

No. 758,659.

PATENTED MAY 3, 1904.

J. A. JAEGER-RAINER.
LADDER.

APPLICATION FILED AUG. 8, 1902.

NO MODEL.

Fig. 1.

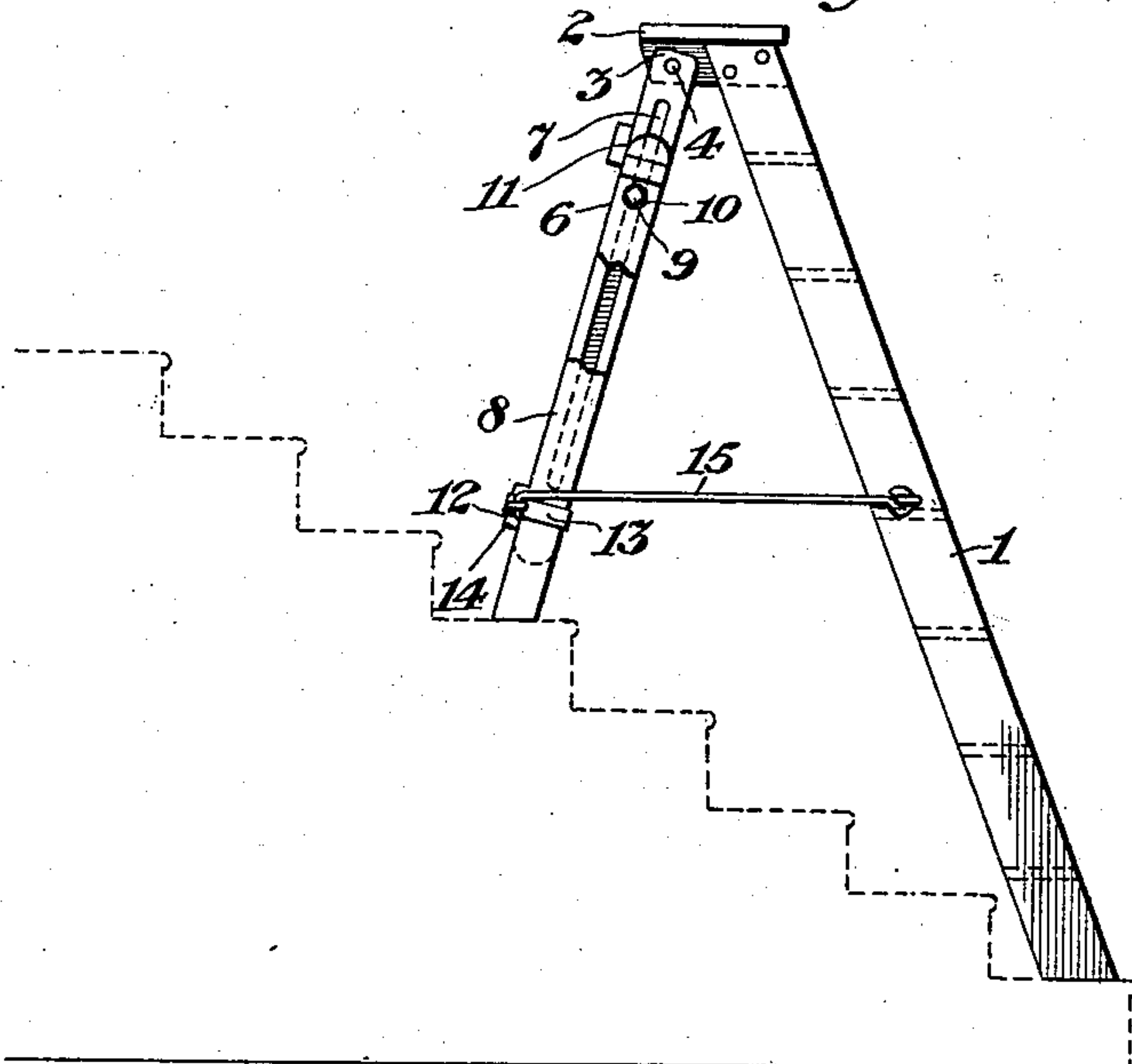


Fig. 3.

