

No. 774,009.

PATENTED NOV. 1, 1904.

C. WANDEL.
LADDER ATTACHMENT.
APPLICATION FILED NOV. 4, 1903.

NO MODEL.

Fig. 1.

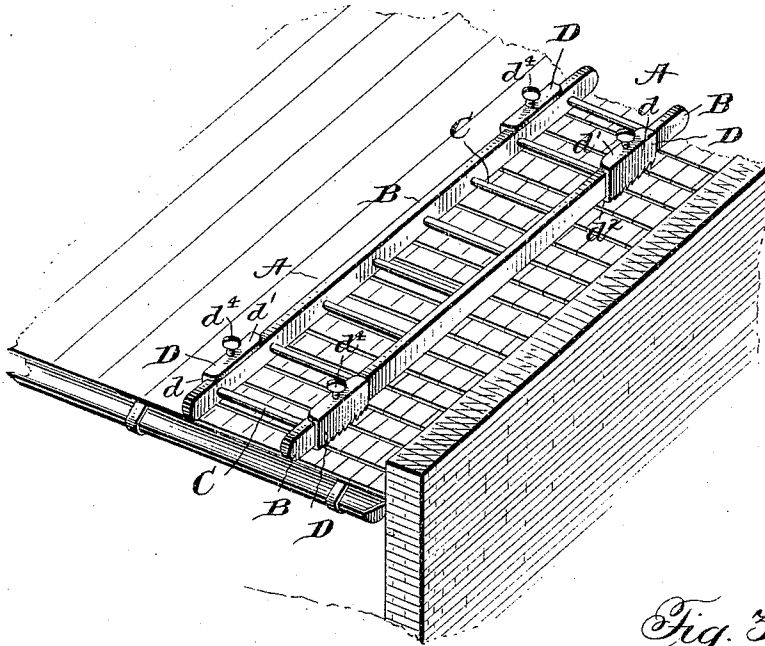


Fig. 2.

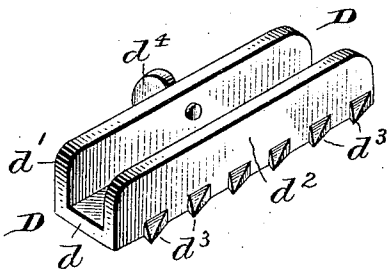
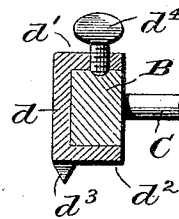


Fig. 3.



Witnesses:
James Hutchinson,
Thos. P. Stead.

Inventor:
Charles Wandel,
By T. Macmillan Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES WANDEL, OF DECATUR, ILLINOIS.

LADDER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 774,009, dated November 1, 1904.

Application filed November 4, 1903. Serial No. 179,768. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WANDEL, a citizen of the United States, residing at Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Ladder Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an attachment for ladders designed for use on sloping or flat surfaces, such as roofs, and more particularly to clips provided with spurs or teeth adapted to bite into the roof and hold the ladder against movement thereon, said clips being adapted to be detachably secured at different points along the side rails of the ladder.

In the drawings, wherein a preferable embodiment of my invention is shown, and wherein like letters of reference refer to similar parts in the several views, Figure 1 is a perspective view of a ladder provided with my attachment secured to an ordinary sloping shingle roof. Fig. 2 is a detail view of one of the clips, and Fig. 3 is a transverse section through one of the side rails and its attached clip.

Referring now more particularly to the drawings, A is a ladder having the usual side rails B and rungs C. Detachably secured to the side rails B of the ladder are a plurality of clips D, which are provided on their under side with spurs or teeth which are adapted to bite into the roof or surface on which the ladder is being used and hold the same in position thereon, as will be hereinafter more particularly set forth. While I have shown but four of such clips secured to the ladder, one at each end of the side rails of the ladder, it may be advisable to employ more in the case of an extremely long ladder. Each of said clips B is formed with a side portion d and with the top and bottom portions d' and d'' , projecting at substantially right angles to the side portion, said portion being arranged to abut against the side of the side rail of the ladder, and said top and bottom portions being arranged to overlie the top and underlie the

bottom of the side rail of the ladder when the clip is secured thereon. The bottom portion d'' of the clip is provided on its under side with a plurality of relatively short rearwardly-inclined spurs or teeth d''' . These relatively short teeth are preferably cast integral with the clip and are so arranged that when the clips are secured upon the ladder the spurs incline rearwardly, so that when the ladder has been placed upon an inclined roof and the spurs have been forced into engagement with said roof any weight on said ladder will cause the spurs to bite deeper into the roof, and consequently hold said ladder more securely thereon. Owing to the fact that the spurs are relatively short, it will be seen that they will be embedded their entire length in the roof or other surface on which the ladder is being used, thereby permitting the side rails of the ladder to rest thereon and be supported thereby, the spurs merely preventing the ladder from slipping thereon. The clips D are secured to the side rails B of the ladder by means of thumb-screws d^4 , which pass through the top portion d' of the clip and engage the top of said side rails when the clips are secured thereon.

It will of course be understood that in practice separate clips will have to be made for use on the right and left hand side rails of the ladder; but as the construction of these clips will be exactly the same, except that the position of the parts will be reversed, I have only deemed it necessary to describe one of them.

It will be seen that a ladder provided with my attachment can be used with perfect security on a sloping surface even when there is no support for the bottom of the side rails.

I do not desire to limit myself to the precise form and construction shown in the drawings, as it is obvious that many minor changes might be made thereto without departing from the spirit of the invention.

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

A clip provided with top and bottom por-

tions arranged to overlie and underlie the top and bottom of the side rail of the ladder, rearwardly-inclined spurs projecting from the under side of the bottom portion, said spurs being relatively short whereby they will be embedded their entire length in the surface on which the ladder is being used thereby permitting the side rails of the ladder to rest

thereon, and means for detachably securing the clip to the side rail. 10

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES WANDEL.

Witnesses:

DAVID HUTCHISON,
E. S. PARKS.