March 7, 1939. H. LEISER 2,149,781

SAFETY DEVICE FOR LADDERS

Filed Nov. 2, 1937

Fig. 1.

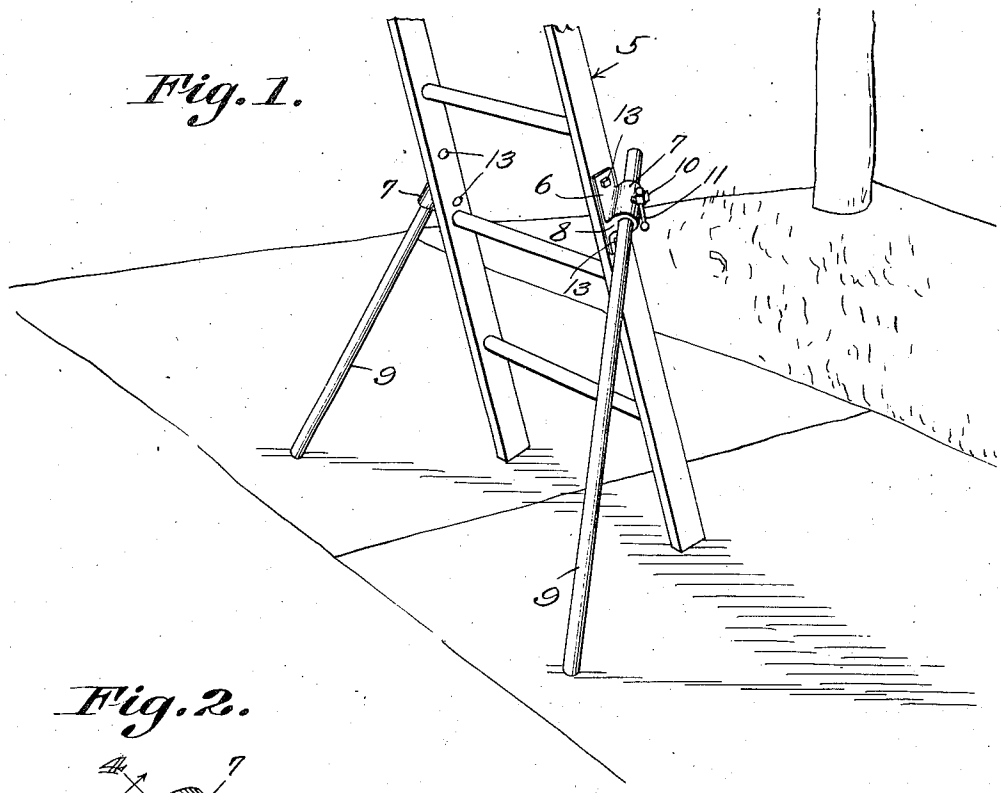


Fig. 2.

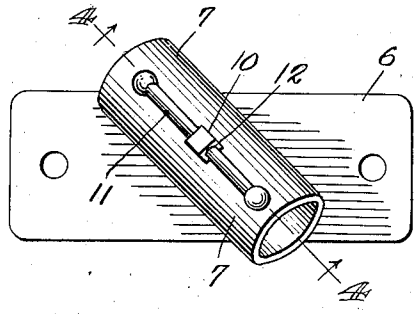


Fig. 3.

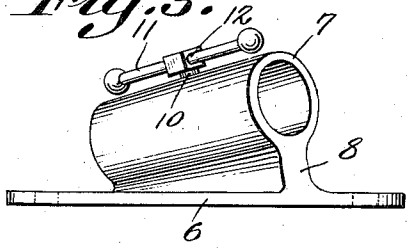
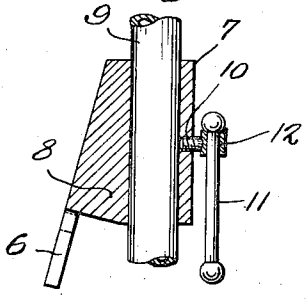


Fig. 4.



