I. C. CLEVENGER.

LADDER.

APPLICATION FILED APR. 9, 1910.

977,853.

Patented Dec. 6, 1910.

Fig. 1.

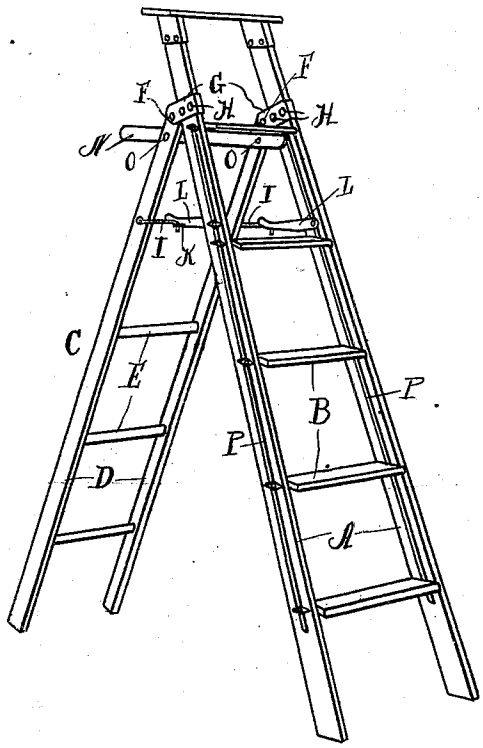


Fig. 2.

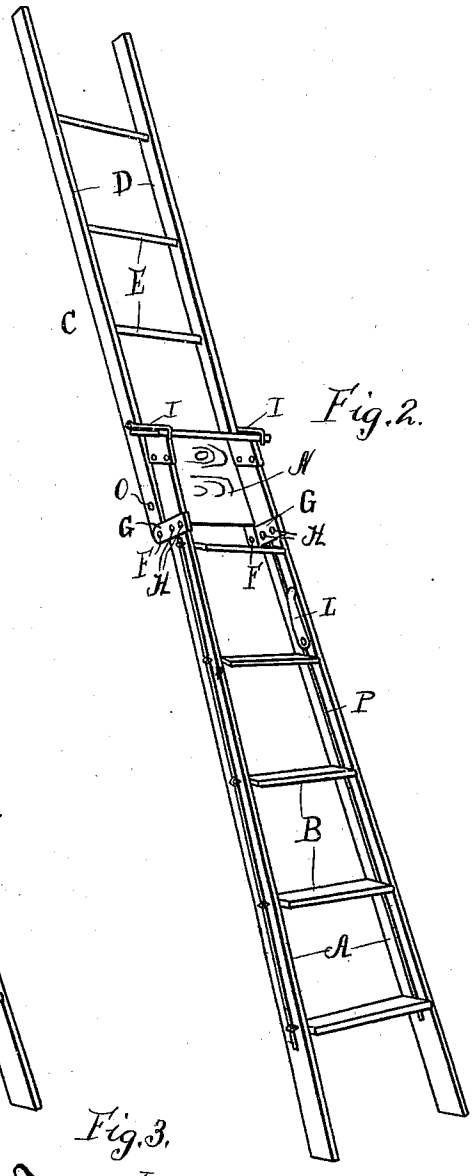
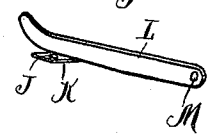


Fig. 3.



WITNESSES

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LADDER.

977,853. Specification of Letters Patent. **Patented Dec. 6, 1910.**

Application filed April 9, 1910. Serial No. 554,318.

To all whom it may concern:

Be it known that I, ISAAC C. CLEVENGER, a citizen of the United States, residing at Buchanan, in the county of Berrien and State of Michigan, have invented a certain new and useful Improvement in Ladders, of which the following is a specification.

My invention relates to a new and useful improvement in ladders, and especially that class which are termed extension ladders, and has for its object to provide an exceedingly simple and effective device of this character, which may be used as a step ladder or wall ladder.

A further object of the invention is to produce a ladder of this description, the cost of which will be no greater than the ones of ordinary construction, and one in which the parts may be readily placed together.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a perspective view of my improved ladder showing it used as a step ladder. Fig. 2, a similar view showing it used as an extension or wall ladder, and Fig. 3, a similar view of one of the catches.

In carrying out my invention as here embodied, A represents the side members, between which are mounted the steps B. This portion of the device may be constructed in the ordinary manner.

C represents the brace, which is formed of two side members D having rungs E mounted therebetween. The upper ends of the side members D are pivoted by screws or their equivalent F, between the sides of the clips G which are secured to the sides A of the ladder proper by the nails H or their equivalent.

To the side members D of the brace are pivoted the hooks I, each of which engages a hole J in the extension K formed integral with the catch L, said extension being bent at right angles to the body of the catch from the lower edge thereof. This catch is provided with a hole M, whereby the catch may be pivoted to the side members A of the ladder. To use as a step ladder the hooks I are fastened in the catches L, which securely holds the brace in position relative to the ladder. Then if an extension ladder is desired, the hooks are disengaged from the catches and the brace turned up so that the hooks I will engage the edge of the top step of the ladder as plainly shown in Fig. 2. As here shown a pivoted platform N may also be used which is pivoted at O to the side members D of the brace. This means of pivoting allows said platform to rest against the under side of the side members A, between the side members D when the ladder is extended, and when the ladder is being used as a step ladder the sides of the platform will extend beneath one of the steps of the ladder.

I do not wish to be limited to the construction here shown, but when a ladder is used having slots P in the side members, the extensions K of the catches L may register with these slots when the device is being used as an extension ladder, thus holding them in a position which will not interfere with the person using the same, and if found desirable similar slots might be formed on the inside of the side members, especially for the reception of the extensions.

Having thus fully described my invention, what I claim as new and useful, is—

1. In a ladder, a brace pivoted thereto, catches pivoted to the side members of the ladder, and means mounted upon the brace for engaging said catches or the top step of the ladder, as specified.

2. In a ladder, a brace pivoted thereto a short distance below the upper ends thereof, catches pivoted to the side members of the ladder, and hooks pivoted to the side members of the brace adapted to engage said catch or the edge of the uppermost step.

3. In a ladder, catches pivoted to said ladder, said catches composed of a body and an integral extension having a hole therein, and hooks pivoted to the brace adapted to register with the holes in the extensions, or engage the edge of the uppermost step of the ladder.

4. In a ladder, two side members, steps secured thereto, clips fastened to said side members a short distance below their upper ends, catches provided with integral extensions having openings therein, said catches being pivoted to the side members, a brace

composed of side members having rungs mounted there between, the upper ends of said side members being pivoted in the clips, and hooks pivoted to said side members adapted to register with the holes in the extensions or engage the edge of the uppermost step.

5. In a ladder, two side members, steps secured thereto, clips fastened to said side members a short distance below their upper ends, catches provided with integral extensions having openings therein, said catches being pivoted to the side members, a brace composed of side members having rungs mounted there between, the upper ends of said side members being pivoted in the clips, hooks pivoted to said side members adapted to register with the holes in the extensions or engage the edge of the uppermost step, and a platform pivoted to the side members of the brace, as shown and described.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

ISAAC C. CLEVENGER.

Witnesses:

JOHN C. DICK,

CLYDE MARBLE.