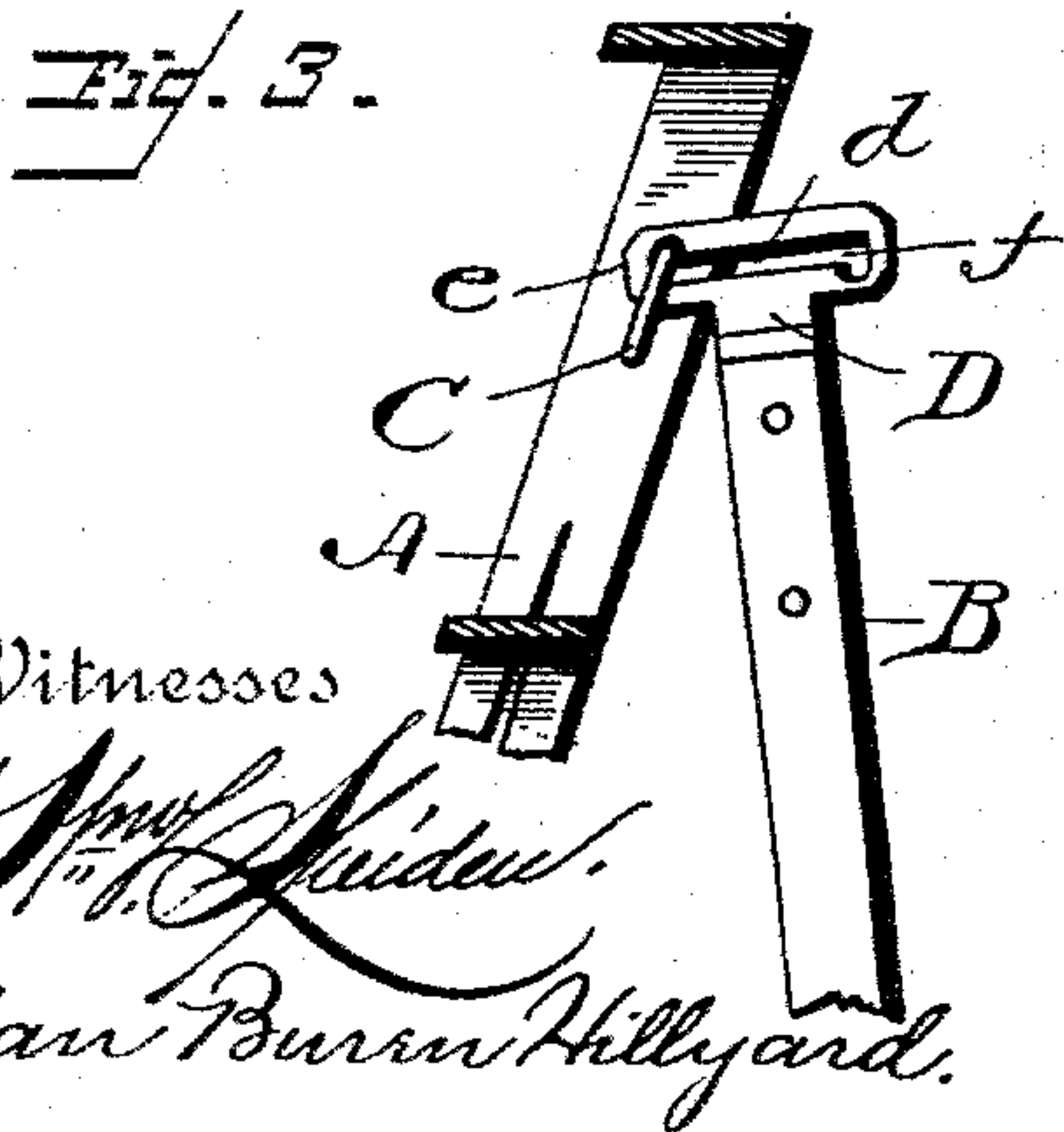
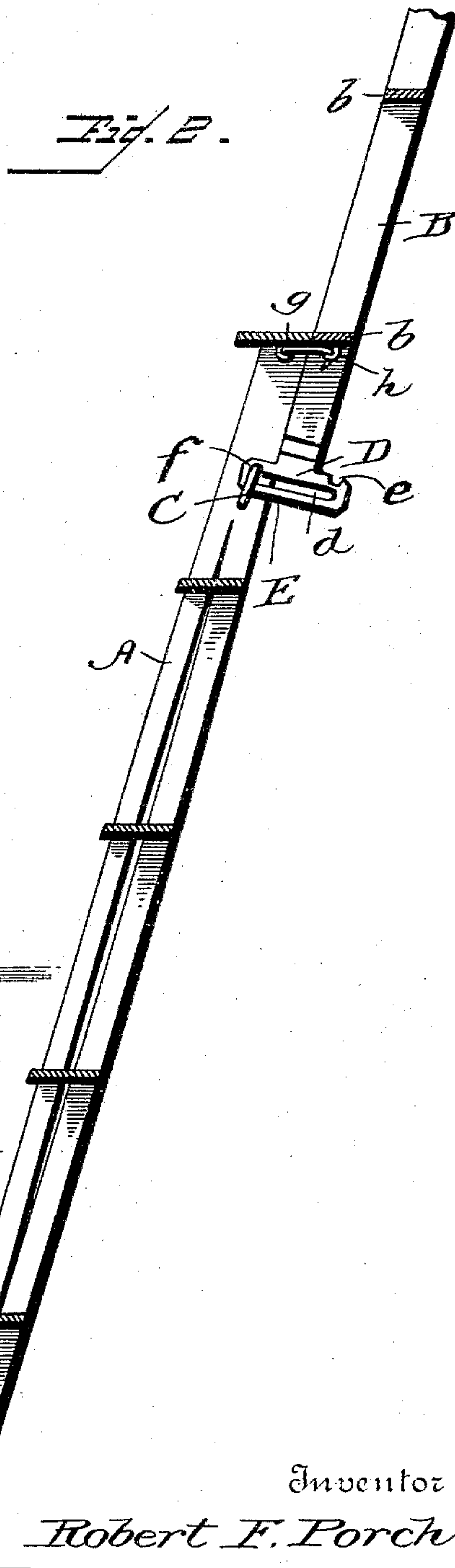
