

J. S. and A. M. Barry's Improvement in
 117966 **FRUIT PICKERS.**

PATENTED AUG 15 1871

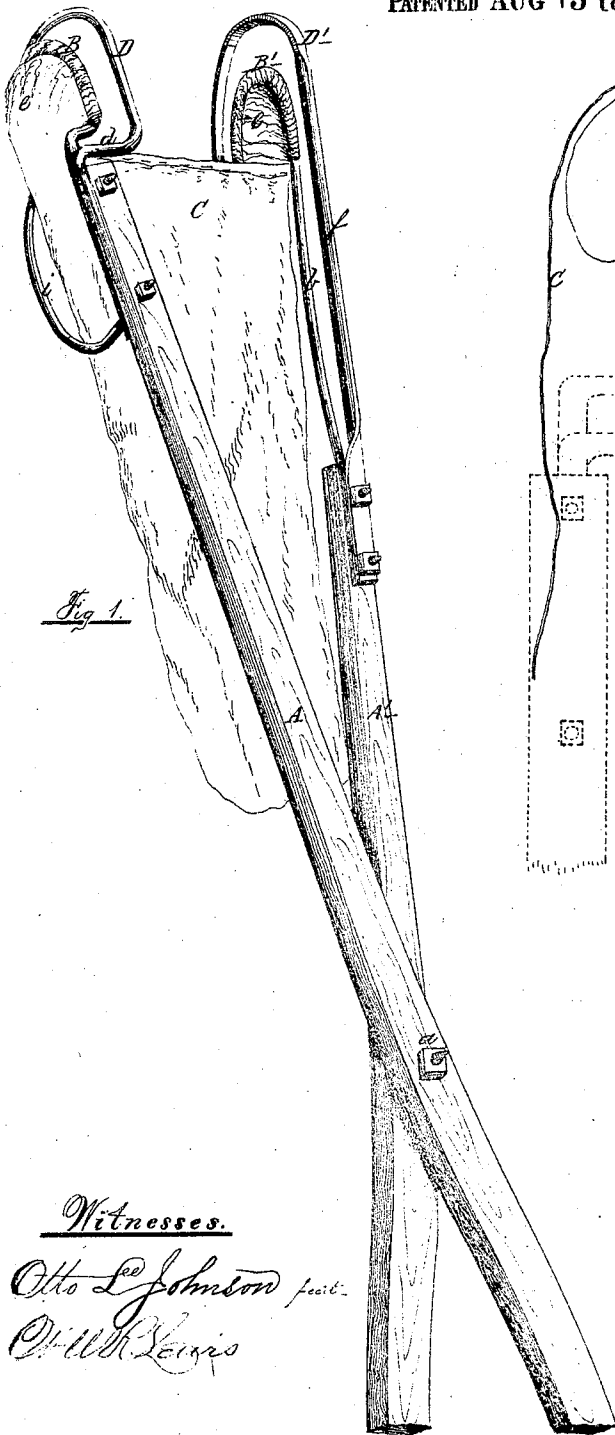


Fig. 1.

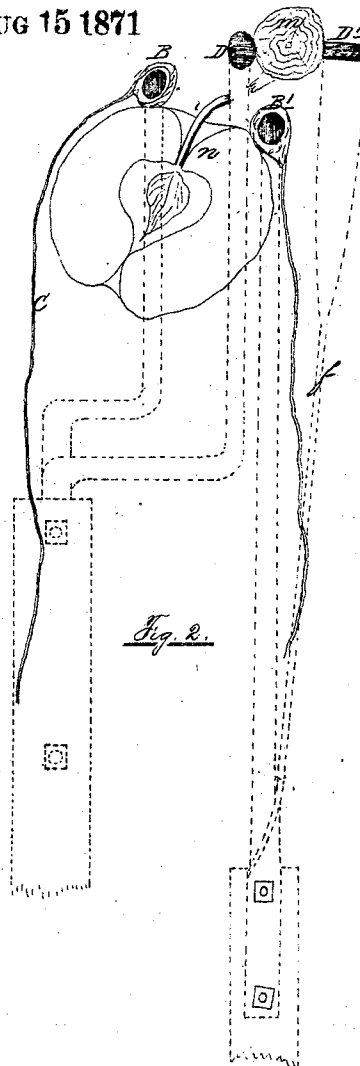


Fig. 2.

Witnesses.

Otto L. Johnson fecit.
 O. W. Lewis

Inventors.

