

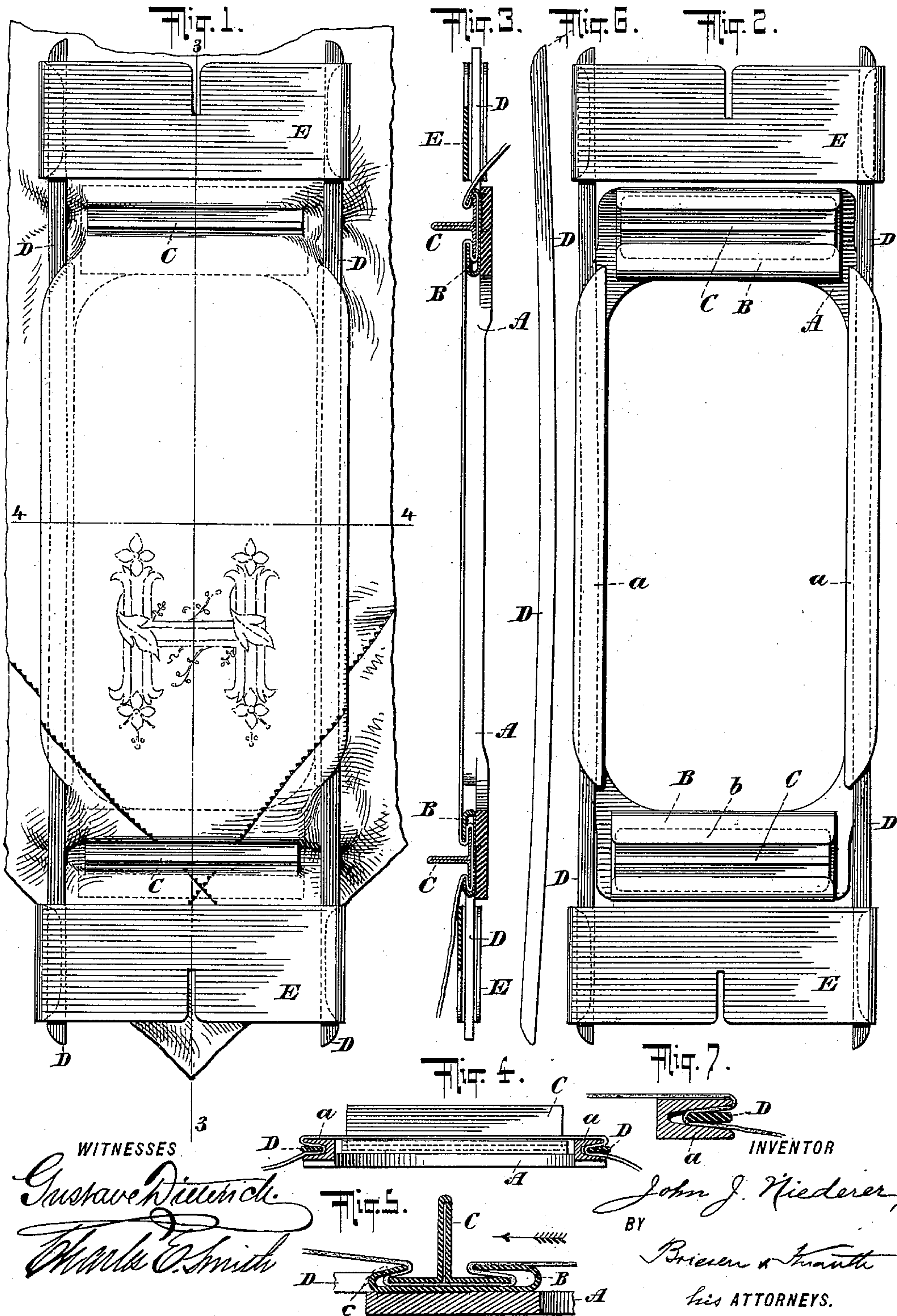
(No Model.)

J. J. NIEDERER.

FABRIC HOLDING FRAME FOR EMBROIDERING MACHINES.

No. 605,902.

Patented June 21, 1898.



UNITED STATES PATENT OFFICE.

JOHN J. NIEDERER, OF NEW YORK, N. Y.

FABRIC-HOLDING FRAME FOR EMBROIDERING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 605,902, dated June 21, 1898.

Application filed September 18, 1896. Serial No. 606,200. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. NIEDERER, a resident of the city, county, and State of New York, have invented certain new and useful
5 Improvements in Fabric-Holding Frames for Embroidering-Machines, of which the following is a specification.

My invention relates to fabric-holding frames for embroidering-machines; and the
10 object of the invention is to provide a simple and efficient fabric-holding frame wherein the fabric can readily be placed in position on the frame and securely held thereon during the embroidering operation.

15 To this end my invention consists in the novel combination and arrangement of parts hereinafter described and claimed.

In the drawings, wherein like letters indicate corresponding parts, Figure 1 is a face
20 view of a fabric-holding frame made in accordance with my invention with the fabric in position thereon. Fig. 2 is a like view of the same with the fabric removed. Fig. 3 is a central longitudinal section through the
25 same. Fig. 4 is a transverse section on the line 4 4 of Fig. 1. Fig. 5 is an enlarged transverse sectional detail of one of the end clamps of the frame. Fig. 6 is a detail side view of one of the bowed side bars. Fig. 7 is a trans-
30 verse sectional view in detail of one of the side walls of the frame, showing the bowed side bar in position therein.

