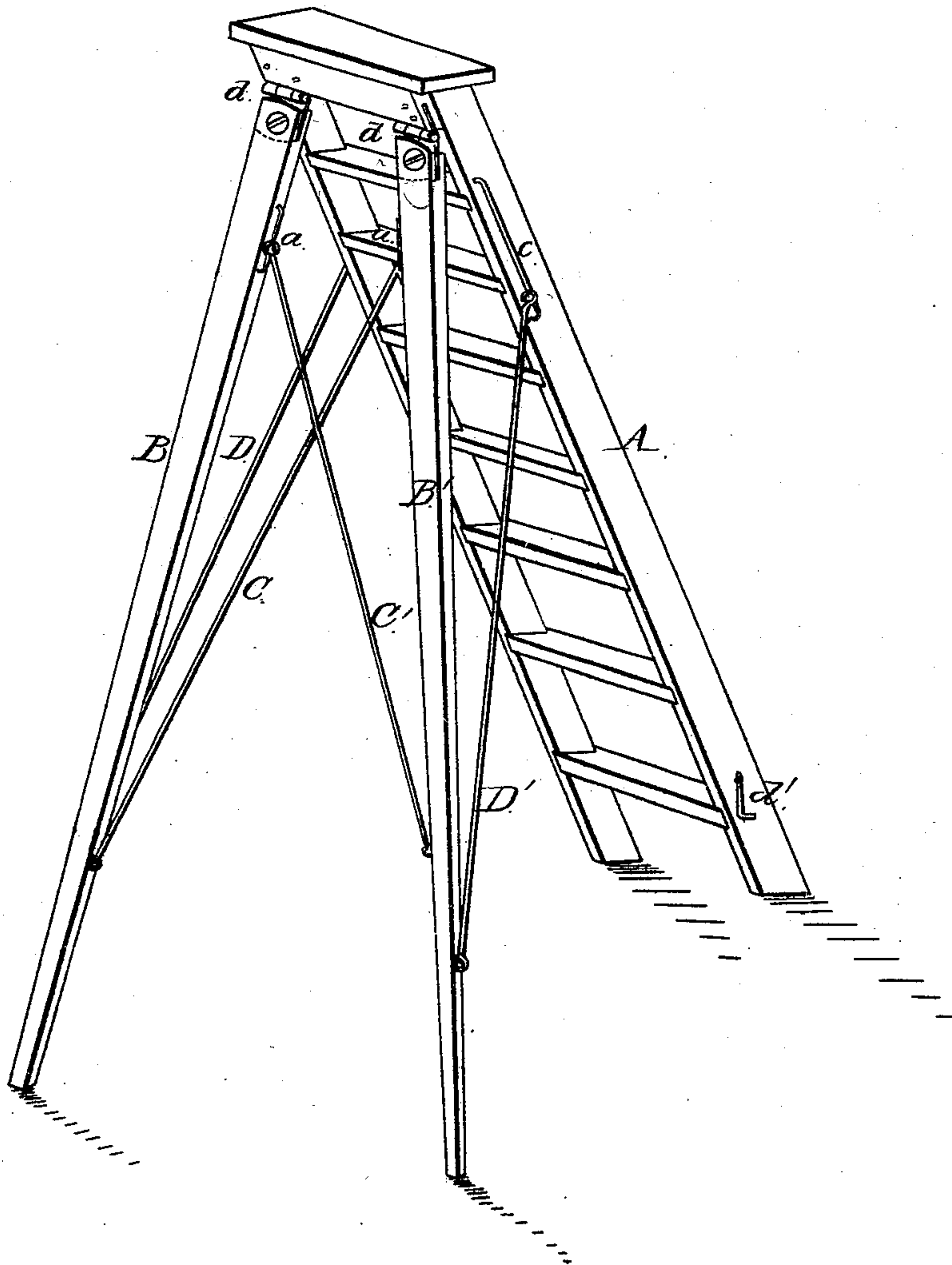


M. E. Abbott,

Step Ladder.

No. 70,933.

Patented Nov. 19. 1887.



Witnesses:

Theo Tuschke
Wm. Freim

Inventor:

M. E. Abbott
Per Manning &
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United States Patent Office.

M. E. ABBOTT, OF BETHLEHEM, PENNSYLVANIA.

Letters Patent No. 70,933, dated November 19, 1867.

IMPROVEMENT IN STEP-LADDER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, M. E. ABBOTT, of Bethlehem, in the county of Northampton, and State of Pennsylvania, have invented a new and improved Step-Ladder; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of constructing step-ladders, whereby they are rendered adjustable, and so formed that the braces may be folded up in a small space; and the invention consists in the construction and arrangement of parts as hereinafter described.

The drawing represents a perspective view of a step-ladder constructed according to my invention.

As regards the ladder proper, I claim nothing novel. What I claim as new relates to the manner in which the braces or legs are attached to the ladder, and to the manner in which the stay-rods are arranged and attached.

A represents the ladder proper, or the step part. B B' represent the legs or braces. There are two of these, as is usual in this kind of ladder. They are hinged to the upper part of the ladder, as seen at *d d*. The hinge or butt is firmly attached to the ladder; but the upper ends of the braces are pivoted to the other leaf of the hinge, so that a compound joint is formed, the lower ends of the braces being allowed thereby to be spread, and brace the ladder in two directions, as seen in the drawing. Between the two braces or legs B B' there are two stay-rods C C', which cross each other, as seen. These stay-rods are attached to the braces at their bottom ends by eyes in the usual manner; but at their top ends they are attached to long staples *a a* in the braces, which allow them to have a longitudinal or up-and-down movement. This, with the pivot-joints of the braces at their top ends, allows their lower ends to be spread, although the rods cross and brace from one to the other. Upon the two sides of the ladder there are two other stay-rods, D D', (one on each side,) which are attached to the braces B B' at their lower ends, the same as C C', and to the side of the ladder by long staples *c c*, as before described, which allows the ends of the rods to slide upward on the staple when the braces are folded up, which arrangement allows the braces to lie flat on the back of the ladder, where they are held by small hooks, seen at *d'*.

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

A step-ladder, with the braces B B' and the stay-rods C C' and D D' attached to the ladder A, substantially as described; that is to say, by the pivot-joints *d d* and the long staples *a a* and *c c*, as and for the purposes set forth.

In combination with a step-ladder, I claim the pivot-joints *d d* and the long staples *a a* and *c c*, (or their equivalents,) substantially as and for the purposes described.

M. E. ABBOTT.

Witnesses:

C. F. BEALER,

M. SAGE.