

UNITED STATES PATENT OFFICE.

EDUARD AUGUST WILHELM WOLTER, OF BERLIN, GERMANY.

ART OF STAMPING IN COLORS.

SPECIFICATION forming part of Letters Patent No. 509,109, dated November 21, 1893.

Application filed June 18, 1892. Serial No. 437,210. (No specimens.)

To all whom it may concern:

Be it known that I, EDUARD AUGUST WILHELM WOLTER, a subject of the German Emperor, residing at Berlin, Prussia, German Empire, have invented certain new and useful Improvements in the Art of Stamping in Colors, of which the following is a specification.

My invention relates to a new method of stamping colored names and ornaments on book covers, photographic cards, fancy paper, &c., which was hitherto done by stamping leaf metal into the object to be ornamented or by using dies covered with coloring matter. Heretofore one or the other of two methods have been used, viz., either laying a piece of leaf metal upon the object to be ornamented, and then stamping portions thereof in suitable design in the object by pressure with a heated die, or first covering the die itself with suitable coloring matter and then pressing the die upon the object. I however have devised suitable color-carrying layers, which layers are placed upon the object color side down, and then the heated die is pressed on the back side of the layers whereby the coloring matter of the layers is imparted to the object in the design formed by the die. Thus essentially my invention consists, first, in the color-carrying layers, second in the method of stamping by pressing such layers on the object by heated dies.

While I can use various layers, I have found well sized and glazed paper upon which the coloring-matter is carefully and uniformly spread, to be very suitable. If, for example, a white color is desired, the layer may be prepared as follows: Mix intimately zinc-white, baryta-white, or white lead (as Krems-white, Venetian-white, Hamburg-white, Dutch-white) with about one thousand units by weight of water, six units by weight of gelatine, and sixty units by weight of glycerine, however varying the quantity of the last named ingredient somewhat according to the

degree of moisture of the air, while preparing the layer. Continue stirring the aforesaid mixture until it is brought to a thoroughly uniform consistency. Then coat the layer of well glazed and sized paper thoroughly and uniformly with the mixture. When coated, dry carefully and the layer will be ready for use. If other colors than white are desired, they may be obtained by adding the suitable coloring matter, as carmine, blue, &c., to the aforesaid mixture. When the layer of paper is coated and dried as described it is laid on the object, color side down and pressed by a heated die, the heat of the die causing the coloring matter or a part thereof to separate from the layer and adhere to the object in the design of the die. With a cold die such transfer of color would not take place.

Now, having described my improvement, I claim as my invention—

1. The art of stamping in colors consisting in pressing a color-carrying layer upon an object by a heated die having the configuration or design that is to be transferred to the object, thereby separating the color from the layer in the configuration or design of the die and fixing it on the object, substantially as hereinbefore described.

2. The art of stamping in colors consisting in spreading the coloring matter on a layer of paper, drying the coloring matter thereon, and then pressing said layer on the object by a heated die having the design or configuration that is to be transferred to the object, thereby separating the color from the paper in the design or configuration of the die and fixing it on the object, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

EDUARD AUGUST WILHELM WOLTER.

Witnesses:

ALEX SCHOLZE,
W. H. EDWARDS.