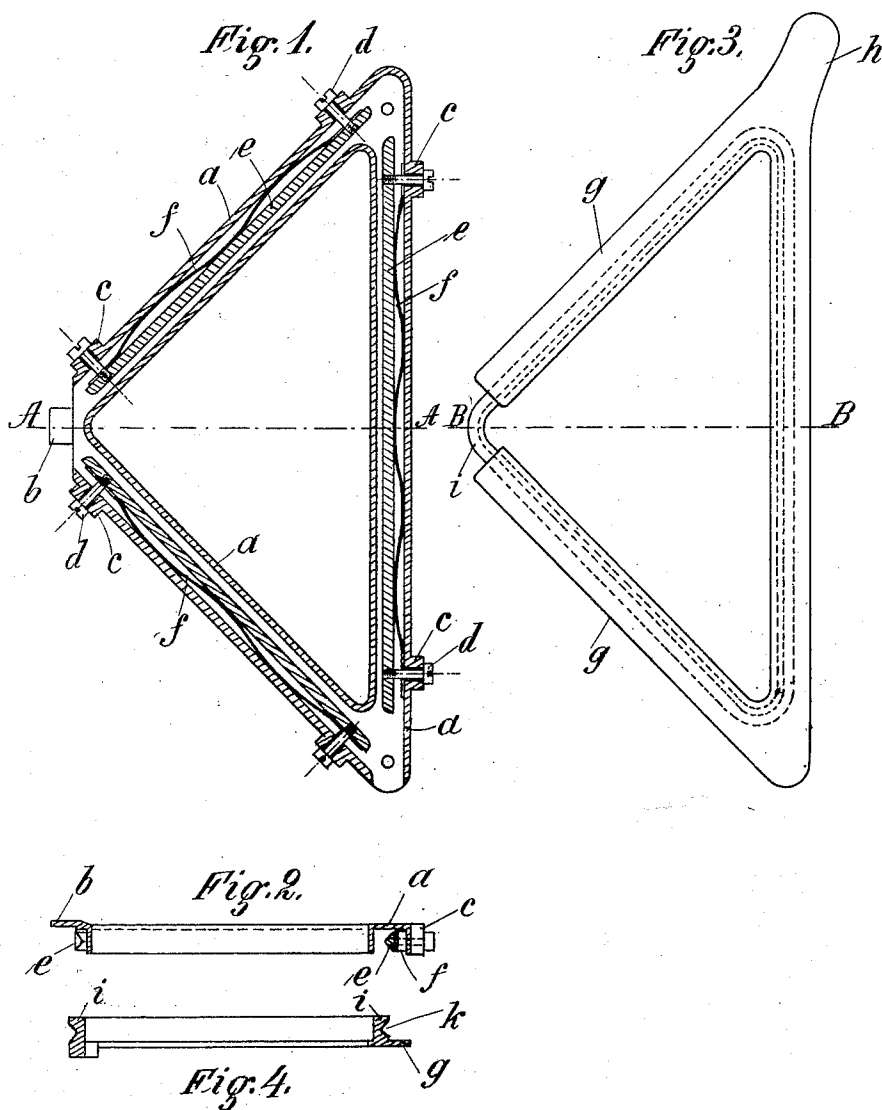


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EMBROIDERING MACHINE.
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1,039,929.

Patented Oct. 1, 1912.



Witnesses:
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UNITED STATES PATENT OFFICE.

BRUNO GREUTER, OF KREUZLINGEN, SWITZERLAND.

EMBROIDERING-MACHINE.

1,039,929.

Specification of Letters Patent.

Patented Oct. 1, 1912.

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To all whom it may concern:

Be it known that I, BRUNO GREUTER, a citizen of the Swiss Republic, residing at Kreuzlingen, Switzerland, have invented certain new and useful Improvements in Embroidering-Machines, of which the following is a full, clear, and exact specification.

