

THE NATIONAL HEALTH.

MODERN SUNLIGHT.

"Modern Sunlight—the British Journal of Actino-Therapy," published monthly by the Sunlight Bureau, Oswaldestre House, Norfolk Street, Strand, W.C.2. (price, 2s.) "is an independent Journal for all interested in the fuller use and development of Sunlight, natural and artificial," and as such must be of interest to the Nursing Profession, which cannot know too much as to the effects of light and heat, obtainable from this beneficent source. The surprising thing is that at the end of 6,000 years of the sun's beneficent action upon this planet we know and realise so little of such action, that we exclude it, often, from our houses, allow our cities to be enveloped in an atmosphere of smoke, and fail to utilise its benefits through the medium of our skins.

A few quotations from this up-to-date Journal will emphasise our meaning.

Vitamins Supplied by Exposure of Surface of Skin to Sunlight.

"Professor Drummond, in a communication to the Royal Society of Arts, recently printed in full in the *Medical Press*, has made this definite statement:—

Our present belief is that exposure of the surface of the skin to ultra-violet radiations, either as sunlight or in the form of suitable artificial lamp-light, brings about a synthesis from cholesterol of the anti-rachitic vitamin which otherwise it would be necessary to supply in the diet.

"This important conclusion, foreshadowed in our first issue, when some account was given of Steenbock's great discovery of 1923, refers back to the fact that sunlight, natural or artificial, when falling upon substances containing cholesterol, 'produces' the anti-rachitic vitamin. And since the skin of the human body contains cholesterol in every cell, the action of sunlight in the promotion of this essential vitamin becomes a matter of deduction if not of proof.

"Professor Drummond proceeds to give a parallel instance, namely, the minute fraction of Vitamin E discovered by Evans and Bishop, as being essential to normal reproduction. As little as 0.0005 of a gram of this, obtained by a fractionation of wheat oil, has restored fertility to a female rat previously rendered sterile by deficient diet. Finally, says Professor Drummond—and here again he touches the known region of sunlight activity—

Finally, the example of Vitamin D may be given, for, although the minimum amount required to protect against or cure rickets in the rat is not yet known, very small doses, of the order of a ten-thousandth part of a gram, have been found effective.

"We therefore approach the solution. For as it is clear that a *very minute quantity* of at least one vitamin—produced unquestionably by the action of sunlight on the skin—can be effective in the cure and prevention of rickets, so we may not have to go far before we discover that sunlight falling upon the skin activates other substances, and 'produces' yet other minute 'vitamins,' each essential to some function of the human body."

The Planning and Equipment of an Ultra-Violet Clinic.

Dr. Eleanor H. Russell and Dr. W. Kerr Russell contribute a paper containing some interesting recommendations as to the planning and equipment of an ultra-violet clinic. As linoleum as a floor covering has strong advocates, we note that they say "linoleum is not ideal as a floor covering, as it is inflammable, and red hot pieces of carbon falling from the open arcs may burn holes in it unless special pans are provided." While such inflammability is specially dangerous under the circumstances it should, we think, be taken into consideration when the selection of floor covering for any institution for the sick is under discussion.

As to the Nursing Staff the writers say:—

"In charge of the treatment should be a matron who has had training in this special work. The Finsen Institute, Copenhagen, undertakes the training of nurses, and it seems desirable that the matron should have had this or similar experience. There should also be one or two assistant nurses, and one or more charwomen.

"In regard to equipment, certainly both mercury-vapour and carbon arc lamps should be provided, the first-named being particularly valuable for the treatment of children suffering from rickets and allied conditions. For local treatment, the Finsen-Reyn or Kromayer lamp should be installed."

The following practical points are also mentioned:—

"Special alarm clocks are a great convenience in the administration of the treatment, particularly with mercury vapour lamps, where only short exposures are required.

"The chairs used by the patients during treatment should be of unpainted hard wood, held together with brass screws, no glue being used. The couches, if covered with oilcloth, can conveniently be cleansed, a paper crepe sheet being placed under the patient to avoid chill. One or two stretchers should be available, and couches provided in the rest room.

"Convenient control boards for the lamps should be placed on the walls at such a height that they are not within reach of the children. Only protected quick-break double-pole switches should be used. Brown paper shades, which can be easily made and destroyed after use, should be provided for the protection of the patient's eyes. Special light glasses can be used by the staff.

"Lamps should never be oiled, but should be kept scrupulously clean. A small electric hand blower is helpful for this purpose. In the doctor's room, or the medical dressing rooms, surgical instruments for dressings will be necessary, syringes for aspirations of abscesses, dressings, &c. Fire extinguishers should be available and also supplies of fuse wires."

Sunlight and the Slums.

A very interesting article on "Sunlight and the Slums—How to make the Best Use of Light" is by Dr. R. King Brown, B.A., M.D., D.P.H., Medical Officer of Health for Bermondsey, who points out "some practical improvements which can be immediately put in force in the abolition of slums and their replacement by healthy dwellings. For" he says, "slums *must* be abolished; no plans for providing existing slums with sunlight are feasible or practicable; but we can at least see that they are rebuilt in such a manner that the best possible use is made of such sunlight as our uncertain climate permits us to enjoy. . . .

"That the children of the slum dweller are not more unhealthy than they are is due to the fact that their playgrounds are of necessity the open street. Here they get some air—it can hardly be called fresh—and light. If one walks through the slum areas in spring and summer, one is struck by the healthy appearance of the children compared with the pale, pinched faces seen in the winter time. The improvement here noticeable is almost entirely due to the direct sunlight, sky-shine and diffuse daylight, to which they are exposed for many hours during the warmer months. . . .

"There are many other practical questions one would like to discuss did space permit, such as open playing-grounds for children and covered playgrounds with arc lamps for use during the winter. Nor must one forget that the climate of the slums is bound up with the climate of the city to which they belong, and no reform of the slums will be complete till pollution of the atmosphere by smoke becomes a thing of the past. This can only be done by the use of smokeless fuel in our manufactories and homes."

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