I. Van Kannel,

Cherry Stoner,

No. 36,683. Patented Oct. 14, 1862.

Fig. 1.

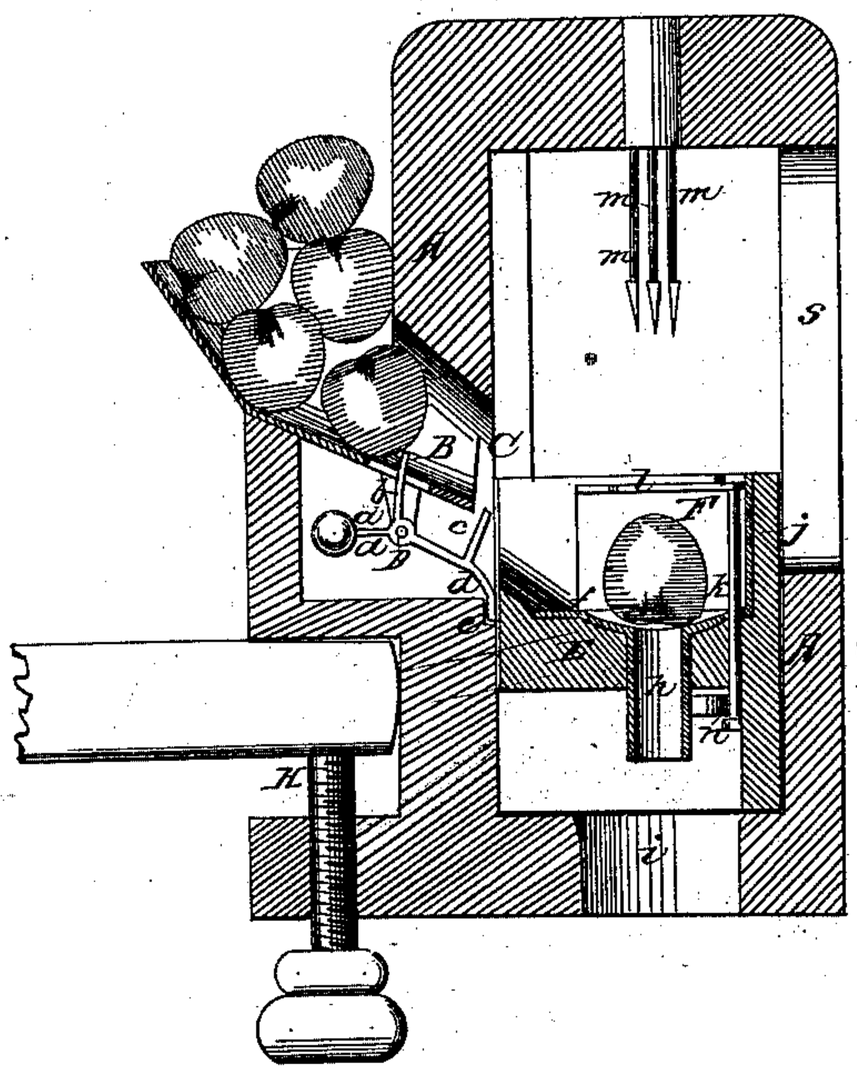


Fig. 2.

