

Photographic Notes

COMBINED TONING AND FIXING BATH FOR GELATINE CHLORIDE PAPER:—

Hypo-sulphite of soda.....	8½ oz.
Citric acid	2 drs.
Acetate of lead	3 "
Sulphocyanide of ammonia	7 "
Alum	2 "
Chloride of gold.....	15 grs.
Water	14 oz.

HOW LONG SHOULD PRINTS BE WASHED? This, says Herr Liesegang, in the *Archiv*, depends on the manner of washing. He recommends the addition of a substance to the toning and fixing baths, which shall act as an indicator. As such, eosine, in the proportion of 0.02 per cent., has given him the best results. He washes until the red coloration has disappeared from the backs of the prints.

BLOOD-RED TONES ON BROMIDE PRINTS. According to the *Paris Photographe*, such tones are obtained in the following way: The print, after being fixed and washed, is immersed in a fifteen per cent. solution of bichloride of copper. The elimination of the excess of copper salt having then been removed by careful washing, the print is placed for several seconds in a solution of ferrocyanide of potassium—strength not stated,—is again thoroughly washed, and then once more passed through a solution of cupric chloride, when the red image is immediately seen to appear.

INCREASING THE SENSITIVENESS OF A PLATE.—Mr. P. B. de Laborre says that to impart a high degree of sensitiveness to a plate, in order, say, to take an instantaneous portrait in the studio, it should be immersed for a minute or two in the following solution:

Bichromate of potassium.....	2 parts.
Distilled water	100 "

This is said to make the plate more sensitive, and it should then be exposed, without washing, and while still wet.—*British Journal of Photography*.

PHOTOGRAPHY AND DERMATOLOGY.—Dr. E. Schiff, of Vienna, has been applying photography to the study of the human skin, and by the aid of a small incandescent lamp and a metallic reflector has been able to project on that part of the epidermis undergoing examination a light so strong, that by the use of very rapid plates all the details of the texture of the skin, and such small markings as are ordinarily non apparent and are occasionally present, were obtained. The enlarged positives on matt paper are carefully coloured, and the results are said to be of great interest to dermatologists.—*British Journal of Photography*.

A NOVELTY.—Paper prints mounted in optical contact with glass, known nowadays as opalines, are very effective, but a much superior effect can be produced by a thin transparency developed with hydroquinone, backed up with white paper; this gives a picture of much more bril-

liancy. It has also the advantage of not being so likely to fade owing to any impurity of the paper. The effect produced is exactly similar to that seen when developing a correctly exposed lantern slide, with its white background of unaltered emulsion before fixation. The whole of the delicacy of a glass transparency is preserved.

A NEW TRACING PAPER.—A new tracing paper has been made of material taken from a Japanese plant, and the inventor, says *Invention*, who also hails from Japan, claims that although no oil is used in the making of it, it is as transparent as the ordinary oil paper. We understand that samples sent to Europe have been tested and were found highly satisfactory, for the paper is very tough and quite transparent. If these statements are correct, it seems probable that this tracing paper could be used for photographic purposes as well as for drawing; but it is doubtful whether its manufacture in Europe would be altogether profitable, unless the plant could be acclimatised and trained here.—*Printer and Stationer*.

ELIMINATING THE YELLOW COLOR FROM NEGATIVES.—A method outlined by Mr. A. Cowan at the London and Provincial Association, as reported in the *British Journal of Photography*, consists in first bleaching the negative with a weak solution of perchloride of iron and then in re-developing with the ferrous oxalate developer. This changes the film to a dark black and produces any desired density. If the yellow color extends over the whole surface of the film, the plan does not answer as well, as a veil will redevelop. Yellowness in dry plate negatives is due to insufficient fixing or insufficient washing after the negative has been fixed, and no remedy for it at all satisfactory has been devised. It cannot be removed by the ordinary clearing solutions recommended for eliminating pyro stains.—*Scientific American*.

WASHING ALBUMEN PRINTS.—In the first number of *Das Atelier des Photographen*, which is under the editorship of Dr. Miethe, the latter discusses the experiments of Messrs. Grundy and Haddon on the amounts of silver and sulphur left in albumenized prints at different stages of washing. These he summarizes as follows: 1, ten minutes' washing eliminates all soluble matter; 2, further washing extracts no more sulphur or silver, supposing that that all the free silver salt of the print has been converted into the soluble silver hyposulphite. To assure the latter condition, the author recommends fixation in a first hypo bath—forty to fifty grammes of salt in 400 or 500 c. c. of water per sheet,—to wash for ten minutes in running water, and then place the prints in a second hypo bath—six to ten grammes of hypo in 150 c. c. of water, per sheet,—leave in for at least eight minutes, and finally wash in running water for from ten to fifteen minutes.—*Scientific American*.

Ink for Writing on Photographs.

Potassium Iodide	10 parts
Water	30 parts
Iodine	} of each 1 part
Gum	

This formula is said to produce an ink that is very serviceable for marking proofs. The writing being made on a dark portion, the lines soon bleach, in consequence of the conversion of the silver into an iodide.

A High Gloss Lubricator for Albumen and Gelatine Prints.

White wax.....	100 grains
Rectified oil of turpentine ..	100 grains
Damara varnish	4 grains

For use, melt the wax and add the turpentine and Damara under constant stirring. When the mixture is too hard, add more turpentine.

Combined Toning and Fixing Bath.

A simple combined toning and fixing bath for papers of the aristotype class:

a. Water	1000 cm.
Nitrate of lead	10 grains
Hypo.....	200 grains
b. Water	100 cm.
Chloride of gold.....	1 grain

For use, add to solution A 50 cm. of solution B. The bath is now ready for use. It is, however, advisable to fix a few spoiled prints in the bath first. An addition of 3 per cent. boracic acid hastens the toning process, and gives fine purple tones.—*Scientific American*.

Coloring Gelatino-Bromide Prints

The *Archiv* gives the following plan for getting different colors on bromide prints. The prints are feebly developed with eikonogen, fixed, washed, and then immersed in a solution of—

Nitrate of lead.....	4 parts
Red prussiate	6 parts
Water	100 parts

This bleaches the image, which may then be colored thus:

BROWN.

Schlippe's salt.....	10 parts
Ammonia.....	5 parts
Water	150 parts

YELLOW.

Neutral chromate of potash..	4 parts
Water	100 parts

GREEN.

Immerse the yellow prints in:

Iron perchloride	1 part
Water.....	10 parts

RED.

Immerse the yellow prints in:

Chloride of Copper	1 part
Water.....	10 parts

NICKLE GREEN.

Chloride of nickel	1 part
Water.....	10 parts

ORANGE.

Mercury bichloride.....	3 parts
Potassium iodide.....	4.5 parts
Water.....	100 parts