J. W. LOWRANCE.

Peach Cutter and Stoner.

No. 217,887. Patented July 29, 1879.

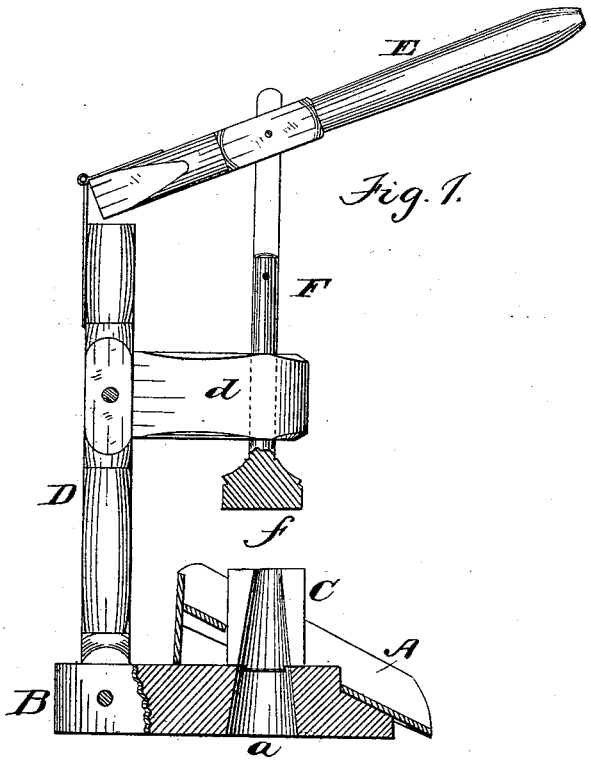

Fig. 1.

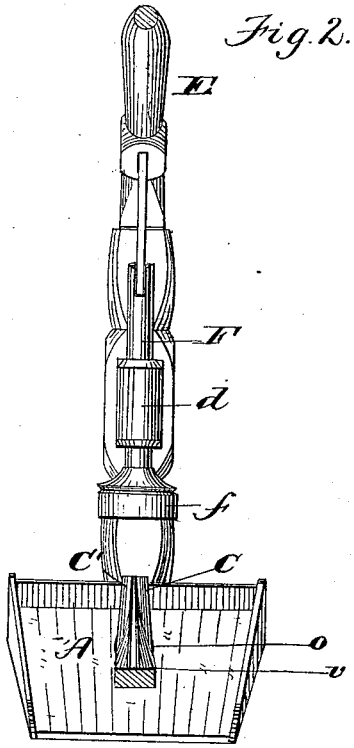

Fig. 2.

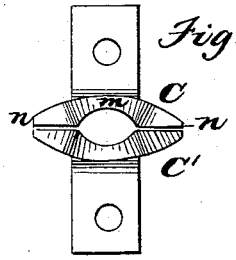

Fig. 3.

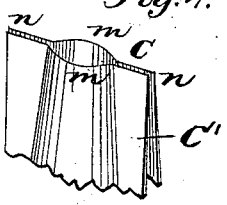

Fig. 4.

WITNESSES

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JAMES W. LOWRANCE, OF MOORESVILLE, TENNESSEE.

IMPROVEMENT IN PEACH CUTTER AND STONER.

Specification forming part of Letters Patent No. **217,887**, dated July 29, 1879; application filed February 3, 1879.

To all whom it may concern:

Be it known that I, JAMES W. LOWRANCE, of Mooresville, in the county of Marshall and State of Tennessee, have invented a certain new and Improved Peach Cutter and Stoner; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation, partly in section; Fig. 2, a front view, and Figs. 3 and 4 views of the cutting-blades.

Similar letters of reference in the several figures denote the same parts.

The object of this invention is to improve the construction and general operation of machines for cutting peaches and removing the stones therefrom; and the invention consists in a spring cutting and stoning blade made in two parts, each part having a curved center to admit the stone, and two cutting flanges or wings to sever the peach, the two cutting-wings of one part being normally in contact with the corresponding wings of the opposite part throughout their whole extent, so as to operate as a single blade in dividing a peach into halves.

In the drawings, B is a suitable base or table, and A is an inclined spout or chute fixed upon it to direct the cut and stoned peaches into a suitable vessel or receptacle placed beneath the lower edge of the incline.

