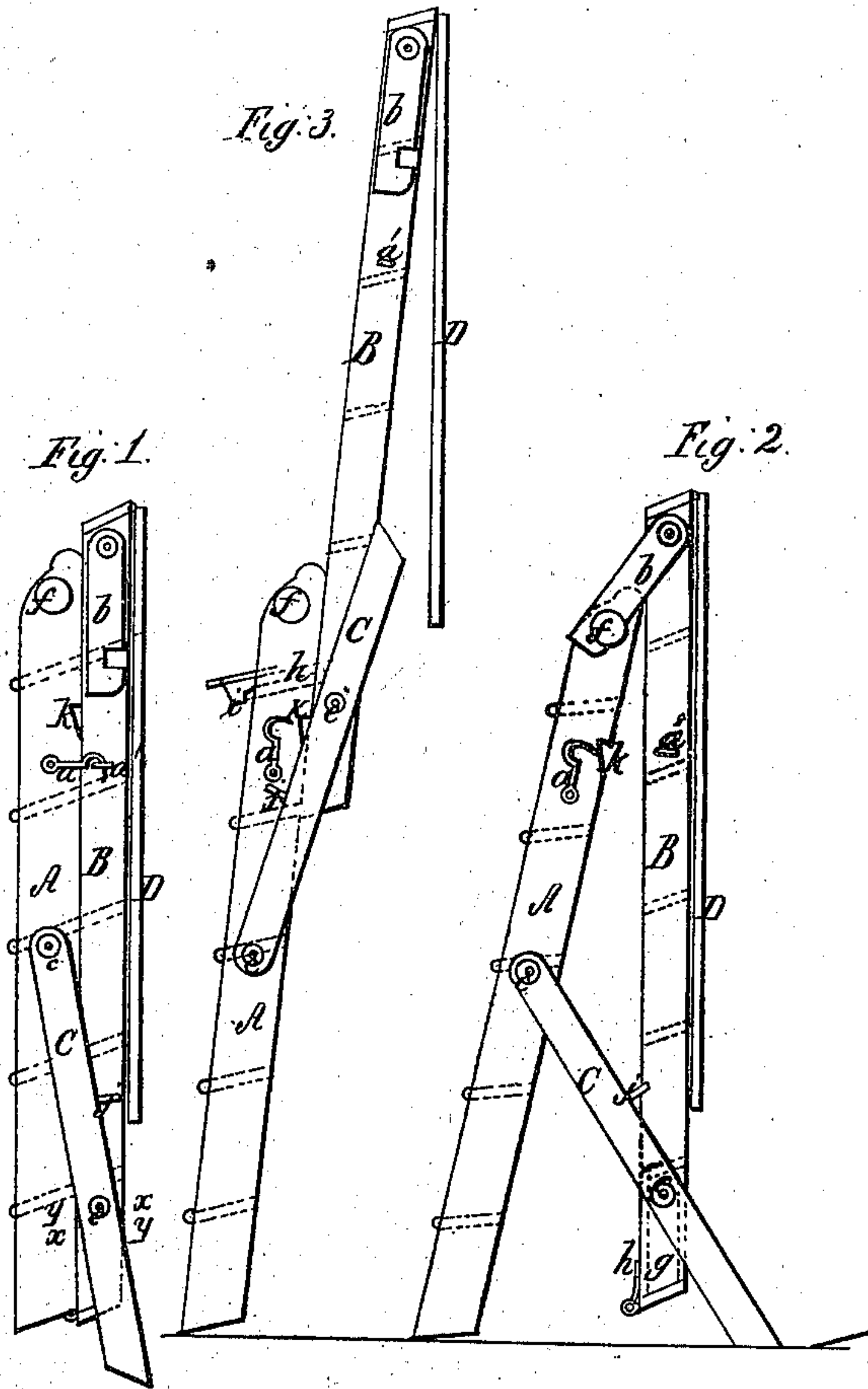
