

C. W. Brown.

Step-Ladder.

No 53,566.

Patented April 3. 1866.

Fig: 1.

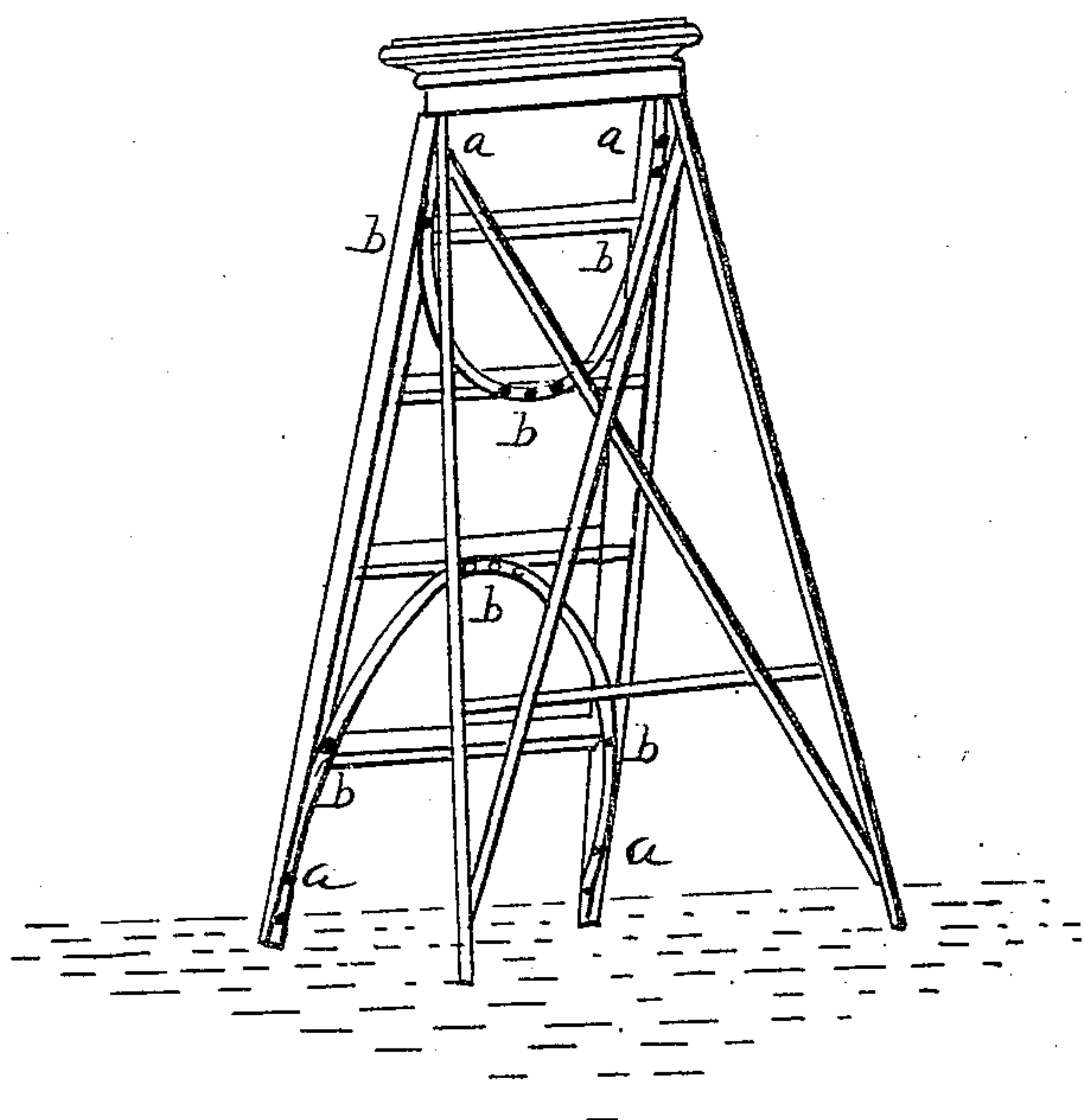
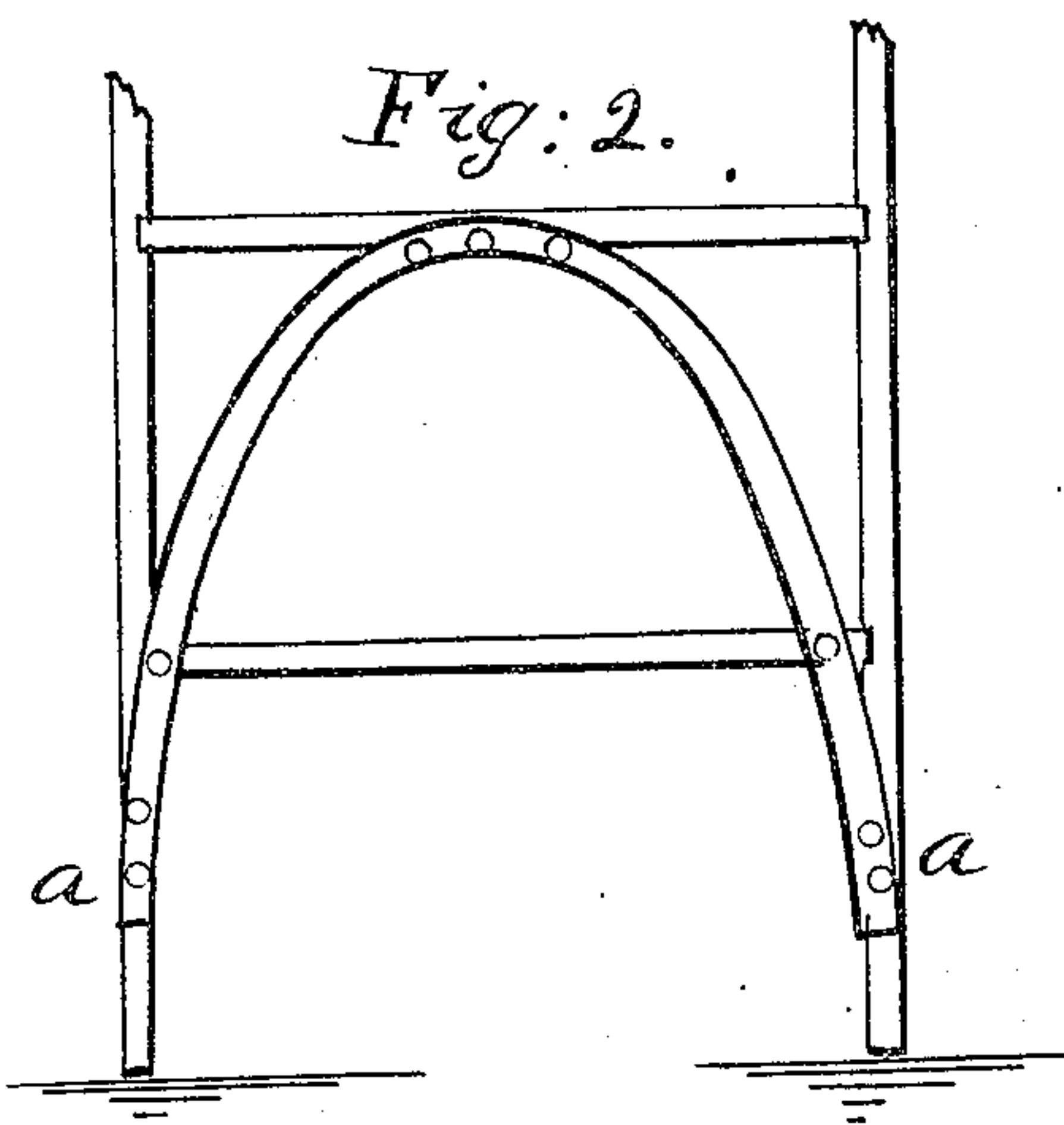


