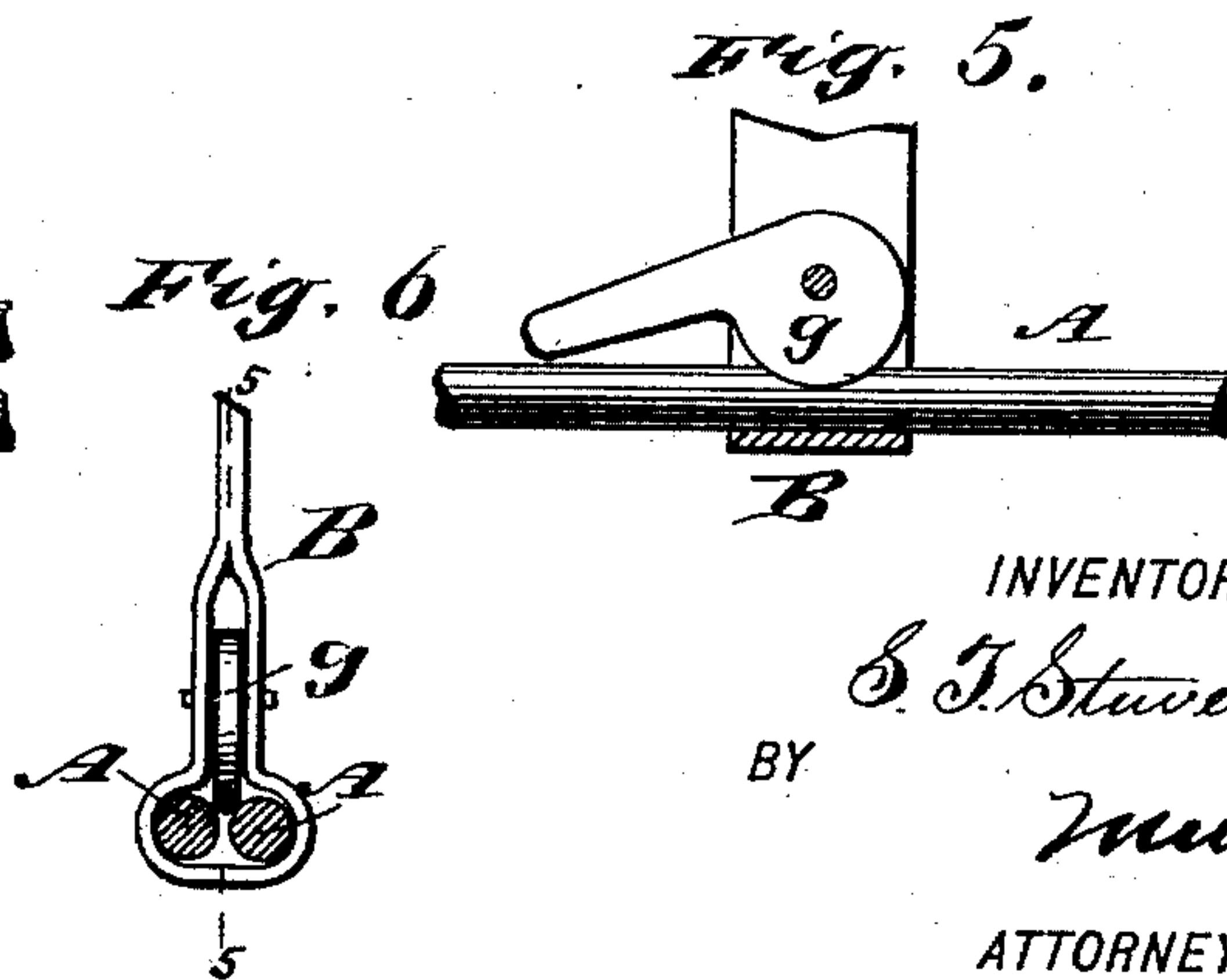
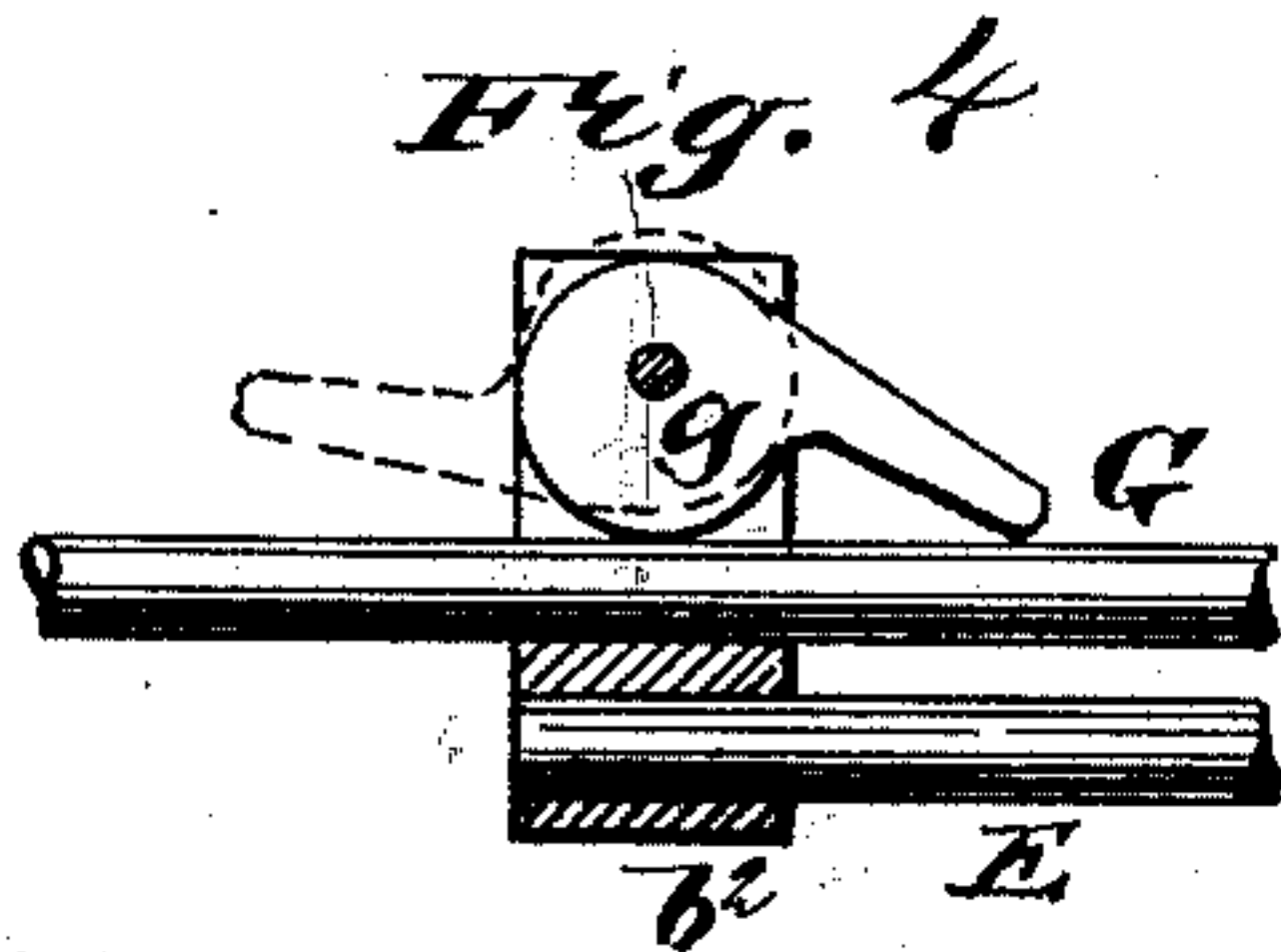
