Artificial Sunlight has Curative Properties

A New Use for Electricity

WE have recently been fortunate in securing the opinions of a prominent medical man on artificial sunlight, or ultra-violet ray treatment.

From him we learn that its use is valuable as a general tonic and perfectly safe in the hands of the layman if instructions are carried out.

The curative value of natural sunlight is well known, the ultra-violet rays which it contains being the curative constituent. The relative intensity of the sun varies enormously with its altitude, decreasing as the sun gets low. Miles high, too, there is an ozone layer absorbing all the sun's shorter rays, and lower down the ultra-violet rays are absorbed by the atmosphere.

SUN-RAYS FOR A HORSE.
This horse is undergoing sun-ray treatment at the People's Dispensary for Sick Animals of the Poor (England).

Ultra-violet rays from the sun vary at different months of the year and at different hours of the day, decreasing in winter time, as we should expect.

Ultra-violet rays come to us also from the whole of the sky, and when the sun is low those from the sky-shine are greater than from the sun itself. Hence the depressing effect of a grey sky. There is also a very great loss of ultra-violet rays in smoky cities, even during periods of bright sunshine.

Approximately 7 per cent. of ultra-violet rays are contained in the sun's rays. Artificial sunlight will give from 28 per cent. from a mercury-vapour lamp to 5 per cent. from a carbon arc lamp, both of which can be controlled to avoid sunburn. Most makers of ultra-violet ray apparatus will give a certificate stating what the particular apparatus will produce.

For the same reason that a person who is not accustomed to exposure to strong sunshine will suffer sunburn if subjected to prolonged exposure, artificial sunlight treatment should be introduced gradually. One minute's exposure should be the first treatment, increasing by one minute each treatment, until 30 minutes' exposure is being taken at one treatment.

Such a treatment when given over a whole body constitutes an excellent sun-bath and has a marked tonic effect.

WHILE artificial sunlight is not recommended for application to closed abscesses, it has a highly remedial and germicidal effect when applied to skin affections, such as eczema, boils, carbuncles, open leg ulcers, etc., actually killing the bacteria and creating healthy tissue.

It is highly thought of for the treatment of rickets and kindred diseases, due to faults of nutrition (not necessarily under-nutrition, but often poor nutrition lacking in vitamin D., or failure to assimilate the nutrition taken, as in girlhood anaemia), pneumonia and some forms of tuberculosis, such as tubercular joints and hip-disease. It should not, however, be used for tuberculosis of the lungs, where there is an actual lesion, as haemorrhage might be induced.

It is usefully employed during convalescence, as recently, in the case of His Majesty the King, who derived great benefit from the treatment, and for general debility.

Neuralgia, sciatica, etc., are always relieved and frequently cured by ultra-violet ray applications.

Owing to the ozone which is emitted, the odour of which can be readily detected, it is valuable in treating cases of asthma, influenza, bronchitis, and epidemic colds. Ozonisers are used in the out-patients' waiting rooms of some large hospitals to ozonate the air and free it of impurities.

ITS properties are nowhere more remarkable than in the world of chemistry. A British combination of research chemists succeeded in creating a substance the same as vitamins A, B, C. and D, but which, when fed experimentally to puppies, was disappointing, in that it did not cure or prevent rickets, until irradiated by ultra-violet rays, when it assumed all the active properties of actual vitamin D. There is now, therefore, no real obstacle in the way of producing vitamin D in sufficient or even excessive quantities in margarine, winter milk, and butter, and such foodstuffs as are normally lacking in same.

We find, therefore, that a small, portable, ultra-violet ray apparatus, such as can be obtained from a reliable maker at the cost of a few pounds only, should be of immense value, not only in the general toning-up of the system and increasing its resistance to disease, but in the actual creation of vitamins within the body itself by the application of the rays, and the fact that it enables sedentary workers, invalid children, old people and folk tied to their business during the daytime, to acquire the benefits of a sun-bath, independent of weather or other conditions, at any time, which may be at their disposal.

Trials in Tact, or What Would You Do?

(Conducted by Savoir-Faire)

Under this heading, an every-day problem will be set week by week, and readers are invited to send in their solutions, for which marks will be awarded. Prizes are offered to those obtaining the most marks over a series of ten. First prize, £2/2/0; second prize, £1/1/0; and third prize, 10/6 for each series

Competitors may send in their own problems for publication and solution and a prize of 10/6 will be given for the best one sent in during each series, and 5/- for each contributed problem used.

PROBLEM No. 1. *1st SERIES.*

Mrs. A. and Mrs. B. have been near neighbours and good friends for some time, taking tea and going into town together occasionally, etc.

After a time, Mrs. A. notices a coolness on Mrs. B's. side and excuses are made when invitations or suggestions are given by Mrs. A., until finally Mrs. B. "cuts" Mrs. A. directly. Mrs. A. is unconscious of having given cause for offence and is hurt and sorry at losing the friendship. What should Mrs. A. do?

Suggested by Savoir-Faire.

A nom-de-plume may be used but names and addresses must be sent. The same nom-de-plume must be retained throughout the series. All replies must bear a post mark dated not later than the Thursday after the date of the journal in which the problem appears, and should be addressed to "Savoir-Faire," Radio Record and Electric Home Journal, P.O. Box 1032, Wellington.

Savoir-Faire's decision must in every case be accepted as final.

THOMAS A. EDISON,
The world's greatest inventor, to whom the world owes applied electricity.

All-Alive-O!

SIX electric eels have lately arrived at the Philadelphia Zoological Garden, and the superintendent says that they are literally the most shocking creatures that have ever come under his care.

The creatures are about six feet long and about five feet of their length contains an electric current generating apparatus, which generates enough electricity to bowl over a horse.

It is inadvisable, therefore, unless properly insulated, to handle them from the wrong end. Other tricks that they can do include lighting an electric bulb, running toy trains, or work an egg-beater, provided, of course, that they are properly attached. In their natural state in Trinidad, after they have exhausted their batteries, they retire in a rock and rest up while the electrical equipment is being renewed. The matter of recharging remains a mystery, and it is for the purpose of investigating their sources of energy and their method of storing it, that they have been sent to the Philadelphia Zoo.