

UNITED STATES PATENT OFFICE.

JOHN BRODRICK, OF NEW YORK, N. Y., ASSIGNOR TO THE BRODRICK
COPYGRAPH COMPANY, OF SAME PLACE.

METHOD OF MAKING STENCIL-PLATES.

SPECIFICATION forming part of Letters Patent No. 505,698, dated September 26, 1893.

Application filed May 20, 1886. Serial No. 202,794. (No specimens.)

To all whom it may concern:

Be it known that I, JOHN BRODRICK, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Methods of Making Stencil-Plates, of which the following is a specification.

In a patent granted to me, No. 377,706, dated February 7, 1888, I have described and claimed an improved prepared sheet for stencils and also an improved stencil. And in a pending application bearing Serial No. 256,837 I have described and claimed improved methods of making stencils by the use of such sheets.

My present invention consists of an improved method of making a stencil, which stencil may be of substantially the character described in my said patent, and it consists, in general terms, of applying a heated writing or imprinting instrument on or to a sheet composed of thin porous material, impregnated or coated with a substance impervious to ink, but of such a nature as to be melted or dissipated and expelled from the sheet by the application of the said heated writing or imprinting instrument at every point of contact, but not at the adjacent points, so that every impression or contact of said heated instrument upon said prepared sheet, will leave the form of such impression distinctly defined and open to the transmission of ink, thus producing a stencil from which the most perfect duplications of writing, drawing and printing can be secured. This method enables a large continuous surface of impressions to be made with perfect delineations, there being no limit to the surface of impressions.

The prepared sheet employed in my present process may be produced in the same manner and from the same material as is described in my said patent, as wax is susceptible of being removed either by pressure or by melting, but any other fusible material impervious to ink and suitable for the purpose may be used. I shall here briefly describe the manufacture of a prepared sheet which may be made into stencil sheets by the process herein described, but this simply for the purpose of showing one way in which said sheets may be made, without confining

the application of my invention to sheets prepared in this way or of these materials.

By preference I take a sheet of thin highly porous paper and immerse the same in a bath of melted gummy or waxy substance—such as paraffine. Any suitable method of waxing paper now known in the arts may be employed. I now use one of the most porous and thinnest grades of Japanese paper, commonly known as Yoshino in Japan, or as dental paper here, having by preference a weight of about, say, seventeen ounces to the ream of sheets, fifteen by ten and a half inches, but it will be understood that any other sheet of material of the required porosity, thinness and toughness will be the equivalent and may be employed in place of the above described sheet. Over this sheet I pass a heated pen or pencil, thus removing the coating and making a stencil sheet of the matter written; likewise a stencil of any other matter may be made by pressing a heated type printing plate or stamp bearing the design in relief on the prepared sheet.

The heated instrument used in writing may consist of a stylus with a hollow handle like that of a common stylographic pen, said handle acting as a reservoir and being filled with any suitable fluid, supplying a tiny wick leading from the same, and projecting against the end of the stylus, slightly above the writing point, so as when lighted it will cause a minute flame to play against the stylus above the point heating it to a temperature that will melt or dissipate the filling or coating of said prepared sheet at the point of contact. Any form of stylus or instrument heated by any efficient means may be employed. When the heated writing or printing implement is brought into contact with the prepared sheet the coating is removed, leaving the exposed surface open to the free transmission of ink and a sheet is thus produced suitable for use as a stencil.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The process or art of making stencils, or transmitting printing sheets, which consists in coating or impregnating a sheet of porous material with a substance impervious to ink,

and then removing said coating or filling at the lines or points of impression by the application thereto of a heated implement, substantially as described.

5 2. The process or art of making stencils, or transmitting printing sheets, from a sheet of porous material coated or impregnated with a substance impervious to ink, which process consists of removing said coating or filling
10 ing at the lines or points of impression by the application thereto of a heated implement, substantially as described.

15 3. The process or art of making stencils, or transmitting printing sheets, from a sheet of porous material through which ink is readily transmitted, such as Japanese dental paper or Yoshino, coated or impregnated with a substance impervious to ink, such as paraffine, which method consists of removing said

coating or filling at the lines or points of impression by the application thereto of a heated implement, substantially as described. 20

4. The process or art of making stencils, or transmitting printing sheets, which consists of coating or impregnating a sheet of porous material with a substance impervious to ink
25 and of then removing said coating or filling at the lines or points of impression by the application thereto of a heated implement, substantially as described. 30

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

JOHN BRODRICK.

Witnesses:

GEORGE N. SANDERS,
LOUIS A. WAGNER.