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PROBLEMS OF SCIENTIFIC PUBLICATION

OMMENCING with this issue, "Letters to the A Editors" of Nature are being printed in a smaller type than hitherto. This is only a temporary measure, but it is not yet possible to state when it will be possible for the correspondence columns to revert to their original form. Though it is only a temporary measure, it is not a pleasant one; it is, however, essential for reasons of space and for other very important reasons. It is a symptom of a much wider and equally serious problem. Nature, in common with all other journals and periodicals, was compelled, under stress of war conditions, to reduce its size—the number of pages was reduced, the size of page was decreased, and smaller type used in the main part of the journal. Extra supplies of paper were permitted from time to time, but usually on condition that the extra allowance was utilized mainly for increasing the number of copies exported. Thus the position arose that the publishers were able to accept subscriptions from abroad but not from Great Britain. This measure has had its advantages recently, in helping to bring those men of science so long working out of touch with each other back to that international scientific collaboration which Nature has always endeavoured to foster. It needs little imagination to realize how starved of intellectual stimulation and scientific information so many of these men of science must have been during the war years.

A few months ago, the general position was apparently changed, in that the restrictions on the mode of use of paper allocated were lifted. But this does not solve the problem which faces the Editors to-day, namely, the need for more space to print the numerous important items awaiting publication, for the paper available was required to meet the increasing demand for copies of the journal. Indeed, the problem itself is probably unique, since Nature is essentially a scientific journal.

During the War, the balance of Nature was necessarily somewhat upset, since certain branches of science came under the ban of secrecy whereas others did not. But for several reasons this did not reduce the number of contributions to Nature, mainly because new interests arose. This journal is not only a scientific newspaper and forum for discussion of scientific research and progress: it also has very much to heart scientific policy, both national and international, and also the relations of science and scientific men to the general community. Science played such a large and important part during the War that scientific policy has therefore had to loom large in the pages of Nature.

Another extra demand on *Nature* in recent years has been for space to publish articles which would normally be considered too specialized for publication in a general scientific journal. The Editors, however, have done their best to accommodate such articles because, owing to the War, some of the more special scientific journals, which would have been their natural vehicle, slowed down or even

stopped publication, and, indeed, have yet to resume their important roles. Many such articles would have appeared, at the best, very belatedly, and their main purpose often missed, if an opportunity for their publication had not been afforded by *Nature*.

Now that the War is over, there is a temporary spate of material for publication which can be explained on several grounds. The cloak of secrecy has been discarded in many cases, and much scientific progress made during the War can now be presented to the whole scientific world. This must be carried out as swiftly as possible in order to help science back quickly to its normal routine of full publicity and general discussion. Again, men of science, hitherto unable to communicate with the scientific world outside their own countries, are now able to do so. Nature must be made available to them; and above all, facilities must be given for publication of scientific results obtained and conclusions drawn by these workers.

Taking a long-term view of affairs, it may be expected that in the coming months and years the calls on the pages of Nature are likely to continue to increase. The war-time work on radar, penicillin, atomic energy, and so on, have forced on the notice of the general public the significance of scientific discovery. As we have emphasized time and again, the results achieved during the War represent but the speeding-up of investigations under the impulse of dire necessity and with the aid of facilities provided almost without limit and question as regards finance, supplies and man-power. Nevertheless, they have made patent to all the power which science must and does exert in our lives, and they suggest the increasing attention which must be given to scientific developments in the years to come. Increasing research and increasing numbers of those engaged directly and indirectly in it mean a growth in the publication of results in order to achieve the full interchange of information so necessary for the cause of progress.

Signs of all this are already appearing in *Nature* office. It is no exaggeration to say that more "Letters to the Editors" and many more general and special articles are awaiting publication in *Nature* now than at any other time in its history; more than two hundred and fifty "letters", from many centres of scientific research throughout the world, are awaiting publication. Books for review, also, are beginning to arrive from those countries until recently cut off from contact with Britain.

The only satisfactory solution to the whole problem would be to increase very considerably the size of the journal. This is out of the question at the moment; but the amount of paper available for *Nature* has just been increased, and will enable us to overtake some of the arrears. It is to be hoped that the period during which space and supply cannot meet the demand will not be long; but while it lasts the problem has to be faced.

Reduction in size of type in the correspondence columns will be a considerable help. But there are certain other aspects which are not so easy of solution. For example, the main aim of the Editors is to facilitate prompt publication. This is not always possible to-day, and each case has to be judged on its merits; consequently, for the time being, some delay is inescapable. It has been suggested that publication should follow strictly according to date of receipt at Nature office. This policy has never been followed in Nature, neither can it be. Nature covers all branches of science, and when deciding what shall be published in any issue the Editors must be guided by several factors—one of which is, of course, date of receipt—otherwise in any one issue either one section or several sections of the journal or perhaps the whole issue would be hopelessly out of proportion.

Readers and contributors can be of assistance during the present difficulty. It is essential that they keep their communications down to the absolute minimum in length. Furthermore, illustrations, graphs and tables should not be included unless they are essential to the argument or unless they render unnecessary a more lengthy amount of text.

As soon as the paper situation permits, the size of *Nature* will be increased and the type and lay-out improved. Until then, every effort will be made to publish everything which the Editors find suitable, even though the form in which it appears may not be so pleasantly readable as they would wish.

SOUTH AFRICAN BOTANY

A Botanist in Southern Africa By Dr. John Hutchinson. Pp. xii + 686 + 49 plates. (London; P. R. Gawthorn, Ltd., 1946.) 45s. net.

THIS important book is primarily an elaboration of the botanical results of the author's travels in southern Africa in 1928 and 1930, though it contains much more than the simple title suggests. Dr. Hutchinson has drawn on his wide knowledge of flowering plants, his long acquaintance with the special problems associated with African (and particularly South African) taxonomy, his keen interest in phytogeography, his artistic ability, and his experience in the field to produce a noteworthy and, in some respects, unique volume.

General Smuts, whose vivid portrait by Prof. Arthur Pan is splendidly reproduced as a frontispiece, contributes an appreciative foreword (revealing, incidentally, his deep understanding of the problems of natural classification) in which he pays tribute to Dr. Hutchinson's earlier systematic work, yet emphasizing the severe limitations of basing such investigations solely on preserved material. "Botany is a science of life, and cannot be learned fully from the dead . . . Hutchinson had still to complete his studies . . . He had studied Africa dead in the Herbarium. He had still to see it living in the sun, on the mountains and the plains, in heat and drought, in rain and swamp, in the shadows and the insolation of this so-called Dark Continent . . . we roamed at will through the floral treasuries of Southern Africa. . . . What fun to present Hutchinson with a live plant which he could not recognize, only to be told that he had determined it dead at Kew!" Now Dr. Hutchinson has the last word and his impressive collections of more than 4,700 specimens, including about fifty new species, a new genus, and many topotypes in confirmation of old records, show how