

No. 682,415.

Patented Sept. 10, 1901.

P. MARTENS.

PROCESS OF MAKING ORNAMENTED LEATHER.

(Application filed Feb. 6, 1901.)

(No Model.)

Fig: 1.

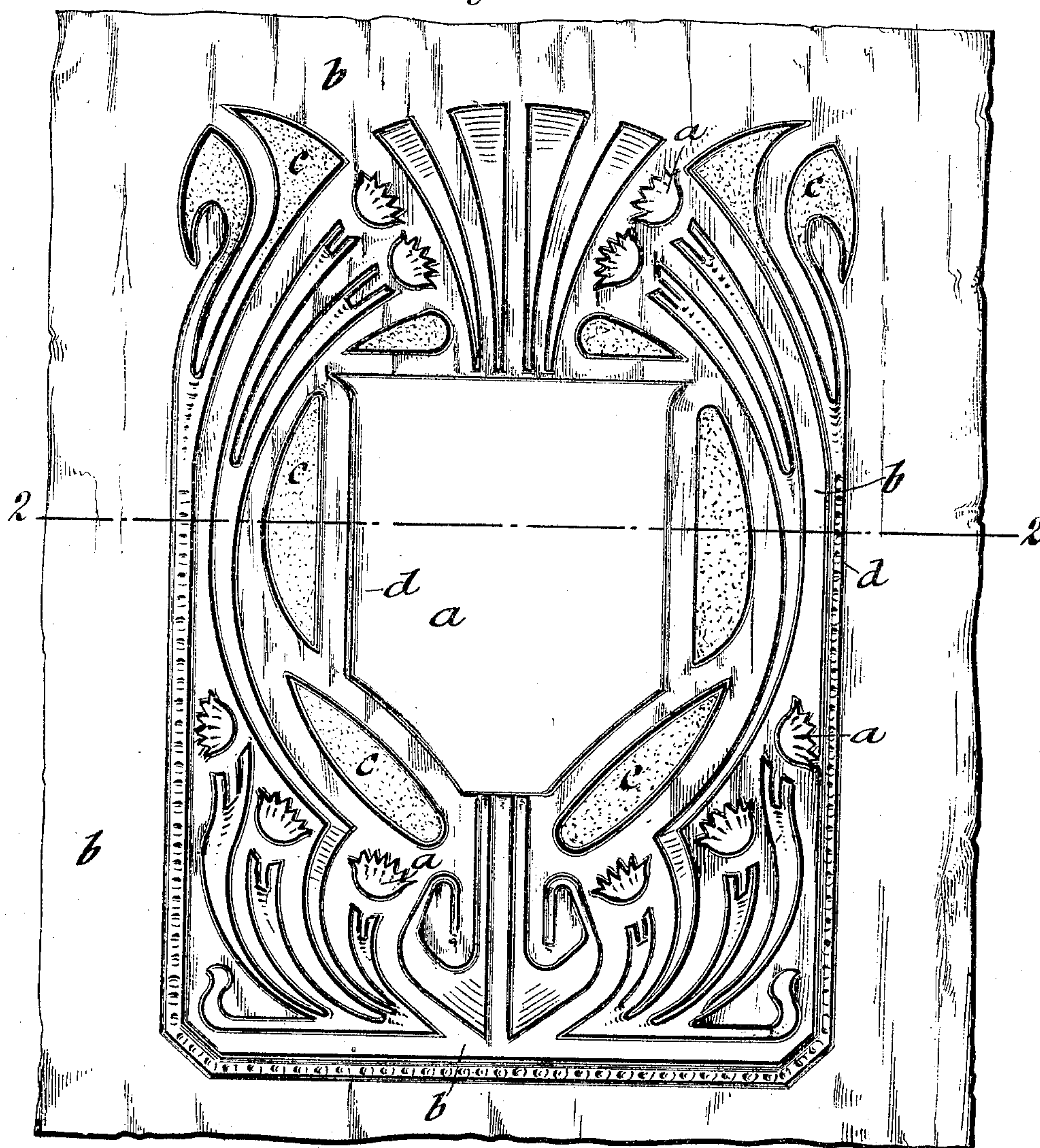
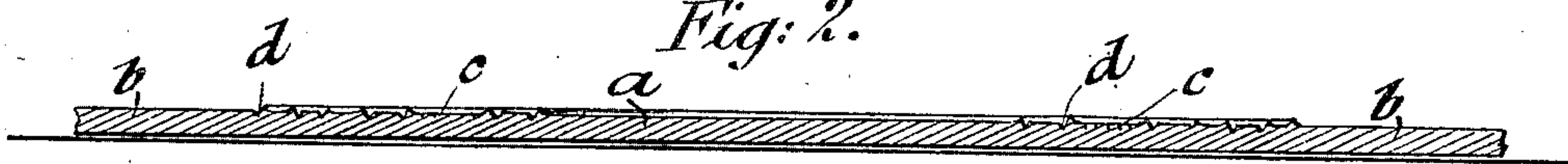


Fig: 2.



