

(No Model.)

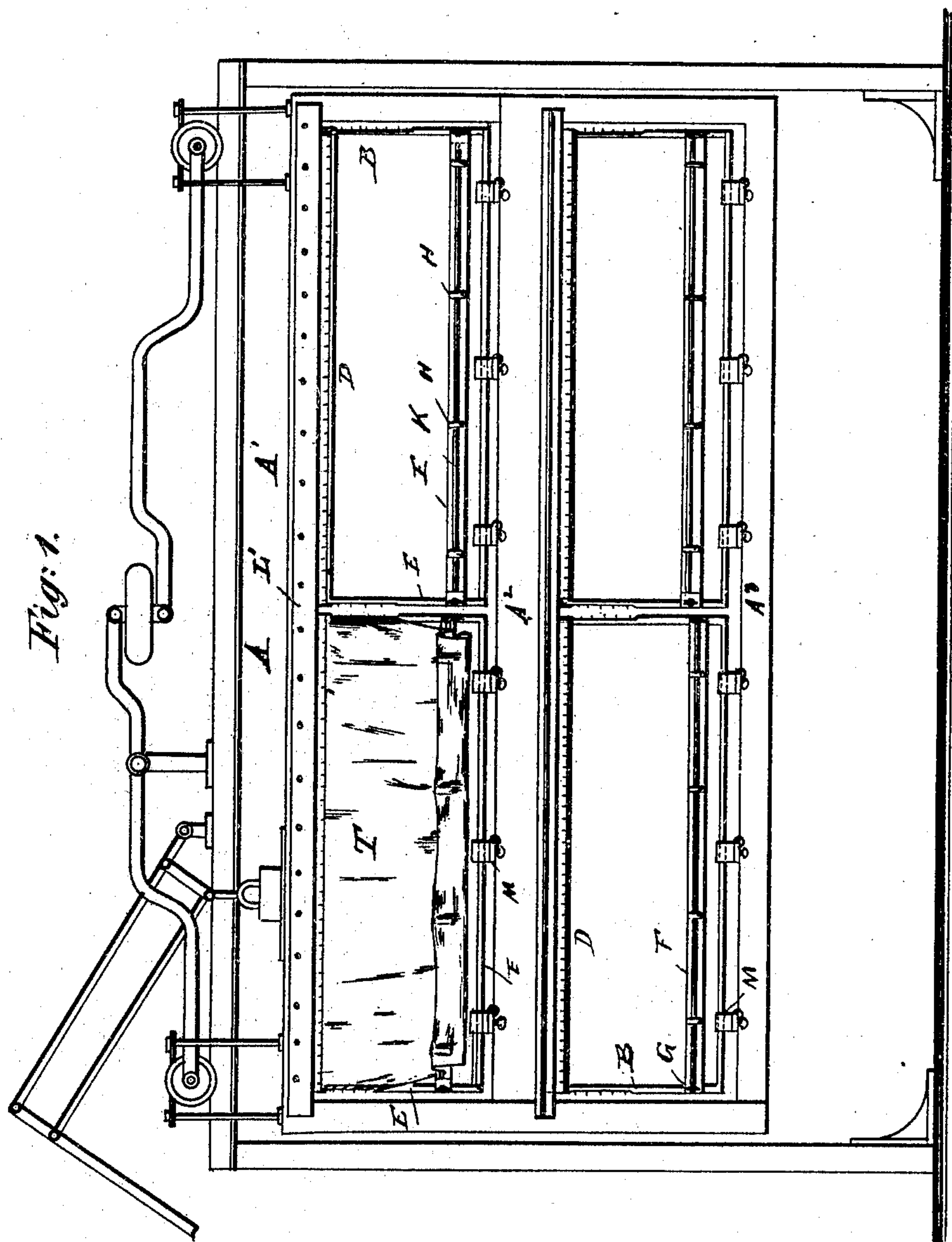
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J. KELLENBERGER.

FABRIC HOLDER FOR EMBROIDERING MACHINES.

No. 502,463.

Patented Aug. 1, 1893.



WITNESSES:
Harry Willard Griffiths
Marion Hall

INVENTOR
J. Kellenberger
BY *Guyel & Rueger*
ATTORNEYS.

