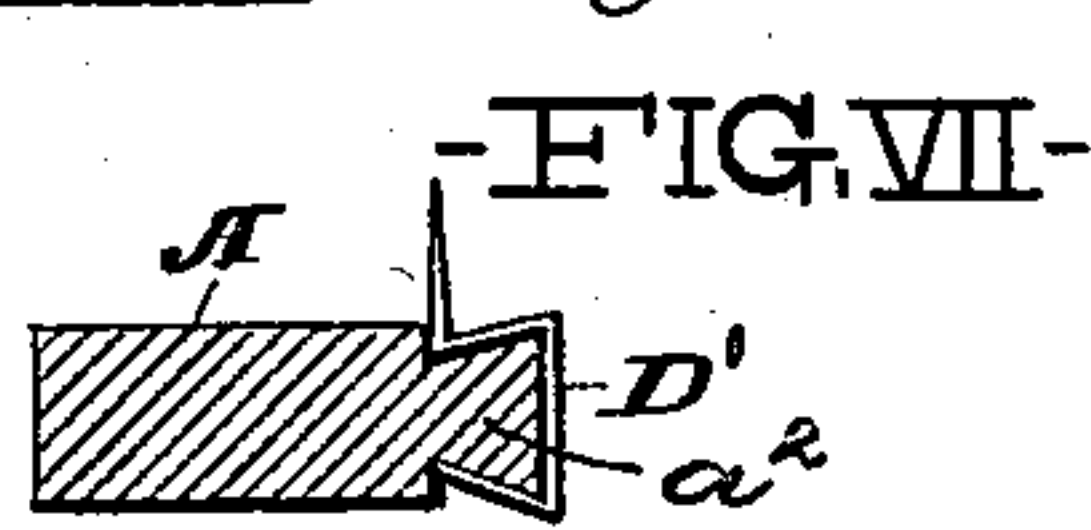
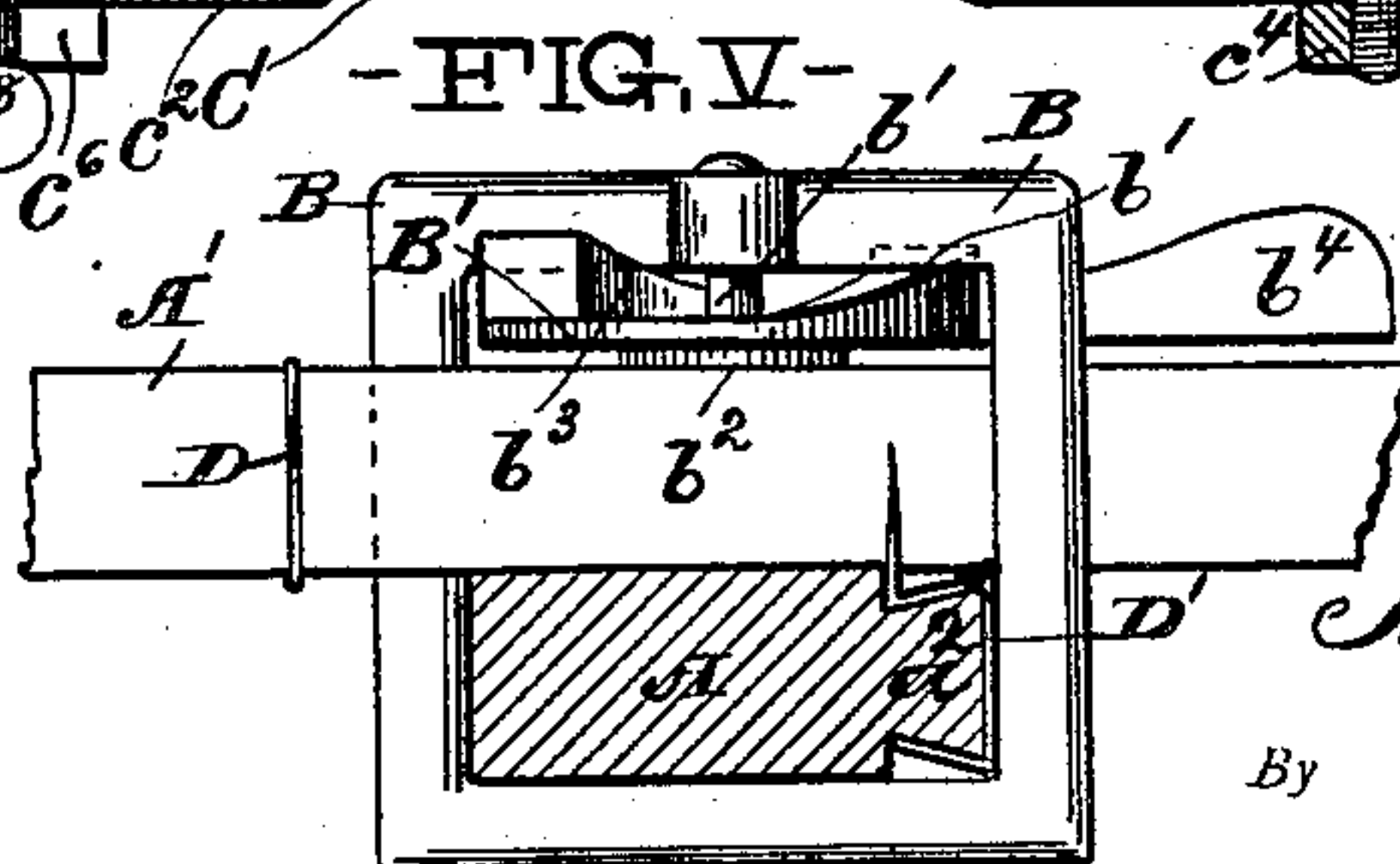
