

UNITED STATES PATENT OFFICE.

HECTOR DE GROUSILLIERS, OF BERLIN, GERMANY.

PAPER FOR MAKING TRANSFER-PICTURES.

SPECIFICATION forming part of Letters Patent No. 504,835, dated September 12, 1893.

Application filed February 9, 1893. Serial No. 461,666. (No specimens.)

To all whom it may concern:

Be it known that I, HECTOR DE GROUSILLIERS, a subject of the German Emperor, and a resident of Berlin, Germany, have invented certain new and useful Improvements in Paper for Making Transfer-Pictures, of which the following is a specification.

The present invention consists in applying to the transfer paper a coating soluble in water, and a second coating of a material insoluble in water, which serves to carry the impression of the design, and which after removal of the paper, is applied with the impression uppermost, to the object to be decorated, upon which it is then pressed by means of a soft brush. After drying, this skin adheres perfectly to the decorated object and the design can be burned in if the colors are of a vitreous nature.

The design is first printed or formed on the soluble coating and when the insoluble coating is applied it receives the impression thereof on its inner face which when the outer face is pressed upon the surface to be ornamented and the paper and soluble coating is removed becomes the uppermost or exposed face of the insoluble coating containing the design and presenting the same to the eye. This insoluble design carrying layer consists of a mixture of turpentine and a drying oil, which according to the state of the atmosphere, is mixed with from twenty to twelve times the quantity of a two per cent. collodion. The turpentine and drying oil are generally used in equal quantities; the proportions have however to be varied somewhat according to the nature of the printing. Collodion alone, or only mixed with glycerine, for rendering it more supple, can only be used as the design carrier (as is done with the photo ceramic dusted designs) when the skin has been freshly prepared, because it is very fragile and difficult to manipulate. In addition, the skin is very apt to split off on drying and burning. But in particular the use of collodion has the disadvantage that it falls to pieces after a short time, and that a design printed thereon can then no longer be trans-

ferred. The addition of drying oil renders the skin more supple, tougher and more dense, and enables it to last a very long time, so that the impressions can be kept for a long time. The addition of turpentine renders the skin more adhesive, so that it adheres very firmly to the object to be decorated. But its particular advantage is that, in partially evaporating in burning in the design, it renders the skin porous to a certain extent, so that it is not raised off the object by the pressure of the vapors that may be generated beneath it, and lastly, it melts together on to the object with the residue of the turpentine.

The transfer design may also be prepared according to this invention in such manner, that design is first printed on the coating soluble in water, and after the impression is dry, the above described mixture of turpentine, drying oil and collodion is applied thereto. If the transfer designs are applied to porous objects, they are apt to split off. In order to prevent this, the parts of the object to be decorated are first coated with a material that removes the porosity. For this purpose tragacanth mucilage, starch paste, turpentine dissolved in turpentine oil, resin solution, or other suitable material may be employed.

I claim—

1. An improved transfer paper, consisting of a base sheet, a coating thereon carrying the design and soluble in water, and a second coating covering the first composed of turpentine, drying oil and collodion, substantially as described.

2. The herein described method of making transfer paper consisting in applying a coating soluble in water to a base sheet, printing a design on said coating, drying the same and finally applying over the impression a coating of turpentine, drying oil and collodion, substantially as described.

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

HECTOR DE GROUSILLIERS.

Witnesses:

ADER BOIS-REYMOND,
R. F. FR. KAUTZ.