

pour off the solution ; now wash the iodide with water, pouring off the water when the salts settle, and repeating the operation two or three times. Finally, add the iodide to the silver bath ; shake well, and treat the whole to at least a whole day of sunshine. Before using it, add nitric acid sufficient to turn blue litmus paper slightly red, when, after standing a few hours, the solution is ready for use.

NOTES.

The bath should be kept as near neutral as possible. If it causes the least sign of muddiness or grayness of the film, add acid cautiously until the trouble disappears.

A bath decidedly acid, and one deficient in acid will cause harshness and slowness, besides a lack of brilliancy and roundness of the image—gray high-lights and dark shadows.

Keep an eighty-grain stock solution of silver on hand with which to strengthen the bath when it becomes weakened by work or overcharged with iodide. Set the bath in the sun a few hours after such additions, and filter before use.

It is unnecessary to filter your bath every night, though if it can be done in the dark it is recommended as being the best plan.

An over acid bath causes specks of comet shape to appear on the film. The only remedy is to mix some plain neutral solution with the other, enough to counteract the acidity.

The addition of ammonia would answer if care is had not to add too much.

Should the bath show indications of being over-acidified, in the hurry of work, a collodion salted with cadmium salts will give temporary relief.

Be careful that the plate-holders, shields, and dark-slides are carefully protected from the action of the silver solution. Shellac, asphaltum, paraffine and lard are all good protectors.

An extra bath should always be kept ready for an emergency.

Do not use your ferrotype bath for negatives.

It is not a good plan to add silver of one manufacture to a bath made up of that of another manufacture. The acid and the metal used by different manufacturers vary in their nature, and, of course, the resulting nitrate varies. Hence the silver made by one party would be very apt to cause some chemical disturbance if added to a solution made up from silver of another brand.