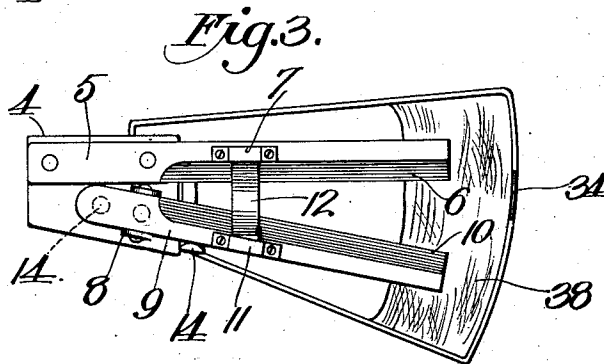
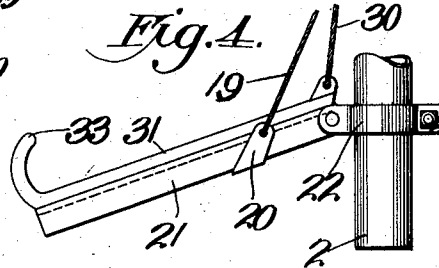
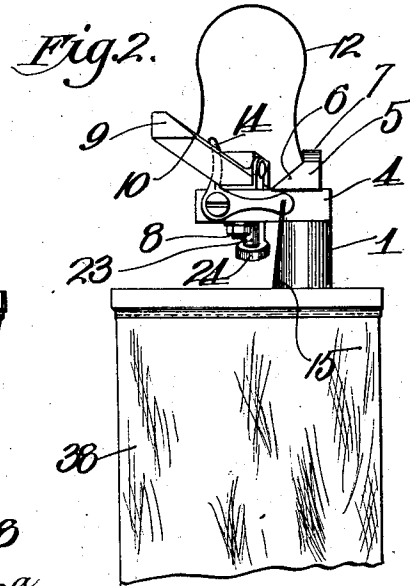


FRUIT PICKER.

1,010,629.



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UNITED STATES PATENT OFFICE.

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FRUIT-PICKER.

1,010,629.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, PERRY HENNEBERGH, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Fruit-Pickers, of which the following is a specification.

This invention relates to fruit pickers of that class embodying a pole, a pair of cutting jaws, means to operate one of said jaws to sever the stem of an apple or other fruit, and a receptacle to catch the fruit and conduct it to the point desired, and my object is to produce a device of this character which will perform its function efficiently and reliably.

With this general object in view, the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawing, in which—

Figure 1, is a side view of a fruit picker embodying my invention. Fig. 2, is a front view of a part of the same. Fig. 3, is a top plan view. Fig. 4, is a detail view to show more clearly the hand operating elements of the device.

In the said drawings, 1 indicates a rod provided with a detachable handle 2, of any desired length, and one of said elements is equipped with a rigid sleeve or socket piece 3, to receive the other. Secured on the upper end of the rod 1, is a head 4, and rigidly secured to and projecting forwardly from the same is a stationary jaw 5, sharpened at its inner side to produce the cutting edge 6, and said jaw is provided with a clip or keeper 7 at its upper side.

8 is a vertical bolt swiveled in the head and provided with a forked or bifurcated head wherein is pivoted a movable jaw 9 arranged at one side of jaw 5 and projecting forwardly from the head, the inner side of said jaw being sharpened to produce a cutting edge 10, and said movable jaw 9 is provided in its upper side with a clip 11.

12 is an arched spring arranged above the jaws and provided with terminals 13 to fit within the clips 7 and 11, the spring tending to hold the jaws in the desired relation as shown in Fig. 3, and to incidentally hold jaw 9 in an upwardly and forwardly inclined position as shown in Figs. 1 and 2.

