

great discretion. The dignified quarto which supplies a link with the early days of the society may be suspended, illustrations reduced to the absolute minimum, communications condensed or reduced, and every conceivable means adopted to avoid expense; but with a diminished sum available for printing, and printing costs trebled, it is obvious that the efficiency of the society as a means of publication must be seriously reduced.

This result bears heavily on oversea members. The member within reach of town has all the advantages of the society; he can attend the meetings, consult the library, and meet his colleagues at the society's rooms; the country member is less favourably situated, but he has at least the privilege of borrowing from the library. The only material advantage received by the oversea member is the scientific publications of the society. The oversea members are an important part of the society, which, though "of London" in style, is world-wide in interest and membership. Our colleagues oversea, though in many cases supporting their own local society, consider it an honour to belong to the mother society at home, and the aim of the mother society is to strengthen the bond and to show the worker oversea that he is both welcome and necessary. Any step, therefore, which tends to lessen the advantages reaped by the oversea member must be avoided.

Apart from external aid there remains only the increased contribution from the individual member. An increase in the subscription will fall hard on many members; but the claims of a society which represents one's work or the scientific interest of one's leisure will not easily be set aside. A man or woman does not join a scientific society in a commercial spirit, but because a congenial atmosphere is there found, or, in the highest motive, because it is an obligation and an honour to help forward the society which represents one's own branch of science. If each member will consider seriously the position of his society, the claim for external aid, amply justified by the value to the community of the scientific work of the society, will come with increased power.

A. B. RENDLE.

THE leading article in NATURE of May 6 has so admirably stated the case for assistance towards the publications of scientific societies that it is almost needless to add further arguments. Nevertheless, there is one point which seems to require attention, namely, that during the last two years, when the pressure of enhanced prices in the printing trade has made itself felt, there has been an attempt on the part of societies subject to this burden to palliate it by means which threaten to change the character of the meetings. To avoid the heavy cost of papers embodying recent research, there has developed a marked tendency to arrange for lectures and demonstrations of a kind which do not require publication in detail, to the disadvantage of original memoirs which demand illustration and extensive text. Should this procedure continue, it is plain that research will suffer, investigators will not be ready to produce the results of their work in the meetings, and the value of the societies' issues will be diminished.

If assistance of the kind advocated can be secured, former methods can be resumed; if that assistance is denied, it is to be feared that, in spite of stringent economy or increased subscriptions on the part of the societies, the publications will suffer; for the maintenance charges must first be met before the balance of income is available for printing memoirs.

B. DAYDON JACKSON.

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I DO not suppose that there is a single editor of a scientific journal who will not read with sympathy and gratitude of your effort to obtain financial support for such publications in view of the enormously increased cost of paper and printing. In the case of the *British Journal of Psychology*, with which I am specially connected, the subscription is being raised for the second time since the war, whilst no class has suffered more as regards income than that from which the subscribers to scientific journals are drawn.

CHARLES S. MYERS.

30 Montagu Square, W.1, May 10.

#### The Indian Chemical Service.

SIR P. C. RAY's objections to the proposal to form an Indian Chemical Service are based upon the fact that the Education Department of India has failed to realise the importance of research in connection with university teaching. However, I feel sure that he would not advocate the abolition of that Department, much less would he wish to see the Indian Education Service a mere adjunct to some other branch of the public services, without even provincial directors to look after the interests of himself and his colleagues. Every member of a Service knows that, in the event of a difference arising between himself and a member of another Service, he will have the support of a senior member of his own Service at each stage until the matter is perhaps settled by the Viceroy himself. Even directors-general and members of council are human, and inclined to support members of their own Department against the world.

Prof. Thorpe does not dwell at any length on the personal aspect of the problem, but I gather from his letter that he appreciates the importance of it. I do not doubt that he has grasped the fact that, while the members of such units as the Geological Survey of India or the Indian Medical Service are contented with the conditions of their service, grave discontent prevails amongst the numerous scientific men attached to, but not members of, organised Services. The fact that many men holding such positions have thrown up their appointments and come home disgusted has added considerably to the difficulty in recruiting scientific men, and particularly chemists, for service in India. There is no alternative to the bureaucratic system of government for India, and the proposed scheme provides for its inherent defects.

It is, of course, essential that the director-general and the directors of provincial institutes should be chemists who have proved their capacity for research. The Geological, Botanical, and Zoological Surveys of India seem to get on fairly well under directors-general who are scientific experts, and I do not see the necessity for assuming that the head and sub-heads of the Chemical Service will be any less competent than those who have done distinguished service for India in other branches of science.

Knowing something of India, I believe that the proposed scheme is sound, and I wish it every success.

M. W. TRAVERS.

Beacon Hall, Priory Gardens, Highgate,

May 15.

#### A New Method for Approximate Evaluation of Definite Integrals between Finite Limits.

1. If  $f(x) = a + bx + cx^2 + dx^3 + gx^4 + hx^5 + jx^6 + kx^7 + lx^8 + mx^9$ , the value of  $\frac{1}{10} [f(\frac{1}{10}) + f(\frac{2}{10}) + f(\frac{3}{10}) + f(\frac{4}{10})]$  is  $a + 0.5000b + 0.3350c + 0.2525d + 0.2028g + 0.1696h + 0.1455j + 0.1270k + 0.1120l + 0.0994m$  which is approximately identical with