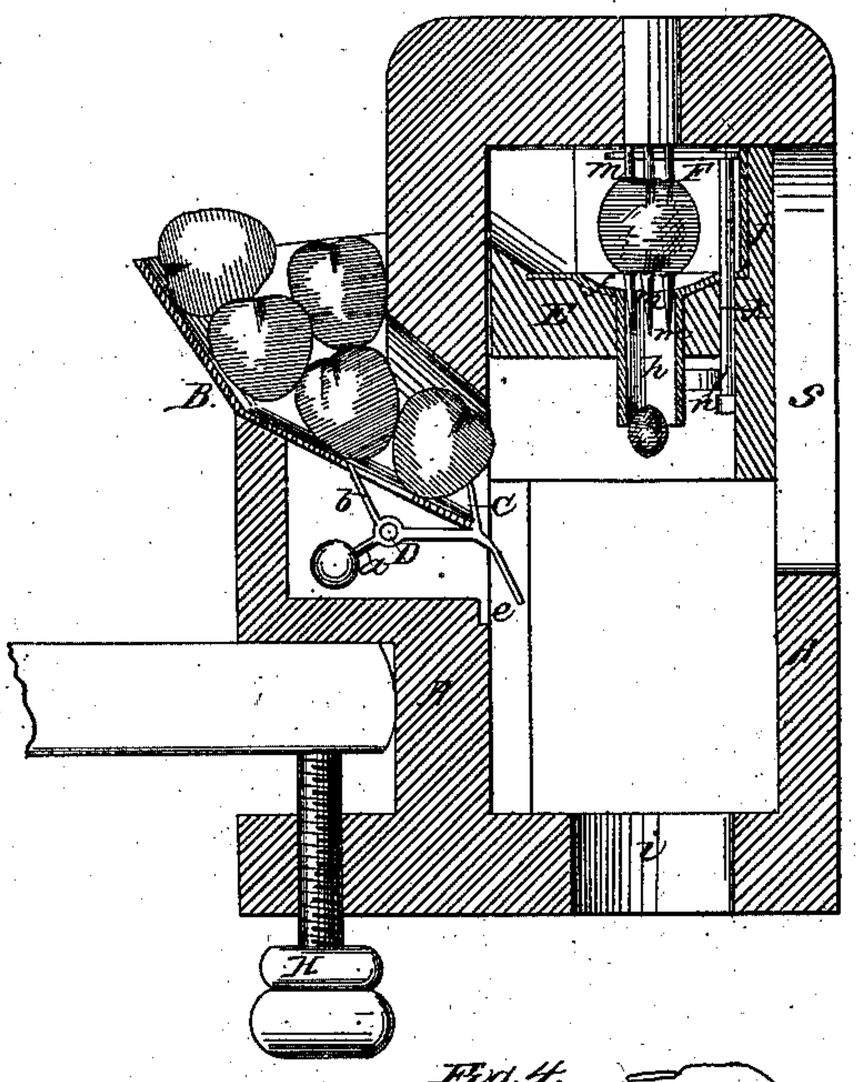


Fig. 3.

