

July 24, 1923.

H. HUNT

1,462,505

LADDER ATTACHMENT

Filed July 15, 1922

2 Sheets-Sheet 1

Fig. 1.

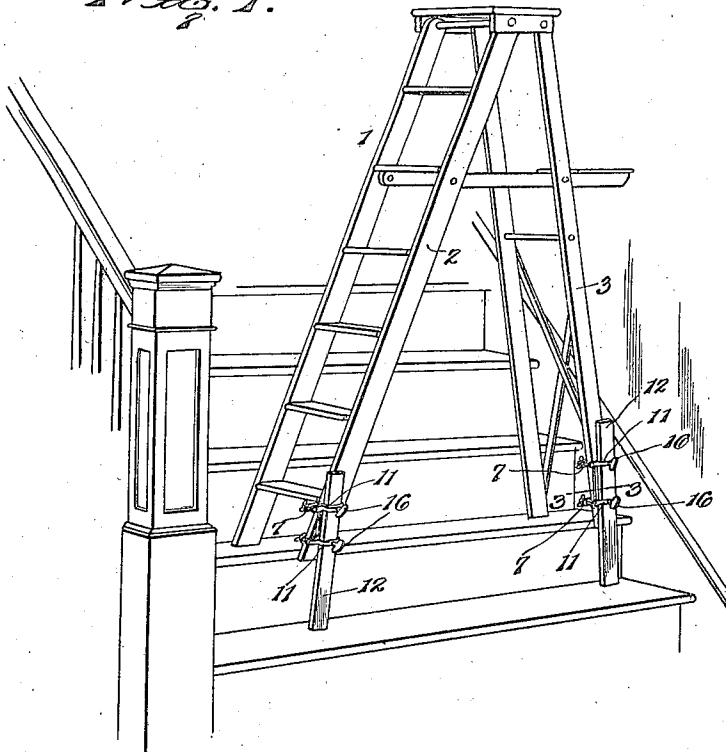
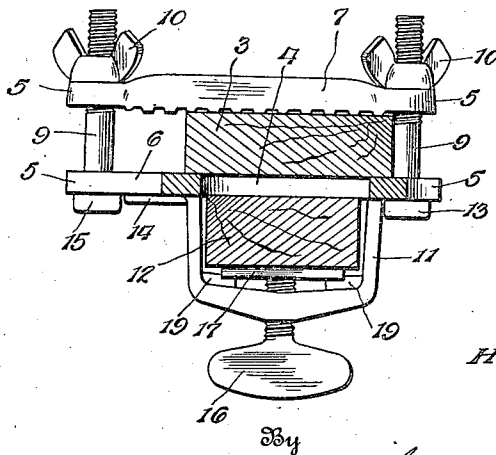


Fig. 3.



Invent
Homer Hunt.

By

Lacey Hunt, Attorneys

July 24, 1923.