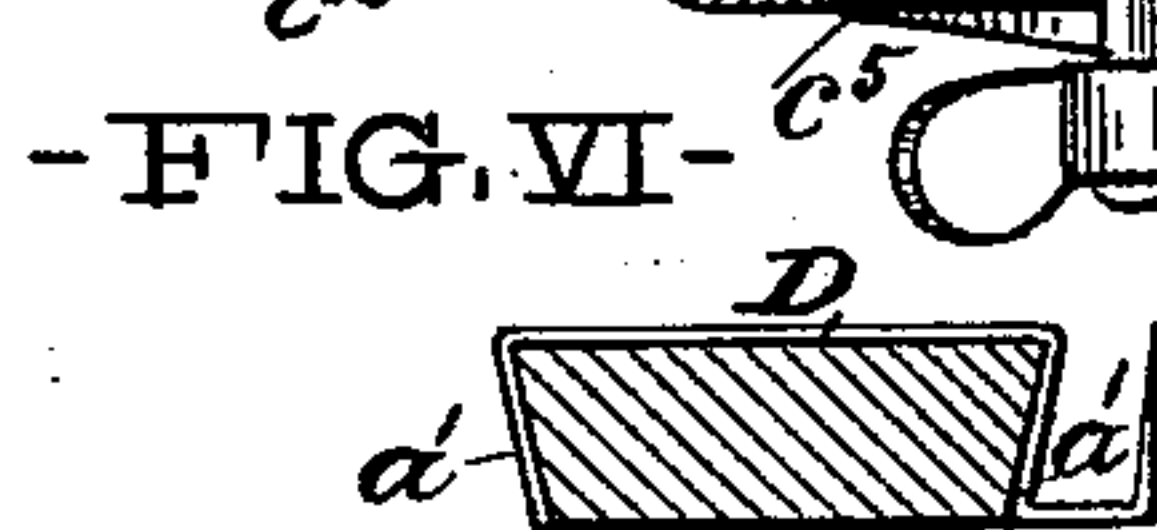
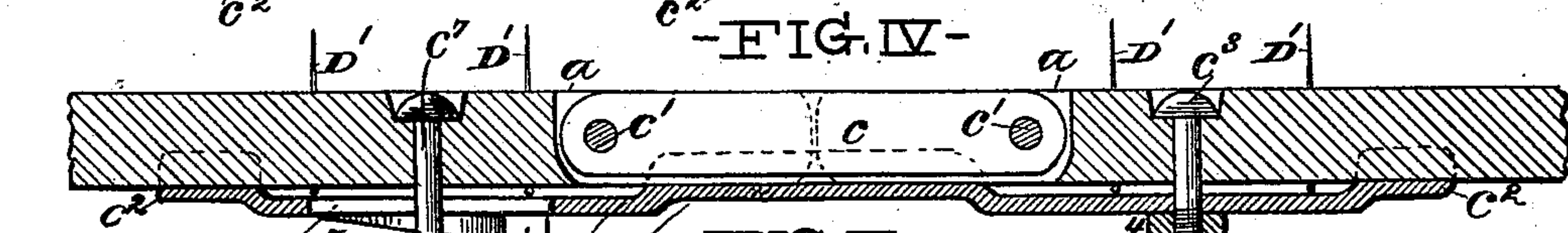
