

Photographic Notes.

Permanency of Photographs.

Since prepared printing-out papers have come to be so universally used, the nightmare, if I may call it, of photographers has been the fading or yellowing of prints. Approximately, the carbon print, or a print made on platinum paper, has a gratifying stability, but these will not for many years become the pictures for the masses, because of the extra cost of production, and because, when both are new, the difference is not sufficiently apparent to the patron to induce him to pay the difference in cost. I am frank to say that I believe the results, as a rule, that were obtained on albumen paper were more permanent than the majority of printers obtain to day on collodion or gelatine, and also as frank to assert that such ought not to be the case. Where, then, is the trouble? My experience teaches me that the most of it lies in the fact that the formulas have universally understated the time that is necessary to fix these prints, and printers have followed the formulas too closely. A collodion print will fix thoroughly in much less time than a gelatine positive, but I would not advise anyone to fix in ten minutes if permanent pictures are desired. Gelatine paper, if the gelatine be at all of a hard variety, will require a liberal fixing in strong hypo. If there be some vignettied prints in the lot under treatment, it is easier for the eye to distinguish when fixation is complete. As gelatine is very tenacious in its hold on chemicals, it is well to be in no great hurry to remove prints when they appear all right to the eye. In other words when a vignette has been in the hypo a few minutes (that is, a gelatine print) there will appear in the edge of the vignetting a halo of a brownish tint. Fixing must continue until this tint entirely disappears, and, as I said above, for a short time, say five minutes, longer. Then the washing of gelatine papers must be very thorough by moving them from one dish to another in clean water for at least ten or twelve times, which is equal to letting the water run on them all night.

The odor of formaldehyde is masked with spirit of eucalyptus.

HOME MADE COLOR SCREEN.—An easy way of making color screens is as follows: Float a carefully-cleaned iron ring of the right size to fit the hood of the lens on the surface of some mercury in a shallow vessel; then pour a small quantity of collodion stained to the right color into the ring, cover with a sheet of paper to keep off the dust, and when dry the screen will be ready for use.

CURIOUS ACTION OF PHOTOGRAPHIC DEVELOPERS.—P. Mercier has remarked (*Repert. Chem. Ztg.*), that by the treatment of photographic plates, either before or after exposition with solutions of amidol, metol, ortol, hydroquinone, or pyrogallol, vigorous negatives may be



A Study.

obtained by subsequent development with hydroquinone-sodium carbonate developer, and even from excessively over-exposed plates. For instance, 0.01 Gm. of amidol is dissolved in 100 Cc. of water, the solution permitted to become brown by standing exposed to the air, and the plate then bathed in the solution for 2 minutes. The plate takes up about 1 Gm. of fluid by this treatment, corresponding to about 0.0001 Gm. of amidol. After this treatment the plate may be over-exposed a thousandfold, but on being developed with a hydroquinone-sodium carbonate developer a strong negative may be obtained.

SEPIA AND PURPLE TONES.—The following instructions may prove useful when one wishes to get a sepia or purple-toned print:

For green tones take a red print, after washing, and brush over with:

Nitrate of cobalt.....60 grains.
Sulphate of iron.....60 grains.
Water.....2 ounces.

For sepia tones take a red print, after washing, and brush over with:

Sulphate of iron.....60 grains.
Water.....6 ounces.

Developer for purple tones:

The print must be over-exposed. Wash well; then brush over with:

Gold chloride.....4 grains.
Water.....1 ounce.

Acetic, nitric or hydrochloric acid turn a green print blue.

DEVELOPMENT AFTER FIXING.—

The London agents for the "Lumiere" plates, Messrs. Fuerst Bros, recommend the following for development 10 mola after fixing:

Metol.....120 grs.
Sulphate of sodium.....2½ ozs.
Water.....20 "
Use ½ i.z. to 1 oz.

The plates should be strongly over-exposed, and all traces of hypo removed. After an hour or two of development, according to the exposure given, the positive image appears full of detail, visible by reflected light, but scarcely perceptible by transparent light. At the end of two hours the image has grown sufficiently to be identified with mercury.—C. and D

Don'ts in Photography.

Don't try to develop a large number of plates or films at one time. Experiment with one plate or film to find the working properties of your bath. Much better to spoil one negative than several. If there are several plates on the tray, they are apt to slide over one another while rocking the dish and thus tear the film.

Don't forget that during the summer months a piece of ice in your developer, fixing bath and toning solution is a necessary luxury. If you don't care to have it in the tray itself, a nice method is to have two trays, one larger than the other. In the larger one have ice water and place the smaller tray in the water; this will keep your solutions cool. Frilling and blistering of your negatives and prints are thus avoided, and the developing is retarded to such an extent that it can be managed