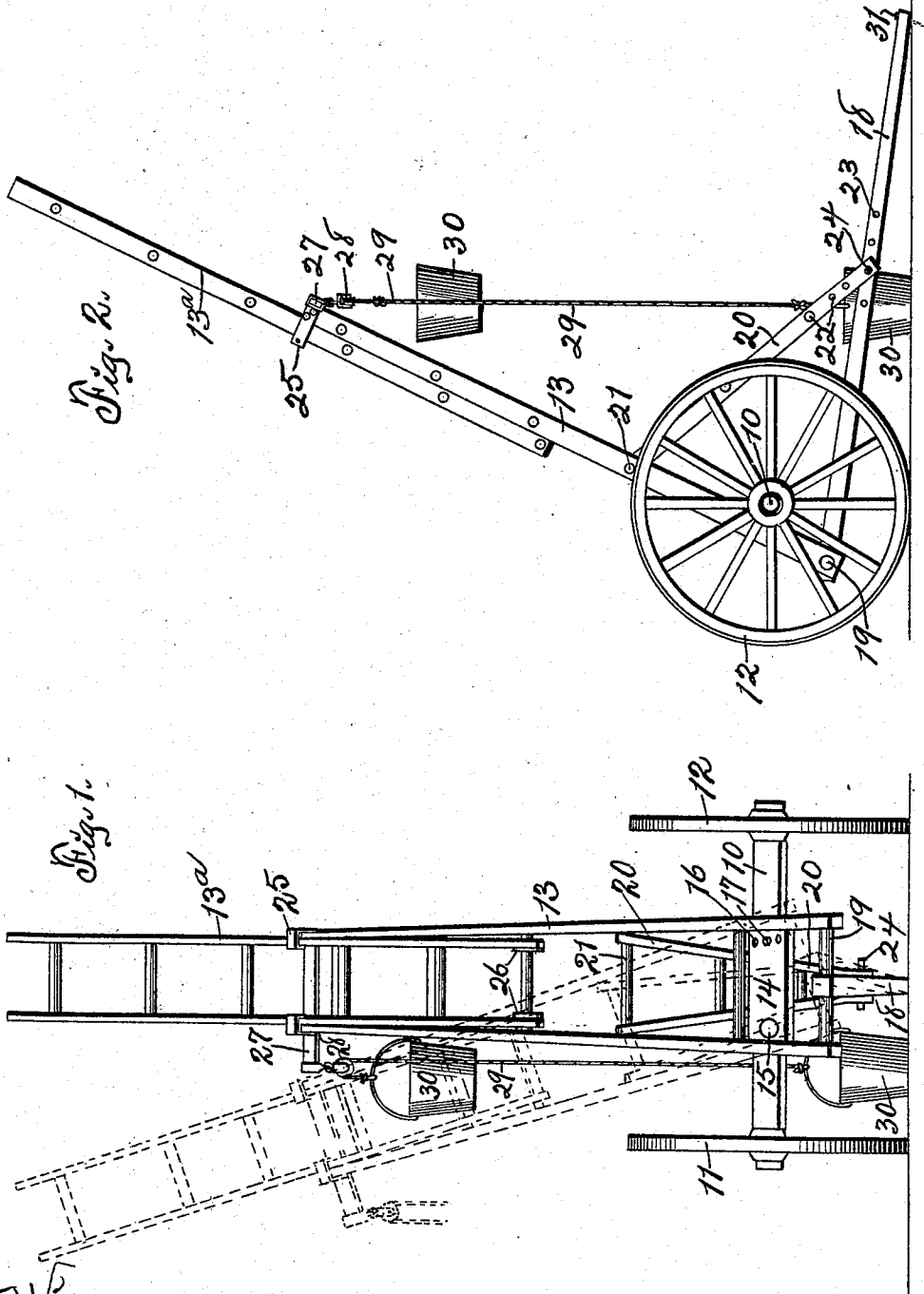


E. A. SMITH.
 PORTABLE FRUIT PICKER'S LADDER.
 APPLICATION FILED FEB. 9, 1909.

937,388.

Patented Oct. 19, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDGAR A. SMITH, OF ACKWORTH, IOWA.

PORTABLE FRUIT-PICKER'S LADDER.

937,388.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed February 9, 1909. Serial No. 477,466.

To all whom it may concern:

Be it known that I, EDGAR A. SMITH, a citizen of the United States of America, and resident of Ackworth, Warren county, Iowa, have invented a new and useful Portable Fruit-Picker's Ladder, of which the following is a specification.

The object of this invention is to provide improved means for supporting a person engaged in gathering fruit from trees.

A further object of this invention is to provide an improved portable ladder.

A further object of this invention is to provide improved means for adjusting inclination of a ladder in various directions.

A further object of this invention is to provide an auxiliary ladder at an angle to a main ladder and adapted to support a person engaged in picking fruit from the lower branches of the tree.

A further object of this invention is to provide improved means, in connection with a ladder, for lowering fruit gathered from a tree.

My invention consists in the construction, arrangement and combination of elements, hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is a front elevation of the complete device, the dotted lines indicating a lateral adjustment of the ladder. Fig. 2 is a side elevation of the same.

