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The Significance of Imperial Chemical Industries.

FOUR years ago a Labour Government, pledged to the ideal of international co-operation, in a fit of political expediency exercised the veto of the State to frustrate the attempt of the majority of the board of directors of the British Dyestuffs Corporation, Ltd., and the Interessen Gemeinschaft to reach a working agreement for the better production and distribution of their products. The succeeding Government, although not prepared openly to be a party to co-operation between powerful chemical groups in Great Britain and Germany, sold its holding in the British Dyestuffs Corporation (albeit at a great depreciation), and thus left the directors free to do as they pleased.

In the meantime, however, the various German chemical groups had amalgamated into the most formidable chemical combine in the world. The new combine has made possible the pooling of resources upon research problems of importance ; there are no longer trade secrets to be withheld from any unit of the industry : the State and the universities have given the combine all assistance within their power to afford. Its financial resources are enormous. Obviously its competitive strength in relation to that of Great Britain has been considerably enhanced, and equally obviously it would be difficult for such a combine to make an agreement based upon complete mutuality with any specialised chemical group in Great Britain.

Evidently Sir Alfred Mond, now Baron Melchett of Landford, had these considerations in mind when he conceived the plan of a corresponding combination in Great Britain. If there is eventually to be an international chemical combine to include Great Britain, Germany, and the United States, the sooner the chemical industry of Great Britain attains to the dignity of a unit the more potent will be our influence in any greater combine. The energy with which Sir Alfred has initiated his project is illustrated by the report of Imperial Chemical Industries, Ltd., covering the year 1927, the first year of its existence. The merger now directly controls the British Dyestuffs Corporation, Ltd., Brunner Mond and Co., Ltd., Nobel Industries, Ltd., the United Alkali Co., Ltd., as well as thirty-five other lesser manufacturing and trading concerns, indirectly controls thirty other companies, and has interests in certain American undertakings. The original scope of the undertaking has thus been considerably widened, and the process of consolidation and expansion is steadily going on. Its

trading connexions extend to virtually every corner of the world map.

The authorised capital of the combine is £65,000,000, its assets nearly £70,000,000. The gross profit for the year was £4,567,225, excluding a capital profit of £1,000,000 arising from the realisation of certain investments of the member-businesses which has been placed to the reserve accounts. In the first year of its existence the merger is in a position to pay a dividend of 8 per cent on its ordinary capital, 7 per cent on its preference shares, and to bring its deferred capital into the dividend list, in spite of the fact that in 1927 Great Britain was only just emerging from the disastrous industrial struggle of 1926. The financial results obtained indicate that the member-businesses have made good use of the advantages offered by the pooling of resources, and in view of the absence of criticism in the country as a whole, it can be assumed that these advantages consist of greater efficiency in production and distribution of multitudinous products, and that the consumer has gained and not been exploited unfairly because of the decrease of competition. Fertilisers, for example, are being sold at four-fifths of the pre-War prices, a fact of tremendous importance to the farming community.

The production of the maximum amount of goods at the least price, at a profit calculated to inspire confidence in the investing public and consistent with proper conditions of life for the work-people of the merger, are, however, merely means to an end, judging from the public utterances of its chairman. He appreciates the wider implications of creative industry, that its proper function is to consider world problems as a whole, to serve mankind as a whole, and in order to do this all relevant factors must be taken into consideration and fully examined. He realises that there is likely to be short shrift for monopolies the activities of which are actuated by the same lack of principle as the average small business. For the modern monopoly is acquiring more and more the character of a public corporation, serving a public uncircumscribed by political boundaries, its activities directed more and more by creative minds fully aware of the responsibilities attaching to their task, with a higher ideal than mere profit-making; attracted to the great enterprise, in fact, by the tremendous scope it offers for scientific methodology, and the adventurous application on a grand scale of the discoveries of science.

Probably Mr. H. G. Wells regards the men whom Sir Alfred Mond has gathered round him as among

the "more vigorous intelligences in the business directorates of to-day" who "are beginning to realise the uncompleted implications of their enterprise," and as such the most promising instruments in the "open conspiracy" for the "awaking of mankind from a nightmare of the struggle for existence and the inevitability of war," men who refuse to regard the environment as a static entity, whose struggle is directed towards a modification of their environment. Conspicuous on the façade of the austere beautiful and noble building rapidly approaching completion on Millbank, which is to serve as the headquarters of Imperial Chemical Industries, Ltd., are some sculptured peacocks. These, says the architect, Sir Frank Baines, should not be regarded as symbolic of mere pride of achievement, but of the incorruptibility of the commercial ideals which it is hoped will actuate the infant enterprise.

