

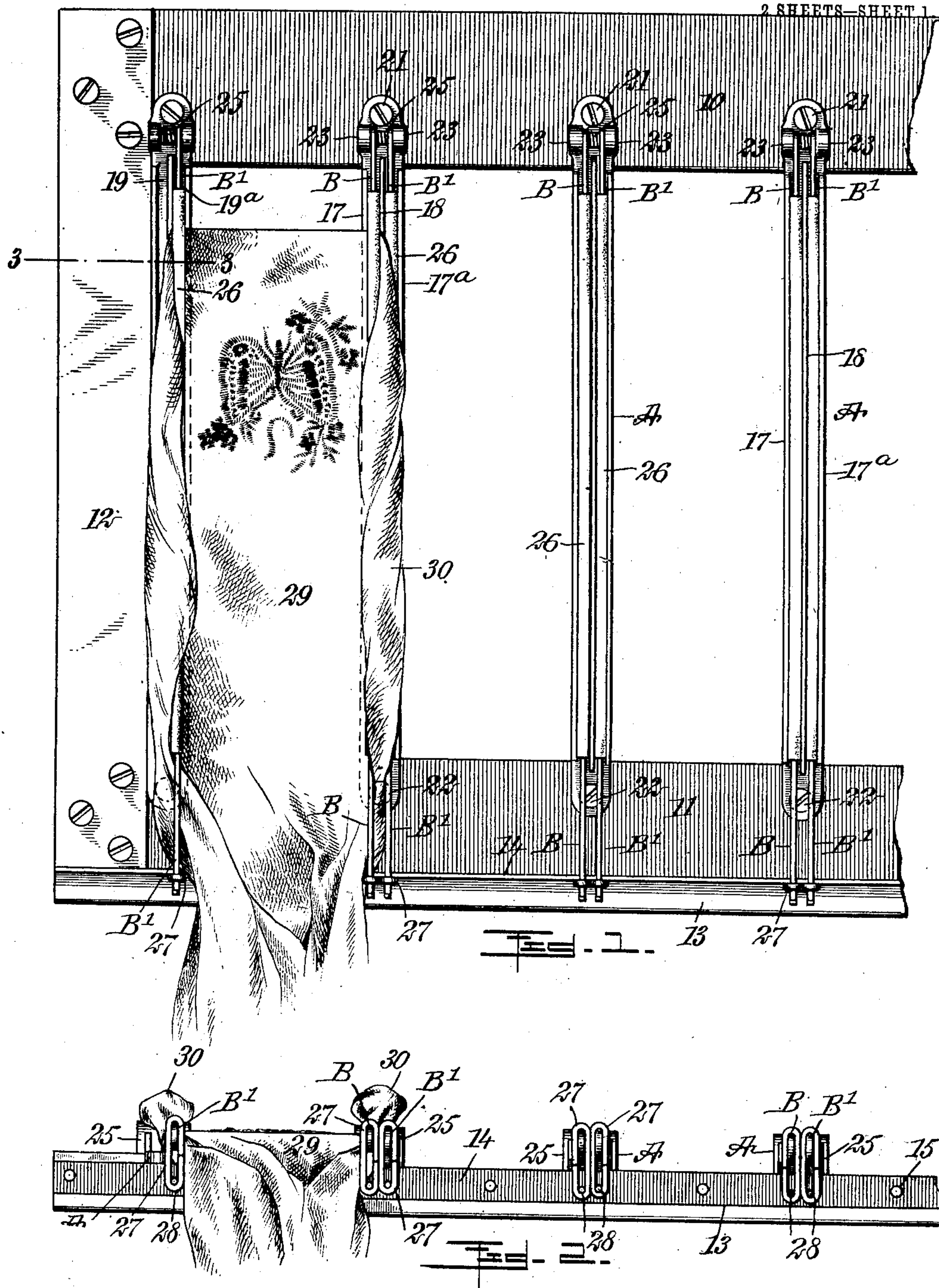
No. 826,853.

PATENTED JULY 24, 1906.

H. HOCHREUTENER.
FABRIC HOLDING FRAME.

APPLICATION FILED DEC. 4, 1905.

