of persons interested in science and with a keen appreciation of the practical value of science to mankind. But the excessive specialisation of British Association meetings has repelled instead of attracting their interest, and they have felt that they could not "see the wood for the trees."

After all, as you point out, one of the most important functions of the Association is to obtain the attention of the nation to the objects of science. It cannot do this unless it is willing to popularise its meetings, and I feel sure that your suggestions to associate with the meetings public men, whether of local or national distinction, and by grouping sections to obtain a broader outlook upon the scientific questions of the day, form a practical contribution towards the problem of how to revive public interest in the Association. I trust they will be seriously considered by the council.

NEVILLE CHAMBERLAIN.
Westbourne, Edgbaston, Birmingham,
September 20.

THE stress laid in the leading article in NATURE of September 16 on "The British Association and National Life" on the importance of the "enlightenment of an extensive group of workers as to main lines of advance in fields not specifically their own" emboldens me to repeat a suggestion which I have often made and never found acceptable. It is that the presidential addresses in the sections should be placed in the foreground of the work of the Association, and so timed that an individual member could hear them all if he felt so disposed. The president of a section may safely be assumed to know his own subject, and he is usually able to express his views in language sufficiently explicit to be clear to everyone interested in any department of science. It is of vital importance to every scientific worker to know how his brethren are heading, were it only in order to see which lines are converging on his own, and which in the light of new knowledge may seem to be diverging from it.

September 18.

HUGH ROBERT MILL.

I WISH, as a mere layman, to support the plea in your leading article of September 16 for more energetic and popular action by the British Association.

I am afraid that the responsibility both for the indifference, or even hostility, to science of Governments (of which Prof. Soddy complained in a recent letter), and for the lack of financial support from the general public, lies at the door of men of science themselves, who do not understand that they ought to carry on systematic educational propaganda as to the value of science in terms of the things that interest the ordinary man.

I will give three pieces of evidence:

(1) I am thirty-four years of age. I have never been directly appealed to for a subscription to any scientific society, and I have never been asked to join one.

(2) I have just recently looked through the file containing letters appealing for subscriptions addressed to a certain business firm during the twelve months ended August 31, 1920. I find there are just over 150 appeals, or say three a week. They range from hospitals to choral societies. Not one is for aid to scientific research. Most exceptionally, there is one for an educational institution, and part of the large gift made in response may go to research.

(3) I happened to remark to a well-educated and

intelligent man who takes great interest in public affairs that I was glad to see that a large sum of money had been given for biochemistry. My friend replied that no doubt it was a good thing, but he was sorry that the donor had not rather given the money to reduce the National Debt! I think I managed to convince him that the money given to biochemistry would probably yield the nation thousands per cent. in mere cash, to say nothing of other benefits, e.g. health.

But this is what the average man—very naturally—thinks of scientific research, and will continue to think until men of science, or more properly their officials specially trained for the work, carry on systematic propaganda in the same way as hospitals, political organisations, and trade bodies do.

The love of science for its own sake is a special taste, like an interest in heraldry or stamp-collecting. If the men of science want the support of those who do not happen to share that taste, they must show the non-scientific man that science (unlike stamp-collecting) can confer real benefits, moral or material, on the world at large.

Governments move as they are pushed; if they have not moved to support scientific research, it is because there is no strong body of public opinion pushing them.

My practical suggestions are these:

Creation of a "Propaganda and Finance Department" of the British Association, with a permanent staff consisting of a director (responsible to the council of the B.A.); under him a publicity manager controlling a staff of journalists and a staff of lecturers, a financial agent controlling a staff of travelling collectors, with the necessary typists and clerks.

The working would be somewhat as follows: The publicity manager tells his journalists to "write up" the life and experiments of Faraday, showing the present results; particulars of the industries and benefits that have resulted from them; number of men employed; dividends paid; number of tramcars running; and need of financial support for "our modern Faradays." This to be embodied in (i) lectures—for the travelling lecturers; (ii) posters; (iii) booklets and pamphlets for the use of the travelling collectors; and (iv) letters to the Press, especially the provincial and local Press.

After a certain district had been well "treated" with this propaganda, a travelling collector to be sent to interview individuals, firms, chambers of commerce, trade unions, and so on. These collectors would have to be men of high capacity and tact. They would endeavour to get (1) subscriptions and (2) new members of the B.A.

A few thousands a year spent in this way would produce easily an income of 500,000l. a year in subscriptions and donations, to say nothing of the other advantages that would flow in.

One useful means of propaganda would be a "Science Day" on the lines of Lifeboat Saturday. Another would be a "Review of the Year's Work" in each branch of science in non-technical language.

FRANK R. EAST.

9 King Edward's Road, Swansea,
September 18.

Relativity.

THE examples considered by the theory of relativity appear to have become somewhat stereotyped, and to deal mainly with problems of optics and electrodynamics. The specification of "simultaneity" seems to be regarded as necessarily involving the use of rays