

Generally speaking, however, the scientific man is wholly honest, but unfortunately he is often a babe outside his own, sometimes a very narrow, field.

It seems then highly probable that your genuine man of science will only very rarely make a good legislator or a good administrator. But on the other hand, if he can inculcate the spirit of science, the scientific method, into sociological affairs, and if he can within his own sphere provide men of commoner clay with the facts from which proper deductions may be drawn, and if moreover he can present those facts with the authority to which Dr. Childs refers, is it not conceivable that he may be of greater service to his generation than if he takes a seat in Parliament or in political organizations?

LOUGHNAN PENDRED.

The Athenæum.

THE admirable statement of the case in NATURE of March 8, p. 275, makes further comment unnecessary, but as I am referred to and as my letter in NATURE of January 25, p. 119, has been misinterpreted by some correspondents, perhaps I may be permitted to say that in advocating control by science after the War as a means of making good the destruction of wealth due to it, I did not intend to convey that men of science were to be in a position to dictate to the elected representatives of the people.

I am wondering if the following suggestion would be practicable: that a select committee or commission should be appointed to consider and report upon the best scientific methods of making good the ravages of war. An advisory council representative of all sciences might be set up, to whom all standing in need of scientific advice would have access, whether Government officials, farmers, industrialists, or whatever they may be. Sacred though freedom is, people ought not to be free to waste the national wealth in the present crisis by exploitation or unscientific activities.

ROBERT H. F. FINLAY.

Victoria Square,
Belfast.

Can Science be Independent?

PROF. A. V. HILL¹, in discussing State aid for science, directs attention to "the danger that he who pays the piper may call the tune, that research may be devoted primarily to objects which the politician, or the Civil servant, regard for the moment as of national importance", and demands that "the independence and integrity of science must be carefully safeguarded". A casual reader might suppose that in Great Britain before the War, men of science could choose their own field of research.

This is not the case. I am Weldon professor of biometry (defined as the application of higher mathematics to biological problems) not because I chose this topic, but because the late Mrs. Weldon left a large sum of money to endow a chair of this subject. I believe that I carry out my duties conscientiously, and I am doubtless lucky to find so congenial a post. But I should greatly prefer a chair of genetics which gave me more scope for experimental work. However, there is no such chair in England because no rich person has endowed one.

In fact the fields of scientific research in Great Britain are to a considerable extent determined by the wishes of rich men and women. This is not independence. It is true that professors who are paid to devote themselves to one subject often carry out excellent research in another. Professors of human anatomy have given conspicuous examples. But it may be doubted whether this can always be done without a certain sacrifice of integrity, such as is made by clergy who interpret the creeds or the thirty-nine articles in a 'broad' manner which enables them to enjoy ecclesiastical emoluments whilst deviating from the purpose for which they were provided.

The plain fact is that science cannot be independent because it does not exist in a vacuum, and that complete intellectual integrity is very difficult except for those who are so fortunate that their opinions coincide at all points with those of their rulers.

Until such facts are realized, men of science will be likely to cherish the delusion that they can hope for complete liberty in a society where others do not share it. We can no more escape from a large measure of control by our social surroundings than from the earth's gravitational field. For this reason I believe that every man or woman of science should make some kind of study of social and economic relations in order to understand the conditions under which he or she must work.

I should like to go beyond Prof. Hill in one direction regarding his suggestions for co-operation with the fighting services. During the present War I have worked for all three. Some of the topics were very properly secret. Others, relating to hygiene in the broadest sense, were certainly not. Had certain of the problems under investigation been solved before the outbreak of war, a number of lives would have been saved. They would have been solved had biologists outside the services known of their existence. The barrier of secrecy around such questions has not merely protected the services from spying, but also from progress. In matters which concern the health and safety of personnel, there should be far more freedom of discussion than existed before the present War, and *a fortiori* vastly more than exists to-day.

J. B. S. HALDANE.

University College,
London, W.C.1.

¹NATURE, 147, 251 (1941).

Prof. Haldane's denial that "before the War men of science could choose their own field of research" seems to be based on his own academic position—which is surely an exceptional one. By far the majority of university chairs are not endowed by private individuals, and most of them that are have no ultra-specific conditions attached to them. Prof. Haldane's statement that "the fields of scientific research in Great Britain are to a considerable extent determined by the wishes of rich men and women" savours of naïvety. Further, he states that there is no chair of genetics in England; this seems to overlook the Arthur Balfour chair of genetics at Cambridge, recently vacated by Prof. R. C. Punnett, and temporarily in suspense.

EDITORS OF NATURE.