

**A Text-Book Upon the Pathogenic Bacteria** for Students of Medicine and Physicians. By Joseph McFarland, M.D., Demonstrator of Pathological Histology and Lecturer on Bacteriology in the Medical Department of Pennsylvania, etc. Philadelphia: W. B. Saunders.

There is growing up in the United States a class of workers, chiefly younger men, who are silently winning for that country a proper place in the scientific world,—men content to set down what they have seen, and leave to their elders the lucrative and useless task of collaborating upon "systems."

Dr. McFarland apparently belongs to this class, for the book reveals that the author speaks of things of which he has knowledge. It is not so very long since it was found possible to include the whole duty of the bacteriologist within the compass of a very moderate-sized volume. The growth and movement of the subject soon made this attempt impossible. Then, in the evolution of books, writers addressed at the same time students of varying degrees of ignorance and teachers of different grades in experience and knowledge; as a result, students were led to believe that they could conduct this form of research, as Michael Foster said of physiological experiments, "with a stick and a piece of string," while teachers found only futility and barrenness. Now nearly everyone is agreed that you can neither learn nor teach bacteriology out of a book, yet, in so far as this can be done, the present work serves admirably.

The author has chosen wisely to restrict his writing to so much as could fairly be covered in a work of reasonable compass. The subject has grown too large to be dealt with as a whole. He deals with the pathogenic bacteria alone, and, after taking thought, decided to omit all whose deleterious action is questionable. Yet he admits forms allied with the spirilla of cholera, for example, though they have no special significance. This of course does not fall within the rigid lines of any classification, but no one cares for "system" any more if only a book is useful. It may as well be said at once that the book is very useful to students of medicine and to the practitioner who aims to learn and profit by what bacteriology has accomplished.

The whole subject is so new and fascinating, no writer can refrain from commencing at the beginning of things, just like the president of an annual meeting, who either repeats the whole story of medical progress or the advance that has been made within the year. The present writer surely goes to bottom when he takes the Hebrew legend of the origin of things as his starting point. But the story is always interesting, and is again clearly told to any who can break through the first sentence, "The unrecognized inception of this department of science had its latent germs in the thought of antiquity."

The classification and biology of bacteria is adequately set down and the problems of immunity and susceptibility are discussed with real ability. Then follows a full account of the devices and processes incident to the business of bacteriology. The body of the book is given over to a description of the various organisms which produce pathologic conditions, but to deal with it in detail would be to write the book again.

The book is not highly decorative; yet the illustrations are useful, and errors of type are of no importance in text-books which, in a very few years, must pass into new editions or altogether disappear.

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