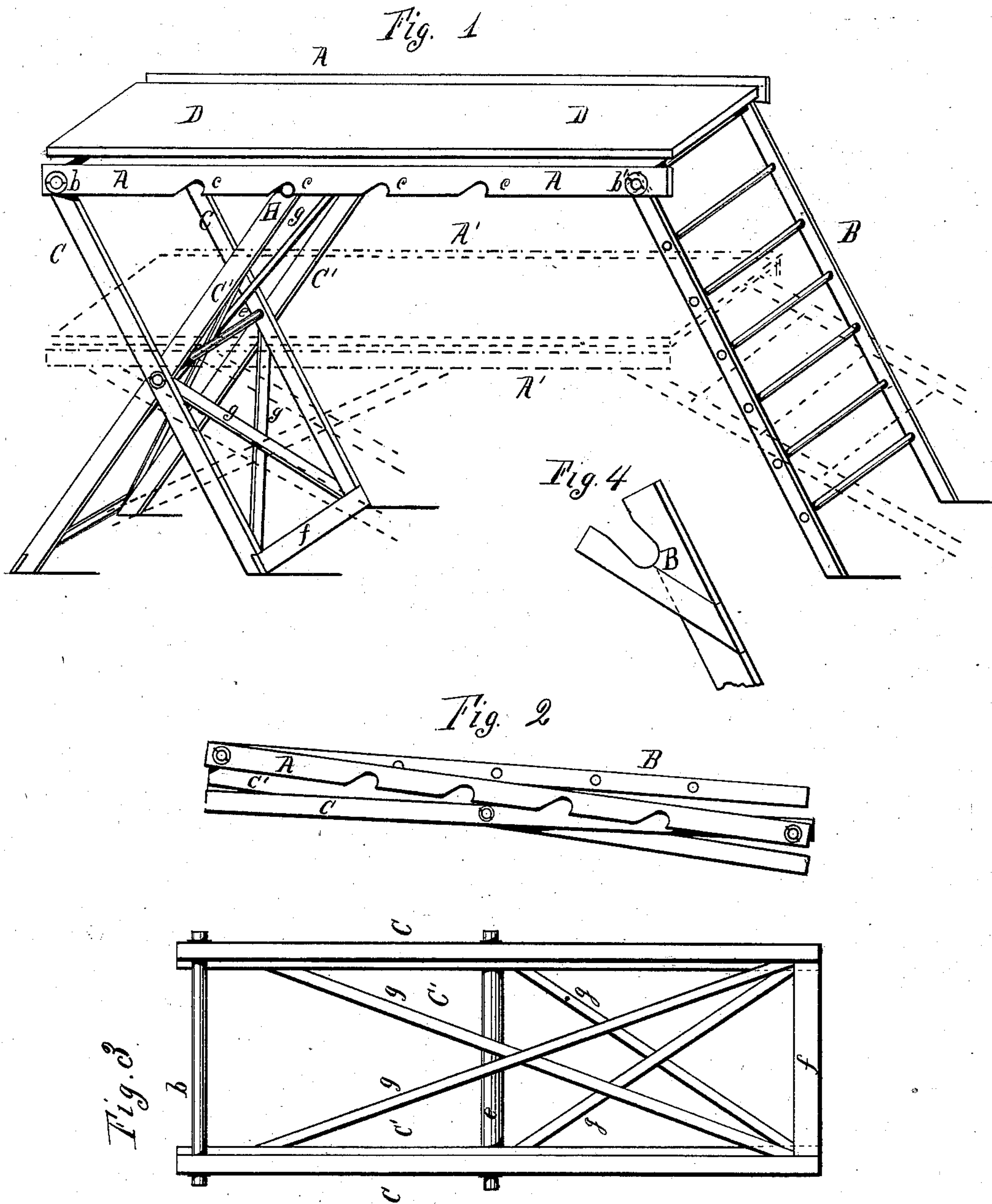


J. A. KELLOGG.
Step-Ladder.

No. 217,539.

Patented July 15, 1879.



WITNESSES
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IMPROVEMENT IN STEP-LADDERS.

Specification forming part of Letters Patent No. 217,539, dated July 15, 1879; application filed April 26, 1879.

To all whom it may concern:

Be it known that I, JAMES A. KELLOGG, of Greece, Monroe county, New York, have invented an Improvement in Step-Ladders, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved step-ladder ready for use. Fig. 2 is a side view of the same when folded up; and Fig. 3 is an end view, showing the construction of one of the crossed frames.

My improved step-ladder is more particularly designed for use in orchards for picking fruit; but it is applicable to many other purposes.

My invention consists in a combination of a horizontal platform, having a ladder attached at one end thereof, with a pair of crossed frames pivoted to the other end, and so constructed and arranged that the platform shall have firm support longitudinally and laterally independent of the ladder, and also that the platform may be raised or lowered, while the whole apparatus is so constructed that the same may be folded up for storage within a small space.

My improved step-ladder is represented in the accompanying drawings, in which A A, Fig. 1, is the horizontal platform, to one end of which the ladder B is attached, and C C C' C' are the crossed frames connected to the other end of the platform.

The platform consists of two parallel bars, connected together at each end by transverse rods *b b'*. A series of notches, *c c*, is made in the lower side of the parallel bars. The platform may be covered by a board or boards, D D. The ladder B is provided at its upper end with hooks, which engage with the transverse rod *b'*; or it may be permanently attached thereto.

The crossed frames C C C' C' are arranged to support the end of the platform opposite to the ladder B. These frames consist of two side bars crossed at their centers, and having a bar, *e*, passing through them at that point. They are provided at the top and bottom with suitable cross-bars, *b* and *f*, and are braced to each other in any suitable fashion, as represented

at *g*, Fig. 3. The upper ends of the frame C C are pivoted on the cross-bar *b* of the platform A A. The upper cross-bar, H, of the frame C' C', is adapted to fit into the notches *c c* in the lower side of the platform A A. The height of the platform A A from the ground may be varied by placing the bar H in the different notches *c c*, as represented at A' A', Fig. 1. One of the frames is made wider than the other, as shown in Fig. 3, in order that the narrower pair may turn freely on the bar *e* inside the wider pair.

When not in use, my improved step-ladder may be folded up within a small space. (See Fig. 2.) The ladder B is either detached entirely or folded back over the top of the platform A A, while the crossed frames C C C' C' are folded together and brought into a position parallel or nearly parallel, with the platform A A.

The various cross-bars may be provided at either end with washers and pins, or other suitable devices, for securing the side pieces of the platform and ladder and the frames together.

By the construction herein shown I am enabled to produce a step-ladder possessing many advantages over those heretofore in use. It is cheap and simple in construction, and is exceedingly durable. The platform, the ladder, and the crossed frames may be of any desired length. A large amount of standing-room is afforded by the platform A A, while at the same time the apparatus, when folded up, is very portable. The longer the frames are made the greater the distance of the platform from the ground at its most elevated position.

In Fig. 4 I have represented the form given to the upper end of the ladder B to adapt it to receive the cross-bar *b'*.

I claim—

The combination of the platform A A, having notches *c c*, ladder B at one end of the platform, and crossed frames C C C' C' at the other end, arranged to support the platform, substantially as and for the purposes set forth.

JAMES A. KELLOGG.

Witnesses:

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