UNITED STATES PATENT OFFICE.

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PROCESS FOR PRINTING AND TRANSFERRING DECALCOMANIAS TO CHINA, METAL, WOOD, &c.

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To all whom it may concern:

Be it known that I, ALBERT S. BECKER, a citizen of the United States, residing at Jersey City, county of Hudson, State of New Jersey, have invented a certain new and useful Process for Printing and Transferring Decalcomanias to China, Metal, Wood, Glass, or other Surfaces, of which the following is a specification.

My invention relates to a new process for printing and transferring decalcomanias to china, metal, wood, glass, and other surfaces or material, without the use of varnish, gum or other fixing material, thus simplifying the process of transfer and obviating the necessity of coating the decalcomania with a fixing material to make the same stick and adhere to the article to be decorated and thus saving time of preparing and coating the decalcomania with varnish, gum or other fixing material for the purpose of transferring same.

Heretofore all decalcomanias, in order to make them adhere to the surface or material to which they are to be applied or transferred, had to be prepared or coated on the surface or face, with a sticking or adhesive material, such as gum, glue, or varnish; without such an adhesive the decalcomania would not stick or attach properly to the surface or material to be decorated and thus become useless or defective.

By my new process, no sticking or adhesive material is required to make a perfect and proper transfer of the decalcomania, as will be shown hereinafter.

To accomplish this purpose, I print the decalcomania in positive colors, instead of negative, that is, so that the colors will show outward on the face of the transfer paper, instead of negative or reverse, as all decalcomanias for wood, metal, china, glass, or other hard surfaces are now printed. I use a transfer or decalcomania paper that has a sufficient coating of starch and glue, so that any colors, leaf or bronze, printed on same, will readily slide off when the paper is moistened with water. Instead of printing the colors of the transfer design first on the paper and then backing up this design with a solid backing as is now the case, I reverse the printing process, and print a solid backing of color, bronze or metal leaf as a base upon which the transfer design is then printed in positive colors. This completes the printing process—the result being a decalcomania printed in positive colors on a solid backing. This decalcomania is now ready for use. My new process or method of transferring this decalcomania is entirely different from the old process of transfer, because no gum, varnish or adhesive material of any kind is used. Of course, if the old method of transferring were used in this decalcomania, the design would be reversed and the solid backing would be exposed to view, as the backing first printed on the paper would hide the colors and design of the decalcomania. My process of transferring this decalcomania, printed as aforesaid, is as follows:

I dip the decalcomania in water and when the paper is thoroughly saturated, I slide off the transfer design, that is the solid backing with the colors printed thereon, from the transfer paper to the surface to be decorated, placing the solid backing downward and the positive printed colors upward; in other words, the printed transfer design is simply slid from the paper surface to the other surface to be decorated, thus reversing the old method of transferring. No washing or cleaning of any kind is necessary.

That completes the transfer process. The gum and starch on the transfer paper give sufficient adhesive power to the transfer so as to make it stick good and hard on the surface to be decorated, after it has thoroughly dried.

It is obvious that by this new process no adhesive or sticking material such as gum, glue or varnish is necessary in making a proper transfer of the decalcomania printed as herein described, thus saving time and money.

There are other advantages to be derived from using this new process, because in applying varnish or gum for transferring the decalcomania, an experienced hand is required for applying the varnish or gum, so as to get a thin and smooth coat and thus obviate the cracking of the transfer;

Then it is also necessary to take time in allowing the coat of varnish to become tacky and sticky before making the transfer to avoid cracking and breaking of the transfer;

My new process also obviates the necessity of cleaning or washing the transfer with

benzin or turpentine, to remove the varnish stains surrounding the transfer, which is necessary with the old process of transferring.

Having thus described my invention, I claim:

1. The process of printing decalcomanias on transfer paper, consisting in applying an adhesive coating to the paper, then applying a solid backing of color to the coating, and then printing in the positive on the backing of color the design to be transferred, the design being adapted to be removed from the transfer paper when moistened and applied to an article with the backing next to the article so that the adhesive thereon will cause an adhesion of the design to the article.

2. The process of printing decalcomanias on transfer paper, consisting in applying a coating of starch and glue to the transfer paper, then applying a solid backing of color to the coating, and then printing in positive colors the design to be transferred onto the backing of color, the design being adapted to be removed from the transfer paper after the same has been moistened by sliding the design from the paper onto the article to be decorated and the coating forming the means by which the design is caused to adhere to the article.

ALBERT S. BECKER.

Signed in presence of—
HERBERT SCHULENBURG,
WM. H. BLOMBERG.