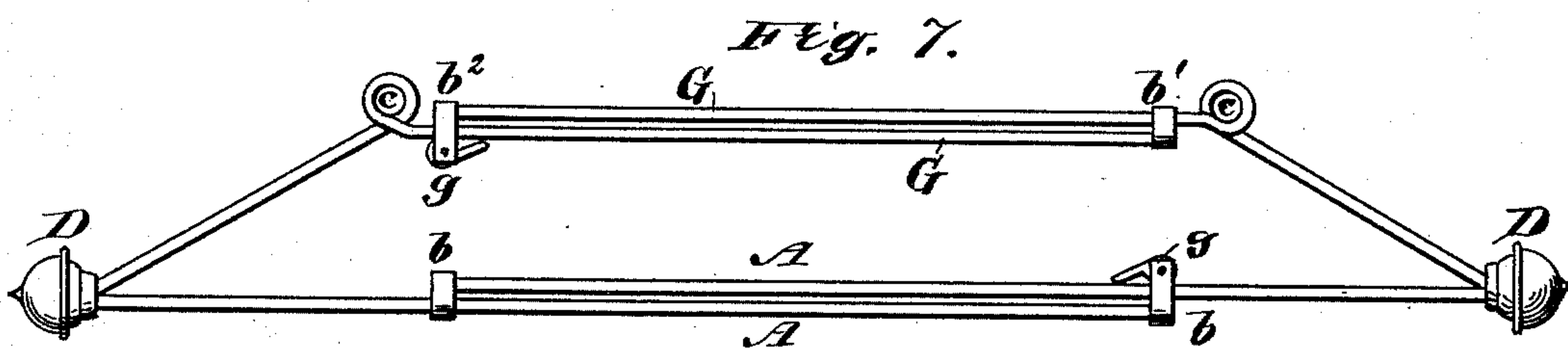
