Oct. 20, 1936. W. L. HOBBS 2,057,777.

EXTENSION ATTACHMENT FOR LADDERS, SCAFFOLDS AND THE LIKE

Filed June 5, 1936

FIG. 1.

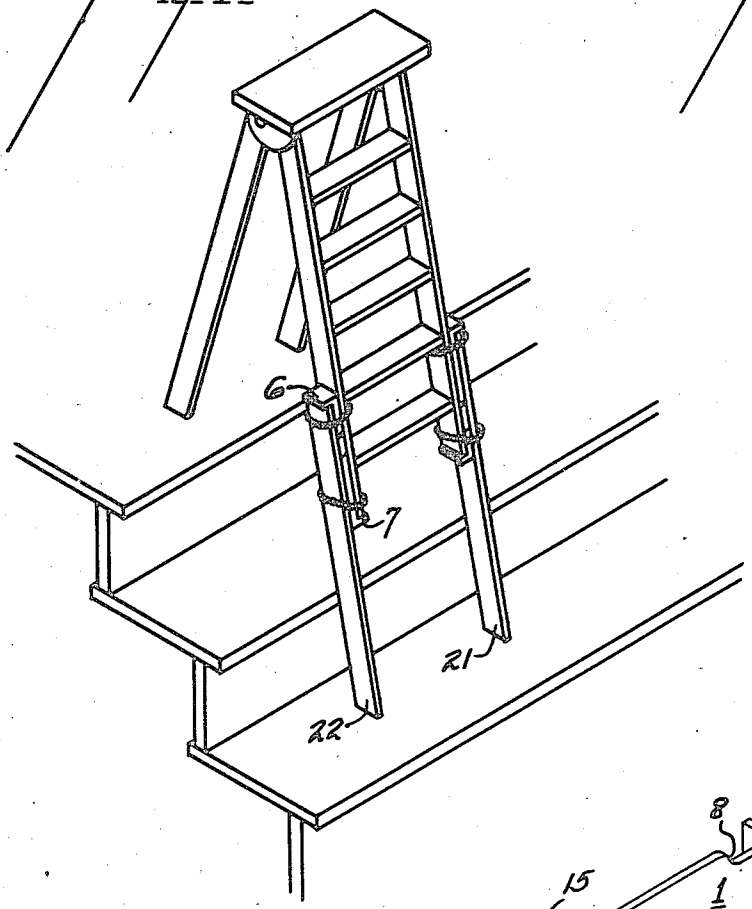


FIG. 2.

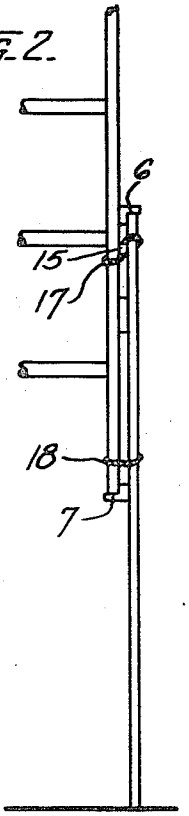


FIG. 3.

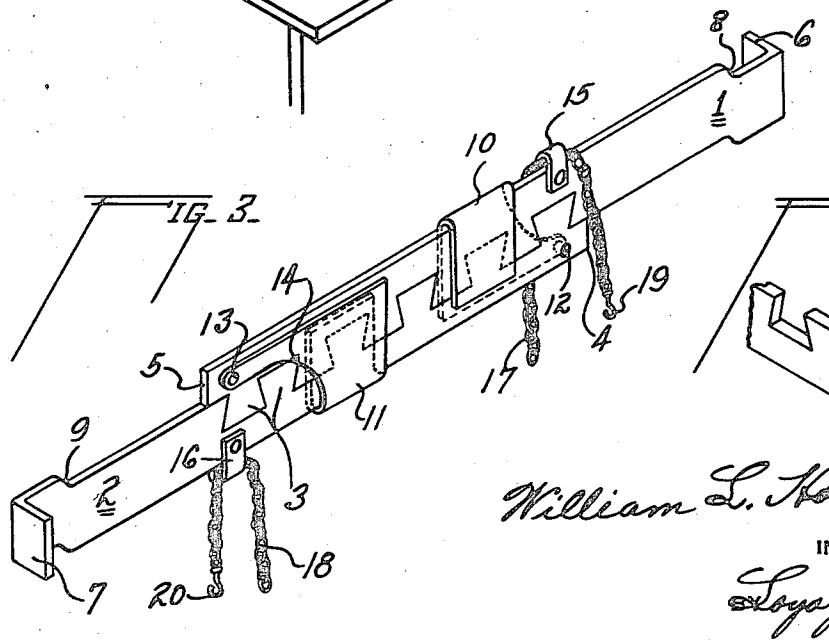
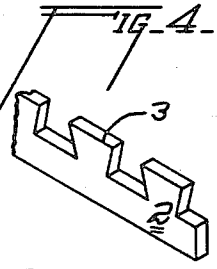


