

(No Model.)

J. T. HARTWELL.

SECTIONAL LADDER.

No. 342,909.

Patented June 1, 1886.

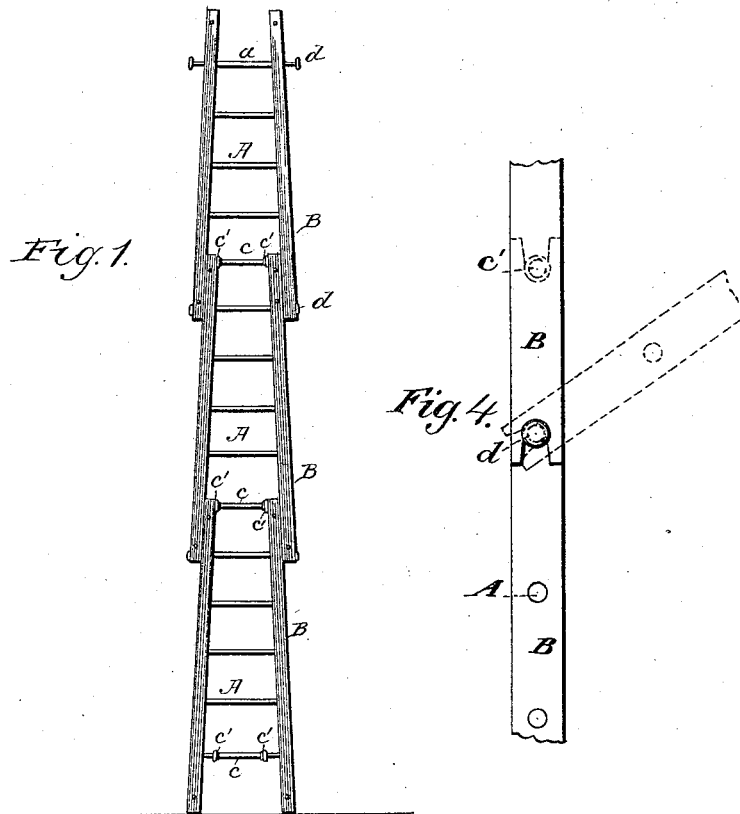


Fig. 2.

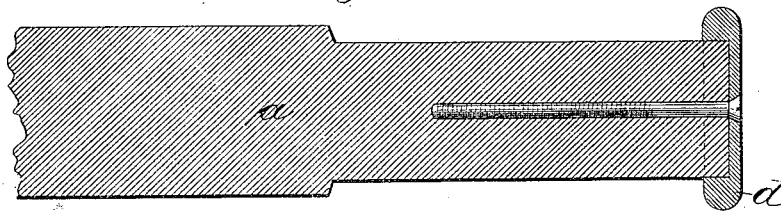
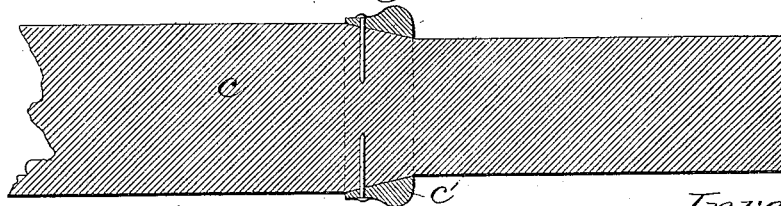


Fig. 3.



Witnesses.

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Inventor.

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# UNITED STATES PATENT OFFICE.

JOHN T. HARTWELL, OF DELPHOS, OHIO, ASSIGNOR OF ONE-HALF TO  
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## SECTIONAL LADDER.

SPECIFICATION forming part of Letters Patent No. 342,909, dated June 1, 1886.

Application filed August 30, 1884. Serial No. 141,858. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN T. HARTWELL, of Delphos, in the county of Allen and State of Ohio, have invented a new and useful Improvement in sectional Ladders, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 represents three sections, A A A, in one position for use. Fig. 2 shows in substantially full size either end of the upper rung of each section of the ladder, and also the button or stop *d* at either end thereof; and Fig. 3 shows in substantially full size one end of the lower rung, *c*, of said sections, having the button, shoulder, or stop *c'*. Fig. 4 is a side view showing the construction of the slots.

The object of my invention is to devise a sectional ladder in which the sections may be applied to each other to form an extended straight ladder of any length, or in which two or more sections may be applied to each other at angles to form a step-ladder or a support for scaffolding; and my invention consists in the novel construction and combination of parts hereinafter specified. The upper rung, as shown in the drawings, of each section projects through and beyond the side pieces, B, and terminates in a button, shoulder, or stop, *d*, which is secured to each end of said rung by a screw, or in any suitable manner, the said rung being so extended to receive the lower ends of the side pieces of the next section to be added thereto, which said side pieces of the next section are prevented from lateral displacement by the said button or stop *d*. The lower rung, as shown in the drawings, is provided on the inside and between the side piece of the ladder with a shoulder, button, or stop, *c'*, which may be fastened to said rung by pins, as shown, or in any convenient manner, the same being attached to said rung a sufficient distance from the inside of the respective side pieces so as to hold and slightly

bind the upper ends of the side pieces of the adjacent section of the ladder. The extension of the upper rung, *a*, of each section on either side of the side pieces thereof should be of a sufficient length, and the button or shoulder *d* should be attached thereto so as to bind slightly the ends of the side pieces of the next section to be applied at that point. Both ends of both side pieces should be cut out in an oval rather than in a rectangular slot, so as to permit of the adjustment of one section of the ladder to the other section at an angle thereto.

The rungs of the ladder may be either oval or rectangular, except at the points where the side pieces are applied, at which point they are preferably made round or oval and without angles.

I am aware that sectional ladders in which the side pieces of one section are applied to the rungs of the next section are old, and my present invention is limited to the means and manner herein described of attaching the side pieces of one section to the rungs of the next section, either in continuation or at an angle, and of securing them adjustably together.

I disclaim the mortising or gaining of the rung of a sectional ladder for the purpose of receiving the ends of the side pieces of the adjacent section, as I am not the first inventor thereof.

I claim—

A sectional ladder in which the side pieces of one section are applied by a slot in the end of said side pieces to the rung of the next section, and are adjustably secured there by the buttons or shoulders *c'* and *d*, substantially as and for the purposes set forth.

JNO. T. HARTWELL.

Witnesses:

J. H. RAYMOND,  
C. H. T. MASON.