Sheet 1- 2 Sheets.

J. Weed,

Apple-Corer and Slicer,

No. 6,619, Patented July 31, 1849.

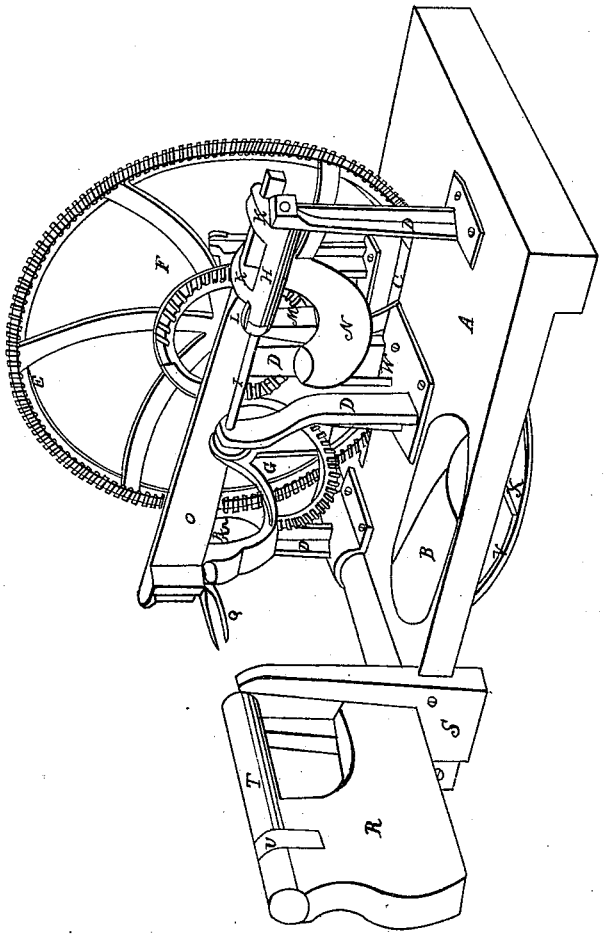

Fig. 1

Sheet 2 - 2 Sheets.

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Fig. 2

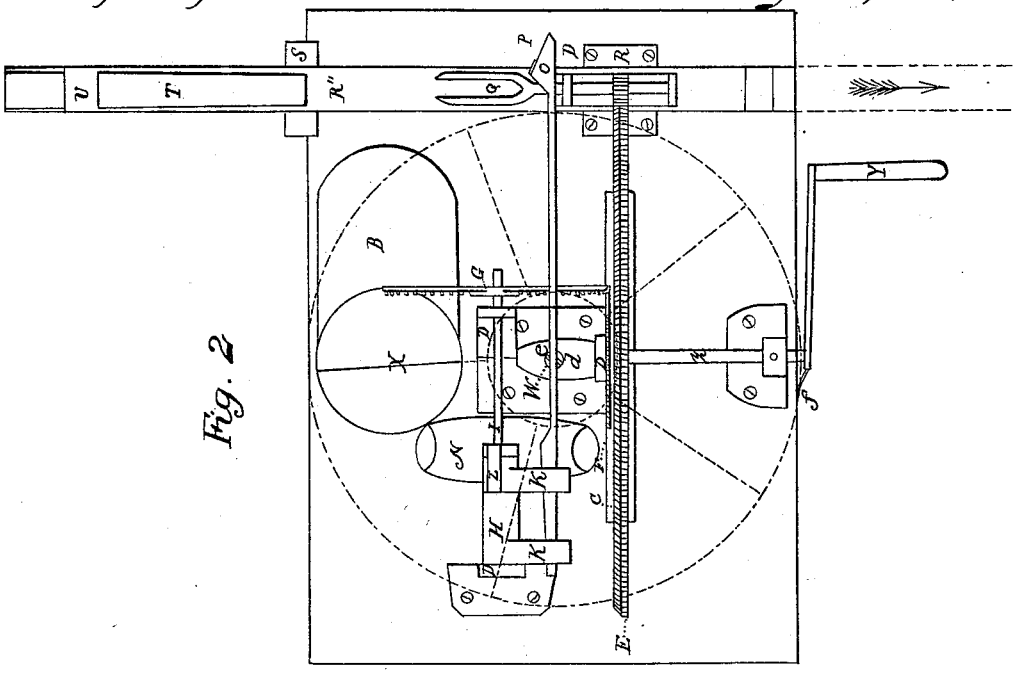
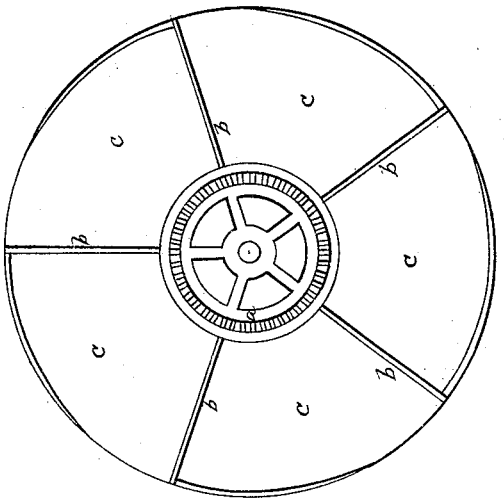


