

(No Model.)

E. WUESTNER.
NON-HALATION PLATE.

No. 566,111.

Patented Aug. 18, 1896.



WITNESSES:

Harry C. C. C.
J. Little

INVENTOR

Edmund Wuestner

BY

E. W. Dickerson

ATTORNEY

UNITED STATES PATENT OFFICE.

EDMUND WUESTNER, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO THE
WUESTNER'S NEW EAGLE DRY PLATE WORKS, OF NEW JERSEY.

NON-HALATION PLATE.

SPECIFICATION forming part of Letters Patent No. 566,111, dated August 18, 1896.

Application filed March 23, 1893. Serial No. 467,251. (No model.)

To all whom it may concern:

Be it known that I, EDMUND WUESTNER, of Jersey City, Hudson county, State of New Jersey, have invented a new and useful Improvement in Photographic Plates, of which the following is a full, true, and exact description, reference being had to the accompanying drawing.

It is well known that photographic dry-plates as ordinarily made are subject to the serious disadvantage, under certain conditions, of what is known as "halation;" that is to say, when the view to be reproduced contains some exceptionally-bright spots, as, for instance, a window, in comparison with a darker portion of the view, the effect is, if the exposure be sufficient to reproduce the darker portions, to make a foginess in connection with the light portions, spreading somewhat from them onto the darker portions, which is ordinarily known as "halation."

The object of this invention is to make a plate which will accurately reproduce a view showing great difference in illumination, and to avoid the halation commonly experienced. Efforts have been made in this direction upon the theory that halation was due to a reflection from the glass plate by coating such plate with a black varnish or other non-reflecting body. These efforts have, however, been practically failures. Efforts have also been made in the direction of putting a quick on a slow emulsion of the ordinary kind, but these likewise have failed of success. By my improvement I have successfully overcome this difficulty by placing a fast emulsion upon the top of a slow orthochromatic emulsion, and, by preference, I place a gelatin substratum between the orthochromatic

emulsion and the plate. I may also color this gelatin substratum, as, for instance, with picric acid.

My invention will be readily understood from the accompanying drawing, in which, of course, the thicknesses are greatly exaggerated, in which A represents the glass plate; B, the gelatin substratum; C, the orthochromatic emulsion, and D the ordinary fast emulsion.

The orthochromatic emulsion may be of any of the suitable well-known kinds; but I prefer an emulsion colored with eosine, erythrosine, or cyanine, or a combination of them. By this combination I can not only prevent halation, but get a practically perfect relation of high lights and darker portions of the view.

The gelatin substratum is advantageous, but not essential to the success of my invention.

Of course for a glass-support I could substitute an ordinary transparent or stripping film.

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

A photographic plate consisting of a transparent support, an orthochromatic emulsion placed upon the support, and a more rapid ordinary emulsion superimposed upon the orthochromatic emulsion, substantially as specified.

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

EDMUND WUESTNER.

Witnesses:

H. COUTANT,
DAVID A. SMITH.