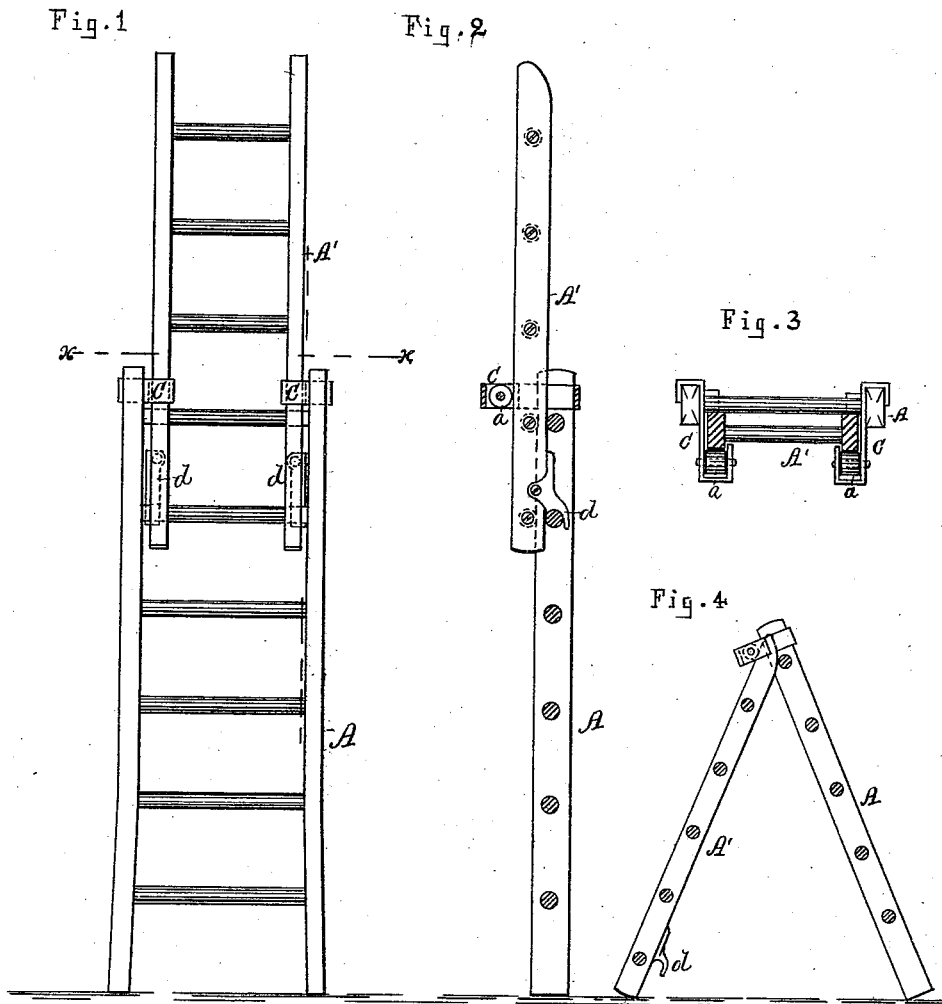


J. BERG.  
EXTENSION-LADDERS.

No. 195,563.

Patented Sept. 25, 1877.



WITNESSES:

J. C. Wilcke  
A. H. Sherburne

INVENTOR:

John Berg  
By Gidley & Sherburne  
Atty

# UNITED STATES PATENT OFFICE.

JOHN BERG, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN EXTENSION-LADDERS.

Specification forming part of Letters Patent No. **195,563**, dated September 25, 1877; application filed February 27, 1877.

*To all whom it may concern:*

Be it known that I, JOHN BERG, of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Extension - Ladders; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a front elevation of an extension-ladder embodying my said invention. Fig. 2 represents a sectional elevation of the same. Fig. 3 represents a sectional plan of the same, taken on the line *x x* in Fig. 1; and Fig. 4 represents a diminished side elevation of the same, when adjusted to form a step-ladder.

Like letters of reference indicate like parts.

The object of my invention is to provide a ladder so constructed as to admit of being readily extended or contracted, and to admit of being so adjusted as to form a step-ladder; and to that end my invention consists in the arrangement of the several parts, as hereinafter more fully described and claimed.

In the drawing, A represents the lower section of the ladder, which may be made in the usual form, and A' represents the upper section, and which is of the proper width laterally to fit loosely between the side rails of the lower section A. C C represent wrought or cast metal clasps, permanently attached to the side rails of the lower section A at or near their upper ends, and are so formed as to take around the side rails of the upper section A', as shown in Fig. 3. Each of said clasps is provided with an anti-friction wheel,

*a*, journaled therein, and so adjusted as to bear lightly against the edge of the side rails of the section A to relieve the friction of the side rails against the clasps when extending or elevating the section A'. The side rails of the section A' are each provided near the lower end with a hook, *d*, so arranged as to take around the rounds of the lower section A and to support the section A' in an elevated position, as shown in Fig. 2.

The upper end of the side rails of section A' are rounded off on the back to allow the lower end of both sections to be set apart without causing the ends of the side rails of section A' to bind between the upper round of section A and the wheels *a a* when the sections are adjusted to form a step-ladder.

To adjust said ladder so as to render it capable of use as a step-ladder, it is only necessary to contract the same longitudinally, and separate the lower ends of the sections, allowing the upper ends of the side rails of the section A' to rest between the wheels *a a* and the upper round of the section A, as shown in Fig. 4.

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

The combination, with the section A, having the clasps C C attached to the upper end of the side rails thereof, and provided with the anti-friction wheels *a a*, of the section A', having the back of the side rails rounded off at the upper end, and provided at the lower end with the hooks *d d*, substantially as and for the purpose specified.

JOHN BERG.

Witnesses:

N. C. GRIDLEY,  
N. H. SHERBURNE.