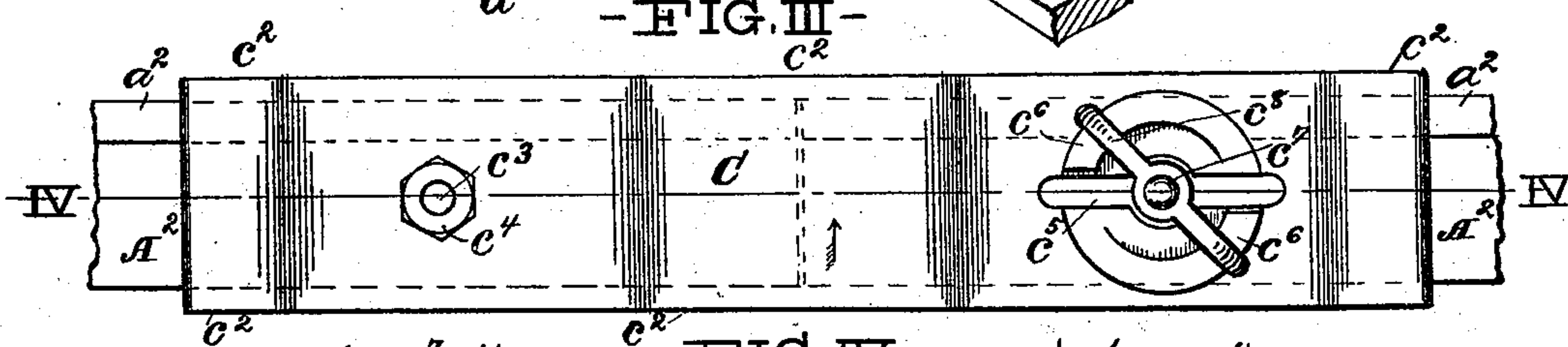