2 SHEETS—SHEET 1



WITNESSES:

Geo. O. Kingsbury. ©
J. F. Adams

INVENTOR

Henry Hochreutener

BY

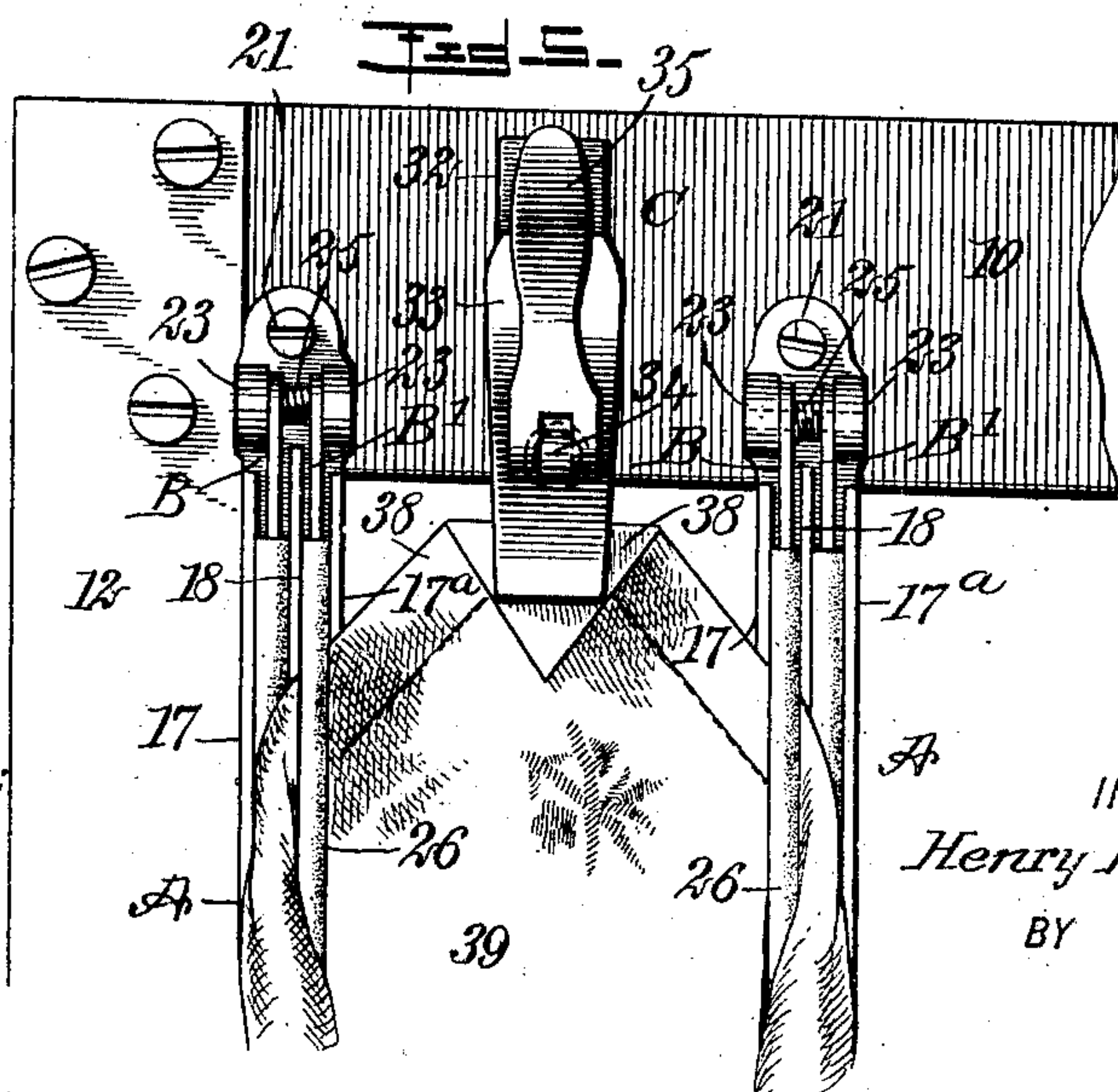
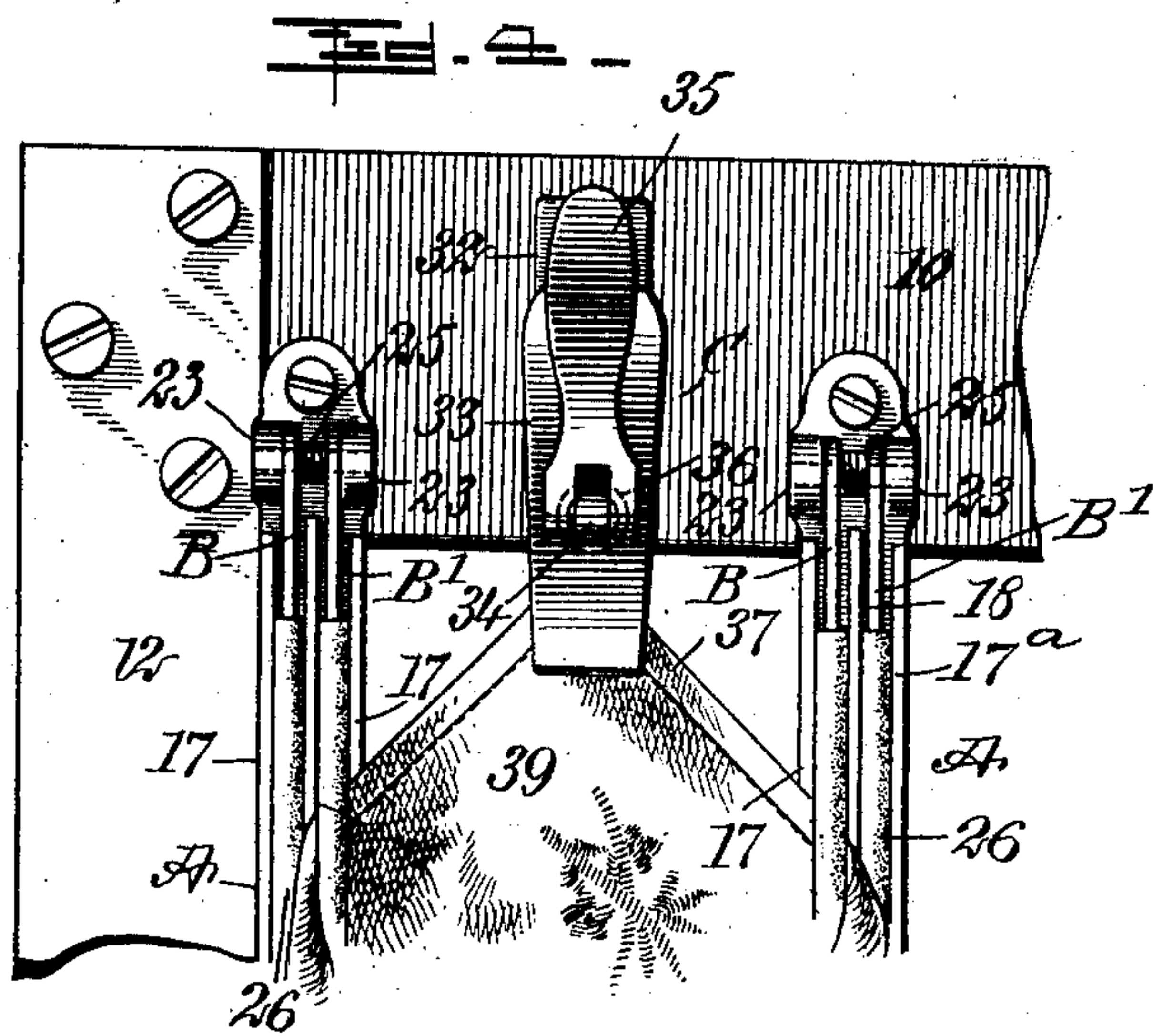
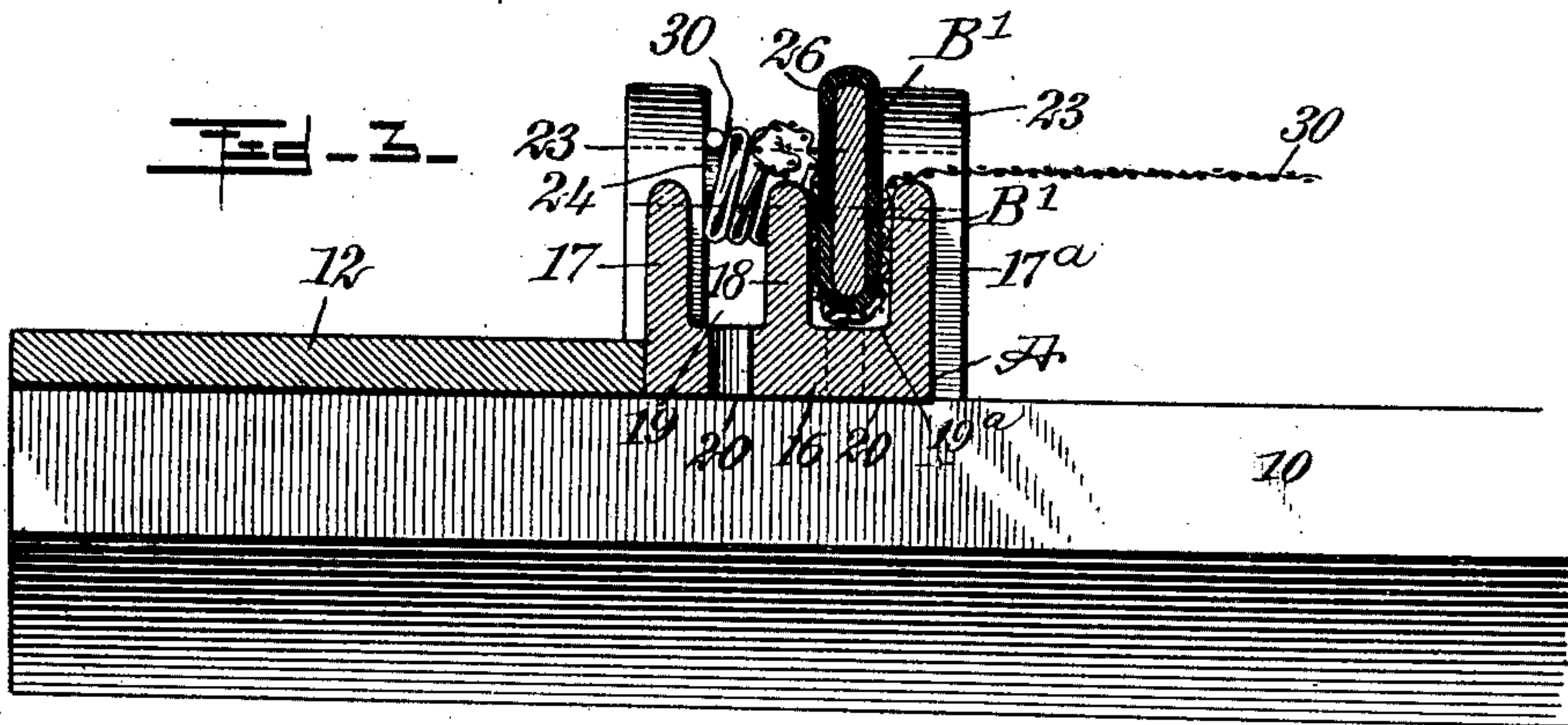
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UNITED STATES PATENT OFFICE.

