

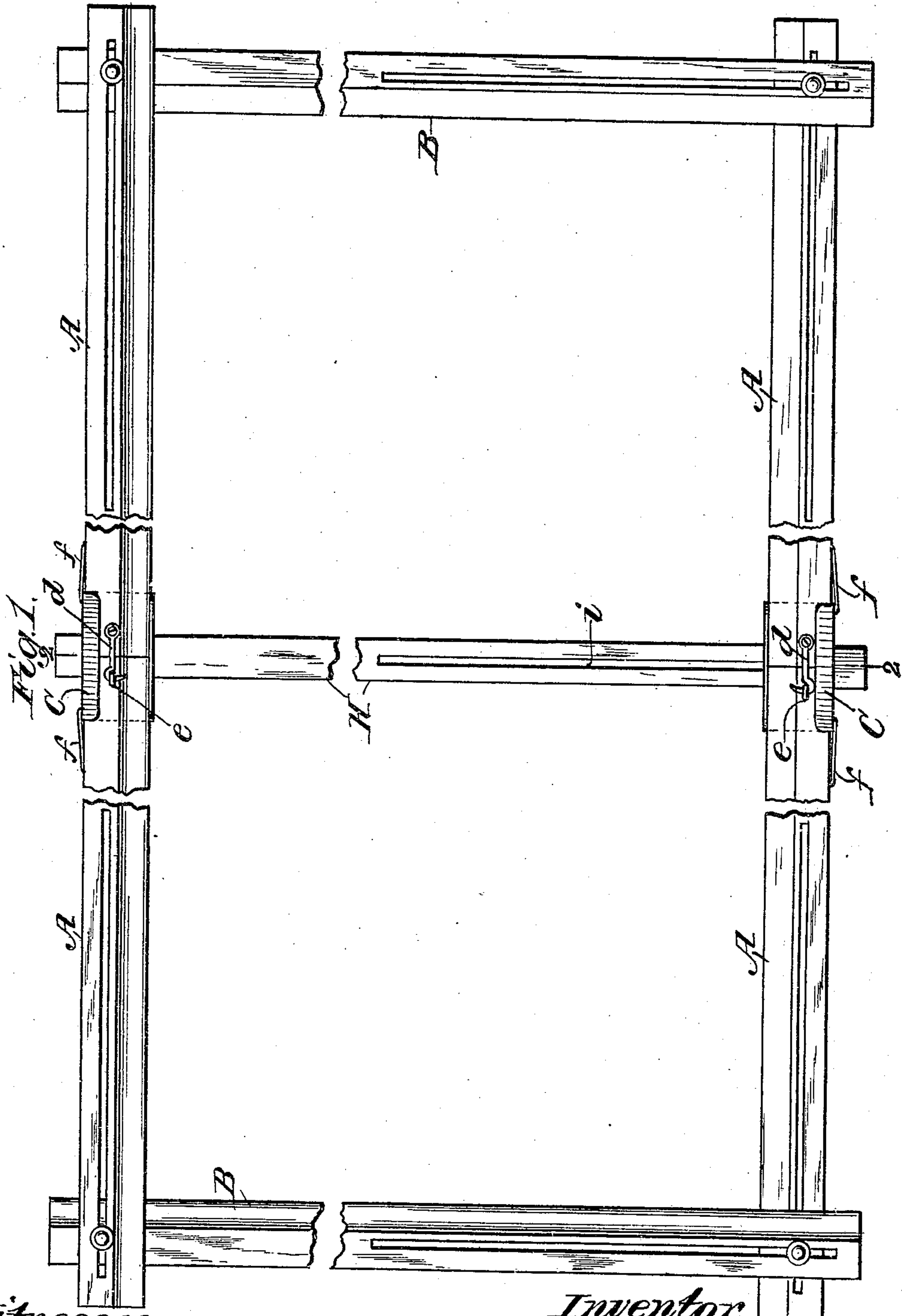
No. 855,908.

PATENTED JUNE 4, 1907.

H. E. SOUTHWORTH.
CURTAIN STRETCHER.

APPLICATION FILED MAR. 22, 1907.