14 is a bell crank lever pivoted to the front end of head 4 and arranged with one arm projecting upward and bearing against the outer side of jaw 9, and limiting the movement of said jaw away from jaw 5 and its other arm extending substantially horizontal, and attached at its upper end to the last-named arm of the bell crank lever is a cord 15. The cord 15 extends downward through a loop 16 secured to rod 1, and is provided near the lower end of the latter with a loop 17 for detachable engagement by a hook 18. The hook 18 is attached at its lower end to a cord 19, which cord is attached at its lower end to a lug 20, on a lever 21 pivoted to a clamp ring 22, secured to the handle 2. The arrangement is such that when said lever 21 is swung downward, it exerts a pull on cord 19 which is transferred by the bell crank to the movable jaw 9 to force the latter with bolt 8 as the axis of movement, toward and against jaw 5, the spring 12, yielding under the pressure applied by the bell crank of the said movable jaw. Under ordinary conditions this pivotal operation of the movable jaw is sufficient to sever the stem of the apple, pear, peach or other fruit, In the event however, that the fruit is not dislodged by such relative movement of the jaws, it is possible to follow up such movement of the jaw 9 by a downward movement of the same, so that it shall have a shearing action on jaw 6 and thus positively cut the stem. To accomplish this shearing action, I provide the following construction:—23 is a pin arranged for vertical movement on the head and fitting between the rear end of the movable jaw and the free end of a lever 24 pivoted to a lug 25, depending from the head 4. 26 is a cord extending through the guide loop 27 secured to rod 1, and attached at its upper end to the rear end of lever 24. At its lower end cord 26 is provided with a ring 28, for detachable engagement by a hook 29 secured to the upper end of a cord 30 attached at its other end to the inner end of a slide 31 dove-tailed as at 32 in lever 21, said slide having a hook or handle 33 at its free end. When the lever 21 is operated as described to cause the jaw 9 to swing toward jaw 5, the slide 31 moves with it but does not materially affect the cord 30 owing to the attachment of the latter close to the pivotal point of said lever. Should the shearing action be necessary, the operator after swinging the lever 21 downward, ex-

erts downward pressure on the handle or hook end of the slide and causes the same to slide downward on the lever and thus exert a pull on cable 30 which, through the
 5 rock lever 24 and pin 23, swings the movable jaw downward so as to cause its cutting edge to shear against the cutting edge of jaw 6 and thus reliably effect the severance of the stem of the apple or other fruit.

10 To catch the fruit as dislodged, a hopper is secured to rod 1 below the cutting mechanism. In the preferred construction the hopper comprises a frame 34 having a depending arm 35, at its rear side equipped
 15 with a pair of clamps 36 to encircle the rod and with clamping screws 37 engaging the ends of the clamps to cause the same to bind firmly on the rod.

38 is a hopper depending from the frame 20 34 and of downwardly tapering form by preference, and said hopper is provided with an opening 38^a in its side, closed by a net work 39, in order that the operator may be enabled to see through said net work for the
 25 purpose of properly positioning the cutters with reference to the object being dislodged.

At its lower end the receptacle is provided with buttons 40 or equivalent devices to permit a canvas tube 41 to be fitted over the
 30 lower end of the hopper and buttoned thereto, this tube being of any suitable length and adapted to discharge the fruit into a suitable receptacle, not shown, or upon the ground. In practice this tube will preferably
 35 be of greater length than the distance between the lever and the place where the fruit is to be deposited in order that it will bend and thus retard the downward progress of the fruit and guard against the same being
 40 injured or bruised.

From the above description it will be apparent that I have produced a fruit picker embodying the features of advantages enumerated as desirable and I wish it to be understood that while I have illustrated and described the preferred embodiment of the invention I do not desire to be restricted to the exact details of construction shown and described as obvious modifications will suggest themselves to one skilled in the art.
 50 I claim:

1. A fruit picker, comprising a rod, a rigid jaw arranged at the upper end of the rod, a movable jaw pivoted to move in two
 55 directions, in one direction toward the rigid jaw until the cutting edges of the jaws are about in the same vertical plane and then in a vertical direction to effect a shearing relation between said cutting edges, a lever
 60 mounted on the rod, means whereby the operation of the lever shall cause the movable jaw to describe the first-named movement thereof, and means whereby the second or shearing movement shall be imparted to said
 65 movable jaw.

