

S. E. Hewes.

Ladder.

N^o 82,221.

Patented Sept. 15, 1868.

Fig. 2

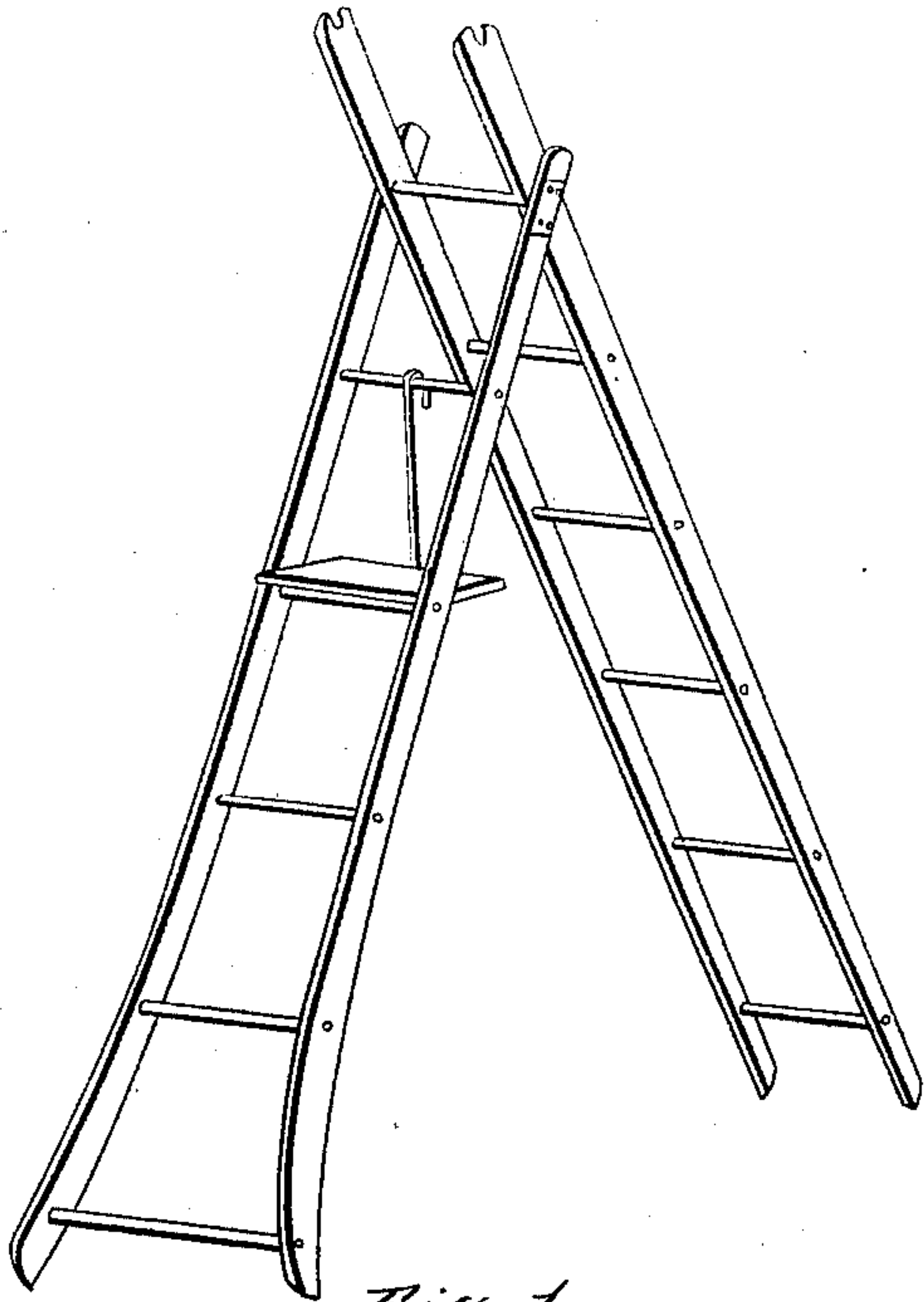
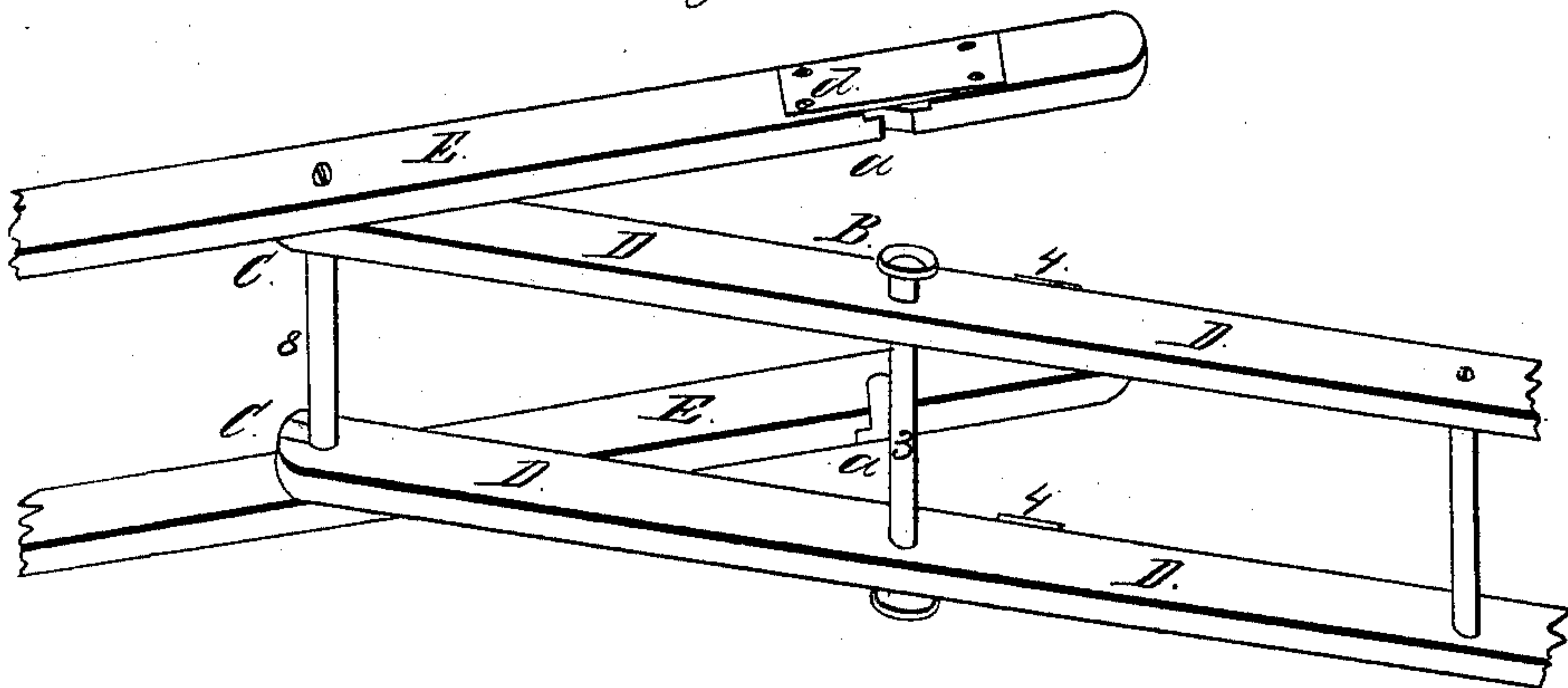