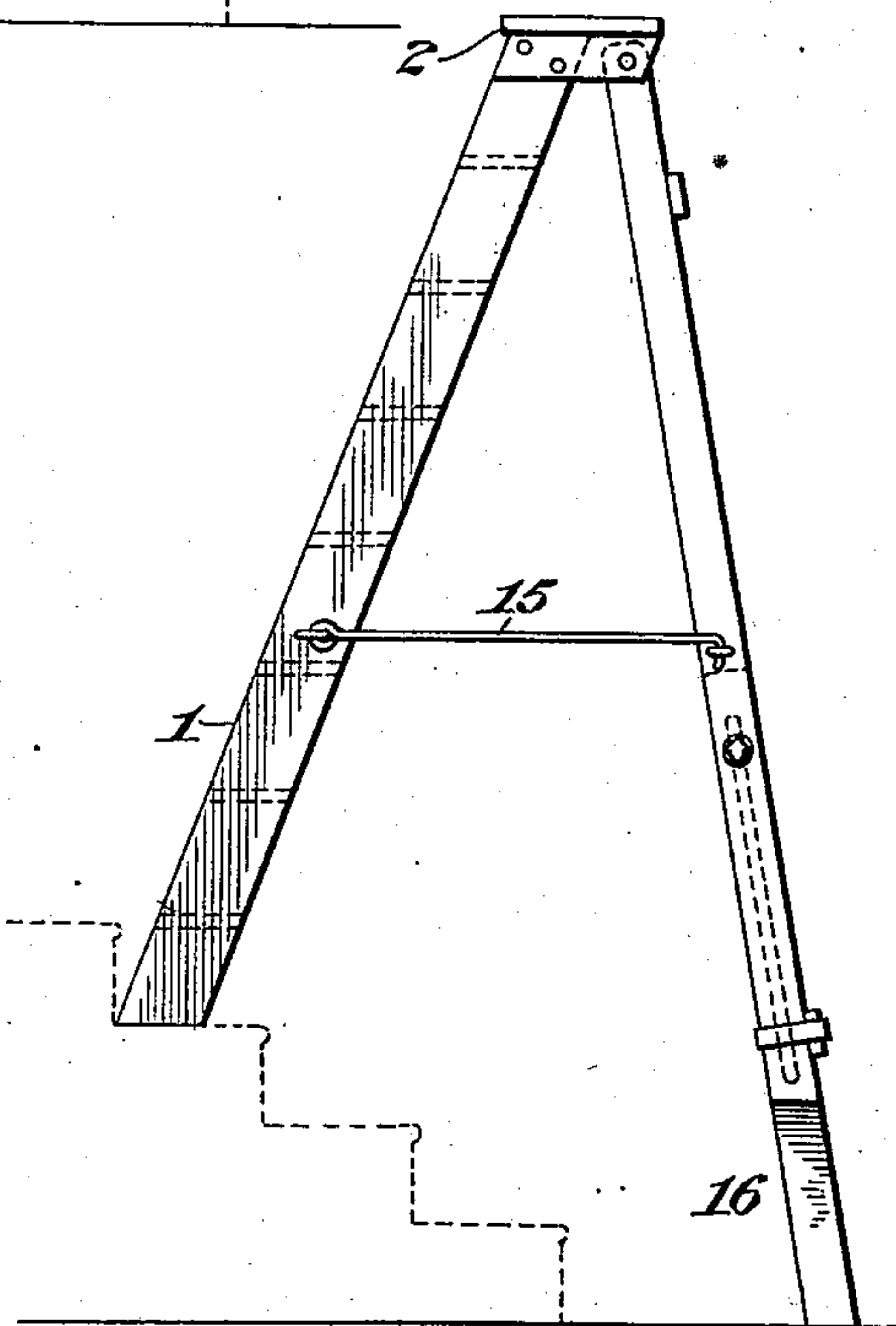
