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PHOTOGRAPHIC REVERSAL DEVELOPMENT

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3 Claims. (Cl. 95—88)

My present invention relates to the photographic reversal development.

In the photographic reversal development of photographs the second exposure before the second development can, as is known, be avoided by treating the picture layer, after dissolution of the silver picture produced by the first development, with a solution of an alkali sulfide. These solutions have the drawback that they have a strong smell of hydrogen sulfide.

According to my invention instead of the alkali sulfide solution, there is used for the production of the reversal picture an alkaline developer containing a small quantity of an odourless sulfur compound which does not color the finished picture or the binding agent and is capable of forming developable nuclei of silver sulfide. Whereas the known alkaline developer when the second exposure is omitted, produces a blackening of the silver halide only after at least 20 minutes, the alkaline developer mixed with a small quantity of an odourless sulfur compound, for instance, thiosinamine or thiourea, produces the silver picture already after one minute. The sulfur compound alone in the low concentration, in which it is present, would not be able to blacken the silver halide.

Odourless sulfur compounds are, besides the thiosinamine already mentioned, thiourea and other sulfur compounds capable of forming germs of silver sulfide.

The following example illustrates the invention:

1000 cc. of the known metol-hydroquinone-developer, as it is utilized in the reversal development for the first negative development, are mixed with 0.5 gram of thiosinamine. The silver halide which remains in the layer after the treatment with the reversal bath consisting of bichromate and sulfuric acid is blackened by the odourless solution in less than one minute. The tint of the silver picture is very similar to that of a picture produced with a pure alkali sulfide.

The requisite odorless sulfur compound may be mixed with the developer in solid form, so that a solid developer in accordance with my invention may be placed on the market.

The reversal process may be carried out in any known manner, so, for instance, after the first developing operation a clearing bath may be introduced.

What I claim is:

1. In the photographic reversal process the step which comprises, after a first development and bleaching of a photographic material, effecting a second development with an alkaline developer containing a small quantity of an odourless sulfur compound capable of forming germs of silver sulfide.

2. In the photographic reversal process the step which comprises, after a first development and bleaching of a photographic material, effecting a second development with an alkaline developer containing a small quantity of thiosinamine.

3. In the photographic reversal process the step which comprises, after a first development and bleaching of a photographic material, effecting a second development with an alkaline developer containing a small quantity of thiourea.

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