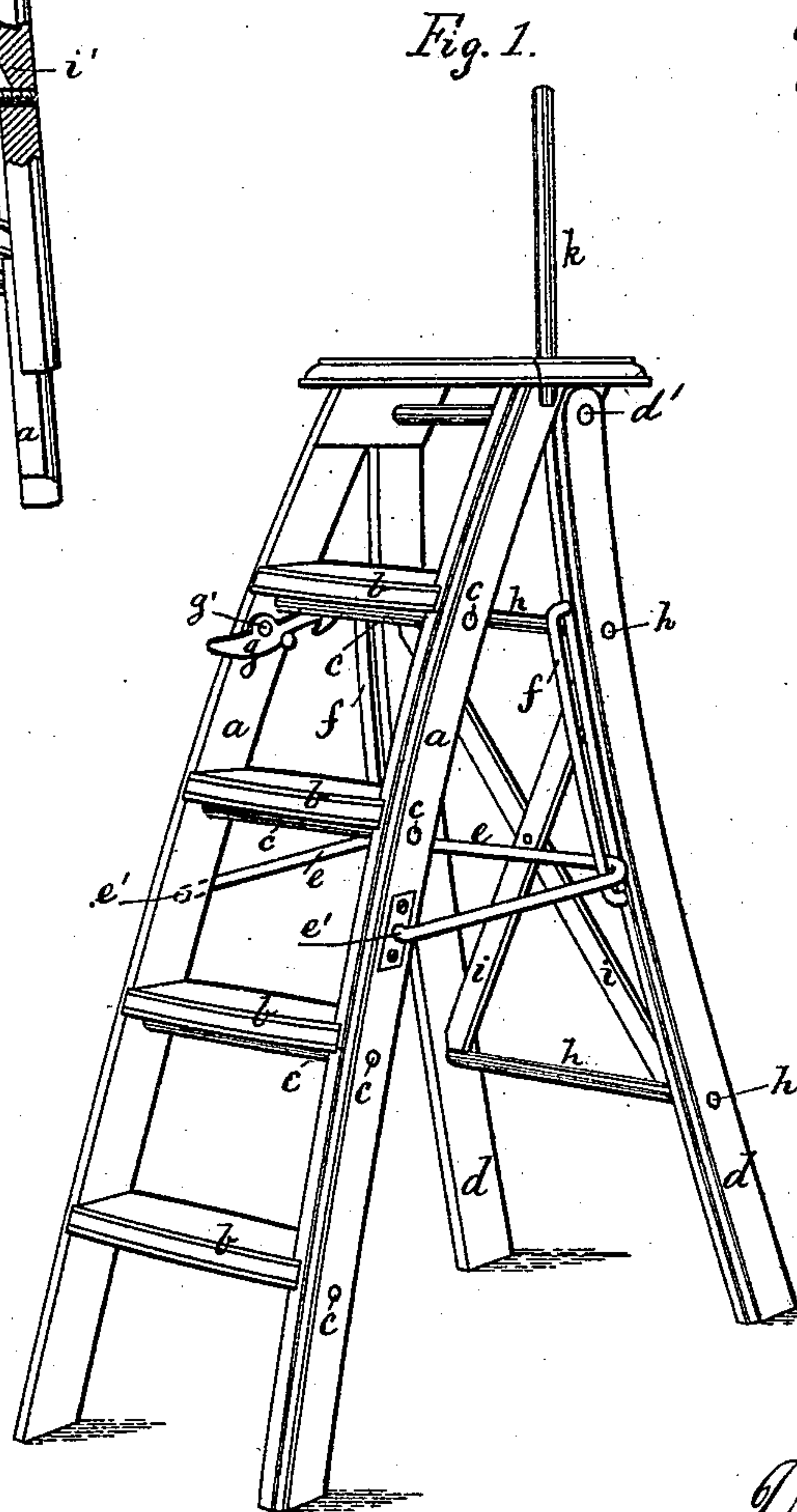
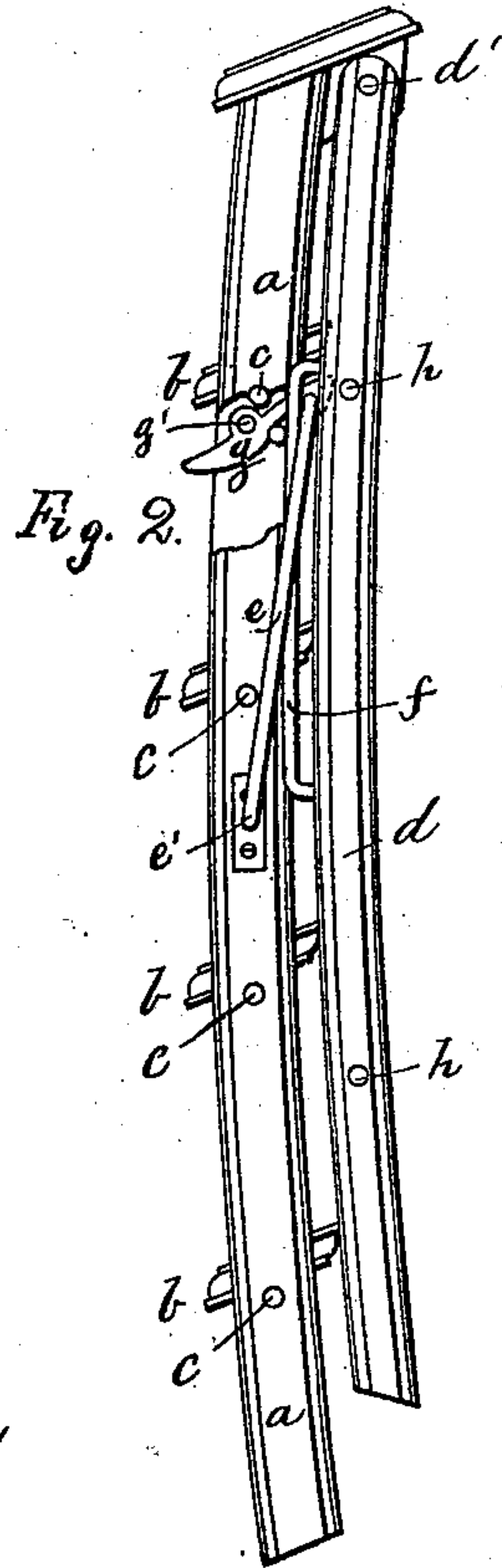
