

# UNITED STATES PATENT OFFICE.

ARTHUR EICHENGRÜN AND KARL DEMELER, OF ELBERFELD, GERMANY,  
ASSIGNORS TO FARBENFABRIKEN OF ELBERFELD CO., OF NEW YORK,  
N. Y., A CORPORATION OF NEW YORK.

## PROCESS OF DEVELOPING PHOTOGRAPHIC PICTURES.

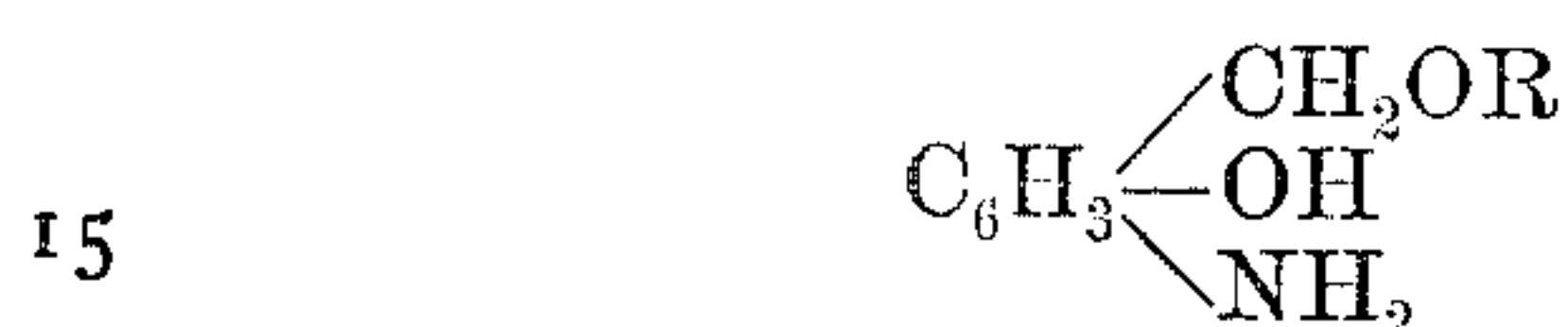
SPECIFICATION forming part of Letters Patent No. 696,019, dated March 25, 1902.

Application filed August 5, 1901. Serial No. 70,926. (No specimens.)

*To all whom it may concern:*

Be it known that we, ARTHUR EICHENGRÜN and KARL DEMELER, doctors of philosophy, chemists, residing at Elberfeld, Germany,  
5 (assignors to the FARBENFABRIKEN OF ELBERFELD CO., of New York,) have invented certain new and useful Improvements in Processes of Developing Photographic Pictures, of which the following is a specification.

10 We have found that the amidoöxybenzyl alcohols, their ethers and esters, having the following general formula:



(in which formula R means hydrogen, an alkyl or acidyl radical, such as methyl, ethyl, acetyl, or the like,) are especially suitable  
20 for developing photographic pictures on glass, celluloid, paper, &c., prepared with silver chlorid, bromid, or iodid, or with two or all of these salts, after proper exposure to light. The production of the said amidoöxybenzyl  
25 alcohols is described in a separate application for Letters Patent bearing the same date.

The new products used in the usual way develop quickly without the use of caustic alkalis, which are in many ways unsuitable  
30 in photography, and in this way they are superior to the developers hitherto employed. The pictures produced by the new developers show extraordinary brilliancy, great detail, and strong contrast and possess a color which  
35 insures rapid printing. Another special advantage of our new developers is that plates, &c., may be left in the developing-baths for any reasonable length of time and no fear of fog need be entertained.

40 In carrying out our new process practically we can proceed as follows: Ten grams of sodium sulfite are dissolved in one hundred cubic centimeters of water and into the resulting solution one gram of finely-powdered

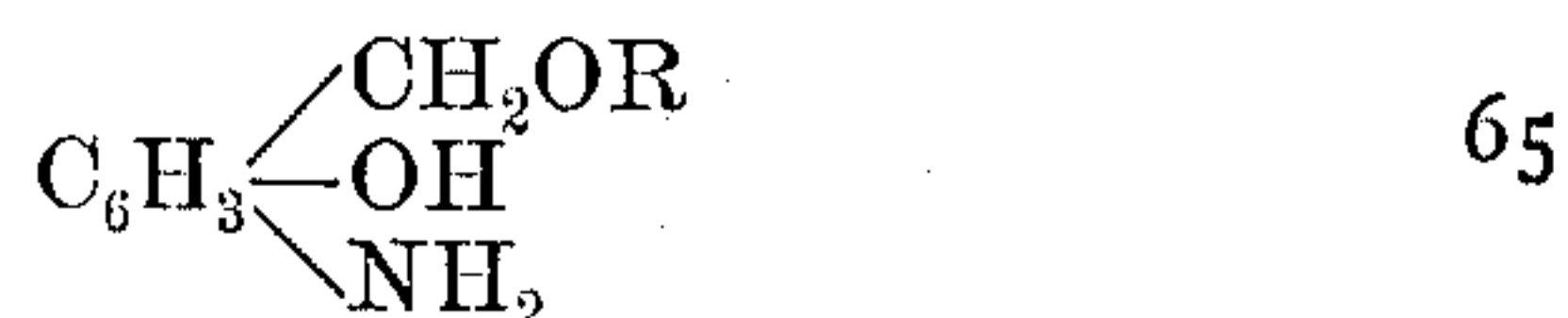
hydrochlorid of amidoparaoxybenzyl alcohol 45 is introduced. For use sixty cubic centimeters of this solution is mixed with twenty cubic centimeters of a twenty-per-cent. solution of potassium carbonate.

The developing-bath is prepared in an analogous manner if other of the above-mentioned amido compounds are used.

Instead of sodium sulfite, sodium pyrosulfite, and instead of potassium, carbonate acetone may be used. 55

Having thus described our invention and in what manner the same is to be performed, what we claim as new, and desire to secure by Letters Patent, is—

1. The herein-described process of developing photographic pictures by means of amido compounds having the hereinbefore-defined general formula: 60



substantially as hereinbefore described.

2. The herein-described process of developing photographic pictures consisting in subjecting them to the action of a solution containing amidoparaoxybenzyl alcohol, substantially as hereinbefore described. 70

3. The herein-described process of developing photographic pictures consisting in subjecting them to the action of an aqueous solution containing amidoparaoxybenzyl alcohol, hydrochlorid, sodium sulfite and potassium carbonate, substantially as hereinbefore described. 75

In testimony whereof we have signed our names in the presence of two subscribing witnesses. 80

ARTHUR EICHENGRÜN.  
KARL DEMELER.

Witnesses:

OTTO KÖNIG,  
FRITZ ÜBERS.

It is hereby certified that in Letters Patent No. 696,019, granted March 25, 1902, upon the application of Arthur Eichengrün and Karl Demeler, of Elberfeld, Germany, for an improvement in "Processes of Developing Photographic Pictures," an error appears in the printed specification requiring correction, as follows: Line 77, after the word "alcohol," the comma should be stricken out and inserted after the word "hydrochlorid," line 78; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 8th day of April, A. D., 1902.

[SEAL.]

F. L. CAMPBELL,  
*Assistant Secretary of the Interior.*

Countersigned:

F. I. ALLEN,  
*Commissioner of Patents.*