

United States Patent Office.

GEORGE CLAFLIN, OF MILLER'S CORNERS, NEW YORK.

Letters Patent No. 107,225, dated September 13, 1870.

IMPROVEMENT IN ADJUSTABLE LIFTING-LADDER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE CLAFLIN, of Miller's Corners, in the county of Ontario and State of New York, have invented a certain new and useful Improvement in Adjustable Lifting-Ladders, of which the following is a specification.

Nature of the Invention.

This invention consists of a lifting platform, of peculiar construction, combined with a bracing foot-ladder, as hereinafter described.

General Description.

In the drawing—

Figure 1 is a perspective view of a ladder provided with my improvement.

Figure 2, a cross-section through the sliding part of the platform, and the side pieces of the ladder.

A represents the ladder, and

B, the platform.

The ladder proper is of ordinary construction, but it is supported in the rear by braces, C C, which fit, at top and bottom, on rounds *a b*, so as to be each independent and removable therefrom for adjustment.

The braces are provided with holes, *c c*, by which the ladder proper may be adjusted higher or lower, and still leave the braces upright, which is frequently necessary, especially when working close to a building.

The lower round *b* is also provided with adjusting holes *d d*, in which fit pins *f f*, by which means the width of the base of the braces may be expanded or contracted to adapt them to the work to be done.

These features constitute one part of my invention, for although braces fixed to ladders to support them are common, they have not generally been independent and removable; neither have they been adjustable by the two methods described.

The sides of the ladder proper have projecting ledges *g g*, with which engage similar ledges *h h* of the base piece *k* of the platform, as shown in fig. 2.

This base piece also has interior rollers *m m*, which roll up on the upper surface of the side pieces of the ladder, to prevent undue friction.

A leaf, *p*, is hinged to the top of the base of the platform, and constitutes the platform proper.

At its outer corners it has journals, *r r*, which rest in any of a series of holes, *s s*, formed in bracing arms *w w*.

These arms are pivoted at *v v* to the bottom of the base piece. By this means, the position of the leaf may be adjusted to stand horizontal to any adjustment of the angle of the ladder.

It also enables the leaf to be set at any desired an-

gle, to adapt to the load which is applied, or to the facilities of introducing the load, preparatory to elevating.

If desirable, also, the platform may be taken off and reversed in position, so as to bring the leaf at the bottom instead of at the top, in which condition it serves, when let down to the ground, as an inclined plane for the rolling up of the load to the proper position on the platform, when the leaf is raised to support the load and held in place by the braces *w w*, while the elevating action goes on.

This is convenient in heavy loads, as it enables them to be got onto the platform more easily than would otherwise be the case.

This is an important feature of my improvement, and, I believe, original with myself.

To the top of the platform is attached a rope or chain, G.

This passes up over pulley H, thence down around pulley I; thence up over pulley K, and finally down to windlass L, around which it winds.

Instead of passing over two pulleys at the top, it may pass over but a single one, and then attach to the windlass.

The windlass is provided with any suitable device for holding the platform at any desired height.

This ladder will be found useful for many purposes, such as picking fruit, painting buildings, raising materials in buildings, raising loads upon wagons, &c.

When desired, the braces C C may be taken off, and the ladder proper used alone.

As before stated, I claim no novelty in a ladder having braces C C, except so far as said braces are independent and removable, and are adjustable both vertically and laterally by the holes *c d*.

Neither do I claim, broadly, an elevating platform, though, so far as I am aware, none has ever before been used in connection with a foot-ladder; but the novelty in this case consists in the special construction of the platform, viz., with the hinged leaf and the adjusting braces, when the same are combined with the foot-ladder, constructed as before described.

What I claim, and desire to secure by Letters Patent, is—

The arrangement of the platform B, provided with the hinged leaf *p* and adjusting brace arms *w w*, when the same is combined with a foot-ladder having the braces C C, which are removable and adjustable, in the manner and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE CLAFLIN.

Witnesses:

G. T. MIATT,

G. WILLM. MIATT.