

Having exposed a plate to the two actions alternately, first, once upon one zone, twice upon another, and so on until the last zone had been exposed and destroyed six times, I covered the plate with a piece of black lace or an engraving, finally exposing the whole to white light; the result was an equal deposit of mercury upon the whole surface of the plate. The impression of the lace or engraving seemed to be the result of a single exposition to light, as would have been the case with a normal plate; therefore the action of the red, orange, or yellow glass, upon a plate previously affected by light, produces the same effect as a fresh exposure to the vapors of iodine or bromine, when we wish to restore the plate to its first sensitiveness.

This restoring property of the colored glasses may be of great use in the Daguerreotype manipulation. Instead of preparing the plates in the dark it may be done with impunity in the open light. To give sensitiveness, we have only to place the plate for some minutes under a red glass before putting it in the camera obscura. The frame or box used to hold the plate, if furnished with a red glass at the bottom, will serve for this restoration. I have obtained in this manner images equal in effect to those produced on plates prepared in the dark.

This possibility of preparing plates in open day, offers a great advantage to those who wish to take views or pictures abroad, and who cannot conveniently obtain a dark room. Again, in the case of a plate which has been left too long in the camera obscura, or accidentally exposed to the light, instead of rejecting it, we can restore its sensitiveness by placing it under a red glass. There is still another useful application of this property: if after one or two minutes' exposure to the mercury, we perceive the image is too rapidly developing, or presenting signs of solarization, which a practised eye discovers before it is too much advanced, we have only to stop this ac-

cumulation of mercury by exposing the plate for a few seconds to the red light, and again place it in the mercury box, to complete the modifications, which give the image all its tones and the most favorable tint. In truth, we may complete all the operations of the Daguerreotype in the open air, in the middle of a field if necessary. We can introduce the plate into the mercury box, in the same manner that we did in the camera obscura, by means of the same frame and red glass, which also serves to protect it when we take it from the mercury to rapidly view its development. I say rapidly, for if we expose it too long to the red light, the Photogenic effect will be neutralized. We shall presently see that the time required to observe the state of the image is not sufficient to affect its affinity for mercury, if it be found requisite to replace it in the mercury box. The exposure under red glass necessary to destroy the effect produced by white light, must be a hundred times longer than has been the exposure to white light, that of the orange glass fifty times, and that of the yellow glass only ten times; thus a plate exposed to white light for a second will be restored to its former sensitiveness in ten seconds by the yellow glass, in fifty by the orange, and in a hundred by the red. As soon as the sensitiveness of the plate affected by white light is restored by the colored glasses, it may be affected again by the Photogenic light. It is not even necessary that the restoration should be complete: at each degree of restoration the plate is capable of receiving an accumulation of Photogenic effect. If the red rays have not acted more than fifty times longer than the daylight, only half of the affect will be destroyed; if twenty-five times longer, one-fourth; and so on in proportion.

Besides the destructive action of the red, orange, and yellow glasses, these same radiations are endowed with a Photogenic power, that is to say, they have, like the blue and violet rays, the power of causing