or other support, *a′*.

B is the drive-wheel, partly broken away at Fig. 4 to show its internal gear with pinions C and D. The pinion C is fixed to and rotates the fork-shaft E, with its fork *e*, and the pinion D is fixed to and rotates the feed-screw F. The feed-screw is journaled in suitable bearings in the standards A″ A‴, and the fork-shaft E is journaled in suitable bearings in the standard A‴.

G is a tool-carrying head, journaled on a rod, H, which is parallel or about parallel with the feed-screw F, in such manner that the head may be slid back and forth on said rod, and also be turned or partially rotated thereon.

I is the paring-knife, carried on a shaft, *i*, which is journaled to the head G and held by a spring, *i′*, which permits the knife to yield in a plane transversely to the feed-screw. A lug, *i″*, projects from the journal-shaft of the paring-knife, which lug slides up a cam, J, on the main frame, and thereby holds the knife I away from contact with the apple-fork in passing it.

K is the slicing-knife, attached to the head G, and provided at its upper end with a coring-knife, L.

M is an arm secured to and projecting from the head G, and having its inner end formed

into the segment of a nut which will gear with the screw-thread on the feed-screw F when in contact therewith.

N is a latch hinged at one end to the head G so that it may be swung in a vertical plane.

The parts hereinbefore described by letter are constructed and arranged to operate in substantially the same manner as ordinary apple-paring machines of this special class, except as hereinafter particularly described, and hence need no fuller description here.

P is a bar extending from the standard A″ to A‴, and is made to partly encircle the feed-screw F, as shown at Fig. 2, whereby it may act as a shield and protection for the feed-screw and perform other functions, as hereinafter described.

Q is an inclined cam-track on the rear side of the bar P. The free end *n* of the latch N is bent downward, to adapt it to engage with the bar P, by extending downward over the rear side of said bar, as shown most plainly at Fig. 2. The arm M and latch N together form a clasp-nut, which gears with the feed-screw, and may be detached therefrom and moved independently when required.

As shown at Figs. 1, 2, and 4 by full lines, the parts are in proper relative positions to commence operation on an apple which is to be carried on the fork *e*. The rotation of the drive-wheel rotates the apple-fork and feed-screw in the ordinary manner, and the segment-nut M, being held in contact with the feed screw by means of the engagement of the latch N with the bar P, the head G will thereby be made to traverse the bar H and carry the paring, coring, and slicing knives along in contact with the apple in the manner common to this particular class of machines. When the apple is passed by the operating-knives, so that the paring, coring, and slicing is completed, the end *n* of the latch N will come in contact with the cam-track Q, and, sliding up said cam-track, will be raised above the bar P, as shown by dotted lines at Fig. 2, and be released from said bar and thereby permit the head G to swing on the rod H, and the paring, coring, and slicing knives to swing away from the fork and feed-screw, as shown by dotted lines at same figure. When the paring, coring, and slicing knives have swung back, as last described, they may be returned again to the positions shown by full lines by sliding the head G on the bar H by hand in the ordinary manner. One of the standards, A⁗, may be dispensed with, and, whether one or two are used, by curving it, as shown plainly at Fig. 2, the head G and the knives it carries will hang at such an angle over the rod H as to greatly facilitate these parts in swinging downward when the latch N is released from the bar P, as hereinbefore described. The bent standard and overhanging paring-knife will also cause the parings to fall clear of the machine, as will be evident from inspection of the drawings.

What I claim as new is—

1. In combination with the feed-screw and sliding head carrying the paring-knife, segment-nut, and latch, the bar P, which partly encircles the feed screw F, adapted to engage the latch, and provided with a cam-track for raising the latch, substantially as and for the purpose specified.

2. In combination with the main frame, feed-screw, rod H, fork *e*, sliding head carrying the paring knife, segment-nut, and swinging latch and mechanism for operating the same, the bar P, having a recess which receives the feed-screw F, and a cam-track for raising the latch, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID H. GOODELL.

Witnesses:
H. A. HURLIN,
E. W. BAKER.