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INCENTIVES IN INDUSTRY off

INCE Supernite and industry was published in the Economic Journal in April 1942, the question of the relations between industry and government has steadily grown in importance. It is now widely realized that this question is bound up with that of the relation of industry as a whole with society, and of the internal relations of employers and employed, whether managers or operatives. Increasing concern with management and attempts to raise its standard in industry have emphasized the complexity of these relations and inter-relations, as has experience with the nationalized industries and the new public boards which have been brought into being in Great Britain. With all these questions the papers collected under the title "Ideals and Industry"* are concerned, and in the six or seven years since they were first delivered they have lost nothing of their force. They are as relevant to our immediate problems as to the conditions obtaining during the war years when they were prepared; industrial relations are at the root of the problem of securing the greater efficiency and higher productivity on which Britain's economic recovery depends, whether we think primarily of the external relations with government or the internal relations of man with man. Co-operation with, and in, industry should be our first concern; and at bottom the issue is one of human relations and of human understanding.

The re-appearance of these papers is to be welcomed for the emphasis they place on that specific point. Whether Mr. Courtauld is discussing government and industry, industrial relationships, industrial changes, labour management, the control of industry or co-operation, the deep respect which he shows for men and women as human beings and his sense of the responsibility of each man in society is manifest. That is well brought out also in the discerning appreciation which Mr. Charles Morgan contributes by way of preface. Indeed, it is not too much to say that the recovery of Britain will depend largely on the measure in which we can evoke that sense of personal responsibility from every citizen, whatever his occupation; and when that sense of responsibility is kindled, respect for human individuality becomes implicit.

Already hard experience of the past few years should have driven home the lesson even to the most doctrinaire mind that organisation by itself is not enough. To a large extent, the community favoured the nationalization of the coal industry of Britain in the belief that under national ownership a new outlook and a new sense of responsibility would be brought into it. It can no longer be held that nationalization by itself automatically establishes the right human relations within an industry, and secures the co-operation upon which efficiency and productivity depend. So far, the nationalized industries in Britain have proved no more successful than private industry in securing such co-operation and

* Ideals and Industry: War-time Papers. By the late Samuel Courtauld. Pp. xviii+134. (Cambridge: At the University Press, 1949.) 10s. 6d. net. goodwill, and in such respects have been far behind some individual large and small firms.

At the outset of his paper on "Government and Industry", Mr. Courtauld made six assumptions. The experience of the past seven years has clearly justified the first five, and few unprejudiced observers will be disposed to dissent from his sixth-that the English genius for social evolution and for compromise can find a middle way, between pure individualism and pure socialism, which will bring the greatest attainable good to the nation. Indeed, it might be said that such a middle way offers, in Britain, the only hope of obtaining the higher productivity and efficiency which alone can solve the economic problems of the country. Production is still the most vital activity of the nation, government control remains and will increasingly determine industrial growth, labour may increasingly share in the management policy and rewards of industry, gambling in industrial counters may be ruthlessly eliminated and government bureaucracy no longer hinder the efficient conduct of business; but still the problem of securing the willing co-operation of all in that attempt to raise standards has to be solved.

In these pages are many suggestions which hitherto have not been explored. Much stress was laid by Mr. Courtauld on education; but little has yet been done on the lines he suggests. On the part of the Government, there has been but a partial recognition of the truth stated so plainly by Mr. Courtauld that, to work well, a man must take a real interest in his job and feel that he has full scope for his brains and abilities; that he must understand how his particular task fits into the whole manufacturing programme and that his ideas about it will be listened to and examined. Mr. Courtauld saw all the implications of this truth and just how it bears on the vital problem of incentives and on the work of works councils and production committees.

Mr. Courtauld's statement as to the main functions of government in relation to industry is worth recalling to-day. Government, he writes, should give general guidance, under the highest possible disinterested scientific and economic advice, to industrial development, in accordance with national interests. It should ensure that industry takes no measures to impede the development of new ideas, even if they threaten legitimate existing interests, except by order of the Government itself and under government safeguards. It should see that the law is kept in the spirit as well as in the letter, and should collect all statistics needed from the whole of industry, and keep an open clearing-house of information. In particular, Mr. Courtauld emphasized that the State should have a far-reaching control over the location of industry and over its intake of labour, so as to prevent the recruitment of juveniles into blind-alley occupations. He set his face against commercial education; and he has wise words on taxation policy, and the danger of a policy which discourages men from developing and exploiting their own new ideas and devoting their own financial resources to doing so.

The present Government in Britain is manifestly in accord with some of Mr. Courtauld's ideals. Nothing could be more emphatic than Sir Stafford Cripps's and Mr. Attlee's words on the fundamental importance of production. The value of joint consultation has been established by experience, and the Minister of Labour has indicated the Government's desire to give every encouragement to industries to adopt the form of organisation for that purpose best suited to their particular needs. Steps have also been taken towards the provision of statistics, and though the Government has declined to adopt the essential recommendations of the Barlow Report as regards the location of industry, steps have been taken in that direction as well as in the field of education.

Nevertheless, the Government's relations with industry have been excessively rigid and marked by little realization that the main problem is that of creating and maintaining the attitude of co-operation which is the foundation of all successful industrial enterprise. The Government appears still to be indifferent alike to the fact that, while both the controls necessitated by war-time and post-war exigencies in regard to materials and high taxation have largely sapped the incentives to enterprise on the part of business men or managers, the advent of the welfare State and the policy of full employment have similarly undermined incentives on the part of those employed in industry, and that a high income tax and profits tax have tended in the same direction. Nor has sufficient regard been had to the way in which limitations on capital expenditure have handicapped the re-equipment of British industry; or to the further handicap imposed by the steady deterioration of communications such as postal services and railway services as compared with those obtaining fifty years ago.