Fig. 3



UNITED STATES PATENT OFFICE.

JULIUS WEED, OF PAINESVILLE, OHIO.

PARING, CORING, AND SLICING APPLES.

Specification of Letters Patent No. 6,619, dated July 31, 1849.

To all whom it may concern:

Be it known that I, JULIUS WEED, of Painesville, in the county of Lake and State of Ohio, have invented a new and Improved Machine for Paring, Coring, and Slicing Apples; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view, and Figs. 2 and 3 ground plans, the same letters referring to similar parts in all the drawings.

To enable others skilled in the art to make and use my invention I here explain the manner of constructing and operating the same.

A, Fig. 1, is the foundation or sill, with two openings B, C cut through it, also a mortise about the center of said board for the admission of the shaft of the slicer hereinafter mentioned. D D D D standards for the support of the different parts of the machine. E a spur and bevel driving wheel, having attached to its arms another bevel wheel F, of the peculiar form hereinafter mentioned.

G is a segment or half wheel, also beveled, and working into the center bevel wheel F.

H is a socket into which the shaft I is inserted, said socket has two projecting arms K, K, containing mortises through the sides for the reception of the handle of the knife hereinafter mentioned.

L is a projecting prong or catch operating on the shoulder of the rod M.

N is a vibrating or swinging weight attached to the shaft I, M and N being one entire piece, O the knife, which consists of a handle formed of wood—thin and slender—and of the form as delineated in the drawing, the blade or cutter of which is bent with one angle and fastened thereto at P; said knife is placed in the mortises of the projecting arms K K.

Q is a fork with the stem lengthened and placed through the spindle or pinion wheel R, said pinion meshing into the spur teeth of the driving wheel E.

R″ is a block to support the cover; said block is of the shape as shown in the drawing, the lower part being lengthened and sliding through the guide S and under the opposite standard D, having a free motion backward and forward.

T is a tube fastened to the block R″ by the strap U. V the slicer attached to the shaft W (hereinafter more particularly described) with the edge of one of the blades shown at X.

Y, Fig. 2, is a hand crank attached to the shaft Z by which the driving wheel is worked.

The form of the inside bevel wheel which makes part of the driving wheel is of the following construction: One part of the beveled surface is bare of cogs, and another space is occupied with a wide cog, and the remaining space with cogs of the size to fit the segment wheel, the object of said bare space and wide cog will be explained in the operation.

