

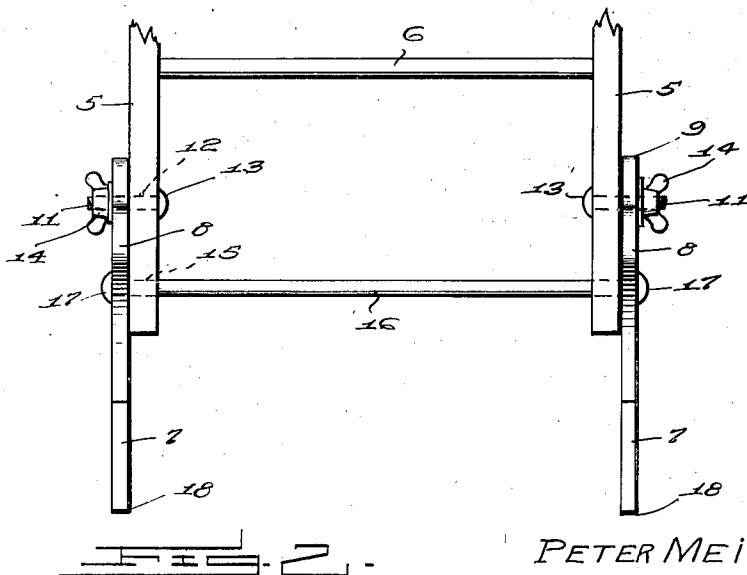
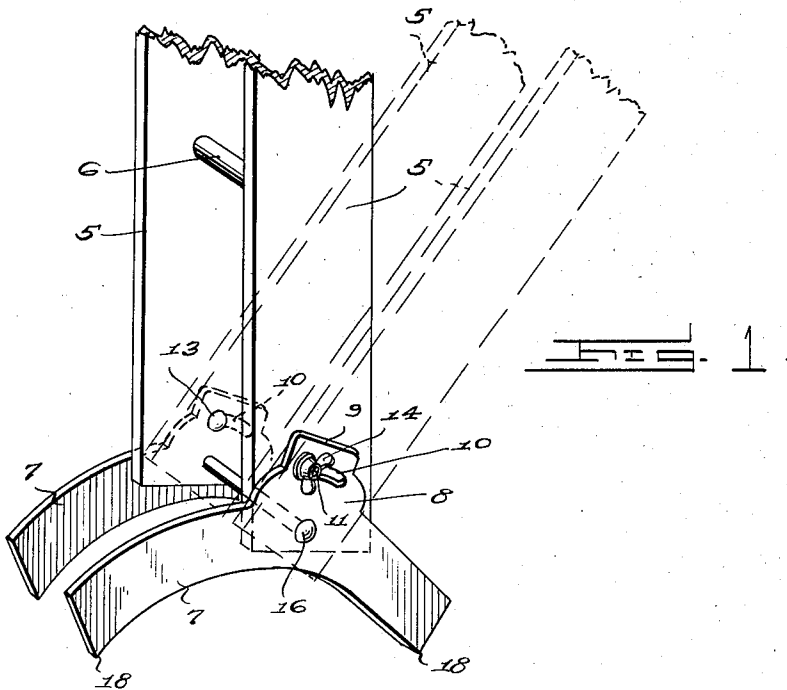
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P. MEIER

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SAFETY MEANS FOR LADDERS

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Inventor
PETER MEIER,

By *Clarence A. O'Brien*
and *Hyman Berman*
Attorneys

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SAFETY MEANS FOR LADDERS

Peter Meier, Woodward, Iowa

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1 Claim. (Cl. 228—64)

The present invention appertains to new and useful improvements in ladders and more particularly to anti-slipping means therefor.

The principal object of the present invention is to provide safety means for ladders constructed and arranged in such a manner as to prevent slippage of a ladder when it is set up for use.

Another important object of the invention is to provide safety means for ladders which can be adjusted to the desired extent to accommodate a ladder regardless of the angle at which the same is to be used.

These and other objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawing:

Figure 1 represents a fragmentary perspective view showing the safety means associated with the lower portion of a ladder.

Figure 2 is a fragmentary front elevational view of the lower portion of a ladder with the safety means attached.

Referring to the drawing wherein like numerals designate like parts it can be seen that numerals 5—5 denote the parallel runners of the ladder which are connected by the rungs 6. Arcuate shaped shoes 7—7 are employed in carrying out the present invention, one being located at the lower end of each of the runners 5. These shoes 7 each consists of an arcuate plate having an upstanding intermediate portion 8 extending into a reduced portion 9. In this raised portion 8 is the arcuate slot 10 through which a bolt 11 extends. This bolt 11 extends through an opening 12 in the lower portion of the corresponding runner 5, the head portion 13 of the bolt being at the inside of the runner, while the winged nut 14 is feedable inwardly on the outer end of the bolt and against the foot portion 8 to clamp the portion 8 against the lower portion of the runner with the runner in the desired angular relation with respect to the corresponding foot plate 7.

These runners 5—5 have openings 15 in their lower end portions through which the rod 16 extends, this rod also extending through the intermediate portions of the foot plate 7 and having a head 17 at each end thereof beyond the said shoe plate 7. Thus the ladder is rockably supported on the rod 16 and the bolts 11 and nuts 14 serve to hold the shoes in the desired position with respect to the runners of the ladder, and taking into consideration the inclination of the ladder, so that the corner portions 18 of the shoe plates 7 can bite into the ground to prevent any possibility of the ladder slipping.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

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

In a ladder structure including substantially parallel runners; a pair of arcuate-shaped anti-slipping shoes for the lower ends of the runners, the end portions of the shoes being cut off to define corners adapted to bite into the ground when the ladder is being used, each of these said shoes being provided with an enlarged intermediate portion, a rod disposed through the central portions of the enlarged portions of the shoes and the lower end portions of the runners for pivotally securing the shoes to the runners, each of the said enlarged portions of the shoes being provided with a short extension, each of the extensions having an arcuate slot therein, and bolt and nut means disposed through the slot of each extension and through the corresponding ladder runner.

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