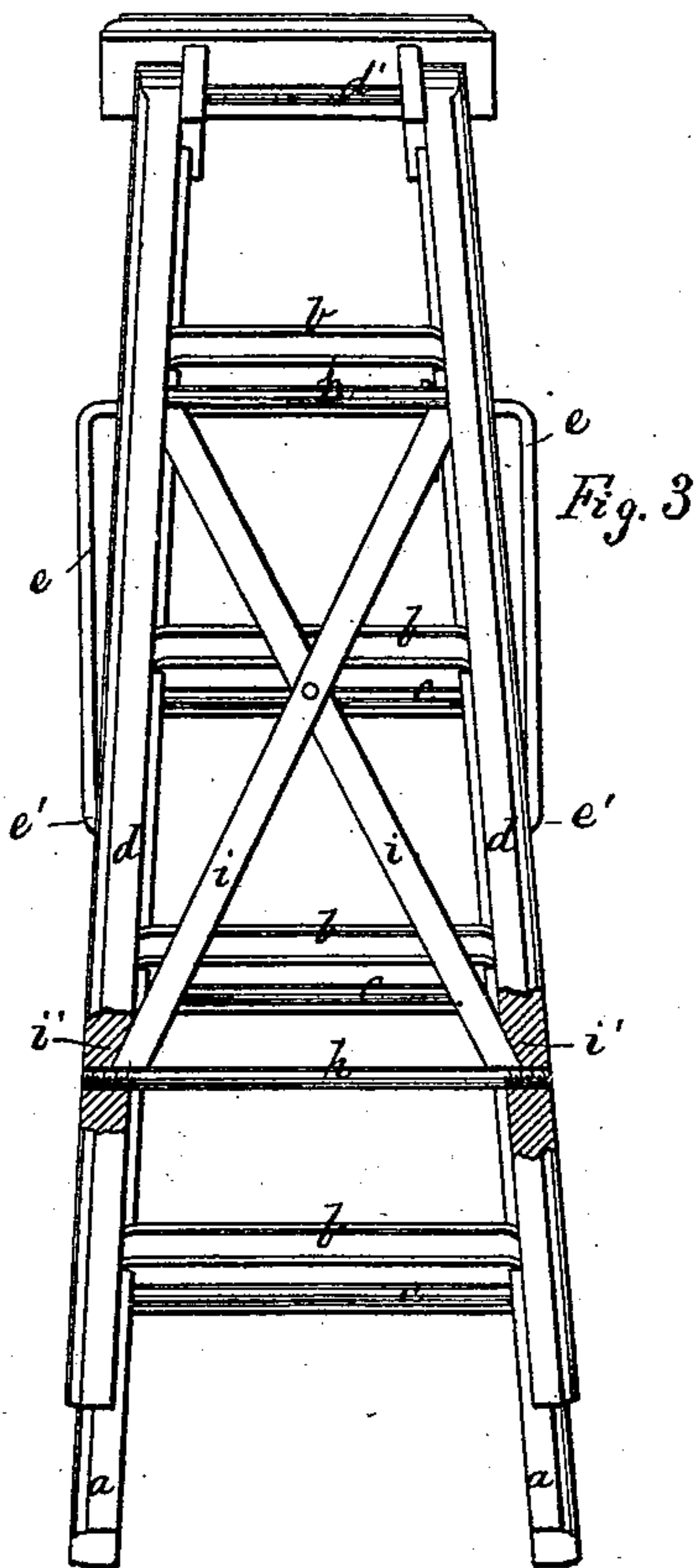