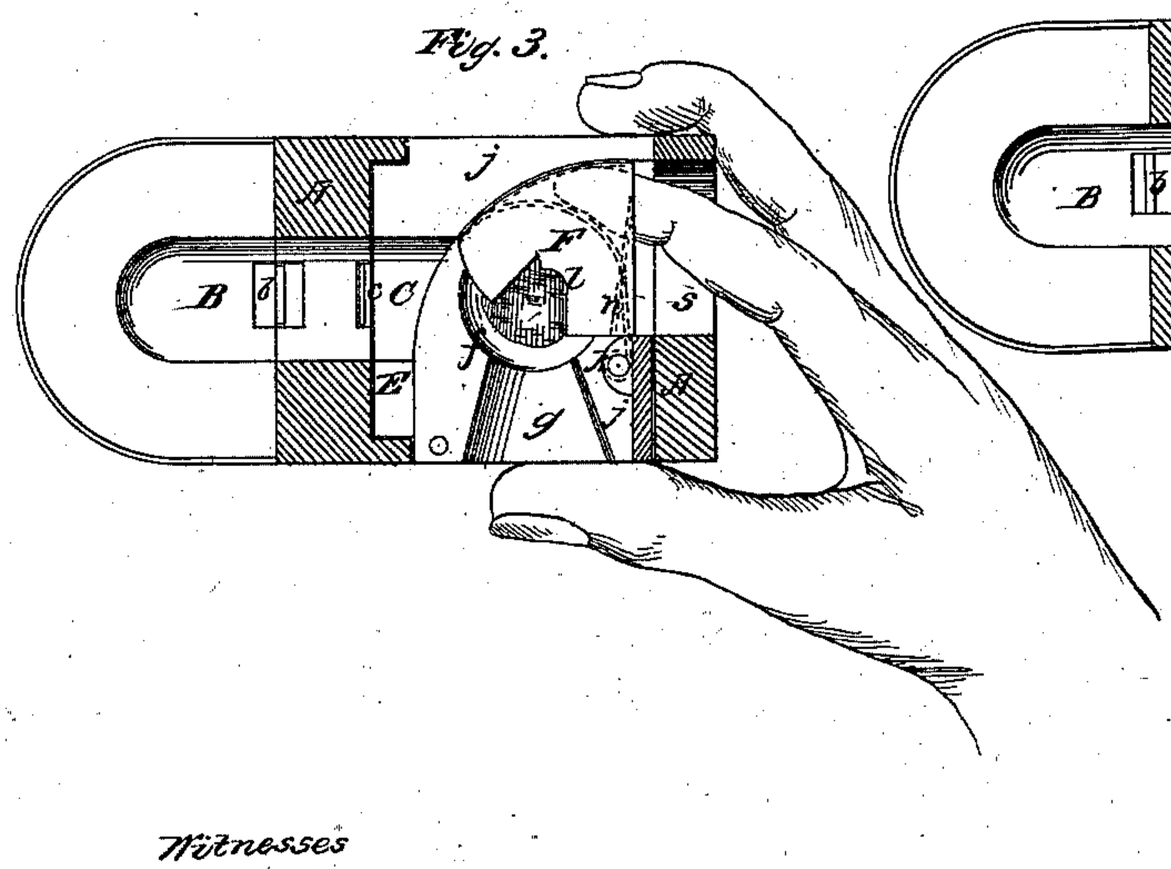
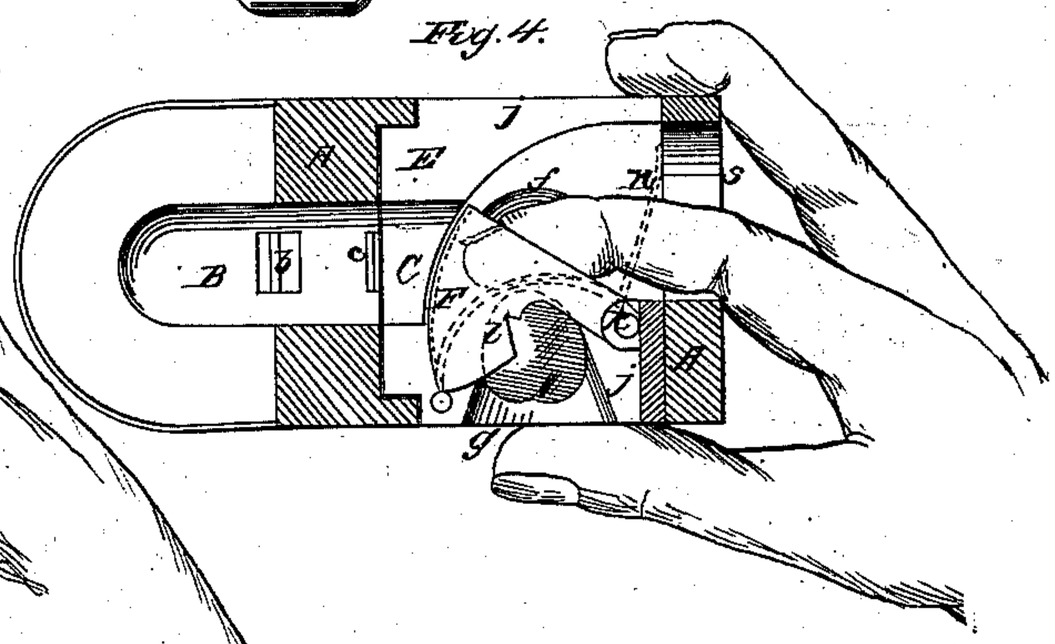


Fig. 4.



Witnesses
Gustavus Dieterich
Edwin L. Jacobs

Inventor
Theophilus Van Kannel
by
Mason, Fennick & Lawrence
his Attys

UNITED STATES PATENT OFFICE.

THEOPHILUS VAN KANNEL, OF CHESTER, ILLINOIS.

IMPROVED MACHINE FOR STONING CHERRIES.

Specification forming part of Letters Patent No. **36,683,** dated October 14, 1862.

To all whom it may concern:

Be it known that I, THEOPHILUS VAN KANNEL, of Chester, in the county of Randolph and State of Illinois, have invented a new and useful Improvement in Machines for Stoning Cherries; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical central section of the machine ready to stone a cherry. Fig. 2 is a similar section of the machine as it appears just after the stone is removed from the cherry. Fig. 3 is a horizontal section of the machine in condition for raising the cherry up to the stoning-fork. Fig. 4 is a horizontal section of the machine in act of removing the stoned cherry from the machine.

Similar letters of reference in the several figures indicate corresponding parts.

