J. F. MERRILL.

ORCHARD LADDER.

APPLICATION FILED JULY 21, 1914.

1,139,990. Patented May 18, 1915.

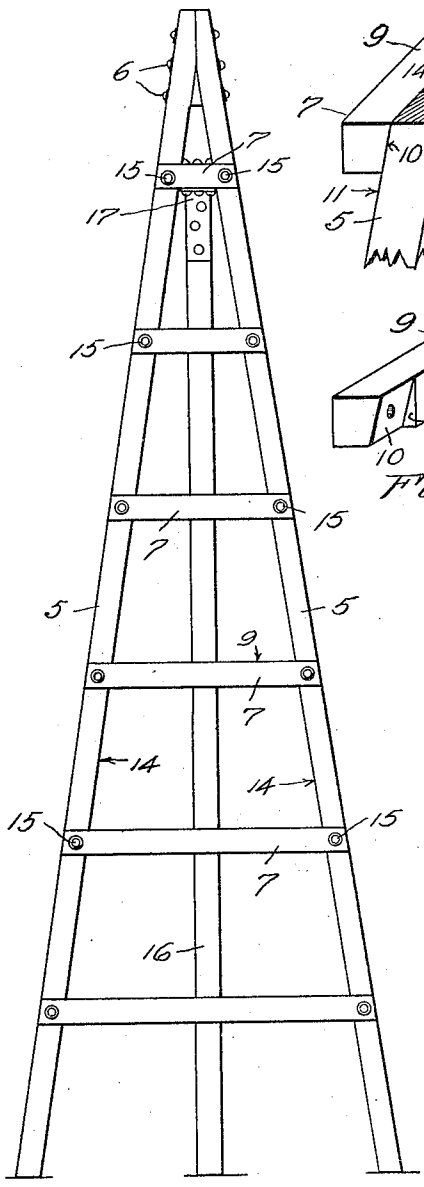


Fig. 2

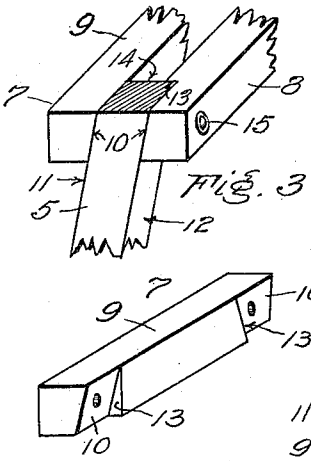


Fig. 3

Fig. 4

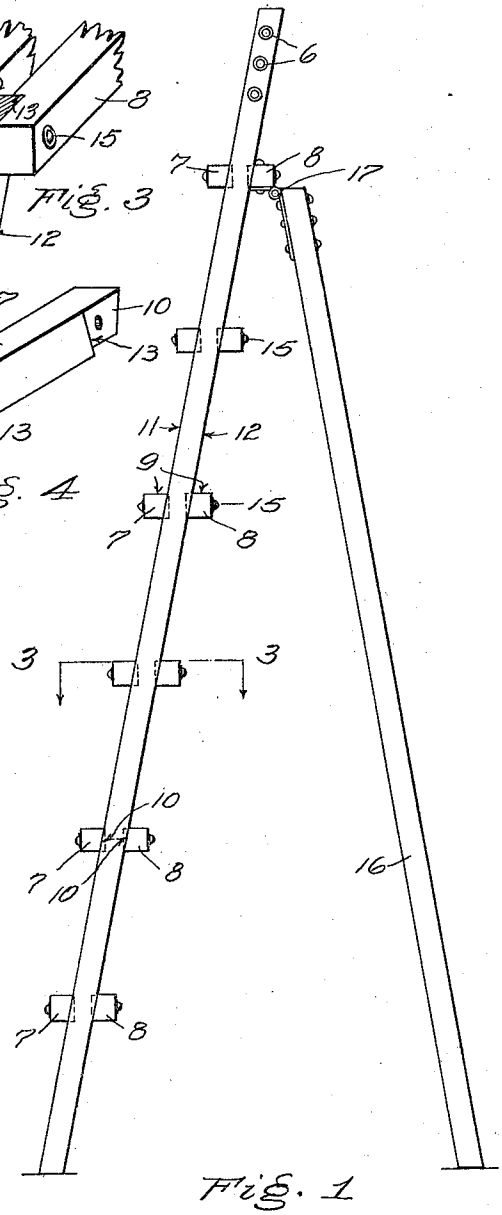


Fig. 1

WITNESSES:

A. L. Bowen.

E. Peterson.

INVENTOR

J. F. Merrill.

BY

Pierre Games

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN F. MERRILL, OF WENATCHEE, WASHINGTON, ASSIGNOR TO HARRY T. TRUNKEY, OF WENATCHEE, WASHINGTON.

ORCHARD-LADDER.

1,139,990. Specification of Letters Patent. Patented May 18, 1915.

Application filed July 21, 1914. Serial No. 852,151.

To all whom it may concern:

Be it known that I, JOHN F. MERRILL, a citizen of the United States, residing at Wenatchee, in the county of Chelan and State of Washington, have invented certain new and useful Improvements in Orchard-Ladders, of which the following is a specification.

This invention relates to step ladders; and its object is to produce a ladder of light weight, strong and durable in construction, and one which is peculiarly serviceable for use in orchards.

With these ends in view, the invention consists in the novel construction, arrangement and combination of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a ladder embodying the present invention. Fig. 2 is a front elevation of the same. Fig. 3 is a sectional view through 3—3 of Fig. 1. Fig. 4 is a perspective view of step member shown detached.

The reference numerals 5 represent the side rails or legs of the ladder which are joined at the top by transversely arranged bolts 6. Secured to the legs in spaced relations are steps each of which is comprised of elements or bars 7 and 8 respectively positioned at the front and rear of the legs so that the upper surfaces 9 of the elements of a step will be in an approximately horizontal plane when the ladder is in operative position.

To such end, said elements are formed with notches at their beveled ends having beveled surfaces 10 adapted to bear against the inner and outer faces 11 and 12 of the legs; said notches terminate at shoulders 13 which abut against the inner or opposing leg faces 14.

15 represent bolts extending through the respective pairs of step elements and the legs for rigidly securing the same together.

16 represents the supplementary leg or prop which is connected by a hinge 17 to the rear element 8 of one of the upper steps.

The above described manner of providing the various step elements with notches to receive the legs and of coupling them together constitute, in effect, horizontal truss members to effectually stay the legs and afford a strong and rigid structure of comparatively light weight.

The steps by being arranged with horizontal tread surfaces 9 provide supports upon which a person may safely stand without the necessity of grasping the ladder, thereby allowing the use of his hands in picking fruit or in performing other work among the branches of a tree.

What I claim, is—

1. A ladder comprising two leg members which are secured together at their upper ends, a series of steps, each of said steps being formed of two bars having beveled notches at their ends to fit against front and rear faces of said leg members, means to secure the bars of a step together and to the leg members, and a prop hingedly connected at its upper end to one of said steps.

2. In a ladder, the combination with the leg members, of a series of steps respectively comprising two bars, said bars being formed with a notch at each end having a bevel face to fit against the front or back face of a leg-member and terminating in shoulders adapted to be juxtaposed with the opposing inner faces of the leg-members, and step-securing bolts extending through the leg members and the adjacent ends of the associated step bars.

Signed at Wenatchee, Wash., this 25th day of June, 1914.

JOHN F. MERRILL.

Witnesses:
F. W. WHALEN,
H. T. TRUNKEY.

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