More efficient management will certainly make an important contribution to increased productivity and the more effective use of our resources in man-power and materials. Unless, however, it is remembered at this juncture that the effect of the efforts of the British Management Institute, the Administrative Staff College and other bodies endeavouring to raise the standard of management and to investigate problems of management is severely circumscribed by the policy of the Government itself, there is real danger that the whole scientific approach to such matters will be discredited. Furthermore, leaving purely political considerations entirely on one side, the adequacy of the whole administrative organisation of the central government is open to challenge. The concern already manifested in Parliament, independent of party, as to the means for securing effective Parliamentary and public control over the nationalized industries and the public corporations is only one aspect of a problem to which Political and Economic Planning and other bodies have already turned their attention. Moreover, the extent to which personal freedom and the rights of individual citizens are being made subservient to administrative convenience is a further reason for expediting an overhaul of the whole structure of government, since this

also indirectly affects — and adversely — the attitude of the individual to production.

The whole question of the relations of government and industry should be re-examined outside the heat of party politics, so as to afford the nation an unprejudiced view as to the exact means by which Parliament could control the strategy of the nationalized industries and of the public corporations without that detailed interference which would cause a paralysing centralization. Time is an essential factor, for the overloading of Parliament and the Civil Service with legislative proposals is one reason for the present strain on the organisation of government and the cumulative threats to personal liberties. Whatever solution is found, whether the select committee, served by an appropriate staff, as the past experience of the House of Commons suggests, or any other method, it is of vital importance that besides technical efficiency, enterprise and constructive rather than restrictive policies should be stimulated.

A major charge to be laid against the Government's industrial policy is that it has inhibited enterprise and killed incentive, for the employer and manager and for the worker. The major charge which has to be preferred against the bulk of British industry, employer and employee alike, is that they have sought refuge in restrictions rather than in enterprise. The evidence of the report of the first team from a British industry-the steel foundry trade-sent to the United States by the Anglo-American Productivity Council is conclusive on this point. Much of this report is addressed to the steel foundry trade itself, but when it deals with the question of the factors that are responsible for higher productivity of the American industry and the part played by incentives, it touches on issues that have a bearing on almost every section of British industry. The report stresses the widespread "productivity consciousness" in the United States-the recognition that high productivity is a benefit to all concerned-and that in the background is the compulsion of competitiveness and the persistent endeavour to reach higher standards of living. The report suggests that Great Britain has been unmindful of the dangers attending the pursuit of freedom from want, of the corollary of a full employment policy, namely, mobility of labour, of which Gertrude Williams wrote so pointedly in her book "The Price of Social Security". The sixteen members of this team, in which management, technical staffs and craftsmen from eleven leading British steel foundries were represented, concluded that their industry and, by implication. other British industries, have drifted into a dangerous position from which they can be saved only if some of the most cherished traditions are broken down. If the right attitude to productivity is to become effective, the practices of all the collective organisations of industry-the trade associations, the employers' wage-negotiating bodies and the trade unions-will have to be changed.

This aspect of problems of production must be given more consideration at the present moment. Economies of various kinds, however right in themselves, cannot exert their proper effect unless atten-

tion is given to this question of incentives. We cannot wait while further research is made into new forms of joint consultation, the attitudes of groups and the evolution of more effective means of cooperation. The contribution which industrial psychology and the study of human relations in industry can make will not be diminished but rather enhanced when it is recognized plainly that fear and self-interest still powerfully condition men's minds and spur them to greater endeavour. Government policy should seek so to shape the conditions of industry and the relations of industry with the State by taxation and policy, economic and social, and its system of control, that by stimulating enterprise and initiative and discouraging restriction of every kind, the powerful forces to which this report bears witness are turned to serve the national interest as well as that of individuals.

APIOLE AND ESSENCE

The Essential Oils By Dr. Ernest Guenther. Vol. 2: The Constituents of Essential Oils. Co-Author, Dr. Darrell Althausen. Pp. xiii+852. Grew York: D. Van Nostrand Co., Inc.; London Macmillan and Co., Ltd., 1949.) 75s. net.

In this second volume, which follows close upon its predecessor (see *Nature*, **163**, 663; 1949), the constitution, occurrence, isolation and properties of several hundred compounds are discussed and documented with a precision and thoroughness (covering the literature up to 1948, inclusive) which leaves little room for comment. Each compound has a separate monograph, and there is an exhaustive subject-index. Dr. Frances Sterrett contributes a sixty-page appendix on the technique of preparing characteristic derivatives of the eight or nine chemical classes which comprise most of the compounds described.

Each monograph includes also a sub-head on uses. On direct uses in the perfume and flavour industries, the information of responsible agents of the firm of Fritzsche Brothers is, of course, authoritative. Beyond this, however, the authors do not seem always quite clear as to their terms of reference. If the largescale use of palmitic and stearic acids in soap and cosmetics is considered relevant to the monographs recording the exiguous occurrence of those acids in essential oils, it is not easy to see why the large-scale use of styrene and camphor in plastics, or cymene as a solvent, should be omitted when those compounds are dealt with. Uses in which one essentialoil constituent serves as raw material for making another of greater value (citronellal for l-menthol, for example) are scarcely mentioned. Medicinal uses are more systematically recorded ; there is a slight slip in attributing the name 'apiole' not only to the pure chemical, but also to the medicinal oil fraction which is properly distinguished as 'apiol'. And is it captious to suggest that, English idiom being what it is, the remark that "hydrocyanic acid cannot be used in any proportion in flavours" is less unambiguous than might be wished ?

Although the authors modestly offer the work merely to lighten the labours of the essential-oils