



SATURDAY, MARCH 6, 1926.

CONTENTS.

	PAGE
A British Science News Service. By C. W. H.	329
The University of London. By Prof. A. Smithells, C.M.G., F.R.S.	331
Industrial Distillation. By C. Elliott	334
Biology of Cancer	335
Our Bookshelf	335
Letters to the Editor:	
The Loculus of Archimedes.—R. D. Oldham, F.R.S.	337
Use of an Artificial Horizon in Photographic Measurements of Buildings or other Structures.—A. Mallock, F.R.S.	338
Acidity of the Medium and Root Production in Coleus.—E. Philip Smith	339
Genes and Linkage Groups in Genetics.—Prof. E. W. MacBride, F.R.S.; C. Tate Regan, F.R.S.	340
The Palæolithic Drawing of a Horse from Sherborne, Dorset.—R. Elliot Steel	341
A Single Electrode Arc.—N. Ryland Davis and C. R. Burch	342
The Herrings of the Eastern Part of the English Channel.—W. C. Hodgson	342
Domestic Heating.—Dr. Marie C. Stopes	343
Conservation of Momentum and the Doppler Principle.—Prof. G. E. M. Jauncey	343
An Australian Fossil Jelly-fish.—Fredk. Chapman	344
Measurement of Radiation Intensities by Photographic Methods.—I. O. Griffith	344
What is a Beam of Light?—F. P.	344
The Species Problem and Evolution.—I. By O. W. Richards and G. C. Robson	345
Stresses in Buildings. By Prof. E. G. Coker, F.R.S.	348
Obituary:—	
Prof. A. Perot. By J. E. S.	349
Prof. H. Kamerlingh Onnes, For. Mem. R.S. By Dr. F. A. Freeth, F.R.S.	350
Prof. F. Y. Edgeworth	351
Rev. S. J. Whitmee. By C. H. W.	351
News and Views	352
Our Astronomical Column	356
Research Items	357
The Carnegie Trust for the Universities of Scotland	360
The Genetics of Cereals. By Prof. R. Ruggles Gates	360
Dielectric Constant and Molecular Structure	361
University and Educational Intelligence	362
Contemporary Birthdays	363
Societies and Academies	363
Diary of Societies and Public Lectures	367

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A British Science News Service.

UNDER the auspices of the British Association and the British Science Guild, a conference was recently held to consider the advisability of establishing a science news service in Great Britain, and after discussion a small committee was appointed to carry the matter further. For some time such a service has existed in the United States, and the success achieved in that country encourages the belief that there is room in British newspapers also for accurate information on scientific subjects, narrated in such a manner as to be interesting to the average educated but unscientific reader. Matter which is suitable for the American reader is not necessarily suitable for the British: each nation has its own idiom and its characteristic outlook. But what American science can do for America, British science should be able to do, in its own appropriate way, for Britain. Already the *Morning Post* and one or two other British papers make a feature of admirable reports on scientific subjects, while a few specially gifted men of science are doing excellent work by furnishing the press with informative articles: but apart from these exceptional cases it is a commonplace that the great majority of newspapers fail to distinguish between science and magic in anything but name, that the space they allot to science, as distinct from sensational charlatanism, is negligible, and that such paragraphs as they do devote to scientific topics are for the most part meaningless and in many cases untrue. The sporadic efforts of a few gifted journalists are not adequate to meet the situation. What is needed is a systematic supply of news the accuracy of which shall be guaranteed by recognised scientific organisations, while its form renders it easily digestible by at least the better educated newspaper readers.