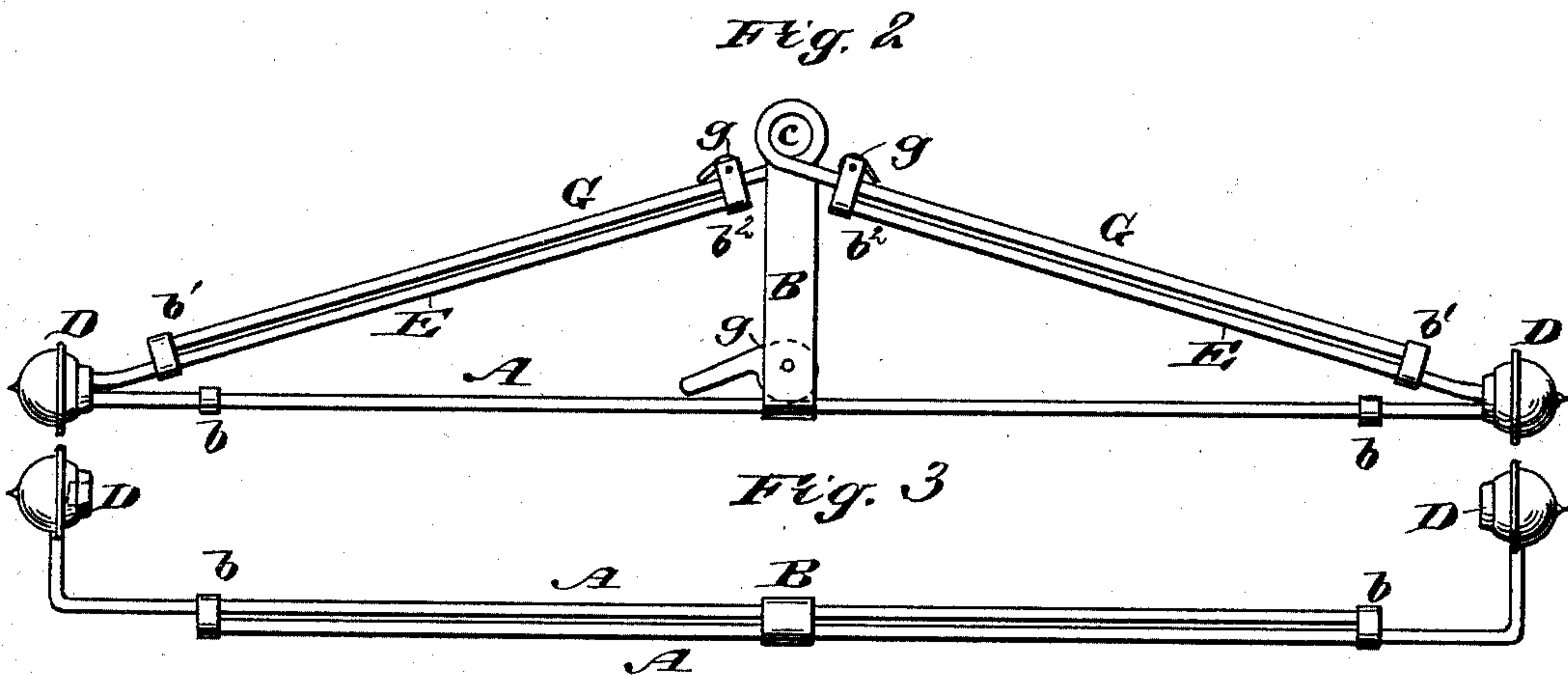
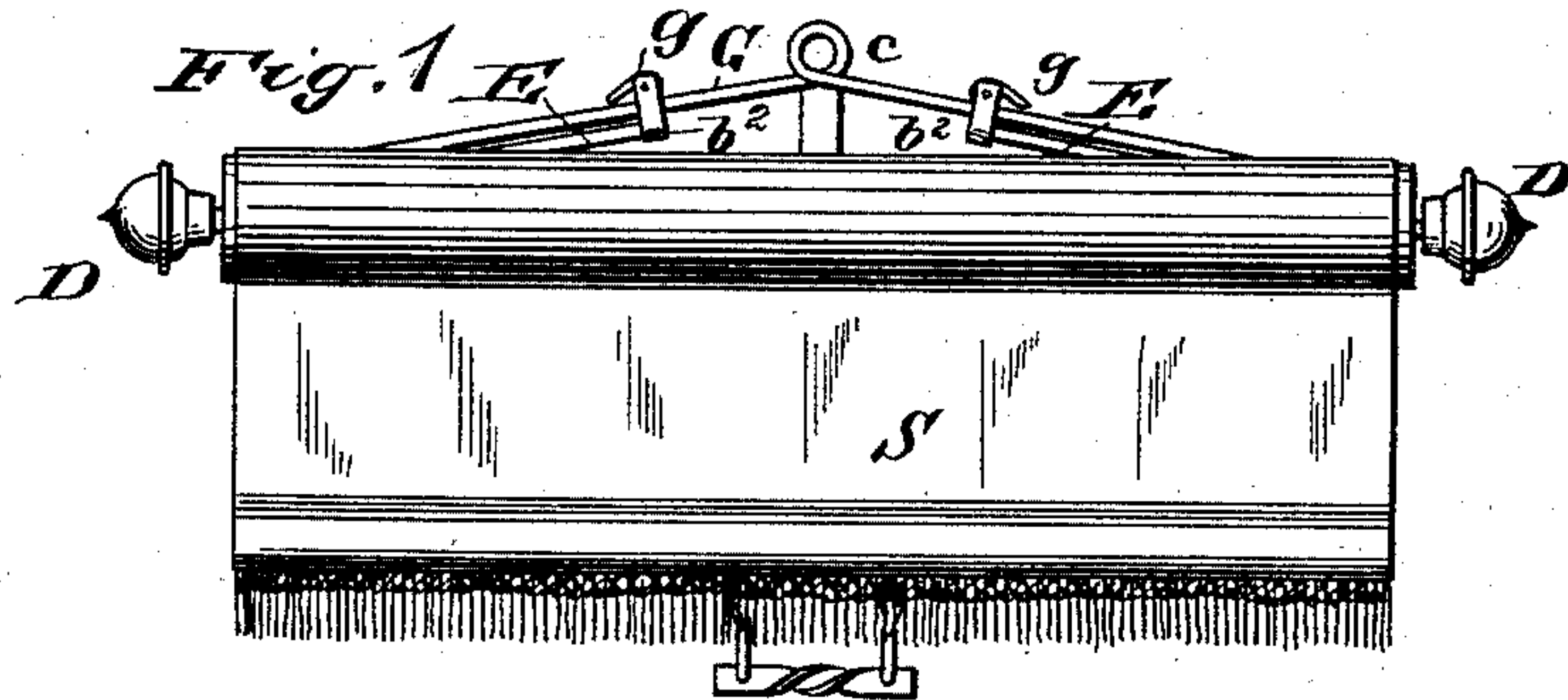


