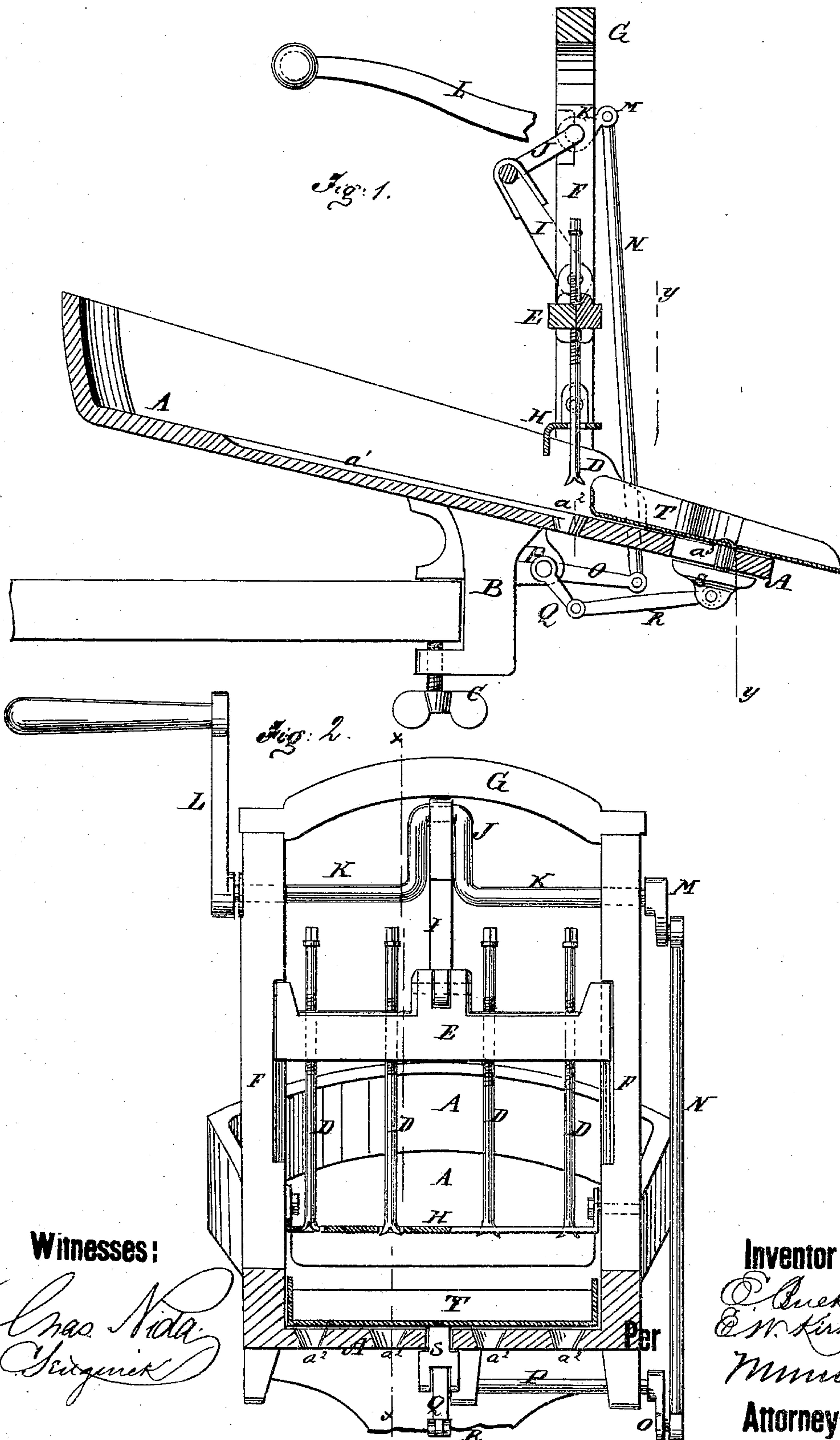


E. BUCK & E. W. KIRK.
Cherry-Stoners.

No. 144,887.

Patented Nov. 25, 1873.