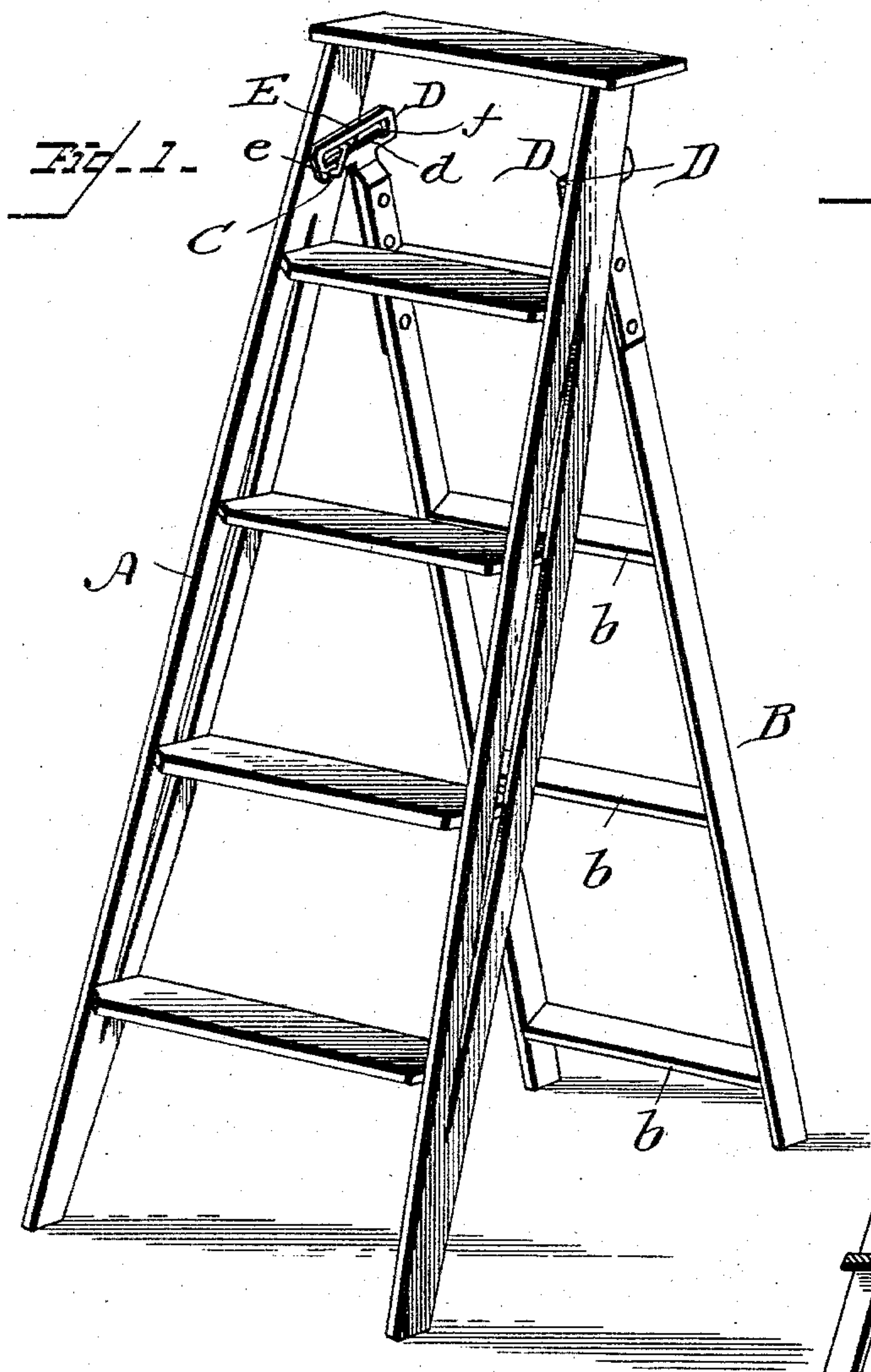