The slicer above mentioned is formed of a wheel having a bevel wheel, *a*, Fig. 3, of suitable diameter, to mesh into the driving wheel E.

b b b b b are five radiating arms; *c c c c c* five cutters or slicing blades fastened on the said arms and the edges of the wheels; the cutters are gradually raised as they approach the arms so as to leave an opening of sufficient space to pass the slices of the apple during the operation. A shaft is attached to said wheel, which is inserted through the mortise in the foundation, passing up through the girt *d*, Fig. 2, and there supported by the pin *e;* the position of said slicer being indicated by the dotted lines in Fig. 2.

On the edge of the sill a spring catch *f*, Fig. 2, is placed to prevent the handle from starting back and causing derangement in the machinery.

As to the material of which my machine is composed the standards, driving wheel, pinion, segment wheel, socket and arms, and weight—also the wheel of the slicer are formed of cast iron; the four shafts of wrought iron;—sill, coring block, guide and knife handle of wood; the coring tube and slicing blades of tin; and the fork and knife blade of steel.

No mention is made of the size of the different parts of the machine, this being regulated by suitable dimensions; nor do I confine myself to the above material named for its construction, any other proper material being equally applicable to my invention, the knives or cutters of the slicer may be of steel; also the handle of the paring knife may be constructed of the same material.

The sill or foundation may be extended to any convenient length, or made of any suitable form to adapt it to a chair, bench, table, tub, or frame.

To put my machine into use the operator places it before him on any convenient article, with the crank on the right hand (the handle of which is down and confined by the spring *f*). After placing an apple on the fork with his left hand he takes the crank in his right and turns it from and toward him until he brings it to again catch in the said spring—this one turn of the crank pares the apple, leaving it on the fork ready for coring.

To describe more particularly the way in which the paring is performed I here state, that, as soon as the driving wheel is started the spindle attached to the fork is put in motion, the knife remaining stationary while the segment wheel is passing over a part of the bare space of the bevel wheel F, thereby giving an interval sufficient to pare the end of the apple before the knife starts, the said segment then strikes the cogs of the said bevel wheel which communicates motion to the paring knife; when said knife is perpendicularly over the apple (or half way) the prong on the socket strikes the shoulder of the rod, causing it to carry the weight N up, the knife at the same time passing on to the opposite end of the apple, where it remains another interval while the segment wheel is passing over the wide cog—paring that end of the apple, after which the said segment reaches the bare space again—throwing it immediately out of gear, and by the gravity of the descending weight the knife is instantly brought back to its former position, ready for another revolution. The solid part of the segment wheel, and the weight of the projecting arms is intended to assist in bringing the knife back. The apple being thus pared as aforesaid, the operator with his left hand strikes the coring block, on the lower part, propelling the tube attached thereto forward against the apple, then with his right hand he strikes the said block back again, causing the said tube to bring off the apple and core from the fork; this motion at the same time causes the apple to strike against the back of the guide which detaches the cored apple from the tube, and falling into the receiver B it is sliced up by the revolving slicer, the operator steadying the apple an instant with his finger until the slicer commences cutting. The slicing of one apple is effected while another is being pared.

Having thus fully described the construction and also the mode of using my machine, what I claim as my invention, and desire to secure by Letters Patent, are the following particulars:—

1. The arrangement of a segment wheel attached to a shaft, said shaft having a socket with projecting arms for the insertion of the knife handle,—said segment wheel meshing into a bevel wheel formed on the driving wheel, which said bevel contains a bare space and wide cog for the purposes hereinbefore described—the said shaft having a swinging or vibrating weight attached thereto for the use above stated.

2. The arrangement of a sliding corer for coring the apple and for detaching it from the fork, and the guide for dropping the apple from the coring tube, as described.

3. A slicing apparatus, with cutters or slicers of tin or steel, of the form and arrangement as herein described, placed under the foundation and connected with the driving wheel aforesaid, so as to perform the operation of slicing at the same time with that of paring.

4. The arrangement of paring, coring, and slicing, combined in the same machine, as described. And I make no other claim.

JULIUS WEED.

Witnesses:
MILO HARRIS,
J. F. SINGLE.