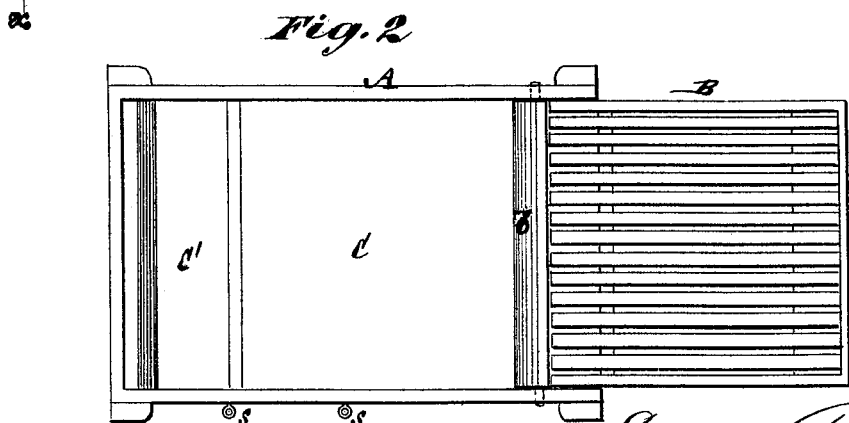
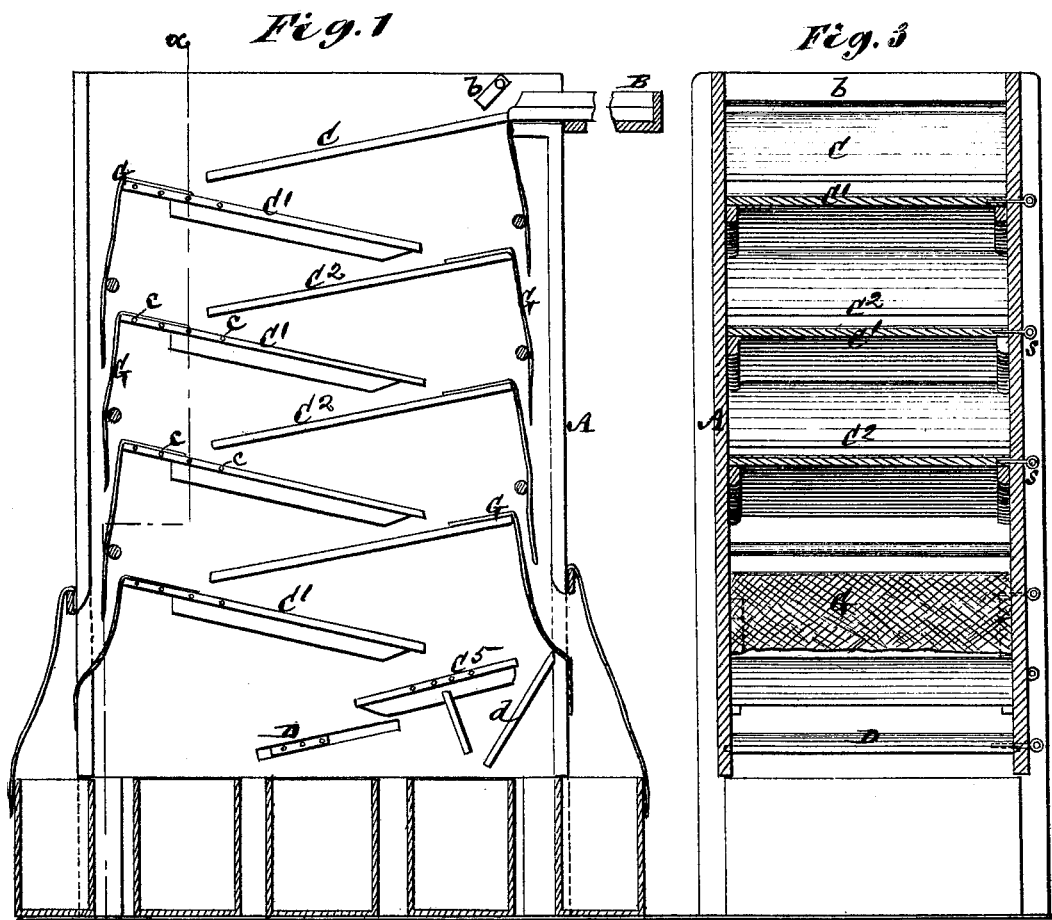


E. BUZBY.
CRANBERRY-SEPARATOR.

No. 180,838.