2 SHEETS—SHEET 1.



Witnesses.
Robert Conitt,
Chas. Lee Helms

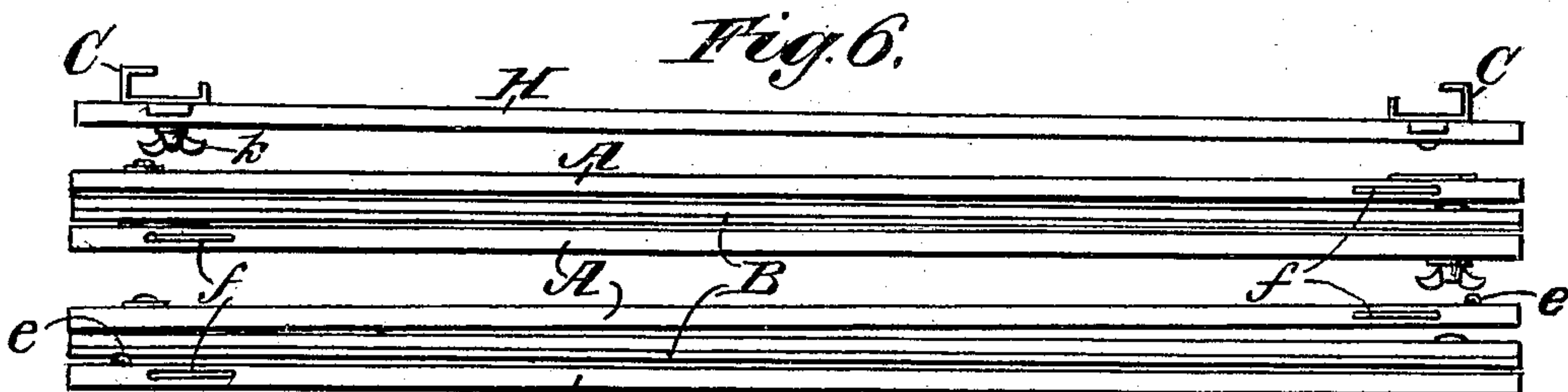
