W. M. GRISCOM.

COMBINED APPLE PARER AND CORER.

No. 191,669. Patented June 5, 1877.

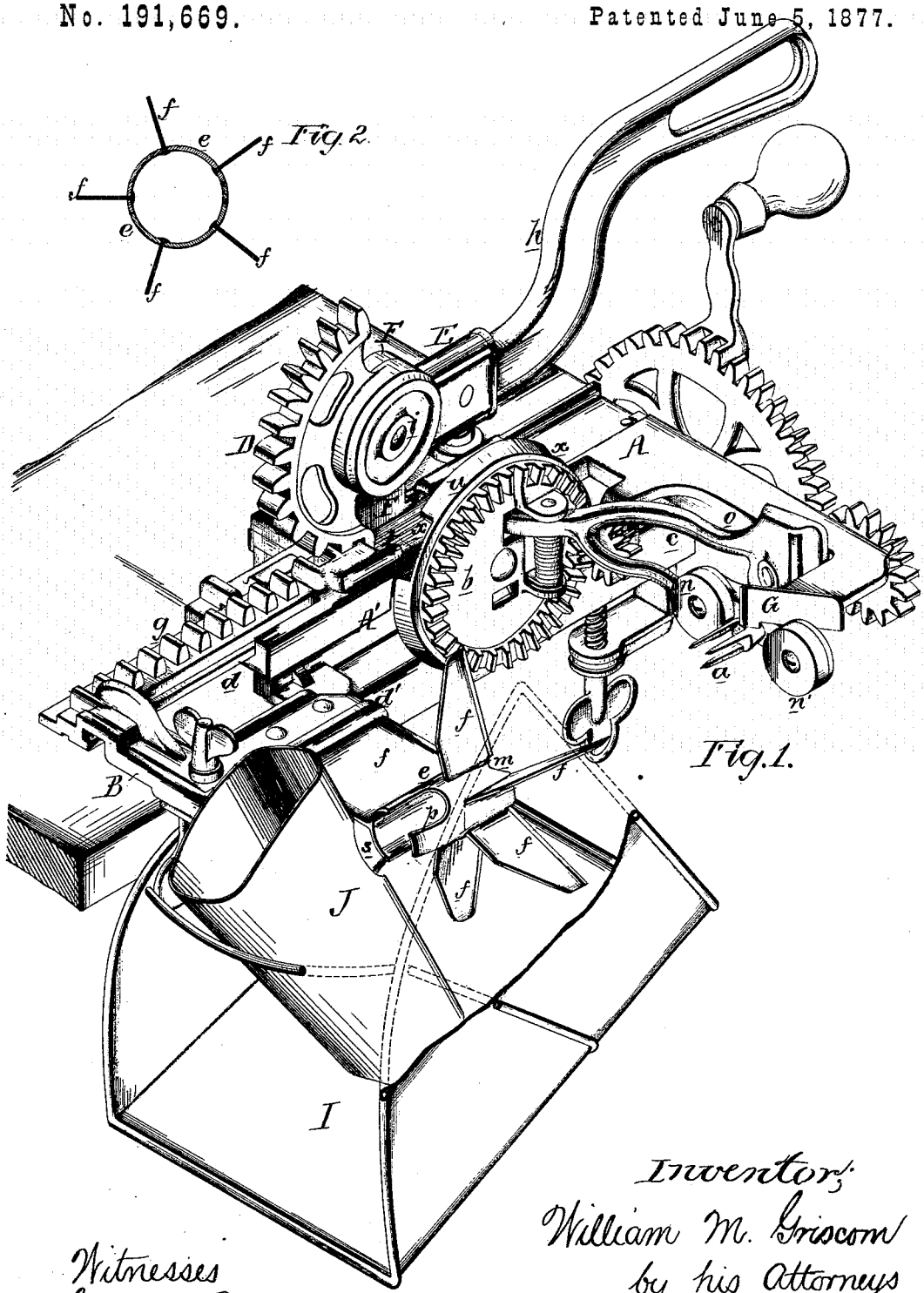

Fig. 2.

Fig. 1.

Witnesses
Hermann Groesbeck
Harry Smith

Inventor:
William M. Griscom
by his Attorneys
Howson and Sons

UNITED STATES PATENT OFFICE.

WILLIAM M. GRISCOM, OF READING, PENNSYLVANIA.

IMPROVEMENT IN COMBINED APPLE PARER AND CORER.

Specification forming part of Letters Patent No. **191,669**, dated June 5, 1877: application filed November 1, 1876.

To all whom it may concern:

Be it known that I, WILLIAM M. GRISCOM, of Reading, Pennsylvania, have invented a new and useful Improvement in Combined Apple Paring, Coring, and Slicing Machines, of which the following is a specification:

The object of my invention is to so construct a machine for paring, coring, and slicing apples as to attain the following results: first, the ready operation of the coring and slicing device; second, the separation of the cores and parings from the slices of the apple; third, the prevention of the forward movement of the coring and slicing device until the paring-knife is out of the way; fourth, a firm bearing for the apple while it is being cored and sliced; fifth, the use of a supplemental paring-knife; and, sixth, the economical construction of the coring and slicing device.