It is a curious fact that while it is considered socially disgraceful to be entirely ignorant of literature, a man's conception of the material universe he lives in may be that of a primitive savage, without his thereby incurring the smallest social stigma. Yet it is of vital importance to a modern State that its people should appreciate the value not only of the past achievements of science but also of its current enterprises. In his recent presidential address to the British Electrical and Allied Industries Research Association, Mr. L. B. Atkinson dwelt on the fact that Great Britain, which can claim credit for the fundamental discoveries in almost all the principal branches of science, has little or no vision of what could be achieved for it, in the material sense, by the adequate encouragement of scientific research: only by the cumulative effect of reiterated reminders, in the form of scientific news

items in the daily press, can the lay public be brought to recognise the untapped resources of command over Nature to which scientific research holds the key. The material advantages conferred by science are, however, to some minds its least valuable gifts. As a means of culture, as a perennial source of interest and wholesome enjoyment, scientific knowledge is a boon which the layman is entitled to share up to the limit of his mental capacity, and the specialist who makes discoveries is guilty of unsocial conduct if he fails to impart his good fortune, so far as is practicable, to the rest of the community to which he belongs. Moreover, if the results of research are of value, its methods are of far greater value. Scientific knowledge differs from unscientific in its quantitative character rather than in its essential nature. It is pursued more systematically, it depends on inferences which are more cautiously drawn, its propositions are held as having assigned degrees of probability rather than as being 'true,' it is characterised by more complete candour, and it is more resolutely guarded against the influence which habit and emotion exert on the judgment. Most of the administrative problems of the world could probably be solved by the application to them of similar standards of thought, and the more fully the general public comes to understand the methods of science, the better will it apply them in the conduct of its own affairs. The value of scientific method as an intellectual model and a mental discipline is at least as great as the value of its industrial achievements.

It must, of course, be recognised that scientific topics are not all equally suitable for popular consumption. The bulk of the matter to be supplied to the press would presumably consist of descriptive accounts of the results of research. Such subjects as the relation of animals and plants to man, or the phenomena observed during an eclipse, can with a little trouble be made interesting to readers of quite moderate education. Into the jam provided by such attractive items could be inserted, with tact and discretion, a reasonable proportion of pills in the shape of references to experimental methods (these would be of particular interest to skilled mechanics) and to reasoning processes. The rather disproportionate interest which the lay public takes in scientific hypotheses might also be gratified with safety, provided that the nature and use of a hypothesis be repeatedly explained. In all cases an attempt should be made to give the facts in true perspective, the relative degrees of probability attaching to various results being carefully distinguished, and the relation between observation and conclusion explained wherever possible.

There is already a keen demand for trustworthy information of the type described, and it is a demand

which could be greatly increased by the provision of a suitable supply. Probably if there is one subject less suitable than the rest for popular exposition it is Einstein's theory of gravitation, yet when this was 'featured' by the *Times* some years ago, the public responded with a thirst for information which created an excellent market for popular books on the subject. If, then, the most esoteric subject that could possibly have been thought of met with such an enthusiastic popular reception, there can be no doubt as to the 'news value' of really suitable material. One or two of the higher grade of newspapers already find it worth while to provide accurate science news, and this fact, combined with the experience of the United States, indicates that a science news service need expect little difficulty in creating a market for its wares.

Doubt is sometimes expressed as to whether satisfactory popular exposition is seriously possible, and whether a scientific truth can ever pass into the mind of an unscientific reader without undergoing such distortion as to render it a fallacy. This objection might be sufficiently met by mentioning a few of the names which have made the Royal Institution famous, but the matter deserves somewhat closer attention. Newspaper readers are not a homogeneous class. Some will only be capable of following the simplest descriptive matter, but for the rest the improved teaching of science in schools is bringing into existence year by year a growing class of men who are quite familiar with the fundamental conceptions underlying modern science, and only need the stimulus of a daily news paragraph to enable them to resist the atrophy of their intellectual equipment.

Further, the difficulty of understanding scientific books and papers arises only in part from the intrinsic difficulty of their subject matter. It is beyond dispute that the published records of research are often extremely badly written. They abound in slovenly sentences giving rise to ambiguities which can be solved only by special knowledge on the part of the reader. They present ideas in a haphazard order which makes assimilation difficult. They omit to elucidate conceptions which are familiar to the author, but require explanation for the benefit of the less specialised reader. They fatigue the mind with the elaboration of minor details, and fail to focus attention on the really important parts of their subject matter.