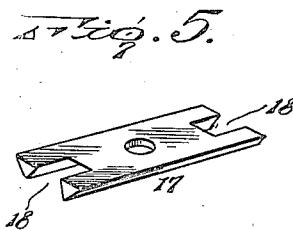
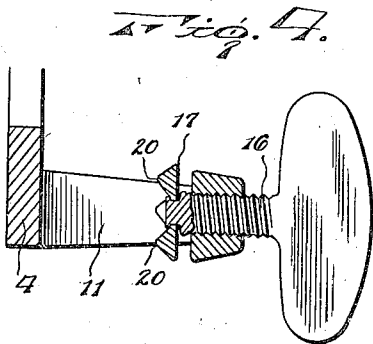
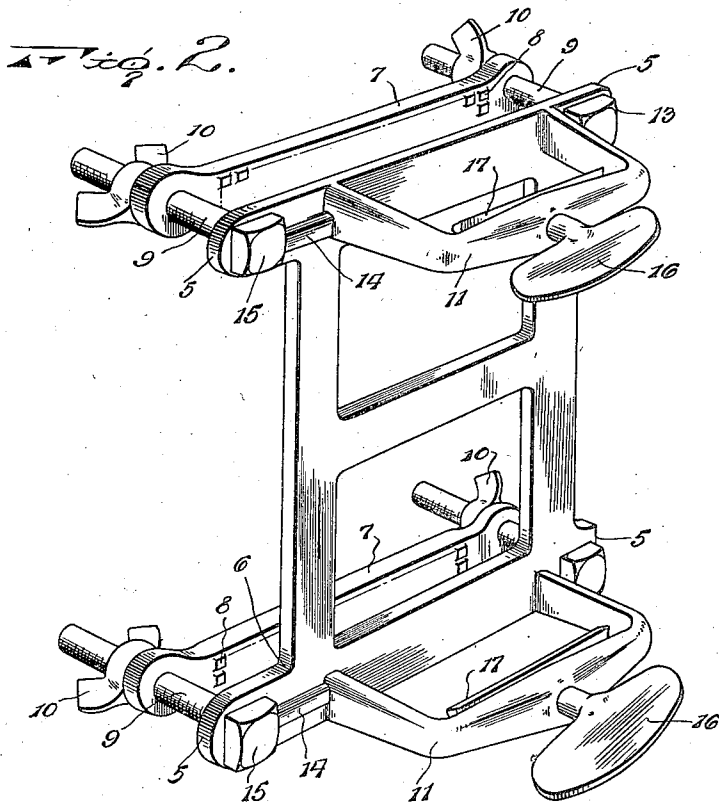
H. HUNT

1,462,505

LADDER ATTACHMENT

Filed July 15, 1922

2 Sheets-Sheet 2



Inventor

Homer Hunt.

By

Larry Lacey, Attorneys

UNITED STATES PATENT OFFICE.

HOMER HUNT, OF HARTFORD, CONNECTICUT.

LADDER ATTACHMENT.

Application filed July 15, 1922. Serial No. 575,202.

To all whom it may concern:

Be it known that I, HOMER HUNT, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Ladder Attachments, of which the following is a specification.

This invention relates to devices for permitting the use of ladders upon stairs or other inclined or uneven surfaces and has special reference to devices for the stated purpose of the type shown in Letters Patent, No. 1,393,536, granted to me October 11, 1921. The object of the present invention is to simplify the construction of the attachment so as to effect an economy in manufacture without any loss of efficiency. The invention is illustrated in the accompanying drawings and will be hereinafter fully set forth.

In the drawings—

Figure 1 is a perspective view of a step ladder equipped with my improved attachment and in place upon a flight of stairs;

Fig. 2 is an enlarged perspective view of the attachment removed;

Fig. 3 is a horizontal section on the line 3—3 of Fig. 1;

Fig. 4 is an enlarged detail section through the means for securing the extension leg in place;

Fig. 5 is a detail perspective view of the clamping plate which is employed to engage the extension leg.

The step ladder, indicated at 1, may be of the usual construction embodying legs 2 and a prop 3. In carrying out my invention I employ a plate or frame 4 which is preferably of skeleton form and is provided at its corners with perforated lugs or ears 5, as shown, the lugs or ears 5 at one side of the said frame or plate being extended, as shown most clearly in Fig. 2 at 6. Cooperating with the base frame or plate 4 are clip plates 7 which are provided on their faces opposed to the base plate or frame with lugs, projections or teeth 8 which are adapted to engage in the material of the prop 3 or the leg 2 of the step ladder, as will be readily understood. These clip plates have openings formed through their ends, and bolts 9 are inserted through the lugs or ears 5 and the openings in the ends of the clip plates, as shown and as will be readily understood.

