(No Model.)

J. D. HATCH.

FOLDING LADDER HOOK.

No. 599,963. Patented Mar. 1, 1898.

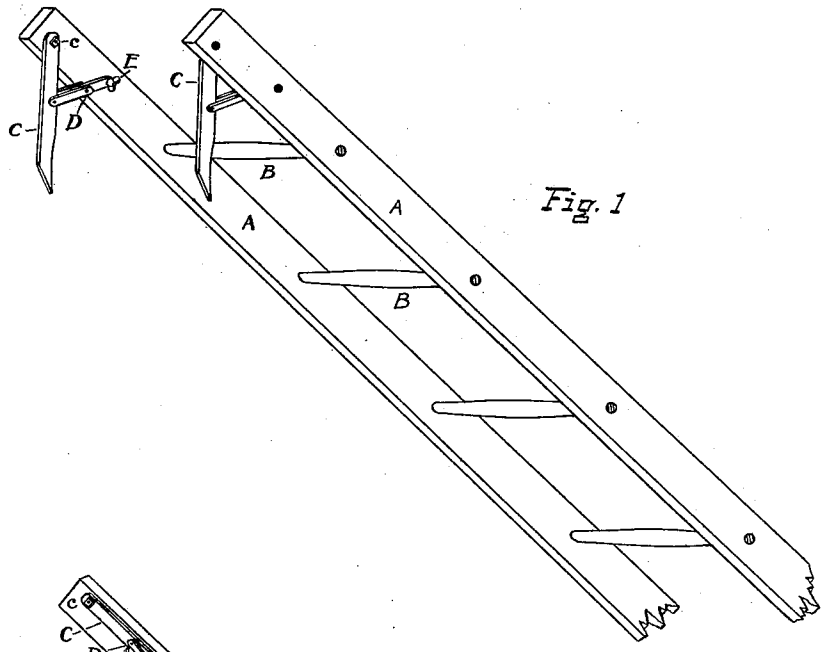


Fig. 1

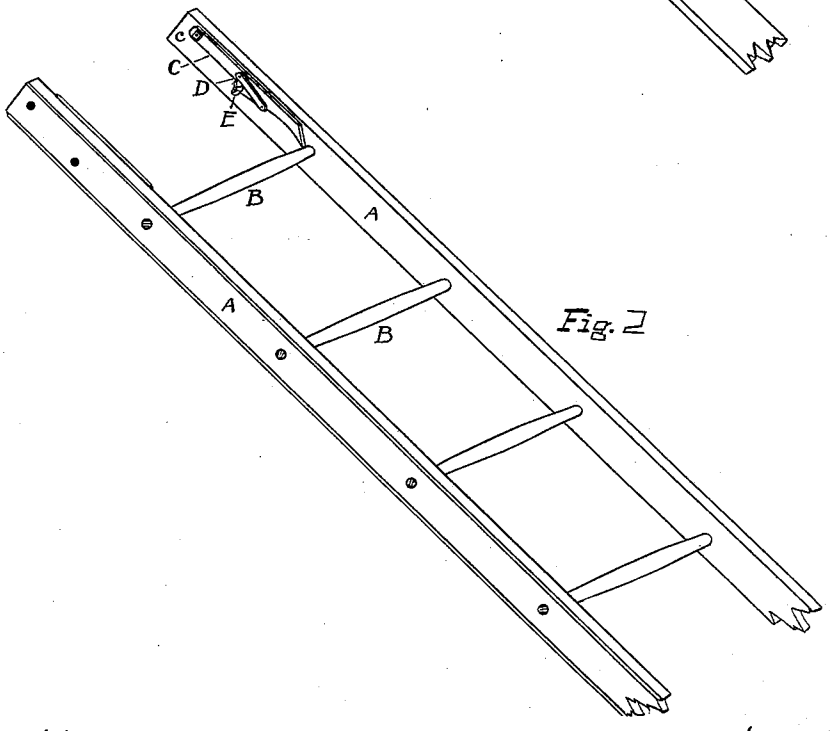


Fig. 2

Witnesses:

Inventor.

Jacob D. Hatch
by J. Russell Atty

UNITED STATES PATENT OFFICE.

JACOB D. HATCH, OF BUCKSPORT, MAINE.

FOLDING LADDER-HOOK.

SPECIFICATION forming part of Letters Patent No. 599,963, dated March 1, 1898.

Application filed June 16, 1897. Serial No. 640,966. (No model.)

To all whom it may concern:

Be it known that I, JACOB D. HATCH, a citizen of the United States, residing at Bucksport, in the county of Hancock and State of Maine, have invented certain new and useful Improvements in Folding Ladder-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists of an improved folding ladder-hook, and is fully illustrated in the accompanying drawings, in which—

Figure 1 is an isometric view of the ladder with hook extended. Fig. 2 is an isometric view of same with hook folded away.

Similar letters refer to corresponding parts in both figures.

The hooks attached to the ends of fire and other ladders are formed rigid with the side bars, making the ladder cumbersome, awkward, and clumsy for stowage.

The object of my invention is to provide a hook which, when not in use, may be folded between the side bars of the ladder, so as not to project above the edge of the side bar, and permit of as close stowage of the ladders on a ladder-truck as might be had in the case of common ladders without hooks.

The side bars A and steps B of the ladder are formed as commonly. To one or both the side bars and near the top I pivot a hook C of any desired shape and designed to turn freely on its pivot *c* and swinging down present its point below the under edge of the side bars A. At a convenient point in the length of the hook C, I attach pivotally to said hook a toggle-joint D, pivotally secured at its opposite ends to the side bar A at a point below the point of attachment of said hook. A wing-nut E or equivalent locking device may be added, by which the lower arm of the toggle-joint D may be locked in any given position when desired.

The operation of my device is as follows, viz: The wing-nut E being unscrewed and the hook C turning freely on its pivot the ladder is pushed up over the saddle-boards of a pitch roof until the point of the hook passes the apex of the roof, when the point of the hook drops over the apex, and the ladder is thus held and prevented from sliding back, and, similarly, when the ladder is elevated perpendicularly and the bottom canted out the hook turns on its pivot and can be made to catch on a rail, a gutter, a window-ledge, or any projection. When the ladder is laid flat, the hook may be folded within the side bars and be entirely out of the way, and when the hook is swung out for operation, as well as when folded away, it may be locked in either position by means of the wing-nut or may be thus locked at any other desired angle.

The principle of my invention is fully comprehended in the operation of a single hook; but in practice a hook will be fitted to each of the side bars.

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

1. In combination with a ladder and one of its side bars a hook pivoted to one of said side bars and a toggle-joint having one of its ends pivoted to said side bar below the pivotal attachment of said hook and the other end pivoted to said hook at a convenient point in the length thereof, below the point where said hook is pivoted to said side bar.

2. In combination with a ladder and one of its side bars a hook pivoted to one of said side bars and a toggle-joint having one of its ends pivoted to said side bar below the pivotal attachment of said hook and the other end pivoted to said hook at a convenient point in the length thereof, below the point where said hook is pivoted to said side bar, and a wing-nut for locking the lower arm of said toggle-joint in any desired position.

JACOB D. HATCH.

Witnesses:
JOHN R. MASON,
HENRY A. APPLETON,
GEO. I. MAUSUR.