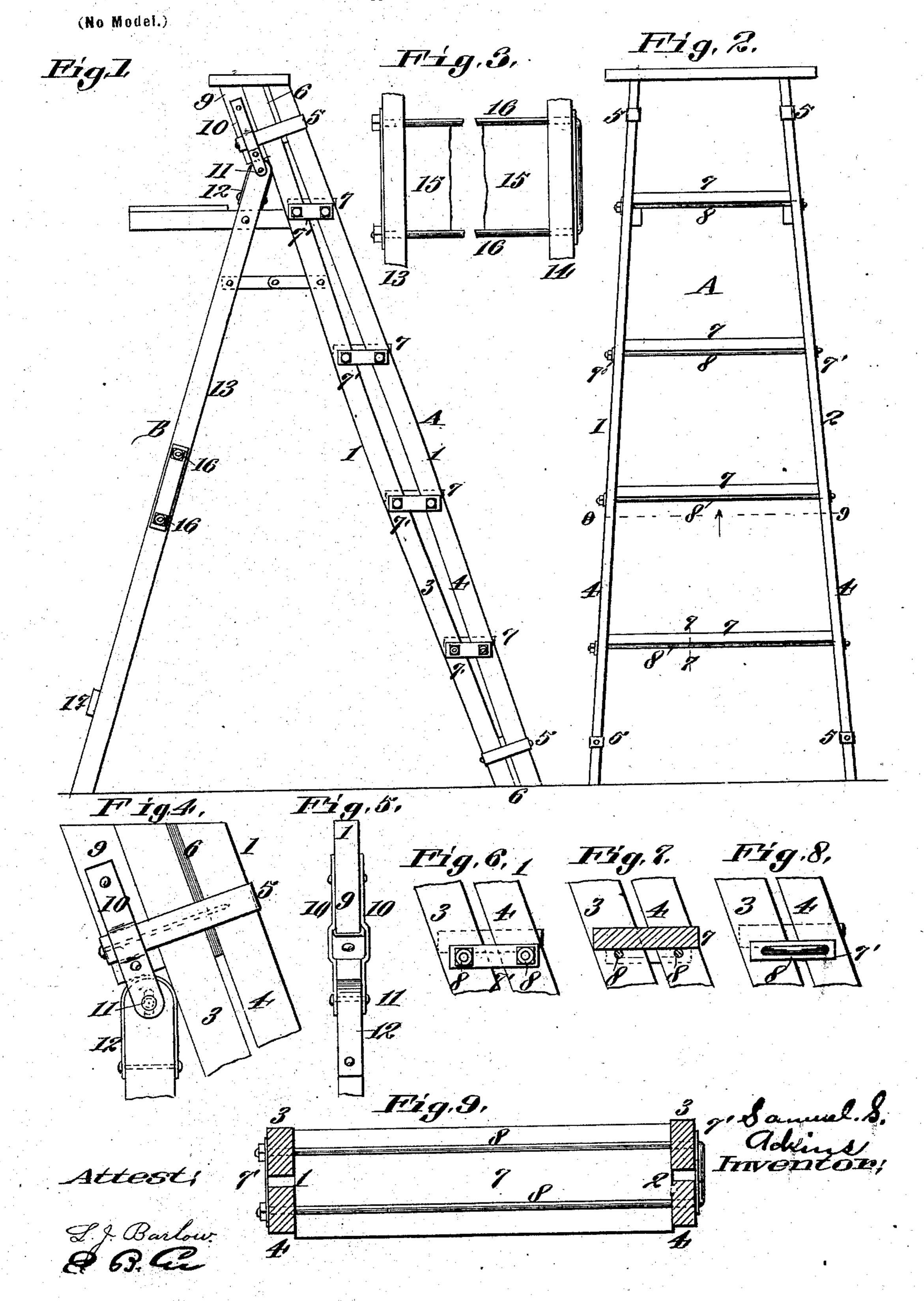
S. S. ADKINS. STEP LADDER.

Application filed Oct. 26, 1900.



United States Patent Office.

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STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 712,351, dated October 28, 1902.

Application filed October 26, 1900. Serial No. 34,526. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. ADKINS, a citizen of the United States, residing at 4803 Leduc street, St. Louis, Missouri, have invented certain new and useful Improvements in Step-Ladders, of which the following is a specification.

My invention relates to the construction of step-ladders in a cheap and substantial man-

10 ner.

In the accompanying drawings, Figure 1 is a side elevation of my ladder. Fig. 2 is a front elevation of same. Fig. 3 is a detail view of the brace, showing the means of se-15 curing the two side members of the brace together. Fig. 4 is a detail view of the upper end of the standard and brace, showing the pivoted connection between brace and standard. Fig. 5 is a detail edge view of same. 20 Fig. 6 is a detail view showing a portion of standard. Fig. 7 is a vertical section on line 77 of Fig. 2, showing the cross-rod connection between the standards. Fig. 8 is a detail elevation of the standards, showing the 25 loop end of cross-rods. Fig. 9 is a detail crosssection on line 9 9 of Fig. 2 looking in direc-

tion indicated by arrow. This ladder is of the usual type, and consists of two members pivotally connected at 30 or near their upper ends. These two members are designated by the letter A as constituting the step portion and B the brace. The step portion consists of two vertical trussed members 1 and 2, alike in construc-35 tion, each of which members consists of two strips 3 and 4, held in fixed relation to each other by the straps 5, surrounding same at or near their terminals, and the interforced wedge 6, with steps 7 arranged at suitable in-40 tervals, their ends abutting against the inner sides of said trussed members and held in position by U-shaped tie-bolts 8, which said bolts pass through the said trussed members, and the washers 7', bearing against the out-45 side of members 1 and 2 and under the said steps, said bolts being provided with nuts upon their ends adapted to be drawn tight against said washers. Said bolts may be provided with heads in lieu of said nuts or with

50 other means adapted to draw said trussed

members toward each other and hold them

there. The said steps rest upon and are supported by the bolts 8 and serve to maintain the said trussed members at a fixed distance apart. The bolts support the steps and draw the 55 trussed members toward each other. At the upper ends of the members 1 and 2 are projecting blocks 9, to which are secured the pivot-plates 10, provided at their lower ends with perforations through which pass the 60 pivot-pin 11. The upper end of the brace B is provided with a cap-plate 12, adapted to contact with the projecting block 9 and the members 1 and 2. To give rigidity and stability to the brace, I secure the members con- 65 stituting the brace at a fixed distance apart by a construction similar to that used in the step portion. The two members of the brace are secured at the proper distance apart by the distance - block 15, its ends abutting 70 against the inner sides of the brace members 13 and 14, providing a long bearing in the direction of their length. The distance-blocks are held in position by the U-shaped tie-bolts 16, passing through the said brace members, 75 said tie-bolts being provided with nuts or heads or other means adapted to draw said brace members firmly against said distanceblocks.

Having thus fully described my invention, 80 what I claim as new, and desire to secure by Letters Patent, is—

In a step-ladder, the combination of two members, one a step member, and the other a brace, said two members pivotally consected; the brace consisting of side members, distance-blocks and U-shaped bolts, with means for drawing said side members toward each other, and against said distance-blocks, and holding said distance-blocks in 90 place; the step member consisting of two side members, steps located between said members and held in place by bolts passing through said side members and under said steps, adapted to draw said side members against 95 said steps and hold said steps in place, substantially as described.

SAMUEL S. ADKINS.

Witnesses:

G. W. SIMPSON,
JOHN WINDMER.