

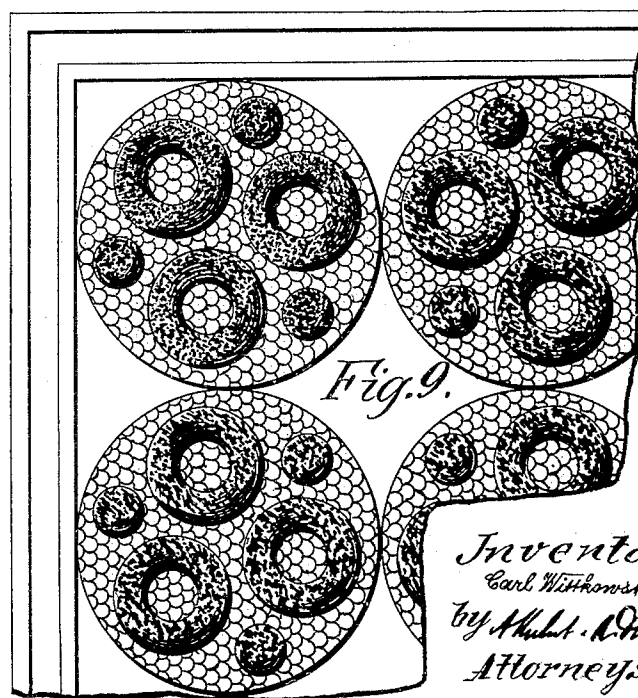
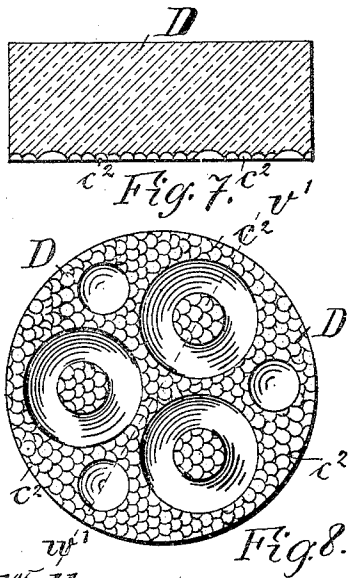
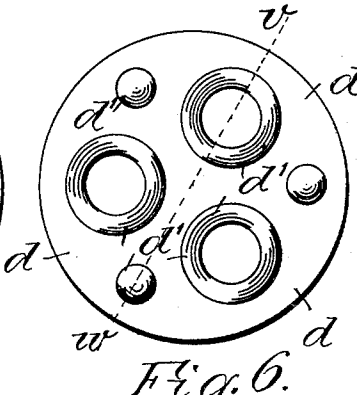
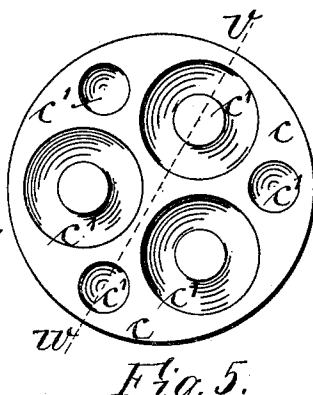
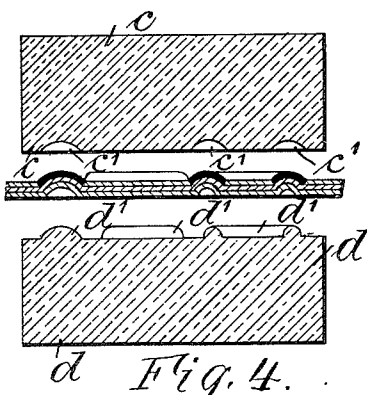
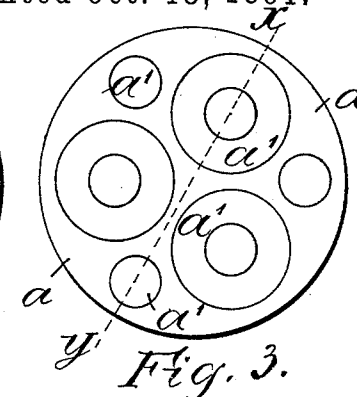
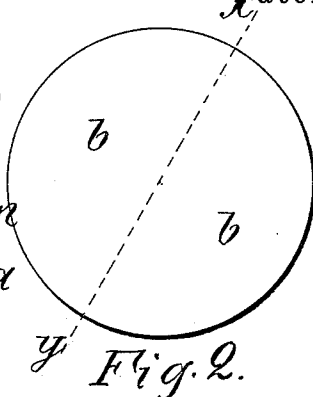
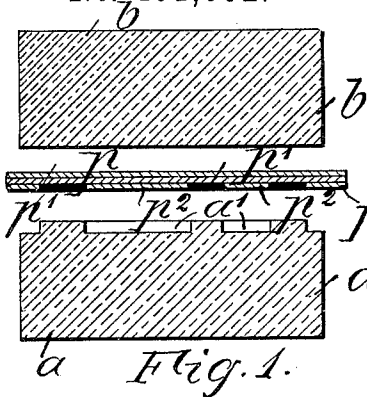
(No Model.)

C. WITKOWSKY.

MANUFACTURING IMITATION OF STAMPED LEATHER WARE.

No. 461,062.