FIG. 4.



William L. Hobbs

INVENTOR

Loyal J. Miller

ATTORNEY

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EXTENSION ATTACHMENT FOR LADDERS, SCAFFOLDS AND THE LIKE

William L. Hobbs, Oklahoma City, Okla.

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6 Claims. (Cl. 228—63)

My invention relates to ladder attachments for use in adding an extension to a ladder and more particularly to a lengthwise adjustable attachment of this type.

The objects of the invention are to provide a device of this class which will enable an operator to set a ladder in a vertical position against the side of a house or against an inside wall regardless of the uneven base on which its two legs rest; which will allow a ladder or scaffold to have each of its supporting members rest on a base which is on a different level than that on which its other leg or legs rest; which may in addition to its use in connection with an ordinary straight ladder or scaffold, be used on saw horses, step ladders and the like; which will prevent the necessity of an operator carrying a specific size of extension for each specific job and for each individual ladder or scaffold, by making it possible for him to use any piece of wood which may be handy, for his extension piece; which does not weaken the ladder or scaffold with which it is used; which provides a factor of safety not provided heretofore on ladder extensions; which is compact and easy for a workman to carry in his tool kit; which may be used to fasten two ladders together; and, which will be efficient in accomplishing all the purposes for which it is intended.

With these and other objects in view as will more fully appear hereinbelow, my invention consists in the construction, novel features, and combination of parts hereinafter more fully described, pointed out in the claims hereto appended, and illustrated in the accompanying one-sheet drawing, of which,

Figure 1 is a perspective view of a pair of the devices installed on a step-ladder;

Fig. 2 is a front view showing one of the devices installed on one leg of a straight ladder, the ladder being only fragmentarily shown;

Fig. 3 is a perspective view of the device complete, showing the various parts more in detail; and,

Fig. 4 is a fragmentary view of the end of one of the twin interlocking elements, showing its dovetail construction.

Like characters of reference designate like parts in all the figures.

It is understood that various changes in the form, proportion, size, shape, weight, material and other details of construction, within the scope of my invention may be resorted to without departing from the spirit or broad principle of my invention and without sacrificing any of the advantages thereof; and it is also understood that the drawing is to be interpreted as being illustrative and not restrictive.

The inventive idea involved is capable of receiving a variety of mechanical expressions one of which, for the purpose of illustrating the invention, is shown in the accompanying drawing wherein:—

The device comprises a pair of interlocking members 1 and 2, made of any suitable material, one side of each member having a series of dovetail joints cut therein, as designated by the numeral 3, for co-operating with the identically sized joints of the other member to lock the two members together in various longitudinal positions. It will be noticed that the joints extend from the ends 4 and 5 of each of the members 1 and 2 to a point past their centers, but do not extend to the opposite ends 6 and 7. The ends 6 and 7 are formed at right angles to the members 1 and 2, and serve as supports, as clearly shown in Figs. 1 and 2. Adjacent the outer ends 6 and 7, each member has an offset bend, designated by numerals 8 and 9, to center the respective ends 6 and 7, and to cause the weight placed on the supports to be distributed along the center line of the assembled device.

Joint clamps 10 and 11 are provided, one on each of the members 1 and 2. They are pivoted on rivets 12 and 13 respectively, and are curved, as at 14 so that the chain eyelets 15 and 16 will not interfere with their pivotal movement. These clamps serve only as an additional safety measure to prevent the members 1 and 2 from slipping sidewise and disengaging from each other. I prefer to use them, but they are not a necessity for the proper operation of the device.

