May 27, 1924. 1,495,197

F. T. OAKLEY

EXTENSIBLE STEPLADDER

Filed Jan. 25, 1923

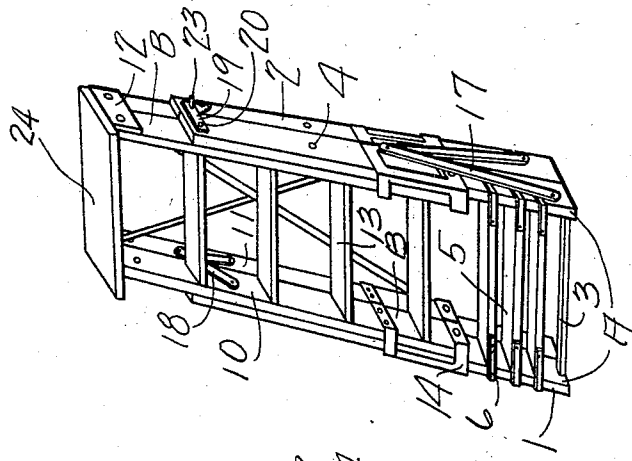


Fig. 3.

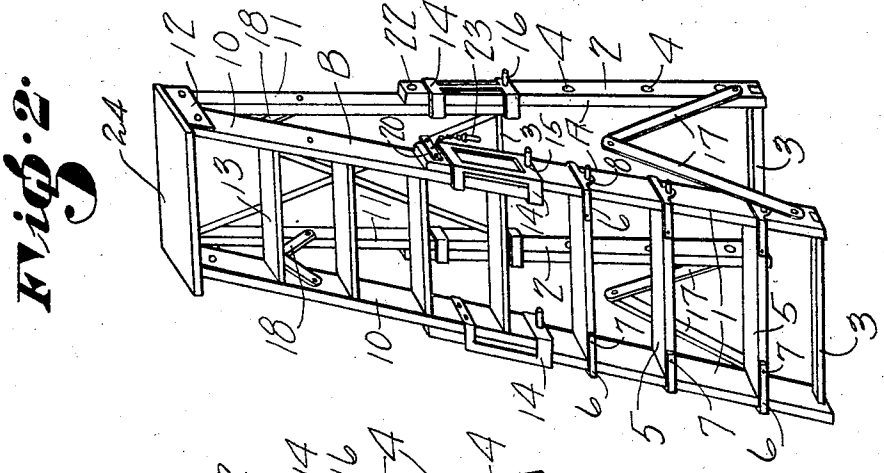


Fig. 2.

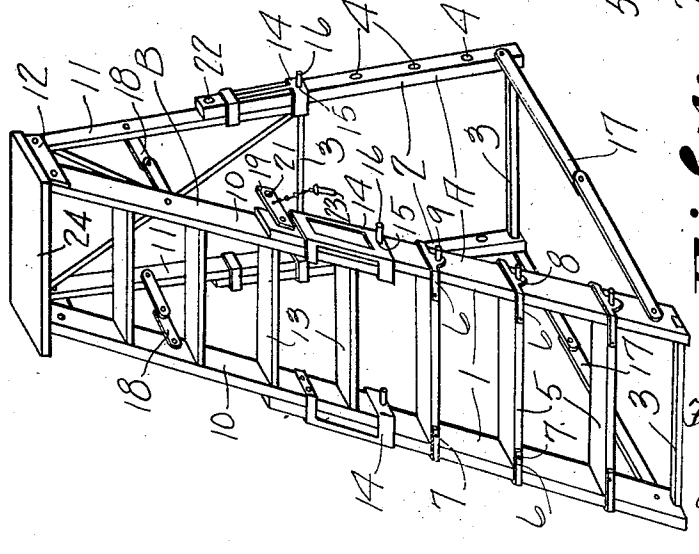


Fig. 1.

INVENTOR
Frederick Thomas Oakley.
BY
Adam & Fisher
ATTORNEY

Patented May 27, 1924. 1,495,197

UNITED STATES PATENT OFFICE.

FREDERICK THOMAS OAKLEY, OF PAWLING, NEW YORK.

EXTENSIBLE STEPLADDER.

Application filed January 24, 1923. Serial No. 614,768.

