

S. N. Maxam,

Apple Parer,

Nº 12,689,

Patented Apr. 10, 1855.

Fig. 1.

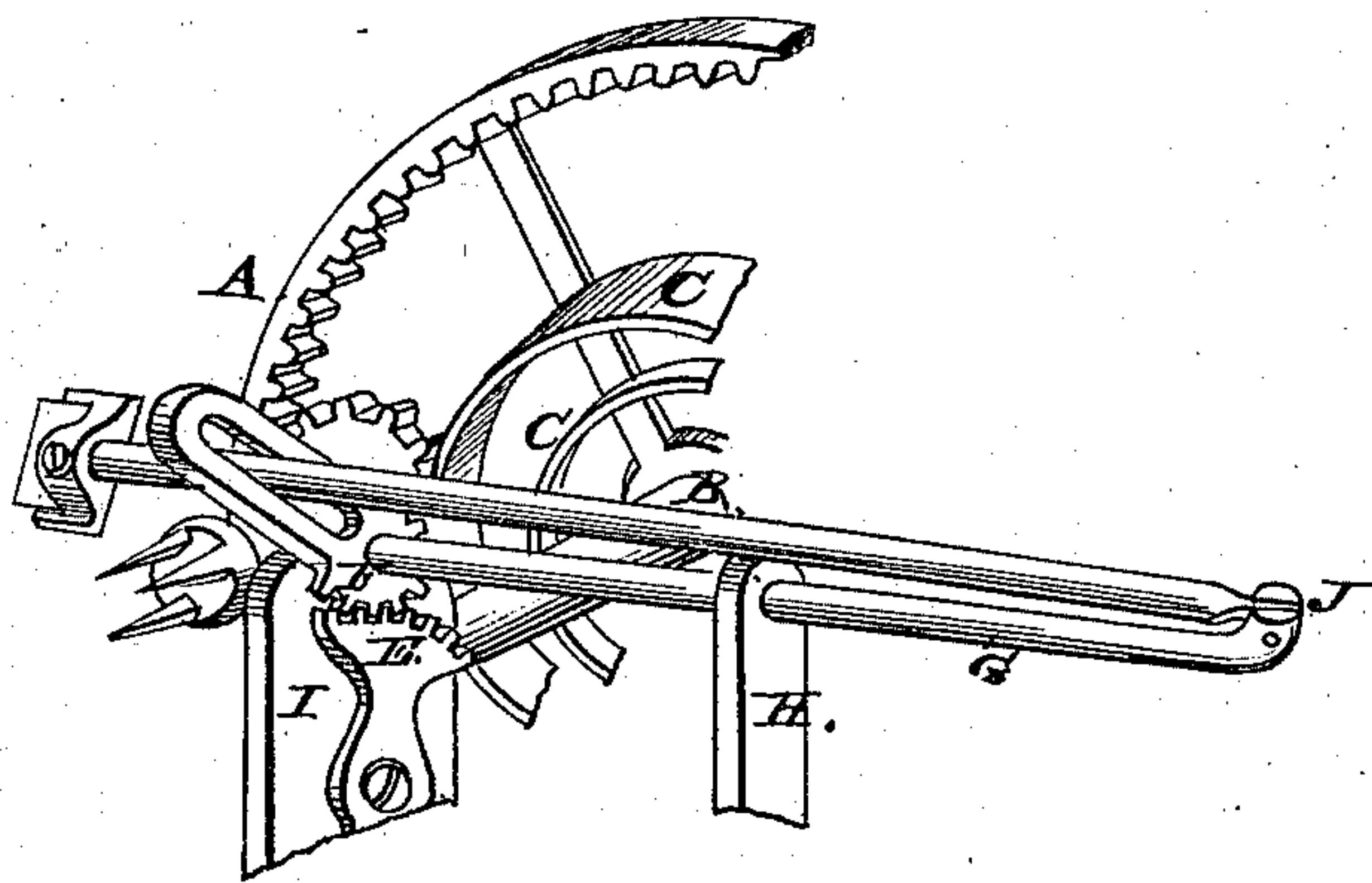
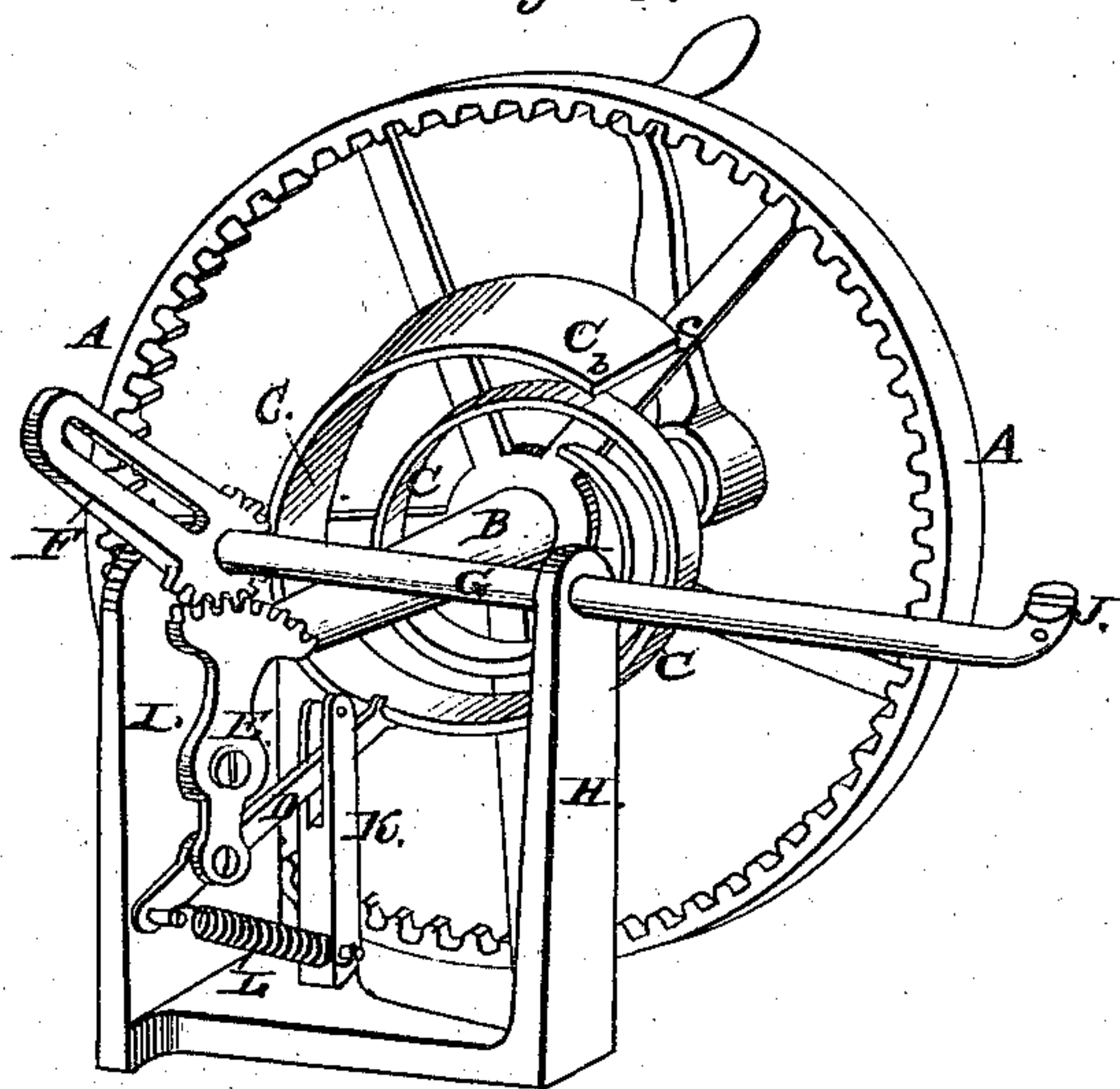


Fig. 2.



