

UNITED STATES PATENT OFFICE.

ERNST ASSMY, OF MILWAUKEE, WISCONSIN.

TRANSFER-COPYING COMPOUND.

SPECIFICATION forming part of Letters Patent No. 466,483, dated January 5, 1892.

Application filed March 20, 1891. Serial No. 385,726. (No specimens.)

To all whom it may concern:

Be it known that I, ERNST ASSMY, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Transfer-Copying Compound, of which the following is a specification.

The object of my improvement is to facilitate the production of multiple copies of drawings, pictures, writings, and the like executed in ink by applying to the surface of the original, one at a time and at any desired intervals, a number, according to the number of copies desired, of sheets of suitable material, as paper or tracing-linen.

My improvement affords ready, convenient, and inexpensive means of obtaining accurate copies of, say, architectural drawings, thereby obviating the necessity of providing blue-print copies or the even more expensive tracings, or of other kinds of drawings, as well as pictures and writing executed in ink.

To operate with my improved compound the original must be executed in ink, though with any desired number of different colors thereof, and the ink should contain more than the ordinary proportion of aniline. The material on which the transfer is to be made is then treated with the liquid compound forming the subject of invention, which possesses the qualities of moistening or softening the ink on the original and preventing it from spreading or "setting" it upon the material on which the transfer is made by applying the treated surface thereof or surface coated with the liquid to the original, which is done by merely imposing the transfer-sheet evenly on the surface of the original.

The liquid for treating the transfer-sheets is a preparation of ingredients composed, preferably, of the following-named materials in substantially the proportions stated: pure glycerine, fifty parts; a suitable gum, (preferably gum-arabic,) twenty-five parts; isinglass, twelve parts; ammonia, six parts; oil and wax, mixed, four parts; alcohol and wax in solution, three parts.

The isinglass referred to is preferably that produced from the bladder of the Russian sturgeon, and the proportions by weight, I observe, of the oil and wax mixture are about fifteen to one of the wax, the proportions of the solution of alcohol and wax being about

three to one. The aforesaid ingredients are thoroughly mixed together under the influence of heat, and when cooled thereafter the preparation is ready for use.

It should be stated that the preparation is efficacious for my purpose if either the oil and wax mixture or the alcohol and wax solution be omitted, though if either be dispensed with the quantity of the other should be increased. It is preferred, however, to employ both.

The transfer-sheet is treated with the aforesaid preparation by applying it thereto with a brush or sponge, and while wet imposing the transfer-sheet on the surface of the original and smoothing it over with the hand. It takes but a short time, less than a minute, to make the transfer-copy, which is then dried, requiring to that end a longer or shorter period of time, according to the temperature to which it is subjected.

Each transfer from the original is of course a negative, though if the transfer-sheet be transparent, like tracing-cloth, its transparency affords a positive copy. To make positive copies on sheets of non-transparent material, I make the first copy a negative on wax-paper or even wax-cloth, previously treated in the manner described with my aforesaid preparation. The wax-paper takes sufficient of the ink from the original to enable several positive copies to be obtained from it by imposing the several sheets of material therefor, each treated with my preparation in turn upon the negative copy on wax-paper.

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

1. A preparation for facilitating transfer-copying, substantially as described, composed of glycerine, a suitable gum, isinglass, ammonia, and a wax mixture compounded substantially in the proportions specified.

2. A preparation for facilitating transfer-copying, substantially as described, composed of glycerine, gum-arabic, isinglass, ammonia, oil and wax mixed, and a solution of alcohol and wax, the whole being compounded in substantially the proportions specified.

ERNST ASSMY.

In presence of—

W. H. DYRENFORTH,
M. J. FROST.