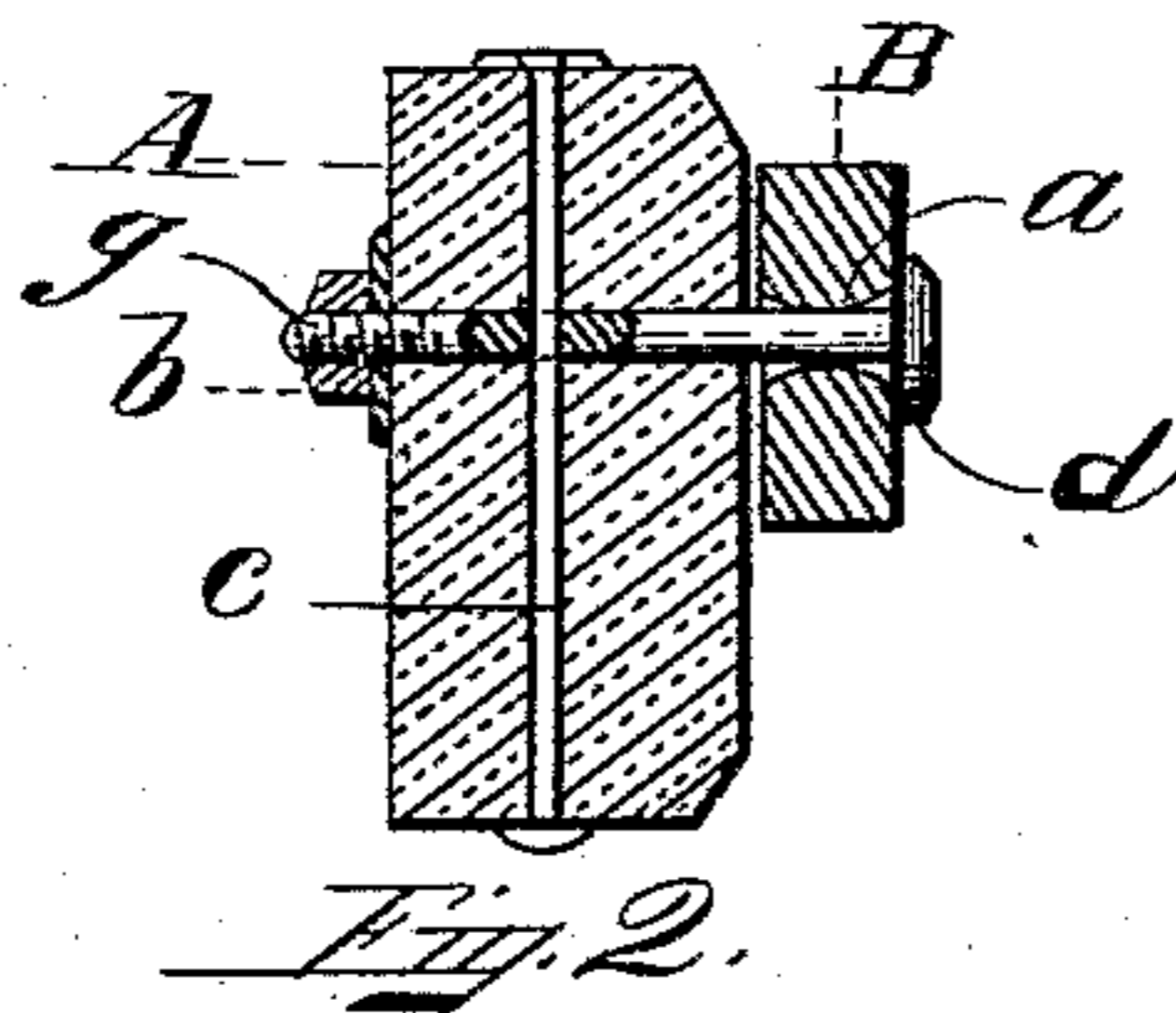
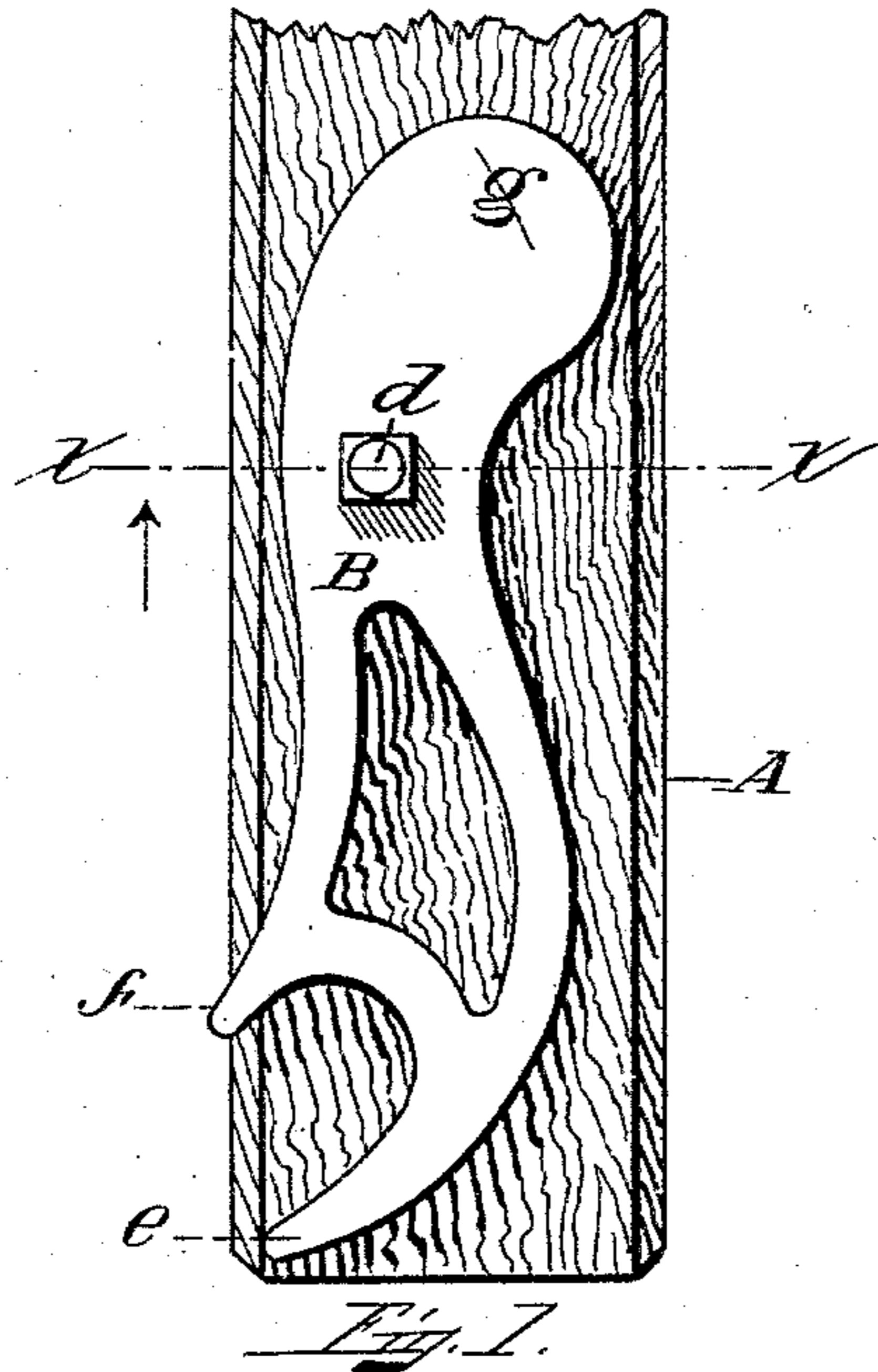