2. A fruit picker, comprising a rod, a rigid jaw arranged at the upper end of the rod, a movable jaw pivoted to move in two directions, in one direction toward the rigid jaw until the cutting edges of the jaws are
 70 about in the same vertical plane and then in a vertical direction to effect a shearing relation between said cutting edges, a lever mounted on the rod, means whereby the operation of the lever shall cause the movable
 75 jaw to describe the first-named movement thereof, a movable bar carried by said lever, and movable with and independent of the same, and means whereby the independent movement of said bar shall effect
 80 the second or shearing action of the movable jaw.

3. A fruit picker, comprising a rod, a rigid jaw arranged at the upper end of the rod, a movable jaw, a spring tending to hold
 85 the jaws open and the movable jaw sloping upwardly and forwardly with respect to the stationary jaw, a lever, means whereby the operation of the lever shall cause the movable jaw to move toward the stationary
 90 jaw, a bar movable with and slidable on the lever, a flexible connection attached to said bar near the pivotal point of the lever, and means actuated by said connection when the bar is pulled downward, for causing said
 95 movable jaw to swing downward.

4. A fruit picker, comprising a rod, a rigid jaw arranged at the upper end of the rod, a movable jaw, a spring tending to hold
 100 the jaws open with the movable jaw sloping upwardly and forwardly with respect to the stationary jaw, a lever, means whereby the operation of the lever shall cause the movable jaw to move toward the stationary
 105 jaw, a bar movable with and slidable on the lever, a flexible connection attached to said bar near the pivotal point of the lever, a bell-crank lever attached to the upper end of the flexible connection, and means actuated by movement of the bell-crank lever
 110 imparted through the flexible connection, to swing said movable jaw downward.

5. A fruit picker, comprising a rod, a rigid jaw arranged at the upper end of the rod, a movable jaw, a spring tending to hold
 115 the jaws open with the movable jaw sloping upwardly and forwardly with respect to the stationary jaw, a lever, means whereby the operation of the lever shall cause the movable jaw to move toward the stationary
 120 jaw, a bar movable with and slidable on the lever, a flexible connection attached to said bar near the pivotal point of the lever, a bell-crank lever attached to the upper end of the flexible connection, and a pin fitting
 125 slidably in the head and bearing at its upper end against the underside of the movable jaw and at its lower end upon the free end of the bell-crank lever.

6. A fruit picker, comprising a rod, a 130

handle detachably engaging the lower end of said rod, a head secured on the upper end of said rod, a rigid jaw projecting forwardly from said head, a movable jaw connected 5 to the said head to have lateral and vertical swinging movement, a bell-crank lever pivoted to the head and bearing against the outer side of the movable jaw, a spring connecting said jaws and holding the movable 10 jaw pressed outwardly against said bell-crank lever, a lever pivoted to said handle, a suitably-guided connection attached to the bell-crank lever, a flexible connection at- 15 tached to the lever mounted on the handle and detachably connected at its upper end to the lower end of the first-named flexible connection, a bar carried by and slidable longitudinally on the lever carried by the handle, a lever pivoted to the head, a pin ex- 20 tending slidably through the head and interposed between one end of said last-named lever, and the movable jaw rearward of its pivot, a flexible connection extending downward from the opposite end of the last-named lever, a flexible connection attached 25 to the inner end of said slidable bar and detachably connected to the lower end of the flexible connection attached to the lever underlying said pin, and a receptacle carried 30 by the rod and located vertically below said jaws.

In testimony whereof I affix my signature, in the presence of two witnesses.

PERRY HENNEBERGH.

Witnesses:
HELEN C. RODGERS,
G. Y. THORPE.

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