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HOOK ATTACHMENT FOR LADDERS

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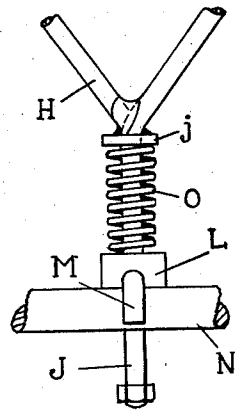


Fig. 4.

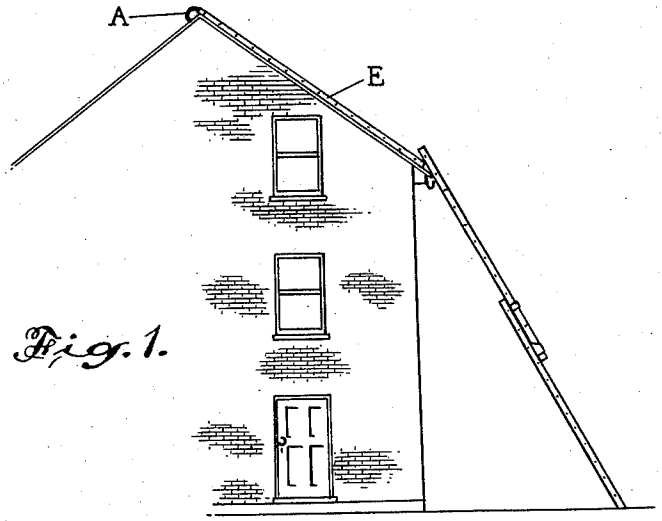


Fig. 1.

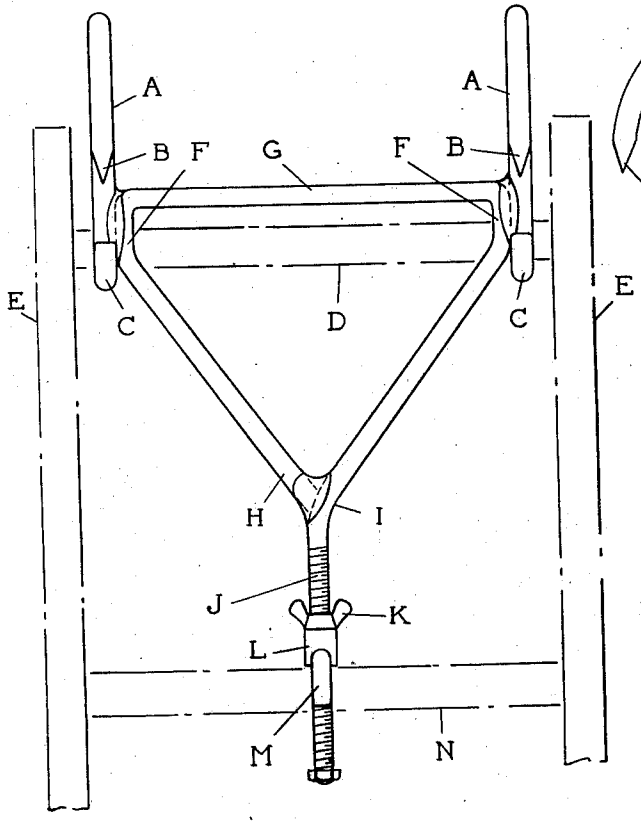


Fig. 2.

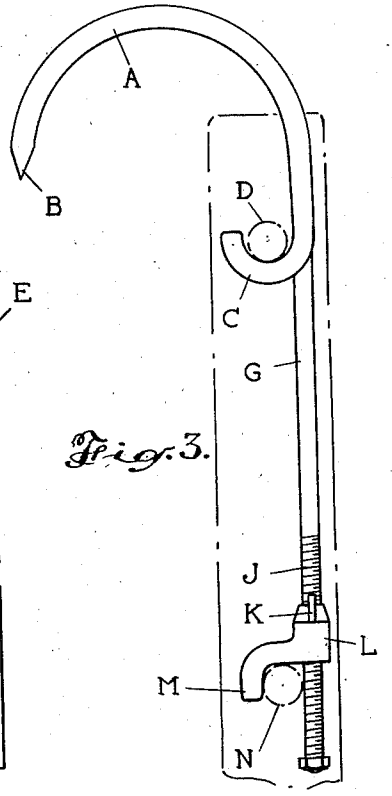


Fig. 3.

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HOOK ATTACHMENT FOR LADDERS

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3 Claims. (Cl. 228—51)

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The principal object of this invention is to provide a device for attachment to ladders which will enable them to be securely anchored at the top on a roof, parapet, window sill or other portion of a building where firemen or workmen are required to operate, and to provide a strong device which may be very easily and quickly attached to or detached from any ladder so that it will be rendered safe.

