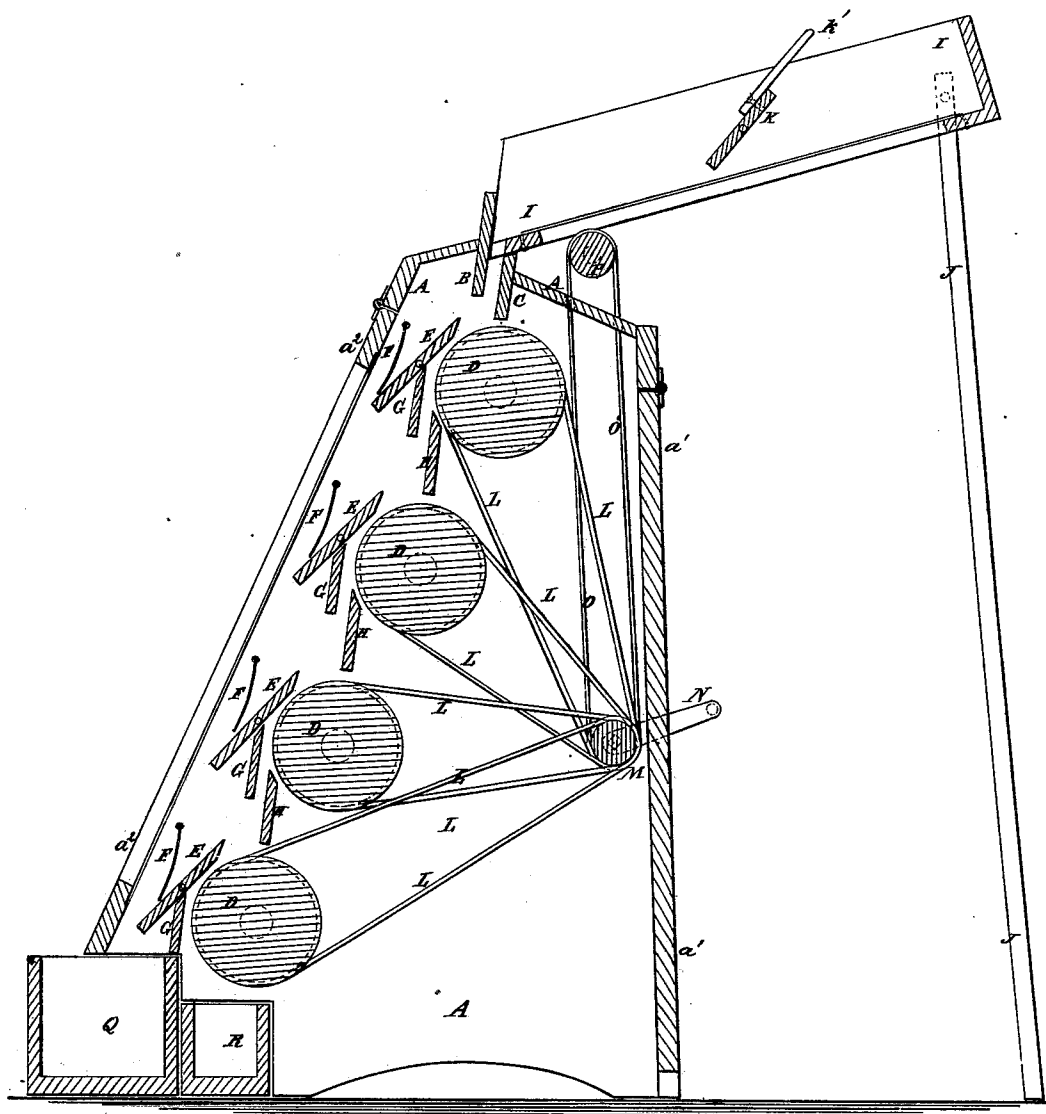


Patented March 6, 1877.



A. W. Almquist
J. N. Scarborough

J. C. Hinckman
BY *mmu*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOSEPH C. HINCHMAN, OF MEDFORD, NEW JERSEY.

IMPROVEMENT IN CRANBERRY-SEPARATORS.