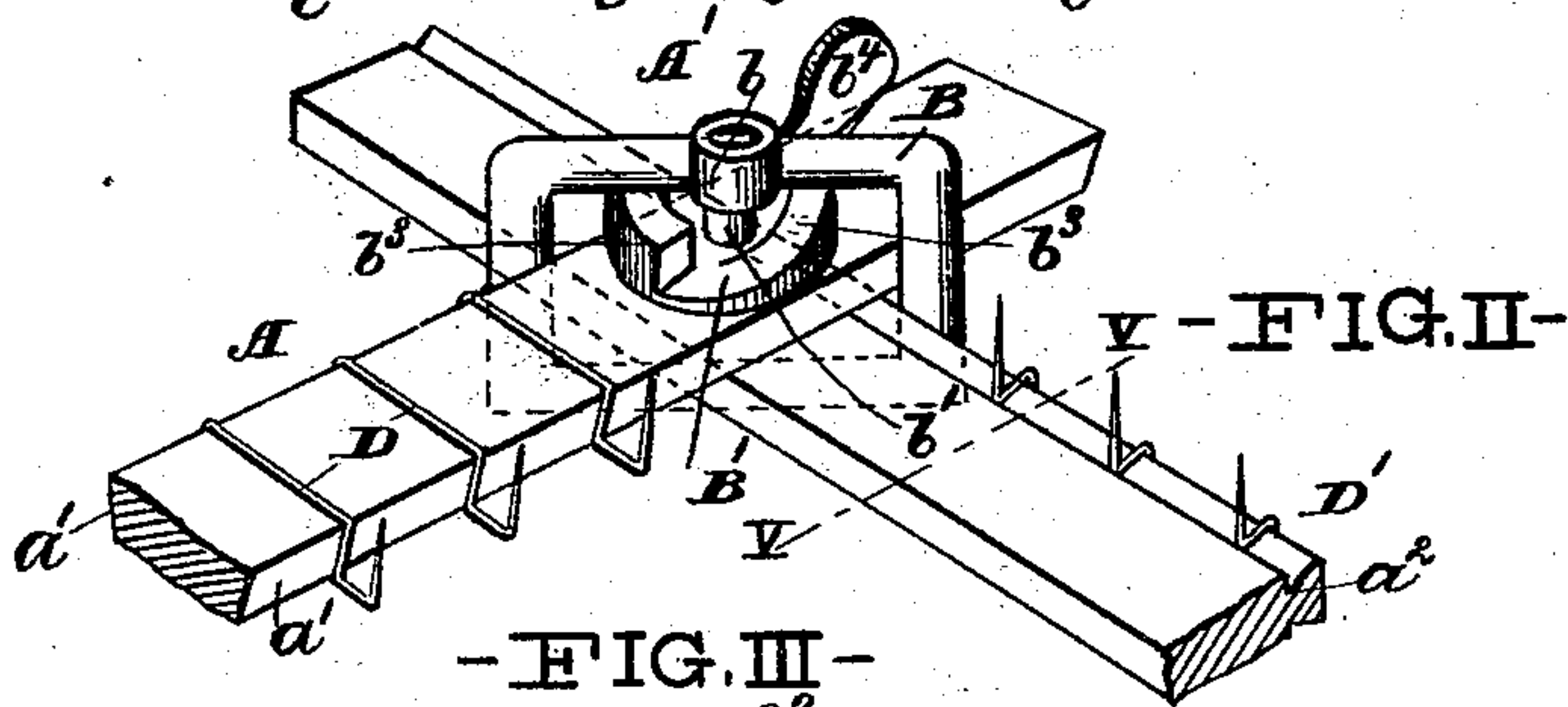
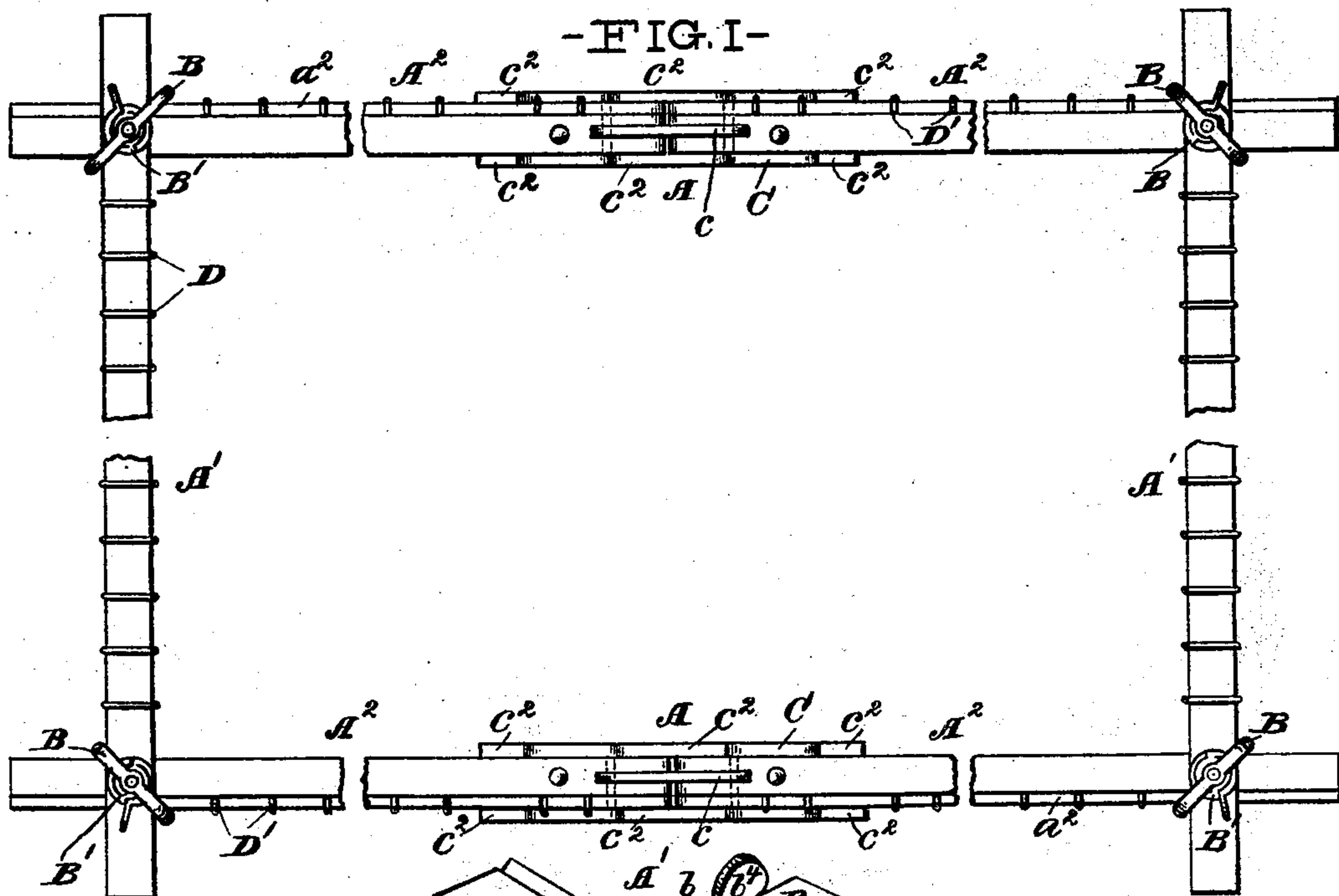


