H. L. ENNES.

LADDER.

No. 191,413. Patented May 29, 1877.

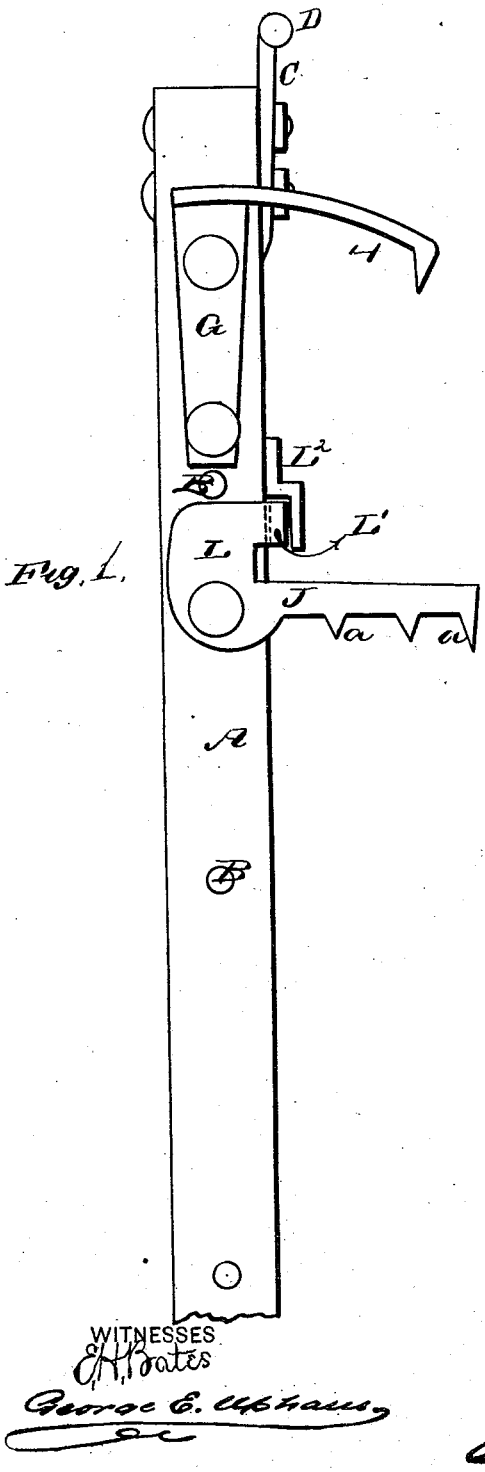

Fig. 1.

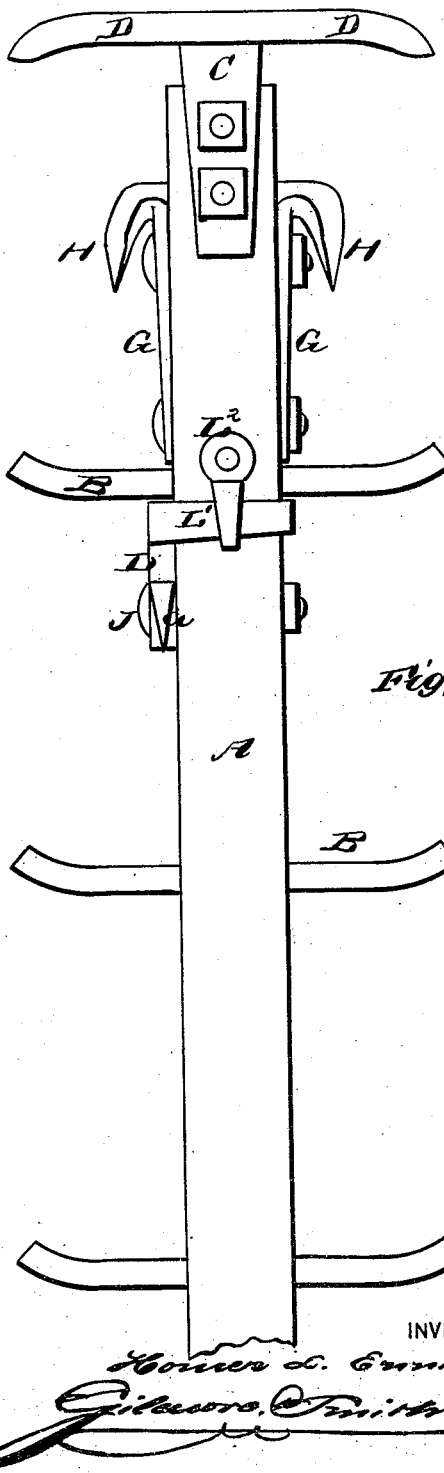

Fig. 2.

WITNESSES.
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UNITED STATES PATENT OFFICE.

HOMER L. ENNES, OF LIBERTY CENTRE, OHIO.

IMPROVEMENT IN LADDERS.

Specification forming part of Letters Patent No. **191,413**, dated May 29, 1877; application filed April 28, 1877.

To all whom it may concern:

Be it known that I, HOMER L. ENNES, of Liberty Centre, in the county of Henry and State of Ohio, have invented a new and valuable Improvement in Ladders; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my ladder, and Fig. 2 is a plan view of the same.

The nature of my invention consists in the construction and arrangement of certain devices for fastening and suspending ladders, as will be hereinafter more fully set forth.

In the annexed drawing, which fully illustrates my invention, A represents the center beam, provided with rods or bars B B passing through it at regular intervals, and projecting equally on both sides thereof, the outer ends of said rods or bars being turned or bent slightly upward. This forms the ladder, which is provided with devices for attaching and suspending the same, as follows: On the rear side of the beam A is attached a metal bar, C, extending above the top end of the beam, and provided at its upper end with arms D D, extending outward in opposite directions, and their ends slightly curved downward. This device is for supporting and suspending the ladder in a well.

To each side of the beam A, near the top, is secured a metal bar, G, from the upper end of which projects a curved hook, H, toward the rear of the ladder. These hooks are made to stand out beyond the sides of the ladder, as shown, and are intended for use in fastening the ladder on and suspending it from the gable end of a house, so that there will be a hook on each side of the roof to steady the ladder.

Below the bar G, to one side of the beam A, is pivoted an L-shaped arm, J, the long part of which extends toward the rear, and has a series of teeth, *a*, on its under side. From the short or vertical part of the arm L projects a finger, L^1, which lies across the back of the beam A, and is held by a button, L^2, pivoted to said beam.

The arm or hook L may be turned down when not in use, but when intended for use it is thrown out and held by the button L^2, and it may then hook on the side of the roof in any place.

I do not limit the use of these devices to the ladder shown—that is, to a ladder composed simply of the center beam A and crossbars B—but they may be applied to any ladder of any suitable construction.

What I claim as new, and desire to secure by Letters Patent, is—

1. The metal bar C, with side arms D D attached to the top of a ladder, substantially as and for the purpose described.

2. The pivoted L-shaped arms L, with teeth *a* and finger L^1, and the pivoted button L^2, applied to a ladder, substantially in the manner and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HOMER L. ENNES.

Witnesses:

GEO. FONCANON,

JOHN THOMPSON.