W. Weaver,

Cherry Stoner,

No. 54,797. Patented May 15, 1866.

Fig. 1

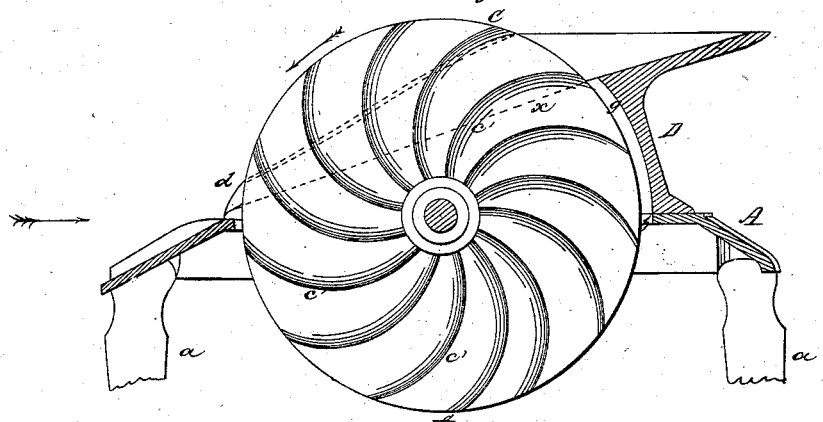


Fig. 3

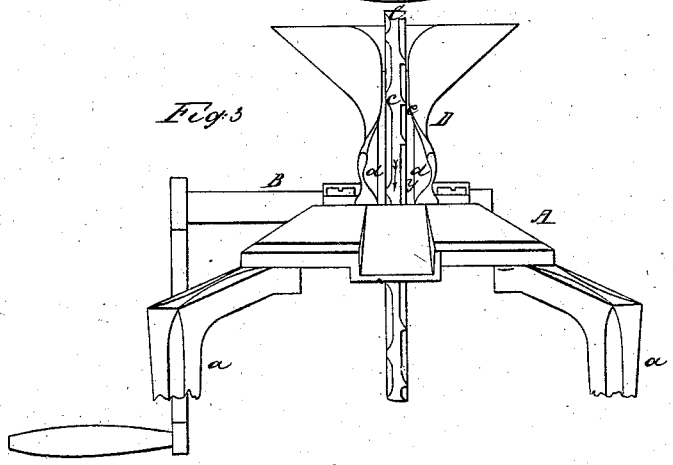
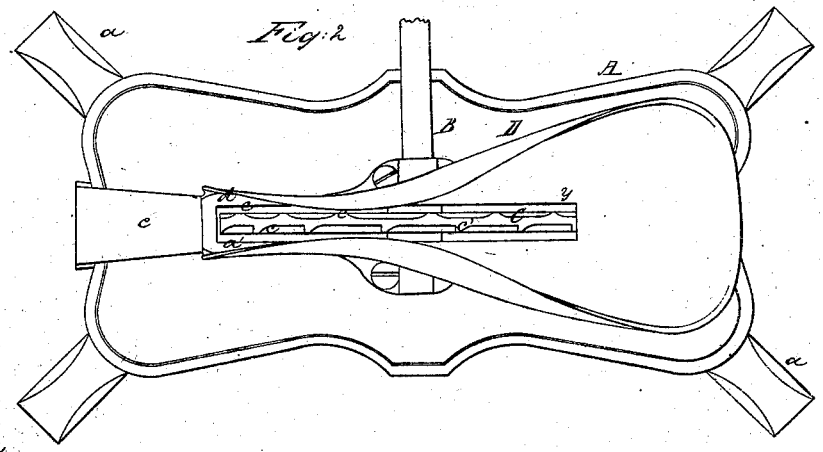


Fig. 2



Witnesses
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By his attorney
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UNITED STATES PATENT OFFICE.

WILLIAM WEAVER, OF PHŒNIXVILLE, PENNSYLVANIA.

IMPROVED CHERRY-STONER.

