

**British Industrialists**

Steel and Hosiery, 1850-1950. By Charlotte Erickson. (The National Institute of Economic and Social Research. Economic and Social Studies, Vol. 18.) Pp. xxi+276. (Cambridge: At the University Press, 1959.) 40s. net.

**T**HIS book gives the results of a survey of the social origins and careers of about 1,000 managing partners and executive directors in the hosiery industry of the Nottingham area and in the heavy-steel industry during the past one hundred years. It is thus in the first place a historical study, but the work was planned on the assumption that important differences might exist in the recruitment of management by different industries, depending upon their age, traditions, structure and organization. It does not claim more than to present some empirical data on the social origins of business leaders and on the use made of the natural ability of able individuals, and makes no attempt to construct principles for the selection of leaders.

Nevertheless, as Prof. T. S. Ashton points out in his foreword, this admirably produced volume contains material highly relevant to present issues. It gives some background for present-day thinking about the selection of leaders and about training for management that should be carefully weighed in planning the expansion of higher technological education at the least. These studies bear closely on such questions as what constitutes the best education and experience for business leadership, the relative place of education and of experience, the appropriate age of appointment of directors, as well as retirement. Such questions cannot be dealt with in averages without regard to the particular individual's rate of development and retention of powers, but they need consideration, and this book demonstrates the practicability of obtaining evidence and shows how it can be obtained. Moreover, the two industries actually chosen offer the possibility of some tentative inferences about the growth of the impersonal corporation upon the selection of business leaders in Great Britain. Indeed the book may well gain in value as further studies on such lines are made in other industries and the results become available for comparison.

R. BRIGHTMAN

**The Study of Man**

The Lindsay Memorial Lectures, 1958. By Prof. Michael Polanyi. Pp. 102. (London: Routledge and Kegan Paul, Ltd., 1959.) 7s. 6d. net.

**T**HESE lectures form a most valuable companion to the author's "Personal Knowledge", in which he goes far towards rejecting the objectivity of science in that, as a discipline, it is commonly thought of as detached and impersonal. An individual, even passionate, element is essential. The three discourses are entitled (1) "Understanding Ourselves", (2) "The Calling of Man", (3) "Understanding History". This emphasis upon understanding rather than upon prediction (the usual goal in the theoretical studies) marks the writer as a true epistemologist. The importance of such an outlook to-day lies in its capacity to offset at least some of the evils of specialization without becoming merely dilettante in the process.

The author is now ready to do something well worth the attempt, namely, to transpose much of Gestalt-psychology into a theory of knowledge. Why this has not happened before is largely because its devotees

were too passive, and inclined to under-estimate the personal element. In this, and in many other ways, Prof. Polanyi shows himself an artist, not least when he insists that those to whom the internal splendours of mathematics are a closed book have no knowledge of the subject.

It remains to see all this in the light of the late Lord Lindsay's outlook on education, and his early efforts on behalf of the University College of North Staffordshire in particular. He would have delighted in the liberalism which makes the act of knowing an urge to service.

F. I. G. RAWLINS

**Russian-English Glossary of Solid State Physics**

Edited by I. Emin. Pp. iii+90. (New York: Consultants Bureau, Inc., 1958.) 10 dollars.

**Russian-English Glossary of Optics and Spectroscopy**

Pp. iv+78. (New York: Interlanguage Dictionaries Publishing Corporation, 1959.) 10 dollars.

**T**HESE two glossaries are of about the same size, the same format and edited by the same editor, but are published by different organizations. They represent very useful compilations of Russian terms belonging to the respective branches of physics, but although each glossary contains some 4,000 terms the user of these glossaries, as of any other specialized technical compilation, will often find certain terms missing. This applies to all specialized glossaries for the obvious reason that there are no hard and fast separations between specialized and general terms in science. Thus, for example, a very important Russian term of a French derivation 'etalon', meaning 'standard', such as 'standard sample' or 'standard measure', also the term 'brus' or 'brusok' meaning 'bar', or again names of certain chemical compounds or common minerals, are all missing from these compilations. The price of each of these glossaries is rather high.

S. I. TOMKEIEFF

**Outline of Human Genetics**

By Prof. L. S. Penrose. (Contemporary Science Series.) Pp. xii+146. (London: William Heinemann, Ltd., 1959.) 12s. 6d. net.

**T**HIS is an excellent and lucidly written introduction to human genetics for the general reader. As one would expect, the treatment is well balanced and the factual basis correct and up to date. Of particular interest is the last chapter ("Eugenics and Dysgenics"), in which the author, himself the Galton professor of eugenics in the University of London, gives many good reasons for a conservative attitude towards practical measures in this field.

H. GRÜNEBERG

**Die Cactaceae**

Handbuch der Kakteenkunde. Von Curt Backeberg. Band 3: Cereoideae (Astrocactinae). Pp. iii+1361-1926+tafel 108-160. (Jena: Gustav Fischer Verlag, 1959.) 85 D.M.

**T**HIS further volume of Herr Backeberg's colossal new handbook to the Cactaceae (*Nature*, 184, 1010; 1959) continues the account of the subfamily Cereoideae as far as the end of the 'sippe' Austro-echinocacti of the subtribe Astrocactinae. Among the larger genera included are *Lobivia* (72 species), *Gymnocalycium* (58) and *Parodia* (36). As before, the volume is copiously illustrated.