

The therapeutic use of the solar rays practically resolves itself into a question of the exhibition of sunlight in such a way as to eliminate any objectionable excess of heat and light, and to secure as much as possible of the actinic force.

As to the general beneficial effects of sunlight, and the injurious consequences that result from any prolonged deprivation of it, there is abundant testimony, to say nothing of the evidence furnished to every man of experience by personal observation.

Dr. Forbes Winslow, in his suggestive volume on "Light, its Influence on life and health," thus summarizes the pathological effects of a marked deprivation of solar light: "It may be enunciated as an indisputable fact that all who live and pursue their calling in situations where the minimum of light is permitted to penetrate, suffer seriously in bodily and mental health. These pathological phenomena are principally observed among those confined in dark mines and collieries, holds of ships, factories, prisons, narrow streets, garrets or cellars. The total exclusion of the sun's beams induces an impoverished state of the blood, muscular debility, dropsical effusion, softening of the bones, nervous excitability, irritability of the heart, loss of appetite, consumption, physical deformity, stunted growth, mental impairment, premature old age. The offspring of those so unhappily trained, are often deformed, weak and puny, and are disposed to scrofulous affections."

This is a formidable catalogue of ills, but the facts are confirmed by investigations carefully made as to the health of the miners in Belgium and other European countries. It was shown thereby, for instance, that in the arrondissement of Chémay, where part of the inhabitants are employed in the fields, and the rest in the coal-mines, the field labourers readily furnish their proper quota of military recruits, while among the miners it is rare to find a man who is not ineligible from army duty through arrested physical development or positive deformity.

It is true that these morbid conditions may be largely ameliorated or entirely removed by a free and constant exposure to light, especially if the remedy is applied while the sufferer is still young.

Fourcault, in his "General Causes of Chronic Maladies," gives a striking illustration of this in the case of a number of orphan girls suffering from chronic diseases, whose condition was greatly changed for the better by simply doing away with the shade of several large mulberry trees, which had prevented the free exposure of their school room to the full light of the sun.

In commenting on the inestimable value of sunlight to children, Dr. Winslow says: "It is systematically ignored at the period of life when it is of the highest importance it should be brought to bear upon the purification of the blood, and consequent healthy development of organic structures. Children, even at an early age, should not be excluded, particularly during the warm periods of the year, from the genial and charming influences of the sun. Great benefit," he further says, "would accrue from giving children solar air baths—that