

(No Model.)

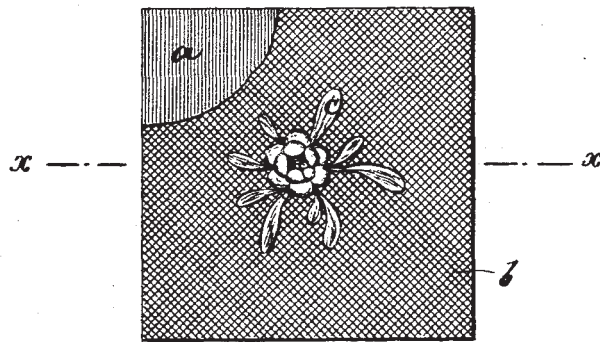
G. HAUSER.

PROCESS OF REMOVING BACKGROUND FROM EMBROIDERY.

No. 525,738.

Patented Sept. 11, 1894.

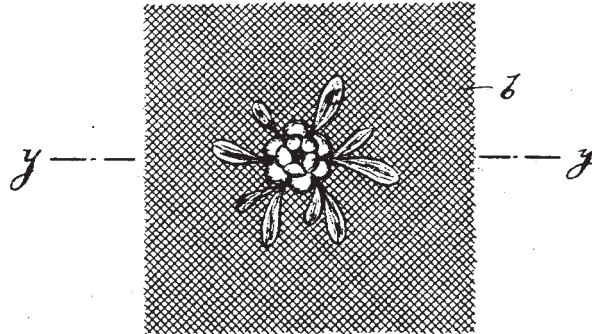
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

*A. Schehl.*  
*Wm. Schulz.*

INVENTOR

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# UNITED STATES PATENT OFFICE.

GOTTFRIED HAUSER, OF NEW YORK, N. Y., ASSIGNOR OF TWO-THIRDS TO  
RUDOLF SPIESS AND EMIL KREIS, OF SAME PLACE.

## PROCESS OF REMOVING BACKGROUND FROM EMBROIDERY.

SPECIFICATION forming part of Letters Patent No. 525,738, dated September 11, 1894.

Application filed July 15, 1892. Serial No. 440,097. (No specimens.)

*To all whom it may concern:*

Be it known that I, GOTTFRIED HAUSER, of New York city, New York, have invented an Improved Process of Removing the Back-  
ground from Embroidery, of which the follow-  
ing is a specification.

This invention relates to an improved process of removing the cotton background from machine made silk or metal embroidery.

10 In producing embroidery upon a machine the background is stretched upon a frame or between rollers, gauze is superposed if desired and then the embroidery is formed in relief by the needles, that penetrate the gauze  
15 and the background. The latter must then be removed so that the embroidery together with the gauze remains over without being injured or discolored and ready for the market. In some kinds of embroidery the gauze  
20 is dispensed with and the pattern formed directly upon the background. In this case also the background must be removed so that the embroidery alone remains over.

My invention contemplates the removal or  
25 destruction of the background in a simple, safe and quick manner.

In the accompanying drawings: Figure 1 represents a piece of machine made embroidery with the background; Fig. 2, a cross section on line *x, x*, Fig. 1. Fig. 3 represents the embroidery with the background removed. Fig. 4 is a cross section on line *y, y*, Fig. 3.

30 *a*, represents the cotton background; *b*, the superposed silk gauze; *c*, the silk or metal embroidery formed upon the gauze and background. In this form (Figs. 1 and 2) the goods leaves the embroidery machine and it is the object of the invention to remove the  
35 background so that the gauze *b*, and embroidery *c*, remain over (Figs. 3 and 4). In cases where no gauze *b*, is employed, the embroidery *c*, only is to remain over.

40 To remove the background the goods is subjected to the action of a bath consisting of chloride of aluminium and a suitable acid

such as sulphuric acid. The proportions of these constituents are from five to ten parts of chloride of aluminium to one part of the acid. In place of sulphuric acid, nitric acid  
50 may also be employed, but I prefer the former. The product is then removed and dried and subjected to a temperature of about 100° Reaumur when the cotton backing will fall away, while the silk gauze and the embroidery  
55 will remain over without being in any way discolored or otherwise injured. The product is then brushed to remove the decayed fibers of the backing which completes the process.

The chloride of aluminium is not believed  
60 to have any effect either upon the cotton backing or upon the embroidery material itself, or to influence in any way the action of the dilute acid upon either of these materials, but it is of value in the above process solely in  
65 relation to the coloring matter of the embroidery threads, with regard to which it is believed to act as a mordant, fixing and retaining the colors during the action of the acid. Whatever be the nature of the chemical  
70 influence exercised, it is found by actual experiments that the chloride of aluminium in the above process prevents the coloring matter used in the embroidery, from being injuriously affected during the heating operation. 75  
Moreover it subsequently protects it effectively against the influences of weather, light and weak lyes, even diluted acids, while the firmness of the silk tissue is greatly augmented. 80

What I claim is—

The process of removing a cotton background from colored silk or metal embroidery which consists in subjecting the same to the action of chloride of aluminium and an acid, 85  
and then to heat.

GOTTFRIED HAUSER.

Witnesses:

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A. JONGHMANS.