James S. Barry.
 Alfred M. Barry -
 by George Johnson -
 their Attorney, in fact.

UNITED STATES PATENT OFFICE.

JAMES S. BARRY AND ALFRED M. BARRY, OF SHERIDAN TOWNSHIP, MICH.

IMPROVEMENT IN FRUIT-GATHERERS.

Specification forming part of Letters Patent No. 117,966, dated August 15, 1871.

To all whom it may concern:

Be it known that we, JAMES S. BARRY and ALFRED M. BARRY, both of the township of Sheridan, in the county of Calhoun and State of Michigan, have invented certain Improvements in Fruit-Pickers, of which the following is a specification:

Our invention relates to the combination, with each other and with a pair of long wooden tongs-shaped handles, of two bow-irons, carrying a bag to receive the severed fruit; and also of one rigid bow-clamp and one spring bow-clamp, which act in concert to grasp and hold the bough steady while the bag-bows are breaking off the fruit; our object being to prevent any jar in the act of picking, which tends so much to shake off other ripe fruit from the tree, which, falling on the ground, is bruised and rendered unfit for keeping.

Figure 1 is a perspective view of our implement, the handles not being exhibited their due length, but shown as broken off, for want of room. Fig. 2 is a vertical central section, in the line of vibration, through a portion of the bag.

A A' is a pair of long wooden crossed handles, shaped somewhat like a pair of smith's tongs and pivoted together at *a*. They are shown as broken off short below the fulcrum. B B' are the two bow-irons to which the bag C is hung, and are simply light iron rods, bent at one end to a semicircle and having flattened shanks to connect them with the handles. The bow-iron B is bolted through a short shank-connection to the longer handle A, and the bow-iron B' has a longer shank, as seen at *b*, and is bolted to the shorter handle A'. The top of the bag is cut to form two side flaps, *e e*, that are folded and stitched over the bows, and the cloth should be so gathered or puckered, especially around the bow-iron B, as to give such fullness to the cloth of the bag on that side as will permit a large apple, for instance, to pass partially under. D is the rigid and D' the spring bow-clamp. The clamp D is an iron rod, having a semicircular bend of rather larger radius than the bow-iron B. Its flattened shank is bolted to the handle A by the same bolts that fasten the bow B, but it has a longer offset bend, as at *d*, so that the

semicircular bend will stand parallel with, but at a proper distance apart from, the said bow B. This clamping-bow might be left projecting from the handles, as do the others; but to prevent the curved end from catching in the tree, and to furnish a guard for that side of the bag, we generally extend the rod, as shown at *i*, around that part of the bag and unite the end with the straight flattened section through which the bolts pass. The spring bow-clamp D' is formed with a semicircular head which matches and stands parallel with and opposite the sister clamp D; and the main reason of cutting the handle A' short and lengthening the rod-stem of the bow B' equal to the proper length of the spring clamping-bar *f* is the convenience of being able to secure both by the same bolts.

To meet all conditions of the hanging fruit, it is best to set the bow B of the bag a little higher than the bow B'; and the clamping-bows should have such projection that, when clamping a bough, the bag-bow can vibrate with sufficient clearance underneath.

The operator passes the open mouth of the bag C over the hanging fruit, and, partially drawing the long handles in his grasp together, the clamping-bows D and D' close and clamp the fruit-bough between. Holding the bough steady, he continues the closing motion, when the elasticity of the clamp-spring *f* allows the bag-bow B' to vibrate under and past the said clamps, carrying the fruit with it, as may be seen in Fig. 2, where *m* is the bough and *n* an apple just severed at the stem.

It will be seen that the fruit must pass partially under the higher bow B into the fullness or bulge of the bag; consequently, it cannot tip up, but must be severed at the stem by the impact of the bow B', which, being cushioned by the bag, will not bruise.

We have said hereinbefore that the bow B should carry that side of the bag; but it is very evident that, were it desirable, the ear or flap of that side of the bag might pass over the bow B and be folded over and stitched to the clamping-bow D without altering the character of our invention.

The parts constituting our improvement are

few, simple, and inexpensive, yet reliable for gathering safely the fruit from a tree without loss by jarring any off.

We claim as our invention—

The arrangement and combination, with each other and with the handles A A' and fruit-receiving bag C, of the bag-bows B B', rigid clamp-

ing-bow D, and spring clamping-bow D', substantially in the manner and for the purpose set forth.

Witnesses:

C. F. COOK,
O. H. COOK.

JAMES S. BARRY.
ALFRED M. BARRY.