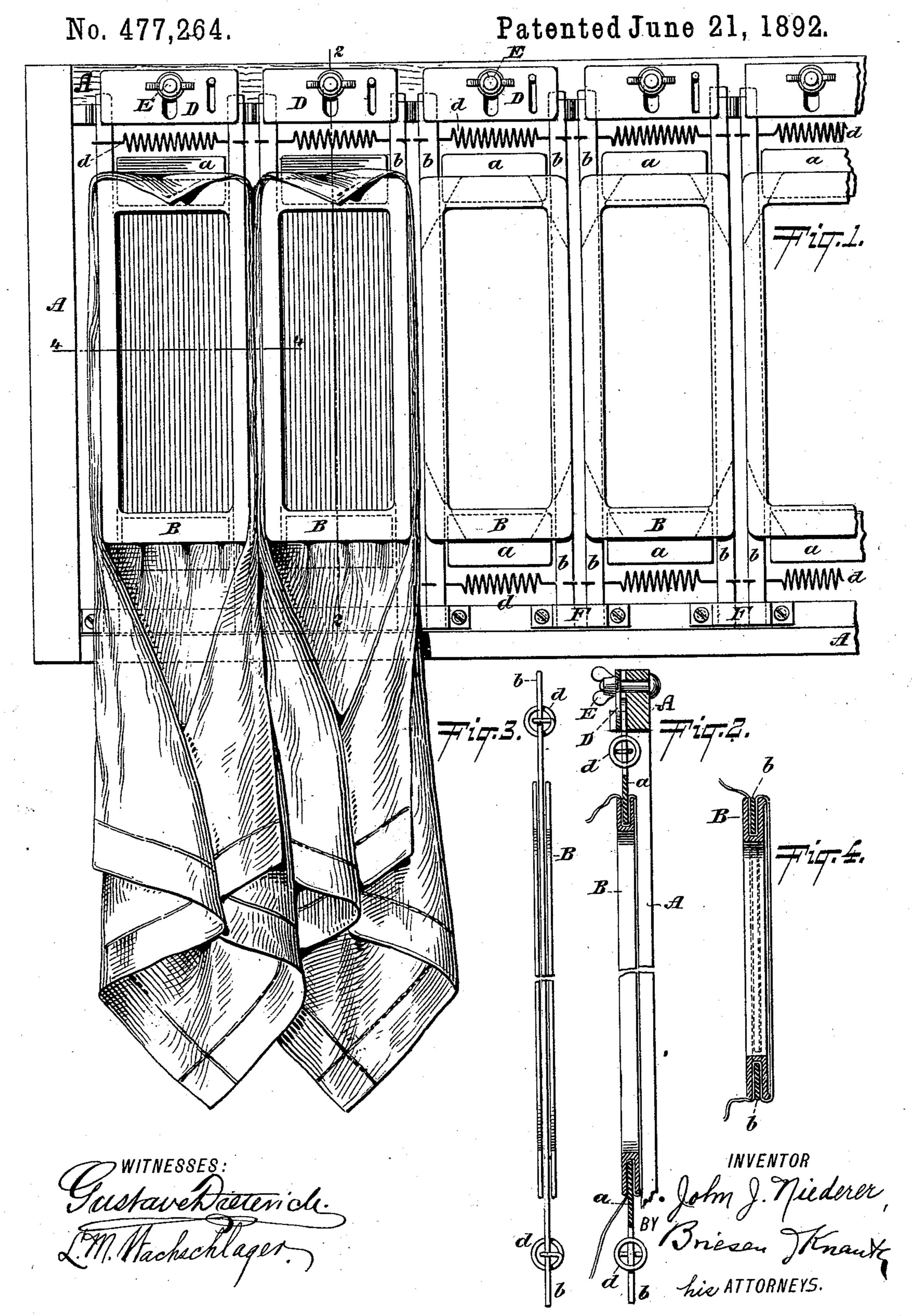
