

to determine whether they were to be blue or violet, the variations in their strength and duration, and whether natural or artificial. He noted that light baths had been used in antiquity, and that General Pleasonton had, in 1877, published a book in Philadelphia, vaunting the influence of blue light in cultivating plants, raising animals, arresting disease, and restoring health in acute and chronic disorders to man and animals. But while Pleasonton "approached the truth," his experiments were faulty and he was too apt to look upon blue light as a panacea.

Finsen cites, as a final argument for light as a stimulant, the marked effect of a sudden change from a cloudy to a clear sky upon insects, reptiles, birds, and ourselves, and maintains that both his positive and negative experiments show that the chemical rays are chiefly responsible for this stimulating influence.

These researches were carried on in the spring and summer of 1894, and published in February, 1895, and represent but a very small portion of the observations Finsen was conducting, but being interrupted, was unable to continue; but in 1899 he published an appendix detailing experiments conducted in the spring of 1895, showing marked secondary effects of light upon the embryo of the frog, supplementing former results, and stamping the ultra-violet rays as the essential exciting cause of the action. These experiments proved that the effect of the chemical rays was only evident after a certain time, and might even attain its maximum after exposure to them had ceased, and suggested opportunities for new researches.

Some charlatans having, meanwhile, exploited incandescent light baths, pretending they were based upon his work, and otherwise using his name in an unwarranted and distasteful manner, Finsen drew attention to the fact that the influence of light as a bactericidal agent, its power to cause inflammation and pigmentation of the skin and its stimulating action all depend upon the chemical rays, of which the light from incandescent electric lamps contains less than ordinary diffuse daylight does, and that such baths simply promote perspiration by reason of the heat rays given off, while proper light baths are cold, and cause a marked effect upon the skin; recent researches had proved that the dilatation of the capillaries and blood vessels of the skin produced by light was not temporary, but of long duration, and on account of a more active blood supply, better nutrition of the skin is promoted, and greater functional activity. In Finsen's sunlight baths, patients walk naked in a courtyard, and to avoid perspiration, water is sprinkled about or douched over the patients. In the electric light bath, patients lie naked on couches, in a room divided by radiating partitions; a couple of large arc lights of one hundred amperes are suspended about six feet from the floor in the middle