

### Indian Epigraphy and South Indian Scripts

By C. Sivaramamurti. (Bulletin of the Madras Government Museum, New Series, General Section, Vol. 3, No. 4.) Pp. viii+280+133 text figures+12 plates. (Madras: Government Press, 1952.) Rs. 14-8-0.

THE author of this publication, who is already well known for his work on "Amaravati Sculptures in the Madras Government Museum" and as co-author of "Guide to Archæological Galleries" and "Illustrations of Indian Sculpture", is at present superintendent of the Archæological Section of the Indian Museum at Calcutta. His painstaking research in the field of epigraphy has been collected in the present volume.

The work is a valuable contribution to the study of Indian epigraphy, which is a necessary adjunct to the study of ancient Indian history, culture and ethnography. It is of special concern to those who are interested in the question of the evolution of the various Indian alphabets from a common source. The Indian subcontinent, with the possible exception of Kashmir and Assam, is generally deficient in an old historical literature. The innumerable inscriptions, copper plates and coins scattered all over the country partially fill this void. In his introductory chapter the author has discussed the value and need of studying this oft-neglected subject.

Mr. Sivaramamurti has drawn charts showing "the development of each individual letter of the Indian alphabet in different areas and during centuries in different types of script developed from the same parent stock" (p. viii), with emphasis on the development of the South Indian alphabet. He rightly remarks that "The scripts of South India have contributed enormously to the spread of Indian culture overseas" (p. 55). The truth of this statement is borne out by the conclusion which he has arrived at by the diligent comparative study of the epigraphy of those regions. He states: "The script of Ceylon is derived from Grantha Tamil. The script of the inscriptions in Java like those of Pūrnavarman closely resembles the early script of South India. The same applies also to the characters used in the inscriptions of Annam or Campa" (p. 55).

In Plate I the author has placed the regional alphabets from various areas, including East Turk-estan, Tibet, Ceylon, Burma, Annam, Malaya, Java and Borneo, side-by-side to facilitate a comparison of the individual characters. Here one misses the area comprising the north-eastern corner of India. Inclusion of scripts from inscriptions in Orissa, Bengal and Assam would have provided, in my opinion, a better perspective for a comparative study.

The author is to be congratulated on his valuable contribution to the study of Indian epigraphy.

M. C. GOSWAMI

### Timber Progress and Desk Book for 1953

Edited by W. E. Bruce. Pp. 202. (London: Cleaver-Hume Press, Ltd., 1952.) 15s.

THE objective of "Timber Progress" is to record annually in authoritative, independent, easy-to-read articles the new ideas, new movements and latest achievements in the technology and commerce of the timber and allied industries. In a foreword David Irwin, chairman of the Education Standing Committee of the Timber Development Association, states that "this publication fills a long-felt want, containing as it does a series of articles by recognized

authorities, a most comprehensive bibliography on timber literature and other useful reference items. It is a library in itself and will, I feel sure, be welcomed by student and employer alike".

Among the articles may be mentioned the following: some recent changes in timber trade practice; structures of new timbers; world review of the newer timbers and their commercial uses; moisture in wood and modern methods of seasoning; British-made plywood and its possibilities; development of modern furniture design in Britain; principles of conversion; and a reference section.

This little book furnishes evidence of the enormous increases in the imports of previously unknown timbers from tropical and sub-tropical forests. In connexion with South-East Asia, it is said that before the Second World War this part of the world provided certain specialized woods only, the most famous being the genuine Burmese teak which is to-day so scarce and expensive. In addition were imported some of the decorative woods such as satinwood, rosewood, pyinkado and gurjun. During the later years of the past century and the early years of the present one before the First World War, Indian forest officers made considerable efforts to place on the London or other British timber markets some of the fine species of Indian timbers, but they met with practically no success. The position of these tropical and sub-tropical timbers is very different nowadays. But much practical research has yet to be carried out before their utilization as a commercial proposition has been substantiated: the forests and their distribution in their habitat; the types of forests in which they are found, and in a mixed forest their proportion in the mixture per acre or hectare or square mile; and the accessibility for extraction at an economic cost. E. P. STEBBING

### General Chemistry

An Elementary Survey emphasizing Industrial Applications of Fundamental Principles. By Prof. Horace G. Deming. Sixth edition. Pp. xii+662. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1952.) 46s. net.

THIS much-used text-book is an introduction to chemistry for university students including those not continuing its study. Prof. H. G. Deming presents the achievements of chemistry and its great economic possibilities not as attractions in themselves but as spurs to study a science worthy of, and requiring, considerable effort. His course follows no definite syllabus but covers approximately the requirements of the Intermediate B.Sc. of a British university, with some additions. These include a chapter on nuclear chemistry and four on organic chemistry, respectively, entitled as follows: hydrocarbons; alcohols, esters, carbohydrates; cellulose products and plastics; and elastomers, dyestuffs and medicinals.

Although Prof. Deming has the remarkable gift of finding simple explanations of difficult matters, his treatment is thorough. He expounds the physical basis of the chemistry in question, stresses the significance of structure and makes advantageous use of present-day knowledge and ideas. Besides the skilful expositions, the student is afforded an abundance of help by the interpolated questions, exercises, cross-references, informative illustrations and summaries for revision. Good as the earlier editions were, the present effort, the product of the author's ripe experience, is even better.

G. F.