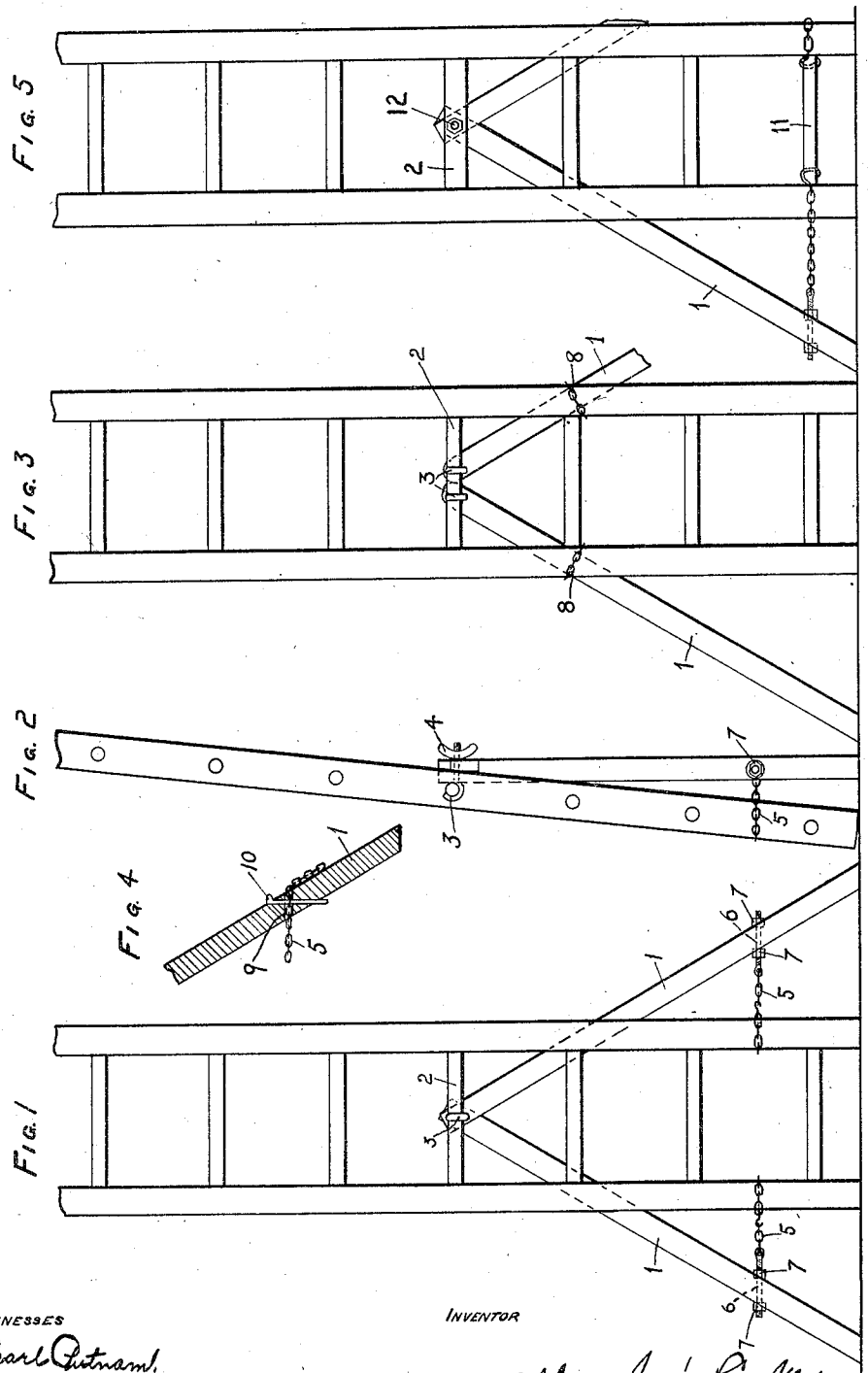
A. J. LE VEY.

LADDER SUPPORT.

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1,110,700. Patented Sept. 15, 1914.



WITNESSES

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ALBUR JOSÉ LE VEY, OF LONDON, ENGLAND.

LADDER-SUPPORT.

1,110,700. Specification of Letters Patent. **Patented Sept. 15, 1914.**

Application filed November 3, 1913. Serial No. 798,986.

To all whom it may concern:

Be it known that I, ALBUR JOSÉ LE VEY, a subject of the King of Great Britain, residing in the city of London, England, have invented new and useful Improvements in Ladder-Supports, of which the following is a specification.

