print, one is visibly struck with the greater definition that is observed between the white and blue portions. As it thus appears to the eye, so will it be in the camera. - We placed behind a lens a sherry-colored film, having a diaphragm in the lens of f/16 and in the plate-holder, color-sensitive to red; we then gave an exposure of three minutes; plates developed with pyro and potash, and secured a negative dense, full of contrast, equal in every respect to that of the plate. The rule is to study the best colors of a screen complimentary to the object that is to be photographed, and use that in combination with a color-sensitive plate, giving a liberal exposure.—The American Amateur Photographer.

## Answers to Correspondence.

CORRESPONDENT, North Bay.—In answer to your inquiry we print the following as being a simplified method:

Mr. A. V. Lavroff, editor of the Russian Amateur Photographer gives the following simplified method of the collotype process: A plate glass is prepared in the usual manner with bichromate of potash, exposed beneath a negative, developed with cold water, and then allowed to dry for twenty-four hours at about 70° Fahrenheit. It is next covered with the following etching solution:

Water																			
Glycerine														200	0	c.	c.		
Hyposulphite of soda 2 grams.																			

This solution is allowed to remain on the plate for one or two hours, according to the relief desired, when it is removed by the aid of a very soft sponge and blotting paper, and the ink applied by means of a gelatine roller. To take prints in the ordinary copying press, the plate glass covered with the ink is placed upon a piece of india-rubber cloth; upon the glass is laid a mask of paraffin paper, then the printing paper, and, finally, a thin pillow of fine cloth, filled with cotton wool, and provided with a case of soft, smooth silk. pillow enables the operator to press the paper into close contact with the plate, and so to obtain all the fineness and detail of the negative. If, after about

twenty prints have been taken, the bichromate image begins to become grey at the light parts, it is only necessary to apply the etching fluid with a soft sponge in order to restore the cliche to its former vigor. By this method anyone can take hundreds of prints at moderate cost, and without a special machine, a little experience and exactness bring all that is required.

## Toning Dantern Slides.

A paper read before the Society of Amateur Photographers of New York.

BY ALFRED STIEGLITZ.



Y late experiments in this line have led me to use the following formula in toning dry plate slides. Over-expose,

and develop in such a manner that the slide looks rather flat and underdeveloped. Fix in hypo, as usual, and then wash under a tap thoroughly (this is of importance to ensure success in the toning operations) for about five minutes.

Make up three stock solutions:

I.—Uranium-nitrate	I	part
Water	0	parts
II.—Ferricyanide potassium	t	part
Water100		
III.—Ferric chloride	i	part
Water	>	parts

They are ready for immediate use.

A. In order to get a brown tone, mix ten parts of I. and one part of II. Dip the slide into this, and keep it there for about thirty to fifty seconds; then wash for ten minutes and dry.

B. For reddish-brown tones, take equal parts of I. and II. and proceed as above.

C. Red tones are procured by taking one part of I. and two parts of II., and proceeding as above. Be careful in toning slides with this mixture, as extra care has to be taken in order to keep the high lights clear. A trace of stain does not necessarily spoil a slide. On the contrary, such a slide often looks exceptionally beautiful on the screen. Judging slides by daylight results in misjudgment very often. The only proper way to see what a slide is worth is to project it on the screen.

D. Green-blue tones. After having