Dec. 1, 1925. 1,563,700

W. B. FRANKENSTEIN

ADJUSTABLE LADDER SHOE

Filed Sept. 10, 1924

Fig. 1.

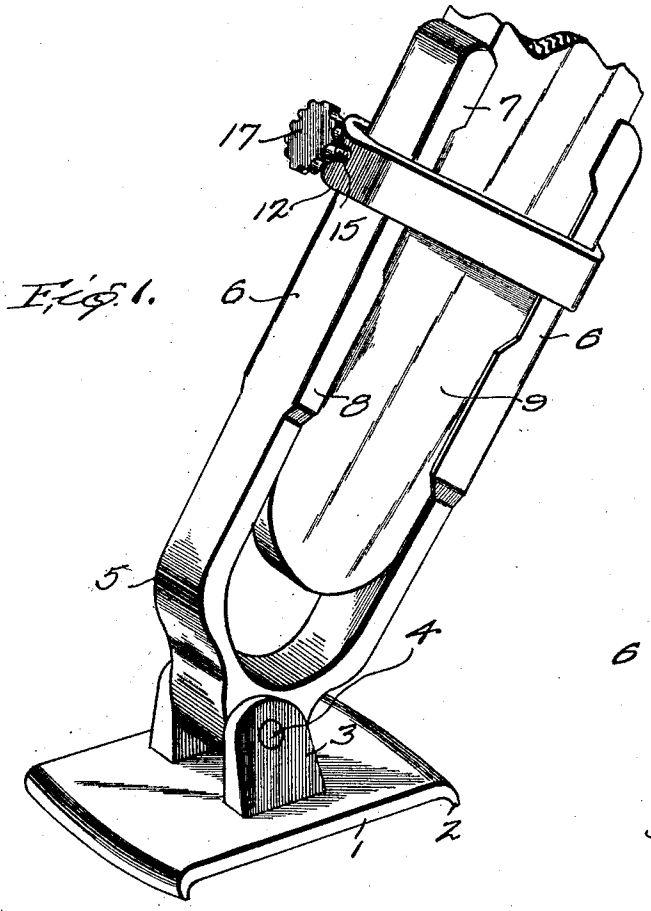


Fig. 3.

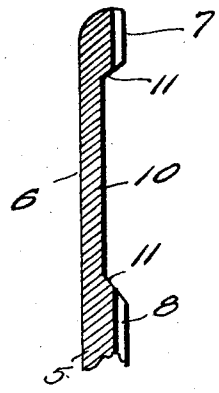
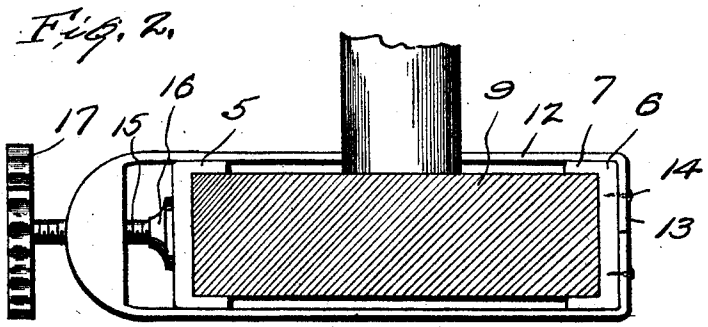


Fig. 2.



Inventor

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Witness

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UNITED STATES PATENT OFFICE.

WILLIAM B. FRANKENSTEIN, OF ROCHESTER, NEW YORK.

ADJUSTABLE LADDER SHOE.

Application filed September 10, 1924. Serial No. 736,983.

To all whom it may concern:

Be it known that I, WILLIAM B. FRANKENSTEIN, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Adjustable Ladder Shoes, of which the following is a specification.

The present invention relates to a ladder shoe and has for its prime object to provide an attachment for the bottom ends of ladder uprights or rails in order that they may be supported on the ground without danger of sinking herein or slipping.

Another important object of the invention is to provide attachments of this nature which are adjustable so that slight changes in the length of the ladder may be made.