(No Model.)

S. T. STUVER.
WINDOW SHADE SUPPORTER.

No. 483,796.

Patented Oct. 4, 1892.



WITNESSES:
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STEPHEN T. STUVER, OF PUYALLUP, WASHINGTON.

WINDOW-SHADE SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 483,796, dated October 4, 1892.

Application filed June 1, 1892. Serial No. 435,188. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN T. STUVER, of Puyallup, in the county of Pierce and State of Washington, have invented a new and useful Improvement in Window-Shade Supporters, of which the following is a full, clear, and exact description.

This invention consists in a novel construction and combination of parts in an adjustable window-shade supporter adapted to accommodate different sizes and widths of shades, the whole forming a truss-frame constructed in sections fitted to slide one upon the other, substantially as hereinafter described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a front or inner face view of a window-shade supporter embodying my invention, together with a window-shade and its roller applied thereto. Fig. 2 is a like view to Fig. 1 with the shade and its roller removed; Fig. 3, an inverted plan of the same in part. Figs. 4, 5, and 6 are partly-sectional views in illustration of certain details hereinafter described, Fig. 5 being a vertical section upon the line 5 5 in Fig. 6; and Fig. 7 is a face view showing a modified construction of the window-shade supporter.

My improved window-shade supporter, which is mainly made of stout wire, is more especially designed for carrying spring-roller window-shades and will here be described accordingly. Its main object is to provide in an easily-adjustable and secure manner for the application of the device to windows and shades of different sizes and widths, and so that when the shade is in place on the supporter and is pulled or drawn down it will hang straight with the window-casing.