Patented Oct. 13, 1891.



Witnesses:

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UNITED STATES PATENT OFFICE.

CARL WITTKOWSKY, OF BERLIN, GERMANY.

MANUFACTURING IMITATION OF STAMPED LEATHER-WARE.

SPECIFICATION forming part of Letters Patent No. 461,062, dated October 13, 1891.

Application filed September 12, 1890. Serial No. 364,766. (No model.)

To all whom it may concern:

Be it known that I, CARL WITTKOWSKY, a subject of the King of Prussia, German Emperor, and a resident of Berlin, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Manufacturing Imitations of Stamped Leather-Ware, of which the following is a full, clear, and exact description, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to imitations of leather-ware produced by subjecting wooden plates to a pressure or pressures between dies having engraved and embossed faces; and the objects of my improvements are, first, to attain a wooden plate in which one part having the form of the desired pattern has a bright color and the other part has a dark color; and, secondly, to provide one of said two parts, either the bright or the dark one, with a relief form.

To carry my invention into effect, I burn in a wooden plate the desired pattern by means of strongly-heated molds or dies in which the wooden plate is placed and by subjecting it to a strong pressure. One die is perfectly smooth and the other, which is strongly heated, is partly smooth and partly deepened, so that only the smooth part of the mold burns in the desired pattern in the wooden plate. By this burning process a wooden plate of partly dark and partly bright color is attained. The wooden plate is then subjected to the strong pressure of a hydraulic press in dies which are only heated to about 100° Celsius, one die being partly smooth and partly embossed and the other die being partly smooth and partly engraved or deepened. The engraved or deepened part of the second die forms the matrix and agrees in its outlines completely with the die that is partly embossed and with the engraved burning-die first used. The burned wooden plate being subjected to the pressure of the engraved and embossed die, the pattern or the burned part of the plate attains a relief form agreeing with the engraving of the die, the other part of the plate being smooth. The burned dark part of the plate having attained by these processes the outlines of the pattern, and, moreover, a relief or embossed form, has the appearance of embossed leather-ware.

In order to improve the appearance of the burned and pressed plate and to strengthen the effect of the imitation I grain the plates at all those parts which remained smooth during the foregoing processes, so that the relief or embossed pattern is surrounded by grained parts. By this manner a wooden plate is attained consisting of a grained bright part and of a dark relief or embossed part.

Instead of embossing the burned part of the wooden plate by the action of dies having engravings corresponding to the burned pattern, I may also emboss the bright part of the burned wooden plate. The burned parts remain plain, being only subjected to the action of the plain parts of the dies. When using this reversed method, the dark parts of the plate may be grained in the same manner as before described with regard to the bright parts of the design.

To show more clearly the object of my invention, I refer to the accompanying drawings, in which similar letters denote similar parts throughout the several views, and in which—

Figure 1 shows a cross-section of the dies *a b* with the wooden plate *p p* through the line *xy* of Figs. 2 and 3. Fig. 2 shows a face view of the die *b*. Fig. 3 shows a face view of the die *a*, used to burn the dark pattern in a wooden plate. Fig. 4 shows a cross-section of the dies *c d* with the wooden plate through the line *vw* of Figs. 5 and 6. Fig. 5 shows a face view of the mold *c*. Fig. 6 shows a face view of the mold *d*. Fig. 7 shows a modified form *D* of the mold *c* in a cross-section through the line *v' w'* of Fig. 8. Fig. 8 shows a face view of this modified form. Fig. 9 shows a face view of the burned and embossed wooden plate.

The wooden plate, which preferably consists of three layers, is at first subjected to the pressure of the dies *a b*. The die *a*, having the deepened parts *a' a'*, is strongly heated, and the plate *p* is thereby burned and attains a dark color at the parts *p'*. The parts *p* remain bright, as before. The burned plate *p p'* is then subjected to the pressure of the die *c*, provided with the deepened parts *c'*, and of the die *d*, provided with the embossed parts *d'*, agreeing in the relief form of the embossments and of the deepened parts. The burned

parts p' of the wooden plate are subjected to the effect of the deepened parts c' and of the embossed parts d' , so that they attain a relief form. The bright parts of the plate remain smooth.

When using the die D with grained parts c^2 , after having darkened the plate by the dies a b , the plate is grained at the parts p^2 and shows a relief form at the dark parts.

The wares manufactured in the described manner are used as chair-seats, as facings of doors, of walls, and so on.

Having thus fully described the nature of my invention, what I desire to secure by Letters Patent of the United States is—

1. The process of ornamenting wood, consisting in subjecting the plates, first, to the pressure of a strongly-heated die having deepened parts and corresponding to the outlines of the desired design, and, secondly, to the

pressure of dies corresponding to the outlines of the design *in intaglio* and in relief, respectively, for the purpose as described.

2. The process of ornamenting wood, consisting in subjecting the plates, first, to the pressure of a strongly-heated die having deepened parts and corresponding to the outlines of the desired pattern, and, secondly, to the pressure of dies corresponding to the desired outlines *in intaglio* and in relief, respectively; one die having, besides, grained parts, for the purpose as described.

In testimony whereof I sign this specification in the presence of two subscribing witnesses.

CARL WITTKOWSKY.

Witnesses:

G. A. TAUBE,
W. W. WENSKI.