The chain eyelets 15 and 16 serve to keep the individual chains 17 and 18 attached to the device so that they will be handy at all times. The chains are equipped with small hooks 19 and 20 to facilitate fastening them around the ladder and extension piece. The eyelets, of course, are not necessary to the efficient operation or use of the device, and may be eliminated if desired.

In operation, any pair of boards 21 and 22 may be chosen by the operator, for use as extension pieces. If they are not of the same length, the two devices used may be adjusted to suit their difference in length, as well as to suit the difference in level of the bases on which the extension pieces are to rest. After the proper adjustment in length has been made the two members 1 and 2 are interlocked by means of the dovetail joints 3, thus forming a complete unit,

which is placed flat against the outside of the leg of the ladder, as shown in Figs. 1 and 2, with the lower end of the ladder leg seated on one end 7 of the device. The extension piece 22 is then placed flat against the outside surface of the device, substantially parallel to the ladder leg, and its upper end is seated on the lower surface of the end 6. Since the clamps 10 and 11, and the eyelets 15 and 16 are of thin material, they allow both the ladder leg and the extension piece to fit snugly against the flat sides of the device. The chains 17 and 18 are now tightly wound about the extension piece, my unitary device, and the ladder leg, and secured tightly in position by fastening the hooks 19 and 20 into adjacent links of the chains. These chains prevent any side play between the extension piece and ladder leg, and the opposite ends 6 and 7 of my device prevent any possible end play or relative longitudinal movement between the two.

Fig. 1 shows two of the devices in use on the two step supporting legs of a step ladder when its two pairs of legs are resting on different stair steps. I call attention that the two devices might be attached, one to one of the step supporting legs and one to one of the other legs thus making it possible to have the top step of the ladder in a position at right angles to its position as shown in Fig. 1.

Fig. 2 shows one of the devices similarly attached to one leg of an ordinary straight ladder. It will be noted that the rungs of the ladder are not used in connection with the device, and it may thus be used equally well on a scaffold, or on any object on which an extension is needed.

While I have described and illustrated a preferred embodiment of the invention I am aware that numerous alterations and changes may be made therein, and I do not wish to be limited except by the prior art and the scope of the appended claims.

I claim:

1. An extension attachment of the class described comprising two complemental identical main body members having a series of dovetail joints in one side and an end formed at right angles to the main body portion so that when in assembled and locked relation the end portions extend at right angles in opposite directions from the main body of the assembled device.

2. A device of the class described comprising two elongated complemental body members; a series of interlocking joints formed in one side of each member and adapted to lock the two pieces together edgewise in various lengthwise positions; and a pair of cross plates, one on each member, formed on the opposite ends of the two members and extending substantially at right angles to the main body members; and a pair of clamps, one pivoted on each member and each adapted to fit along the opposite sides of the interlocked body members and aid in maintaining the interlocked relation.

3. A lengthwise adjustable extension device comprising two main body members each having a straight edge, an end forming a support bent at right angles to its flat side, and an irregularly formed edge adapted to fit a complemental irregularly formed edge in the other member, so that when in locked relation the two support ends are opposite each other, substantially parallel to each other, and extend in opposite directions from the assembled device.

4. An extension attachment of the class described comprising two body members each having a portion of one side edge adapted to complementally fit and securely engage an opposite side portion of the other member, and each member having one end formed at right angles to its main body portion, said right angled portions adapted to fit oppositely to each other when said body members are complementally engaged and positioned, and a pair of clamps one adapted to pivot on each member and each adapted to fit along the opposite sides of said interlocked body members and to aid in maintaining the interlocked relation.

5. The combination with two of the main members of a ladder and with two suitable extension pieces adapted to fit said members, of an extension attachment as described comprising two body members each having a portion of one side edge adapted to complementally fit and securely engage an opposite side portion of the other member each such body member having one end formed at right angles to its body portion, said right angled portions adapted to fit oppositely to each other when said members are complementally engaged and positioned and to support said main members and said extension pieces with relation to each other, and a pair of clamps one adapted to pivot on each member and each adapted to fit along the opposite sides of said interlocked body members and to aid in maintaining the interlocked relation.

6. Organization as described in claim 5, and two pairs of chains adapted to hold said two main members said extension pieces and said extension attachment in secure interlocking relationship.

WILLIAM L. HOBBS.