(No Model.)

Q. MACNIDER.

STEP LADDER.

No. 355,095. Patented Dec. 28, 1886.

Fig. 1.

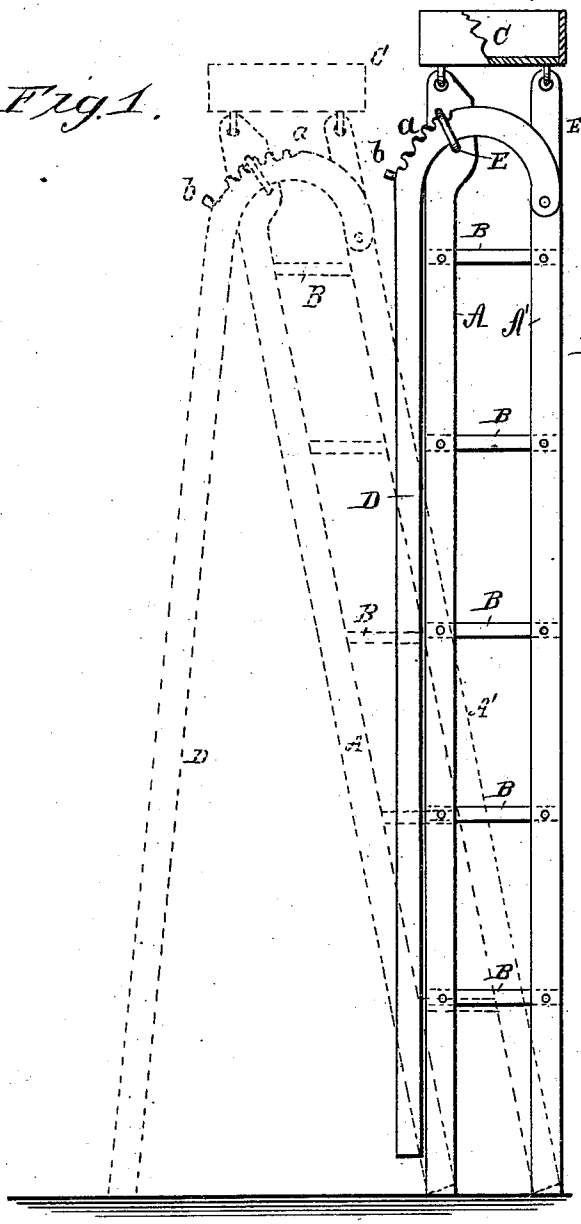
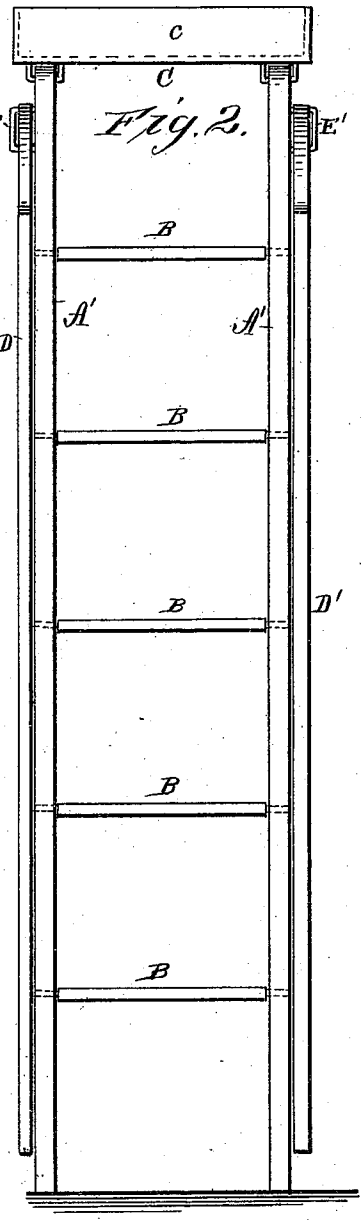


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

QUINTIN MACNIDER, OF BELLEVILLE, ONTARIO, CANADA.

STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 355,095, dated December 28, 1886.

Application filed September 13, 1886. Serial No. 213,432. (No model.)

To all whom it may concern:

Be it known that I, QUINTIN MACNIDER, of Belleville, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Step-Ladder, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation of my improved step-ladder, showing it in dotted lines in position for use, and Fig. 2 is a front elevation of the same.

Similar letters of reference indicate corresponding parts in both views.

The object of my invention is to construct a step-ladder which may be inclined at different angles, and which will maintain the steps in a horizontal position.

My invention consists of a step-ladder composed of two pairs of side bars pivoted to the ends of the steps and to the top step or platform, and provided with legs having curved upper ends and pivoted to the front side bars and passing through staples on the rear side bars, all as hereinafter fully described, and pointed out in the claims.

Two pairs of side bars, A A′, are pivoted to the ends of the steps B and to the under surface of the platform C. The side bars A′, are pivoted to the ends of the steps, near their front edges, and the bars A to the ends of the steps, near their rear edges. This construction allows all the steps B to remain parallel with each other and with the floor, while the bars A A′ are inclined at any required angle.

To the bars A′, near their upper ends, are pivoted the curved upper ends of the legs D D′, the ends being curved on a semicircle whose radius is equal to about half the distance between the center of the front bar, A′, and the rear of the bar A. The curved ends of the legs D D′ pass through staples E E′ inserted in the side bars A, near their upper ends, and the curved part of the legs D is provided with serrations *a*, which engage the staple E and hold the legs and bars A A′ in any position in which they may be adjusted. The legs D D′ are also provided with a stop-pin, *b*, which limits their rearward motion. As the legs D D′ are swung on their pivots to arrange the ladder for use, the side bars, A A′, will swing over and the steps will maintain their horizontal position, as indicated in dotted lines in Fig. 1.

The platform C is preferably inclosed by side pieces, *c*, forming a convenient receptacle for brushes, &c.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a step-ladder, the combination of the steps B, the side bars, A A′, pivoted to the ends of the steps, near the front and rear edges, the legs D, provided with curved upper ends pivoted to the front side bars, A′, and the staples E, attached to the rear bar, A, and receiving the curved ends of the legs, substantially as described.

2. The combination of the steps B, the side bars, A A′, pivoted to the steps, near their front and rear edges, the legs D, having curved and serrated ends, and the staples E, attached to the rear bars, A, and adapted to engage the serrations of the legs D, substantially as described.

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Witnesses:
GEO. A. WEMP,
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