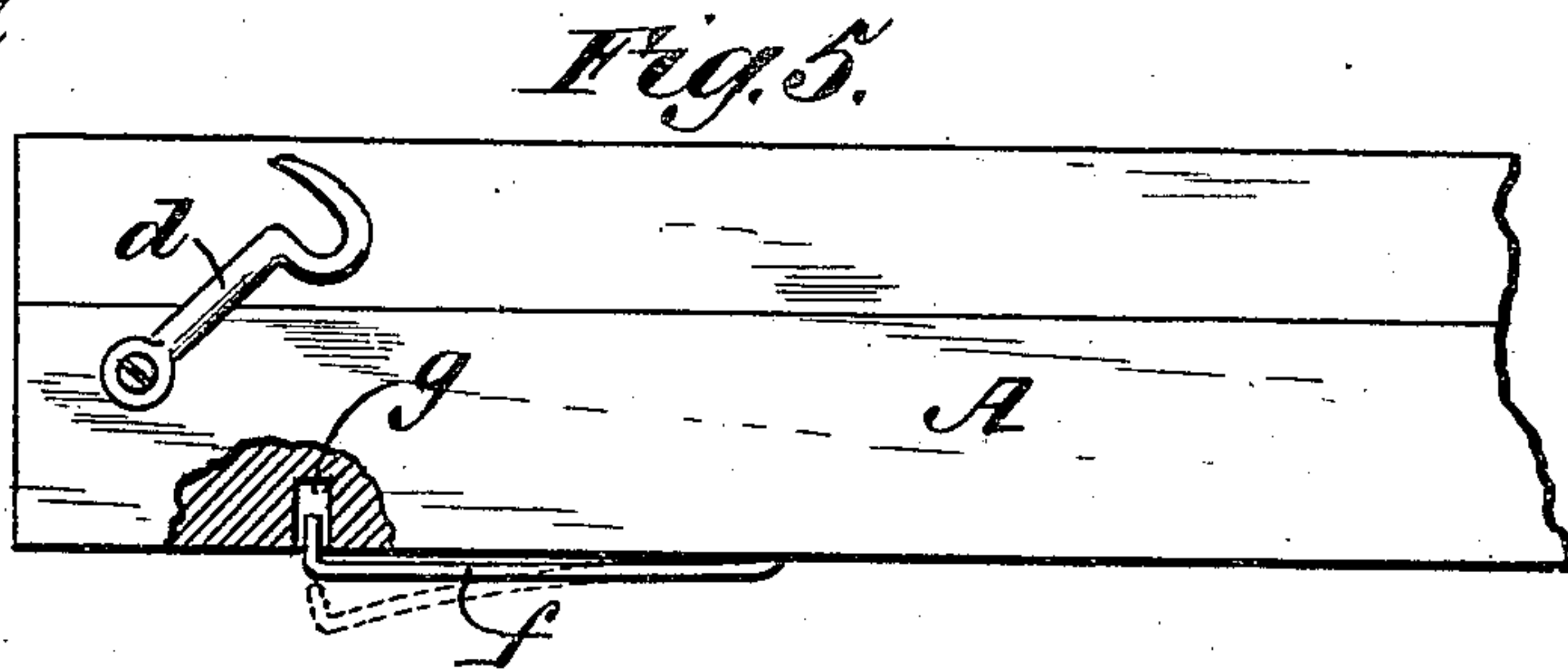
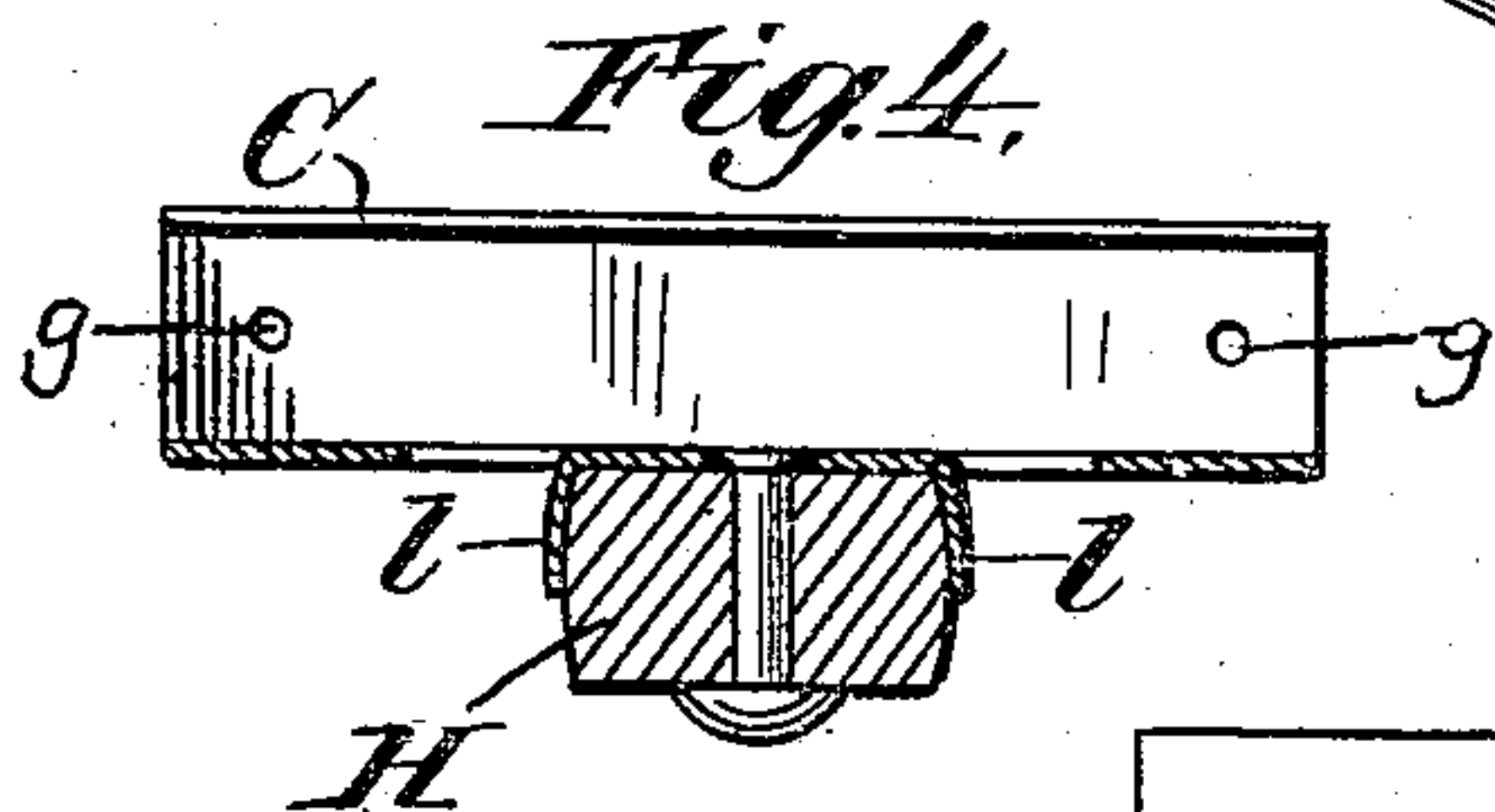
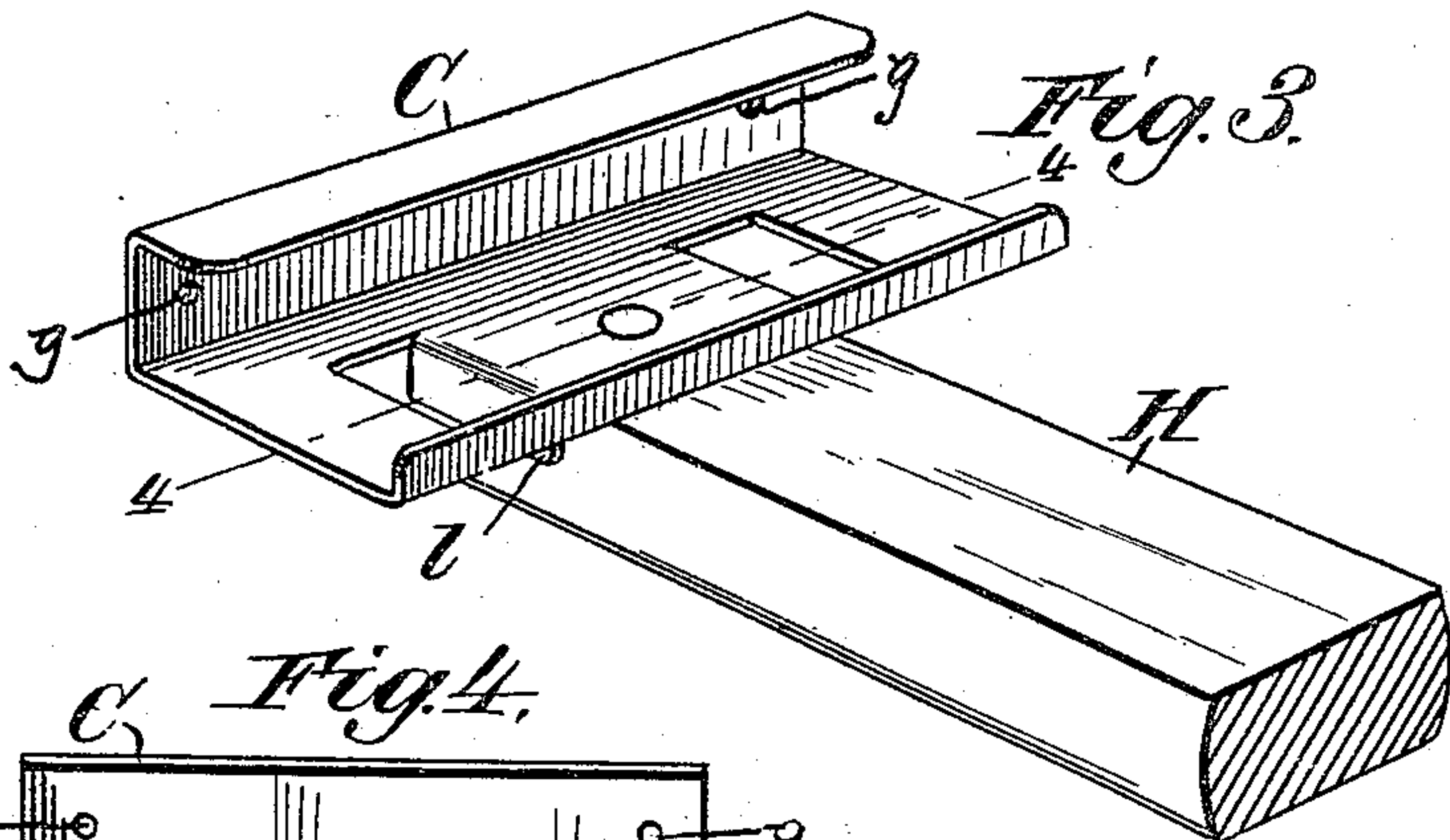
