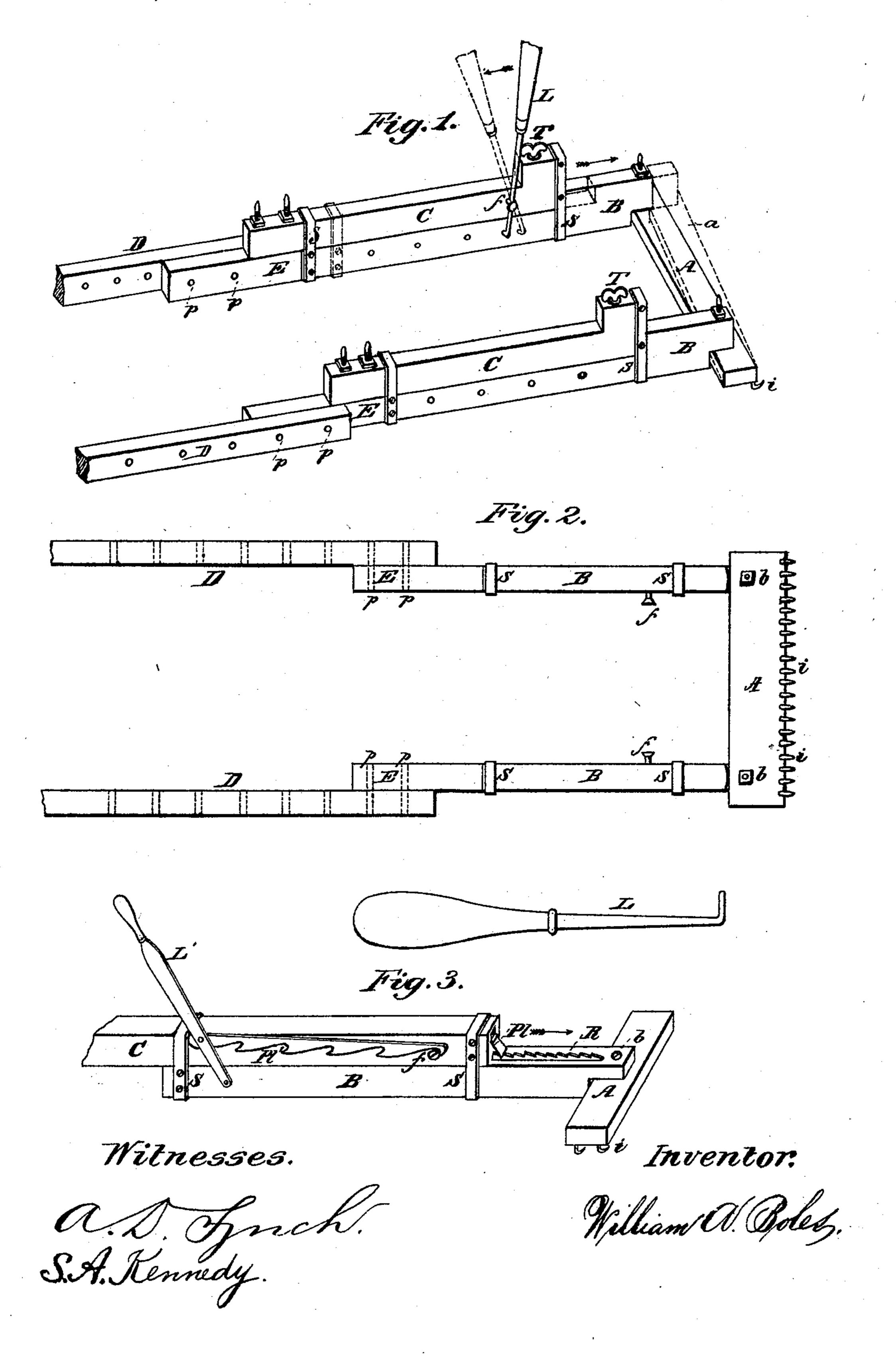
W. A. BOLES. Carpet-Stretchers.

No. 141,418.

Patented August 5, 1873.



UNITED STATES PATENT OFFICE.

WILLIAM A. BOLES, OF SHELBYVILLE, INDIANA.

