

Oct. 31, 1939.

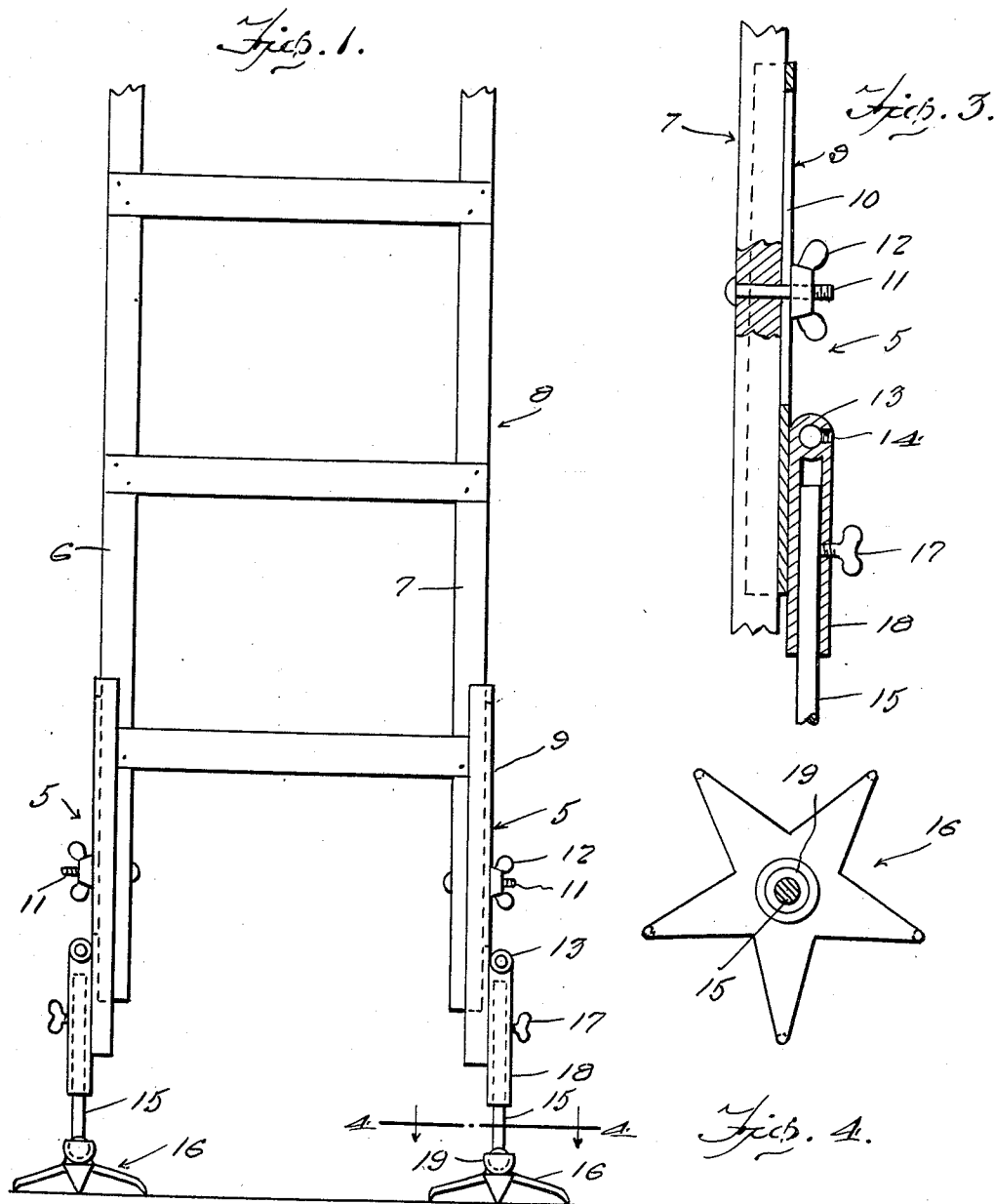
E. G. STABEN

2,177,677

LADDER LEG ATTACHMENT

Filed July 21, 1938

2 Sheets-Sheet 1



Inventor

E. G. Staben

By

Clarence A. O'Brien
and Hyman Berman
Attorneys

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2 Sheets-Sheet 2

Fig. 2.

