J. F. LE BARON.

BERRY PICKER.

APPLICATION FILED NOV. 22, 1916.

1,278,175. Patented Sept. 10, 1918.

Fig. 1.

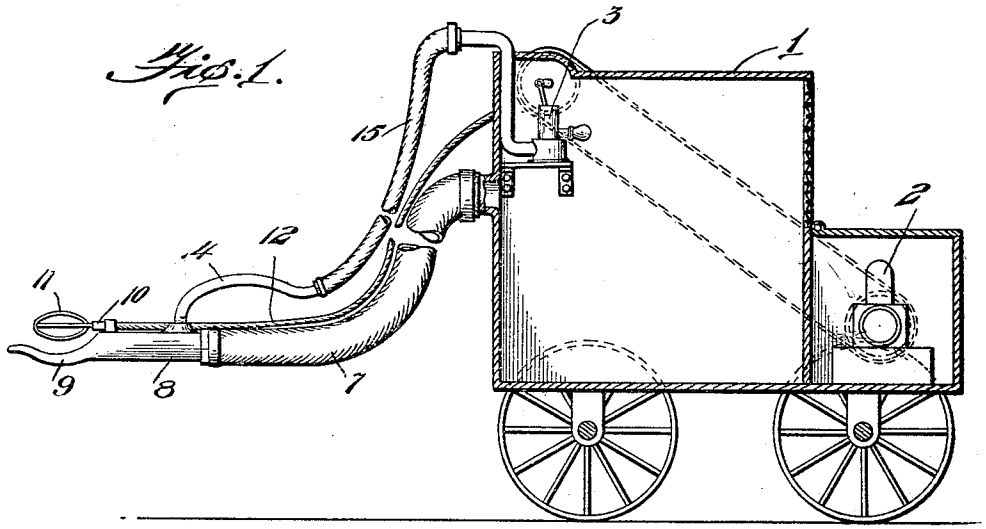
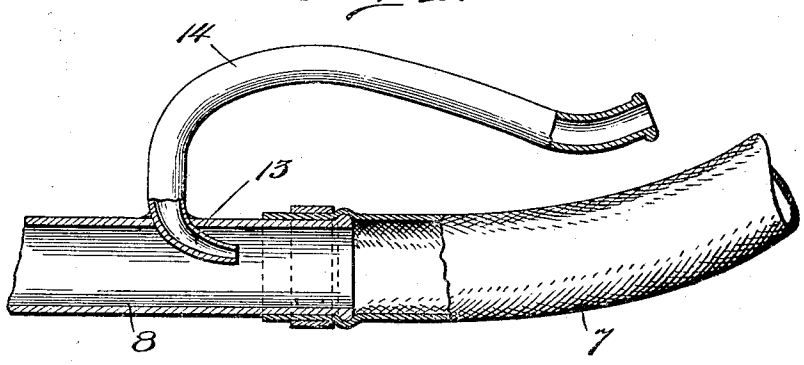


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN FRANCIS LE BARON, OF ESSEX, MASSACHUSETTS.

BERRY-PICKER.

1,278,175. Specification of Letters Patent. Patented Sept. 10, 1918.

Application filed November 22, 1916. Serial No. 132,839.

To all whom it may concern:

Be it known that I, JOHN FRANCIS LE BARON, a citizen of the United States, residing at Essex, in the county of Essex and State of Massachusetts, have invented a new and useful Berry-Picker, of which the following is a specification.

This invention relates to berry pickers and is more especially designed as an improvement upon the structure disclosed in Patent No. 1185110, issued to me on May 30, 1916.

One of the objects of the invention is to provide a berry picker having means whereby the berries, after being loosened from the bushes, will drop into a receiver from which they will be propelled by air into a receptacle provided for them, the conveying mechanism being so constructed and arranged that the berries will pass directly from the receiver to the receptacle without being injured by violent contact with any part of the mechanism of the machine.

A further object is to provide a machine of this character which can be readily manipulated, is simple and compact in construction, and will not readily get out of order.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—

Figure 1 is a view partly in section and partly in elevation of a berry picker embodying the present improvements.

Fig. 2 is an enlarged section through a portion of the conveying conduit and showing the means for directing an air jet into the conduit.

Referring to the figures by characters of reference 1 designates a receptacle which may be mounted on wheels and form a part of a vehicle. This vehicle may support a motor 2 used for driving an air pump 3. A conveying tube 7 of flexible material opens into the receptacle 1 and is provided, at its free end, with a rigid tubular receiver 8 from the outer or free end of which extends a spoon-shaped gathering element 9 such as shown, for example, in my patent hereinbefore referred to. Mounted for rotation on the member 8 is a short rigid shaft section 10 carrying a beater 11 which is located directly above the gathering element 9, this shaft section being driven by a flexible shaft 12 which may receive its power from the motor 2 in any manner desired.

Extending into the tubular member 8 is a nozzle 13 so located as to direct a jet of air backwardly within the member 8 and into the flexible tube 7. Formed with or secured to this nozzle is a rigid air supply pipe 14 preferably bent backwardly so as to constitute a handle whereby the gathering element 9 may be easily supported and manipulated. To this pipe 14 is secured one end of a flexible tube 15, the other end of which is attached to the air pump.

It is to be understood that the tubes 7 and 15 and the flexible shaft 12 can be of any length desired. When the machine is in operation the air pump 3 is driven so as to expel air into the tube 15 and the air will in turn be directed in the form of a jet rearwardly within the member 8 and into the tube 7. The pipe 14 can be used as a handle and the gathering element 9 can be thrust among the branches of a bush so as to receive the berries as they are loosened or detached by the rapidly rotating beater 11. Obviously the jet creates a suction over the gathering element 9 and longitudinally within the member 8 so that as soon as a berry is deposited on the gathering element 9 it will be drawn into the member 8 and then propelled longitudinally through the tube 7 into the receptacle 1. By providing mechanism such as described the berries are conveyed directly from the gathering element 9 to the receptacle 1 without coming into contact with fan blades or other like structures and, therefore, will not be injured.

What is claimed is:—

In a picking apparatus the combination with a tube and means at one end of the tube for detaching and gathering berries and the like, of a tubular handle fixedly connected to the tube at a point between the

ends thereof, one end of the handle being extended along a curved line through the wall of the tube and tapered to form a nozzle for directing air longitudinally of the tube and away from the berry receiving end thereof, a berry receiver, a flexible tubular connection between the receiver and the outlet end of the tube, air forcing means, and a flexible tubular connection between said forcing means and the inlet end of the tubular handle.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN FRANCIS LE BARON.

Witnesses:

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A. E. CHANDLEE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."