

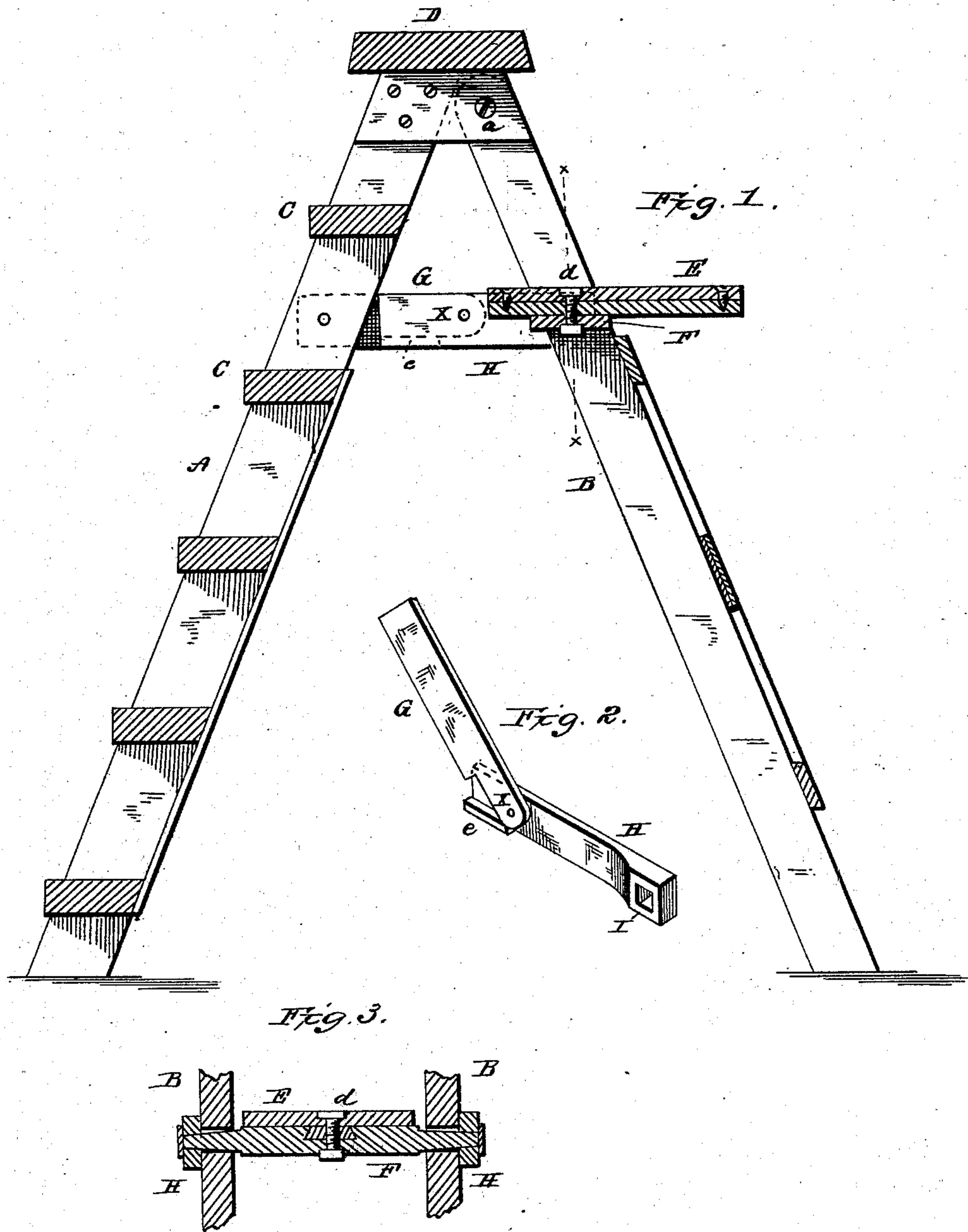
(No Model.)

G. M. BAKER & W. ABBOTT.

STEP LADDER.

No. 284,356.

Patented Sept. 4, 1883.



Witnesses.
Edwin L. Yearee
J. J. M. Carthy

Inventors
George M. Baker and
William Abbott.
By *Levi Alexander*
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE M. BAKER AND WILLIAM ABBOTT, OF ESPY, PENNSYLVANIA.

STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 284,356, dated September 4, 1883.

Application filed April 17, 1883. (No model.)

To all whom it may concern:

Be it known that we, G. M. BAKER and WM. ABBOTT, citizens of the United States, residing at Espy, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Step-Ladders, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to step-ladders, and has for its object the connecting therewith of a shelf which will open out for use or close up automatically when the ladder proper and its supporting and bracing frame are opened or closed, as will be hereinafter more particularly described.

In the accompanying drawings, making a part of this specification, Figure 1 represents a vertical section; Fig. 2, a perspective of the two stretcher-braces, and Fig. 3 a longitudinal section of the bar carrying the shelf.

In the figures, A represents that portion of a step-ladder which is provided with the strips C C and the crown-piece D.

B represents the usual supporting and bracing frame, hinged to the ladder-frame at or near its upper end.

The frames A and B are connected together by the stretcher-braces H G a short distance below their upper ends. The brace G is pivoted at one end to the frame A and at its other to the brace H, as seen at *x*, Fig. 2. Brace H is provided at one end with a square opening, I, and at its other with a flange, *e*, which projects from it at right angles. The inner and lower edge of the brace G, near its pivoted end, has a portion of its metal cut away, and at this cut-away portion it rests when the two braces are in line upon the flange of brace H, being pivoted to said brace near the outer end of flange *e*.

F represents a bar or shaft which has bearings in the two side bars of frame B. The

journals of this shaft are made slightly tapering. The shaft passes beyond the sides of the frame, and a portion of its outer end is made square, and the balance or extreme outer end is provided with a screw-thread. The square end of brace H is made to fit snugly over the square end of the shaft, and is there confined by means of a suitable nut. When the two braces G and H are pressed downward at their centers, the two frames A and B are folded or closed together.

E represents a shelf, which is bolted to shaft F by a bolt, *d*, as seen in Figs. 1 and 3. This shelf is made of any suitable and convenient size. It is evident that as the shelf has a rigid connection to the shaft F, and that the shaft must partially rotate when the brace H is depressed, the shelf will fold up automatically when the two frames A and B come together. It will for the same reason take a horizontal position when the frames are separated and the two braces are in line. The braces may be made to move upward, if so desired; but this movement is preferred.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, in a step-ladder, of the frames A and B, pivoted together at their upper ends, the braces G and H, the brace H being provided with a right-angled extension, *e*, and a rectangular opening, I, the shaft F, passing through the opening in said brace, and the shelf E, secured to said shaft, the whole adapted to operate substantially in the manner specified.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE M. BAKER.

WILLIAM ABBOTT.

Witnesses:

U. H. ENT,

G. M. QUICK.