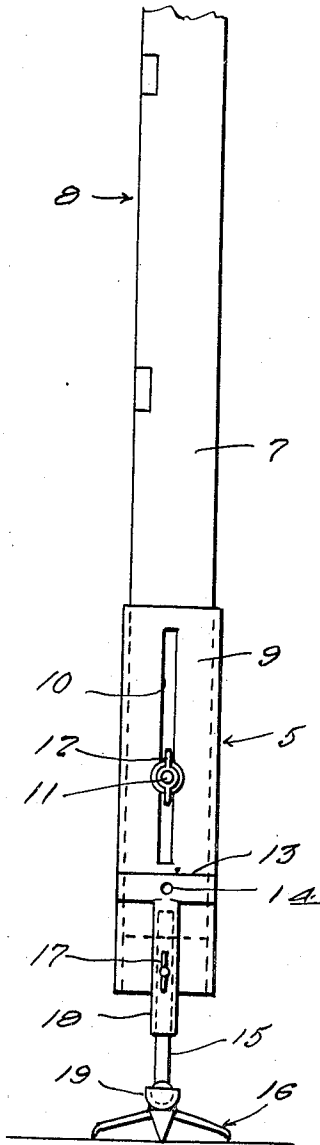


Fig. 6.

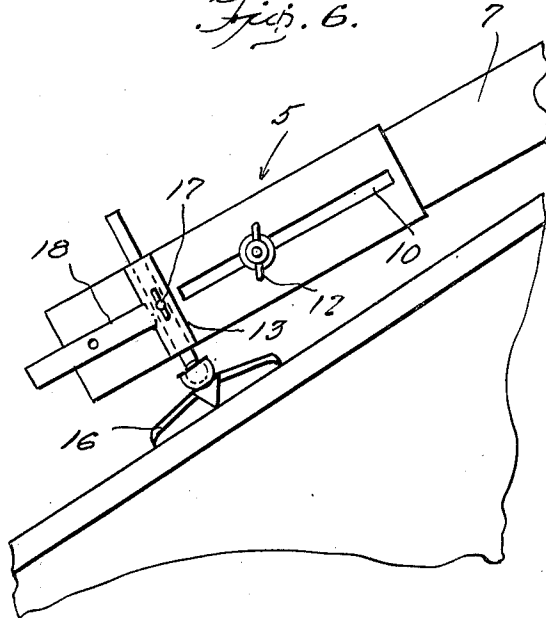


Fig. 7.

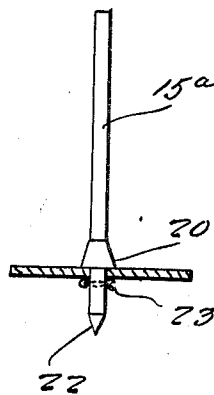
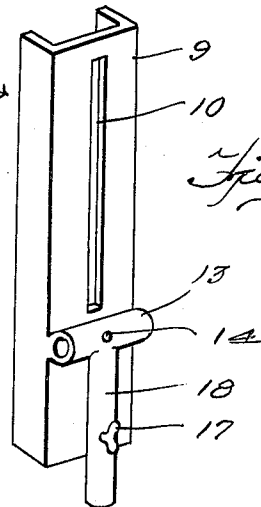


Fig. 5.



Inventor

E. G. Staben

By

Clarence A. O'Brien
and Hyman Berman
Attorneys

UNITED STATES PATENT OFFICE

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LADDER LEG ATTACHMENT

Emil G. Staben, Wheeler, Oreg.

Application July 21, 1938, Serial No. 220,545

2 Claims. (Cl. 228—61)

My invention relates generally to ladders, and particularly to an attachment for the legs or rails of the ladder whereby the same can be adjusted as to length and angularity with respect to the supporting surface and the tilt of the ladder, and an important object of my invention is to provide attachments of the type indicated which are unusually efficient and rugged and can be quickly and easily attached to and adjusted relative to the ladder legs.

Another important object of my invention is to provide attachments of the character stated which involve a foot which can be arranged to assume a position depending from the lower end of the ladder leg or to project laterally from one side of the ladder leg, so as to accommodate different positions and uses of the ladder.

