

far as it has a bearing on questions of physiology. Although they were prepared for medical men they assume on the part of the reader a somewhat greater acquaintance with general and physical chemistry than is usually presented in the medical school courses in this country. To men who have had a proper preliminary training in chemistry the essays will prove interesting and suggestive reading.

J. H. LONG.

SECOND REPORT OF THE WELLCOME RESEARCH LABORATORIES OF THE GORDON MEMORIAL COLLEGE, AT KHARTOUM. ANDREW BALFOUR, DIRECTOR. Published by the Department of Education, Sudan Government, Khartoum. 1906. 255 pages, quarto.

The individual reports in this volume, with one exception, deal with topics of special interest to medical men only. Among them are several researches on mosquitoes and other insect pests, active in the spread of diseases in warm countries and which appear to have been worked out in considerable detail.

There is also a report from the Chemical Laboratory, by William Beam, which contains many analyses of Nile waters, analyses of native milks, gunpowder, gums, arrow poisons and other things of local interest. The book is well printed on good paper.

J. H. LONG.

PORTLAND CEMENT : RICHARD K. MEADE, B. S. —385 pages. Second edition. Price \$3.50. Chemical Publishing Co., Easton, Pa.

This most excellent volume on the chemistry, manufacturing and testing of cement will be highly appreciated by all who are interested in this important engineering material.

Mr. Meade does this volume scant justice in his preface when he says "The present treatise on Portland Cement is really the second edition of a small manual by the writer, published some four years ago called 'The Chemical and Physical Examination of Portland Cement' ". While this first little manual was highly appreciated in its time, it has been left behind by the rapid strides made in this industry in the past few years and bears no resemblance whatsoever to the present volume.

The subject of the book is treated under five headings—The Introduction; Manufacture; Analytical Methods Used on the Raw Materials and the Cement; Physical Testing; and Miscellaneous. In the Introduction the first of the two chapters is devoted to a short history of the cement industry, while the other discusses the composition of Portland Cement, reviewing the various theories as to the hardening and composition of this material. It is to be regretted that this chapter was written before the publication of the excellent work of Day and Shepherd of the Carnegie Institute on the "Lime-Silica Series of Minerals", for they conclu-

<sup>1</sup> This Journal 28, 1089-1114 (1906). Am. J. Sci. (4) 22; 265-302 (1906).