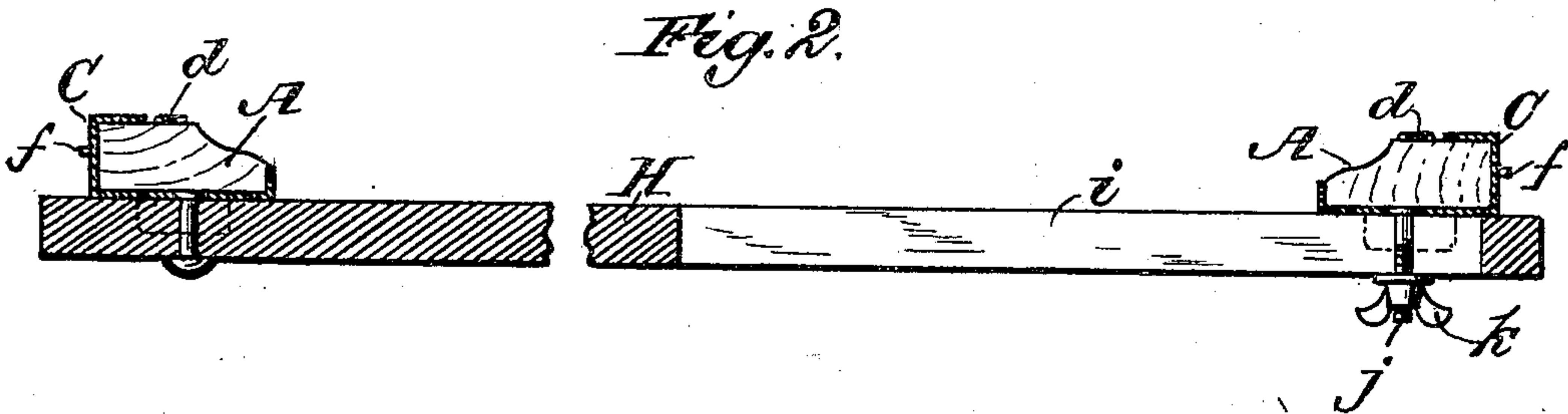
Inventor,
Henry E. Southworth.
By Marshall Bailey
his Atty.

