

important part of our material. He gave values for no less than twenty-eight elements besides gadolinium, and also accomplished much crystallographic work, suggested by Mitscherlich's law of isomorphism, and bearing upon the formulae of compounds of silicic, titanic, tungstic and other acids. The determination of the atomic weights of cerium, lanthanum, didymium, and other elements, led to studies of the rare earths. A considerable labor on the specific heats of solutions of certain salts was also suggested by his interest in atomic weights. The Royal Society's catalogue makes us eager to see the papers remaining for the second volume, now about due.

It is much to be desired that this impressive record of the great work of an eminent chemist be made easily accessible in the United States.

EDWARD W. MORLEY.

A LABORATORY OUTLINE OF GENERAL CHEMISTRY. BY ALEXANDER SMITH, B.Sc., PH.D., Associate Professor of Chemistry in the University of Chicago. Second edition, revised.

The reviewer has read this laboratory guide with interest and pleasure. It has appealed to him as a teacher, who has followed practically similar methods in the instruction of beginners for many years, and naturally the process of development and the examples in experimentation have proved very attractive. It is scarcely to be expected that exceptions would not be found to the array of experiments and the modes of procedure—every teacher will make some exceptions, for each one has his own favorite solution of the problems confronting him, as has Dr. Smith; otherwise this little volume probably would not have been prepared in the face of the numerous existing guides upon the same subject. But one doubt shall be mentioned. It is that the exercises here and there seem to call for knowledge and manipulative skill beyond that which the beginner, absolutely ignorant of chemistry, possesses, and upon whose mind the truths deduced will not make the lasting impression for which every teacher so fondly hopes. It strikes one as if the course, pursued as laid down, would be splendidly adapted to students who have some knowledge of the subject and whose purpose it is to obtain a well rounded-out course in general experimental chemistry. Perhaps by the judicious selection of experiments and a final general review, omitting nothing, the main object would be attained. However,

the little volume should be carefully studied. It will help many. It merits recognition and will receive it. It is the product of an earnest, wide-awake and thoughtful teacher who has performed his task with consummate skill—with lucidity in statement, accuracy in fact and care in detail; hence, it is most welcome.

EDGAR F. SMITH.

BIOCHEMISCHES CENTRALBLATT.

The great strides made in medical chemistry and in those fields of medicine verging on chemistry have necessitated the publication of a central organ. This is now published in Berlin by Carl Oppenheimer, under the direction of Ehrlich, Fischer, Kossel, Liebreich, Müller, Proskauer, Salkowski and Zunts, and they have appointed Heinrich Stern, of New York, editor for the United States and Canada. The object of the publication will be:

A—To report such experiments and observations of physical and applied chemistry as are of importance to the physician.

B—Reports on the physiology of plants.

C—Physiological chemistry in the narrower sense (constituents of the body and their derivatives).

D—Chemistry of the tissues and organs under normal and pathological conditions.

E—Chemistry of digestion, secretions and excretions, metabolism and blood.

F—Ferments and fermentation; toxins of a non-bacterial nature.

G—Chemistry of the pathogenic micro-organisms (toxins, anti-toxins), phenomena of immunity.

H—Toxicology and pharmacology.

I—Hygienic chemistry, disinfection, examination of water.

As this is the only international organ devoted to these scientific fields, American observers and investigators will find it to their interests to prepare abstracts of their papers which have appeared since January 1st and will appear hereafter, and send them to Heinrich Stern, 56 East 76th Street, New York City.