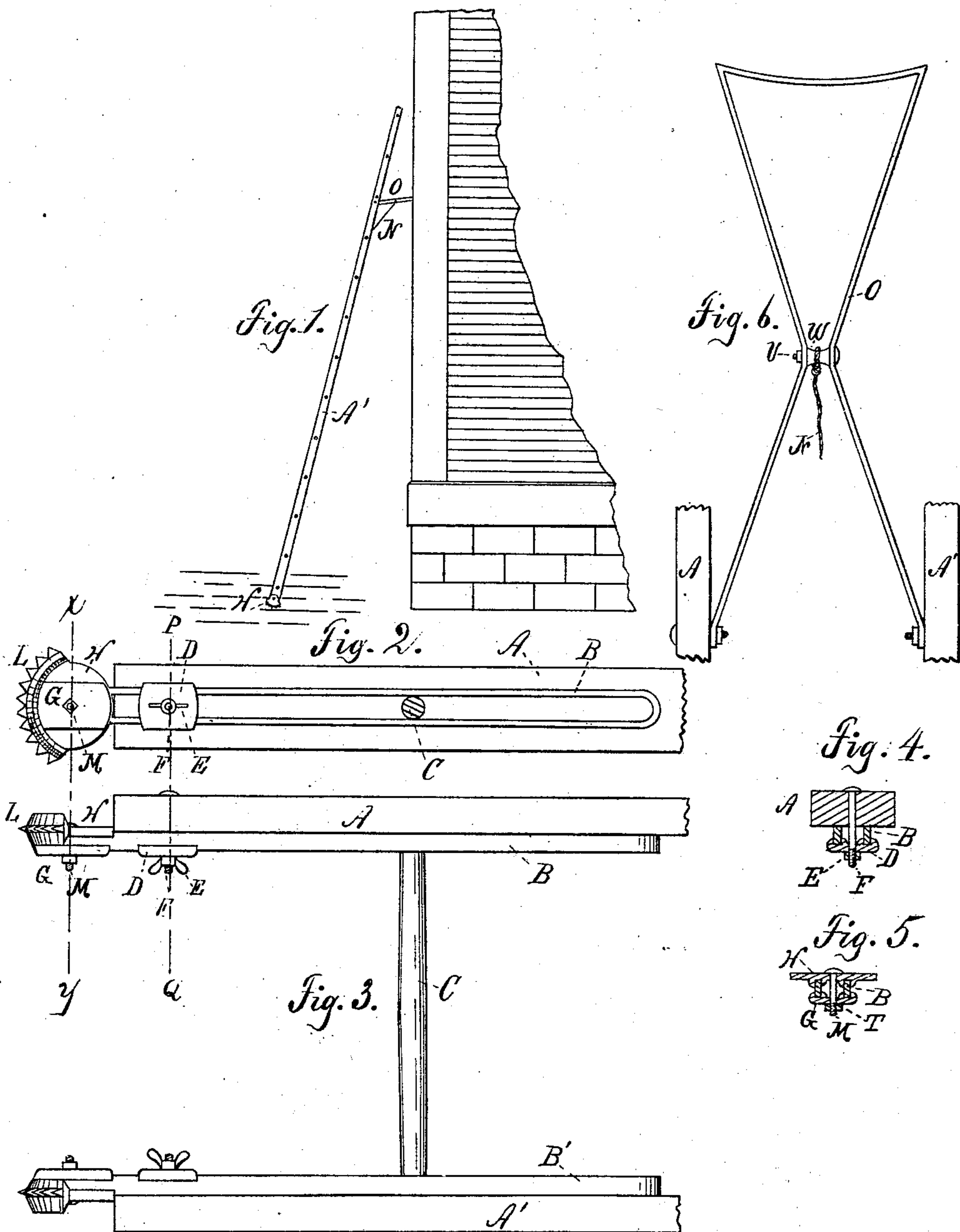


(No Model.)

C. B. SHAVER & S. C. SCHOFIELD.
LADDER.

No. 272,163.