Specification forming part of Letters Patent No. **54,797**, dated May 15, 1866.

To all whom it may concern:

Be it known that I, WILLIAM WEAVER, of Phœnixville, Chester county, Pennsylvania, have invented certain Improvements in Machines for Stoning Cherries; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists in certain devices, constructed and arranged as fully described hereinafter, whereby the removal of the stones of cherries may be more quickly effected than by the ordinary machines, and without mashing or cutting the pulp to an injurious extent.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a sectional elevation of my improved machine for stoning cherries; Fig. 2, a plan view, and Fig. 3 an end view, looking in the direction of the arrow, Fig. 1.

In suitable bearings on a plate, A, which is supported by legs *a a*, turns a shaft, B, to which is secured a disk, C, the latter turning in a slot, *b*, in the center of the plate.

On the opposite sides of the disk C are a number of curved radial projections or ribs, *c c'*, the outer edges of the ribs *c'*, on the side of the plate, being sharpened, as shown in the drawing, for a purpose described hereinafter.

To the top of the plate A is secured a hopper, D, with an inclined bottom, *x*, and through a slot, *y*, in the hopper, projects the disk C, the hopper extending above the disk at one end and being contracted at the lower end, so as to form two inclined grooves or channels, *d d'*, which lead to an inclined chute, *e*, at the end of the plate A.

The sides of the channels *d d'* are inclined toward the disk C, as shown in Fig. 3, for a purpose described hereinafter.

The distance between the sides of the disk C and the sides of the slot *y* is such as to readily permit the passage of the pulpy portion of a cherry from which the stone has been removed, while it is not wide enough to permit the passage of the smallest stone.

The cherries are introduced into the hopper and a rotary motion in the direction of the arrow is imparted to the disk C. As the disk revolves the ribs *c c'* will be brought against the cherries and will push the latter into the channels *d d'*, the space in which is so contracted that the cherries cannot turn readily, and they will therefore be broken or cut at one side by the ribs, the pulp being carried from the stones downward between the disk and the edges of the slot *y*, while the stones are still moved onward in the channels by the ribs and are discharged into the inclined chute *e*, from which they pass to any suitable receptacle.

When the softer varieties of cherries are to be stoned they are introduced into the side of the hopper next the ribs *c*, the blunt edges of which readily break through the soft pulp, so that the stones can escape. The harder varieties of cherries, however, would be mashed and broken at the side if operated on by the blunt ribs *c*. Cherries of such a nature are therefore introduced into the side of the hopper next the ribs *c'*, the sharpened edges of which cut the fruit sufficiently to permit the escape of the stones without mashing or detaching any portion of the pulp.

As the curved sides of the channels *d d'* approach nearer the disk at the lower than at the upper portions of the same, stones of any size may be passed along the channels, but are always brought as close as possible to the disk, so that they cannot escape until all the pulp is removed, the necessity of having adjustable blocks with channels in the same being thus avoided.

I am aware that a disk with ribs on one side of the same has been heretofore used in connection with a hopper for stoning cherries. It will be apparent, however, that by the use of a disk having ribs on both sides, in connection with a double hopper or with two hoppers, twice as many cherries may be stoned as with the ordinary machine.

It will also be seen that, owing to the inclination of the grooves *d d'*, the forward movement of the cherries is greatly facilitated, so that the machine is not so apt to clog as those of the ordinary construction.

I claim as my invention and desire to secure by Letters Patent—

1. The disk C, having ribs on both sides, in

combination with a double hopper, or with two hoppers, arranged at opposite sides of the disk, substantially as and for the purpose described.

2. The combination, with the disk C, of one or more inclined channels, *d*, for the purpose specified.

3. The combination of one or more hoppers with a revolving disk having blunt-edged projections or ribs *c* on one side and sharpened ribs *c'* on the other, for the purpose set forth.

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

WILLIAM WEAVER.

Witnesses:

CHAS. B. PRICE,

CHARLES E. FOSTER.