Witnesses:

Thos. B. Montague.

Guy. H. Hubbard.

Inventor:

Samuel N. Maxam.

UNITED STATES PATENT OFFICE.

SAMUEL N. MAXAM, OF SHELBURNE FALLS, MASSACHUSETTS.

MACHINE FOR PARING APPLES.

Specification of Letters Patent No. 12,689, dated April 10, 1855.

To all whom it may concern:

Be it known that I, SAMUEL N. MAXAM, of Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented a new and Improved Mode of Operating the Knives of Automatic Apple-Parers, which I denominate an improvement in "Paring-Machines"; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in guiding and controlling the knives of paring machines over and upon the surface of the apple to be pared, by means of an inclined plane scroll affixed to the driving wheel of such machine, in connection with suitable loop, gears and slide bar, as will more fully appear from the following description.

A, represents the driving wheel fixed upon its axle B having suitable bearings in the standards of the frame of the machine, and having also an internal gear upon and within its exterior rim, which gear communicates motion to the apple by means of a pinion, shaft and fork constructed in any suitable forms for said purpose. Upon and attached to the arms of said wheel A, is formed the inclined plane scroll C, arising from the plane of the arms of said wheel A, near the shaft B and extending around said shaft in scroll form at constantly increasing distances from said shaft B. This scroll also increases constantly, but not necessarily in uniform degrees, in width from the said plane of the arms until sufficient width is gained to communicate sufficient motion to the slide bar D with the parts connected therewith. Against the edge of the scroll C and pressing against the same, is placed the slide bar D the end thereof appropriately fitting upon the edge aforesaid and extending therefrom between the prongs of the guide post K, is hinged by a screw pin to the segment gear E in such manner as to communicate motion to the same. This segment gear E is hinged in like manner upon the standard I, and by the connecting gearing, communicates a reverse motion to the loop F which loop F is fixed upon the shaft G which, having proper bearings in the standards H—I, is revolved

by the said loop F and its connecting gear within said bearings.

The curved end J, of the shaft G is slotted to receive the handle of the knife which being flattened appropriately to hinge loosely within said slot, is extended from the said slot passing through the loop F and beyond the said loop to the proper position of the knife to connect with the apple upon the fork.

From the foregoing it will be seen, that, by giving rotation to the driving wheel A and the scroll C consequently revolving with the same, the slide bar D will be forced by the inclined edge of said scroll, to recede from the plane of said wheel and moving laterally with a swinging motion during the revolution of the scroll, there is thereby communicated to the segment gear E and consequently to the loop F, the semicircular movement necessary to convey the knife over the surface of the apple, from one pole to the opposite, while the said apple is revolved, by means of the fork, shaft and pinion above described, at such greater velocity than that of the driving wheel A as may enable the knife most efficiently to perform the paring of said apple. When the operation upon each apple placed upon the fork is completed, and by the revolution of the scroll C as aforesaid, the end of the slide bar D, is released from the scroll by the passage of the wide end of the same past the said slide bar D., the spring L then operates by its tension to draw the slide bar with the segment gear and loop connected therewith back to their original positions and thereby returning the knife, attached to the handle passing through the loop F as aforesaid, from its position on the completion of the process of paring the apple, to that preparatory to a repetition of the process, the slide bar D being at the same time thereby carried into position to repeat its action upon the edge of the scroll C as aforesaid.

I do not confine myself to the precise form and exact arrangement of the several parts hereinbefore described, as I may choose to vary the same while I attain the same results by means substantially the same. Nor do I claim any particular form or construction of the knife to be used upon the ma-

chine set forth, but may use any of the known forms of straight, curved, circular or cylindrical knives which have long been in common use.

5 What I do now claim as my invention and desire to secure by Letters Patent, is—

The inclined plane scroll C, combined with the movers D, E, and F, or their me-

chanical equivalents combined, arranged and operating substantially in the manner 10 and for the purposes herein set forth.

SAMUEL N. MAXAM.

Witnesses:

THOS. B. MONTAGUE,

GUY H. HUBBARD.