

W. Morehead.

Extension Ladder.

No. 46,812.

Patented Mar. 14, 1866.

Fig. 1.

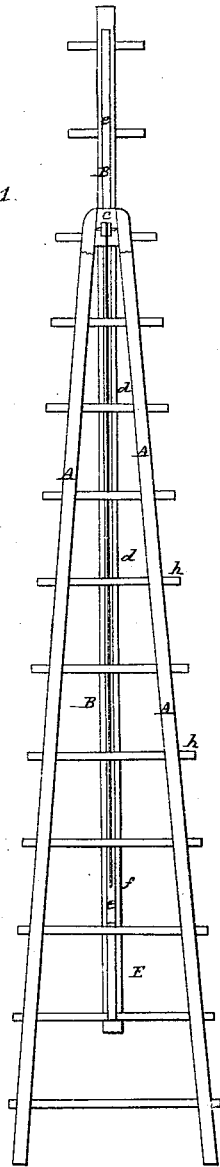


Fig. 2.

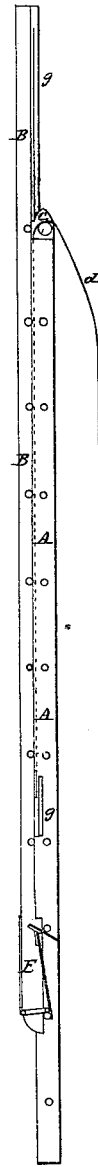


Fig. 3.

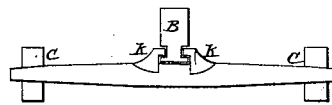
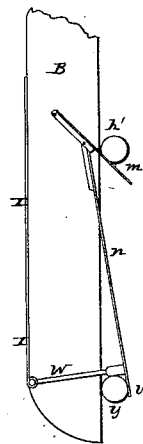


Fig. 4.



Witnesses:

Chas. H. Bartlett
W. D. Wolfe

Inventor:

Wm. Morehead

UNITED STATES PATENT OFFICE.

WARREN MOREHEAD, OF PARKERSBURG, WEST VIRGINIA.

IMPROVED EXTENSION-LADDER.

Specification forming part of Letters Patent No. 46,812, dated March 14, 1865.

To all whom it may concern:

Be it known that I, WARREN MOREHEAD, of Parkersburg, in the county of Wood and State of West Virginia, have invented a new and useful Extension-Ladder; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical view showing the triangular ladder A, sliding ladder B, pulley *c*, rope *d*, groove *e* for receiving the rope *d*, the point *f* of attachment of the rope *d* to the sliding ladder B, and the latch E, for holding the sliding ladder B in its position.

Fig. 2 is a side view, partly sectioned, showing the groove *g* for receiving the guides, which prevent back and lateral motion, pulley *c*, and the latch E.

Fig. 3 is a transverse section showing the rounds *h*, the standard C of the triangular ladder A, the sliding ladder B, the guides *k*, for preventing back and lateral motion, and the groove *g* in the sliding ladder B, for receiving the guides *k*.

Fig. 4 is an enlarged section showing the construction and operation of the latch E, to operate which the sliding ladder B must be drawn up by the rope *d* acting over the pul-

ley *c* and attached to the sliding ladder B at *f* until the tongue *m* of the latch presses under the round *h'*, Fig. 4 next above the one upon which the catch *v* of the latch is expected to fasten. This pressure of the tongue *m* throws forward the rod *n*, (of which the catch *v* is a prolongation,) while the vibrating arm *w* forces the catch *v* above the round *y*. In raising the sliding ladder B the catch *v* must pass under the rounds *h* of the triangular ladder A. This brings it level with the face of the sliding ladder B. To force it out again, the spring *x* is placed at the back of the sliding ladder, acting on the catch *v* through the medium of the vibrating arm *w*. To lower the sliding ladder B, it must be raised until the tongue *m* is above the round *h'*, Fig. 4, which brings the catch *v* on a level with the face of the sliding ladder, thus offering no resistance to its descent.

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

The combination of the triangular ladder A, the sliding ladder B, the guides *k*, and the latch E, constructed, arranged, and operating in the manner specified.

WARREN MOREHEAD.

Witnesses:

JOHN WHITE,
F. L. KIRKPATRICK.