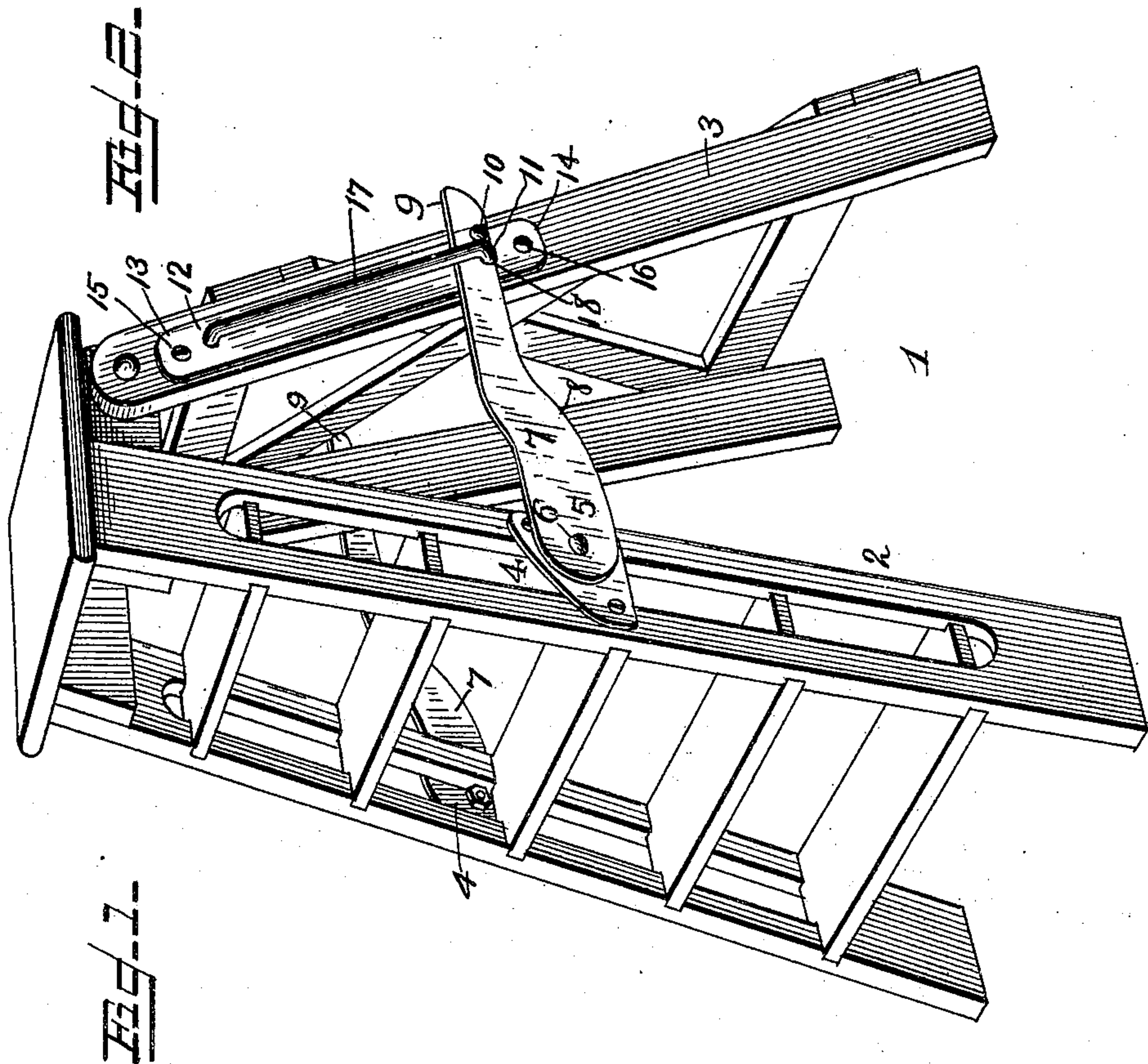
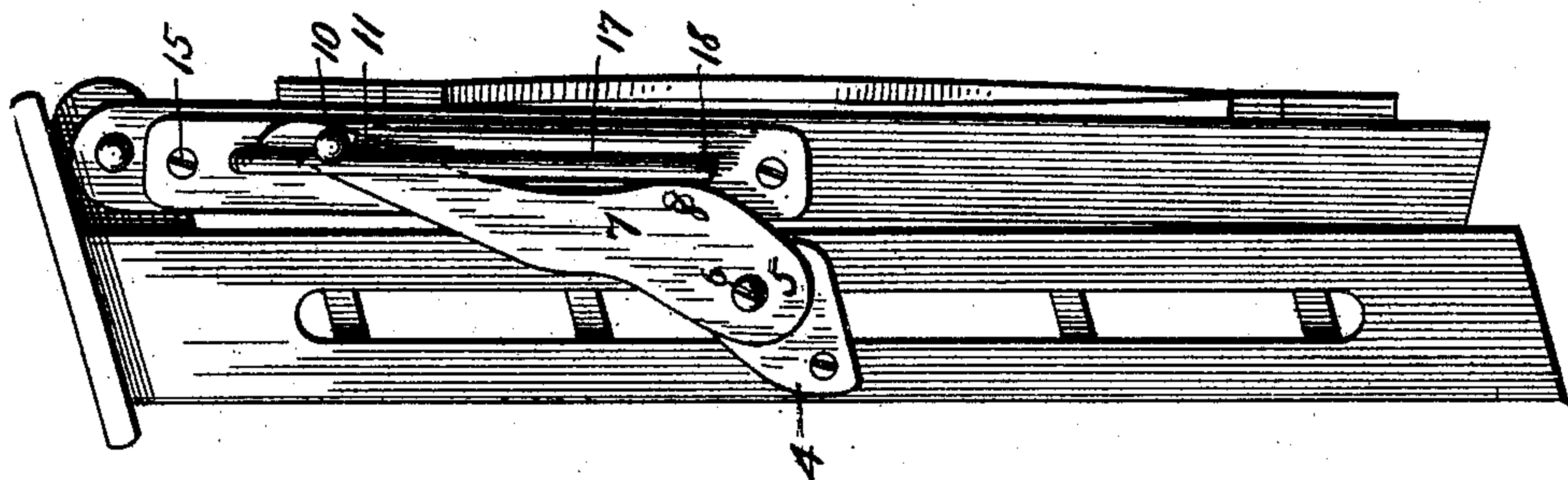


