

A. TSCHERNE.
MACHINE FOR CUTTING EMBROIDERY FOUNDATION.
APPLICATION FILED AUG. 16, 1911.

1,022,611.

Patented Apr. 9, 1912.

Fig. 1

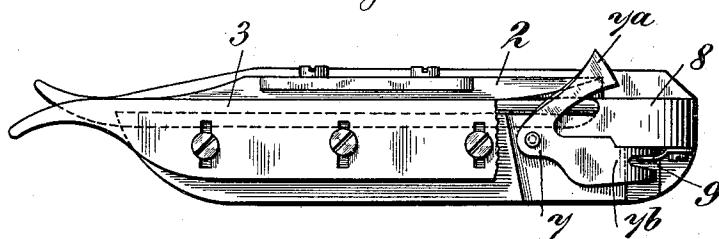


Fig. 2

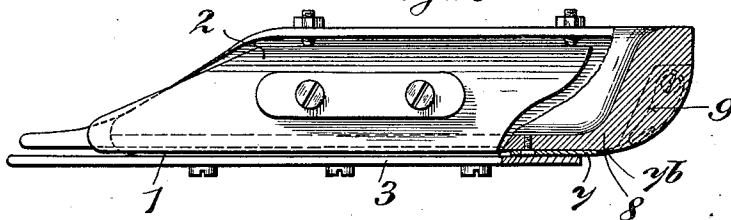


Fig. 3

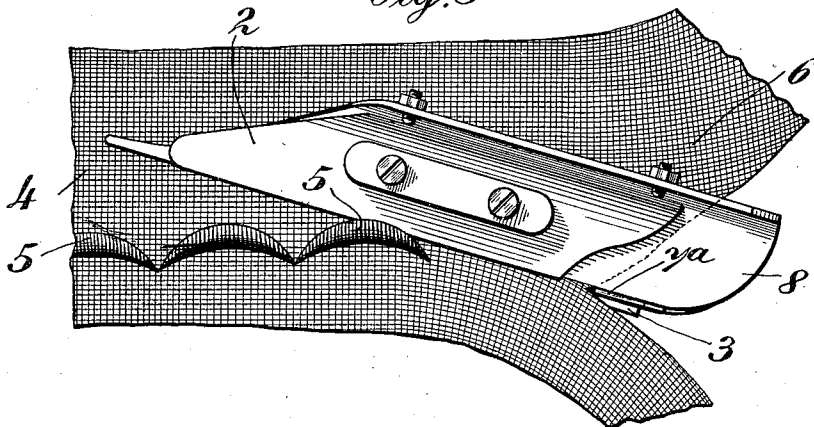
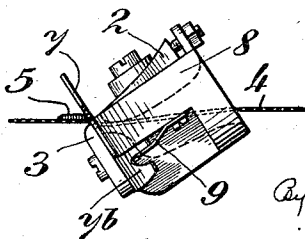


Fig. 4



Witnesses:

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UNITED STATES PATENT OFFICE.

ALOIS TSCHERNE, OF RORSCHACH, SWITZERLAND, ASSIGNOR TO THE FIRM OF HENRI LEVY, OF RORSCHACH, SWITZERLAND.

MACHINE FOR CUTTING EMBROIDERY FOUNDATION.

1,022,611.

Specification of Letters Patent.

Patented Apr. 9, 1912.

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To all whom it may concern:

Be it known that I, ALOIS TSCHERNE, a subject of the Emperor of Austria-Hungary, residing at Rorschach, Hafenplatz, Switzerland, have invented new and useful Improvements in Machines for Cutting Embroidery Foundation; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

A number of arrangements of machines for cutting embroidery foundation along the edge of the embroidery have been devised heretofore. It is a well known fact, that the embroidery does not reach to both ends of the strip forming the embroidery foundation. The embroidery foundation possesses on both ends an unembroidered portion which hitherto could not be cut by the knife of said machines, but was to be cut by hand, with scissors for instance.

My present invention has for its object to cut by the machine also the unembroidered ends of the embroidery foundation. To this end I provide in the cutting device second cutting means opposing the fabric.

A construction according to this invention is illustrated by way of example in the accompanying drawing in which—

Figure 1 shows the device in elevation, parts being omitted. Fig. 2 is a plan view of the same, partly in section, Fig. 3 illustrates the working of the device, and Fig. 4 is an end view of the latter.

A slot 1 (Fig. 2) is bounded at one side by a knife 2 and at the other side by a guide plate 3, both the knife and plate being mounted on a carrier. The embroidery foundation 4 is guided through the slot 1 in order to be cut along the edge 5 of the embroidery. Since the slot 1 is of such width that the embroidery foundation passes freely through it the knife 2 cannot cut the unembroidered portion 6 located on that end of the embroidery foundation which is first introduced into the slot. For cutting this unembroidered portion 6 a second knife 7 is pivotally connected to the knife carrier 8. The part 7^a of the knife 7 which is provided with the cutting edge projects into the slot

1 while the lower part 7^b is acted on by a spring 9.

When the fabric is moved with relation to the knife 7 while the portion 6 of the fabric is guided through the slot 1 *i. e.* over the guide plate 3 and under the carrier 8 as shown in Fig. 3, the knife 7 cuts the said portion to the beginning of the edge 5 of the embroidery. As soon as the knife 2 gets to the edge it begins to cut the embroidery foundation along the edge of the embroidery.

An advantage is obtained by the elastic arrangement of the knife 7. By this arrangement the knife is capable of yielding when touching the fabric-dust accumulated in the slot, whereby another part of the edge of the knife is caused to cut. If hereby the tension of the spring 9 becomes very large the pressure of the fabric-dust is overcome and the latter is thrown upward and thus removed from the slot. The knife 7 could be arranged also before as well as behind the slot.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a machine for cutting embroidery foundation, the combination of a knife carrier, a guide plate distanced therefrom forming a slot through which the foundation is passed during cutting action, a knife mounted on the carrier substantially parallel to the guide plate and in alinement with the slot, said guide plate and carrier supporting the foundation in front of the knife.

2. In a machine for cutting embroidery foundation, the combination of a knife carrier, a guide plate distanced therefrom forming a slot through which the foundation is passed during cutting action, a knife mounted on the carrier in the slot parallel to the guide plate, said guide plate and carrier supporting the foundation in front of the knife.

3. In a machine for cutting embroidery foundation, the combination of a knife carrier, a guide plate distanced therefrom forming a slot through which the foundation is passed during cutting action, and a knife pivoted on the carrier substantially parallel to the guide plate and having its cutting edge projecting above the guide plate and carrier.

4. In a machine for cutting embroidery foundation, the combination of a knife carrier, a guide plate distanced therefrom forming a slot through which the foundation is

passed during cutting action, a knife pivotally mounted parallel to the guide plate and between the latter and the carrier and having its cutting edge extending above the same, and a spring on the carrier to yieldingly hold the knife in operative position.

5 In a machine for cutting embroidery, the combination of a knife carrier, a guide plate distanced therefrom forming a slot
10 through which the fabric is guided, and a knife in alinement with the slot adapted to

cut the foundation up to the beginning of the embroidery and from the end of the embroidery.

In testimony that I claim the foregoing 15 as my invention, I have signed my name in presence of two subscribing witnesses.

ALOIS TSCHERNE.

Witnesses:

EUGENE NABEL,
RANDALL ATKINSON.

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