A. N. Alcott,

Apple Corer.

No. 19,402. Patented Feb. 23, 1858.

Fig: 1.

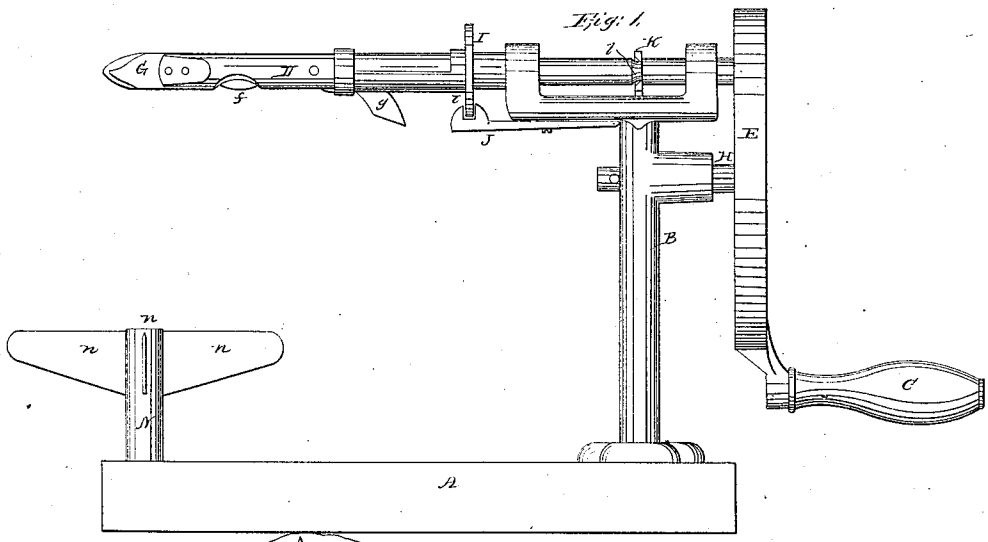


Fig: 4.

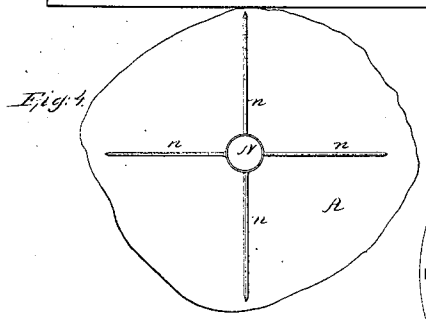


Fig: 2.

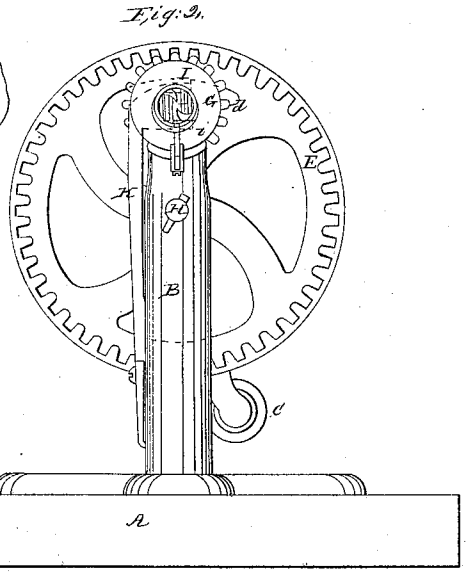
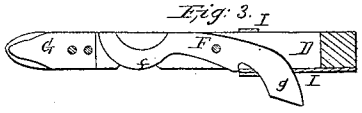


Fig: 3.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

A. N. ALCOTT, OF GOWANDA, NEW YORK.

APPLE-CORER.

Specification of Letters Patent No. 19,402, dated February 23, 1858.

To all whom it may concern:

Be it known that I, AHAZ N. ALCOTT, of Gowanda, in the county of Cattaraugus and State of New York, have invented an Improvement in Machines for Coring Apples, the construction and operation of which I have described in the following specification and illustrated in the accompanying drawings with sufficient clearness to enable competent and skilful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

There have been various devices contrived for cutting the cores from apples, one of the most prominent of which is a sheet metal tube with wings, similar to that represented in the accompanying drawings, and used in connection with my machine for quartering, only. It is well known that the core of an apple at its ends is very small, but in the middle where the seeds lie it is much larger, and for this reason, to cut a hole of equal size all the way through the apple as those machines do, is equivalent either to leaving a portion of the core at its largest part or to cutting away more than is necessary at its ends.

My said invention consists in combining with a shaft which is first bored into the apple, a knife which may be thrown out from the shaft while the apple is upon it, to cut out the larger part of the core in the middle of the apple as hereinafter more fully set forth.

In the accompanying drawings Figure 1 is a side elevation of my improved machine. Fig. 2 is an end elevation. Fig. 3 is a detail view showing a part of the principal shaft and some other parts of the machine in section to show more clearly the action of the knife. Fig. 4 shows an auxiliary device used for quartering the apples, after they are cored by my machine.

A is a piece of board which forms the bed or base of the machine, to which the main standard B is attached with screws or in any other convenient manner, the standard forming the support in which the working parts of the machine are hung.

D is the principal shaft, upon which the apple is cored. It has a pinion *d* upon it by which it receives motion from the internal gear of the crank wheel E as shown in Fig. 2. This shaft D is slotted, as shown more clearly in Fig. 3, to receive the knife F, and also the boring cutter G at the end. The cutter G is made with a slight auger twist to bore its way into the apple as the latter is pushed on to the shaft. A rotary motion is given to this shaft D by turning the crank C, and the apple is pushed on during its rotation. When the apple has been pushed upon the shaft far enough to bring the middle of it upon the bow *f* of the knife F, a slight endlong motion is given the shaft D toward the end to which the cutter G is attached, both the shafts D and H being allowed a little end play for that purpose. The object of this endlong motion is to throw out the knife F from the shaft D to cut out the larger part of the core which is in the middle of the apple. This knife is so thrown out so as to cut this part of the core, by the collar I which rotates with the shaft D, but is kept from sliding with it, by the bracket or arm J which is attached to the standard B, and a disk flange *i* (which forms a part of the collar I) turning in a notch in this bracket or arm J for that purpose.

The arm *g* of the knife F passes through a mortise in the collar I as shown, and is curved or inclined in such a manner that an endwise motion of the shaft D while the collar I is kept from moving in the same direction, will throw out the knife so as to cause it to cut considerably beyond the outside of the shaft, as it is turned around in the apple. The spring K, which is attached to the standard B, bears in the groove *l* in the shaft D, and returns the parts to their original position so as to return the knife F into the shaft.

N is a tube with four wings *n n n n* to quarter the apple. It is an old device for that purpose, and is only shown as an auxiliary to this machine. When used with this machine, the tube N should be the same size

as the shaft D, so that it will enter and fill the hole made by said shaft and thus act as a guide to direct the apple upon the quartering wings.

The particular improvement which constitutes my said invention and which I claim as having been originally and first invented by me, is—

The combination of the knife F with the shaft D and collar I or its equivalent by which the knife may be thrown out from the shaft to cut out the core in its largest part as set forth.

AHAZ N. ALCOTT.

Witnesses:
NORMAN H. ALLEN,
GEORGE ALCOTT.