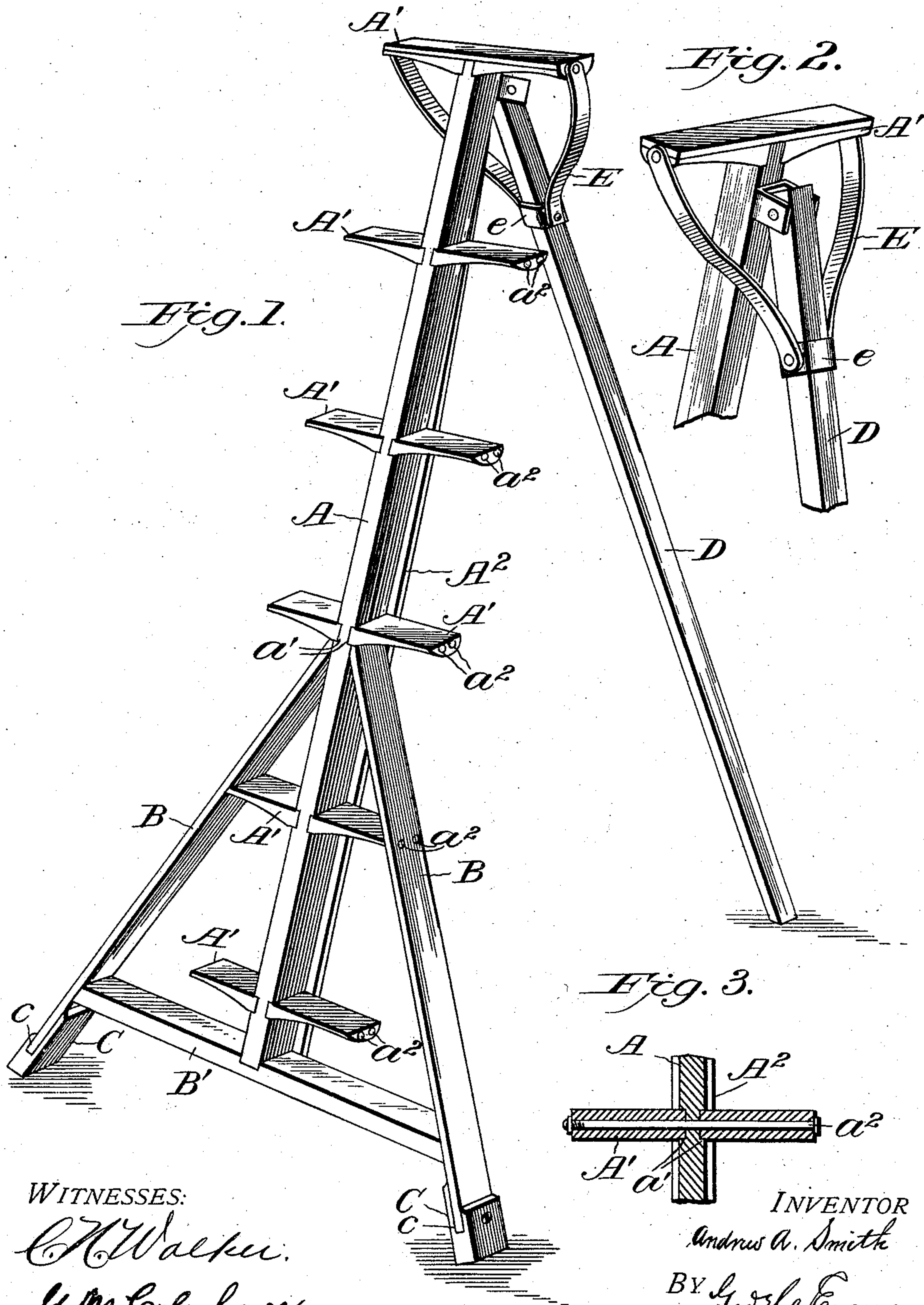


No. 785,277.

PATENTED MAR. 21, 1905.

A. A. SMITH.
STEP LADDER.

APPLICATION FILED AUG. 25, 1904.



WITNESSES:

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ANDREW A. SMITH, OF PAONIA, COLORADO.

STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 785,277, dated March 21, 1905.

Application filed August 25, 1904. Serial No. 222,078.

To all whom it may concern:

Be it known that I, ANDREW A. SMITH, a citizen of the United States, residing at Paonia, in the county of Delta and State of Colorado, have invented certain new and useful Improvements in Step-Ladders, of which the following is a specification.

My invention relates to that class of step-ladders in which a single stile is employed.

The object of my invention is to provide a single-stile step-ladder with flat firmly-secured steps and to firmly brace the stile at its lower end and also along its rear side; also, to provide the lower diverging ends of the side braces with novel feet, and also to provide a single prop connected at its upper end to the ladder by a novel sliding connection. These objects I accomplish by the construction shown in the accompanying drawings, in which—

Figure 1 is a front perspective of my improved ladder. Fig. 2 is a rear perspective of the upper end thereof. Fig. 3 is a detail view showing how the steps are applied.

A designates the single stile, having horizontally-alined steps A' at suitable intervals along its opposite sides, the inner ends of these steps being fitted into recesses a', formed in the sides of the stile. The steps A' are held in place by long bolts a², which are passed longitudinally through every pair of steps and through the stile.

B B are side braces, secured at their upper ends to the stile A, below the middle thereof, and extending at their lower diverging ends below the lower ends of the stile.

To the lower end of the stile A is secured a cross-piece B', to the ends of which the braces B B are secured near their lower ends.

CC are feet formed of blocks, provided with slots c in their upper ends to fit upon the lower ends of the braces B, to which they are secured by nails or screws in any suitable manner.

Along the rear side of the stile A is secured a strengthening-strip A², the side edges of which project beyond the sides of the stile and against the rear edges of the steps A' to further secure them rigidly in place.

D is a single prop pivoted at its upper end in a U-shaped bracket secured to the upper end of the stile A, and E is a yoke the upper ends of which are pivoted to the ends of the top step, while their lower converging ends are provided with a collar e, through which slides the prop D.

The ladder may be used for all the purposes to which step-ladders are commonly applied and will be found light, strong, and easy to handle.

I claim as my invention—

1. A step-ladder comprising a single stile, pairs of horizontally-alined steps secured to the opposite sides of said stile, a single prop pivoted to the upper end of the stile, a yoke pivoted at its upper ends to the top step and provided at its lower converging ends with a collar through which said stile slides.

2. A step-ladder consisting of a single stile, pairs of horizontally-alined steps secured to the opposite sides of the stile, a strengthening-strip along the rear side of the stile and overlapping the rear edges of the steps, diverging braces secured to the stile, a cross-piece on the lower end of the stile to the end of which said braces are secured, feet on the lower end of the braces, and a single prop secured at the upper end to the upper end of the stile.

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

ANDREW A. SMITH.

Witnesses:

FRED H. REYNOLDS,
A. B. CAMPBELL.