

(No Model.)

C. WAGENFÖHR.
DIE.

No. 523,300.

Patented July 17, 1894.

Fig. 1.

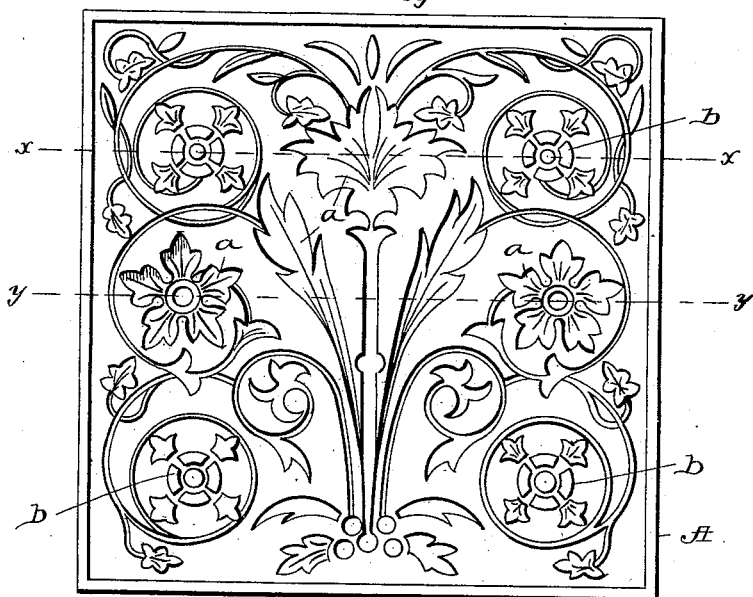


Fig. 2.

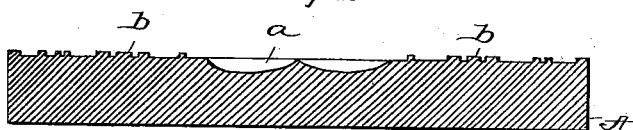
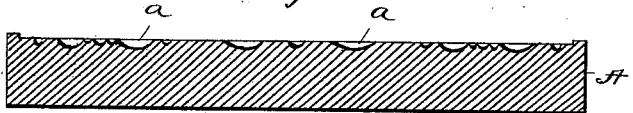


Fig. 3.



witnesses:

C. H. Haider
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UNITED STATES PATENT OFFICE.

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Application filed July 19, 1893. Serial No. 480,949. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WAGENFÖHR, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Dies; and I do 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.

This invention has relation to an improvement in dies as used by engravers, and it has for its prime object to provide a die with either a flat or round surface, which by a single impression upon any material, such as paper, cardboard, wood, or the like, will produce a design with three effects, viz:—etched ornaments sunken into the material, the main figure or design or principal ornament raised, and the coloring matter carried into the sunken portions of the etching.

The invention will be fully understood from the following description and claim when taken in connection with the annexed drawings, in which—

Figure 1, is a face view of my improved die. Fig. 2, is a cross sectional view taken in the plane indicated by the dotted line *x, x*, of Fig. 1. Fig. 3, is a similar view taken in the plane indicated by the dotted line *y, y*, on Fig. 1.

Referring by letter to said drawings:—A, indicates the body of the die which may be of any suitable configuration in outline, and of such material as is usually employed in articles of this character. The die has upon its face the usual carved or engraved sunken ornament *a*, and in the background, an etched or raised ornament or figure *b*, which stands out in relief. The figures or ornaments can of course be of various designs, both those in intaglio and in cameo. These ornaments may be produced upon the plate or die by first

covering the smooth surface with a layer of a sensitive film such as used in the ordinary process of etching or photo-engraving, and by means of a negative, the pattern is transferred and etched on the block or surface, or it can be produced by printing a pattern on the surface and then etching. After the etching in the background is produced, the ornament intended to be embossed, is transferred to the block or die and sunk into it by engraving either by hand or machinery, so it is obvious that the die work may be done first and after protecting the sunken parts of the ornament with wax or other material, the pattern may be etched in the background.

In operation, it will be seen that by placing the coloring matter over the surface of the die, such coloring matter will take to the raised parts or etching, and by a single application of pressure, the main figure or ornament *a*, will be produced upon the material in an embossed or raised form, while the etching in the background will contain the coloring matter, thus giving the article produced the triple effect of the raised figure, the sunken etching, and the coloring which is very beautiful.

These dies can of course be used in ornamenting leather, gold, silver, and other ware, as well as wood, paper, and the like.

Having described my invention, what I claim is—

A die having upon its face a main figure or ornament sunken or depressed therein and a figure or ornament in the background raised upon such surface, substantially as specified.

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

CHARLES WAGENFÖHR.

Witnesses:

AARON H. ROREUBERG,
CHARLES MILLER.