

991,774.

F. N. ELDRED.
FOOT ATTACHMENT FOR LADDER USERS.
APPLICATION FILED MAY 12, 1908.

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Fig. 1.

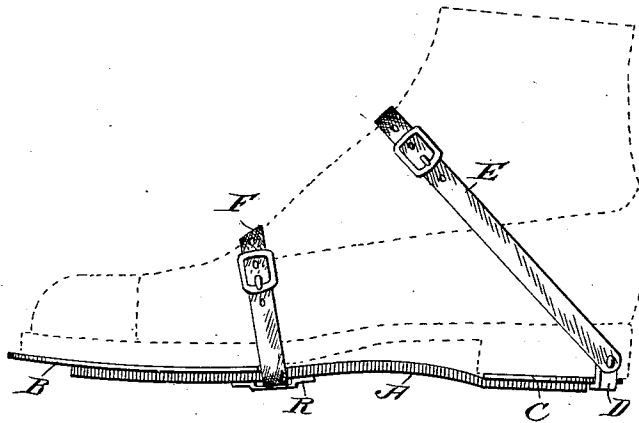
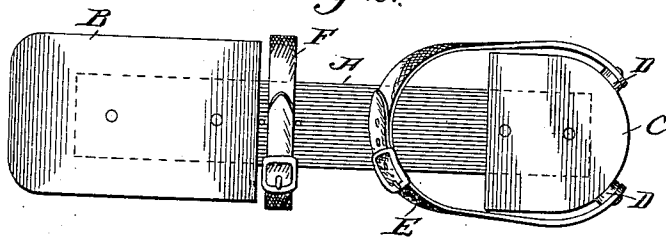


Fig. 2.



Witnesses:
Bernard M. Eldred
Caroline M. Eldred

Inventor:
Franklin H. Eldred.

UNITED STATES PATENT OFFICE.

FRANKLIN N. ELDRED, OF WEBSTER, NEW YORK.

FOOT ATTACHMENT FOR LADDER-USERS.

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Specification of Letters Patent.

Patented May 9, 1911.

Application filed May 12, 1908. Serial No. 432,887.

To all whom it may concern:

Be it known that I, FRANKLIN N. ELDRED, of Webster, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Foot Attachments for Ladder-Users; and I do hereby declare the following to be a clear, full, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference characters marked thereon.

The present invention relates to a foot attachment for ladder users, such as painters, fruit pickers and firemen, and it has for an object to provide a construction which will not interfere with the climbing of a ladder and at the same time will permit the user to rest on a rung without strain on the arch of the foot.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claim at the end of the specification.

In the drawings: Figure 1 is a side view of an embodiment of the invention with a shoe shown in dotted lines associated therewith; and Fig. 2 is a plan view of the attachment.

In the illustrated construction there is employed a sole engaging portion B, a heel engaging portion C and a connecting portion A.

The under surface of the sole engaging portion B is broad and substantially flat so that the user may climb a ladder, and the connecting portion A is preferably curved upwardly or arched on its under side throughout its length so as to engage a rung when the user is resting on the ladder in order to prevent slipping and at the same time not to require the user to maintain any one position. The upper surface of the connecting portion preferably conforms substantially to the form of the under side of a human foot with the shoe removed. This arrangement holds the arched portion of a heeled shoe in spaced relation thereto so that the strain is not on the arch of the foot and cannot be even if the heel were entirely removed as it would be if the connecting portion engaged the arch of a heeled shoe and the heel of the latter were worn down.

It is preferred to construct the main portion of the device to which the other parts

are connected from a wide bar of flat material, the center of which is preferably curved or arched and forms the connecting portion and the ends of which form parts of the sole and the heel engaging portions B and C, the other parts of said portions B and C being formed by thin plates. The under side of the forward end of this bar forms the wide substantially flat bearing surface which is used in climbing a ladder.

The device may be secured to a foot in any suitable manner, but it is preferred to employ a pair of straps E which are secured each at one end to upwardly extending portions D on the rear of the rear plate. The other ends of the straps E are adapted to be connected by a buckle or other fastening device above the instep of the foot of a user. There may also be employed a strap F which may be secured to the connecting portion A as by being passed below the latter and above a plate R that is secured to the under side of the bar near the forward end of the connecting portion. The strap F also has a buckle for securing its ends together and is adapted to be passed over the foot of a user in front of the instep. As the connecting portion is narrower than the sole and heel engaging portions and consequently narrower than the foot of a user, the strap F is permitted to snugly embrace the foot and hold it against sidewise movement on the device. The plate R acts as a stop to prevent the slipping of the bar on the rungs.

With a device constructed in accordance with this invention, a user may walk with ease on the ground and also climb a ladder. While at rest on a ladder the connecting portion A bears on a rung and places the strain on the sole and the heel of the foot instead of on the arch. The condition of the shoes of the user need not be taken into consideration in using this device as a shoe without a heel may be employed without placing any undue strain on the arch of the foot.

What I claim is:

A foot attachment for ladder climbing comprising forwardly and rearwardly arranged sole and heel plates and a stiff, flat connecting bar extending beneath and rigidly attached to both plates and having its intermediate portion arched and adapted to lie beneath the arch of the foot, a pair of attaching ears extending upwardly at the rear of the heel plate and adapted to prevent

the heel of the wearer's shoe from slipping rearwardly off the plate, and a pair of attaching straps adapted to pass over the instep of the foot at upper and lower points thereon in a forwardly inclined direction to offer a distributed resistance to a forward slipping movement of the foot on the plates, the upper strap being connected to the attaching ears and the lower strap being passed beneath the connecting bar at the forward extremity of its arched portion and the rear extremity of the sole plate.

Signed and dated at Webster N. Y. this 11th day of May 1908.

FRANKLIN N. ELDRED.

Witnesses:

W. H. WEBSTER,
P. J. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