IMPROVEMENT IN CARPET-STRETCHERS.

Specification forming part of Letters Patent No. 141,418, dated August 5, 1873; application filed May 9, 1873.

To all whom it may concern:

Be it known that I, WILLIAM A. BOLES, of Shelbyville, State of Indiana, have invented a Carpet-Stretcher, of which the following is

a specification:

The object of my invention is to construct a carpet-stretcher in such manner that it will engage and control one entire width of a strip of carpet at once by means of toothed headpiece A, and at the same time apply extension at either edge thereof through the instrumentality of a lever, L, operating two extension bars, B, alternately or simultaneously, and thereby stretch the carpet uniformly, and hold it evenly until secured by tacks, staples, or hooks to the floor.

The details of my invention are illustrated in perspective and plan in the drawing, Figures 1 and 2, the latter being a plan of my invention bottom side up. Fig. 3 illustrates a design for ordinary family use, with one pair

of bars.

The head-piece A must be stout enough to not warp or spring under the necessary strain, and long enough to span one entire width of carpet. The teeth i for penetrating the carpet are inserted or secured to its lower front edge, as shown in Fig. 2. A is then firmly bolted or hinged, near the ends, to the sliding sections B of the adjustable extension bars. This connection of A to B must be strong, and so as to allow a free vibration of A at either end, as seen in the dotted lines a_i Fig. 1. The sliding sections B of the extension bars are held in apposition to sections C by metal stirrups S, one stirrup on either side permanently attached to B and the other to C. Fulcrum f is attached to the inside face of C, and against it the lever L rests when used to thrust B forward. Thumb-screws T, Fig. 1, pass through C and impinge upon B, and serve to hold B at any point desired. The supplemental bars E may be of any dedesired length, and are firmly bolted to the lower face of C, in rear of B, and to which the long bars D are temporarily doweled by -the pins p.

The object of attaching bars E in the manner here shown is that bars D may be brought

in line with B upon the floor, and thus obviate any upward strain or flection of the bars D and C, which would result if they were di-

rectly attached.

The bars D must be long enough when joined to E to reach the opposite side of a room. They are perforated with holes at regular intervals for the purpose of adjustment of the instrument to smaller rooms. When the machine is adjusted to small rooms the bars D lap on B, the pins p fitting and entering any of the dowel-holes requisite to the adjustment.

The lever L may be of any required length. Its short arm, standing at a right angle to the long arm, enters any of the holes in B, as shown in Fig. 1, while the lever proper rests

against the fulcrum f.

The dotted lines at L show the manner of operation in making a forward thrust, and those at a show the forward movement of one end of A, independent of the other, carrying that side or edge of the carpet with it. After one side is set forward, and secured by running down thumb-screw T, lever L is moved to the other side, and the same operation gone through there; and so on until a proper tension is reached of all parts of the carpet-strip.

A cam secured in jaws formed by extending the sides of the forward stirrup S above C may be substituted for the thumb-screws T. A ratchet-bar secured to C and a short pawl attached to lever L to engage in said bar may be substituted for fulcrum f and the holes in B for purposes of extension; or a ratchet-bar, R, Fig. 3, inserted in a slot in the middle of B, under C, and a short pawl, Pl, at the forward end of C, may be substituted for the thumb-screws T. The lever L' may also be permanently secured in the rear hole of B on each pair of bars, and a toothed pawl, Pl', attached to operate over the fulcrum f.

One pair of extension bars may be used, as in Fig. 3, leaving the head-piece A unbraced and free to vibrate on b, to accommodate itself to the equal strain of the carpet.

The short arm of lever L may be made with

a square face, and of sufficient weight to be used for driving tacks, and thus simplify the operation, only requiring the holes in B to be made larger to admit this hammer-end of lever L.

What I claim as my invention is—

The combination, in a carpet-stretcher, substantially as shown, of two adjustable exten-

sion bars, composed of sections B C D E, secured to the ends of dental bar A, and operated by lever L, or by L' and notched pawl Pl', for the purposes set forth.

WILLIAM A. BOLES.

Witnesses:

A. D. LYNCH, S. A. KENNEDY.