In the construction of the device as shown, the numeral 10 designates an axle mounted loosely in supporting wheels 11, 12. A ladder 13 is provided and is formed with a cross bar 14 near its lower end. A bolt 15 is mounted through one end portion of the cross bar 14 and through the axle 10 and serves to connect the ladder 13 pivotally to said axle so that the upper end of said ladder may be moved laterally through an arc as illustrated by dotted lines in Fig. 1. A row of holes 16 is formed in the end of the crossbar 14 opposite to the bolt 15 and a pin 17 is removably and replaceably mounted in one or another of said holes and extends through a registering hole (not shown) in the axle 10. By this means the lateral adjustment of the ladder 13 may be fixed and determined. A tongue or pole 18 is fixed at its rear end to the center of the lowermost rung 19 of the ladder 13 and said rung is pivotally mounted in the ladder.

An auxiliary ladder 20 is pivoted at one end to a rung 21 of the ladder 13 and extends at an angle therefrom to, and at its opposite end embraces, the tongue or pole 18. The auxiliary ladder 20 is formed with a plurality of horizontal holes 22 and the tongue 18 is formed with a series of similar holes 23. A pin 24 is mounted in one or another of the holes 22 and extends through one or another of the holes 23, thus providing means for adjustably attaching the auxiliary ladder to the tongue or pole.

The ladder 13 preferably is arranged at a right angle or acute angle to the tongue 18 and the auxiliary ladder 20 serves as the hypotenuse of and completes a triangle and braces the ladder relative to the tongue. The ladder 13 may be provided with an extension member 13^a connected thereto by a slide bracket 25 and hook 26 in a well known manner. An arm 27 is fixed to and extends laterally from the upper end of the ladder 13 and a pulley 28 is suspended from one end thereof. A rope 29 is roved through the pulley 28 and carries a receptacle 30 at each end. The receptacles 30 may be of any desired form or character and are adapted to receive fruit and lower the same to the ground under manipulation of the rope through the pulley 28. Through the use of the ladder 13 and extension member 13^a a fruit-picker can reach the outermost and topmost branches of fruit bearing trees.

Through the use of the auxiliary ladder 20 a fruit-picker can reach the lower branches of fruit bearing trees and on some occasions said ladder can be employed by one picker while one or more pickers are occupying the ladder 13 or the extension member 13^a. Through adjustment of the auxiliary ladder 20 the ladder 13 may be inclined to any desired degree relative to the tongue 18. Through the use of the pin 17 the ladder 13 may be adjusted laterally relative to the axle 10 in order to maintain a generally perpendicular position of the ladder when the axle is inclined, such as on uneven or inclined ground surfaces. The stability of the truck is maintained and the device anchored by a stake 31 extending through the outer end portion of the tongue 18 and pressed into the ground.

The device may be moved about and adjusted in desired position relative to a tree by manual force applied to the tongue 18.

I claim as my invention—

1. A portable ladder, comprising supporting wheels, an axle in said wheels, a ladder across and fixed to said axle between
5 said wheels, said ladder formed with a rung at its lower end, a tongue pivoted at one end to the lowermost rung of the ladder and extending across and beneath said axle, an auxiliary ladder pivoted at one end to a
10 rung of the first ladder above said axle, said auxiliary ladder adjustably connected to said tongue at a point laterally removed from the axle, and means for anchoring said tongue.
- 15 2. A portable ladder, comprising supporting wheels, an axle in said wheels, a ladder crossing and carried by said axle, a tongue pivoted at one end to the lower end of the ladder and extending across and beneath
20 the axle and a brace adjustably connecting said ladder and tongue.
3. A portable ladder, comprising supporting wheels, an axle in said wheels, a ladder crossing and carried by said axle, a tongue
25 pivoted at one end to the lower end of the ladder and extending across and beneath the axle and an auxiliary ladder adjustably connecting said ladder and tongue.
4. A portable ladder, comprising supporting
30 ing wheels, an axle carried thereby, a ladder crossing said axle and formed with a cross bar pivoted at one end to the axle, the opposite end of the cross bar being adjustably connected to said axle, a tongue pivoted at
35 one end to the lower end of the ladder and an auxiliary ladder pivoted at one end to the central portion of the main ladder and adjustably connected at its opposite ends to the tongue.
- 40 5. A portable ladder, comprising support-

ing wheels, an axle carried thereby, a ladder pivotally and adjustably mounted on said axle, a tongue pivoted to said ladder and an auxiliary ladder bracingly and adjustably
45 connecting the main ladder and tongue.

6. A portable ladder, comprising supporting wheels, an axle carried thereby, a ladder crossing said axle and pivotally and adjustably secured thereto, a tongue pivoted at
50 one end to the lower end of said ladder and extending across and beneath said axle, an auxiliary ladder bracingly and adjustably connecting said ladder and tongue and an extension member on said ladder.

7. A portable ladder, comprising support-
55 ing wheels, an axle in said wheels, a ladder crossing and carried by said axle, a tongue pivoted at one end to the lower end of the ladder and extending across and beneath the axle, a brace adjustably connecting said
60 ladder and tongue, and a stake extending through the outer end of said tongue and adapted to serve as an anchor.

8. A portable ladder, comprising supporting wheels, an axle carried thereby, a ladder
65 crossing said axle and pivotally and adjustably secured thereto, a tongue pivoted at one end to the lower end of the ladder and extending across and beneath said axle, means for bracing said tongue and ladder,
70 a bracket arm on said ladder, a pulley on said arm, a rope in said pulley and receptacles on said rope.

Signed by me at Ackworth, Iowa, this
21st day of January 1909.

EDGAR A. SMITH.

Witnesses:

R. B. ROWE,
GRACE BAILEY.