

May 30, 1944.

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2,350,116

LEG EXTENSION APPLIANCE FOR LADDERS

Filed July 8, 1943

2 Sheets-Sheet 1

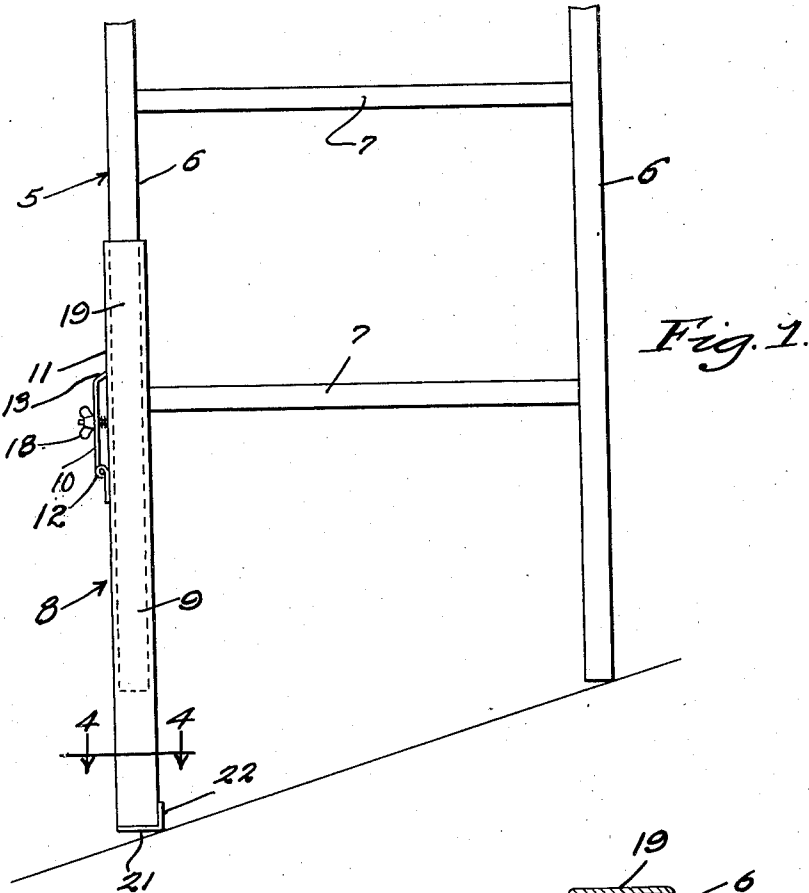


Fig. 1.

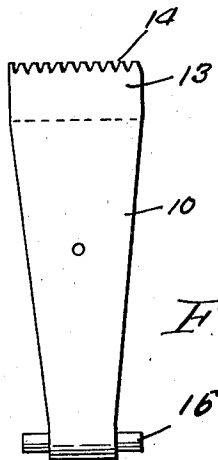


Fig. 6

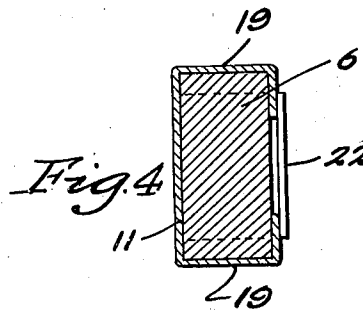


Fig. 4

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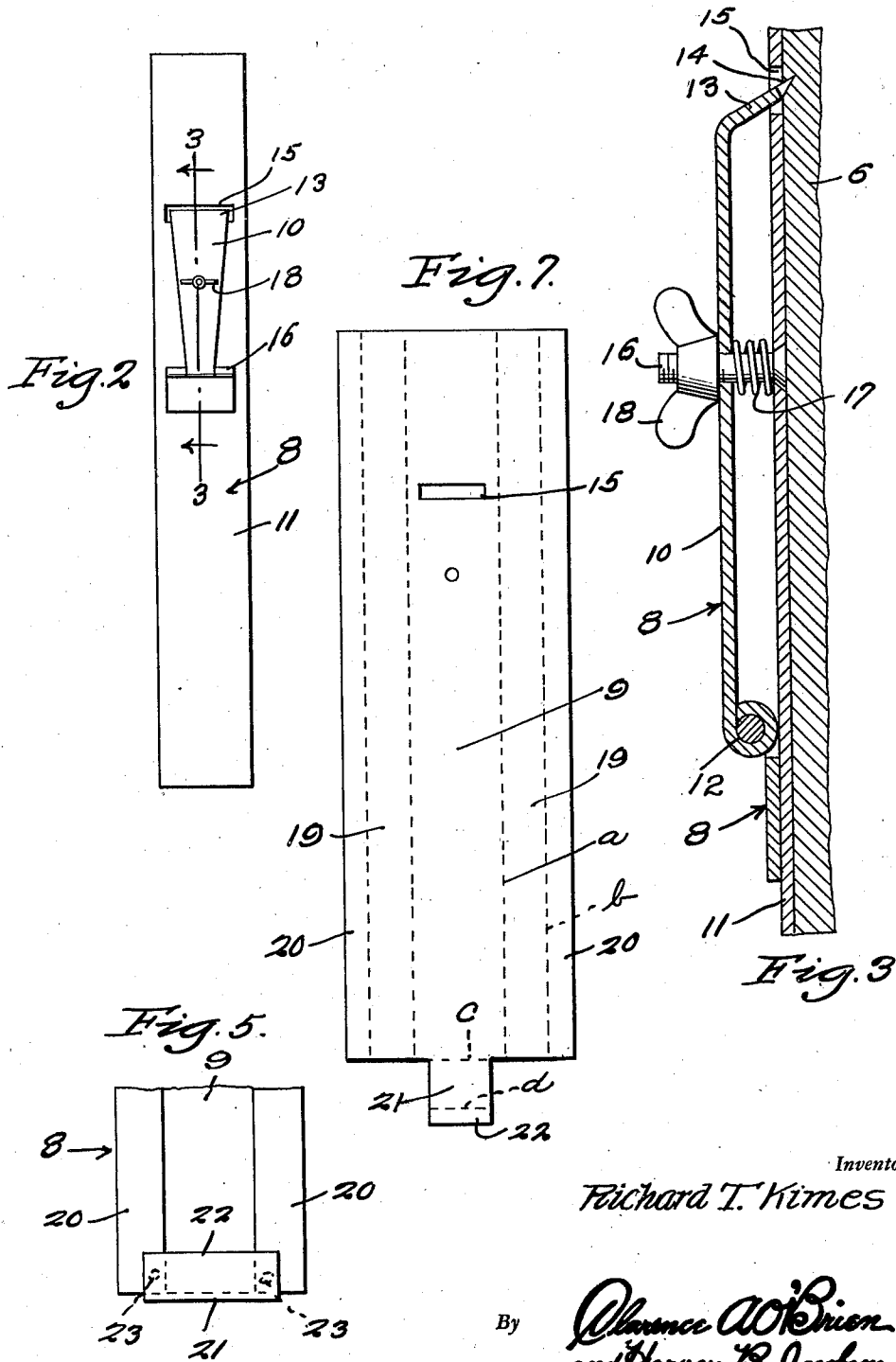
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LEG EXTENSION APPLIANCE FOR LADDERS