It would savour too much of blind optimism to assert that this generation of English people realises fully the appalling reactions of science, applied in a spirit of brutal materialism, upon the life of nations, or that the attitude of mind towards science has completely changed. Science is still largely judged by the material benefits it confers on those who have the prescience to utilise its discoveries, or the material comfort it brings to the multitudes, not very much by the habit of thought it engenders. Its social implications are still unappreciated even by the large majority of scientific workers themselves. When science has relieved man of material cares—and at the present rate of progress of scientific discovery that is not an impossible achievement—it will still be confronted with the task of showing man how to live. "It is," as Prof. Whitehead has said, "among the merits of science that it equips the future for its duties." It can be truly said that it has equipped Imperial Chemical Industries for its future duties. This gigantic industry is based on science, and modern science with its progressive dynamic outlook forces its disciples along hitherto untrod paths in search of greater knowledge and towards greater power.

Nevertheless, we discern an unmistakable tendency in the new combine to leave the main direction of the enterprise to what may be called the financial as distinct from the scientific interest. Only a small minority of the members of the Board inspire us with the confidence that they have had the requisite training in, and possess the requisite knowledge of, science, to be able to appreciate the implications of a discovery. It

may be urged that this contingency is met by leaving the direction of certain of the subsidiary companies to leading scientific workers, and by the creation of the advisory research council, through which agency academic and industrial men of science will co-operate to keep the central board abreast of scientific progress. But is this enough? It has to be borne in mind that the Mond and Nobel companies, which acted as the nucleus for the combine, were founded and controlled by the great men of science after whom they are named. They did not receive their first stimulus from financiers; finance followed their brains, which is the habit of finance the world over. The operations of banks and financial trusts since the War have not inspired the masses of the peoples of Europe and the United States with a great deal of confidence in anything but their capacity to exact a steady toll on industry, whether industry is flourishing or depressed. Booms in trade have been over-financed, but at the first signs of depression, credits have been either withdrawn altogether or made available on such terms that industry and trade have still further declined. It would be interesting to know if Sir Alfred Mond and his colleagues consider that the possibilities of any situation which may arise in the chemical industry are satisfactorily met by the formation of the new Finance Company of Great Britain and America, on the board of which he and Sir Harry M'Gowan are to provide a liaison with Imperial Chemical Industries, Ltd.

From the growth of internationalism in industry and finance, Mr. Wells visualises "an effective world-control . . . of the production and main movements of staple commodities and the drift and expansion of population. . . . These things assured, the abilities and energies of a greatly increased proportion of human beings could be diverted to the happy activities of scientific research and creative work with an ever-increasing release and enlargement of human possibility." We are prepared to believe that Sir Alfred Mond is inspired by an idealism akin to this, that he realises that economic direction of world affairs must be based on the scientific study of all those factors fashioning the environment of man, that industry at its truest and best must be the prelude to man's highest expression. The men he has chosen to deal directly with these matters and to control certain factories and processes enjoy his confidence and inspire us with the same feeling. But there is no guarantee that the same relations will exist between his successors

and them or their successors. He has not started a tradition through which the supreme direction of production will be vested in men with a scientific outlook and creative minds.

In addressing the delegates of the Imperial Agricultural Research Conference in October last, Sir Alfred referred to the difficulty experienced in wresting "from short-sighted treasuries the necessary funds for carrying out . . . experimental work, which in its ultimate effect must vastly increase wealth and happiness and economic prosperity, though to those of little imagination it appears to be a wasteful means of immediate expenditure." Is he certain that there is no danger of a similar short-sightedness afflicting members of a board on which the financial elements predominate? This is an age of bold experimentation. Can it be suggested that the substitution of some of the financial elements by scientific workers of proved aptitude for direction and control and one or two creative artists might be amazingly successful in carrying the merger forward in pursuit of an ideal for industry, an ideal which would act as a beacon for every other industry?

A. G. CHURCH.

The West African Negro.

The Peoples of Southern Nigeria: a Sketch of their History, Ethnology, and Languages, with an Abstract of the 1921 Census. By P. Amaury Talbot. Published for the Crown Agents for the Colonies. Vol. 1: *Historical Notes*. Pp. xii+365. Vol. 2: *Ethnology*. Pp. xx+423+67 plates. Vol. 3: *Ethnology*. Pp. x+425-976+66 plates. Vol. 4: *Linguistics and Statistics*. Pp. v+234. (London: Oxford University Press, 1926.) 4 vols., 70s. net.

THE Government of Nigeria is to be congratulated on its wise policy in relation to anthropology. Not only is the study of this subject encouraged in its officials, but also official anthropologists have been appointed both in the northern and southern provinces, and a census has been published for each. Instead of these latter being mere lists of names and numbers, they are in both instances (the other instance being Mr. Meek's "The Northern Tribes of Nigeria") mines of information which will be valuable alike to administrators and to all other workers and travellers in these vast and little-known districts.

The four volumes before us attest the great industry and the sympathetic observation of the author. Mr. Talbot's chief interest is in religious