

No. 835,336.

PATENTED NOV. 6, 1906.

J. C. WAGNER.
CURTAIN STRETCHER FRAME.

APPLICATION FILED MAY 20, 1905. RENEWED MAY 2, 1906.

Fig. 1.

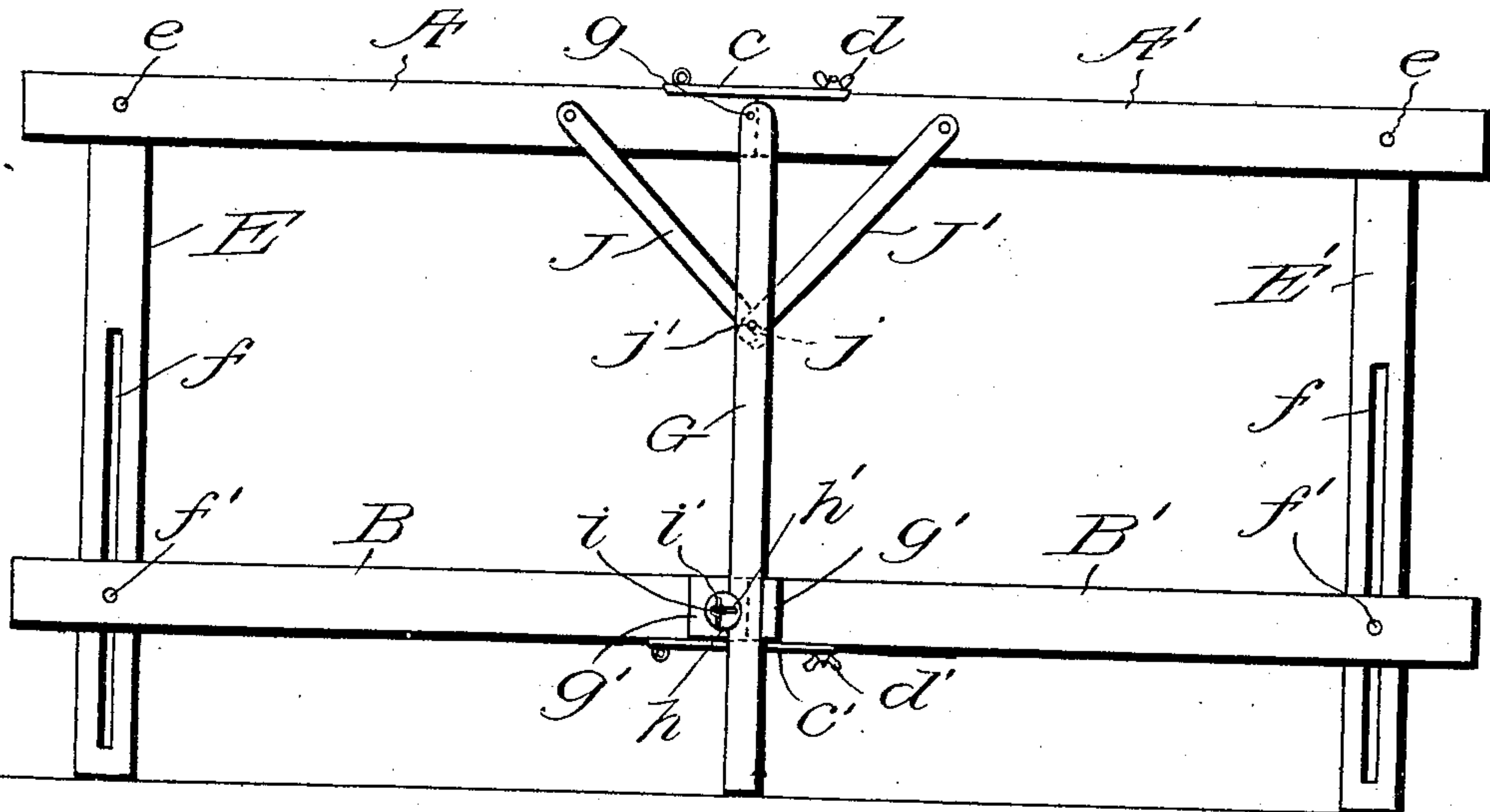


Fig. 2.