Fitted upon the threaded ends of the said bolts and adapted to be turned home against the clip plates are winged nuts 10, whereby the clip plates may be secured against the step ladder leg or prop and the leg or prop securely clamped between the base plate and the clip plates. At the outer side of the plate or frame 4 are bracket loops 11 which are adapted to receive an extension leg 12 which is preferably of such transverse dimensions that it will fit closely within the said bracket loops but may slide therein in the process of adjustment. The brackets or loops are so disposed upon the base plate or frame that one end or side member of a bracket will abut a side of the angular head 13 of the adjacent bolt 9 whereby turning of the bolt is prevented and the nut thereon may be readily turned home. At the opposite side of the device, a rib 14 extends from the adjacent side of the bracket loop to a point adjacent the opening through the correlated lug or ear 5 so as to reinforce the extended lug or ear and also form an abutment for the angular head 15 of the adjacent bolt 9 whereby turning of said bolt will be prevented and the nut thereon may be readily turned home. Engaged centrally through the bracket loop 11 is a thumb bolt 16 and upon the inner end of the said bolt is swiveled a clamping plate 17 which is constructed at its ends with longitudinally disposed notches 18 to engage guide lugs 19 formed upon the inner surface of the respective bracket in the corners thereof whereby twisting of the clamping plate is prevented. The clamping plate is constructed to present longitudinally extending ribs or ridges 20 which will effect binding engagement with the opposed outer side of the extension leg so that, when the bolt 16 is turned home, the leg will be securely clamped against the outer side of the frame 4 and the leg held in a set position.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided an exceedingly simple device whereby an extension leg may be quickly and firmly secured to a ladder to project beyond the lower end thereof and engage the surface upon which the ladder is to be set up. The device may be readily adjusted longitudinally of the ladder leg or prop before the nuts 10 are turned home and, after being

set in the adjusted position, may be secured in that position quickly and easily by merely turning home the said nuts 10. The base plate or frame is of such dimensions that, if the bolts 9 at one side of the frame be disposed against the edge of the latter leg, the device will be arranged in parallelism with the longitudinal lines of the leg and the extension leg will, consequently, project from the ladder leg in true alinement therewith. If, however, it be desired to dispose the extension leg at an angle to the length of the ladder leg, the base plate 4 may be oscillated to the extent permitted by the bolts 9 so that, for instance, the bolt in the lower extended lug 5 will be in contact with the adjacent edge of the ladder leg, while the bolt through the upper extended lug 5 will be spaced from said edge. This position is illustrated in Figs. 1 and 3 of the drawings, and any intermediate position may be readily assumed so that, after the several nuts are turned home, the extension leg will be in the desired angular relation to the ladder, it being again noted that the extension leg substantially fills the bracket loops 11. The projections 8 upon the clip plate 7 will embed themselves in the ladder leg so that, after the clamping nuts have been turned home, slipping of the device upon the ladder leg will be effectually prevented and likewise the ribs or ridges 20 upon the clamping plates 17 will embed themselves in the outer side of the extension leg so that slipping of the extension leg through the brackets will be prevented. My improved device may be produced at a very low cost and may be very readily applied to any ladder without the use of skilled labor. The bracket loops 11 are preferably cast integral with the base plate or frame and the open spider

form of the base plate reduces the weight of the same without any loss in strength.

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

1. An attachment for ladders comprising a base plate adapted to bear against the side of a ladder leg, means for securing the plate to the ladder leg, bracket loops projecting from the side of the plate to receive an extension leg, bolts mounted in the bracket loops, and clamping plates swiveled on the inner ends of said bolts and provided on their inner faces with longitudinal ribs extending from end to end thereof adapted to be embedded in the extension leg, the end of the bolt being located between the ribs.

2. An attachment for ladders comprising a base plate adapted to bear against the side of a ladder leg and provided at its corners with lugs having openings therethrough, the said lugs at one side of the plate being extended laterally, bracket loops projecting from the outer side of the base plate to receive an extension leg and each having one side member disposed adjacent the opening through the corresponding lug on the base plate, ribs extending from the bracket loops over the laterally elongated lugs and terminating adjacent the opening therethrough, bolts inserted through the said lugs and having angular heads adapted to abut the terminals of said ribs and the remote sides of the bracket loops respectively, clip plates fitted upon said bolts to bear against the side of the ladder leg remote from the base plate, clamping nuts fitted upon the bolts and bearing against said clip plates, and means mounted in the bracket loops for securing an extension leg therein.

In testimony whereof I affix my signature.

HOMER HUNT. [L. S.]