(No Model.)

R. J. BARTLEY.
CURTAIN STRETCHER.

No. 521,200.

Patented June 12, 1894.



WITNESSES:

J. C. Turner
Jm Lecher

INVENTOR,

R. J. Bartley

By

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT J. BARTLEY, OF CLEVELAND, OHIO.

CURTAIN-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 521,200, dated June 12, 1894.

Application filed May 31, 1893. Serial No. 476,075. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. BARTLEY, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Curtain-Stretchers, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The annexed drawings and the following description set forth in detail, one mechanical form embodying the invention; such detail construction being but one of various mechanical forms in which the principles of the invention may be used.

In said annexed drawings—Figure I, represents a top plan view of my improved curtain stretcher showing portions of the side and end rails broken away and removed; Fig. II, a perspective detail view of one corner of the frame; Fig. III, a plan view of the under side of one of the joints for the side rails; Fig. IV, a longitudinal vertical section, taken on the line IV—IV in Fig. III, of such joint; Fig. V, a sectional detail view,—on the line, V—V, Fig. II,—illustrating the corner clamp, and Figs. VI and VII, sectional detail views, respectively, of an end rail and a side rail.

The frame consists of jointed side rails, A, and end rails, A' A'. The side rails and end rails are crossed at the corners of the frame, and are adjustably held together by means of rectangular clamp stirrups, B, and cam disks, B'. The stirrups straddle and confine the crossed ends of the rails, and the upper cross-bar of each stirrup is formed with a vertical bearing, b, in which a bolt, b', is pivoted. The lower end of said bolt is formed with a flat bearing head, b², and the cam disk is pivoted at its center upon said bolt. The cam disk is provided with two curved inclines, b³, and with a radial handle, b⁴, by means of which the disk may be revolved so as to force the cam inclines to bear against the inner side of the cross bar of the stirrup, and to thus press the head of the pivot bolt against the upper side of the end rail, thus clamping the end rail and side rail between

the flat head of the bolt and the lower cross bar of the stirrup.

The side rails are jointed, as above stated, and consist each of two portions, A² A². The meeting ends of said rail portions are longitudinally slitted to receive a flat link, c, which is pivoted in the inner ends of the longitudinal slits, a, upon pins or bolts, c'. A plate, C, bears against the under side of the rail portions, bridging the joint, and said plate is formed with upwardly projecting side flanges, c², which bear against the side edges of the rail portions, and have sufficient space between them to admit of the tenter hooks being longitudinally moved upon the rail between the flanges. Near one end, the plate is secured to one side rail portion by means of a bolt, c³, passing through the side rail portion and the plate, and tightened by means of a nut, c⁴. Near the other end, the plate is formed with a longitudinal slot, c⁵, around the center of which are formed concentric, semi-circular cam inclines, c⁶. A bolt, c⁷, projects through the rail portion, and through the center of the slot, and has a thumb nut or cross bar, c⁸, swiveled upon its upper end; which thumb nut may have its edge ride upon the cam inclines surrounding the center of the longitudinal slot.