In the drawings, A represents the main frame of my improved fabric-holding frame,
35 which is provided with grooved converging walls *a* and with end clamps. Each of these end clamps comprises a locking-frame B and a clamping-strip C. The locking-frames B are preferably made integral with the main frame
40 A and are rigid and are substantially C-shaped in cross-section, and one of the arms of each of these locking-frames is longer than the other, as indicated at *b*. The clamping-strip C, which is preferably T-shaped in cross-
45 section, is provided to cooperate with each of these end locking-frames to retain the fabric in position at each end of the main frame, as indicated in Fig. 5—that is to say, each of the C-shaped locking-frames is provided with an
50 opening in a wall thereof, in which opening a clamping-strip may be received and when in

the clamping position extends across the opening, but is capable of a lateral movement in the locking-frame to allow of its withdrawal. Thus it will be observed that when the clamp-
55 ing-strip C is pushed toward the center of the frame the outer end or edge of the clamping-strip will be brought opposite the opening in the locking-frame B and may be readily removed therefrom, whereas a movement
60 of the clamping-strip in an opposite direction will cause the outer edge thereof to be brought under the outer arm of the C-shaped clamping-frame, so as to extend across the opening
65 therein and prevent the strip from being removed therefrom and to form a positive lock for retaining the fabric in place. Removable bowed side bars D are adapted to fit in the
70 grooved walls in the sides of the main frame A. These bowed side bars after having been placed in position on the frame are retained thereon by means of removable end clasps E,
75 which are independent of the main frame and which take around the outer side on each of the bowed side bars at the ends thereof.

In practice the fabric is placed over the main frame in the manner indicated in Fig. 1, and the clamping-strips C are placed in position in the manner described, and as is clearly
80 shown in Fig. 5. It will be seen that the tension of the fabric at the center of the frame, where it is drawn taut, has a tendency to force the clamping-strip C laterally in the direction
85 of the arrow in Fig. 5 and to hold the clamping-strip across the opening in the locking-frame and maintain the parts in the locked position, as well as to bind the outer portion
90 of the fabric against the outer wall of the end locking-frame, as indicated at *c*. The side bars D are then forced into the grooved side walls of the frame over the fabric and the end clasps E placed in position, as shown. It
95 will be observed that by means of the removable end clasps engaging the bowed side bars in the manner shown an even distribution of pressure is had upon the fabric, and the side bars bearing upon the fabric on both sides of the converging walls of the frame will tend
100 to give a secure bight upon the fabric to prevent it from slipping.

While I have described the locking-frame B as having one arm shorter than the other

to provide for the removal of the clamping-strip, it is obvious that the same result might be accomplished if the arms of the locking-frame were of equal length and the T-shaped clamping-strip were provided with arms of unequal length, or the arm of the T-shaped clamping-strip which projects therefrom at right angles to the plane of the frame when the parts are in position might be dispensed with entirely. When the third arm of the clamping-strip is dispensed with, the clamping-strip can be released by exerting pressure upon the outer edge of the fabric, which causes the clamping-strip to be forced toward the center of the main frame, so that the strip will no longer extend across the opening in the locking-frame and the outer edge of the strip to pass free thereof. It may also be found desirable under certain circumstances to employ the C-shaped clamping-frame and clamping-strips upon all four sides of the frame.

By my invention I provide a simple and efficient means for locking or securing the fabric upon the frame without the least liability of the fabric slipping and at the same time provide an even distribution of pressure upon the fabric, which is a matter of considerable importance in devices of this character.

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

1. A fabric-holding frame for embroidering-machines, comprising a main frame, removable bowed side bars independent of the main frame and clasps for uniting the bowed side bars at the ends thereof and causing a pres-

sure to be exerted thereby to hold the fabric in place.

2. A fabric-holding frame for embroidering-machines, comprising a main frame, a C-shaped locking-frame carried upon each end thereof, the outer arm of each of said C-shaped locking-frames being shorter than the inner arm, and a clamping-strip movable laterally in and cooperating with each of the C-shaped locking-frames to hold the fabric in place so that a movement of the clamping-strip in one direction will cause a locking of the parts, whereas a movement of the strip in an opposite direction will allow of the parts being disconnected.

3. A fabric-holding frame for embroidering-machines, comprising a main frame, bowed side bars, removable clasps at each end for uniting said bowed side bars and causing a pressure to be exerted thereby to hold the fabric in place, a C-shaped locking-frame carried upon each end of the main frame and a clamping-strip of sufficient size to be received within each of the C-shaped locking-frames and to extend across an opening in a wall thereof to hold the fabric in place.

4. A fabric-holding frame for embroidering-machines, comprising a main frame, a rigid C-shaped locking-frame and a clamping-strip independent of the main frame and of sufficient size to be received and move laterally in said locking-frame and to extend across an opening in a wall thereof to hold the fabric in place.

JOHN J. NIEDERER.

Witnesses:

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HARRY M. TURK.