

THE BRITISH JOURNAL OF NURSING

WITH WHICH IS INCORPORATED
THE NURSING RECORD

EDITED BY MRS. BEDFORD FENWICK, REGISTERED NURSE.

No. 1,838.

SATURDAY, JUNE 23, 1923.

Vol. LXX

EDITORIAL.

NEW PRINCIPLES IN BACTERIAL IMMUNITY.

One of the very fascinating aspects of nursing to intelligent nurses is that it brings them into touch with the most recent developments of medical science. For new treatment frequently demands new methods of application, and though the nurse cannot go deeply into the scientific aspect of a new discovery, it behoves her to know the principles upon which it is based. Her place in the remedial scheme is to maintain the patient in the best condition for the application of the remedy. She must, therefore, understand what it is that the medical practitioner desires to accomplish, and then consider how, from the nursing point of view, she can best aid his endeavour.

At St. Mary's Hospital, Paddington, on June 14th, Professor G. Dreyer, of the Pathological Department of the University of Oxford, delivered a lecture on "New Principles in Bacterial Immunity," which may well introduce a new epoch of hope for those infected with tuberculosis, and possibly other diseases; and though the details of the discovery are abstruse, the underlying principles, like all great truths, are not difficult of comprehension.

One aim of vaccine-therapy is to render the person treated immune against a particular disease, and the comment of the *Lancet* on Professor Dreyer's de-fatted bacterial vaccines is that this new departure in vaccine-therapy is one of the most hopeful and interesting ventures which it has been able to chronicle for some time.

Everyone knows of the classic instance of vaccination against smallpox. People may or may not believe in it; but they are wise if they accept the decision of medical science on the question. "The principle," says the medical correspondent of the *Times*, "is that the body can re-act to small doses of certain organic poisons produced by parasites in such a fashion

as to provide effective resistance against larger doses of those same poisons. More generally, this is the principle of learning by experience; more generally still, it is the principle of adaptation, a fundamental property of Life.

In some instances bacterio-therapy achieves brilliant successes, and in others it fails or succeeds only very imperfectly. Of the latter, Koch's tuberculin, of which such high hopes were entertained, is one of the best-known instances.

Here comes in the value of quiet and patient study, and, incidentally, the rich reward which may result from the endowment of medical research. Why has the treatment of tuberculosis with vaccines been so disappointing hitherto? How can disappointment be translated into success?

Professor Dreyer lays it down as a general proposition that bacteria which are "acid-fast" and gram-positive strongly resist the influence of vaccines designed to overcome them.

This "acid-fastness" has been proved to reside in the fatty sheath which surrounds these germs, and the problem which Professor Dreyer set himself to solve was how to deprive the germs of tuberculosis of their fat; because, unless the dose of poison contained within the sheath is set free, the body will not make the antidote against it.

The Professor demonstrated, in the course of his lecture at St. Mary's Hospital, how bacteria may be treated by formalin and acetone so that their fatty sheaths may be dissolved and their essential contents become accessible to outside agencies. Much is hoped, and there appear to be good grounds for hope, as to the results to be obtained with these de-fatted antigens, particularly in the cure of tuberculosis, but also in other diseases. The Nursing Profession will endeavour to further the work of the Profession of Medicine in this direction by any means which are open to it. If the scourge of tuberculosis can be banished from this world, it will not only be a much happier place but there will be much more productive labour.

[previous page](#)

[next page](#)