

profound influence on industrial productivity, and visits of teams like those from the steel founding industry may make a most important and even revolutionary contribution if fully utilized and handled with imagination. Neither side of industry, in truth, has equipped itself fully for the responsibilities of increasing productivity. It has been suggested that a national industrial advisory council could prove more effective than the National Production Advisory Council on Industry and the National Joint Advisory Council in exercising a constant stimulus on individual industries and individual concerns, by offering advice or exerting pressure in the cause of greater efficiency or larger production; such an experiment might be worth trying.

No aspect of human relations is more important than that of establishing the closest possible contact between management and the workers, and of discovering and utilizing fully the most effective means of explaining to the latter what is involved in regard to problems that beset their particular industry and firm and those of the country. No step that promises to improve the communications between the Governments, managements and the workers should be left untaken, and there is still much to be done in this field to which Prof. Elton Mayo directed attention in his last book. But the problem is ultimately one of leadership; no amount of exhortation, and no form of organisation can make good defect of leadership, with all it connotes in coherent policy and the vigorous but imaginative translation of policy into practice.

10/6 SIR PHILIP HARTOG

P. J. Hartog

A Memoir. By his Wife, Mabel Hartog. Pp. viii+178+6 plates. (London: Constable and Co., Ltd., 1949.) 10s. net.

THE publication of this excellent and well-written biographical memoir of the late Sir Philip Hartog will be welcomed by all who knew him personally, and no less by that far greater number who knew his work in one or other of the many fields in which he achieved distinction.

The opening chapter recalls a bygone age in the university life of Western Europe, when Hartog studied in Manchester under Roscoe, Schorlemmer, Balfour Stewart and Schuster, under Friedel, Lippmann and Würtz at the Sorbonne, under Bunsen in Heidelberg and Marcelin Berthelot in the Collège de France. It recalls other days in that great period; for in Paris Hartog lived with his brother-in-law, Arsène Darmesteter, the greatest authority of his time in Old French, and at his house he met and came to know well Renan, Gaston Paris, Paul Meyer, Michel Bréal, Louis Havet, Gabriel Lippmann the physicist, the Dieulafoys who excavated Susa, and James Darmesteter the orientalist, while he was a close friend of Bergson and was offered lessons on the piano by Pachmann. There are many interesting stories here of student life in Paris and Heidelberg in the 1880's, and some illuminating comments on France and Germany from Hartog's letters.

The next chapter, on Hartog's years in Manchester 1889-1903, first as Bishop Berkeley fellow in chemical physics in Owens College, then as assistant lecturer and demonstrator in chemistry and later as secretary of the University Extension Scheme of the Victoria University, is no less interesting; it brings back to mind the days of H. B. Dixon, Samuel Alexander and Tout in the University, and of W. T. Arnold, C. F. Montague and C. P. Scott of the *Manchester Guardian*, to which over many years Hartog contributed scientific articles, leaders and reviews. Here also he met Michael Ernest Sadler, one of the determining influences in his life.

The succeeding chapter deals with Hartog's work as academic registrar of the University of London, 1903-20, and there is much here of the history of the University of London during the period when it developed from being a mere examining body with candidates, rather than students, into a university concerned with students and charged with the duty of providing for teaching and research. As these pages show, Hartog throughout his long and eventful period of office was inspired by the aim of helping to build a university worthy of the greatest city in the world.

The fourth chapter describes Hartog's pioneer work in the foundation of the School of Oriental Studies and his life-long devotion to its interests; and the following three chapters deal with his great services to higher education and administration in India. The eighth chapter covers the years 1930-39, and describes Hartog's wide range of activities during his so-called 'retirement', including his remarkable contributions to the history of chemistry and his return to the study of the problem that had attracted him for many years, the first results of this study being published in 1935 as "An Examination of Examinations", the appearance of which caused considerable discussion. The next chapter deals with his long campaign for the better teaching of English, from his early days in Manchester to the posthumous publication of his "Words in Action". A final chapter describes his last years and his heavy labours during the Second World War; it is followed by an epilogue quoting various tributes to his memory and a bibliography of his writings.

Lady Hartog is to be congratulated on the skill and conciseness with which she has portrayed the life and work of a great and rare personality.

D. McKERR

BRITISH VEGETATION 6/6

Britain's Green Mantle

Past, Present and Future. By A. G. Tansley. Pp. xii + 294 + 70 plates. (London: George Allen and Unwin, Ltd., 1949.) 18s. net.

BY the layman the preservation of the flora and fauna is too often regarded as the concern of the man of science alone, since the contribution that the wild plant and animal life make to his enjoyment is either entirely unapprehended or only vaguely appreciated. A wider knowledge by the general public of the nature and diversities of wild life would do much to inculcate a realization of the part which Nature plays in providing the æsthetic enjoyment of the many who have little or no technical appreciation.