(No Model.)

M. H. RUMPF.

FABRIC HOLDING FRAME.

No. 464,442. Patented Dec. 1, 1891.

FIG. 1.

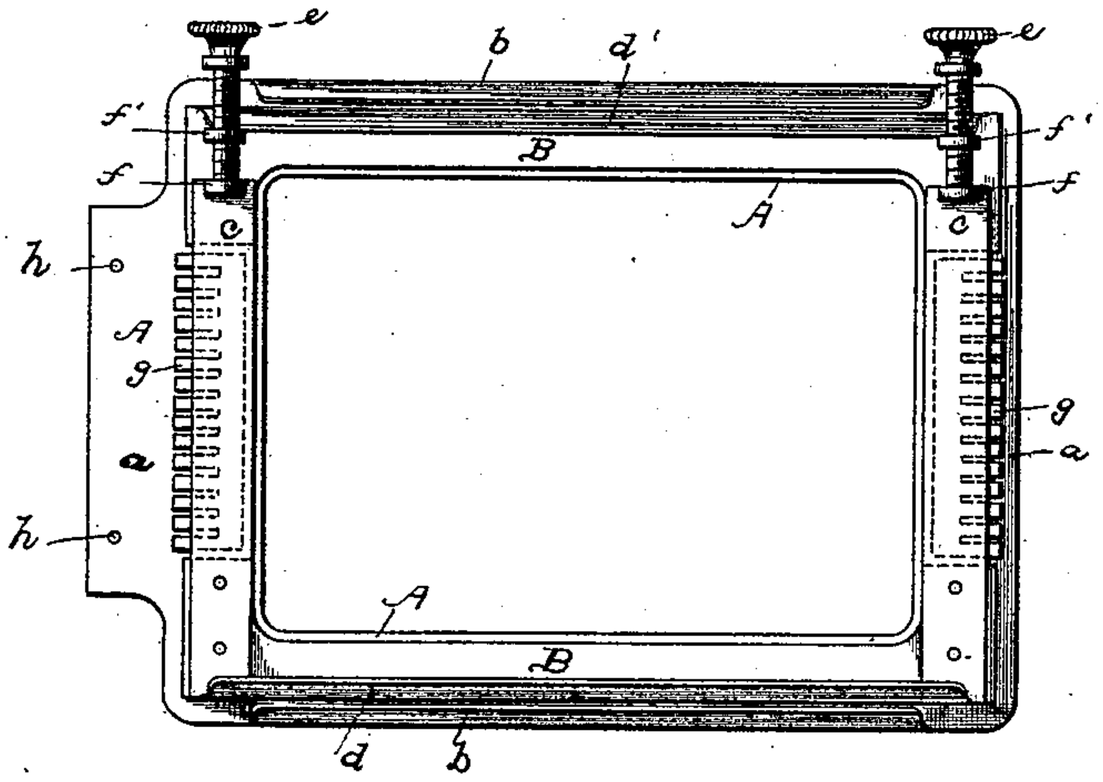


FIG. 2.

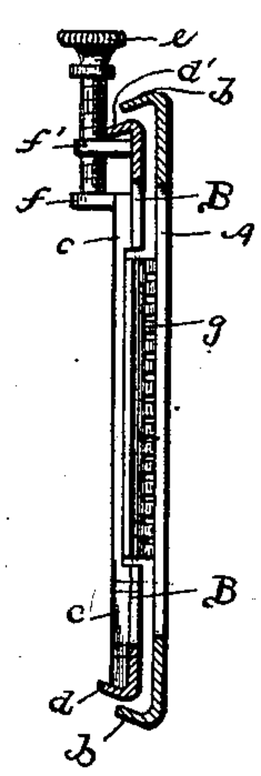


FIG. 3.

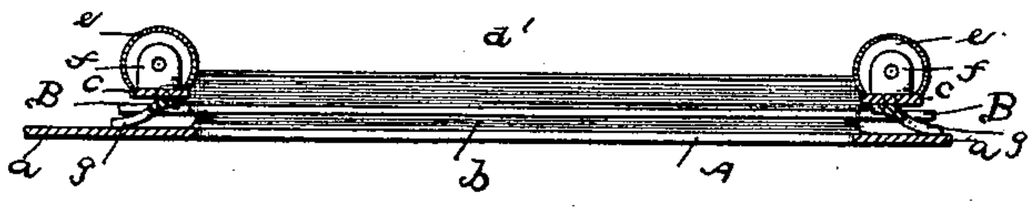
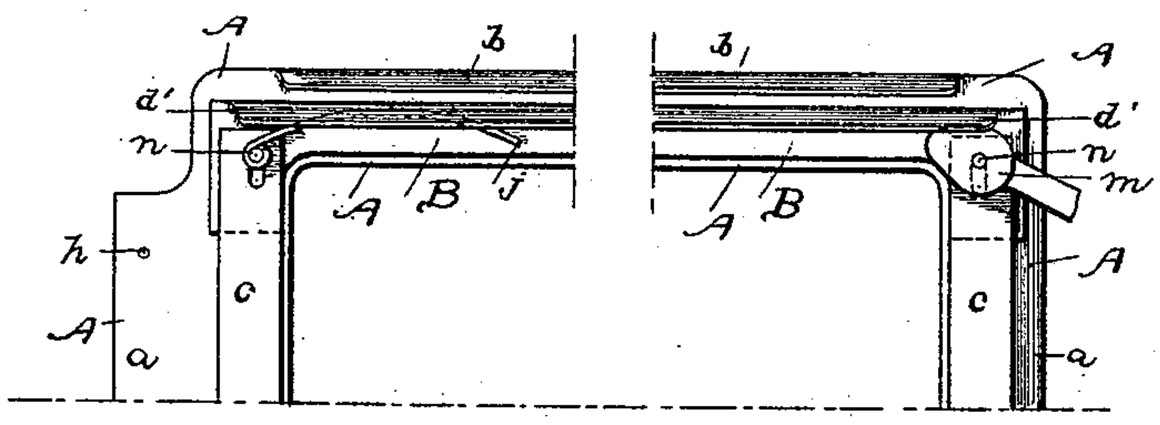


FIG. 4.



