

Hence, it is probable, that a ray of white light is very complex; that, besides containing rays of color, it also contains rays of chemical action, or of *ENERGIA*, as Mr. Hunt has termed it, which rays do not occupy the same space as the colored rays, but rather the space above the violet rays spreading out in that direction, and below extending and overlapping, as it were, the spectrum down to a space considerably below the red. The point of greatest intensity of this power, which has also been called *actinism*, is at the lower edge of the indigo ray: according to some it is this power which effects all the changes, whether chemical or even molecular, which are ever in progress. It is this agent which quickens all the elements of growth, and maintains the conditions of a healthy vitality, and most of the processes of putrefaction and final decomposition of bodies are due to its agency.

That it does not bear any exact relation to the intensity of the light is evident, because, under the brilliant sun and clear skies of the intertropical regions it cannot be produced with as much rapidity as in more temperate latitudes. Hunt represents that, in Mexico, it required twenty minutes or half an hour to produce effects which, in England, would occupy but a minute, and that travellers engaged in copying the antiquities of Yucatan have been obliged to give up the camera and take to the sketch books. Dr. Draper long since remarked the same difference between the chemical action of light in New York and Virginia.

The light in elevated positions, as on high hills, also acts differently from that of the valleys. We cannot suppose that in these cases the white light had any deficiency of active power, but rather that the latter was masked by some effects due either to geographical or meteorological causes, to which we shall hereafter allude; but over the whole of which much uncertainty at present hangs; for it cannot but appear strange that the clear light of the Alps require many

more minutes to produce a good photographic picture than the murky and soot-befogged air of London.

Photogenic pictures have received several names, according to the various results arising out of the metallic salts used as sensitive agents. Thus, there is the *calotype* of Mr. Talbot, and Sir J. Herschell's modification of it called *chrysotype*. The *hyalotype* or photographs on glass by Evrard. The *cyanotype* of Herschell, produced by the action of cyanogen on iron. The *Energia-type* of Hunt depends on the action of succinic acid or of green vitriol on silver salts. The *chromatype* from the reaction of salts of chrome and copper upon each other. The *anthotype*, produced by the colors in the petals of plants, and the *amphitype*, by the reaction of lead salts upon the double tartrate of ammonia and iron.

All these, with the latest improvements suggested or acted on, will be taken up in regular series, and treated at large in the pages of this Journal.

STATUE OF ETHAN ALLEN.

A young man, Mr. B. F. KINNEY, of Rutland, Vermont, has recently exhibited several Plaster Paris busts at the State House, Vermont. It is said that these possess great merit. We understand that Mr. K. has received little or no assistance from any one, and that he is an artist possessing great artistic talent no one denies. For some time past he has been striving to collect facts, and form some correct idea of Ethan Allen. It is now nearly seventy years since Allen's death, and there are but few alive who can describe his features. It seems that the young sculptor has at last succeeded to a great extent, and produced a likeness which is said to be good, and bearing in resemblance to that of a man of energy and spirit.

"When you first look upon that bust, you feel that it is Ethan, or, let it resemble whom it may, the original would have no