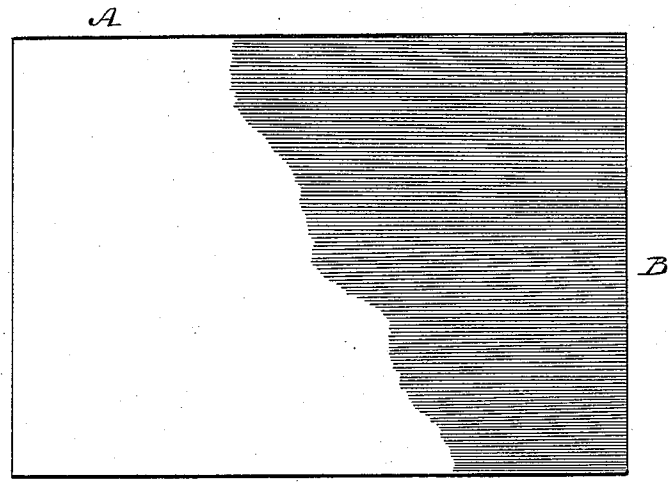
(No Model.)

S. C. DUVAL.

GRAPHIC NEGATIVE FILM FOR PHOTOGRAPHIC PRINTING.

No. 345,220. Patented July 6, 1886.



WITNESSES:

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UNITED STATES PATENT OFFICE.

STEPHEN C. DUVAL, OF NEW YORK, N. Y.

GRAPHIC NEGATIVE FILM FOR PHOTOGRAPHIC PRINTING.

SPECIFICATION forming part of Letters Patent No. 345,220, dated July 6, 1886.

Application filed July 11, 1885. Serial No. 171,398. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN C. DUVAL, of the city, county, and State of New York, have invented a new and Improved Graphic Negative Film for Photographic Printing, of which the following is a full, clear, and exact description.

My invention is designed more especially to be used in connection with the so-called "blue process paper" for photo-printing or reproducing original drawings or writing; and the invention consists of a transparent film or surface rendered opaque with substances, substantially as hereinafter described, the same containing coloring-matter, so that when the surface is written, drawn, or engraved upon with a suitable instrument, and the opaque coating thus removed in lines from the transparent sheet or film, the lines will be clearly apparent to the artist, thus enabling him to see his work as it progresses without having to hold the film up to the light.

Reference is to be had to the accompanying drawing, forming part of this specification, in which the figure is a perspective view of a transparent sheet or film partly coated upon one surface according to my invention.

A represents a transparent sheet, preferably of gelatine, and B is an opaque coating, composed of a dark or colored adhesive substance or varnish and some powdered substance covering one surface of the sheet.

In applying the coating B to the sheet A, I first coat the sheet upon one surface with a thin varnish composed of asphaltum, beeswax, and turpentine, adding sufficient lamp-black or other coloring-matter to deepen the color, and when the varnish is almost dry I cover the varnish with a powdered substance, preferably with what is known as "composition silver." After applying the powder the varnish is allowed to wholly dry, so that the coating adheres closely to the sheet. The coating renders the sheet very opaque, and while it will not crack or flake off from the sheet, nor interfere with its flexibility, the coating may be easily removed in sharp lines by a pointed instrument, so that with any pointed instrument or engraver's tool the coated surface may be drawn, written, or engraved upon, the removal of the coating indicating the work. The coating thus being removed by the instrument, the sheet will be made transparent at all points along the path of the instrument, while at all other points it will remain opaque, so that the sheet may be photo-printed from or used as a medium for graphic purposes by any method of photographic or photolithograph reproduction.

In writing or drawing upon the sheet the color of the varnish greatly facilitates the work, as it shows a dark line as the instrument passes over the coating, enabling the artist to plainly see his work without holding the sheet up to the light.

The sheets may be used as the medium for making photolithographs direct upon the stone, for making zinctypes, gelatine and electrotypes, as the film answers the purpose of either positive or negative, and being more pliable and elastic than any other substance used for this purpose better contact can be obtained and better work produced, and in printing with the blue process it gives blue lines upon a white ground, and a superior reproduction can be made.

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

1. The transparent sheet A of gelatine rendered opaque by the coating B of asphaltum, beeswax, and turpentine applied to the surface of the sheet, substantially as described.

2. The transparent sheet A of gelatine rendered opaque by a coating, B, composed of dark or colored varnish or adhesive substance, consisting of asphaltum, beeswax, turpentine, and lamp-black or other coloring-matter, and a metallic powder applied to the varnish or adhesive substance, substantially as and for the purposes described.

STEPHEN C. DUVAL.

Witnesses:
W. F. GRANT,
CHAS. C. SCHOENECK.