Both edges of the end rail are beveled downward and inward to give such rail a dovetail shape in cross section, as shown at a' in Figs. II and VI; and tenter hooks, D, have their shanks bent so as to fit around this dovetail shape, and thus be secured to slide longitudinally upon the end rails.

The side rails have dovetailed outer edges, a², as shown in Figs. II and VII; and tenter hooks, D', have their shanks so shaped as to fit around such dovetail formation of the outer edge to slide longitudinally upon said rails. The tenter hooks of the end rails project upward from a plane level with the under sides of said rails, and the tenter hooks of the side rails project from a plane level with the upper sides of the side rails, so that,—when the end rails and side rails are joined, as illustrated in the drawings, with the under sides of the end rails resting upon the upper sides of the side rails,—all of the

tenter hooks will project upward from the same plane. By this arrangement of the tenter hooks, the curtain to be stretched in my improved frame will not be drawn out of shape by tenter hooks in different planes, such as are ordinarily found in curtain stretchers with which I am acquainted.

When not in use the side rails of the frame are doubled at their joints, the thumb nuts of the joint braces or fastenings being turned so as to slip through the longitudinal slots in the plates, and the rail portions being swung one upon the other; and the link between the meeting ends of said rail portions admits of the rail portions being sufficiently raised to be doubled with the corner clamps in place at the ends of the side rails, and with one end rail swung in between them. When the frame is to be put up for use, the side rails are opened, and secured in their opened position by the thumb nuts riding upon the cam inclines; whereupon the side rails and end rails are adjusted in their relation to each other, according to the size of the curtain to be stretched, by means of the corner clamps. As the bearing surface of a clamp is at the flat head of the pivot bolt, the cam disk may be turned without meeting with any considerable frictional resistance upon the upper side of the end rail.

Other modes of applying the principle of my invention may be employed for the mode herein explained. Change may therefore be made as regards the mechanism thus disclosed, provided the principles of construction set forth respectively in the following claims are employed.

I therefore particularly point out and distinctly claim as my invention—

1. In a curtain stretcher, the combination with side and end rails having their ends crossing each other, of tenter hooks projecting from the plane of the under sides of the rails crossing above the other rails, and tenter

hooks projecting from the plane of the upper sides of said latter rails, substantially as set forth.

2. In a curtain stretcher, the combination of a dovetailed rail, with a tenter hook having its shank shaped to fit and longitudinally slide upon the dovetailed rail, substantially as set forth.

3. In a curtain stretcher, the combination of end rails dovetailed in cross section, side rails having dovetailed outer edges and having their ends crossed beneath the ends of said end rails, tenter hooks having their shanks shaped to fit upon the dovetailed end rails and projecting from the plane of the under sides of said rails, and tenter hooks having their shanks shaped to fit upon the dovetailed outer edges of the side rails and to project in the plane of the upper sides of said side rails, substantially as set forth.

4. In a curtain stretcher, the combination of a clamp stirrup having a bearing in one side, a pivot bolt having a flat head and pivoted in said bearing, a cam disk pivoted upon said pivot bolt and formed with inclines bearing against the cross bar and with a radial handle, substantially as set forth.

5. In a curtain stretcher, the combination of two side rail portions hinged together and formed with dovetailed outer edges, a plate secured across the joints of said side rail portions and formed with side flanges having spaces between them, and tenter hooks having their shanks fitted to longitudinally slide upon the dovetailed outer edges of the side rail portions between the side flanges of the plate, substantially as set forth.

In testimony that I claim the foregoing to be my invention I have hereunto set my hand this 29th day of May, A. D. 1893.

ROBERT J. BARTLEY.

Witnesses:

WM. SECHER,
DAVID DAVIES.