

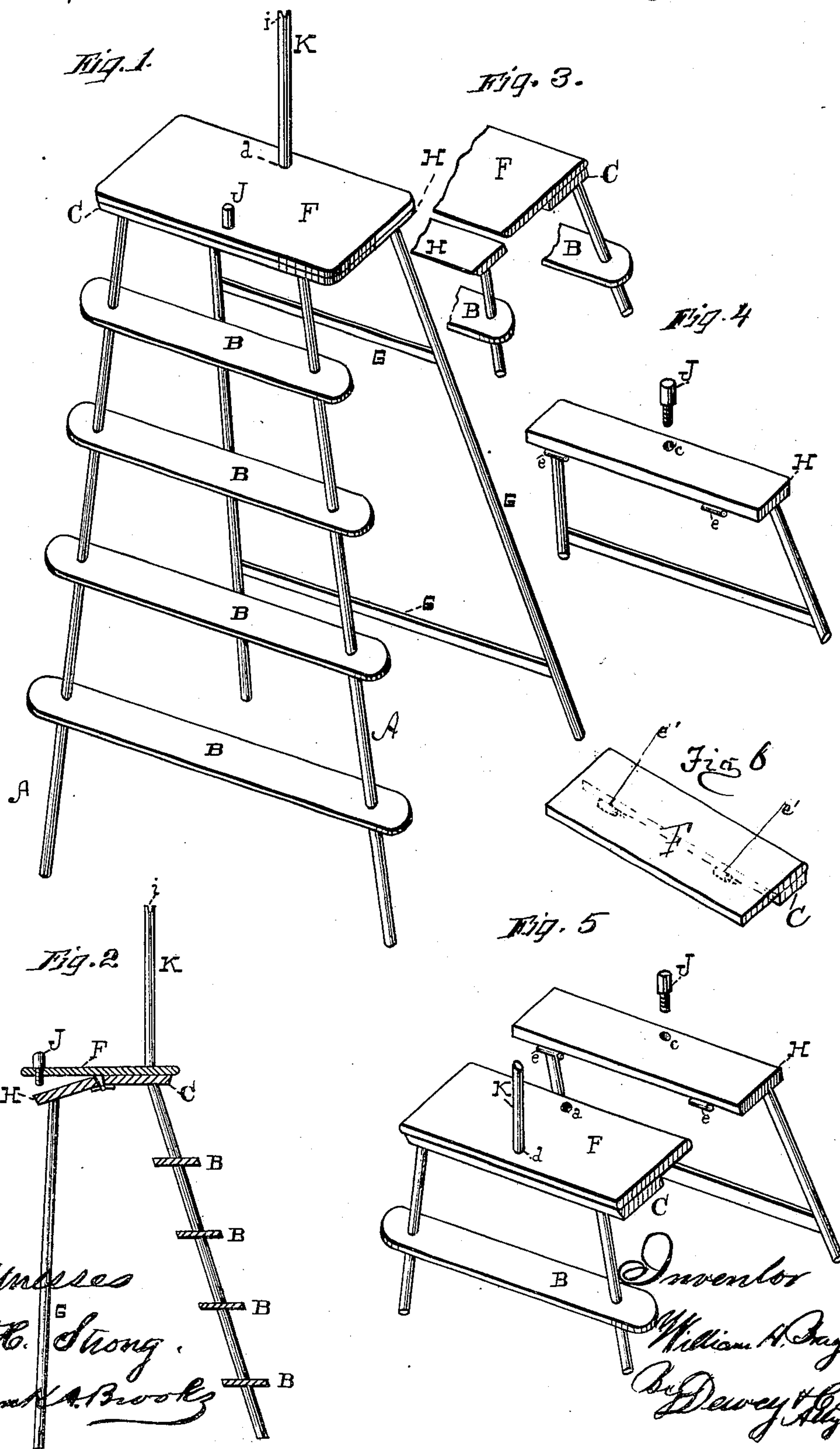
(No Model.)

W. H. BRAY.

STEP LADDER.

No. 245,344.

Patented Aug. 9, 1881.



Witnesses
Geo. H. Strong.
Frank A. Brooks

Inventor
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UNITED STATES PATENT OFFICE.

WILLIAM H. BRAY, OF SAN FRANCISCO, CALIFORNIA.

STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 245,344, dated August 9, 1881.

Application filed May 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BRAY, of the city and county of San Francisco, State of California, have invented an Improved Step-Ladder; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the class of step-ladders; and it consists in such a construction thereof as will enable me to make a convenient and strong step-ladder, and dispense with all side stays and braces, and to convert it from an ordinary single step-ladder into one having steps on both sides or into two separate ladders, all of which will hereinafter fully appear.

Referring to the accompanying drawings, Figure 1 is a perspective view of my step-ladder. Fig. 2 is a vertical section. Figs. 3, 4, 5, and 6 are details of construction.

In the drawings, A A represent the standards of one side of the ladder, carrying the steps B B, and having fixed to their top a flat cross brace or board, C, to the under inner edge of which are secured the pintle-butts *e' e'* of two hinges. On the top C is fastened a top, F, the front edge of which slightly projects over the front edge of the top C, and its rear side projects over the rear edge of the said top—a distance about as great again as said top—that is, the top F is about twice the width of the top C.

Let G represent the back-stay of the ladder, being an ordinary brace having a top, H, about the width of the top C. The side supports or uprights of both ladder A and brace G are set at a proper angle, and the tops of both are level. The top H of the brace or stay G has on its inner under side corresponding hinge-frames with appropriate sockets *e*; to receive the pintles of the butts *e' e'*. The two parts are thus hinged together, the top H fitting under the extended portion of the top board, F, which rests, therefore, upon the two tops, C and H, and practically forms the top of the ladder. In the main top F is a hole, *a*, and in the top H is a corresponding hole, *c*, in line therewith. Through these holes passes the pin or screw J, having a head convenient for handling. This screw locks the two tops H and C together and makes the ladder firm.

Instead of a back brace or stay, G, I can have another ladder similar to A, and adapted, just as the brace G, to fit the ladder A. It can easily be substituted for the brace, and thus convert the device from a single into a double ladder.

The pin or screw J may be made of wood, and given sufficient strength to hold the parts firmly together. It can be easily removed when desired.

By this construction I need use no side braces or ropes, the whole strain being resisted by the wide top piece F, so that the ladder, when locked, cannot separate or close.

By removing the pin or screw J the back support may be readily removed and the ladder set out of the way as conveniently as in the ordinary folding ladders; or, by simply loosening the pin J sufficiently to release the top H, the two parts may be folded together.

Through the main top F and top C is the aperture *d*, into which is inserted the vertical rod or post K, said post being provided on its top with a notch, *i*, or other equivalent device, in which the handles of paint-cans or other articles may be hung, whereby they may be reached when the ladder is in use. This post is easily removable if not needed. It further lends support and assistance when it is desired to mount on top of the ladder.

By having this double ladder it can readily be converted into two single ladders when needed.

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

A step-ladder consisting of front A and back G, having tops C and H, provided with pintles *e'*, and corresponding sockets *e*, whereby said tops are fitted and secured together, the wide main top F, and locking pin or screw J, when arranged substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

WILLIAM H. BRAY.

Witnesses:

S. H. NOURSE,
FRANK A. BROOKS.