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The British Empire Campaign against Leprosy.

IN our issue of October 20, p. 591, we published an article on the leprosy problem, describing the recent improvements in the treatment of the disease, and announcing the formation of the British Empire Leprosy Relief Association, with the direct object of applying the new knowledge to the difficult task of reducing, and eventually eradicating, leprosy from our possessions. A public appeal was made at the Mansion House on January 31 for 250,000*l.* for the campaign, and further information was then given regarding the proposed lines of work. Additional favourable reports of the new treatment have been received, among which is a trial in 4067 cases under American physicians at the Cullion Leper settlement of the Philippines, with great improvement in 74 per cent. of the cases treated for from six to nine months and no less than 93 per cent. after twelve to fifteen months' treatment, including a number in which all signs of the disease and its bacilli had disappeared, while in the Federated Malay States Dr. Travers has cleared up a sufficient number of lepers to furnish a complete staff for his institution.

There is no doubt, therefore, that a great advance has been made in dealing with this hitherto very intractable disease, and numerous cures, in the practical sense of removal of all symptoms and infectivity of the disease, with restoration to health and working powers, have been obtained. On the other hand, in some leper asylums, most of the inmates of which are advanced cases, the medical staffs are not convinced that any definite cures have been obtained, and they point to the impossibility of being certain that recurrence will not take place, as in tubercle. This is a scientific position with which even those who have reported good results are in agreement, although a few of the first-treated Calcutta cases have now remained well for six to eight years. The Medical Committee of the new Association, with Sir John Rose Bradford as chairman and members with long experience in the great leprosy countries of Africa, India, and China, is, however, convinced that the time has come to carry out the unanimous recommendation of the Strasbourg International Congress of last July, that the best available treatment ought to be supplied to all lepers segregated for the benefit of others. Unfortunately, India and a number of African and other British colonies are too poor to do this without assistance: hence the appeal.

The Association will work so far as possible through existing agencies, and its activities will include the establishment of clinics at hospitals in endemic areas on the lines of Dr. E. Muir's clinic at the Calcutta School of Tropical Medicine, which is attracting large numbers of

Editorial and Publishing Offices:

MACMILLAN & CO., LTD.,
ST. MARTIN'S STREET, LONDON, W.C.2.

Telegraphic Address: PHUSIS, LONDON.
Telephone Number: GERRARD 8830.

early, and much more amenable, cases. The clearing up of the symptoms and infectivity of such cases will do more towards stamping out foci of infection in households before another generation has become infected than any segregation policy of advanced cases after they have infected others, and so will enable a more rapid reduction of the disease than has hitherto been possible. In many parts of the world such improved treatment has already produced the very practical result of inducing lepers to come for it early, instead of hiding their complaint as long as possible. Where the number of lepers is not too great to allow of the complete segregation of the infective cases, that method is advocated, combined with efficient treatment; the West Indies, and some other colonies, being very suitable for a demonstration of the possibility of practically stamping out leprosy within two or three decades with the aid of our present knowledge.

As the treatment of a large number of cases in the Philippines and in Calcutta has shown that considerable experience and minute attention to the details of the new methods are essential to full success, the Association also proposes to train leper staffs at such centres as Calcutta. With the same object, the best drugs, details regarding their administration, and abstracts of the latest literature, will be distributed, to enable trials and also research work to be co-ordinated throughout the Empire. One of the primary objects of the Association is to encourage research in the epidemiology of the disease, and to improve still further the treatment; for now that it has been demonstrated that a number of oils furnish soluble compounds of unsaturated fatty acids of great value in the treatment of leprosy, while chemists can synthesise a very great number of compounds of these substances, an enormous field of research has been opened up. This is already occupying investigators in at least three continents, and there is every reason to expect that research will in time lead to the discovery of still more rapidly curative products against leprosy, and, what is even more important, against the closely allied tuberculosis itself.

In adopting such a comprehensive programme the committees of the Association are fully alive to the difficulties of the task before them, as they estimate the minimum number of lepers in the British Empire at 300,000, while including early little-recognised cases it may be much higher. It is hoped, however, that their arduous and humanitarian Empire campaign will call forth as much sympathy and support in 1924 as was rightly accorded last year to our ally, Japan, on the destruction of her cities by earthquake. In 1889 the death of Father Damien from leprosy, after years of devoted work in the Hawaii leper settlement, thrilled the civilised world, and led to the formation of a com-

mittee in London under the chairmanship of King Edward VII. when Prince of Wales. This resulted in sending out the Indian Leprosy Commission and the multiplication of leper asylums under Indian and Colonial Governments and by the Mission to Lepers, which have done a great humanitarian work in relieving many helpless lepers, although until quite recently it was impossible to hold out to them any hope of recovery.

At length a new epoch has arrived, and, although we are still very far from possessing a certain cure for anything like all advanced cases, for the first time in the three-thousand-year-old struggle against the foulest of human diseases, it is practicable to attract the earlier and more curable cases, using that word in the practical sense of restoring them to health and usefulness, and thus to enhance greatly the prospects of at length reducing the incidence of the disease. It is safe to say, however, that, for want of funds, not 5 per cent. of the lepers in the British Empire are receiving the benefit of recent scientific advances, although our American cousins are already providing it for nearly all their known lepers in the United States, and in the Philippine and Hawaii possessions. It is hoped that the new Association will be provided with the means to remove this reproach to the fair name of Great Britain.

Michael Pupin.

From Immigrant to Inventor. By Prof. Michael Pupin. Pp. vii + 396 + 16 plates. (New York and London: Charles Scribner's Sons, 1923.) 18s.

THIS autobiography of Michael Pupin is of great human interest, and well deserves study by educationists. It gives one the impression of a boy of strong physique and sound common sense who made his way through the world with little fear of the future and with a profound reverence for the past. It will be read with special interest by those who knew Cambridge in 1884-85 and Berlin in 1885-86, when Hertz's discoveries first began to be discussed. It will also be of interest to those who know the Isle of Arran in the Firth of Clyde, as this island and its inhabitants made a great impression on one who as a boy had herded cattle at Idvor, a small village in Serbia. The main object of the book, as the author says in chapter xi, is to describe "the rise of idealism in American science," but from the point of view of dwellers on the east side of the Atlantic, this question is not of such interest as the story of his early life.

The author is the professor of electro-mechanics at Columbia University, New York, and is well known to every telephone engineer in connexion with his work