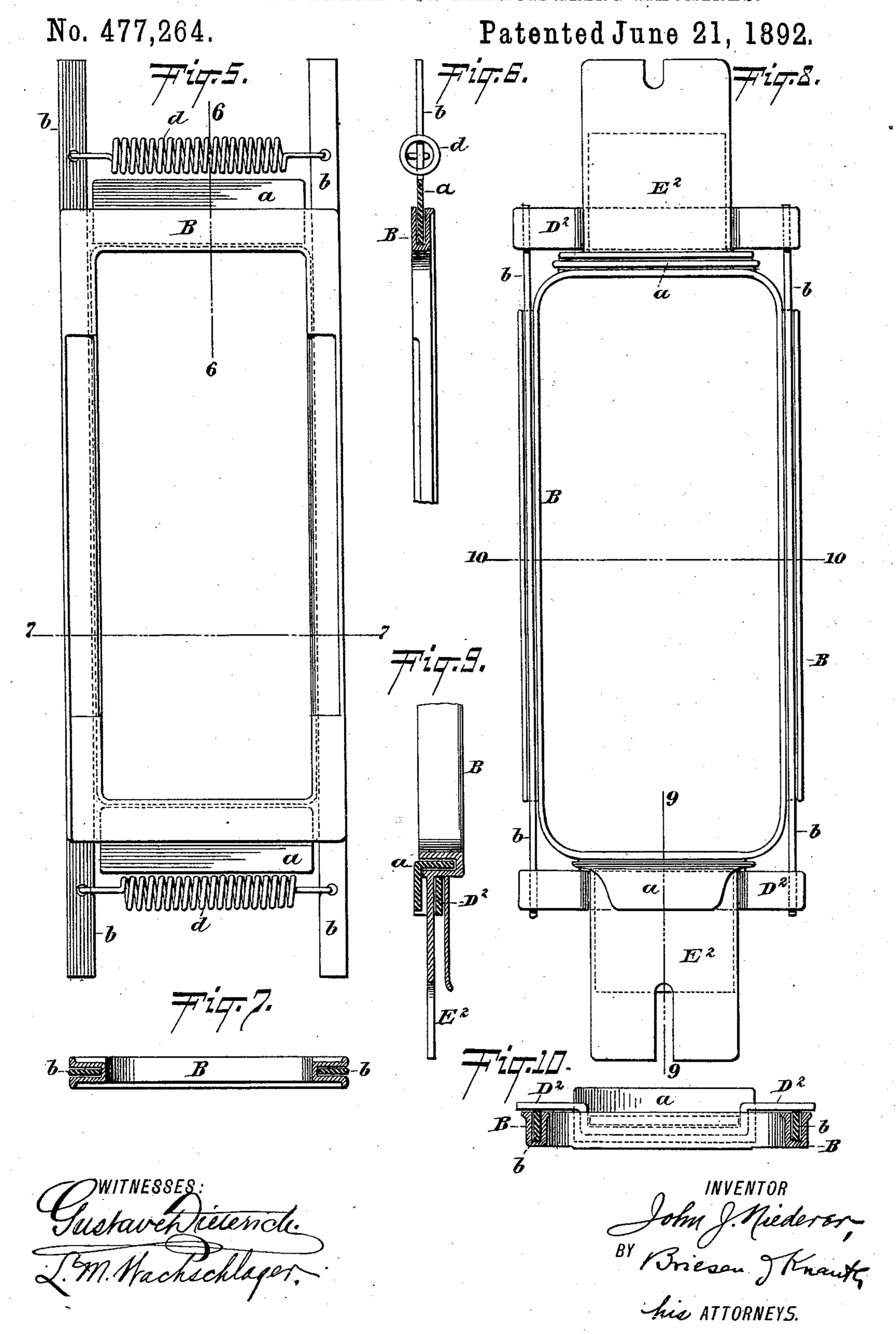
J. J. NIEDERER.