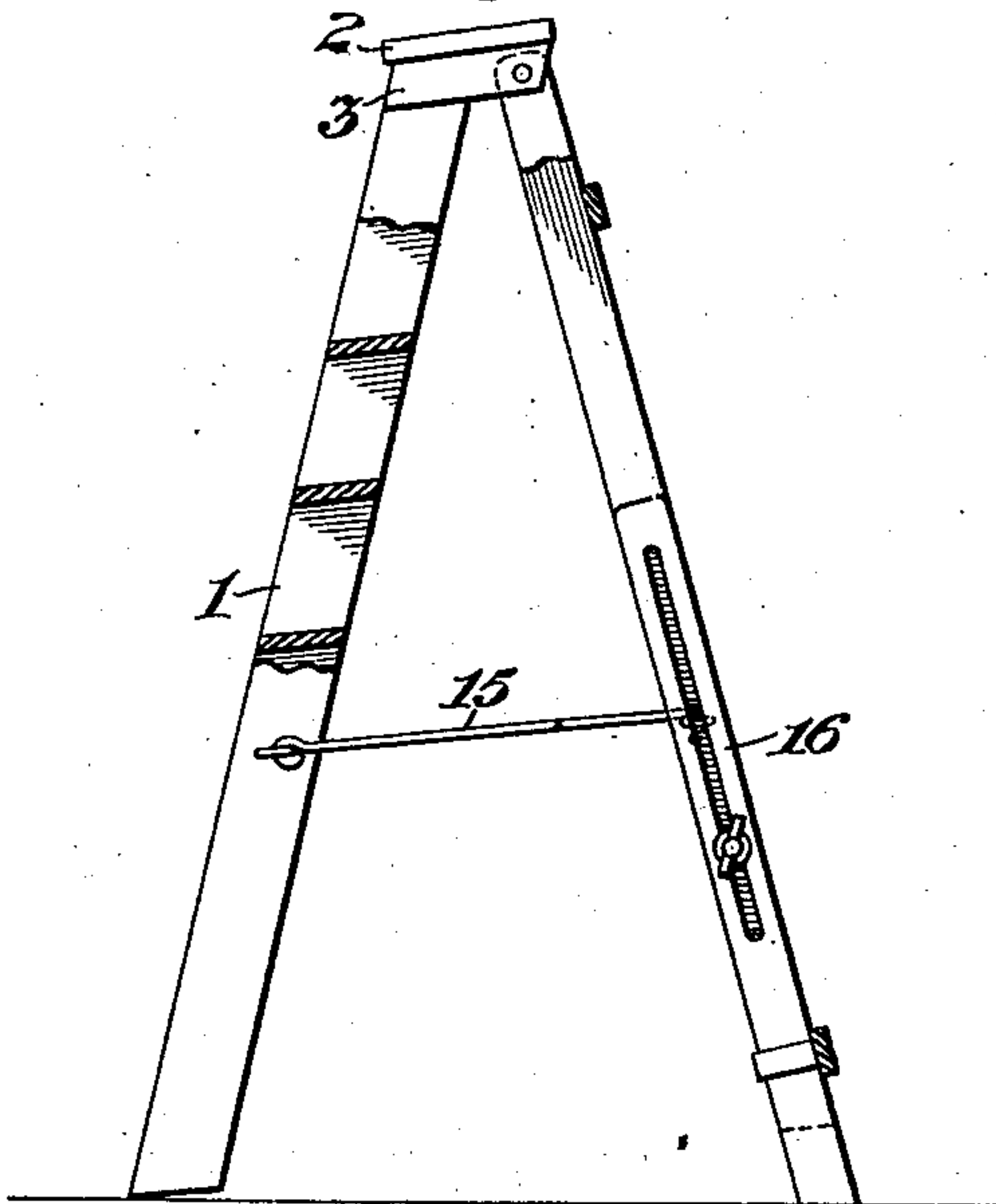