An opening, *a*, is made vertically through the incline and table, and the two-part knife C C′ is fixed to the upper edge of the opening in the table, and extends up through the incline, as shown.

At the back edge of the table is arranged an upright, D, having a horizontal guide-arm, *d*, in which is a vertical guide-hole directly over and in line with the vertical axis of the knife.

To the upper end of the upright is pivoted a hand-lever, E. A rod, F, extends from the lever down through the guide-hole and terminates in a head, *f*, concave or flat on its under side, by which the peach is pressed down on the knife.

The knife is made, as above stated, in two parts, one of which is shown detached from the machine in Figs. 3 and 4. Each part is composed of sheet or plate steel of a springy character, and is constructed with a central vertical concavo-convex rib, *m*, and with two side flanges, *n n*, arranged in the same plane and slightly oblique to the rib, the two side flanges and the central rib, however, blending, and the whole blade becoming concavo-convex near its lower end. This peculiarity of form is represented in Fig. 2, in which the whole blade is shown as concavo-convex from the lower end up to about the point *o*, where the central rib begins to appear, and above which said rib becomes more and more strongly marked until it terminates at its upper end in a nearly semi-tubular form. The side wings, *n n*, begin to appear at the same point *o*, and become flatter and more strongly marked until they terminate at their upper end in straight sharp cutting-edges on diametrically-opposite sides of the central rib. The blade thus formed is strong and yet flexible, and the inherent temper of the steel permits it to yield for the passage of the stone through the tubular center, and then causes it instantly to resume its position. The lower end of the blade may be secured to the base or table at the edge of the opening *a* in any suitable manner, as by a tang driven into the wood, or a right-angled flange attached to the wood by screws or rivets.

The two parts C C′ are placed opposite to each other, their lower ends, if preferred, slightly apart, as shown at *v*, but their upper ends held closely together, so that the cutting-edges of the flanges *n n* of one part are in close contact with the corresponding cutting-edges of the other part, and the whole becomes, as it were, one cutting-blade with a tubular center.

The operation of the device is simple, convenient, and thoroughly effective, as I have demonstrated by a very considerable use for practical purposes. The peach is placed on the blade and the lever is brought down, forcing the stone down through the tube and cutting the body of the peach in two parts, which drop on the incline and slide into the basket or other receptacle. The spring-blade opens to permit the passage of large stones, and instantly readjusts itself when they have passed down

through the tube into their separate receptacle. The peculiar form of the blade gives clearance to the stones as they pass down.

I am aware that a two-part blade, one part of which is adjustable toward and from the other, has been proposed; but such parts were not held in contact by spring-power, and therefore are not the equivalents of my blade.

I am also aware that two blades supported by horizontal spring-arms, so as to yield and allow large stones to pass, have been proposed. Such blades, however, were not springs in themselves, but were rigid throughout their entire length, and therefore required to be mounted and applied in the manner indicated, and were not equivalents of my blade.

My blade differs from all such previous blades in that the body of the blade is a spring or springs, and the dividing-cutters *n n* of one part lie flat against those of the other part, whereby, when a stone passes through, it opens the blade along the line of the dividing-edges *n n* instead of at right angles to such line, as heretofore. The blade constructed in this manner is superior to the others above referred to in point of self-adjustability, strength, durability, ready clearance, and practical efficiency, and is, besides, more easily and cheaply manufactured.

One great advantage that it possesses arises from the fact that the stone as it passes through opens the two parts along the line of the cutting-edges *n n*, thereby assisting in splitting the peach apart, the edges *n n* having already entered the peach, tending to force it asunder as they recede from each other, and thus clear the pulp from the stone and facilitate the operation of the instrument. This advantage results from the combination of the cutting-edges, and would obtain even if said edges were moved by an independent spring-power instead of the inherent springiness of the blades themselves, which arrangement would be an equivalent of that part of my invention set forth in my second claim.

I therefore claim as my invention—

1. The spring-steel blades C C′, constructed with the central rib, *m*, at the upper end running out toward the lower end, and having the two side wings, *n n*, at the upper end blending with the central rib toward the lower end, substantially as described.

2. A steel cutter constructed in two parts, each having a sharp horizontal cutting-edge curved outward at its center and straight at its ends, the straight portions of one part being held against the straight portions of the other part by spring-power, and the two parts when opened separating along the line of the cutting-edges, substantially as described.

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Witnesses:

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