

A. Simmerman & J. S. Simmerman's Self Bracing
Ladder.

73468 Fig. 1

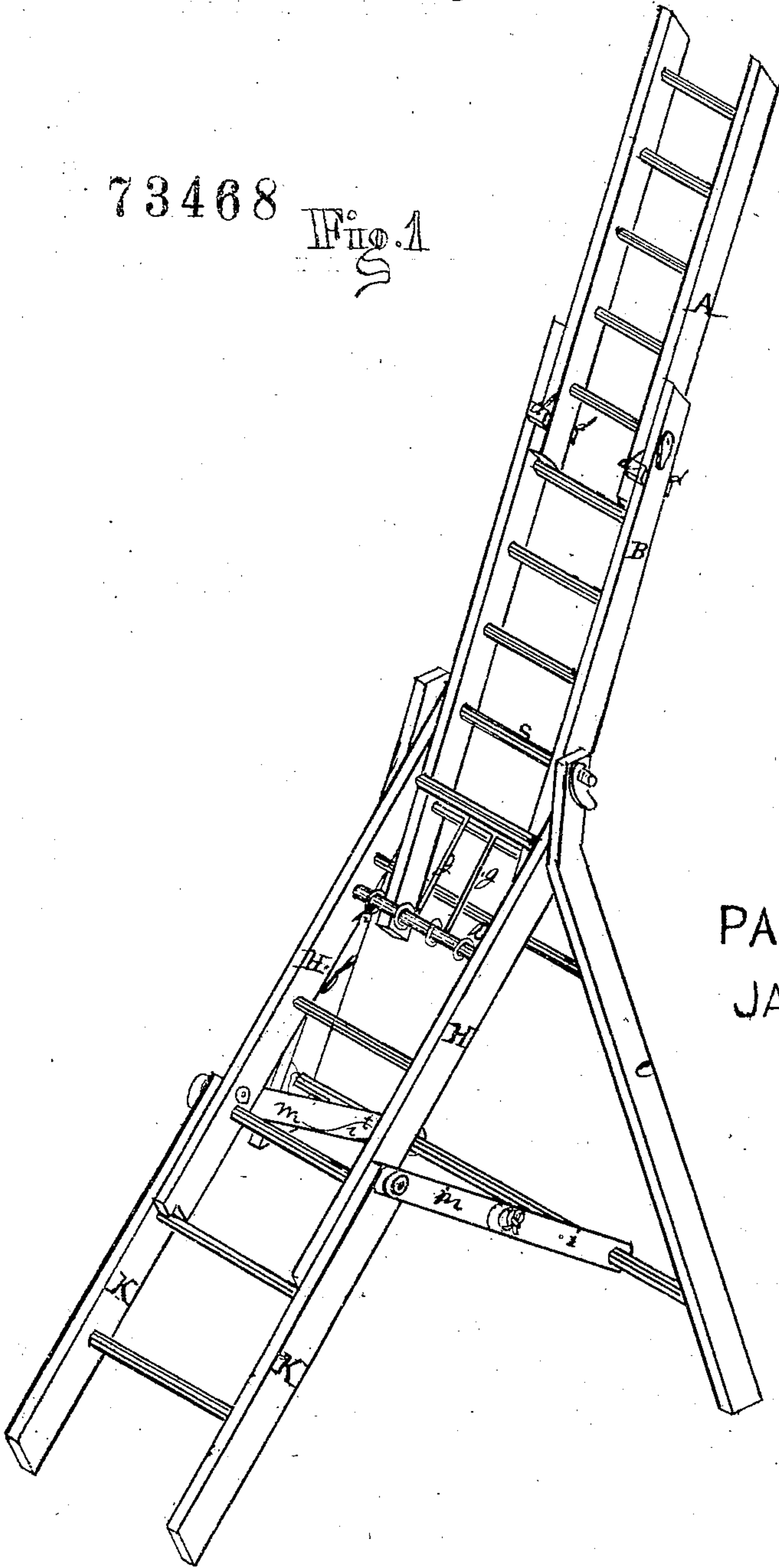
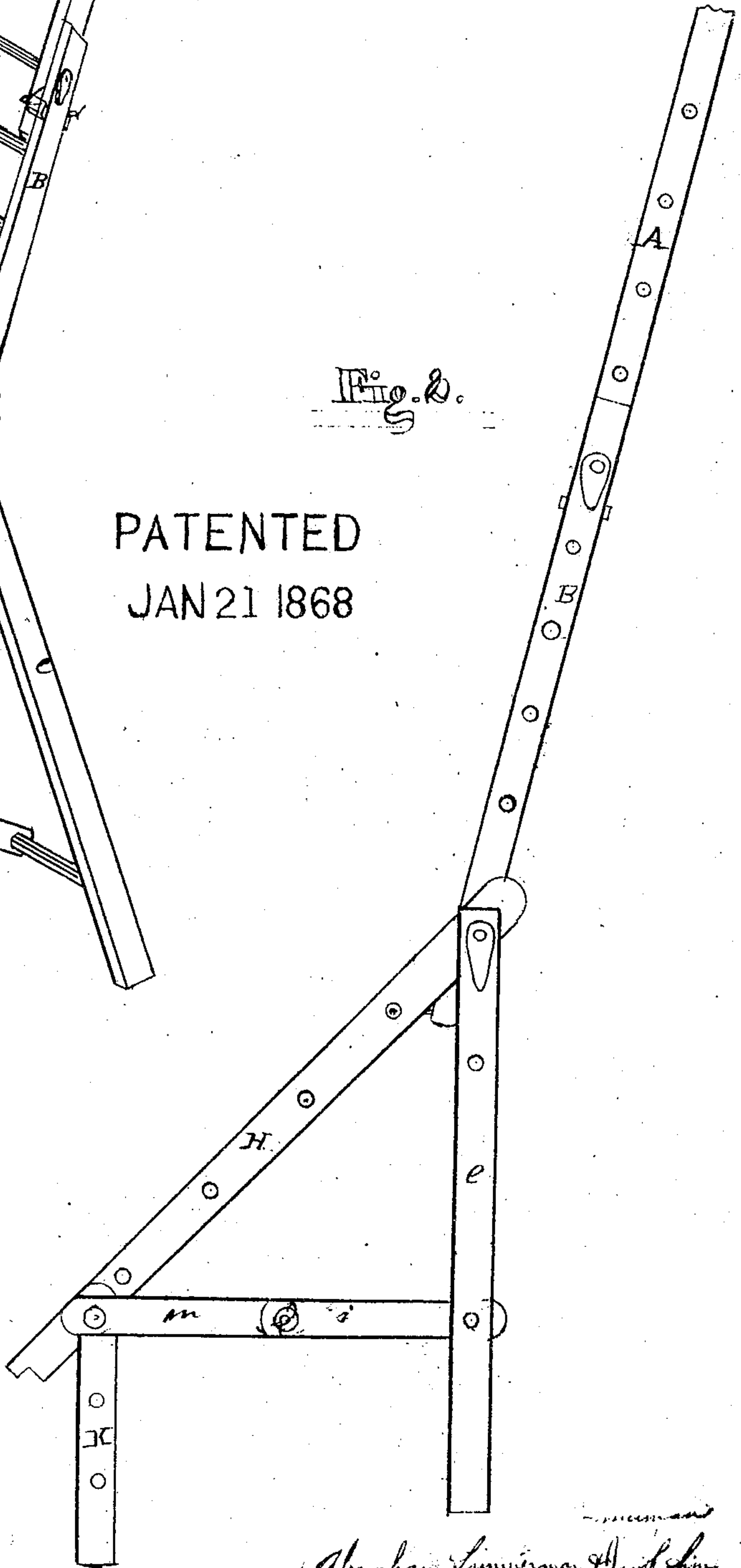