Fig: 2.



Witnesses

Morris D. Lindsey  
Cyrus C. Carrier

Inventor

Charles W. Brown

# UNITED STATES PATENT OFFICE.

CHARLES W. BROWN, OF NEWARK, NEW JERSEY.

## IMPROVED STEP-LADDER.

Specification forming part of Letters Patent No. 53,566, dated April 3, 1866.

*To all whom it may concern:*

Be it known that I, CHARLES W. BROWN, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain Improvements in the Construction of Step-Ladders; and I do hereby declare the following to be a full and exact description of the same, reference being herein had to the drawings accompanying this specification, and which make part of the same.

The nature of my improvement consists in the addition of strength to the ladder by a peculiar form and adaptation of braces to sustain the ladder in the greatest of the strains that come upon it in common use—namely, the diagonal or sidewise strain.

In the drawings, Figure 1 represents the ladder with its back toward us, with the arched braces thereon. Fig. 2 shows the brace and its attachings to the sides and steps.

A piece of suitable hard wood, of the requi-

site width and thickness required by the various lengths and sizes of step-ladders, is first bent to an arch by means of steam or otherwise, and is then, by its ends, secured by nails or screws, as the case may be, to the string-pieces or sides of the ladder, on their back parts, as at *a a*. It is also secured to the steps, as at *b b b*. Letting them in a little below the surface adds to their security.

I am aware of diagonal braces secured by patent, and also of every form of metal braces in use, and disclaim all such.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The arched brace of wood in one piece spanning the ladder-frame, substantially as specified.

CHARLES W. BROWN.

Witnesses:

MORRIS B. LINDSLEY,  
CYRUS C. CURRIER.