

A. W. O'BLENUS.
Step-Ladders.

No. 145,522.

Patented Dec. 16, 1873.

Fig. 1.

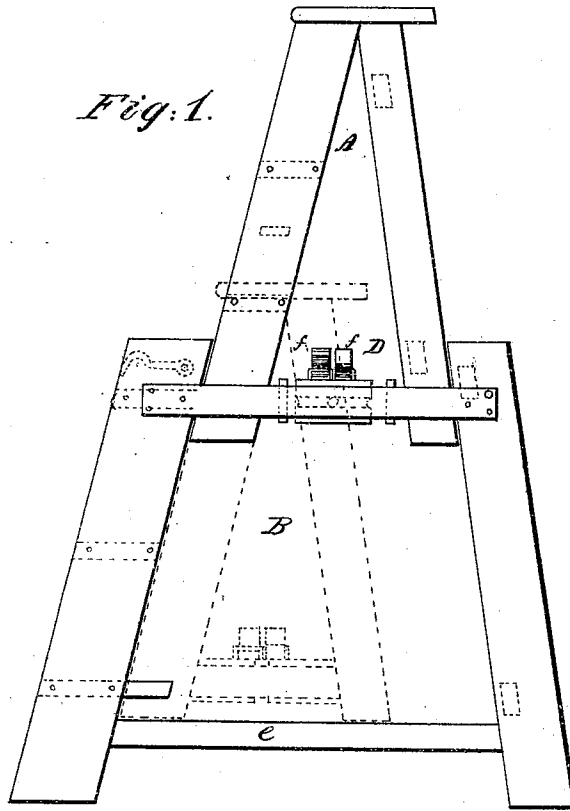


Fig. 2.

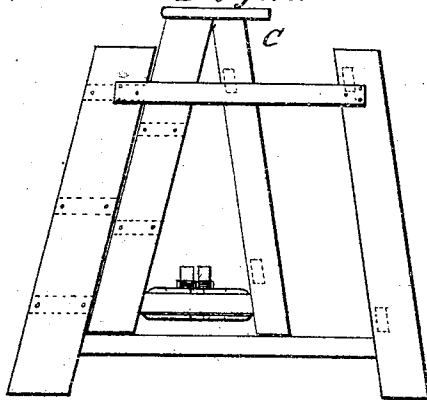


Fig. 4.

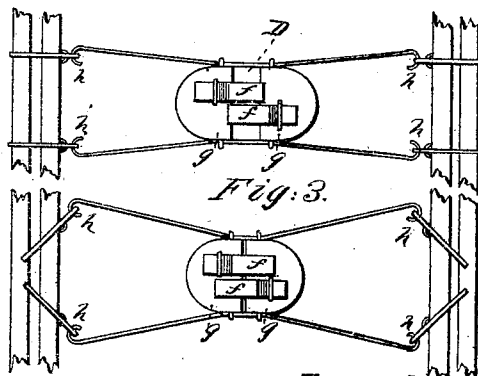


Fig. 3.

Witnesses

Robert Dodge

Edward Hutchings

Inventor

Anthony W. O'Brien

UNITED STATES PATENT OFFICE.

ANTHONY W. O'BLENUS, OF NEW YORK, N. Y.

IMPROVEMENT IN STEP-LADDERS.

Specification forming part of Letters Patent No. **145,522**, dated December 16, 1873; application filed April 7, 1873.

To all whom it may concern:

Be it known that I, ANTHONY W. O'BLENUS, of the city and State of New York, have invented a new and useful Improvement in Step-Ladders; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification.

The nature of my invention consists as follows, viz: The step-ladder is made of wood, iron, or other material, is divided equally into two sections with braces, and is constructed in the relative proportions shown in the drawing.

The lower half or section B of the step-ladder forms a cradle or frame, on lower side braces of which rests, when down, the upper half or section A, forming, when thus closed, either a convenient short ladder for library or other uses, or a seat, as desired. The upper half or section A of this step-ladder, with an equal number and spacing of steps, is of the same height as section B. Its lower width is to be at least one-eighth of an inch less than the width of the interval at the top of section B between the sides, or fourteen and a half inches outside, and its sides are parallel to the sides of section B, so as readily to adjust themselves, on being lowered, to the frame of section B. It can be elevated and supported at its full height by the transverse brace marked D in drawing, and, if elevated partially, is supported by the ordinary hooks in general use, placed at convenient points. Applied to a step-ladder of six feet full height, the lower section B may be constructed with sides, at front three inches wide and at the back two inches wide, each three feet long, with distances apart on each side, at foot, of twenty-one and a quarter inches, and at the top of thirteen and a half inches, the lowest or first step projecting inside one and a half inch beyond the said side supports, to retain section A in position when down. The steps are about nine inches distant from the ground, and from each other, fifteen and a half inches long inside, and the lowest or first step is about four and a half inches above each side lower brace *e*, placed each at three inches above the ground or floor, all the other steps being of same width as the sides, except the top platform, which may project six inches. The upper side braces of section B are to be nineteen inches long, one inch

square, fastened on the outside at a point on the sides two inches from the top, and of similar size and shape as the lower side braces of section A, to afford a rest for the hooks when turned. All these proportions and distances are to be proportioned to any other desired size of step-ladder, as required. The supporting transverse brace D should be made of iron or steel. It consists of two pieces attached by a hook on each end, when in position, to another and clevis-shaped hook, *h h*, whose upright bolt or pivot, attached to the tongues of the clevis at about two-thirds of its length, plays freely in the metal socket fastened on the inside of the lower side back of section A on each side. Applied to a six-foot ladder of wood, the inside metal socket for the bolt or pivot of each of these clevis-shaped hooks is fastened to the lower side braces of section A, on each side, at two points each, so that the bolts or pivots, respectively, shall each be distant about one inch from the sides, and seven and a half inches apart, the clevis-shaped hooks to be each three inches in length of each tongue, and one inch arch, or seven inches long. The two pieces of iron or steel are of equal length, each twenty-one inches of full coil, and are each a separate coil around the opposite block of wood or metal of the size of three by two inches, and shape as *g g*, at the middle of the space. Handles *f f* upon these blocks may be used for bringing the blocks together on their square faces; and when so used the clevis-hooks are turned aside. When the blocks are thus brought together, and the handles parallel, the support of section A at its full height is complete. If it is desired to let section A down to its full length, reverse the movement and separate the blocks.

The result of this construction of both sections is that the step-ladder, when fully elevated, is firmly supported, and may be kept fronting the object and not turned sidewise, as is required with the ordinary step-ladders.

What I claim as my invention is—

The construction and combination, as described, of the sectional divisions in the above form and proportions, and the said supporting transverse brace, as above specified.

ANTHONY W. O'BLENUS.

Witnesses:

ROBERT DODGE,
EDWARD HUTCHINGS.