Witnesses:

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UNITED STATES PATENT OFFICE.

ELI BUCK AND EDGAR W. KIRK, OF CINCINNATI, IOWA.

IMPROVEMENT IN CHERRY-STONERS.

Specification forming part of Letters Patent No. 144,887, dated November 25, 1873; application filed October 11, 1873.

To all whom it may concern:

Be it known that we, ELI BUCK and EDGAR W. KIRK, of Cincinnati, in the county of Appanoose and State of Iowa, have invented a new and useful Improvement in Cherry-Stoner, of which the following is a specification:

Figure 1 is a vertical longitudinal section of the improved machine taken through the line $x x$, Fig. 2; and Fig. 2 is a front view of the same, partly in section, through the line $y y$, Fig. 1.

The invention has for its object to furnish an improved machine for stoning cherries, simple in construction, convenient in use, and effective in operation, removing the stones from the cherries effectively and rapidly, and at the same time separating the stones entirely from the fruit. The invention consists of an improved cherry-stoner, formed of the pan, clamp, punches, stripping-plate, sliding cross-bar, posts, connecting-rods, cranks, and shafts, slide and sliding pan, constructed and operating in connection with each other, as hereinafter fully described.

A is a pan or trough, having a low flange around its sides and rear end, and having a clamp, B, provided with a set-screw, C, attached to its under side toward its forward end for securing it to the edge of a table or bench, said clamp being attached in such a way as to support the pan A in a slightly-inclined position. In the bottom of the pan A are formed four—more or less—grooves, a^1 , according to the number of punches to be employed, and which lead down to an equal number of tapering holes, a^2 , formed through the said bottom, a little below the clamp B C, the said holes being of such a size as to stop the cherries, but which will not allow the cherries to pass through. D is a set of four—more or less—punches, which are attached to a cross-bar, E, which slides up and down in ways upon the posts F, the lower ends of which are attached to the sides of the pan A in line with the holes a^2 , and the upper ends of which are connected and held in proper position by a cross-bar, G. To the lower part of the inner sides of the posts F are attached the ends of

a plate, H, having holes formed through it of such a size as to allow the punches D to pass through freely. To the middle part of the bar E is pivoted the lower end of a short connecting-rod, I, the other end of which is pivoted to a crank, J, formed upon the shaft K, which revolves in bearings in the upper part of the posts F, and to one end of which is attached the crank L, by which the machine is operated. To the other end of the shaft K is attached a short crank, M, to which is pivoted the upper end of the connecting-rod N, the other end of which is pivoted to a longer crank, O, attached to the end of the shaft P, the cranks M and O being of such a relative length that the revolution of the shaft K will only rock the shaft P. The shaft P works in bearings attached to the lower side of the bottom of pan A, and to its other end, and about in the central line of said pan is attached a crank, Q, to the end of which is pivoted the end of a short connecting-rod, R, the other end of which is pivoted to a slide, S, sliding upon the lower side of the bottom of the lower part of the pan A, and which is connected through a slot, a^3 , in said bottom with a pan or spout, T, sliding upon the upper side of the lower part of the said bottom.

With this construction, as the punches D descend upon the cherries in the holes a^2 , the stones are punched out of the fruit, and through the holes a^2 , and fall into a dish placed beneath the said holes. As the punches ascend they carry the fruit with them up to the plate H, by which it is pushed or stripped from the said punches. As the punches ascend the pan T moves back, so as to pass beneath the punches and receive the fruit as it falls from the plate H. The fruit slides down the pan T into a dish placed beneath the lower end of said pan.

The descent of the cherries in the pan A is regulated with one hand, while the crank L is turned with the other.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

1. The combination of the pan A, provided with discharge-openings a^2 , with the recip-

rocating punches D, stripping-plate H, and sliding discharge-apron T, the various parts being constructed to operate in substantially the manner herein shown and described.

2. The reciprocating punches D, operated through the medium of devices which serve to actuate the sliding discharge-apron T, causing the latter to move backward when the

punches rise, for receiving the stoned cherries, substantially as herein set forth and shown.

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