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UNITED STATES PATENT OFFICE.

MARTIN HENRI RUMPF, OF PARIS, FRANCE.

FABRIC-HOLDING FRAME.

SPECIFICATION forming part of Letters Patent No. 464,442, dated December 1, 1891.

Application filed May 6, 1891. Serial No. 391,805. (No model.) Patented in France October 13, 1890, No. 208,813; in England October 27, 1890, No. 17,147, and in Belgium November 3, 1890, No. 92,561.

To all whom it may concern:

Be it known that I, MARTIN HENRI RUMPF, manufacturer, a citizen of the United States of Brazil, and a resident of Paris, in the Republic of France, have invented certain new and useful Improvements in Fabric-Holding Frames, of which the following is a specification.

This invention is embodied in English Patent No. 17,147, dated October 27, 1890; in French Patent No. 208,813, dated October 13, 1890, and in Belgian Patent No. 92,561, dated November 3, 1890.

My present invention relates to an improved fabric-holding frame; and my improvements consist in novel features of construction hereinafter described and claimed.

This fabric-holding frame is shown and described in another application filed November 20, 1890, Serial No. 372,033, where I have shown, described, and claimed a pantograph device for operating the fabric-holding frame, which forms the subject of the present invention.

On the annexed drawings, Figure 1 is a plan view of my improved fabric-holding frame. Fig. 2 is a transverse section of the frame for holding the fabric. Fig. 3 is a longitudinal section. Fig. 4 represents two variations in the construction of the frame.

The fabric-holder is formed of two rectangular frames, one being rigid and the other capable of extension, the two corresponding sides of which are arranged in such a way as to fit in with one another. It is composed of a rigid metal under frame A, the two opposed edges *a* of which are flat and the two other edges *b* bent up near the top, and of a second upper extensible frame B, the two corresponding edges *d d'* of which are arranged in such a way as to fit into the concave part of the turned-up edges *b* of the under frame. For this purpose one of the sides *d'* of the upper frame B is movable and secured by means of screws *e*, capable of being revolved in lugs *f*, arranged on the fixed sides *c* of the upper frame and engaging in similar lugs *f'*, fixed on the movable side *d'*, or vice versa.

The fabric having been placed on the under frame A, it will suffice to cover it by means of the extensible upper frame B and to screw up the pressure-screws *e* to cause the sides *d d'* of the same in separating one from the other to stretch the fabric and hold it firmly, the degree of extension of the upper frame being sufficient to allow of the employment of very thick fabrics and even of leather and other supple materials.

Each of the fixed sides *c c* of the upper extensible frame B carries a thin and flexible plate *g*, having, preferably, a toothed part so arranged that at the moment when the two frames approach one another the flexible teeth of this plate force the fabric to stretch itself on the smooth sides *a a* of the under frame.

The extending of the frame may, if desired, as shown in Fig. 4, be produced by means of blade-springs *j*, attached to the extremities of the fixed sides *c c* of the upper frame B, or by means of eccentrics *m* or other mechanical equivalents.

h are holes by which the holding-frame may be connected with a pantograph device, such as shown, described, and claimed in the other application referred to.

I declare that what I claim is—

1. The combination of the rigid frame A, having inturned flanges at two opposite edges, the extensible frame B, having similar opposing flanges adapted to fit against the inner faces of the flanges on frame A, and an adjustable device for extending or contracting said frame B, substantially as and for the purpose described.

2. The combination of the rigid frame A, having flanges *b*, the extensible frame B, having corresponding flanges *d* and formed of two overlapping parts *c d'*, and adjusting-screws *e e*, screwed into lugs on one of said parts and turning freely in lugs on the other part, substantially as described.

3. The combination of a rigid smooth-surfaced frame A, upon which the material to be embroidered is placed, an extensible frame B, lying against frame A upon the material and having flexible teeth, as described, on its inner face, and adjustable means for extending the frame B and pressing it toward the frame A, whereby the material is stretched between the two frames, substantially as described.

4. The combination of a rigid frame A and extensible frame B, having each inturned edges, as described, a flexible strip *g*, mounted on each of two opposite sides of the frame B and having teeth pointing outward and toward the frame A, and an adjusting device for extending said frame B and drawing it inward toward the frame A, substantially as described.

5. The combination of the rigid frame A, having inwardly-inclined flanges on two opposite edges, extensible frame B, having similarly-inturned flanges and formed of two overlapping parts *c d*, adjusting-screws *e e*, and flexible toothed strips *g*, substantially as described.

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

MARTIN HENRI RUMPF.

Witnesses:
EUGENE LOUIS DUMAL,
CHARLES BAILLY.