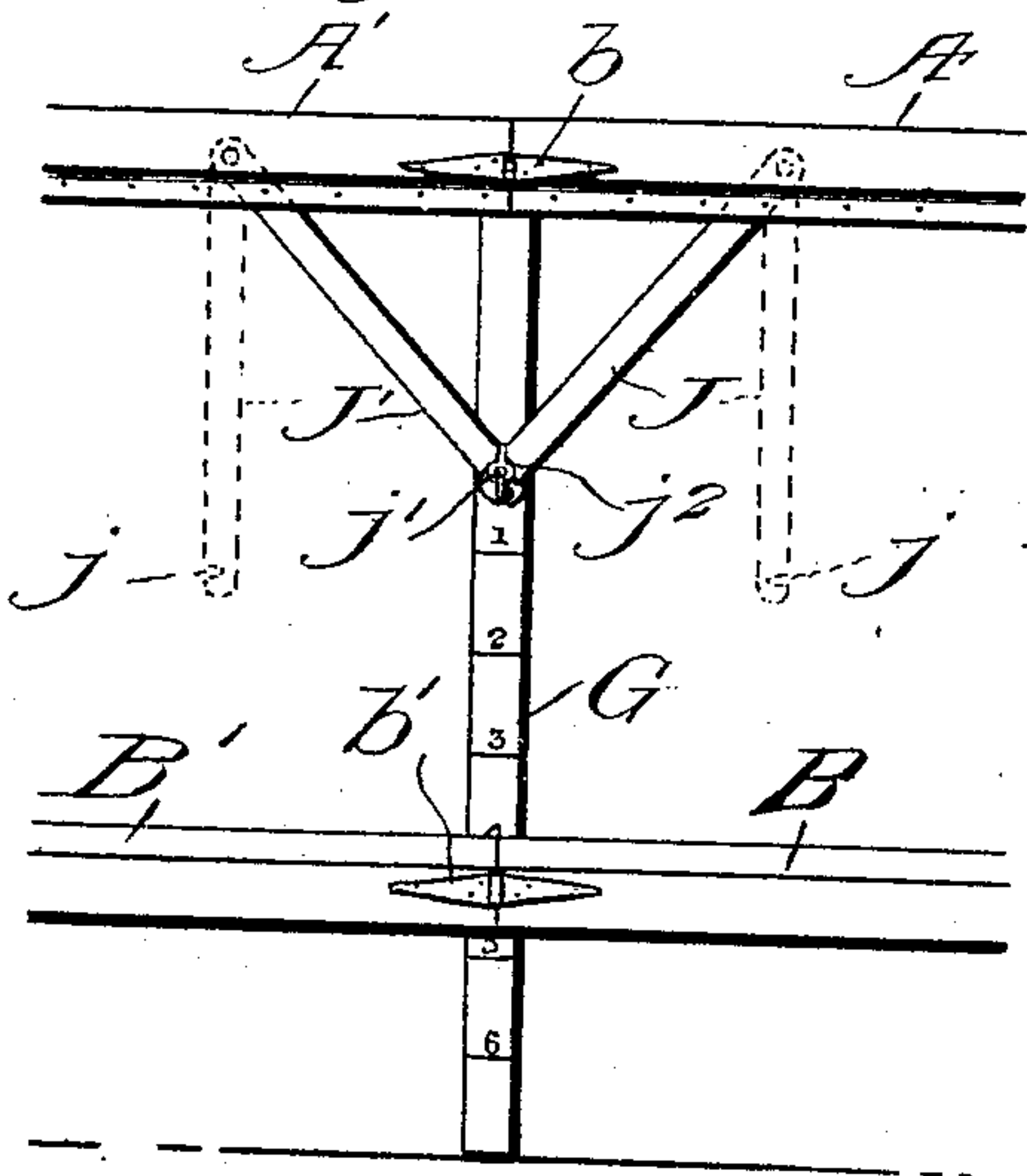


Fig. 3.