FABRIC HOLDING FRAME FOR EMBROIDERING MACHINES.



J. J. NIEDERER.

FABRIC HOLDING FRAME FOR EMBROIDERING MACHINES.



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. 477,264, dated June 21, 1892.

Application filed January 21, 1892. Serial No. 418,828. (No model.)

To all whom it may concern:

Be it known that I, John J. Niederer, a resident of the city of New York, in the county and State of New York, have invented an Improved Fabric-Holding Frame for Embroidering-Machines, of which the following is a specification.

My invention relates to certain new and useful improvements in embroidering-machines; and it consists in a fabric-holding frame for such machines of improved construction wherein the fabric to be embroidered at or near one corner or end may be properly held and distended.

It consists, also, in the novel arrangement and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a front view of several of my improved fabric-holding frames as arranged in the main frame of the embroidering-machine. Fig. 2 is a cross-section on the line 2 2, Fig. 1. Fig. 3 is a side view of one of the frames. Fig. 4 is a transverse section on the line 4 4, Fig. 1. Fig. 5 is an enlarged front view of one of the frames; Fig. 6, a vertical section on the line 6 6, Fig. 5; Fig. 7, a cross-section on the line 7 7, Fig. 5; Fig. 8, a front view of a modification of my invention; Fig. 9, a vertical section on the line 9 9, Fig. 8; and Fig. 10 is a cross-sectional view on the line 10 10, Fig. 8.

A is the main frame of the embroidering-machine, to which motion in the plane of its surface is imparted by Jacquard or analogous mechanism. This main frame A carries series of fabric-holding frames B, to each of which one corner or end of a handkerchief or the like to be embroidered is secured, so that the part of fabric to be embroidered is properly distended in its frame B.

Inasmuch as it is desirable to secure as many fabrics and frames B as possible in the main frame A for simultaneous operation, it is necessary to secure economy of space, that the frames B be placed side by side and as near together as possible. By my present invention this is accomplished in the following manner: Each frame B has its sides and ends grooved, and into these grooves are fitted rods a b.

adapted to clamp and secure the fabric in the 50 grooves. In the frames B (shown in Figs. 1 to 7, inclusive) the grooves are formed in the edges of the frame, and the two longer rods b b, which fit into the side grooves, project from the top and bottom of the frame and may be 55 held together by suitable springs d d. The projecting ends of these rods b b serve, also, as a means for securing the frame B to the main frame A, since it is only necessary to slip them under a clasp D, fastened to the main frame 60 A by a set-screw E at one end and under slotted clips F at the other end or in any other suitable manner. The upper and lower rods a a are inserted in the top and bottom grooves of the frame B between the rods b b.

In the modified form shown in Figs. 8 to 10, inclusive, the grooves are formed in the face of the frame B. The rods a and b are placed in these grooves in the same manner as before, and the rods b are held in place by U- 70 shaped spring-plates D^2 , whose depressed middle portions are passed under extensions E^2 of the frame B, while their raised ends are sprung over the rods b, as shown in Fig. 10, thus holding them in the grooves. I regard 75 these spring-plates D^2 as equivalents of the springs d. The extension E^2 may serve, also, to form a means for securing the frame B to the main frame A of the machine.

In operation the fabric or one end or corner thereof is stretched across the frame B and folded over the grooved walls of said frame. The rods a b are then put in the grooves, securely clamping and at the same time further stretching the fabric. The frames 85 B B, each holding one piece of fabric, are then clamped upon the main frame A of the machine and subjected to the usual or suitable embroidering mechanism. It will be seen that a considerable number of frames B B can 90 be placed close together in the same frame A, thereby permitting a very large number of handkerchiefs or the like to be embroidered simultaneously.

Having described my invention, what I 95 claim is—

Each frame B has its sides and ends grooved, | 1. The frame B, having grooved walls, in and into these grooves are fitted rods ab, combination with the rods aabb, adapted to

enter said grooves, and with springs connecting said rods $b\ b$, substantially as and for the

purpose set forth.

2. The grooved frame B, combined with rods a a and b b, adapted to enter the grooves of said frame, the rods b b being longer than the frame B, with springs connecting the rods b b where they project from the frame B, and with

the main frame A and means, substantially as described, for attaching the frame B to the 10 frame A, all as specified.

JOHN J. NIEDERER.

Witnesses:

HARRY M. TURK, E. L. SHERMAN.