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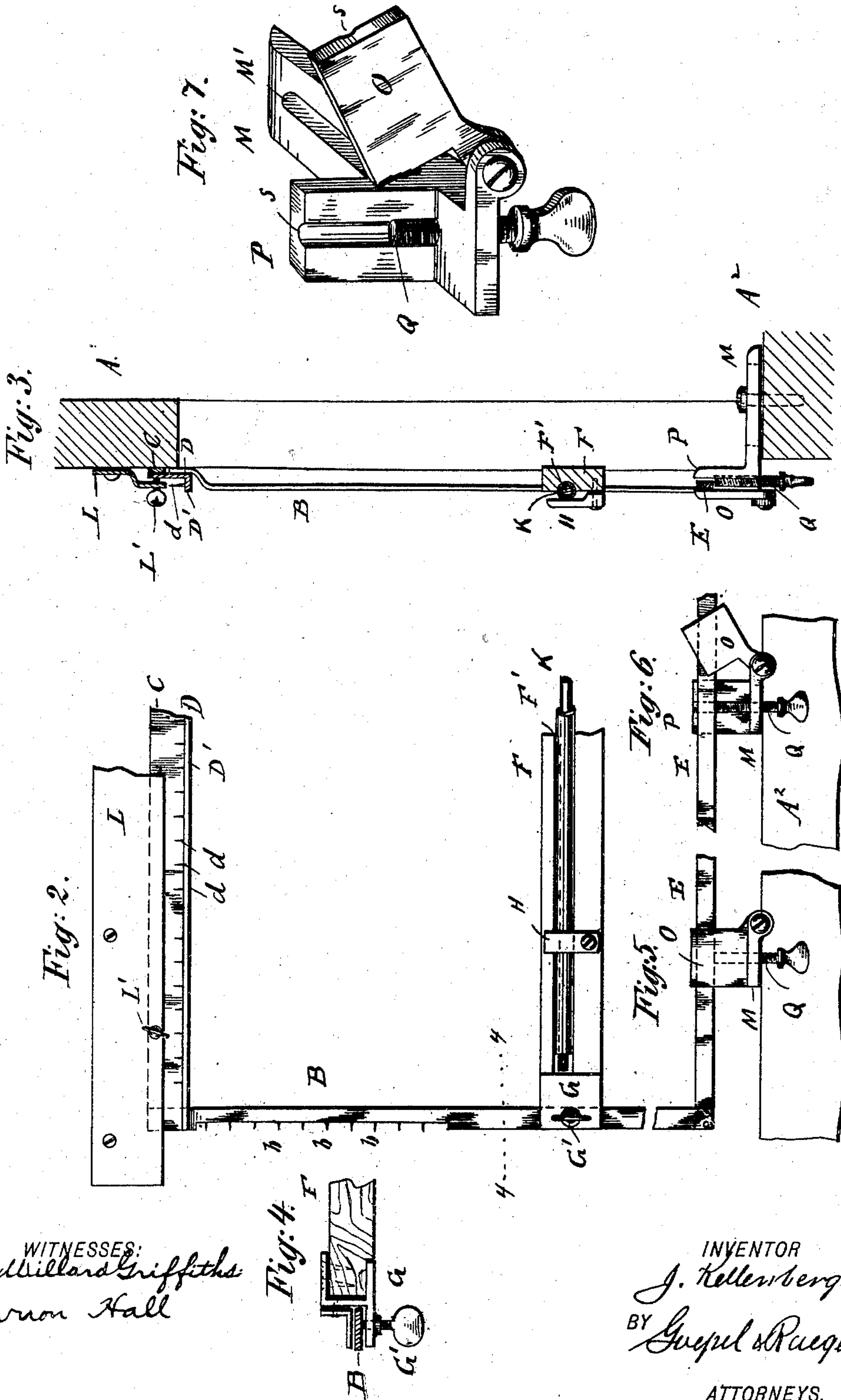
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UNITED STATES PATENT OFFICE.

JOHN KELLENBERGER, OF WEST HOBOKEN, NEW JERSEY.

FABRIC-HOLDER FOR EMBROIDERING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 502,463, dated August 1, 1893.

Application filed December 28, 1892. Serial No. 456,585. (No model.)

To all whom it may concern:

Be it known that I, JOHN KELLENBERGER, of West Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Fabric-Holders for Embroidering-Machines, of which the following is a specification.

This invention relates to improvements in fabric-holders for embroidery frames; and the object of my invention is to provide a device for holding larger pieces of fabric in the frame of the well known Heilmann and like embroidery machines in such a manner that the fabric can easily be applied and removed and can be stretched taut for embroidering.

The invention consists in a fabric-holding frame constructed with end-bars having pin projections from the side-edges, a flanged top-bar uniting the end-bars and provided with upwardly-projecting pins on its flange, a bottom bar, a stretching bar between the end-bars, means for holding the ends of the fabric to the stretching bar and means for holding said stretching bar at a different elevation between the end-bars.

