

Herbert Ives, of the American Telegraph and Telephone Co., is particularly interesting in view of the fact that it has recently been successfully applied to television. The difficulty of synchronisation is in this case got over by phonic wheels at the sending and receiving stations, both controlled by the same tuning fork.

(2) Mr. Dinsdale's booklet purports to give a general statement of the problem of television and the various attempts to solve it. Much is said about the results achieved by Mr. J. L. Baird, and said in a rather rhetorical manner, without, however, giving sufficient data to judge of the originality of the method adopted. But at a time when the solution of the problem is being achieved simultaneously along different lines, it is useful even to have a partial description of one of the successful systems.

E. E. F. D'A.

*The Yearbook of the Universities of the Empire, 1927.* Edited by Walter H. Dawson. Published for the Universities Bureau of the British Empire. Pp. xii + 858. (London: G. Bell and Sons, Ltd., 1927.) 7s. 6d. net.

A BOOK such as this falls, usually, into one of two classes. It can be an indispensable (if tiresome) list of names to which are attached groups of more or less intelligible statistics, a somewhat dull reiteration of policy, an urbane or challenging record of things accomplished, some indigestible lumps of 'useful information,' and a dissertation which veils but thinly the propagandist hand. In this case it goes so swiftly to the reference shelf that, almost in the same breath, we bid it welcome and farewell. Alternatively, it may present all the names, statistics, records, and useful information, and still retain the subtle quality of the dictionary. We take it up to seek some special point of interest and find ourselves absorbed delightfully by old things which appear in new light, and by new things which stimulate and surprise.

It is in the second class we would place the present volume. It is an admirable condensation of authentic information which could otherwise be obtained only by research in individual university calendars—volumes comprising in their total some 50,000 pages. From each of these, extracts concerning personnel, organisation, regulations, and recent activities have been taken and arranged in an interesting and easily accessible form.

With regard to the details of the libraries, laboratories, degrees, scholarships, publications, etc., of each university, we need say no more than that no essential point appears to have been neglected. We must not fail to note, however, that, especially in the appendices, information appears which helps vastly to see how the conception of university work is growing and to note the widening of its function in modern life. One appendix gives lists of the titles of theses accepted for research degrees. Another sets out a remarkably full list of centres of research outside the universities. Details of professional schools show how the advanced work in technical and other colleges is becoming identified with the university.

Descriptions of varied careers give some indication of the delimitation of university aims. Finally, an account of federations and foreign universities cannot fail to leave some impression of the vast possibilities of international understanding yet to be explored.

*Beyond the Milky Way.* By George Ellery Hale. Pp. xv + 105. (New York and London: Charles Scribner's Sons, 1926.) 7s. 6d. net.

THIS little book is a continuation of the series of books by Dr. Hale, of which "The New Heavens" and "The Depths of the Universe" were the first representatives. Like those volumes, it forms an *édition de luxe* of three articles which originally appeared in *Scribner's Magazine*: their titles are—"The Oriental Ancestry of the Telescope"; "Heat from the Stars"; "Beyond the Milky Way." They are plentifully illustrated by excellent photographs and diagrams, and the volume in every respect reaches the high standard set by its predecessors.

The contents of the chapters have already been separately noticed in NATURE on their first appearances, so that little of a descriptive character need be said. It is unnecessary also to comment on the accuracy and lucidity of style of a book by Dr. Hale. His main purpose in this excellent little series is "to tell of some of the principal advances of my associates, with such historical background as to render their significance clear," but that he is not rigidly restricted by the terms of this statement is shown by the fact that the first chapter of the present volume has been constructed, as he says, from material gathered chiefly in Egypt and England. The book will be found useful, not only by the general reader, for whom it is evident that it has chiefly been prepared, but also by workers in astronomy who often feel the need of authoritative statements on matters of current research, disentangled from the mass of detail in which they are necessarily involved in the original publications. A new attitude to the problem of variable stars is inevitably induced in the reader by the direct statement that "while to the eye X-Cygni is 10,000 times as bright at maximum as at minimum, the total radiation as measured with a thermocouple undergoes a variation of only 1.7 times." We hope that Dr. Hale will continue to enrich the literature of astronomy by further additions to this admirable series.

*An Introduction to the Study of Map Projections.* By J. A. Steers. With a Foreword by F. Debenham. Pp. xxiii + 189. (London: University of London Press, Ltd., 1927.) 7s. 6d. net.

THE author of this book, realising that geographers are not necessarily mathematicians, has attempted to explain the subject of map projections. The construction of the map has frequently been beyond the geographical student. The mathematician could arrive at an understanding of this section, but to others it was a morass where few found the path, and the majority had to be content with an imperfect notion. This book, without any pretence to finality, provides a guide for such geographers. It is introductory in the true sense.