WITNESSES:

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PROCESS OF MAKING ORNAMENTED LEATHER.

SPECIFICATION forming part of Letters Patent No. 682,415, dated September 10, 1901.

Application filed February 6, 1901. Serial No. 46,194. (Specimens.)

To all whom it may concern:

Be it known that I, PETER MARTENS, a citizen of the Empire of Germany, residing in New York, borough of Bronx, in the State of New York, have invented certain new and useful Improvements in Processes of Making Ornamented Leather, of which the following is a specification.

This invention relates to an improved process of making ornamented leather, said process having somewhat the same relation to leather as pyrographic decoration to wood, so that a new and very attractive method of decorating leather for making leather goods—such as pocket-books, satchels, portfolios, book-covers, trunks, furniture, wall-hangings, and the like—is obtained.

The invention consists of the process of ornamenting leather, which comprises the steps of transferring the design to the surface of the leather to be ornamented, softening the surface of the leather by an aqueous solution of a suitable acid, treating the surface with a suitable grounding solution, and then treating those portions of the surface forming the design with a suitable bleaching agent.

In the accompanying drawings, Figure 1 is a front view of a piece of leather ornamented according to my invention, and Fig. 2 is a vertical longitudinal section through the same on line 2-2, Fig. 1.

Similar letters of reference indicate corresponding parts.

In carrying out my improved process the design desired to be produced on the surface of the leather is transferred thereto by means of tracing-paper or any other suitable means. The leather is then saturated upon its surface by means of a sponge with an aqueous solution of sulfurous acid, preferably one ounce of sulfurous acid to ten ounces of distilled water or other suitable softening agent. It is then permitted to dry. To the surface is then applied by a sponge a solution of ferric sulfate, made by dissolving three ounces of the same in twelve ounces of cold water. When the surface is well saturated with this solution, it assumes a black color. The leather being allowed to dry, this color becomes a dark-bluish gray. By varying the strength of the solution different shades may be produced from very dark to very light gray.

This step in the process is termed "grounding," as it imparts to the surface of the leather the ground color as distinguished from the design. Grounds of any desired tints or shades may be produced by adding to the ferric-sulfate solution anilin coloring-matters in any suitable quantity to produce the particular color of ground desired. The surface having been thus grounded, the next step is to bleach out those parts *a* of the surface embraced within the design. This is accomplished by treating those portions of the design with a suitable bleaching agent, such as a solution of one ounce of oxalic acid in six ounces of water. This is applied by means of a fine brush, care being taken to apply it only to the parts that are to be discolored and not to the remaining parts *b* of the surface. When ferric-sulfate solution, without additional coloring-matter, is used for grounding, the effect of this oxalic-acid solution is to restore those parts to which it is applied to the original color of the leather and totally neutralize the ground color. If, however, anilin has been used in the grounding solution, the color of the same will not be totally neutralized, but will be modified only, according to the strength of the grounding and bleaching solutions. To the bleaching solution may be added an anilin or other coloring-matter, and thereby the color of the design modified. The bleaching completed, the design or portions of the same may be further colored by applying with a brush anilin or other suitable coloring-matter or dyestuffs. The design is then emphasized and caused to stand out against the ground by outlining the same by tooling, thereby either raising or depressing the surface of the leather at the edge of the design, as at *d*. The leather may then be still further ornamented by tooling the portions forming the ground and design in stipple, as at *c*, or other highly-decorative manner.

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

1. The process herein described of ornamenting leather, which consists in transferring the design to the surface of the leather to be ornamented, softening the surface of the leather by an aqueous solution of a suitable acid, treating the surface with a suitable

grounding solution, and then treating those portions of the surface forming the design with a suitable bleaching agent, substantially as set forth.

5 2. The process herein described of ornamenting leather, which consists in transferring the design to the surface of the leather to be ornamented, softening the surface of the leather by an aqueous solution of a suitable
10 acid, treating the surface with a suitable grounding solution, treating those portions of the surface forming the design with a suitable bleaching agent, and then outlining the design against the ground by suitable toolwork,
15 substantially as set forth.

3. The process herein described of ornamenting leather, which consists in transferring the design to the surface of the leather to be ornamented, softening the surface of the
20 leather by an aqueous solution of a suitable acid, treating the surface with a suitable grounding solution, treating those portions of

the surface forming the design with a suitable bleaching agent, coloring the design, and then outlining the same against the ground by suitable toolwork, substantially as set forth. 25

4. The process herein described of ornamenting leather, which consists in transferring the design to the surface of the leather to be ornamented, softening the surface of the
30 leather by an aqueous solution of a suitable acid, treating the surface with a solution of ferric sulfate, and then treating those portions of the surface forming the design with an aqueous solution of oxalic acid, substantially
35 as set forth.

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

PETER MARTENS.

Witnesses:

PAUL GOEPEL,
JOSEPH H. NILES.