

judged, and even if over printed the resulting transparency generally turns out very satisfactorily if left a little longer in the fixing bath.

To finish the prints, it is only necessary to soak them in a few changes of water to remove the free silver, and then pass them through any ordinary gold toning bath. They tone rapidly and fix (in hypo, 2 oz.; water, 20 oz.) in about five minutes, though I generally leave them for ten. Washing takes about an hour and a half, and the plates are then dried in the usual way. The transparency may now be placed face to face with a piece of finely ground glass and a strip of gummed paper fastened around their edges to exclude dust, prior to screwing up in the final brass frame.

The tones possible in this process are exquisite in their range.



### Halation and False Tonality.

BY JOHN CLARKE.

90° Fahr. in the shade has come so suddenly that I have not got used to it, and dreading the physical exertion necessary for the laboratory work that usually furnishes the necessary inspiration, this article must be the outcome of thought rather than of work.

Some four or five years ago, while on a Western tour, I had the pleasure of attending a meeting of a photographic society long since defunct, at which the paper of the evening was one by the genial astronomer of the Dearborn Observatory on the light of the dark room. His plea was for ruby glass, and that only of a particular kind, known to the trade as *copper ruby*, and it was wound up by the comforting assurance that so difficult was it to get the right thing, that in a search through

the whole of the "second city" he had been able to obtain only one small piece.

In the course of the discussion that followed, the editor of a photographic journal took pretty strong exception to the professor's statement that for high class work a suitable ruby, or indeed a ruby of any kind was essential, enforcing his opinion by the statement that during a recent tour through several states he found many of the best photographers doing the highest class of work under a yellow or orange-yellow light; to which the professor replied that that did not at all affect the question, as *professional photographers did not know when their plates were fogged*.

Now this dictum of the professor is my text to-day, or rather the subject over which I have been dreaming or trying to dream out something that may be of interest to my readers.

Whether or not the average photographer knows a fogged negative when he sees it is not of much consequence, as under certain conditions, the presence of a certain amount of veiling is a real improvement, but there are other things which he does not seem to know which are not so, and by the knowledge, or recognition of which, and the determination to avoid them, his work would be vastly improved.

Two of the most injurious and most easily avoided are halation and the improper rendering of colour-value; and of both the average photographer is either really ignorant or to both supremely indifferent.

Halation in its most pronounced form, as it appears when an interior is photographed with the lens pointing to a window, or when bare branches or well defined lines are taken against a well lighted sky, they may know well enough, but those are not the only subjects in which it appears, as it is more or