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Patented Mar. 7, 1939 2,149,781

UNITED STATES PATENT OFFICE

2,149,781

SAFETY DEVICE FOR LADDERS

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Application November 2, 1937, Serial No. 172,421

1 Claim. (Cl. 228—60)

This invention relates to an attachment designed for use with ladders, the primary object of the invention being to provide means to brace the ladder with which the device is used, against lateral movement due to high wind pressure, or under the weight of the person standing on the ladder.

Another important object of the invention is the provision of means to prevent the lower end of the ladder from slipping away from the building or structure against which the ladder is leaning, due to excessive weight on the ladder, vibration of the ladder, or should the lower end of the ladder be placed too far away from the structure against which the ladder is placed.

Still another object of the invention is to brace the ladder when the ladder is placed against a weak structure.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein described, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a fragmental perspective view illustrating a ladder equipped with an attachment, constructed in accordance with the invention.

Figure 2 is a plan view of one of the securing members employed in securing the device to the ladder.

Figure 3 is a side elevational view thereof.

Figure 4 is a sectional view taken on line 4—4 of Figure 2, one of the supporting legs of the attachment, being shown as positioned in the bracket or securing device.

Referring to the drawing in detail, the ladder on which the attachment is shown as mounted, is indicated generally by the reference character 5, the ladder being shown as having its lower end as positioned in spaced relation with a structure, against which the ladder is positioned.

The attachment comprises a pair of supporting members, and since these supporting members are identical in construction, only one of the supporting members will be herein described in detail.

Each supporting member includes a base plate indicated by the reference character 6, and a tubular portion 7 formed integral therewith, the tubular portion 7 being disposed at oblique angles with respect to the side edges of the plate 6, as clearly shown by the drawing. Due to this construction, the plate 6 of the securing device may be secured to the outer face of the side rail of a ladder structure, and the tubular portion 7 thereof will be disposed in such position that it will support the adjustable leg member, associated therewith, at an oblique angle with respect to the side rail of the ladder.

Although the tubular section 7 is formed integral with the plate 6, a web indicated by the reference character 8 is formed between the tubular section 7 and plate 6. As shown by Figure 3 of the drawing, the web 8 is substantially wide near one end of the tubular member 7, and tapers towards the opposite end of the tubular member with the result that the opposite end of the tubular member is disposed in close relation with the plate 6. Due to this construction, the tubular portion 7 is supported in an inclined position, with the result that the leg members, which in the present showing are indicated by the reference character 9, and which are held within the supporting members, are disposed at oblique angles with respect to the front and rear edges of the side rails of the ladder, the lower ends of the leg members 9 being spread apart, to brace the ladder against lateral movement, caused by wind pressure, excessive weight on the ladder, and vibrations of the ladder.

A screw indicated by the reference character 10, extends through a threaded opening in the tubular section 7, and is adapted to engage the leg member 9 associated therewith.

An operating handle indicated by the reference character 11 extends through an opening 12 formed in the screw, and affords means whereby the screw may be rotated to engage or disengage the leg member, as the case may be.

From the foregoing it will be seen that due to the construction shown and described, the leg members 9 of the attachment may be moved to various angles with respect to the ladder, bracing the ladder against lateral movement or movement away from the building against which it is positioned.

It might be further stated that due to this construction, the ladder equipped with an attachment as described, may be supported on an uneven surface, by adjusting the leg members 9 with respect to each other, to compensate for the irregular surface.

Bolts indicated by the reference character 13 extend through openings in the plate 6, and pass through openings in the side rails of the ladder

5, whereby the attachment is firmly secured in position on the ladder.

I claim:

A ladder support comprising a rectangular base plate having screw openings for the reception of screws to secure the base plate to a ladder, a tubular member on the base plate and disposed at an oblique angle with respect to the side edges of the base plate, a web formed integral with the base plate and connecting the tubular member with the base plate, said web being wide at one end and narrow at the other end whereby the tubular member is inclined with respect to the side rail of the ladder, a bracing leg member slidable through the tubular member, a screw movable through the tubular member and adapted to engage the bracing leg adjustably securing the bracing leg within the tubular member.

HENRY LEISER.