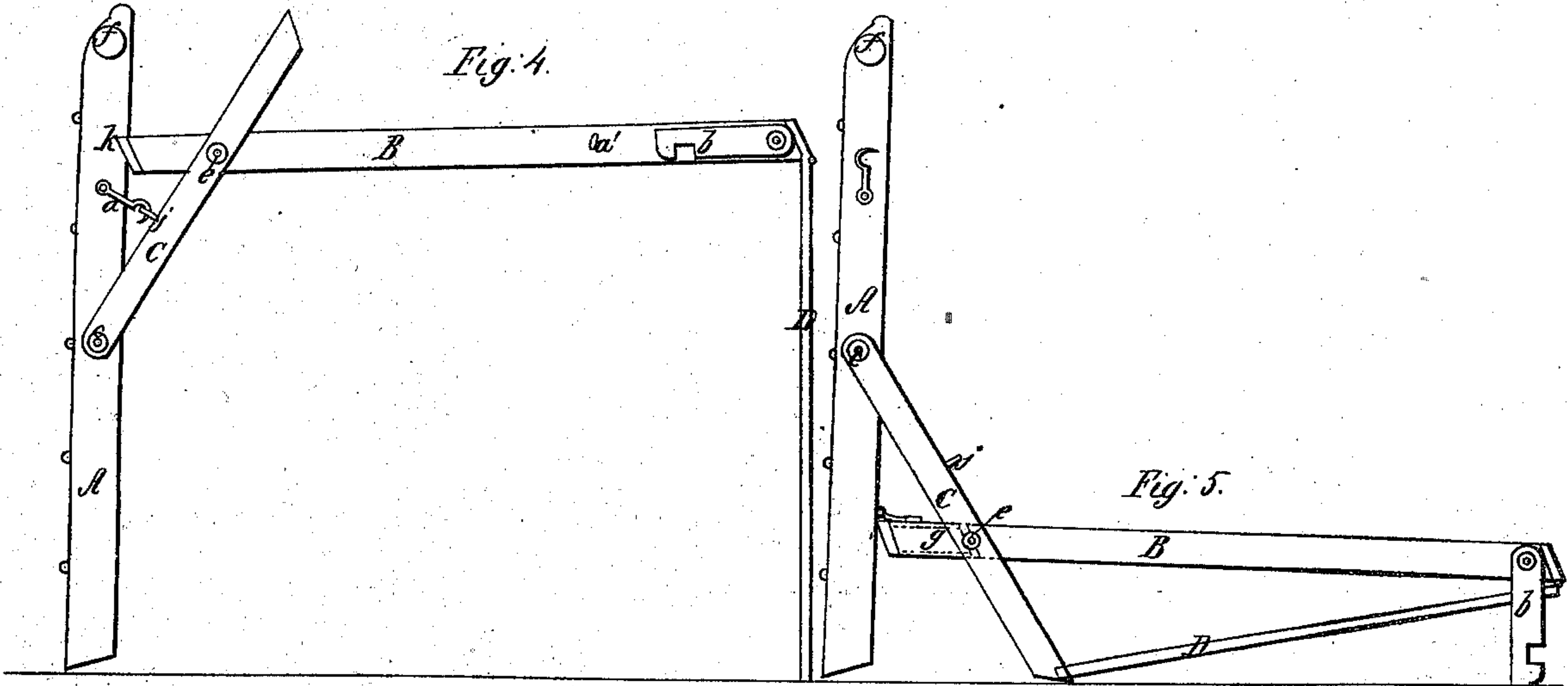


