No. 889,783. PATENTED JUNE 2, 1908.

H. HOCHREUTENER.

SHUTTLE MACHINE EMBROIDERY FRAME.

APPLICATION FILED OCT. 15, 1907.

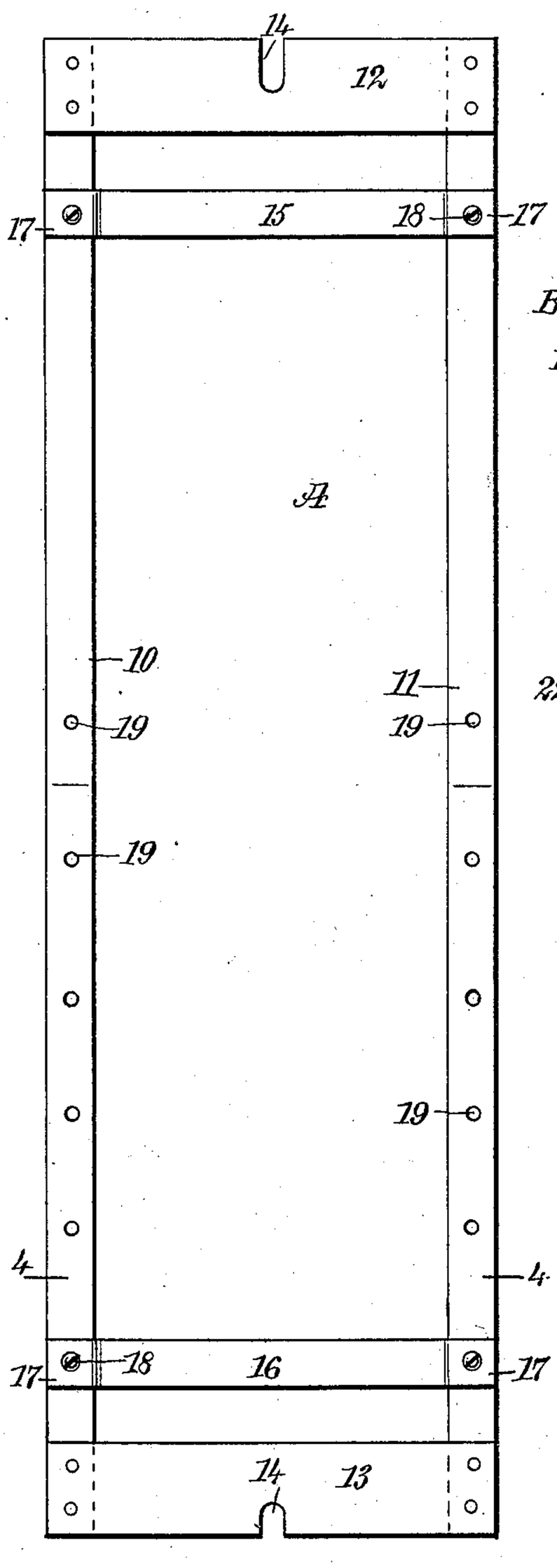

Fig. 1

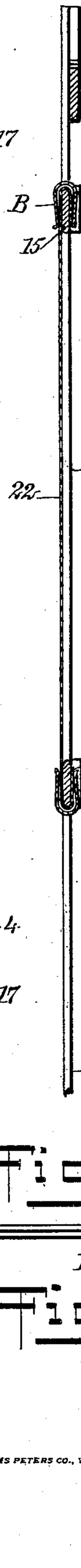

Fig. 3

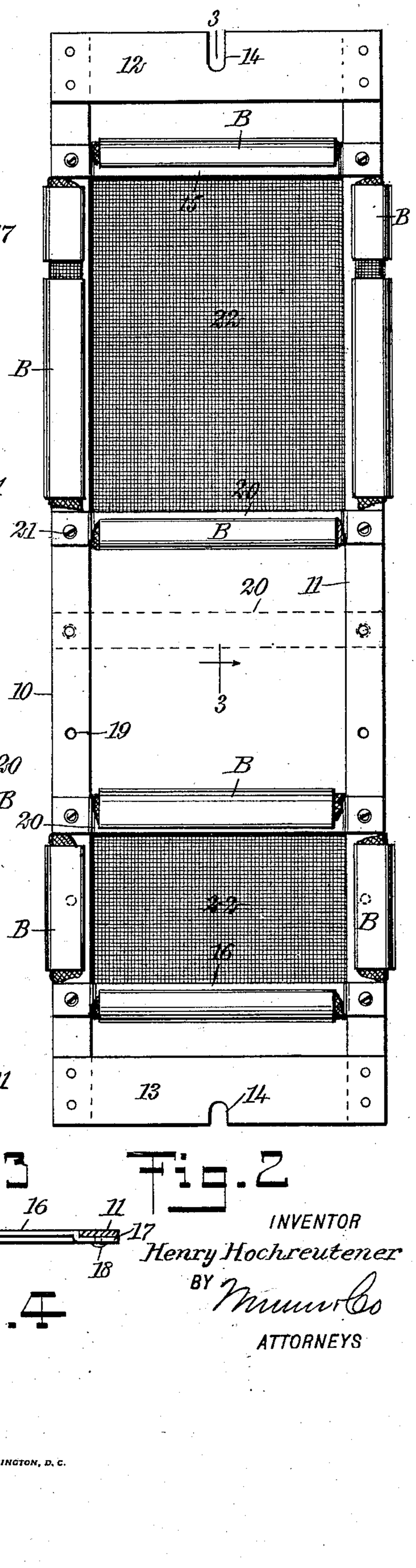

Fig. 2

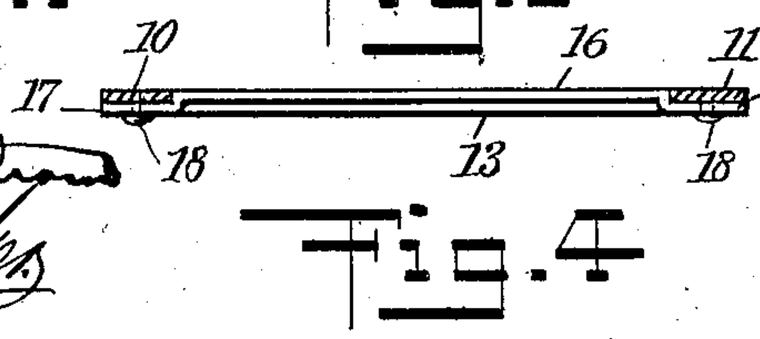

Fig. 4

WITNESSES

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SHUTTLE-MACHINE EMBROIDERY-FRAME.

No. 889,783. Specification of Letters Patent. Patented June 2, 1908.

Application filed October 15, 1907. Serial No. 397,478.

To all whom it may concern:

Be it known that I, HENRY HOCHREUTENER, a citizen of the United States, and a resident of West Hoboken, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Shuttle-Machine Embroidery-Frames, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide an extension frame for shuttle embroidering machines that will lie perfectly flat upon the machine, and which will not interfere with the shuttle or other moving portions of the machine in any manner.

It is also a purpose of the invention to provide a frame of the character described that will accommodate a long piece of fabric or one or a number of shorter pieces, and to provide means whereby the changes in the frame necessary to accommodate different lengths of fabric may be simply, conveniently, and expeditiously made.

Another purpose of the invention is to provide very simple and economic means for holding the fabric properly stretched upon the frame.

The invention consists in the novel construction and combination of the several parts as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the frame adapted for the reception of a long piece of fabric; Fig. 2 is a similar view of the frame, illustrating its adaptation to receive and hold pieces of fabric of different lengths; Fig. 3 is an enlarged longitudinal section through a portion of the frame and the fabric thereon, the section being taken practically on the line 3—3 of Fig. 2; and Fig. 4 is a transverse section taken substantially on the line 4—4 of Fig. 1.

