No. 649,377. Patented May 8, 1900.

W. B. WATERS.

CRANBERRY GATHERER.

(Application filed Dec. 8, 1899.)

(No Model.)

Fig. 1.

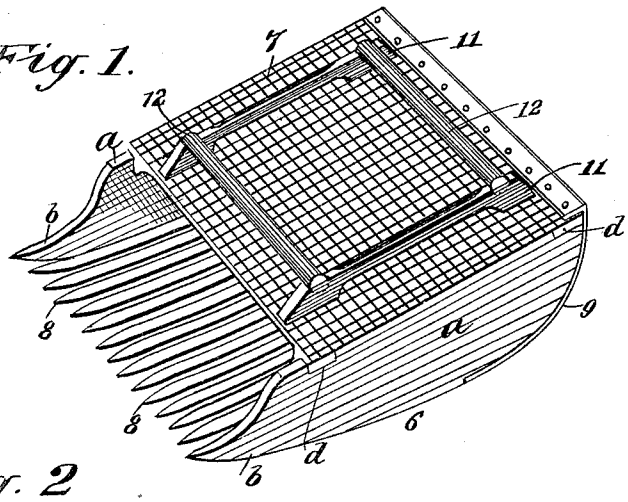


Fig. 2

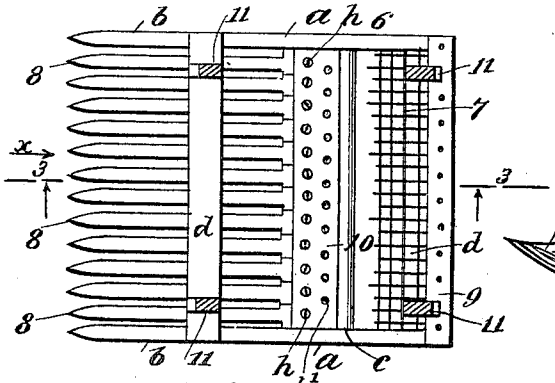


Fig. 3.

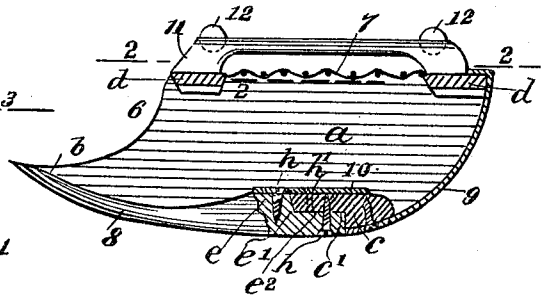


Fig. 4.

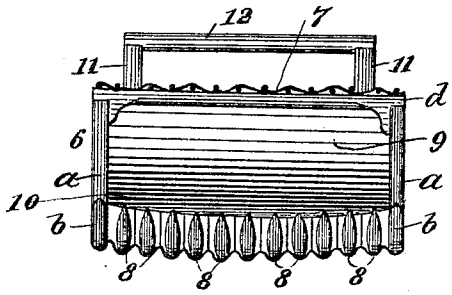
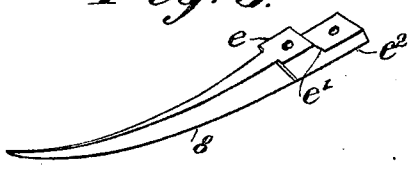


Fig. 5.



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WILLIAM BRADFORD WATERS, OF MANOMET, MASSACHUSETTS.

CRANBERRY-GATHERER.

SPECIFICATION forming part of Letters Patent No. 649,377, dated May 8, 1900.

Application filed December 8, 1899. Serial No. 739,644. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BRADFORD WATERS, a citizen of the United States, and a resident of Manomet, in the county of Plymouth and State of Massachusetts, have invented a new and Improved Cranberry-Gatherer, of which the following is a full, clear, and exact description.

This invention relates to means for facilitating the gathering of cranberries or other small berries of a like character from bushes or vines, and has for its object to provide a gatherer of novel construction which is convenient to handle and is adapted to safely remove the berries expeditiously from the vines or bushes and also enable the removal of leaves and other refuse from the fruit as it is gathered.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and indicated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improved cranberry-gatherer. Fig. 2 is a partly-sectional plan view substantially on the line 2 2 in Fig. 3. Fig. 3 is a sectional side view substantially on the line 3 3 in Fig. 2. Fig. 4 is an end view of the device seen in direction of the arrow x in Fig. 2, and Fig. 5 is a detached perspective view of one of the teeth of the comb of the gatherer.

The features of improvement comprise a scoop-like shell or body, a series of securable and detachable teeth projecting forwardly therefrom and forming a portion of the bottom, a screen forming a cover for a main portion of the shell, and a handle device mounted thereon.

