UNITED STATES PATENT OFFICE.

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COMPOUND FOR THE TREATMENT OF PHOTOGRAPHIC PRINTS.

No. 930,578.

Specification of Letters Patent.

Patented Aug. 10, 1909.

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To all whom it may concern:

Be it known that I, CHARLES B. WAITE, a citizen of the United States, residing at city of Mexico, Mexico, have invented certain new 5 and useful Improvements in Compounds for the Treatment of Photographic Prints, of which the following is a specification.

This invention relates to photography, and particularly to treatment of photographic

10 prints.

The object of the invention is to provide a preparation or compound for removing yellow or brownish stains such as frequently appear upon photographic prints after the 15 same have been developed. The invention may also be used to reduce the color of photographs which have been over printed, or exposed to the light too long in the printing operation.

Not only may the invention be employed in connection with ordinary photo prints but it is contemplated to use the same in the manner above described on any photographs obtained by the process of development after 25 short exposure of a negative or positive, and includes bromid enlargements, all papers or prints adapted to be printed by gas light, and also certain printing out papers which have for their base a silver emulsion com-30 bined with gelatin or collodion.

My compound consists of the following ingredients in substantially the proportions

specified:

35	Water 10	ounces.
	Cyanid of potassium	onnce
•	Ammonia $(28\%)_{}$ 10	drams.
		grains.
		drama

In the actual use of my preparation the cyanid of potassium affects the underlying emulsion of the photographic print, its action being to produce a separation of this emulsion, together with the photograph car-45 ried thereby, from the base on which it is placed. By using the ammonia and borax in connection with the cyanid of potassium

what, the uneven separation of the emulsion 50 from the base carrying the same, and the production of spots which would ruin the

the effect of the latter is neutralized some-

photograph being thus prevented. By continued experiments I have found that the use of ammonia and borax in the proportions stated enables me to secure the best results 55 in the actual practice of my invention. Were the cyanid employed in the present compound without the ammonia and borax, the action of the compound would be uneven, having a tendency to cause white 60 streaks and spots on the print. The ammonia and borax by retarding the action of the cyanid thus produce uniformity in the reducing or clearing process, and this is to great advantage in the practical embodiment 65 of the invention, in fact is absolutely essential to obtain proper results.

The carbolic acid included in my compound is designed to neutralize the poisonous effect of the fumes of the cyanid of 70 potassium, which would be inhaled by the operator and might result in serious injury. The fumes of the cyanid are dissipated by the carbolic acid and rendered practically harmless in this way. These fumes are also 75

purified to a certain extent.

In treating photographic prints with my preparation I apply said preparation to the prints with a tuft of cotton, or the like, after which the prints are again placed in the fix- 80 ing bath and thoroughly washed. The discoloring stains will be removed by applying the compound in the above manner or the same operation will reduce the color of prints should they have been printed too 85 dark through inadvertence.

Having thus described the invention, what

is claimed as new, is:

A compound for treatment of photographic prints including the following in- 90 gredients in substantially the proportions specified: water, ten ounces; cyanid of potassium, one ounce; ammonia, ten drams; borax, twenty grains; and carbolic acid, three drams.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES B. WAITE.

Witnesses:

C. PIQUETTE MITCHELL, G. A. Guerra.