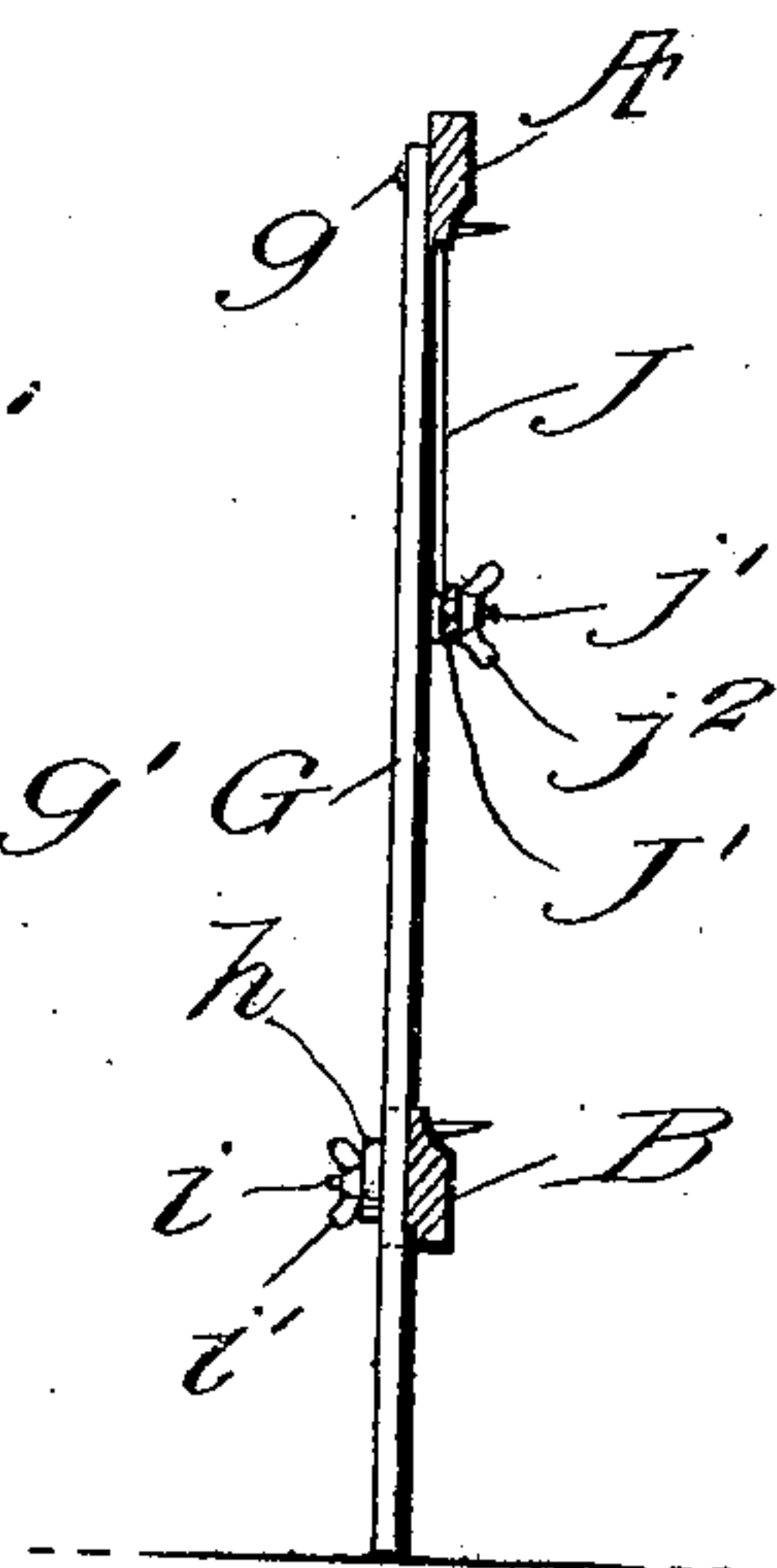
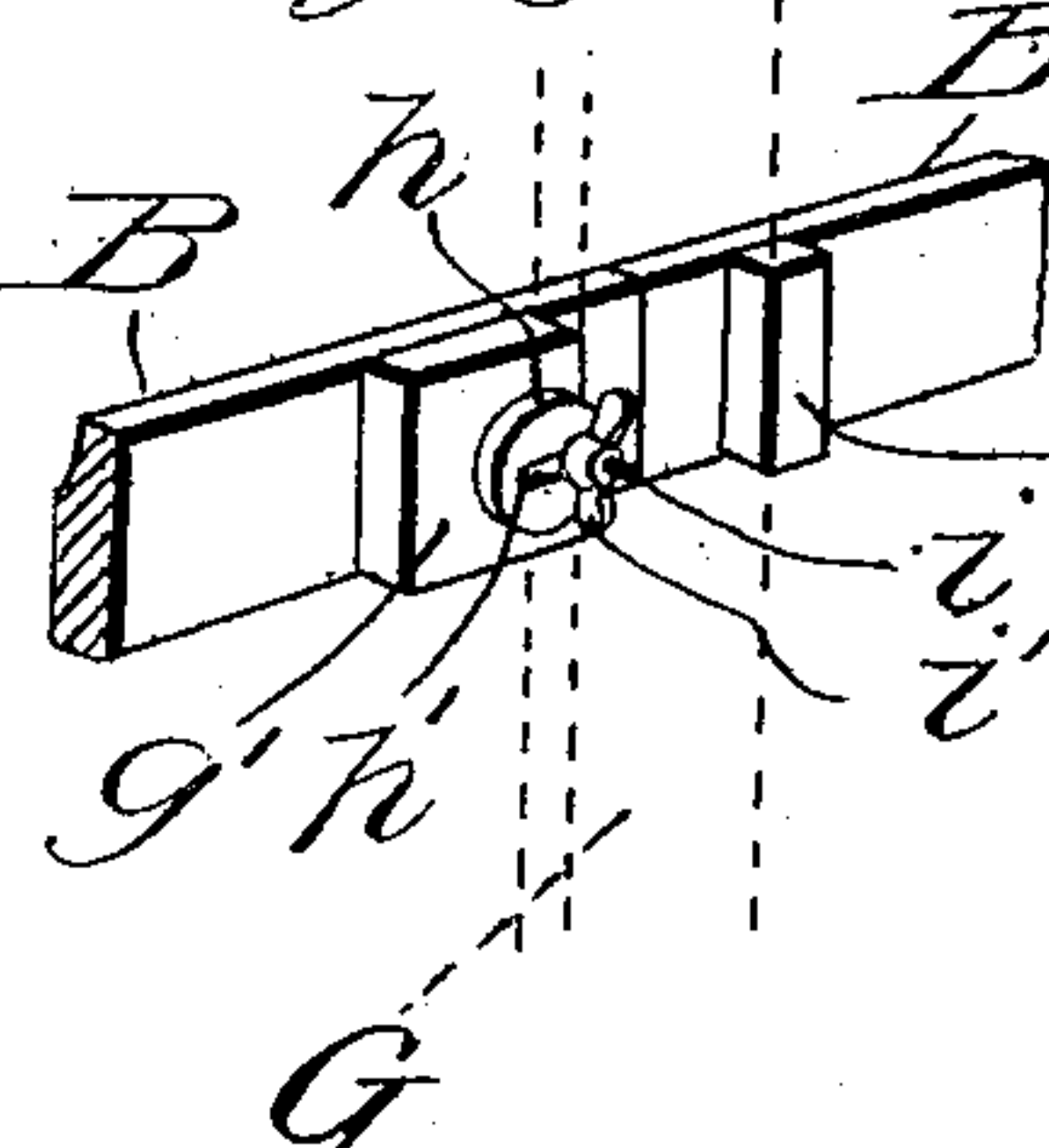