(No Model.)

C. W. H. MOULTON.
EXTENSION LADDER.

No. 556,830.

Patented Mar. 24, 1896.



Witnesses
J. D. Shouder
H. W. Green

Inventor
Charles W. H. Moulton
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UNITED STATES PATENT OFFICE.

CHARLES W. H. MOULTON, OF CAMBRIDGE, MASSACHUSETTS.

EXTENSION-LADDER.

SPECIFICATION forming part of Letters Patent No. 556,830, dated March 24, 1896.

Application filed May 23, 1894. Serial No. 512,196. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. H. MOULTON, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented
5 a new and useful Improvement in Extension-Ladders, which will, in connection with the accompanying drawings, be hereinafter fully described and specifically defined in the appended claim.

10 In said drawings, Figure 1 is a side elevation of a portion of the side of the top section of an extension-ladder and the pawl thereto secured by which said section is supported upon the lower section. Fig. 2 is a cross-section
15 taken on line *xx*, Fig. 1.

This invention relates to the means by which the upper or sliding section of an extension-ladder is held in position upon the lower section of the ladder; and it consists in the
20 means by which the pawl is pivoted upon the ladder side, so that it can always turn readily upon the pivot-bolt by which it is held in place, as will be herein described, and then defined in the appended claim.

25 Referring again to said drawings, A represents the ladder side, and B is the pawl, which engages the rungs of the lower section of the ladder. (Not shown.) Said pawl is the self-acting kind—that is, it is not actuated by
30 springs, but by being so exactly adjusted in its weight upon the opposite sides of its pivot-bolt as to act automatically by its own weight. In order that said pawl shall move upon its said pivot-bolt *g* with the least possible friction, it is requisite that it bear thereon at a
35 small point and that said bolt shall not com-

press it against side A. To effect the first of these results, the hole *a* through said pawl is enlarged from its center outwardly on each side, as shown clearly in Fig. 2, so that said
40 pawl bears upon said bolt only at the center of the pawl, and it is held steady and true between bolt-head *d* and side A, the larger surface of the latter affording a broad support for said pawl; and in order that nut *b*, screw-
45 threaded on said bolt, can be turned up tight and snug and yet not pinch said pawl a rivet *c* passes through side A and bolt *g*, so that said bolt cannot be drawn inward by the action of its nut beyond the intended limit, as
50 already explained. It will thus be seen that pawl B can revolve on bolt *g* with but a minimum of friction, which is at the center of its plane, and that said pawl can be held just as near to side A as desired, and yet the nut *b*
55 cannot by any carelessness in turning it up so pinch said pawl as to interfere with its revolving freely on its pivot-bolt.

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

The combination of ladder side A, the pawl B, its pivot-bolt *g* provided with head *d* and nut *b*, and a rivet *c* passing through side A and said bolt *g* so that said bolt by the action
65 of its nut cannot pinch said pawl between side A and head *d* to prevent free rotation of the pawl, as specified.

CHARLES W. H. MOULTON.

Witnesses:

T. W. PORTER,
M. E. BOWDITCH.