The invention also consists in the construction and combination of parts and details which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a front-elevation of the tambour frame of the well-known Heilmann embroidery machine provided with my improved fabric-holder. Fig. 2 is an enlarged detail elevation of my improved fabric-holder, parts being broken out. Fig. 3 is a vertical transverse sectional view of the frame and holder. Fig. 4 is a horizontal sectional plan view, on the line 4 4, of Fig. 2. Figs. 5 and 6 are front-views of the bottom clamp in a different position, and Fig. 7 is a perspective view of said bottom clamp.

Similar letters of reference indicate corresponding parts.

The usual main frame A of the Heilmann machine is provided with the top, intermediate and bottom bars A', A² and A³, and between said bars A' and A², A³ a number of my improved fabric-holding frames are applied.

My improved fabric-holding frame is constructed with two flat metal end-bars B pro-

vided on the outer edge with prongs or pins *b* at the upper half. Said end-bars B are connected at the top by a bar C, and to the front of the same a bar D is riveted, which is provided on its bottom with an outwardly-projecting flange D' and with the upwardly-projecting pins *d* throughout the entire length of said flange. The lower ends of the end-bars B are connected by the metal bar E. A stretching bar F having a longitudinal groove F' in its front is arranged between the end-bars and is provided at each end with a grooved clip G, in the groove of which the end-bars B fit. A clamping-screw G' is provided on each end-piece G for the purpose of holding the same in position on the end-bars B. A series of buttons H is pivoted to the front of the bar F. The piece of fabric T to be embroidered, for instance an infant's shawl, is engaged along one edge with the pins *d* and the end parts of the fabric are engaged with the pins *b* projecting from the side-edges of the end-bars B and parts of the shawl are pressed into the groove F' of the bar F by means of a rod K covered with rubber, which rod is held in place by swinging the button H over it. The stretching bar F is then moved downward until the fabric is drawn taut in the frame, and then said bar F is locked in place by drawing up the thumb-screws G'. The bars A' and A² of the machine frame are provided along their bottom edges with flanged strips L having thumb-screws L'. The upper edge of the top-bar C and the flanged bar D of my improved fabric-holding frame are passed under said angle-plates L and are held by drawing up the thumb-screw L'. On the upper surface of the bar A² and the bar A³ of the main-frame a series of angle-clips M is held by screws passing through longitudinal slots M' in said angle-clips into the tops of said bars A² A³ to permit of adjusting the clips forward and back. To the front end of each clip a wing O is pivoted, and between said wing O and the upwardly-projecting lug P of the clip a screw Q is screwed through the bottom of the clip, said lug P and the wing O being provided in their inner surfaces with a semi-circular groove S through which the screw can pass. The adjacent surfaces of said lug P and the wing O are such a distance from each other

that the bottom bar E of my improved fabric-holding frame can pass in between them and can rest on the upper ends of the screws Q. After the upper bar C has been passed under the angle-plate L and the bottom bar E of the fabric-holding frame has been rested upon the screws Q the wings O are swung in front of the lugs P, as shown in Fig. 5; then the screws P are turned to move the entire fabric-holding frame upward and when it is in proper position the thumb-screws L' are drawn up. The entire fabric-holding frame is thus held firmly and securely in the main frame of the embroidery machine and the embroidering operation can take place.

My improved frames can easily be applied on the machine and readily removed and can be very finely adjusted by means of the screws Q, and the screws passing through the slots M' of the angle-clips M.

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

1. The combination, with two end-bars having pins formed on their outer edges, of a flanged cross-bar having upwardly-projecting pins on its flange, a bottom cross-bar, a stretching bar mounted between the end-bars and movable between the top and bottom bars, means for locking said stretching bar in place on the end-bars and means for holding the fabric to said stretching bar, substantially as set forth.

2. The combination, with end-bars having pin projections on their outer edges, of a top

cross-bar uniting the end-bars and having a flange provided with upwardly-projecting pins, a bottom bar uniting the end-bars, a stretching bar between the end-bars and having grooved clips through which the end-bars pass, screws in said clips for locking the stretching bar in place, a holding rod in a longitudinal groove of the clamp-bar and buttons for holding said holding rod in place, substantially as set forth.

3. In an embroidering machine, the combination, with the main-frame, of angle-clips on the same, wings pivoted to said angle-clips, screws passed through the angle-clips behind the said wings and means for holding the upper parts of a fabric-holding frame to the bars of the main-frame, substantially as set forth.

4. In an embroidering machine, the combination, with an angle-clip having an upwardly-projecting lug provided with a groove in its front surface, of a wing pivoted to the clip in front of said lug, which wing is also provided with a longitudinal groove in its rear surface, and a screw screwed through the bottom of the clip between the wing and said lug, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOHN KELLENBERGER.

Witnesses:

OSCAR F. GUNZ,

HARRY WILLARD GRIFFITHS.