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2 SHEETS—SHEET 2.



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Robert Corbett
Th. Lee Adams

Inventor,
Henry E. Southworth.
By Marcus Bailey
his Atty.

UNITED STATES PATENT OFFICE.

HENRY E. SOUTHWORTH, OF COLCHESTER, VERMONT, ASSIGNOR TO PORTER
SCREEN MANUFACTURING COMPANY, OF BURLINGTON, VERMONT.

CURTAIN-STRETCHER.

No. 855,908.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed March 22, 1907. Serial No. 363,845.

To all whom it may concern:

Be it known that I, HENRY E. SOUTHWORTH, a citizen of the United States, residing in Colchester, in the county of Chittenden and State of Vermont, have invented a new and useful Improvement in Curtain-Stretchers, of which the following is a specification.

This invention relates to that class of curtain stretchers in which the side rails are composed each of two sections; and a center brace, extending across between these rails, is employed to stiffen the frame and prevent it from sagging.

Under my invention the two sections of which each side rail is composed are not hinged together, as has been usual heretofore, but are held together solely by means of a sleeve-like socket in which their abutting ends fit and are housed. The socket—preferably made of sheet steel—is in fact a close-fitting sleeve having a longitudinal opening to expose the rabbeted portion of the rail in which the stretcher pins are located. It is also a short socket, its length being about double the width of the rail, for purposes hereinafter indicated.

The abutting ends of the rail sections may be detachably held together in the socket in which they are fitted by any suitable fastenings. I prefer to provide a separate and independent fastener for each section, by which it may be detachably secured to its socket.

The center brace extends across between, and is secured to, the two sockets, it being longitudinally slotted at one end to receive a bolt and wing nut by which it is held at this end to the socket in such manner as to permit its adjustment to varying widths of frame, as customary in this class of stretchers. Upon each socket are two projections—preferably formed as ribs or flanges—between which the ends of the center brace fit and by which they are laterally embraced, the parts mutually sustaining one another and forming a practically rigid construction.

In the accompanying drawing, to which I will now refer for a more complete understanding of my invention—Figure 1 is a view of a curtain stretcher frame embodying my invention—the side and end rails, and center brace, being partly broken away in order to bring the frame within the limits of

the sheet without representing the parts upon too small a scale. Fig. 2 is a section on line 2—2 Fig. 1. Fig. 3 is a perspective view of one of the sockets, together with the end of the center brace attached to the same. Fig. 4 is a section on line 4—4 Fig. 3. Fig. 5 is a view representing the spring catch or detent by which each rail section may be detachably connected to its socket. Fig. 6 represents the frame folded for storage or transportation.