A still further very important object of the invention is to provide a very simple and efficient device of this nature, one which may be manufactured at a comparatively low cost, yet be durable, strong, reliable, easy to manipulate, and well adapted to the purpose for which it is designed.

With the above and numerous other objects in view the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing:

Figure 1 is a perspective view of the attachment showing it in association with the lower end of a ladder upright or rail,

Figure 2 is a sectional view of the upright or rail showing the attachment in end elevation, and

Figure 3 is a detail longitudinal section through one side of the clamping member.

Referring to the drawing in detail it will be seen that 1 designates the base of the device which is of a substantially rectangular formation and provided at its ends with downwardly extending flanges 2 which are adapted to engage the ground or the like so as to prevent slipping of the base. A pair of spaced ears 3 rise from the base and are apertured to receive a pin 4 on which is pivoted a clamp member 5. This clamp member 5 is substantially U-shaped in formation the intermediate portion thereof being pivotally mounted on the pin and the legs or sides thereof forming jaws indicated by the numerals 6. Two pairs of side flanges 7 and 8 are provided on the edges of the jaws so that they are substantially U-shaped in cross section through these portions in order that the lower end of a ladder upright or rail 9 may be received as is indicated in Figures 1 and 2 between the jaws. The inner faces of the jaws 6 are cut out as at 10 so as to provide spaced shoulders 11. A U-shaped strap 12 has its ends bent inwardly toward one another forming the lips 13 which are riveted or otherwise fastened to one jaw 6 as at 14 while the intermediate portion of the strap is spaced from the other jaw. This strap extends transversely of the clamp member 5 at the portion of the jaws wherein the inner faces are cut out as at 10. A screw 15 is threaded through the intermediate portion and the inner ends thereof has swiveled thereon a bearing plate 16 which is adapted to engage the adjacent jaw 6. A knurled operating handle 17 is provided on the screw. When the screw is tightened up so that the jaws are forced into tight frictional engagement with the upright or rail 9 the shoulder 7 will be forced into tight binding engagement with the upright. It is preferable to construct the clamp member 5 of metal or some other suitable resilient material in order that it may be clamped very tightly in engagement with the upright. The device is capable of being adjusted along the upright so as to slightly change the length thereof.

In use the base is placed on the ground or other suitable support and the flanges 2 prevent the slipping thereof. The latter may be disposed at any practical desirable angle because of the pivotal mounting of the clamp 5 on the base. It is thought that the construction and operation of the invention as well as its advantages should now be clearly understood without any more detail description thereof. It is desired, however, to point out that changes in the details of construction, material, and in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described my invention, what I claim as new is:

1. An attachment of the class described for a ladder including a base, a U-shaped clamp pivoted intermediate its ends to the base and provided with jaws the inner faces of which are cut out to provide spaced

shoulders and means for throwing the jaws toward each other so as to swing them into firm frictional engagement with the upright of a ladder.

2. An attachment of the class described for a ladder including a base having depending flanges at its ends and uprising spaced ears, a pin supported between the ears, a U-shaped clamp member the sides of which form jaws, the intermediate portion of the clamp member being pivoted on the pin, the jaws being cut out on their inner faces to provide spaced shoulders and provided with inwardly extending flanges adjacent each shoulder, a U-shaped strap straddling the jaws and extending transversely of the clamp member between the shoulders and having its ends bent inwardly to form lips, means for fixing the lips to one jaw, a screw threaded through the intermediate portion of the strap to bear against the other jaw.

3. A ladder shoe comprising a base, a U-shaped member pivoted to the base and capable of pivotal movement about a horizontal axis, the legs of the U-shaped member being adapted to receive a ladder leg therebetween and having their opposed faces cut away to provide pairs of opposed shoulders which grip the ladder leg, and a yoke encircling the legs, and a screw carried by the yoke adapted to bear against one of the legs whereby to draw both legs into binding engagement with the ladder leg.

In testimony whereof I affix my signature.

WILLIAM B. FRANKENSTEIN.