This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my improved machine for paring, coring, and slicing apples; and Fig. 2, a detached view of a portion of the same.

So far as regards the paring devices they are similar to those in general use in this class of machines; and consist essentially of a revolving fork, *a*, which carries the apple, and a revolving table, *b*, carrying a lever, *c*, to which the paring-knife is secured, and which is so acted on by suitable devices that the knife is caused to traverse the surface of the apple beneath the skin, which is consequently removed.

The frame A, which carries these working parts, is provided with a clamp, by which it is secured to the corner of a table, as shown; but, instead of being constructed in the usual manner, the frame has an extension, A′, and to guides on this extension, and on the frame itself, is adapted one arm, *d*, of a two-armed frame, B, the opposite arm *d′* of which carries the paring and coring device, the latter consisting of a central tube, *e*, arranged in line with the fork *a*, and provided with a number of radial arms, *f*.

The arm *d* of the frame B has a rack, *g*, which gears into a toothed segment, D, forming part of a lever, E, the latter having an operating-handle, *h*, and being hung by means of a pin, *i*, to the upper end of a post, F, secured to or forming part of the frame A.

This lever is acted upon by a spring similar to that described in the machine for which Letters Patent were allowed to me on the 5th day of October, 1876, the tendency of this spring being to maintain the lever in the position shown in Fig. 1, with the coring and slicing device away from the paring devices.

I prefer to use in connection with the usual paring-knife a supplemental paring-knife, G, for removing the skin near the stalk of the apple, and as this knife projects somewhat beyond the base of the fork *a*, I form in the front edge of the coring-tube *e* a recess, *m*, for the reception of the edge of the knife G when the coring-tube is brought forward.

In order to prevent the apple from being broken from or forced off the fork *a* by the coring and slicing device, I form on the frame A, on either side of the fork *a*, cheeks *n n′*, which present an extended bearing for the base of the apple. The use of the cheek-pieces in this position necessitates the recessing of the lever *c* at the point *o*, so that the said lever is at liberty to clear the cheek *n′*.

The rear end of the coring-tube *e* is cut away so as to form a spring-finger, *p*, which, while it does not interfere with the forward movement of the coring-tube over the core on the fork *a*, takes a firm hold on the core upon the rearward movement of the tube, and thus effectually prevents the adhesion of the core upon the fork *a*.

The arm *d′* of the frame B, in addition to carrying the coring and slicing device, carries an inclined chute, I, at or near the center of which is arranged a spout, J, open at the bottom, inclined in a direction contrary to that of the chute, and having in its front edge, near the top, an opening, *s*, immediately adjacent to the rear end of the coring-tube *e*. As the cores are ejected from this tube they pass through the opening *s* into the spout J, and are directed into the same receptacle which receives the parings, the slices of the apple, meanwhile, falling onto the bottom of the chute I, and being directed into a different receptacle placed in a suitable position in respect to the end of the chute.

By this means the sliced apples are effectually separated from the cores and parings, thus overcoming a serious objection to ordinary machines of the class to which my invention relates, in which cores, parings, and sliced apples fall into one receptacle, and must be afterward separated.

In order to prevent injury to the coring and slicing knives, owing to their being brought forward while the lever *c* is in the way, I form on the arm *d* of the frame B a projection, *t*, and recess the rim *u* of the table *b* at the points *x x*, so that the frame B can only be brought forward when the lever *c* is in the position shown in Fig. 1—that is, at the rear of the fork—the forward movement of the frame under any other circumstances being prevented by the projection *t* coming into contact with the rim *u* of the plate *b*.

In order to prevent the slicing-arms *f* from being torn from the tube *e*—an accident which is liable to occur when the arms are merely brazed to the tube—I form the latter in halves, as shown in Fig. 2, so as to afford facilities for riveting the arms of the two halves, which are then united together by brazing, or equivalent means. This is a much stronger slicer than if the arms were secured to a complete tube, which affords no facilities for riveting the ends of the arms on the inside.

It will be understood that the frame A and its clamp are separable from each other, that the handle *h* is detachable from the lever E, and that the chute I is so connected to the frame B that it can be readily removed or replaced, so that the entire machine can be packed into small compass for transportation.

I claim as my invention—

1. The combination of an apple-paring machine with the sliding frame B, the coring-tube and slicing-arms, the chute I and spout J, having an opening, *s*, opposite the coring-tube, as set forth.

2. The combination of the supplementary paring-knife G with the coring-tube *e*, having a recess, *m*, in its front edge.

3. The combination of the fork *a* and a coring and slicing device with cheeks *n n'* arranged on either side of said fork, as set forth.

4. The combination of the frame B and its projection *t* with the rotating table *b*, having a rim, *u*, recessed at *x*, as set forth.

5. The within-described coring and slicing device, consisting of a tube, *e*, made in two or more sections secured together, and the slicing-arms *f*, riveted to the said sections, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM M. GRISCOM.

Witnesses:

HERMANN MOESSNER,

HARRY SMITH.