Patented Feb. 13, 1883.



WITNESSES:

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CHARLES B. SHAVER AND SILAS C. SCHOFIELD, OF FREEPORT, ILLINOIS;
SAID SCHOFIELD ASSIGNOR TO SAID SHAVER.

LADDER.

SPECIFICATION forming part of Letters Patent No. 272,163, dated February 13, 1883.

Application filed October 16, 1882. (No model.)

To all whom it may concern:

Be it known that we, CHARLES B. SHAVER and SILAS C. SCHOFIELD, residents of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Ladders; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

Our invention relates to improvements in ladders, and especially in ladders adapted to the use of painters. It comprises two devices—one for leveling the foot of a ladder on uneven surfaces, the other for holding the top of the ladder away from the wall of the building on which the painter is at work. Both these devices are described in the following specification, and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a complete ladder in working position against the wall of a building, the top of the ladder being held away from the wall by the brace O; Fig. 2, an inner side elevation of side bar of ladder, showing leveling device at its foot; Fig. 3, a front elevation of foot of ladder, showing leveling device; Fig. 4, a cross-section of side bar of ladder through line P Q, Figs. 2 and 3; Fig. 5, a cross-section of foot of leveling device through line *xy*, Figs. 2 and 3; and Fig. 6, an elevation of brace O, showing its connection with side bars A A' of the ladder.

In these figures, A A' are the side bars of an ordinary ladder, united by rungs C. On the lower rung C, as a guide, slides freely the slotted bar B, of cast or wrought iron, but preferably the latter. A guide-plate, D, longitudinally grooved for the reception of the bar B, is fastened to the side bar A by a bolt, F, provided with a wing-nut, E, by which it can be readily loosened to permit the sliding of the bar B or tightened to hold it securely in any desired position. The lower end of the bar B is held firmly between two grooved plates, G H, one of which, H, is expanded to form a foot, the lower surface of which is convex and provided with spurs L to guard against slipping. The convexity of the lower surface of the foot

is such that in any working position of the ladder at least two of the spurs L will be in contact with the supporting-surface on which the ladder stands. The two plates G H are united by an ordinary bolt, M, provided with a suitable nut, T, by means of which the plates may be readily separated. The side bar A' is provided with a device exactly similar to that above described, and we think it desirable to make the ladder with an adjustable foot on each side bar, as shown, although one of them may be dispensed with by turning the ladder over for a reverse slope of the surface on which it stands. It is evident that by sliding the adjustable foot downward on one side bar the length of that side bar may be practically increased, as desired, and the ladder made to stand plumb, notwithstanding any inequality or slope in the surface on which it is placed.

Near the top of the ladder is pivoted to its side bars, A A', a brace, O, formed preferably of a single bar of wrought-iron, bent as shown, and united near its middle by a bolt, V, on which is a sleeve, W, to this sleeve being fastened a cord, N. The object of the device is to hold the top of the side bars away from the building, in order to allow the painting of the wall below the line of contact of the top without changing ladders. This result is accomplished by throwing the top of the ladder out from the wall and raising the brace O until its free end is slightly higher than the point at which it is attached to the ladder, when it is rested against the wall and the weight of the ladder allowed to rest against it. In order to prevent any possible slipping upward of the free end of the brace, the cord N may be tied to a rung of the ladder below the point at which the brace is attached thereto.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the side bar A and bottom rung C of a ladder with the slotted bar B, sliding freely on said rung, the grooved guide-plate D, attached to said side bar, and the foot composed of grooved plates G H, clasping said slotted bar and rigidly connect-

ed by a bolt or other suitable means, all constructed and operating substantially as described, and for the purpose set forth.

- 5 2. The combination of the side bars A A', brace O, formed of a single piece of metal, substantially as described, and pivoted to said side bars at or near the upper end thereof, substantially as and for the purpose set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

CHARLES B. SHAVER.
SILAS C. SCHOFIELD.

Witnesses:

R. H. WILES,
J. A. SHEETZ.