H. J. Hancock.

Ladder.

N^o 87,066.

Patented Mar. 9, 1869.



Witnesses;
Jno Cooney
Fred. Haynes,

Inventor;
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United States Patent Office.

HENRY J. HANCOCK, OF NEW YORK, N. Y.

Letters Patent No. 87,666, dated March 9, 1869.

IMPROVED STEP AND EXTENSION-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, HENRY J. HANCOCK, of the city, county, and State of New York, have invented a new and useful Combined Step-Ladder, Extension-Ladder, and Scaffold; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention consists in an apparatus of novel construction, convertible, at pleasure, into a step-ladder, an extension-ladder, or a scaffold, and also, if desirable, into a bedstead.

Referring to the accompanying drawings—

Figure 1 represents the apparatus, when folded for transportation or storage;

Figure 2 represents the same as a step-ladder;

Figure 3 represents it as an extension-ladder;

Figure 4 represents it as a platform; and

Figure 5 represents said apparatus, when converted into a bedstead.

Similar letters of reference indicate corresponding parts in the several figures.

A and B are ladders, connected to each other, by means of pivoted braces C C.

These braces C C are arranged opposite to each other, and connected at one end to the central portion of the ladder A, by means of a pivot or rod, *e*, and are connected to the ladder B by a similar rod or pivot, *e*, passing through them at a point, *x x*, and through the lower portion of the said ladder B, at a point, *y y*, leaving the lower extremities of the braces C C projecting beyond the said rod or pivot *e*, to serve as supports for the apparatus in some of its capacities.

The lower end of the ladder B is or may be provided, between its first and second steps, with a box, *g*, for containing the tools of the workman, or for other articles.

h is a lid or cover to said box *g*, hinged at its upper edge to the second step, and is provided with a hooked projection, *i*, upon its lower inner side, for a purpose hereinafter explained.

To form the apparatus from its folded position, as represented in fig. 1, into a step-ladder, as represented in fig. 2, the hooks *a a* are unhooked from their staples *a' a'*, and the ladders separated or moved out at the bottom, until hooks *b b*, which are pivoted at the upper end of the ladder B, will fit over pins *f f*, at the upper end of the ladder A, while the braces C C, with their lower ends outwardly extended, serve as supports for the structure, as represented.

To form the apparatus into an extended ladder, as represented in fig. 3, the long hooks *b b* are unhooked from the pins or studs *f f*, and the ladder B, the lid *h*, of the box *g*, having been first opened, is raised in a vertical, or nearly vertical direction, until its lower portion laps against the upper portion of the ladder A, the braces C C turning, by means of their pivots *e* and *e*, into the position as shown in the figure.

The lid or cover *h* is then shut down over the top step of the ladder A, its hooked projection *i* locking

upon the front edge of said step, thereby confining the said ends of the two ladders firmly together.

Suitable hooks may be substituted for this purpose, instead of the lid *h*, if it should be preferred to keep the box closed, or when it is desirable, in the construction of the apparatus, to dispense with said box and lid altogether.

To form the apparatus into a scaffold, as shown in fig. 4, the lid *h* is detached from the step of the ladder A, over which it had been locked, and the ladder B allowed to swing over, upon its pivot *e*, into a horizontal position, its lower end fitting into notches *k k*, cut in the ladder A, at a suitable location thereon, for reception of said end, when the ladder B is in said position.

The parts are confined together in this relative position, by locking the aforesaid hooks *a a* into staples *j j*, provided upon the upper sides of braces C C, at points thereon most suitable for said locking-engagement; and the outer or extended end of said ladder B is supported by a pendent frame, D, hinged to the outer extremity of said ladder, thereby serving as legs for the same.

To convert the apparatus into a bedstead, the long hooks *b b* are turned downward, at right angles to the ladder B, to serve as legs or supports, and the hooks *a a* being unhooked from the staples *j j*, and the hinged frame D folded inwardly, the ladder B still retaining its horizontal position, is lowered, until the lower ends of the braces C C, by the swinging round of said braces, and the hooks, or legs *b b*, touch the ground, or other surface upon which the structure is placed.

While thus converted into a bedstead, the box *g* comes in suitable position to be used as a place of deposit, where the sleeper's money and other valuables may be safely kept while he sleeps.

To fold the apparatus for transportation or storage, the outer extremity of the ladder B is brought over in the direction of the upper end of the ladder A, when the two ladders may be brought side by side, and the hooks *a a* hooked into the loops or staples *a' a'*.

The bedstead may also be formed by inverting the scaffold, the ladder A and frame D serving as supports for a mosquito-bar.

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

1. The combination of the ladders A B, the braces C C, and the hooks and studs *b b* and *f f*, to form a step-ladder, substantially as herein described.

2. The combination of the ladders A B, the braces C C, and the hooked lid, or cover *h*, to form an extension-ladder, substantially as herein described.

3. The combination of the ladders A B, the braces C C, hooks and staples *a a* and *j j*, and the hinged frame or legs D, to form a scaffold, substantially as described.

4. The combination of the ladders A B, braces C C, and legs *b b*, to form a bedstead, substantially as herein described.

Witnesses:

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