

Photographic Notes

Developing Films.

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Believing that many photographers, amateurs and professionals, have trouble with films, the writer feels that an explanation of a few original "dodges" will lessen no small amount of profanity regarding the "pesty things."

Having developed as high as a thousand 4x5 film negatives a day with amidol, without having any trouble, and having used that developer for nearly a year, the writer feels like recommending it to those who are not satisfied with the developer they are using, but at the same time strongly advises those who are satisfied and are securing good negatives to stick to their own developer. The simplicity and rapidity of amidol are points in its favor, and it is very nearly what its makers of all developers please to claim a "universal developer."

The easiest method of using amidol is to make a stock solution of sulphite of soda (crystals), 200 grains to the ounce. Then get a wooden mustard spoon and file it down so that it will hold just ten grains of amidol when the powder is dipped up and levelled off with a light jerk. For normal developer put one spoonful of the powder into a graduate and add half an ounce of the stock solution of sulphite of soda. Stir till dissolved and add water to bring the solution up to four ounces. Of course, this amount is not sufficient when a large number of films are to be developed, but it is mentioned as a convenient unit of quantity. With some makes of sulphite it is necessary to add a few grains of carbonate of soda to the stock solution. A very small quantity will usually suffice. When only one or two plates or films are to be developed, and it is desirable to save the developer, a grain or two of oxalic acid or oxalate of potash may be added to the mixed developer and its keeping qualities greatly improved, although, where much developing is done, it is advisable to use fresh developer every day, for the reason that the user will always know exactly what the strength is. The sulphite solution deteriorates very slowly if kept in a moderately cool place.

The writer also uses a combination of eikonogen and quinone with excellent results on Carbutt's ortho films. The following formula has given satisfaction on these and also on extremely rapid exposures on race horse and similar subjects:

A.

Water.....	1250 c. c.
Sodium sulphite crystals.....	150 grammes.
Eikonogen.....	22½ "
Hydrochinon.....	7½ "

B.

Water.....	250 c. c.
Potassium carbonate.....	75 grammes.

Take five parts of solution A and one part of solution B. If over exposure is

suspected add several parts of water and a few drops of bromide of potash solution.

Cut the films from the roll holder and place them in a light-tight box, and this box in another box for safety. The films should be cut in lengths suitable for the tray in which they are to be developed. After the developer is mixed and in the tray, take one of the strips of negatives and quickly slip it under the surface of the developer. It will flatten out in a few seconds. Allow it to remain face or film up until all details are out. Then turn it over and start on a new strip. By the time the second is ready to turn over the first will probably be dense enough. If not, start on the third strip. When the first is ready to come out throw it into a deep dish of water until about a dozen or two strips are finished, moving them occasionally. Then put them in the fixing bath face down, and keep them moving until all are thoroughly fixed. Wash as usual—that means thoroughly. One of the easiest and best fixing baths is made as follows:

Water.....	1 quart.
Hypo.....	3 pound.
Sulphite soda.....	1 ounce.
Tartaric acid.....	1 ounce.

Alum is not necessary with this bath. It will remain clear a very long time and increase the brilliancy of negatives. It is a magnificent fixing bath for lantern slides on account of its freedom from stain and slight clearing of fog.

After the films are well washed they must be soaked to prevent curling when dry. A bath made of water and enough glycerine to give twenty degrees hydrometer test will be found to work perfectly if the following original process of drying is followed.

One of the great trials of film developing was the method of drying a large number of films by driving tacks through the corners, as recommended by the makers. With several hundred films this was a job of considerable magnitude. An easier way is to soak the films in the above bath for five or ten minutes. Then spread out half a newspaper and lay the negatives on it face up. Lift up the paper by the corners and allow the surplus water to drain off for a few seconds. Then lay a sheet of hard blotting paper over the negatives and quickly blot off all the water on the face of every negative.

Without doubt the best blotting paper to use for this purpose is the "Royal" brand, imported by the United States Photo Supply Co. It costs only a few cents a sheet and will last a long time if carefully dried after each using. It is an improvement to lay the negatives on a sheet of this blotter instead of newspapers. It is also possible to blot the negatives with new, clean newspapers, but it is hardly as good as the blotter, although the writer has blotted over 10,000 negatives with old papers. But they must not be used more than once, and the blotting must be quickly done. The films must have every drop of water removed

from the face, otherwise the drop will not dry perfectly and will stick to the paper in printing. The sheets of paper on which the films have been blotted must be placed in a dry place free from dust until dry.

An old pepper box filled with talc powder (French chalk) is very convenient to have around when printing. Should the films show any signs of stickiness dust some powder over them and rub off with a piece of soft cloth. That will remedy the sticking. If any large spots are sticky or the paper should adhere, throw the film in water until the paper can be easily removed and then soak and thoroughly blot again.

If you have been in the habit of tacking up negatives to dry you will be surprised to find how much the easier is this method.—*Pacific Coast Photographer.*

The Blue Process.

The following process for producing cyanotypes on paper is recommended by Herr F. Veress, the well-known photographer of Hungary, in the *Photo-Almanach* of 1893. Two solutions should be prepared:

SOLUTION A.

Iron and ammonia citrate.....	8 grammes.
Ammonium ferrioxalate.....	2 grammes.
Oxalic acid.....	1 gramme.
Distilled water.....	120 c. c.

SOLUTION B.

Ferrioxalate of potassium.....	8 grammes.
Ammonium ferrioxalate.....	2 grammes.
Distilled water.....	120 c. c.

The two solutions are mixed and then filtered. Previously moistened glossy baryta paper is floated on the filtered solution for about four minutes, when it is dried at 89° F. The paper is then printed in the usual manner beneath a negative. The prints are washed in soft water, and then placed one by one in a mixture of 100 parts water and one part of hydrochloric acid. They are allowed to remain in it about five minutes, until the image has become quite pure. Finally the prints are well washed in clean water.

To produce blue prints on canvas and silk the following process is given by the same author: 5 grammes of arrowroot are dissolved in 50 c. c. of water; 2 grammes of gelatine are dissolved in 50 c. c. of warm water; 300 c. c. of water, to which has been added 1 gramme of ordinary whitesugar, 10 drops of glycerine, and 5 drops of a saturated solution of caustic potash, are boiled, and the arrowroot and gelatine solution added to it by constant stirring. The liquid is then filtered through flannel in a flat dish resting in a warm water bath. The fabric to be sensitized is placed on the liquid and allowed to float for from four to five minutes; it is then mounted on blotting paper, which is fastened to a drawing board and dried in a warm room. The fabric is sensitized and printed as described above and it should be used soon, for it quickly loses its sensitiveness. Before fixing, the prints should be placed one by one between sheets of blotting paper, in order