D. C. SMART.
Step-Ladder.

No. 226,935.

Patented April 27, 1880.



Witnesses:

Henry Chadbourn.
J. Allen.

Inventor:

Don Carlos Smart.
by
Alvan Andrews.
his atty.

UNITED STATES PATENT OFFICE.

DON CARLOS SMART, OF CAMBRIDGEPORT, MASSACHUSETTS.

STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 226,935, dated April 27, 1880.

Application filed May 2, 1879.

To all whom it may concern:

Be it known that I, DON CARLOS SMART, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Step-Ladders; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in step-ladders; and it consists, first, of a bail or holder jointed on two opposite sides to the ladder and having its outer end adjustable within a wire guide attached to the standard or legs, which bail, when adjusted to its horizontal position, serves as a holder to prevent the standard from spreading out from the ladder or collapsing toward it, and which, when adjusted to its upright position within the wire guide, is automatically locked to a self-locking lever or hook jointed to the ladder, so as to retain the step-ladder in a closed position when not required for use.

On the accompanying drawings, Figure 1 represents a perspective view of my improved ladder when in an open position. Fig. 2 represents a side view of the same in a closed position; and Fig. 3 represents a rear view of the same, also in a closed position.

Similar letters refer to similar parts wherever they occur on the drawings.

a a are the uprights of the ladder, and *b b b* are the steps, as usual. *c c c* are the round braces secured to the uprights *a a*, and located therein in such a manner as to serve as a rest

or support for each of the steps *b b b*, as and for the purpose set forth.

d d are the legs or standards, jointed at *d'* in their upper ends to the ladder part, in the usual manner. *e* represents the bail or holder, hinged or jointed at *e' e'* to two opposite sides of the uprights *a a*, and having its outer part adjustable within the wire guides *f f*, that are secured to the legs *d d*, as and for the purpose set forth.

g is the hooked lever, hinged to the ladder *a* at *g'*, as shown, for the purpose of retaining the ladder and its legs in a locked position when closed together, as shown in Fig. 2.

The legs *d d* are secured together by means of the rods *h h*, that are screw-threaded in their outer ends and screwed into screw-threaded holes in the standards *d d*, as shown in Fig. 3.

i i are the diagonal braces, having their extreme ends resting within the grooves or recesses *i' i'* in the legs or standards *d d*, and toed against the rods *h h*, as and for the purpose set forth.

k is the detachable staff, inserted, when in use, in a socket or perforation at the upper end of the ladder, for the purpose set forth.

What I wish to secure by Letters Patent, and claim, is—

In combination, the ladder *a a*, hinged standard or legs *d d*, adjustable bail or holder *e*, wire guides *f f*, and the hinged locking-lever *g*, as and for the purpose set forth and described.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

DON CARLOS SMART.

Witnesses:

ALBAN ANDRÉN,
FRANCIS ALLEN.