This invention relates to detachable ladder supports for giving lateral stability to the ladder.

According to this invention two props are connected to one of the rungs of the ladder and are prevented from spreading outward unduly by chains or the like connected or passing around the sides of the ladders.

The two forms of construction of the invention are illustrated in the accompanying drawings, in which—

Figure 1 is a front view of the ladder with its supports; Fig. 2 is a side view of the same; Fig. 3 is a front view of a ladder and another form of support; and Fig. 4 is a section through the lower part of one of the ladder supports showing an alternative method of connecting it to its chain. Fig. 5 is a front view of a ladder showing another method of connecting the props thereto.

The support shown in Figs. 1 and 2 consists of two props, 1 attached at their upper ends to the rung 2 by means of the hooked bolt 3 and wing nut 4. The bolt 3 passes through the ends of both props which have half their thickness cut away at the place where they overlap to allow both the props to lie in the same plane.

The props are prevented from spreading outward unduly by means of the chains 5. These are passed around the legs or sides of the ladder and then hooked on to themselves. It is evident that the spread of the props can be regulated by choosing which links to hook the ends of the chains to. This gives a rough adjustment. For more delicate adjustments, each prop may be provided with an eye bolt 6, and nut 7 and the position of the props, can be altered by loosening one of the nuts 7 and tightening the other. Usually the length of the chain need only be adjusted when the support is first used with the ladder, since a change in the inclination of the ladder may be used as a rule for any slight adjustment necessary to bring the bottoms of the props and the ladder all into contact with the ground.

Instead of adjusting the chains as just described, the form of construction shown in Fig. 4 may be used in which the chains 5 are made to pass through holes 9 in the props and then fixed in the desired position by slipping a pin or bolt 10 which slides in a hole in the prop, through one of the links of the chain.

Another method of adjustment is illustrated in Fig. 3, in which each strut is separately clamped to the rung by a hook-bolt 3. The struts are passed through loops of chain 8, straps or the like attached to the props and passing around the sides of the ladder under one of the rungs. The feet of the props are extended and placed on the ground and then the clamps 3 are tightened to hold the props in place.

It is of course not absolutely essential that the feet of the ladder should rest on the ground as the struts will give all the support that is necessary. It is preferable, however, not to put such a strain onto the support unless it is unavoidable.

After use the chains 5 are unhooked, the clamp 3 is loosened and the props 1 swung around so as to lie longitudinally along the ladder. They can be held in this position by passing one or both of the chains 5 around one of the rungs or the side of the ladder and hooking the end of the chain into one of the links as before.

In the form of construction shown in Fig. 3 the loops of the chains are unfastened and the props swung around and fastened as just described.

In addition to the forms of construction illustrated in Figs. 1 to 4 other equivalent forms of construction may be used without departing from the spirit of the invention. For example instead of passing the chain around the leg of the ladder and hooking it on itself, the chain 5 may be made to hook directly onto the rung 11 (Fig. 5). Also instead of using a hook-bolt 3 to clamp the props to the rung, a bolt 12 passing through the props 1 and through the rung 2 itself may be used, in which case an extra strong rung should be used.

I claim—

1. A detachable ladder support comprising two props, means for clamping the upper ends of the props to one of the rungs of a ladder, and means for limiting the lateral spreading of said props, said means consisting of tension members connecting the props to the sides of the ladder.

2. A detachable ladder support compris-

ing two props, means for clamping the upper ends of the props to one of the rungs of a ladder, and means for limiting the lateral spreading of said props, said means consisting of tension members, with means for adjusting the effective length thereof.

3. A detachable ladder support comprising two props each having a hole near its lower end, means for clamping the upper ends of the props to one of the rungs of a ladder, members attached to the sides of the ladder and each having one end passing through the holes in the props, and means for adjustably attaching the said ends of the members to said props.

4. A detachable ladder support comprising two struts each having a hole near its lower end, means for clamping the upper ends of the struts to one of the rungs of a ladder, members attached to the sides of the ladder, an eye-bolt attached to the free end of each chain, said eyebolts passing through the holes in the struts, and nuts on said eyebolts, at both ends of the holes, said nuts being adapted for adjusting the position of the eyebolts in the holes.

ALBUR JOSÉ LE VEY.

Witnesses:
HARRY EDWARD RILEY THOMPSON,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."