The skilled scientific journalist, who mixes with the world in general sufficiently to understand his public, will avoid these faults. He will also know what to take for granted and what to explain, when to use a technical term and when to translate it. He will illustrate general principles by particular examples, and explain obscure conceptions by means of such analogies

as are helpful and not misleading. Above all, he will repeat his more important statements, varying their form and context, often enough to make sure of their being fairly grasped. Charles Darwin showed what can be done by a man who is himself clear-headed and takes the trouble to write simply, directly, and with a sympathetic regard for his reader's difficulties in comprehension. The "Origin of Species" consists largely of close and difficult reasoning, yet it is probably one of the most widely read and best appreciated books of its century. It should be the duty of any news service which may be instituted to provide day by day the kind of authentic yet digestible interpretation of science which such writers as Darwin have definitely shown to be attainable.

The committee which has been formed will be confronted with a number of difficult problems, which will have to be solved before success can be achieved. Perhaps one of the most difficult will be that of guarding the news against mutilation by unscientific sub-editors. On the other hand, there is little to be feared from the alleged hostility of the pioneer journalists who are already in the field. It is to the interest of all concerned to co-operate in creating an increased demand for science news, and it is therefore reasonable to hope that the parties in the case will agree to pool their assets, which are, on one side, experience and an established reputation, on the other, the prestige of scientific authority.

Without the willing assistance of scientific workers and institutions, no organisation for the preparation and distribution of science news can possibly be successful, and even with it, there is little hope that the agency would be self-supporting for several years. As regards finance, it may be mentioned that the American service pays for itself to the extent of about 60 per cent. of its expenses, the remaining 40 per cent. being provided by endowment. It has been estimated that a British service, selling news at standard rates, would need an endowment of at least 5000*l.* to ensure its being able to run for three years, at the end of which time it should be possible to decide whether the support secured was sufficient to justify the continuance of the service. One of the questions before the committee which has been set up is that of the possibility of raising this sum by contributions from public-spirited donors or other sources. It is unnecessary to discuss here the contrivance of machinery for obtaining and supplying news, but on the assumption that this and the other tasks confronting the committee can be successfully carried out, the scheme in its broad outline is one which must commend itself to every man of science who appreciates the significance of the discipline with which he is associated.

C. W. H.

The University of London.

University Reform in London. By Thomas Lloyd Humberstone. Pp. 192+4 plates. (London: George Allen and Unwin, Ltd., n.d.) 7*s.* 6*d.* net.

THE signing of the Locarno Pact and the settlement of the Boundary question in Ireland can scarcely have failed to raise hopes in sanguine minds that, in such days as these, even the University of London difficulties may at last meet with some satisfactory solution. A Departmental Committee of the Board of Education, appointed in 1924, is at work. It is sitting behind closed doors, but it is understood that evidence has been taken and that before long we may have the Report. It is certain that when the Report does come, it will be read with the utmost interest and examined with the closest scrutiny by all who are interested in British university education.

With this prospect before us there comes to hand in the most timely way a book that will be invaluable in supplying to all who seek it a compact and readable account of the history of the University of London. Mr. Humberstone calls his book "University Reform in London," and he writes not merely as a chronicler but as one imbued with a zeal and a policy for reform. In such circumstances, it is not easy for a writer to present an undistorted tale of history, but, though the reviewer differs from Mr. Humberstone on a number of questions, he has no single word of complaint to make of prejudice or distortion. On the contrary, he is grateful for an historical summary that is at once accurate and alive, far removed in style from the monotonous correctitude of the civil service essays in which so much of our authentic educational history is—perhaps necessarily—enshrined. One is impressed but not oppressed by what Mr. Wells calls the high sincerity of the writer; he has a literary gift, a light touch, and an engaging frankness that greatly help the march of his story. Where he is adding his own comments or expressing his own views, it is plain to the reader, and it is quite refreshing to have here and there some serious proposal stigmatised as preposterous. The size of the book, the print, and the three aircraft plates of Bloomsbury, South Kensington, and King's College, are admirable.

For an adequate appreciation of Mr. Humberstone's outlook, the reader must be referred to the book itself; it must suffice to say here that he expresses strong opinions about the restoration of the Royal College of Science at South Kensington (the "Imperial College" being left for technology), and he is strongly in favour of full development of Bloomsbury as a university quarter. On the whole his counsels are those of moderation, and he seems quite hopeful of harmonious