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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LEG EXTENSION APPLIANCE FOR LADDERS

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Application July 8, 1943, Serial No. 493,913

1 Claim. (Cl. 228—63)

This invention relates to new and useful improvements in leg extension appliances for ladders and more particularly to a device which can be applied to the lower end of either runner of a ladder to make that end portion longer than the other to compensate for setting up the ladder on an uneven or inclined surface.

An important object of the invention is to provide a leg extension appliance of the character stated which can be readily applied and removed with respect to the end of a ladder runner with but a minimum expenditure of human effort.

Another important object of the invention is to provide an appliance of the character stated which is positive acting and not susceptible to developments of ready defects.

Other objects and advantages of the invention will become apparent to the reader of the following description.

In the drawings—

Figure 1 represents a fragmentary front elevational view showing the lower portion of a ladder with the appliance thereon.

Figure 2 is a side elevational view of the appliance.

Figure 3 is an enlarged vertical sectional view through the appliance and a portion of one runner of a ladder.

Figure 4 is a section on the line 4—4 of Figure 1.

Figure 5 is a fragmentary inside elevational view of the lower portion of the appliance.

Figure 6 is a side elevational view of the claw.

Figure 7 is a plan view of the stamped sheet from which the appliance is constructed.

Referring to the drawings wherein like numerals designate like parts, it can be seen that numeral 5 generally refers to a conventional ladder made up of substantially parallel runners 6, 6 connected by rungs 7.

Numeral 8 generally refers to the extension appliance, which can be applied to the lower end of either of the runners 6, 6.

The extension appliance 8 consists of an elongated hollow member 9 which is adapted to be slipped over the lower portion of the desired runner and this hollow structure has an elongated claw 10 hingedly secured to the outer wall 11, as at 12. This claw is provided with an inclined or oblique end portion 13 serrated as at 14 to provide teeth. This toothed portion is adapted for disposition through a slot 15 transversely disposed

in the outer wall 11, to bite into the surface of the corresponding runner 6.

The said outer wall 11 has a threaded stud bolt 16 protruding therefrom and through an opening in the intermediate portion of the claw 10. A coiled compression spring 17 is located on the stud bolt 16 and interposed between the outer wall 11 and the claw 10 for normally urging the claw 10 outwardly.

A wing nut 18 is provided on the stud bolt 16 and when screwed inwardly, serves to cause the toothed end of the claw 10 to bite into the runner 6 to hold the appliance 8 in the correct adjusted position. Obviously, when the wing nut 18 is unscrewed, the spring 17 will serve to automatically urge the claw 10 outwardly from a position engaged with the runner 6.

As can be seen in Figure 7, the hollow structure 9 is formed from a single sheet of sheet metal or the like and folded at each side portion on lines *a, b* to define side walls 19, 19 and inwardly disposed back flanges 20, 20, while a tongue 21 is provided at the lower portion of the sheet and this is bent on lines *c, d* so as to define a bottom and a back flange 22, the latter preferably being welded or otherwise secured as at 23 to the flanges 20.

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:

A leg extension for a wooden ladder, comprising a channel-shaped member adapted to slidably fit on the lower end of a runner of the ladder and having an outer wall provided with a slot, an elongated claw hinged at its lower end to said outer wall on the outside of said member and having an upwardly and inwardly projecting upper end arranged to project inwardly through said slot and formed with teeth adapted to bite into the runner when the claw is forced to swing inwardly toward said member, a bolt fixed at one end to said outer wall and slidably projecting through said claw, a nut threaded on the projecting end of said bolt and operable to force the claw to swing inwardly, and a spring encircling the bolt between the outer wall and said claw to swing the claw outwardly.

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