Fig. 2.

PATENTED
JAN 21 1868



Witnesses {
Jas. Ellis
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Inventor {
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J. S. Simmerman
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United States Patent Office.

ABRAHAM SIMMERMAN, OF GLASSBORO, AND JACOB S. SIMMERMAN, OF
MILLVILLE, NEW JERSEY.

Letters Patent No. 73,468, dated January 21, 1868.

IMPROVEMENT IN LADDERS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, ABRAHAM SIMMERMAN, of Glassboro, and JACOB S. SIMMERMAN, of Millville, State of New Jersey, have invented certain new and useful Improvements in Self-Bracing Ladders; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification. In the annexed drawings, which make a part of this specification—

Figure 1 represents a perspective of our ladder when extended.

Figure 2 is a side elevation of the same.

The object of our invention is to construct a ladder which, by the union of several devices, will perform the offices of three distinct ladders.

The letters A and B, fig. 1, represent two sections of a common ladder, the section A being made sufficiently narrow to slip in between the side rails of section B, and is confined, when in position, by the metal rod C and plates d, the said plates being made to play on their respective bolts, which pass through the rails B, and will, when in a horizontal position, rest against a pin in the rail A. By the use of this simple device an extensive ladder, reaching to any desired height, can be made. The lower end of section B is supported by the legs e and f, with a bolt, s, which passes through the sides of B and legs e and f, and also through the ladder H, near its top. g g represent two hooks, the lower ends of which are looped on a round in ladder H, and their upper ends hooked over the lowest round in ladder B. Two shorter hooks, h h, are looped on the same round with the hooks g g, and are made to catch in staples near the lower end of section B. The object of the two sets of hooks is to alter the relative position of the ladder H with the sections B and A. K represents a short section of a ladder pivoted to ladder H, near its lower end. When section K is brought in line with ladder H, the middle round in K will rest against a shoulder at the end of H, and be thus held in position. m represent two sets of arms pivoted to similar arms i. The arms m are allowed to play vertically on the same pivots that confine section K with ladder H. When the arms m and i are in line, they are supported in that position by the pin t in arms i, which rest against a shoulder in arms m. The lower ends of arms i are perforated, to receive the round which holds the legs e and f together near their base.

When using our ladder for the purpose of painting the walls of houses, the two metal plates d d must be turned to a horizontal position, so as to extend over the rails of section A. The two sections A and B now being in line, the hooks h h must be secured to the staples in section B, and the ladder will be held in firm position.

It will be observed that, as the various sections of our ladder are adjustable, it can be arranged so as to form a step-ladder, a scaffold, or in other required forms.

Having thus described our invention, what we claim, is—

The sections A B H K, in combination with hooks g g h h, arms m i, and legs e f, all arranged to form a perfect self-bracing ladder, substantially in the manner described.

In testimony that we claim the foregoing as our own, we affix our signatures in presence of two witnesses.

ABRM. SIMMERMAN,
J. S. SIMMERMAN.

Witnesses:

JACOB JOHNSON,
WILLIAM O. JOHNSON.