Referring in the first instance or more particularly to the first six figures of the drawings, A A are two lower horizontal wires or rods arranged one in front of the other and fitted to slide, as by clips or guides *b b*, simultaneously in reverse directions one along the other and through a central upright brace B, which is provided at its top with an eye *c* to centrally suspend the supporter from the window-casing, so as to insure the shade S hanging, when pulled down, straight with the win-

dow-casing. The longitudinal lower wires or rods A A are bent forwardly at their outer ends and there rigidly united with knobs D D, constructed to form sockets for the support and rotation of a spring-window-shade roller, to which the shade S is secured in the usual or any suitable manner. Secured to the outer ends of the wires A A, at the roller-sockets D D, are other and upper wires or rods E E, inclining upwardly in reverse directions, respectively, toward the vertical central brace B, and above these wires E E and angling in like directions with them and in proximity to them is another wire or rod G, firmly connected with the top of the brace B and twisted at its junction therewith to form the suspension-eye *c* of the shade-supporter. The wires or rods E E are connected in a longitudinal sliding manner with the rod G by means of clips or guides *b' b'*, fast on the outer ends of the rod G and inner ends of the rods E E, respectively, to admit of said rods E E longitudinally sliding in concert with the lower pair of rods A A when it is required to lengthen or contract the shade-supporter to adapt it to different lengths of shade-rollers and different widths of window-shades. It will accordingly be seen that the adjustable window-shade supporter is composed of a truss-frame constructed in sections fitted to slide one upon the other to be contracted or expanded, as required, and which by virtue of its truss construction will combine lightness with freedom from sagging when pulling down on the shade. To give increased stiffness, however, to said frame and to bind or secure its sliding sections as adjusted lengthwise in relation to each other, locking-cams *g*, provided with suitable handles for operating them, are applied to the sections of the truss-frame—as, for instance, one to the clips or guides *b'*, fast on the inner ends of the wires or rods E E to bind the latter to the rod G and another on the brace B to bind on the wires or rods A A, or either of them. When these cams are released, then the sections of the truss-frame are free to be slid one upon the other to lengthen or shorten the shade-supporter, as required.

The modification shown in Fig. 7 is substantially of the same construction and shows the shade-supporter as made of sections fitted

to slide one upon the other; but in this the vertical central brace B is dispensed with, the lower wires or rods A A are arranged one above the other and fitted to slide one over
5 or along the other by means of clips or guides *b b*, fast on the inner ends of said rods, respectively, with a locking-cam *g* applied to one of said clips or guides, and only two upper wires or rods G are used and fitted to
10 slide one upon the other by means of clips or guides *b' b'*, fast on the inner ends, respectively, of said rods, and one of which is provided with a locking-cam *g*. These upper rods are made straight for a portion of their
15 length to provide for their sliding action the one over the other and are twisted intermediately of their length to form two suspension-eyes *c*, and from such points incline downward to join at their outer ends the sockets
20 or knobs D D, to which also the outer ends of the rods A A are secured. The action or operation is the same as in the other form of the shade-supporter shown in the other figures of the drawings.

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

1. An adjustable window-shade supporter composed of a truss-frame constructed in sections fitted to slide one upon or along the
30 other and made up of an upper and lower series of wires, clips or guides adapted to provide for such sliding action, locking devices

mounted on the clips or guides and engaging the wires to secure them when adjusted, knobs
35 or sockets at the ends of the wires and adapted to carry the shade-roller, and one or more upper suspension-eyes adapted to insure the straight hang of the window-shade, substantially as described. 40

2. An adjustable window-shade supporter composed of a stationary wire G, having an eye *c* and inclined downward in opposite directions from the eye, rods E, parallel with the inclined ends of wire G, clips *b' b'*, forming a sliding connection between said wires,
45 parallel wires A A, sliding upon each other, and shade-roller supports D, connected to the outer ends of wires A A E E, substantially as set forth. 50

3. An adjustable window-shade supporter composed of a stationary upper wire having a suspension-eye, sliding wires parallel with said stationary wire, guides or clips uniting said wires, lower sliding wires, roller-supports
55 connecting the outer ends of the upper and lower sliding wires, a central clip B, secured to the upper stationary wire and through which the lower wires slide, and a clamping-lever pivoted to said clip and locking the lower
60 wires, substantially as set forth.

STEPHEN T. STUVER.

Witnesses:

J. W. STUVER,

E. H. PERRY.