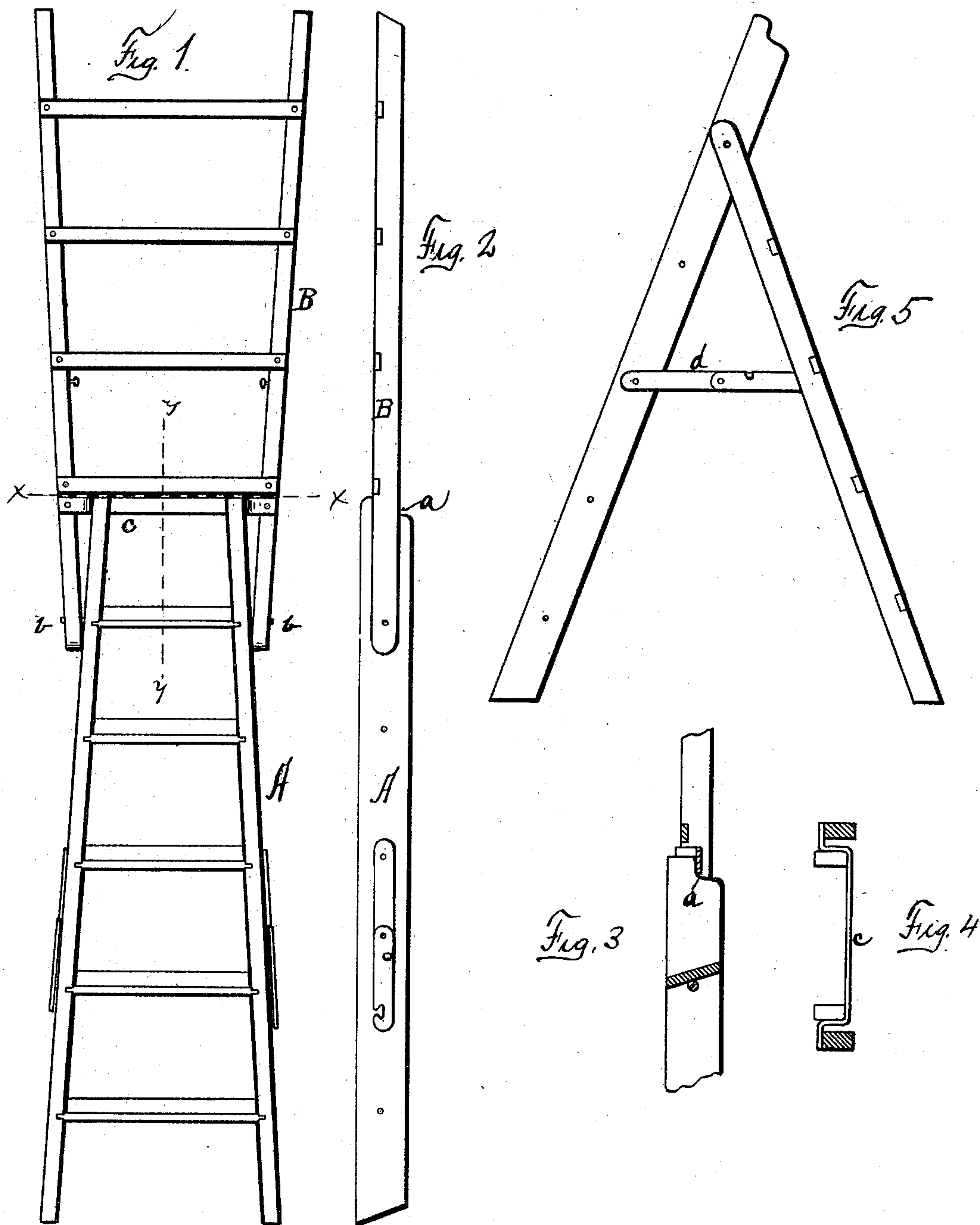


(No Model.)

W. J. OSBORNE.  
EXTENSION LADDER.

No. 509,673.

Patented Nov. 28, 1893.



WITNESSES:

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WILLIAM J. OSBORNE, OF SONORA, NEW YORK.

## EXTENSION-LADDER.

SPECIFICATION forming part of Letters Patent No. 509,673, dated November 28, 1893.

Application filed June 9, 1893. Serial No. 477,096. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. OSBORNE, of Sonora, in the county of Steuben, in the State of New York, have invented new and  
5 useful Improvements in Extension-Ladders, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to ladders which are  
10 adapted to be used interchangeably as extension ladders or step-ladders.

My object is to produce such a step-ladder, cheap and durable in construction and of great utility.

15 My invention consists in the several new and novel combinations of parts hereinafter described and which are specifically set forth in the claim hereunto annexed. It is constructed as follows, reference being had to the  
20 accompanying drawings, in which—

Figure 1, is a front view of the ladder complete, in its extended position. Fig. 2, is an edge view thereof. Fig. 3, is a vertical section on line *y y*, Fig. 1. Fig. 4, is a cross section on line *x x*, Fig. 1. Fig. 5, is an edge  
25 view of the ladder arranged as a step-ladder.

A, is the lower section of a ladder constructed in the ordinary way, contracted or narrowed toward its upper end, as shown and  
30 having its upper inner corners cut away, as shown at —*a*—.

B, is the extensible portion hinged, or otherwise loosely secured to the base section at a short distance from its end as shown at

—*b*—, and is provided at a short distance 35 from its end with a metallic strap —*c*— secured between the side bars of the section and with which the ends of the sections —A— at their cut-away portions —*a*— are adapted to engage so as to afford a support when the 40 ladder is used extended. The section —B— of the ladder is narrower as it approaches the end which is hinged to the section —A— so as to afford a more sure footing when the ladder is used as a step-ladder, as shown in Fig. 1. 45

*d*, is an extensional strap-brace adapted to secure the sections together diagonally, when the sections are used as a step-ladder, as shown in Fig. 5.

Having described my invention, what I 50 claim, and desire to secure by Letters Patent, is—

A ladder comprising sections —A— and —B— hinged together at or near their upper ends and gradually reduced in width toward 55 their meeting ends, the inner corners of one section being cut away, and a metallic strap secured upon the bars of the opposite sections and re-entering between said bars with which said cut-away portion is adapted to en- 60 gage, as set forth.

In witness whereof I have hereunto set my hand this 5th day of June, 1893.

WILLIAM J. OSBORNE.

In presence of—

THERON COLE,  
D. F. BARRETT.