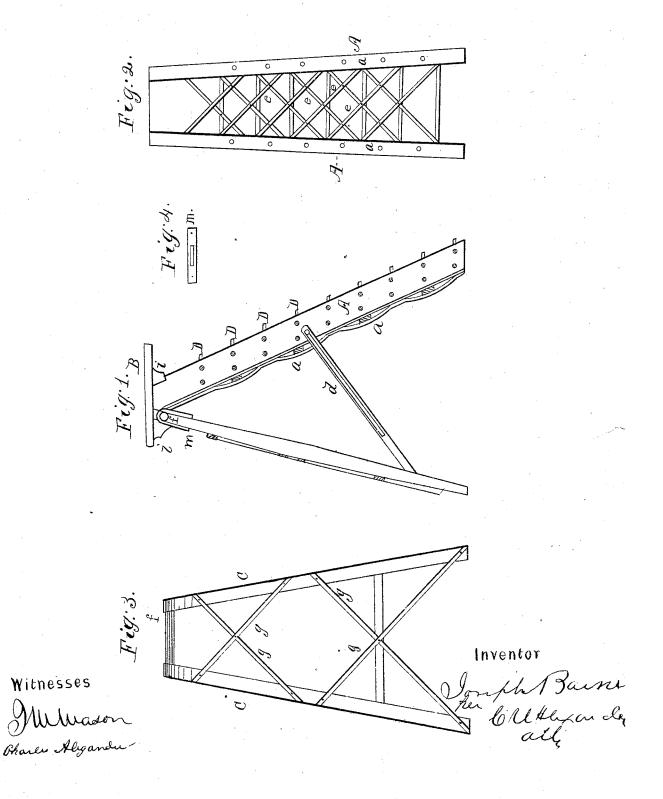
## J. Barnett. Step Ladder. Patented Sep. 20. 1865.

No 50,091.



## UNITED STATES PATENT OFFICE.

JOSEPH BARNETT, OF DAYTON, OHIO.

## STEP-LADDER.

Specification forming part of Letters Patent No. 50,091, dated September 26, 1865.

To all whom it may concern:

Be it known that I, JOSEPH BARNETT, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Step-Ladders; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A A represent the side pieces of the ladder, between and to which the steps D D are secured.

e e represent a series of thin strips, which are secured to the back edges of the pieces A A, said strips being crossed to make lattice-work, as shown in Fig. 2.

a a represent two strips, which are also secured to the side pieces, A A, but are secured longitudinally of their back edges. The strips a a pass over the ends of strips ee, and secure to the side pieces, A A, between the points where the strips ee are secured to them, and thus, bending, form a series of arches, as shown in Fig. 1. These arches add very materially to the strength of the side pieces, and are very little additional weight or expense.

Fig. 3 represents a view of the back support of the ladder.

d represents a metallic slotted slide, one end of which is connected to the leg C. This slide is connected to the side piece, A, by means of

a pin which passes through the slot in it, as shown in Fig. 1, and is for the purpose of stationing the legs C C at proper distances from the side pieces, A A.

*i i* represent brackets, which are placed under the step B for the purpose of making it more solid and prevent its breaking.

m represents a loop-hinge, which is made as shown in Fig. 4. This hinge is secured to the ends of the pieces C C, and a rod, f, passing through the loops formed by its connection with the piece C, and said rod being firmly secured to the main body of the ladder under the step B, the back support or legs of the ladder are thus attached. A small pin passes into the slot shown in the hinge m and into rod f, to keep it securely in position.

It will be seen that by the means herein described a very light and at the same time strong ladder may be made very cheaply.

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

The employment of the strips a a and e e in connection with the side pieces, A  $\Lambda$ , and arranged with the slotted bar d and legs C C, the several parts being used as and for the purpose herein specified.

JOSEPH BARNETT.

Witnesses:

THOS. B. TILTON, J. J. STECKEL.