HENRY HOCHREUTENER, OF WEST HOBOKEN, NEW JERSEY.

FABRIC-HOLDING FRAME.

No. 826,853.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed December 4, 1905. Serial No. 290,147.

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 Fabric-Holding Frames, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a fabric-holding frame especially adapted for use in connection with what is known as "Swiss embroidering-machines" and to so construct the frame that any desired number of retaining devices may be employed, which devices are simple, durable, light, and strong, and so that by their means any desired number of pieces of fabric may be quickly and conveniently stretched and firmly secured in their stretched position without danger of injury to the goods.

Another purpose of the invention is to provide a fabric-holding frame by means of which the corner portions of the handkerchief or like article can be stretched not only longitudinally of the frame, but also transversely as well, enabling a design—a letter or the like—to be worked a uniform distance from the hem or border, no matter how narrow or how wide the hem or border may be.

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 plan view of a portion of the improved fabric-holding frame. Fig. 2 is a front elevation of the said frame as shown in Fig. 1. Fig. 3 is an enlarged longitudinal section taken practically on the line 3-3 of Fig. 1. Fig. 4 is a plan view of a corner portion of the frame, illustrating the application thereto of an auxiliary clamp, said clamp being shown used in connection with a handkerchief having a narrow border or hem. Fig. 5 is a view similar to that shown in Fig. 4, showing the auxiliary clamping device used in connection with a handkerchief having a wide hem or border; and Fig. 6 is a side elevation of one of the locking-arms.

The body portion of the frame consists of two side bars 10 and 11 of any desired length and a connecting-bar 12, located at one end

only of the said side bars. One of the side bars—the side bar 11—is provided with a rabbet 13 in its outer edge, and at the vertical wall of the said rabbet a metal strip 14 is secured by means of screws or pins 15 or their equivalents. The side bars 10 and 11 are connected by retaining devices A, located, preferably, at regular intervals apart, although I do not confine myself to any particular number or arrangement of the said retaining devices.

Each retaining device is of the same construction, and a retaining device consists of a body-bar 16 of sufficient length to extend well over both of the side pieces 10 and 11 at their opposing edges, and longitudinal flanges 17 and 17^a, which extend up from the longitudinal edges of the body-bar, together with a central partition 18, parallel with the said flanges. The flanges 17 and 17^a do not extend quite to the ends of the body-bar, but are sufficiently long to reach from the inner edge of one side bar to the corresponding edge of the other, and preferably the partition 18 is slightly longer than the flanges 17 and 17^a. In this manner the body-bar of the retaining device is divided into two longitudinal compartments 19 and 19^a. Furthermore, in the construction of the body-bar slots 20 are made in the bottom portions of the compartments 19 and 19^a, as is shown in Fig. 3, so that when material is forced down into the said compartments it will be pressed into the said openings 20 to a greater or lesser extent, and thus facilitate the binding action between the material and the body-bar. Therefore these openings 20 are preferably more or less elongated.

One end portion of a body-bar is secured, by means of a screw 21 or its equivalent, to the side piece 10, while the opposite end is attached to the side piece 11 by a screw 22 or the like, and at that end of the body-bar which is located on the side piece 10 opposing ears 23 are formed, extending upwardly from the said bar, and a pin 24 is passed through the two ears, which pins serve to pivot the outer ends of the two locking-arms B and B', each locking-arm being made to extend the length of one of the compartments 19 and 19^a of the body-bar, and the opposite or free ends of the said locking-arms extend out beyond the end of the body-bar attached to the side pieces 11 and over the rabbet 13 in said side bar, as is shown in Figs. 1 and 2. These

locking-arms are held spaced apart at their pivot ends, preferably by means of an interposed spring-washer 25, as is best shown in Fig. 1, and the said locking-arms are more or less longitudinally curved, their under edges being convexed and their upper edges concaved, so that when the free ends of the said locking-arms are pressed down in the compartments of the body-bar 16 they will have the firmest possible bearing upon the bottom of the said compartments, as the bars are rendered more or less straight when they are forced down at their free ends, and after said bars have been forced down as far as possible in the said compartments they are locked at their free ends in any approved manner—for example, by means of links 27, which are slipped over the free ends of the said locking-arms, and over pins 28, which extend outward from the plate 14, attached to the outer side edge of the side bar 11, as is particularly shown in Fig. 2. Furthermore, in order that the locking-arms when carried to locking position shall not cut or in any manner injure the fabric to be clamped in a compartment each locking-arm is provided between its ends with a sleeve 26, of rubber or other yielding material, the sleeves being of a length practically corresponding to the length of a compartment 19 or 19^a in the body-bar.