The nature of my invention consists, first, in a gravitating feeding device constructed substantially as hereinafter described.

It consists, second, in a vertically-sliding receiver with a central passage through it, in combination with a series of stationary barbed needles and the gravitating feeder.

It consists, third, in a pivoted spring finger-piece for stripping the stoned cherry from the barbed needles and discharging it from the machine.

It consists, fourth, in the organization of the whole machine so that it will feed the cherries separately, stone them separately, and discharge the stone in one direction and the pulp or meat of the cherry in another direction.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A is a frame with an opening in each of its four sides.

B is a feeding-hopper with inclined bottom leading into the frame or box by means of a passage, C, which is large enough to freely escape a cherry through it.

D is a four-armed gravitating lever fitted under the bottom of the hopper. On its arm *a* a ball or weight is fitted. The arm *b* extends up through a hole in the bottom of the hopper, and acts as a feeder to force a single cherry through the passage C. The arm *c* extends up in front of the lower edge of the hopper, and acts as a guard against the entrance of a second cherry through said passage until the proper time. The arm *d* extends down opposite a notch, *e*, of the frame, and by entering said notch arrests the movement of the feeder D.

E is a slide fitted within guides of the frame A, and constructed with a concave, *f*, in its top and an inclined gutter, *g*, leading from the concave to the edge of the top. The concave at its center extends down through the slide in the form of a cylindrical passage, *h*, as represented. The passage *h* and a passage, *i*, in the bottom of the frame A conduct off the stones removed from the cherries. The slide has a raised flange, *j*, on three of its sides, and within this flanged portion a finger-piece, F, is arranged to swing round upon a vertical axis, *k*, as represented. The top plate of this finger-piece extends over the concave *f*, but is cut away, as at *l*, so as to admit the finger-piece to come in proper relation to the barbed needles *m* to strip the cherry from them. The axis of the finger-piece is pressed upon by a light spring, *n*, so that when the finger is withdrawn from the finger-piece the same shall return to its original position. The barbed needles are suspended some distance above the slide, being attached to the central part of the top of the frame directly in line with the passages *h* and *i*, as represented.

The machine is screwed to a table by means of a thumb-screw, H, and to operate with it cherries are placed in the hopper, as represented, and the thumb of the hand then placed on the front part of the slide E, with the first finger through the aperture *s* and the remaining fingers on the opposite side, as represented in Fig. 3. The slide is now raised, with a cherry in its concave, (it having been previously moved slightly so as to depress the arm *c* of the feeder D,) from the position shown in Fig. 1 to the position shown in Fig. 2. This movement forces the cherry upon the barbed prongs and causes the stone to be removed from it, as represented in Fig. 2. The finger-piece is now pressed around the prongs above the stoned cherry, and in this condition it and the slide are drawn down to their original position, and when down the cherry which the finger-piece stripped from the barbed needles is discharged from the concave through the gutter *g* by pressing the finger-piece round from

the position shown in Fig. 3 to the position shown in Fig. 4. While the operation of stoning a cherry is proceeding, the pressure of the slide E upon the arm *d* ceasing, the arm *c* stops the descent of another cherry; but as soon as the slide is brought down to its original position this pressure acts, and the arrested cherry rolls down until it is stopped by the back of the finger-piece, which by this time has been moved round opposite the passage C for the purpose of discharging the stoned cherry. As soon as the finger-piece is returned the cherry arrested by it falls into the concave, ready to be carried up to the stoning-forks. While a cherry is entering the concave, and until it is forced upon the forks, the arm *b* of the feeder prevents another descending.

This description of the operation would give the impression that much time and care are necessary; but such is not the fact, as the performance of the operation is very rapid and convenient.

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

1. The gravitating feeding device D, substantially as and for the purpose described.

2. The vertically-sliding receiver or concave E *f g*, with a central passage, *h*, through it, in combination with a series of barbed needles, *m*, and with the gravitating feeder D, substantially as and for the purposes described.

3. The pivoted spring finger-piece applied and operating substantially as described, for the purpose set forth.

4. The organization of the machine, as described, so that it will feed the cherries separately, stone them separately, and discharge the stone in one direction and the cherry meat or pulp in another direction, substantially as and for the purposes set forth.

THEOPHILUS VAN KANNEL.

Witnesses:

ISAAC H. NELSON,

JAMES M. RALLS.