Zuckerman in his recent address (see *Nature*, July 18, p. 135) delivered at the California Institute of Technology.

It is no disparagement of the importance of the National Health Service to suggest that Sir George Schuster's pamphlet is of even wider public interest in the context of the problem of government generally, the place and use of the expert in public affairs, the responsibilities of professional organizations and the functions and staffing of the Civil Service. Like Dr. Chapman, he displays issues where fresh thought is urgently required, practices which require critical and independent examination, and preconceived ideas and even traditions which should be challenged. It is to be hoped that the place of his pamphlet in the survey of the National Health Service made by the Acton Society Trust will not lead other professional associations, or indeed the scientist and technologist generally, to miss the challenge to creative leadership which he offers to them no less than to the medical profession itself.

BRITISH INDUSTRY

The Structure of British Industry

A Symposium. Edited by Duncan Burn. Vol. 1. Pp. xvii +403. 45s. net. Vol. 2. Pp. xii +499. 50s. net. (National Institute of Economic and Social Research.) (Cambridge: At the University Press, 1958.)

FOR a long time the best general account of the main British industries in a single book has been Prof. G. C. Allen's famous work, "British Industries and their Organisation", first published as long ago as 1933, though modernized in successive editions since. The two volumes here under review constitute, therefore, the first new major attempt for a long time to provide something which, in principle, every British student of economics (and many overseas students) would like to have.

As a new standard text-book and work of reference, this book has very great strength, but also, inevitably some weaknesses. Its strength is that it calls upon an extremely able team of writers, many of them fresh from, or still engaged in, the task of writing larger monographs on the industries which they here discuss; the rest, who have made investigations for the sole purpose of their contributions to this symposium, remarkably well-selected and successful. Its weakness is that it lacks the uniformity which can be achieved by a single author, asking roughly the same questions about a number of industries. Apart from setting out the facts of size and number of firms, the different contributors adopt a variety of approaches which makes the editor's gallant effort to treat some matters of general interest in his final chapter a difficult one. The student may also find the size and cost of this important work formidable.

It would be wrong, however, to judge it merely as a text-book. It is an important fact about economic studies that in the past decade or two, while at their theoretical end they have been accused of becoming more difficult for the practical man to understand, they have undeniably gained enormously in realism through economists consorting with practical men, either as Civil servants or as students of industrial problems in the field. No one man can nowadays attain to comprehensive first-hand knowledge of a

wide range of industries, as Alfred Marshall was able to seventy years ago—hence the necessity for a symposium—but the intimacy of the knowledge attained by the contributors, and the fundamental nature of the questions which some of them attempt to answer on such matters as pricing policy, are evidence of the increased penetration of economists generally into the realities of industrial life.

A list of the industries dealt with shows the wide scope of these volumes: agriculture, building, road and rail transport, coal, oil, chemicals, steel, building materials, machine tools, motors, aircraft, shipbuilding, electronics, cotton and rayon textiles, woollen and worsted, man-made fibres, pottery, pharmaceuticals, and cutlery. It suggests, too, the variety of different 'atmospheres' to be dealt with, ranging from those dominated by State policy, as in the case of agriculture and aircraft production, to the predominantly private commercial atmosphere of, for example, the pottery industry; or from ferments of technological change, as in electronics or pharmaceuticals, to the static environment of wool textiles. It need scarcely be said that the nature, possibility, and meaning of competition vary enormously from one industry to another. The more closely one looks at most industries (even those which are in some sense the most 'competitive'), the further they appear to lie from the old model of 'perfect' competition between firms making exactly similar products. The nearest simple model of wide application, indeed, would seem to be that of 'oligopolistic' competition, between firms which compete directly (or not quite directly) with a fairly small number of others—though with the important reservations that 'potential' competition, often from users of the product who might turn to manufacturing it themselves, is frequently just round the corner, and that the weapon of competition is increasingly often an improvement in design rather than a reduction in price. Nearly everywhere there is some evidence of increasing concentration, but in very many places the small firm is remarkably viable, not by any means always for the same reason. Where concentration has gone so far as to create monopoly power, it becomes very evident that this power, though it may not be harmless, is subject to a variety of checks, quite apart from those imposed by legislation. The case of coal, where absolute monopoly is itself the product of legislation, shows how powerful the restraint imposed by competition from quite different products can be.

The question how far the structure of British industry conduces to high and increased efficiency is one which, again, admits of no simple answer. The very general impression, indeed, is that the adjustments of the past twenty years have been made with reasonable smoothness and with gains of efficiency which are often striking. This, however, should not lead the reader into complacency. The contributors to this work have the relatively pleasant task of portraying British industry on the favourable wicket of expansion in the national economy and in world trade. It is a very different story from the agonizing chronicle of difficult contraction in so many of the basic industries between the Wars. It may be as well to reflect that, while we may hope never again to see general stagnation of the economy or a major depression in its total activity, we have given a number of hostages to fortune in, for example, motors and shipbuilding, which may find how much more difficult it is to be progressive in adversity than in prosperity. A. J. Brown