To all whom it may concern:

Be it known that I, FREDERICK THOMAS OAKLEY, a citizen of the United States, residing in the city of Pawling and State of New York, have invented new and useful Improvements in Extensible Stepladders, of which the following is a specification, reference being had to the accompanying drawings.

This invention is an extensible step ladder, and the object is to provide such a ladder in a simple, practical and economical form.

In the drawing:

Figure 1 is a perspective view showing the ladder opened to its full extent.

Figure 2 is a perspective view showing the ladder partly opened.

Figure 3 is a perspective view showing the ladder closed or folded up.

The invention consists of two telescopically connected sections A and B. The lower section A embodies the side rails 1 and back legs 2, both being permanently spaced apart by the cross bars 3. The rails 1 and legs 2 are all pierced transversely by series of aligned bolt-holes 4, these holes being spaced apart the distance it is required the steps 5 to be spaced apart. The lower steps 5 are cut a little short so as to freely pass between the rails 1, and they are provided with iron straps 6 at each end, these straps being screwed to the edges of the steps as shown at 7 and then loosely embracing the rails 1 so that the steps 6 may slide up or down on said rails. The straps 6 are also pierced with bolt holes 8 aligned with the holes 4, and bolts 9 are provided and adapted to slide through these aligned holes 8 and 4, thus locking the steps in spaced relation as shown in Figure 1. By withdrawing the bolts 9 the steps 5 may be readily moved or slid to the bottom ends of the rails 1. The upper section B likewise embodies side rails 10 and back legs 11, these being adapted to slide or telescope between the respective side rails 1 and legs 2 of the section A, and the legs 11 being hinged at 12 to the top ends of the upper side rails 10 immediately below the top step 24 of the ladder. The section A is provided with steps 13 set permanently in place. At the lower ends of the side rails 10 and back legs 11 of the section B are permanently mounted iron slide-ways 14 which loosely engage the lower side rails 1 and permit the latter to freely slide therethrough. Bolt holes 15 are pierced through these slide-ways in alignment with the holes 4 of the lower section A, and by means of bolts 16 thrust through these holes it is evident the section B may be locked at various desired heights on the lower section A. Toggle links 17 and 18 on the sections A and B, serve as means for bracing the sections in open position. A lock bar 19 is provided and permanently attached at 20 to the top end of the lower side rail 1 and has a bolt hole 21 in its free end. An aligned bolt hole 22 is then formed in the top end of the back leg 2, and when the sections are drawn together the bolt 23 serves to lock them together. This ladder may be readily opened out to any desired height or may be closed by collapsing the steps 5 to the bottom, buckling up the toggle links 17 and 18, then drawing the back legs 2 and 11 up against the rails 1 and 10, inserting the bolt 23 into the holes 21 and 22, and then letting the section B fall or telescope into the section A.

While I have herein described a certain specific method of constructing and assembling the elements of my invention, it is understood same may be varied in minor details, not departing from the spirit of my invention as defined in the appended claim.

I claim:

An extensible step ladder, comprising a pair of lower side rails having spaced and aligned bolt holes therethrough; steps provided with straps at their ends loosely embracing the side rails, said straps having bolt holes therein aligned with the bolt holes of the side rails; bolts for use in said holes to lock the steps in place; a pair of upper side rails adapted to telescope within the lower rails; steps permanently mounted between the upper rails; slide-ways on the lower ends of the upper rails adapted to slidingly engage the lower rails; bolt holes through the slide-ways aligned with the bolt holes of the lower rails; bolts for use in these holes to lock the two sets of rails in various vertical positions; a pair of upper back legs hinged to the upper side rails; slide-ways on the lower ends of the upper back legs and having bolt holes therein; a pair of lower back legs telescopically mounted on the upper back legs through the said slide-ways thereon, said

lower legs having bolt holes spaced as are the bolt holes of the lower side rails and aligned also with the bolt holes of the slide-ways of the upper back legs; bolts to engage the bolt holes of the said slide-ways and lower back legs to lock the upper and lower back legs in various vertical positions; toggle links connecting the upper and lower pairs of side rails; and a lock bar for locking the ladder together in collapsed condition.

FREDERICK THOMAS OAKLEY.

Witnesses:
WM. GEO. TICE,
VAN NESS KELLEY.