The stretcher frame consists of side rails A and end rails B united at the corners of the frame, where they overlap, by the usual slot, bolt and wing nut connections to permit of the adjustments requisite to vary the length and width of the frame. The front face of the rails along the inner edge is rabbeted, as customary, to receive the stretcher pins.

The side rails A consist each of two separate and disconnected sections, put together end to end.

The sleeve-like sockets, in which the abutting ends of the side rail sections are received and held, are shown at C. As before said, they are preferably made of sheet steel; and they are so fashioned that they closely embrace the rail sections on practically all four sides—the only exception being that they are open along the rabbeted portion of the sections where the stretcher pins are located.

To prevent the meeting ends of the sections from accidentally separating or drawing out from their socket, I may use any suitable means for detachably connecting them either directly together, or indirectly together through the intermediary of the socket to which they may be secured each independently of the other. I have shown both ways in the drawing. The direct connection between them is made by a hook *d* on the one, which is adapted to engage an eye *e*, on the other. The independent connection of each to the socket, is made by a spring catch or detent *f* on each section, the end of which springs into registering holes *g* in the section and socket when the section is in proper place therein, as indicated more plainly in Figs. 1, 4 and 5. To detach the section from the socket all that is needed is to draw back the catch, as indicated in dotted lines in Fig. 5. Both of these styles of fastening can be used together, or either one can be used to the exclusion of the other. I

prefer, as before said, the independent spring catch for each section.

The center brace is shown at H as extending between, and fastened to, the sockets. It is riveted to one socket and is adjustably connected to the other by the usual slot and bolt and wing clamping nut connection—*i* being the slot in the brace, *j* the bolt attached to the socket and passing through the slot, and *k* the clamping nut.

The ends of the center brace which lie flat upon the rear outer face of the sockets, fit between the flanges *l* on the sockets, formed by punching them out from the body of the sockets and then bending them rearwardly. These flanges embrace and bear against the center brace from opposite sides, and prevent any swiveling movement of the sockets relatively to the brace, forming in this respect a practically rigid construction.

In the extended frame shown in Fig. 1, the ends of the top side-rail lap over upon the upper ends of the end rails B, while the lower ends of the latter rails lap over upon the ends of the bottom side-rail. This mode of assembling the parts (which is permitted by my invention) has its advantages. To fold the frame, all that is needed is first to withdraw the side rail sections from their sockets, which will result in dividing the frame into halves, and then to fold together the three parts of each half, one on top of the other, as indicated in Fig. 6,—which, owing to the overlapping arrangement, can be readily done. Thus the frame is folded compactly without disturbing a bolt or nut, and without any change in the relations of the sockets to the center brace. On the other hand to set up the stretcher, the operation is reversed—the rails of each half of the frame are unfolded, and the ends of the side rail sections are inserted in their appropriate sockets, all of which can be done without the removal or loosening or tightening of a single bolt or nut.

The sockets are at all times carried by the

center brace, and, as indicated, are adjustable thereon one relatively to the other, to adapt them to any width of frame. In length they do not exceed about twice the width of the rail, so that when the two halves of the frame are folded, and laid together, the center brace can be packed with them. It is customary in doing this to place the two folded sections side by side, and to place the center brace on top of them in which position the sockets C on its opposite ends will not protrude beyond the sides of the bundle.

Having described my improvement and the best way now known to me of carrying the same into practical effect, I state in conclusion that I do not limit myself strictly to the structural details hereinbefore set forth inasmuch as the same can be varied to some extent without departure from the spirit of the invention; but

What I claim as new in a curtain stretcher of the kind herein described is as follows:

1. A curtain stretcher comprising a center brace; short sleeve-like sockets C secured to and carried by the center brace, adjustable one to and from the other thereon, and having each a longitudinal slot or opening on top adjoining the inner edge; sectional side rails composed each of two separate and independent sections fitted and detachably held together end to end in said sockets and individually removable therefrom; and end rails adjustably secured to the side rails—as and for the purposes hereinbefore set forth.

2. The center brace, and the sleeve-like sockets C secured to the same and provided with flanges *l* between which the ends of the center brace are received, substantially as hereinbefore set forth.

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

HENRY E. SOUTHWORTH.

Witnesses:

L. WINTERBOTTOM,
JAMES O. WALKER.