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH C. WAGNER, OF GREENSBURG, PENNSYLVANIA.

CURTAIN-STRETCHER FRAME.

No. 835,336.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed May 20, 1905. Renewed May 2, 1906. Serial No. 314,814.

To all whom it may concern:

Be it known that I, JOSEPH C. WAGNER, a citizen of the United States, residing at Greensburg, in the county of Westmoreland and State of Pennsylvania, have invented new and useful Improvements in Curtain-Stretcher Frames, of which the following is a specification.

This invention relates to improvements in curtain-stretcher frames, and particularly to frames of this character of the collapsible type.

The object of the invention is to provide a curtain-stretcher frame having simple and effective means for holding the parts thereof in extended condition and preventing said parts from moving out of proper relation and causing the frame to sag.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a rear view of a curtain-stretcher frame constructed in accordance with my invention. Fig. 2 is a front view of a portion of the same, on an enlarged scale, showing particularly the means for bracing or staying the central transverse brace. Fig. 3 is a cross-section through the frame. Fig. 4 is a detail view showing the disk for clamping the central transverse brace in adjusted position.

Referring now more particularly to the drawings, the letters A A' and B B' designate the main longitudinal bars of the stretcher-frame, which are arranged in pairs, as shown, and which, for convenience of description, will be hereinafter termed the "side" bars of the stretcher-frame. The bars A A' are connected at their inner ends by a hinge *b*, while the inner ends of the bars B B' are similarly connected by a hinge *b'*, this construction permitting the bars to be folded in the usual manner and to be extended to the form shown in Fig. 1 for stretching purposes. Fastening-plates *c c'* are respectively pivoted to the bars A' B' and are adapted to lap over upon the bars A B and to be secured thereto by bolts and winged nuts *d d'* to fasten the sets or pairs of bars together and hold them rigidly in extended position or longitudinal alinement. The fastening elements *c c'* may be applied to the bars A' and B' otherwise than by pivoting them thereto, and they may be of any preferred construction to suit the purpose.