The principal feature of the invention consists in the novel construction of a rigid frame adapted to fit between the side bars of a ladder to which are integrally secured a pair of rigid bar hooks which embrace a ladder rung and extend upwardly and outwardly therefrom to overreach the ridge of a roof or other projection to securely engage the same, the central member supporting the hooks having adjustable means for securely engaging the ladder rung adjacent to the rung engaging the hook member.

In the accompanying drawings, Figure 1 is a side elevational view of a ladder provided with my improved hook attachment shown in operating position with the hooks extending over the ridge of a building.

Figure 2 is an enlarged front elevational view of my improved attachment.

Figure 3 is a side elevational view of the attachment shown in Figure 2. Figure 4 shows a modification.

Roof ladders as used by firemen in the prosecution of their duties are ordinarily provided with hook extensions rigidly secured to the side rails of the ladder, so that the ladder may be hooked over the eave or a ledge or any projection on a building to hold securely by the engagement of the point of the hook with the engaged structure.

It is desirable to provide a hook device which may be attached to practically any size or shape of ladder and I have constructed a device as illustrated in the accompanying drawings, which comprises a pair of hooked members A, preferably formed of round steel bar stock of suitable dimensions to securely support the long ladder and curved with a sufficient radius to reach well over an eave or roof ridge or a parapet, the end B of said hooks being pointed to enable them to effect a secure grip on any surface.

The other end of these hook members are curved inwardly and upwardly with a short curved hook C which is sufficiently large to embrace the rung D of a ladder.

The hooks A are spaced apart a distance sufficient to permit them being placed between the

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side rails E of a ladder and they are rigidly secured in parallel relation to each other by welding or brazing to the short spaced side portions F of a triangular loop G, also formed of round steel bar stock. The hooks C project toward the large hooks A and away from the frame G.

The frame G is made of a single length of steel rod with a cross portion extending between the straight parallel portions F and from the straight portions of the bars angle inwardly to meet each other centrally of their width, one end H thereof meeting an obtuse angled bend I in the other portion and being securely brazed or welded thereto. The central extension J of this triangular frame is threaded with a heavy standard thread upon which is threaded a wing nut K.

Slidably mounted on this threaded portion J of the frame is a sleeve L which is formed with a lateral hook extension M which is adapted to extend over the ladder rung N next below the rung D. This hooked member is clamped tightly against the rung N by means of the wing nut K and pushing upwardly against the Y frame it holds the hooks C firmly in position against the under side of the upper rung D.

It will be readily appreciated that this device may be very quickly attached to or detached from a ladder. It is merely necessary to loosen the wing nut K and adjust the sleeve on the threaded stem J of the frame so that the hook M will clear the rung N permitting the device to be simply lifted off the ladder; the device may be simply replaced on any ladder by placing the hooks C to engage the desired rung, then by sliding the sleeve L on the threaded stem of the frame until it engages the next succeeding rung of the ladder and then turning the wing nut down to engage this sleeve and tightening it in place; the device is firmly secured in position, so that it becomes a rigid part of the ladder and will withstand any kind of rough usage and cannot become accidentally misplaced or forcibly torn off.

A device such as described is of very simple but effective construction and its use will enable ladders to be usd in almost any conceivable position with remarkable safety.

It will be appreciated that a device as described may be instantly fitted on any ladder irrespective of the spacing of the rungs.

In the modified structure illustrated in Figure 4 the threading of the frame extension J may be dispensed with and said extension provided with a flange *j* at the top and a coil compression

spring O is arranged on the extension J between the flange *j* and the hook sleeve L.

In the use of this form of the device the hook M is placed over the ladder rung N and the frame is pressed down to compress the spring until the hooks C slip under the end rung D. The spring then forces the hooks C into engagement with the rung D and the device is effectively held in position.

The device can be readily removed by pushing down on the hooks A to disengage hooks C from the rung D.

What I claim as my invention is:

1. A hook attachment for ladders, comprising a pair of curved roof engaging hooks formed of bar stock extending downwardly to overlie the upper rung on the outward side and curved inwardly and upwardly to embrace the adjacent rung, a bar steel frame formed of a rigid triangular loop having a central stem extending rigidly from one corner and having the other corners bent into straight parallel relation and welded to said hooks and supporting them in parallel relation, and a rung hook adjustably mounted on the central stem of said frame.

2. A hook attachment for ladders, comprising a pair of curved roof engaging hooks having short upturned rung engaging hooks, a rigid frame formed of a single length of bar stock bent into a closed Y-shaped frame having the outer sides rigidly secured to the aforesaid hooks and having the lower central stem portion threaded, a nut threaded on said stem, and a hook formed with a sleeve slidably mounted on said threaded stem.

3. A device as claimed in claim 2 having a coiled compression spring engaging the adjustable hook to hold it downwardly in a locked position.

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