When the fabric 19 is to be stretched in the frame, the locking-arms B' and B of the pair selected to lock the fabric in place are lifted up at their free ends, and the fabric is then passed beneath the raised arms, and the edge of the fabric near which the embroidery is to be worked is brought as near as may be desired to the inner edge of the side bar 10 of the frame. The surplus material at each side of the arms in action is then rolled upon itself, as is shown at 30 in Figs. 1 and 2, and then the overhanging inner portion of the material is carried inward beneath the free end portions of the locking-arms B' and B, and the material is stretched as much as possible with the hands, and then the locking-arms upon being forced down and locked in their fixed position will have stretched the material between them as tight as is ever required.

This device is exceedingly simple, it is well adapted for the purpose intended, and is convenient in operation. It is evident that any one or more pairs of locking-arms may be brought into action, and that when a locking-arm is pressed downward and locked the fabric is crowded into a compartment 19 or 19^a in such manner that it cannot be moved out therefrom until the locking-arms are released, as is very evident by reference to Fig. 3. It may be here remarked that as a locking-arm is not required in the outer compartment of the outermost retaining device or that located near the transverse connecting-bar 12 such locking-arm has been omitted in

Figs. 1 and 3 of the drawings. In Figs. 4 and 5, however, such bar is shown, although it is rarely used.

In Figs. 4 and 5 I have shown the addition of a clip C of any approved construction, located on the side bar 10 about an equal distance between opposing retaining devices A. This clip C, as illustrated, consists of a base-plate 32, secured to the side bar 10, an arched spring upper lip 33, having play on the base-plate, a post 34, which is attached to the base-plate and extends up through an opening in the said lip, a spring 33^a (shown by dotted lines) coiled around the post between the base-plate and the lip, and a handle 35, which is pivoted on the upper end of the post 34, the said handle at its pivot end being provided with a cam-surface 36, so that when the handle is forced downward and outward, as shown in Figs. 4 and 5, the material introduced between the base-plate and the lip will be firmly engaged and held, and when the handle is carried in an opposite direction the lip rises from the base-plate and the material can be freed therefrom. This clip C is employed when the embroidery is to be worked adjacent to the corner of a handkerchief 39, for example, and when the hem 37 on such handkerchief is narrow the mouth of the clip receives the corner of the handkerchief in single thickness; but when the handkerchief is provided with a wide hem 38, as shown in Fig. 5, the corner of the handkerchief at the hem is folded over upon itself, as shown also in Fig. 5, so as to bring the mouth of the clip to about the same position relative to the inside edge of the hem or border as it sustained to the inside edge of the narrow border of the handkerchief shown in Fig. 4.

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

1. In fabric-holding frames, a frame and retaining devices secured to the frame comprising parallel channel-bars, the channels being in their upper faces and a longitudinal partition in the channel of each bar, dividing each channel-bar into two parallel compartments which are open at their ends, a curved locking-bar having its under surface convexed operating in each compartment of each channel-bar the length of the compartments, which locking-bars are free at one end and are pivotally mounted at their opposite ends, springs at the pivoted ends of the locking-bars of each channel-bar yieldingly supporting them, fastening devices for the free ends of the locking-bars, and an elastic sleeve surrounding each locking-bar for the major portion of its length between its ends.

2. In fabric-holding frames, a frame and retaining devices secured to the frame comprising spaced and parallel channel-bars, the channels being in their upper faces, and a longitudinal partition in the channel of each

bar, dividing each channel-bar into two parallel compartments which are open at their ends, a curved locking-bar having its under surface convexed, operating in each compartment of each channel-bar the length of the compartments, which locking-bars are free at one end and are pivotally mounted at their opposite ends, springs at the pivoted ends of the locking-bars of each channel-bar yieldingly supporting them, fastening devices for the free ends of the locking-bars, an elastic sleeve surrounding each locking-bar for the major portion of its length between its ends, and

clips secured to the frame between the channel-bars where the locking-bars are pivoted, which clips grip and retain the corner portions of a handkerchief while its side portions are held under tension by the locking-bars.

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

HENRY HOCHREUTENER.

Witnesses:

ULRICH EGGENBERGER,
ANNA NEFF.