Patented Aug. 8, 1876.



Witnesses
John Becker
Fred Hamer

Edward Buzby
John Atkinson
Brown & Allen.

UNITED STATES PATENT OFFICE.

EDWARD BUZBY, OF SHAMONG, NEW JERSEY.

IMPROVEMENT IN CRANBERRY-SEPARATORS.

Specification forming part of Letters Patent No. 180,838, dated August 8, 1876; application filed January 11, 1876.

To all whom it may concern:

Be it known that I, EDWARD BUZBY, of Shamong, in the county of Burlington and State of New Jersey, have invented certain new and useful Improvements in Cranberry-Separators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

This invention relates to that description of separators in which the momentum of the cranberries, as they run down one or more inclined surfaces, with or without the addition of bounders, causes the sound berries to be separated from the unsound ones and the long berries from the round ones.

The invention consists in a novel arrangement of reversely-inclined and partially-overlapping planes or chutes, arranged one above the other, and stopping short at their outer ends of the sides of the box or case in which they are arranged; also adjustable in relation with each other to suit different conditions or sizes of the berries, said chutes preferably being clothed and provided with aprons, to prevent the bruising of the berries, and to check their rebound from the sides of the case.

Figure 1 is a side view of a cranberry-separator constructed in accordance with my invention, and with the sides of the case nearest to view removed; Fig. 2, a plan of the same, and Fig. 3 a vertical section on the irregular line *x x*.

A is the outer box or case, into which the cranberries are introduced over a slotted or perforated feed-board, B, to clear them of dust or dirt, the berries passing under a regulating-gate, *b*, to increase or diminish their supply, onto an upper inclined plane or chute, C, and from thence in succession onto a series of reversely-inclined planes or chutes, C¹ C², arranged one above the other, and stopping short at their upper and outer ends of the sides of the case. Furthermore, these chutes stop short, at their lower or inner ends, of the upper ends of the chutes immediately below them, or, in other words, only partially overlap the chutes immediately beneath them.

The sound berries, having greater momentum or an easier rolling action than the un-

sound ones, will be carried over the upper or outer ends of the chutes C¹ C², while the unsound ones will fall or work toward the center of the box or case A. The same remark applies to the round berries, as compared with long berries, and as the latter are delivered onto a lower inclined plane, C³, they will either pass up over said plane, and be conducted by a board, *d*, or be carried down said inclined plane to a bounder, D, and pass, in either case, into a suitable receptacle on either side of the center of the base, while the unsound berries will drop from the bounder into a center receptacle; and the round berries, or those having the greatest momentum or easiest rolling action, passing over the upper and outer ends of the chutes C¹ C², will be delivered into receptacles still farther from the center of the box or case. Of course, this distribution may be varied as regards the different qualities of the berries, without changing the mode of separation; and, to suit different conditions or sizes of the berries, the one set of inclined planes or chutes C¹, on the one side of the machine, may be adjusted by holes *c* and locking-pins *s*, or other means, to vary their length of projection over the inclined planes C² immediately beneath them, and so regulate the delivery of the round or sounder berries over the upper and outer ends of the chutes. The lower inclined plane C³ may be similarly adjustable in relation with the bounder D.

By employing a multiplicity of reversely-inclined planes or chutes, arranged as described, a more thorough and perfect separation is effected, and the accelerated momentum acquired by such sound berries as have the entire fall through the machine will insure their final delivery into the outermost receptacle at the base.

By tilting the machine so as to give more incline to one side than the other, a further separation of qualities may be obtained, inasmuch as the more solid berries, being livelier, will pass down the inclined planes or chutes having lesser inclination, and come out on the higher side.

The chutes C¹ C² are clothed and provided at their upper portions with pendent aprons G, to prevent the bruising of the berries by

their striking the sides of the box, and to prevent their rebound from said sides when carried by their momentum over the upper ends of the chutes. Said aprons G are made of any suitable soft and flexible material. The berries, too, are checked from bruising each other by the general construction and arrangement of the machine.

I claim—

1. In a cranberry-separator, the combination, with the case or box A, of the reversely-inclined planes or chutes C¹ C², arranged transversely one above the other in such manner

that they partially overlap one another, and stop short at their upper ends of the sides of the box or case, substantially as described.

2. In a cranberry-separator the reversely-inclined planes or chutes, arranged transversely one above the other, and adjustable in relation to each other from opposite sides of the case A, substantially as and for the purpose described.

EDWARD BUZBY.

Witnesses:

JOHN SCOTT,
LORENZO LAWRENCE.