Fig. 2.



Witnesses
Chas. J. Clagett
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By his Attorney, J. R. Littell

UNITED STATES PATENT OFFICE.

JOSEPH A. JAEGER-RAINER, OF NEW YORK, N. Y.

LADDER.

SPECIFICATION forming part of Letters Patent No. 758,659, dated May 3, 1904.

Application filed August 8, 1902. Serial No. 118,852. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. JAEGER-RAINER, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Ladders, of which the following is a specification.

This invention relates to adjustable step-ladders adapted especially for the use of paper-hangers, painters, or other artisans in working upon stairways.

The object of the invention is to provide a step-ladder adapted to be used with convenience and safety upon a stairway and which may be also used on floors or other level surfaces.

The construction of the improvement will be fully described hereinafter in connection with the accompanying drawings, which form part of the specification.

In the drawings, Figure 1 is a side elevation of the device with its legs adjusted to their shortest position and showing the position of the ladder upon a stairway in dotted lines. Fig. 2 is a side elevation, partly broken away, of a modified construction of the ladder; and Fig. 3 is a side elevation showing by dotted lines the position of the modified construction upon a stairway.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to Fig. 1, the numeral 1 designates the ladder proper comprising side bars and a series of steps secured thereto in the usual manner. Secured to the inner sides of the side bars of the ladder just below the top step or platform 2 are two parallel brackets 3, formed with bearings for a transverse shaft 4, the ends of which project laterally beyond the brackets to serve as pivotal supports for the supporting-legs of the ladder, the upper ends of which are formed with openings to receive the ends of the shaft.

Each leg of the ladder comprises an upper section 6, formed with an elongated slot 7, and a lower section 8, which overlaps the upper section and is secured thereto adjustably by a bolt 9, extending through the upper end of the section 8 and through the slot in the adjacent upper section 6, and a clamping-nut

10, preferably of the butterfly form. The upper leg-sections 6 are braced together adjacent to their upper ends by a transverse brace 11 and at their lower ends by a brace 12, the ends of which project laterally beyond the sections 6 to overlap the rear edges of the lower sections and to serve in connection with metallic straps 13 as guides or keepers for the lower sections. At each end of the lower transverse brace 12 is secured an eye 14 to receive the hooked end of a side brace 15, the opposite end of which is loosely secured to the adjacent side bar of the ladder.

As illustrated in Fig. 1, the ladder constructed as above described is adapted to be used upon a stairway. The legs of the ladder when shortened by adjustment rest upon one of the stair-steps, while the foot of the ladder proper rests either upon the floor or upon one of the stair-steps below that upon which the legs rest, as indicated by dotted lines. Thus the ladder affords a firm support for a workman, and papering or other work may be conveniently accomplished on ceilings or at points above the stairway.

The modified construction shown in Figs. 3 and 4 differs from that above described in that the lower leg-sections 16 are slotted instead of the upper sections, the other features being similar to the form shown in Figs. 2 and 3. This modified construction is adapted to be supported upon a stairway in the position shown in Fig. 4, which is a reversal of the position shown in Fig. 1, the foot of the ladder in this instance resting above the legs, as shown.

The two forms of ladder may be used together to support a scaffold-board, in which event one of the ladders rests upon the stairway and the other upon the floor, and a board is supported between them, one end resting upon each ladder.

It will be observed that when the leg-sections of the ladder are adjusted to correspond in length to that of the ladder proper the device is adapted for use on level surfaces or against a wall after the manner of an ordinary non-adjustable step-ladder.

I would have it understood that I reserve the right to make all such variations or

changes in the details of the improvement as may fall within the scope of the claim.

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

5 A step-ladder comprising a platform 2 having brackets 3 secured to the under side two non-extensible legs the upper ends permanently secured to said brackets, two extensible legs each comprising upper and lower
10 overlapping sections, the upper sections 6 having elongated slots 7 and having their upper ends secured by a brace 11 and pivoted to said brackets and their lower ends connected by a brace 12, the ends of said brace overlap-
15 ping the lower sections and being provided with keepers 13 on their ends surrounding

and guiding the lower sections and an eye 14, a side brace 15 one end pivoted to a non-extensible leg and the other end hooked in the eye 14, threaded bolts carried by the lower 20 sections and passing through the elongated slots in the upper sections, and nuts adjustable on said bolts, whereby each lower section is independently adjustable on its upper section, substantially as described. 25

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

JOSEPH A. JAEGER-RAINER.

Witnesses:

F. O. McCLEARY,
J. CLARK PYBAS.