The frame in its entirety is by preference made of metal. The frame proper consists of two parallel side pieces 10 and 11 that have flat forward and rear faces, and connecting end members 12 and 13 that are secured in any suitable or approved manner upon the front faces of the side members 10 and 11, and each end member is provided usually with a slot 14 in its outer edge to receive offsets from the bed of the machine so as to hold the frame in place and prevent it from having side or end movement.

Transverse members 15 and 16 are located between the end members 12 and 13 adjacent to said end members, as is shown in Fig. 1. The end portions of the transverse members 15 and 16, which may be termed intermediate members, lie flat upon the front faces of the side members 10 and 11, flush with the end members 12 and 13, and these transverse members are held fixedly in position by screws 18 passed through their end portions, or by equivalent means. The said transverse members 15 and 16 between their ends, or between the opposing edges of the side members 10 and 11, are depressed from the rear forward, as shown at 17, to such an extent that their rear or back faces are flush with the corresponding faces of the side pieces 10 and 11, as is shown in Fig. 4, and by this construction it is evident that the front and the back faces of the frame are rendered flat and offer no obstructions.

The side members 10 and 11 of the frame are provided with a series of apertures 19, and also in connection with the frame A that has been just described, a series of auxiliary transverse members 20 are provided, adapted to be located between the fixed intermediate members 15 and 16, as is shown in Fig. 2, and these auxiliary transverse members 20 are of the same construction as the fixed transverse members 15 and 16, and bear the same relation to the frame A, but the auxiliary transverse members 20 are adjustable upon the side members of the frame, so that material 22 of different lengths may be accommodated on the frame at one time, but when an exceptionally long piece of material is to be embroidered, the auxiliary transverse members 20 are omitted, as is illustrated in Fig. 1. These auxiliary transverse members 20 are held in adjustment by screws 21, or their equivalents, passed through apertures in the end portions of the said transverse members, and through the apertures 19 in the side members of the frame.

In connection with the frame and with the transverse members thereof, clips B are employed, of different and suitable lengths, and these clips are preferably made of thin brass, and are U-shaped in cross section, being reinforced at their longitudinal edges. After the transverse members have been adjusted on the frame, the material is passed over the outer longitudinal edges of the transverse

members, or the edges at their depressed portions, and the side portions of the material are carried over the outer side edges of the side members 10 and 11 of the frame, then the clips are sprung over the folded edges of the material and over the surfaces of the transverse and side members of the frame along which the edges of the material extend.

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

1. An embroidery frame for shuttle embroidery machines, comprising parallel side members connecting fixed end members, fixed transverse members intermediate of the end members, removable transverse members between the fixed transverse members, said transverse members intermediate of the end members being depressed between their points of connection with the side members, means for adjustably securing the removable transverse members to the side members of the frame, and spring clips that straddle the side and transverse members of the frame.

2. An embroidery frame for shuttle embroidery machines, comprising parallel side members, connecting end members secured to the front faces of the side members, fixed members intermediate of the end members secured to said side members, removable members located between said fixed intermediate members, means for adjustably securing the removable members to the side members of the frame, the front faces of the fixed members and the removable members at their ends being flush with the corresponding faces of the end members, said fixed and removable intermediate members having their front faces depressed between the opposing edges of the side members, said depressed portions at the back being flush with the corresponding portions of the side members of the frame, and spring clips for the members of the frame.

3. An embroidery frame for shuttle embroidery machines, comprising parallel side members provided with a series of apertures therein, connecting end members secured to the front faces of the side members, transverse members fixed to the side members between the ends of the frame, removable transverse members adapted to be located between the fixed transverse members, being provided with apertures at their ends, the end portions of all of the transverse members engaging with the front faces of the side members and flush with the end members, the surfaces between the ends of said transverse members being rearwardly depressed from the front, the backs of said surfaces being flush with the rear faces of the side members, spring clips for the members of the frame, and removable retaining devices for the removable members.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY HOCHREUTENER.

Witnesses:
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JOHN P. DAVIS.