(No Model.)

W. SCHUMACHER.

DIE FOR ORNAMENTING PAPER, LEATHER, AND OTHER PLASTIC MATERIALS.

No. 445,863. Patented Feb. 3, 1891.

Fig. 1.

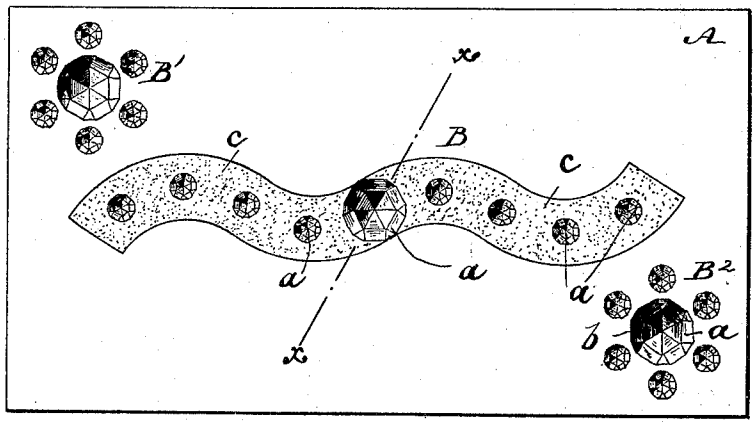


Fig. 2.

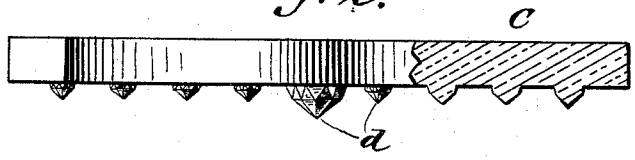


Fig. 3.

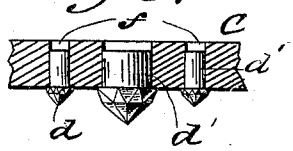
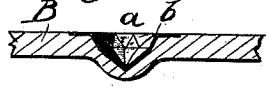


Fig. 4.



WITNESSES:

John A. Brennan

C. Sedgwick

INVENTOR:

W. Schumacher

BY Munn & Co

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM SCHUMACHER, OF BROOKLYN, NEW YORK.

DIE FOR ORNAMENTING PAPER, LEATHER, AND OTHER PLASTIC MATERIALS.

SPECIFICATION forming part of Letters Patent No. 445,863, dated February 3, 1891.

Application filed September 13, 1890. Serial No. 364,329. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SCHUMACHER, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Dies for Ornamenting Paper, Leather, and other Plastic Materials, of which the following is a full, clear, and exact description.

My invention relates to dies for use in the ornamentation of pasteboard, (particularly such as is commonly used for signs and book-covers,) leather, and other plastic material with gold, silver, or other metal leaf, the object being to not only apply the leaf to the surface to be ornamented in the desired outline, but to form separate sockets in the paper or leather which shall be lined with the metal leaf in a highly-polished state to reflect the light, so that the ornamentation will appear as if studded with diamonds.

In applying the leaf I employ a glass die formed upon its under surface with projections to form the sockets, or I may use a metal die to which glass protuberances are fixed for forming the sockets and for giving the requisite polish to the metal leaf in the sockets.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an enlarged view of a sheet of paper, leather, or other material ornamented in accordance with my invention. Fig. 2 is a sectional elevation of a glass die for ornamenting the sheet. Fig. 3 is a detached view showing a metal die provided with glass protuberances; and Fig. 4 is a detailed section on line $x x$ of Fig. 1.

A represents a sheet of card-board, leather, or other plastic material to which an ornament B B′ B^2 is applied in accordance with my invention. The outline of the ornament may be of any desired design, including letters of the alphabet, the characteristic of the ornamentation being the sockets a, pressed into the sheet and which are lined with gold, silver, or other metal coating b. The portion c c of the ornamentation is a flat surface of gold, silver, or other leaf, which may be mottled or plain, or configurations may be pressed into it.

In applying the metal leaf and forming the sockets I use a die C, of glass, formed with the polished projections d, which may be plain or formed with facets, like a diamond. The outline of the die is that of the ornamentation, and its under surface between the projection d is by preference mottled to impart a mottled surface to the metal leaf B. In some instances the body of the die may be of metal, hard rubber, celluloid, or similar substances, in which case separate glass projections d will be held on the face of the die by their stems d', inserted in sockets or apertures f in the body of the die, as shown in Fig. 3. The glass projections d are highly polished and under heavy pressure impart a much higher finish to the metal lining of the sockets than it is possible to obtain by the use of metal dies, so that the light will be reflected with great brilliancy.

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

1. A die for ornamenting card-board, leather, or similar material, formed or provided with polished projections of glass, substantially as shown and described.

2. A die composed of a suitable body formed with apertures f and glass projections d, fitted in said apertures, substantially as described.

WILLIAM SCHUMACHER.

Witnesses:
W. S. WALKER,
E. M. CLARK.