(No Model.)

R. F. PORCH.  
STEP LADDER.

No. 490,042.

Patented Jan. 17, 1893.



Witnesses

*Wm. H. Hillyard.*  
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# UNITED STATES PATENT OFFICE.

ROBERT F. PORCH, OF SPICELAND, INDIANA.

## STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 490,042, dated January 17, 1893.

Application filed May 6, 1892. Serial No. 432,047. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT F. PORCH, a citizen of the United States, residing at Spiceland, in the county of Henry and State of Indiana, have invented certain new and useful Improvements in Step-Ladders; and I 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 10 which it appertains to make and use the same.

This invention relates to step ladders of that class which are adapted to be extended.

The purpose of the invention is simplicity, efficiency and safety to the person using it, 15 as well as convenience in adapting the device for use in its ordinary or extended position.

The improvement consists essentially in a casting at the upper end of the brace section having a transverse slot and retaining notches 20 near the ends of the said casting, and a staple to work in connection with the said casting to secure the brace section in either of its two positions.

The improvement further consists of the 25 novel features and the peculiar construction and combination of the parts which will be hereinafter more fully described and claimed and which are shown in the annexed drawings, in which;

30 Figure 1 is a perspective view of a step ladder embodying my invention. Fig. 2 is a central longitudinal section of the ladder showing it extended, parts being broken away. Fig. 3 is a detail view of a modification.

35 The ladder A is of usual construction and the brace section B which is provided with treads *b*, is connected with the sides of the ladder by means of the castings D and the staples C. The castings D, one for each side 40 piece of the brace section B, are fastened to the said side pieces in any convenient manner, and each is provided with a transverse slot *d* and with retaining notches *e* and *f* near the ends of the casting. The castings 45 are T shaped and the slot *d* is formed in the cross head E.

In Figs. 1 and 2 the notch *e* is formed in the under side of the cross head and the notch

*f* at the rear end of the slot *d*, whereas, in Fig. 3 the notches *e* and *f* are at the ends of the 50 slot *d* and extend in opposite directions. The staple C is constructed to straddle the cross head and is adapted to enter one or the other of the notches and retain the brace section B in the desired position. When the brace section 55 is turned up as shown in Fig. 2, the upper portion of the staple will enter the notch *f* and the said section will rest bracingly against the top step of the ladder A. The hook *g* and the eye *h* serve to hold the brace 60 section B in an extended position.

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

1. A step ladder comprising the ladder A, 65 and the brace section B provided with treads, castings secured to the side pieces of the brace section and having transverse slots and notches *e* and *f*, and staples C provided on the 70 side pieces of the ladder A and adapted to engage with the said castings, substantially as set forth.

2. In a step ladder the combination with the ladder and the brace section, of castings 75 secured to the sides of the brace section and having T-heads which are slotted and provided with notches *e* and *f*, and the staples C secured to the side pieces of the ladder and adapted to engage with the said T-heads, 80 substantially as described.

3. In a step ladder the combination with the ladder and the brace section, of castings 85 secured to the sides of the brace section and having T-heads which are slotted, and having notches *e* and *f* at the ends of the said slots 90 which extend in opposite directions therefrom and staples C secured to side pieces of the said ladder and adapted to embrace a portion of the said T-heads, substantially as shown and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT F. PORCH.

Witnesses:

O. H. NIXON,  
J. C. ANTRIM.