Another important object of my invention is to provide in attachments of the character indicated, different detachably connectible feet specially designed for non-slipping engagement with different types of supporting surfaces.

These and other important objects and advantages of my invention will be apparent from a reading of the following description taken in connection with the drawings, wherein for purposes of illustration I have shown a preferred embodiment of my invention.

In the drawings:

Figure 1 is a front elevational view of a ladder augmented in accordance with the present invention.

Figure 2 is a right hand side elevational view of Figure 1.

Figure 3 is a vertical transverse sectional view taken through a portion of the ladder leg and a portion of the attachment.

Figure 4 is a horizontal sectional view taken through Figure 1 approximately on the line 4—4 and looking downwardly in the direction of the arrows.

Figure 5 is a perspective view of one of the attachments with its foot removed.

Figure 6 is a side elevational view showing a portion of a slanting roof of a building and showing the foot of the attachment adjusted to project laterally with respect to the ladder leg to support the lower end of the ladder on the roof, and,

Figure 7 is a sectional elevational view of a modified form of foot for use on soft ground.

Referring in detail to the drawings, the numerals 5 generally designate the similar attachments for the legs 6, 7 of the ladder 8, each attachment comprising a channel-shaped member

9 slidably receiving the laterally outward part of the ladder leg and formed with a longitudinal slot 10 accommodating the clamping bolt 11 which passes through the ladder leg and the slot and is provided with a wing nut 12 to be turned down on the bolt against the member 9 to clamp the same in adjusted position along the ladder leg.

Welded or otherwise suitably fastened to the outer side of the web of the member 9 below the slot 10 is the transverse tube 13 formed with the threaded set screw opening 14, the bore of the transverse tube 13 being of a size to accommodate the shank 15 of the foot 16 in the non-vertical position illustrated in Figure 6 of the drawings, the shank being locked in adjusted position by the set screw 17 engaging the said shank.

A vertical tube 18 forming a part of the transverse tube 13 and depending therefrom is also suitably fastened to the outer side of the web of the member 9, the bore of the tube 18 being of a size to accommodate the shank 15 of the foot 16 when the foot is used in longitudinal extension of the ladder leg. As indicated in Figures 1, 2 and 3 of the drawings, the set screw 17 in this instance threads through the side of the tube 18 to lock the shank 15 in adjusted position.

The foot or shoe 16 is preferably in the form of a five-pointed star with a radially outwardly and downwardly projecting point or talon on the end of each point to securely and non-slippingly engage the surface on which the ladder is to supportably rest while in use. Other shapes and surface gripping means may be used for the foot, but in each case the same will be provided with an element of a swivel joint 19, the companion element of the swivel joint being formed on the lower end of the shank 15, whereby the shoe may automatically accommodate itself to any unevennesses of the supporting surface.

A modified form of foot or shoe is shown in Figure 7 of the drawings as especially adapted for use in supporting the ladder on soft ground and comprises a shank 15a similar to the shank 15 but devoid of a swivel joint which is replaced by a shoulder which bears against the top of a metal disk 21. The lower part of the shank 15a traverses the disk and is pointed as indicated by the numeral 22 to facilitate entry thereof into the ground. A cotter key or the like 23 traversing the lower part of the shank opposes the shoulder 20 in holding the disk in place on the shank.

Although I have shown and described herein a preferred embodiment of my invention, it is to be definitely understood that I do not desire to limit the application of the invention thereto,

and any change or changes may be made in the structure and arrangement of the parts, within the spirit of the invention and the scope of the subjoined claims.

5 Having described the invention, what is claimed as new is:

10 1. A ladder attachment comprising a ladder leg engaging member, means for securing said member to said ladder leg, a T shaped hollow element carried by said member and providing a head portion and a stem portion arranged at right angles to said head portion, and a ladder foot including a shank received in either the head portion or stem portion for positioning the foot

at different angles with respect to the ladder leg.

2. A ladder attachment comprising a ladder leg engaging member, means for securing said member to said ladder leg, a T shaped tubular element formed integrally with said member and providing a head portion and a stem portion arranged at right angles to said head portion, a ladder foot including a shank received in either the head portion, or the stem portion, and set-screws carried by said portions for releasably securing the shank in either the stem portion or the head portion.

EMIL G. STABEN.