S. JONES.
STEP LADDER.

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934,315.

Patented Sept. 14, 1909.



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UNITED STATES PATENT OFFICE.

SIMON JONES, OF NEW YORK, N. Y.

STEP-LADDER.

934,315.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed June 3, 1909. Serial No. 500,006.

To all whom it may concern:

Be it known that I, SIMON JONES, of New York, in the county and State of New York, have invented certain new and useful Improvements in Step-Ladders, of which the following is a specification.

This invention relates to new and useful improvements in step ladders, and is more especially designed for step ladders which are used in hospitals or in places where step ladders are of frequent use and have to be folded for carrying and unfolded for use.

The invention relates more particularly to a peculiar form or shape of brace, which is employed to hold the two parts of the step ladder apart when the step ladder is in use and when the step ladder is folded for transportation or packing, the brace, by its peculiar form, is kept from falling down and remains snugly alongside the ladder.

In the accompanying drawings, which form a part of this specification, Figure 1 represents a perspective view of an ordinary step ladder provided with the invention, the step ladder being extended for use. Fig. 2 represents the same step ladder folded for transportation or packing.

In the drawings, the numeral 1 represents any ordinary form of step ladder consisting of a step-portion 2 and a support-portion 3 hinged together at the top. Secured to one of these portions, as for example the portion 2, at a convenient point between its upper and lower parts, is a plate 4.

Hinged at its butt end 5 by a bolt 6 to a plate 4 is a brace 7 having on its bottom edge a curved or cam shoulder 8. The brace 7 has its loose end 9 provided with a pin 10, and just inside of the pin a notch 11.

The plate 12 is supported at its ends 13 and 14 by bolts 15 and 16 to the support 3. This plate 12 is provided with a rod or loop 17 which is spaced away from the plate. The plate 4, brace 7, and plate 12 with the loop 17 are placed in duplicate, one set of each side of the ladder, as indicated in Fig. 1. The brace 7 is slipped by its butt end 5 through the loop 17 of plate 12 and is fastened by its bolt 5 to the plate 4. The pin 10 prevents the brace 7 from passing entirely through the loop 17 and forms a limiting stop for said brace.

When the ladder is in use in the position shown in Fig. 1, the notches 11 of the brace 7 fit around the lower part 18 of the loop or rod 17, the engagement of the notch with the bar effectually preventing any movement of the brace 7 and preventing the ladder from accidentally closing. When it is desired to close the ladder, the braces 7 are moved up into the position shown in Fig. 2. The pins 10 prevent the braces from being pulled out of the loop after the notches 11 have been removed from engagement with the loop or rods 17.

When the ladder has assumed the folded position shown in Fig. 2, the curved or cam shoulders 8 bear against the bottoms 18 of the loop or rod 17, against one side of the loop or rod 17, and the pin 10 bears against the other side of the loop or rod 17 at or near the top. The curved or cam shoulders 8 bear against one side of the loop or rod 17 which brings or forces the pin 10 against the upper portion of the loop or bar on the other side and causes friction, which retains the brace and ladder in closed position.

Having described my invention, what I claim is:

1. A step ladder consisting of a step-portion and a support-portion hinged together, the support-portion provided with a loop, the step-portion provided with a brace hinged thereto and having on its under side a cam shoulder and at its loose end a pin, and a notch on the under side, the loose end of the brace passing through the loop.

2. A step ladder composed of two portions hinged together, one part provided with a loop and the other with a brace hinged thereto and having an end projecting through the loop of the other part, such brace provided on one side of the loop with a cam shoulder adapted for engagement with the loop, and on the other side of the loop with a pin.

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

SIMON JONES.

Witnesses:

M. H. YATES,
D. V. PIERPOINT.