Pivoted at one end to the outer ends of the bars A A', as indicated at *e*, are end bars E E',

which when the parts are extended project at right angles to said bars. These end bars E E' are provided with longitudinal slots *f* for the reception of guide members *f'* on the outer ends of the bars B B', whereby the latter are adjustably connected thereto, so that they may be moved toward and from the bars A A' to adapt the frame for stretching curtains of different sizes and to stretch a curtain applied thereto to the desired tension.

A transverse central bar or brace G is disposed in parallel relation to the end bars E E' and is pivoted at one end, as indicated at *g*, to the inner end of the bar A and passes at its free end between guide-lugs *g'*, formed on or secured to the rear inner or meeting ends of the bars B B'. The function of this transverse bar G is to stay or brace the other elements of the stretcher-frame and to hold them in rigid relation and properly guide the bars B B' with reference to the companion bars A A'.

In order to secure the free end of the bar G to the bars B B', a clamping-disk *h* is formed with a slot *h'*, receiving a bolt *i*, passing through the inner end of the bar B, the said bolt carrying a winged nut *i'*, by which the disk is held in position on the bolt and adjusted toward and from the bar G. The slot *h'* is of such length as to permit the disk to be adjusted to overlap the bar G, so that upon tightening the winged nut *i'* the bar G will be clamped by the disk against the inner ends of the bars B B'. Upon relaxing the nut the slot also permits the disk to be slipped laterally or transversely out of engagement with the bar G, thus permitting the latter to be slipped out of the space between the lugs *g'* in order to permit it to be folded on its pivot *g* with the other parts of the stretcher-frame. By means of this form of clamp or fastening the bar G may be quickly released to permit of the adjustment of the bars B B' and as quickly tightened up to fasten the bar G rigidly to the bars B B' after the latter have been adjusted to the desired position.

In order to prevent the end bars E E' from swinging on their pivots and causing sagging of the frame when strain falls thereon during the operation of stretching, a pair of braces J J' is employed. These braces are respectively pivoted at their outer ends to the bars A and A' and are formed at their inner ends with notches *j*, causing the production of hooks, which are adapted to engage a bolt *j'*,

passing through the bar G, said bolt being provided with a winged nut j^2 to hold the braces connected with said bolt. When the braces are connected with the bar G, they
5 extend diagonally or in convergent relation from the bars A A', and thus act to sustain the strain in the most effective manner and to prevent the bars E E' from swinging on their
10 pivots, and thus causing the parts of the frame to sag or get out of alinement. By simply relaxing the winged nut j^2 the notched or hooked ends of the braces may be slipped out of engagement with the bolt j' , thus per-
15 mitting the braces to be swung outwardly from the bar G, so that they will conveniently fold with the brace of the frame. It will thus be seen that the invention provides a simple and efficient means for clamping the
20 transverse central bar in position and at the same time staying or reinforcing it to prevent sagging of the frame.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation,
25 and advantages of the invention will be readily understood without a further extended description.

Changes in the form, proportions, and minor details of construction may be made
30 within the scope of the invention as defined by the appended claims without departing from the spirit or sacrificing any of the advantages thereof.

Having thus fully described the invention,
35 what is claimed as new is—

1. A stretcher-frame comprising pairs of hinged side bars, means for holding said side bars in rigid alinement, end bars pivoted to

one pair of side bars and adjustably connected with the other pair of side bars, a cen- 40
tral transverse bar pivoted to one of the bars of one pair of side bars, means for securing the free end of said central bar to the other pair of side bars, and braces for reinforcing the central bar from the first-named pair of 45
side bars.

2. In a stretcher-frame, pairs of side bars, end bars pivoted to one pair of side bars and adjustably connected with the other pair of side bars, a central cross-bar pivoted to one 50
pair of side bars, and a clamp on the other pair of side bars for securing the free end of the central bar thereto, said clamp comprising a slotted disk, a bolt projecting through the slot in the disk, and a nut upon said bolt 55
for clamping the disk in adjusted position.

3. In a curtain-stretcher, pairs of folding side bars, end bars pivoted to the side bars of one pair and adjustably connected with the side bars of the other pair, a central trans- 60
verse bar pivoted to one of the first-named pairs of bars and adjustably connected with the other pair of bars, means for clamping the free end of said central bar to the bars with which it is adjustably connected, braces 65
pivoted to the bars to which the central bar is pivoted, and means for adjustably connecting the free ends of said braces to the central bar.

In testimony whereof I affix my signature 70
in presence of two witnesses.

JOSEPH C. WAGNER.

Witnesses:

N. A. LOOR,
W. C. LOOR.