The present invention relates to a device for holding the corner of a piece of cloth while operated upon by an embroidery-machine, and consists in the provision of two triangular frames of which one has a U-shaped cross-section to admit a rib on the other frame and so to clamp the work between the two frames.

In the accompanying drawings the invention is illustrated, Figure 1 representing a sectional plan of the U-shaped frame, Fig. 2, a cross-section of the same on the line A—A of Fig. 1, Fig. 3, a plan of the ribbed frame, and Fig. 4, a cross-section of the latter frame on the line B—B of Fig. 3.

The device is composed of two triangular frames *a* and *g* two sides of which form a right angle. The frame *a*, which is the base-frame, has the point at the right-angled corner cut off, the cut-off portion being substituted by a lug *b* by means of which the frame, or a suitable number of such frames, is secured to the frame of the embroidery-machine. The sides of the base-frame are of U-shaped cross-section and have a bar *e* of triangular cross-section loosely arranged between their flanges. Pins *d*, which are slidably fitted in bosses *c* in the outer flanges of the frame, hold the bars *e* with one apex directed toward the opposite flange and so as to allow a lateral displacement of the bar between the flanges. A sinuous spring *f* is interposed between each bar *e* and the respective outer flange, which spring has a tendency to urge the bar toward the inner flange. It is preferable to provide the pins *d* with screw-thread at one end for engagement with the bar *e* and at the other end with a head for limiting the inward movement of said bar.

The upper frame *g* is flat and is fitted at one corner with an actuating handle *h*. It has a rib *i* secured thereto at right angles, which rib is adapted to take between the bars *e* and the inner flanges of the frame *a*. The rib is thicker than the normal space between these elements so that an insertion of the same in position causes the bars *e* to be depressed in opposition to the springs *f*.

A groove *k*, of the same cross-section as the bars *e*, is provided in the rib in which groove the bars snap, so as to hold the elements in position, when the rib is fully inserted.

When the device is to be put into operation, the corner of the cloth is spread over the frame *a* whereupon it is stretched across the members of said frame by pressing the rib *i* of the frame *g*, together with the cloth, into the space between the bars *e* and the inner flanges of the base-frame as just described. The bars *e* snap into the groove *k* and hold the cloth well stretched and firmly clamped between the frames. When the work is ready, the frame *g* is removed by means of the handle *h*, the bars *e* yielding automatically to allow such removal.

I claim:—

1. A work holder for embroidery-machines, comprising two right-angled triangular frames, the sides of the base-frame having U-shaped cross-section, the upper frame being flat, ribs connected to the sides of the upper frame at right angles to the plane of the upper frame so as to press the cloth into the grooves of the base-frame when both frames are joined with such cloth between them, resilient elements in the grooves of the base-frame for retaining said ribs, and means for securing the base frame to an embroidery-machine, substantially as set forth.

2. A work holder for embroidery-machines, comprising two right-angled triangular frames, the sides of the base-frame having U-shaped cross-section, the upper frame being flat, ribs connected to the sides of the upper frame at right angles to the plane of the upper frame so as to press the cloth into the grooves of the base-frame when both frames are joined with such cloth between them, spring-actuated triangular bars arranged in the grooves of the base-frame so as to snap into grooves in said ribs when the frames are thus joined, and means for securing the base-frame to an embroidery-machine, substantially as set forth.

3. A work holder for embroidery-machines, comprising two right-angled triangular frames, the sides of the base frame having U-shaped cross-section, the upper frame being flat, ribs connected to the sides of the upper frame at right angles to the plane of the upper frame so as to press the cloth into the grooves of the base-frame when both frames are joined with such cloth between them,

headed pins slidably fitted in the outer web at each side of the base-frame, a triangular bar arranged in the groove at each side of the frame and secured to the ends of such
5 pins, sinuous springs arranged between the bars and the outer webs so as to cause the bars to snap into grooves in said ribs when the frames are joined and hold them connected, an actuating handle on the upper

frame, and means for securing the base- 10 frame to an embroidery-machine, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

BRUNO GREUTER.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."