

# UNITED STATES PATENT OFFICE.

EDWARD HETT, OF NEW YORK, N. Y.

## METHOD OF TREATING PRINTING-SURFACES.

SPECIFICATION forming part of Letters Patent No. 637,588, dated November 21, 1899.

Application filed October 21, 1899. Serial No. 734,378. (No specimens.)

*To all whom it may concern:*

Be it known that I, EDWARD HETT, a citizen of the United States, and a resident of New York, (New Dorp,) county of Richmond, State of New York, have invented an Improved Method of Treating Printing-Surfaces, of which the following is a specification.

This invention relates to a novel method whereby a prepared lithographic surface may be preserved indefinitely and made ready for subsequent use in printing with a colored ink without the necessity of additional treatment preparatory to applying said colored ink.

The invention consists of the method hereinafter set forth, and specified in the claims.

Heretofore after a lithographic-printing surface has been prepared and rolled up it has been the practice to leave the rolling-up ink upon the printing-surface for the purpose of preserving the printing-surface until it is about to be inked with the printing-ink and employed in printing, and this is especially important when the prepared printing-surface is not to be immediately used in printing, but is to be stored away for a time. The preserving-ink employed for this purpose has generally been the ordinary black ink used in rolling up the printing-surface. Before inking the printing-surface with a colored printing-ink it has been the practice to first wash off the black preserving-ink in order that when the colored printing-ink is applied to the printing-surface the previously-applied black preserving-ink might not be left to detract from the tone of the colored printing-ink and so spoil a number of copies of the printed matter. In washing off the black preserving and rolling-up ink before applying the colored ink considerable time has been consumed. The time thus consumed in washing off the black preserving-ink in multicolor-printing diminishes greatly the earning capacity of the press, and thus adds to the expense, and this expense increases in proportion to the number of printing-surfaces which the particular job requires. In carrying out my method I apply to the printing-surface a suitable light-colored body adapted to preserve from deterioration the prepared printing-surface between the time when the prepared printing-surface is prepared and the time when the said printing-surface is inked

for printing with the colored ink. This body need not be removed or washed off from the printing-surface, but may be left thereon when the printing-ink is applied, the body being of such a character that it will not materially detract from the color tone of the printing-ink. This body may vary considerably in character. It may also vary considerably in color, according to the particular color of the printing-ink to be subsequently applied to that particular printing-surface. I find it most advantageous, however, to employ a body white or nearly white in color, a body of such color being best adapted to accomplish its purpose in connection with a greater number of colored printing-inks than a body of any other color. This light-colored preserving body is preferably in fluid form, so that it may be more readily applied to the prepared printing-surface and so that it may be applied by means of inking-rollers. The preserving body which I find most suitable for the purpose consists of one part zinc-white, two parts vaseline, two parts magnesia or laketine, and a small quantity of linseed-oil. A preserving body thus constituted forms what may be termed a "white" ink.

When a preserving body has been applied to the printing-surface, the colored printing-ink may be applied to this printing-surface without previously treating the printing-surface to remove the preserving body, and the preserving body thus left will not materially detract from the color tone of the printing-ink subsequently applied. In using the light-colored body whose constituents are above specified it will be found that it blends with the printing-ink, and whatever preserving body is employed it is preferred that it be of such a character that this blending action will take place, because it is believed that all traces of the preserving body will thus most quickly disappear in the printed copies.

The term "lithographic" is herein used in its broader significance and without reference to whether the printing-surface is stone, zinc, aluminium, or other material the printing with which is dependent upon the mutually-repelling properties of grease and water.

What I claim as new, and desire to secure by Letters Patent, is—

1. The method of preserving and making a



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prepared lithographic-printing surface ready  
for the reception of a colored printing-ink  
without the necessity of additional treatment  
preparatory to applying said printing-ink,  
5 which consists in applying to said prepared  
printing-surface a suitable light-colored body  
adapted to preserve from deterioration the  
prepared printing-surface between the time  
when said printing-surface is prepared, and  
10 the time when said printing-surface is inked  
for printing, said body being of such a char-  
acter that when the printing-ink is applied  
the body does not materially detract from the  
color tone of said printing-ink.  
15 2. The method of preserving and making a  
prepared lithographic-printing surface ready  
for the reception of a colored printing-ink  
without the necessity of additional treatment  
preparatory to applying said printing-ink,

which consists in applying to said prepared 20  
printing-surface a suitable light-colored body  
adapted to preserve from deterioration the  
prepared printing-surface between the time  
when said printing-surface is prepared and  
the time when said printing-surface is inked 25  
for printing, said body being of such a char-  
acter that the printing-ink when applied  
blends with it and the body and does not ma-  
terially detract from the color tone of the  
printing-ink. 30

In testimony whereof I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

EDWARD HETT.

Witnesses:

J. O. GEMPLER,  
B. C. GAEDEKE.