In carrying into effect the features of invention, 6 indicates the shell which receives and holds the gathered berries until they are emptied therefrom and which consists, essentially, of two side walls a a, which are convexly curved on their lower edges, have straight upper edges for a main portion of their length, and terminate forwardly in integral comb-teeth b. (Clearly shown in Figs. 1 and 3.) The two side walls a a are held spaced apart a suitable distance in parallel planes by a lower cross-bar c and two upper cross-bars d d, which are secured at their ends by any preferred means upon the side walls a a. The cross-bars d d are positioned, respectively, at the front and rear corners of the straight upper edges of the side walls a, and the space between said top cross-bars is covered by screen-cloth 7 of proper mesh. The cross-bar c is located at the lower edges of the side walls a intermediately of the top cross-bars d, and, as shown in Fig. 3, a rabbet c' is formed in the lower side of the cross-bar c, extending a proper width from the front edge thereof toward the rear edge, thus affording a seat for a series of comb-teeth 8. The comb-teeth are each shaped substantially as shown in Fig. 5, having a heel portion e, which is in the form of a rectangular block integral with the body of the tooth. The heel portion e is wider than the body of the tooth and is for a portion of its length reduced in thickness, thus producing a shoulder e' on the upper side of the heel-block e and affording a flange e^2 at the rear end of the heel-block. The body of each comb-tooth 8 is tapered and bent so as to give it a slightly-upward curve toward the point thereof, and the heel portion e^2 of each comb-tooth is seated upon the rabbeted surface c' of the cross-bar c when said teeth are assembled to form a comb. The heel-blocks e on the comb-teeth are of equal width—that is, so proportioned as to properly space apart the bodies of the teeth—as is best shown in Fig. 2, and each tooth has its heel portion affixed upon the cross-bar c by two screws h, which are spaced apart longitudinally in the heel-block.

Upon the series of heel-blocks e of the comb-teeth 8 a cap-plate 10 is imposed and held in place by the rivets h', that pass through the cap-plate and also through the thin forward portion of the cross-bar c. The forward series of screws h pass down through the cap-plate 10 and screw into the thick portions of the heel-blocks e near the reduced bodies of the teeth 8, but the other series of screws h pass upwardly from the lower sides of the heel-blocks e, each screw, respectively, securing the flange e^2 of a tooth to the cross-bar c, as shown in Fig. 3.

The lower side of the shell or box-body is completed by a curved wall 9, preferably

formed of sheet metal and secured upon the convex edges of the side walls *a*, the upper edge of the wall 9 being bent to permit it to seat upon the rear cross-bar *d* and be thereto secured, as represented in Figs. 1 and 2.

The lower surface of the cross-bar *c* where it is rabbeted is preferably convexed, so as to dispose the teeth 8 at their points in a slightly depressed and curved plane, so that the teeth at the transverse center of the comb will be somewhat lower than at either side of the same, as clearly shown in Fig. 4.

Upon the cross-bars *d* two stretcher-bars 11 are secured at their ends, so as to be located parallel with and respectively near a side wall of the shell or box-body 6. Preferably between the points of attachment of the stretcher-bars 11 the bodies thereof are reduced and rounded to form hand-grips, as indicated in Figs. 1 and 3. At the front and rear ends of the stretcher-bars 11 two handle-bars 12 are secured thereon at their ends, thus disposing the handle-bars transversely of the screen on the shell or box 6 and near the front and rear edges of the same.

In operation the portable berry-gatherer is grasped by the operator and moved along through and upon the bushes or vines, that in some cases are very low and may be prostrate upon the ground. The transverse curvature of the comb raises the sides of the same sufficiently to prevent scooping up a great amount of dirt with the berries as the latter are stripped by the comb from the bushes. When a quantity of the berries has accumulated in the scoop or box-body of the gatherer, the leaves, stems, and other refuse are to be picked out, and when this is done loose dirt may be quickly sifted from the berries by turning the gatherer over, so as to throw the berries upon the inner surface of the screen 7, and the berries will remain on the screen, while the dirt is screened out by an agitation of the gatherer.

The construction of the handle device facilitates the handling of the gatherer, as the operator can hold it either by the side handle-bars or the transverse bars, whichever for the easy manipulation of the gatherer becomes necessary. The manner of securing the comb-teeth 8 in place upon the cross-bar *c* is very reliable and facilitates the replacing of a broken tooth with a new one as occasion may require.

It is evident that by a proper proportion of the novel device it may be employed for gathering different kinds of berries which will not be injured by application of a comb to the bushes, plants, or vines.

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

1. In a berry-gatherer, the combination with a shell or body comprising side walls convex on their lower edges, spaced top cross-bars on said side walls, and an intermediate lower cross-bar having a rabbeted lower edge, of a series of comb-teeth curved convexly on lower edges lengthwise thereof, and recessed on their upper side to seat in the rabbeted edge of the lower cross-bar, means to detachably secure the comb-teeth in place on the lower cross-bar, said teeth occupying a transverse plane which is lowered toward the transverse center thereof, a screen on the body above the comb-teeth, and a handle device thereon.

2. In a berry-gatherer, the combination with a shell or body, comprising two side walls convex on their lower edges and each having an integral tooth on the front end, two spaced cross-bars secured on the upper edges of the side walls, an intermediate cross-bar secured adjacent to the convex edges of the side walls, said cross-bar having its lower side rabbeted from the front edge rearwardly, and a curved rear wall secured on the convex side edges of the side walls below and rearward of the lower cross-bar, of a series of tapered and upwardly-curved comb-teeth each having a widened heel-block thereon, and a shoulder adapted to abut upon the front edge of the lower cross-bar, in such a manner as to have said series of comb-teeth present at their points a slightly depressed and curved plane transversely, a cap-plate on the heel-blocks of the comb-teeth, a screen on the upper side of the shell or body, and a handle device thereon.

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Witnesses:
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