Fig. 1.



Witnesses:
Joel Tiffany
Benjamin Croft

Inventor:
S. E. Hewes

United States Patent Office.

SHUBAEL E. HEWES, OF ALBANY, NEW YORK.

Letters Patent No. 82,221, dated September 15, 1868.

IMPROVED STEP-LADDER JOINT.

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, SHUBAEL E. HEWES, of the city and county of Albany, and State of New York, have invented a new and useful Improvement in Joints to Extension and Step-Ladders; and I hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The object of my improvement is to furnish, for extension and step-ladders, an economical, convenient, strong, and safe joint, by means of which a ladder can be made up of two or more sections, to be put together easily, and, when together, to be as strong as though the sides were single and entire through their entire length, and at the same time easily detachable into several parts for purpose of conveniently storing away.

In the accompanying drawing—

Figure 1 represents so much of two sections of a ladder as is necessary to include the improved joint, which is represented in that figure.

In fig. 1, D D D D represent the stiles or side pieces of one part of the ladder, representing at B B the male part of the joint, and representing at C C a short slot cut in the end of the side pieces fitting upon the round, s. E E represent the sides of the other part of the ladder, in which the female part of my improved joint is seen at a a. The button, B B, fitting upon the ends of the round, s, is made to enter and fit closely in the socket a a, as that portion of the ladder containing the male portion of the joint, turning upon the round, s, as its fulcrum, swings to its place in extending the ladder for use.

The slot a a is cut upon the periphery of a circle having the distance of C B for radius, so that the button B swings naturally into its place in the slot a, when the foot, c, is in place upon the round, s.

The side of the ladder in which the slot a is cut is strengthened by a plate, of iron, brass, or other strong metal, screwed upon it, and aiding in forming the matrix, into which the button B is fitted.

In making this joint in perfection, care must be taken, in adjusting the button B to the end of the round, s, that its length and position be such as to press or hold firmly together the two parts of the ladder united by the joint.

To keep the ladder in place when extended, I attach a small button upon the sides D D, which I turn across the sides E E, when the ladder is extended. These buttons may be located upon sides at or near 4 4, as seen in fig. 1.

The parts of the ladder, when arranged as a step-ladder, are seen as in fig. 2.

Having thus fully described the nature and character of my said improvement, I will proceed to describe the same with respect to my claim.

I claim the joint composed of the foot C C, the round, s, the button B B, and the matrix a a, substantially in the manner and for the purpose above described.

S. E. HEWES.

Witnesses:

JOEL TIFFANY,
BENJAMIN NOTT.