Specification forming part of Letters Patent No. 188,053, dated March 6, 1877; application filed January 13, 1877.

To all whom it may concern:

Be it known that I, JOSEPH C. HINCHMAN, of Medford, in the county of Burlington and State of New Jersey, have invented a new and useful Improvement in Cranberry-Separators, of which the following is a specification:

The figure is a vertical section of my improved machine.

The object of this invention is to furnish an improved machine for separating cranberries, which shall be simple in construction, convenient in use, and effective in operation, separating the good and bad berries rapidly and thoroughly.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A is the case or frame of the machine, the rear side a^1 of which is hinged at its upper end, so that it may be swung out to give access to the interior. The forward side a^2 is inclined, and is hinged at its upper end, so that it may be swung outward to give access to the rollers and guide-boards. The forward side a^2 is a frame, covered with cloth, so that the berries that strike against it will not rebound. To the top of the case A, at the opposite sides of a cross-slot formed in it, are secured two boards, B C, at such a distance apart that the berries may pass down between them. To the sides of the case A are pivoted four, more or less, rollers, D, in such positions that the vertical plane passing through the axis of each lower roller may be about upon a tangent to the forward side of the next upper roller. In front of each roller D is placed an inclined board, E, which is pivoted at its ends to the sides of the case A, so that it may be adjusted at any desired inclination. To the sides of the case A, in front of the boards E, are attached wires, from which are suspended short curtains F. To the sides of the case A, between the boards E and the rollers D, are secured the ends of two boards, G H, at such a distance apart that the berries can pass down between them. The lower edge of the board G is a little below the lower edge of the pivoted board E, and the lower edge of the board H is a little below the lower edge of the board G, and near the upper side of the next lower roller D.

The cranberries are fed into the space between the two boards B C from the spout I, the bottom of which is a screen, and the outer end of which is supported by a frame, J. The rapidity of the feed from the spout I is regulated by a feed-board, K, which is pivoted at its ends to the sides of the spout I, and is provided with a handle, k' , for convenience in controlling it. Around each of the rollers D passes a band, L, which also passes around a roller, M, pivoted to the rear part of the sides of the case A. To one of the journals of the roller M is attached a crank, N, for convenience in operating it. The roller M is also designed to be connected by a band, O, with a roller, P, pivoted to an upward projection of the sides of the case A, just below the lower part of the spout I, so that by turning the roller P the rollers D may be adjusted by the person attending the feed.

In using the machine, as the berries drop through the space between the boards B C they strike the forward part of the upper side of the upper roller, and the perfect berries bound over the upper edge of the inclined board E, and pass down from one to another of the boards E until they are received in the box Q, placed beneath the forward lower part of the case A. The perfect berries that were prevented from bounding, and those that struck against the inner side of the board E, pass down between the boards G H to the next roller, where the same operation is repeated, and so on, to the last, when the bad berries drop into the box R, placed at the inner side of the box Q. The boards H prevent any of the berries from bounding back through the space between the rollers D. The curtains F retard the descent of the berries, and prevent them from bounding about as they pass from one of the boards E to another. The wholly soft berries crush upon the rollers D, and when so many have lodged upon them as to begin to interfere with the bounding of the perfect berries the rollers D are turned a little by turning the roller M or P to present a clean surface to the berries. Scrapers should be attached to the case A, at the rear side of the rollers D, to scrape off the soft berries, and thus keep the surfaces of the rollers D clean. These scrapers are not shown in the drawings.

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

1. A cranberry-separator, provided with rollers for the berries to bound from, substantially as herein shown and described.

2. The combination of the adjustable inclined boards E and with the rollers D, substantially as herein shown and described.

3. The combination of the curtains F with

the inclined boards E and the rollers D, substantially as herein shown and described.

4. The combination of the pairs of boards G H with the inclined boards E and the rollers D, substantially as herein shown and described.

JOSEPH C. HINCHMAN.

Witnesses:

SARAH A. WRIGHT,
READING N. WRIGHT.