THE TORONTO MEETING OF THE BRITISH ASSOCIATION

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THE 92nd annual meeting of the British Association for the Advancement of Science, held in Toronto from the 6th to the 13th of August, is declared by those competent to express an opinion to have been the most successful overseas meeting in the history of the Association. While the attendance of 2,380 was large, the enthusiasm and interest displayed in the scientific sessions were even more gratifying. Of the total membership about 700 were from overseas, 250 were from the United States, and the remainder from Canada. Approximately 80 per cent of those enrolled were professional scientists, the remainder being drawn from all sections of the community. The presidential addresses of the various sections were delivered in crowded lecture-rooms, and a well maintained attendance at the succeeding meetings testified that the interest displayed at the commencement was maintained to the end.

It is always difficult to evaluate the relative importance of contributions in so many different subjects and in such diverse fields of scientific activity as the British Association encompasses. There can be no doubt that, in general, this year these were of a very high order of scientific value. But no sensational discovery was announced, such as has not infrequently made the annual meeting of the British Association one of the historic events of the year. Judged by the attendance and subsequent comments of hearers, most interest was excited by the presidential address of Sir David Bruce on "Prevention of Disease," by the addresses of Sir Ernest Rutherford on the "Disintegration of Atoms" and Professor A. S. Eddington on "Relativity," and by the joint discussions on "Vitamins," "Canadian Forestry Problems" and "Diminishing Returns in Agriculture."

Among the sectional presidential addresses those of Sir John Russell on "Present-Day Problems in Crop Production" and Sir William Ashley on "A Retrospect of Free Trade Doctrine" claimed the greatest share of popular attention, as is natural in a community where agricultural and fiscal questions occupy the thoughts

of a very large proportion of the citizens. The presidential addresses in the Physics Section where Sir Wm. Bragg spoke on the "Analysis of Crystal Structure by X Rays", and in the Physiology section where Professor H. H. Dale discussed "Progress and Prospects in Chemotherapy," naturally drew intensely interested audiences in a university where so much scientific energy has been devoted to research in spectrum analysis, where Insulin was recently discovered, and where the physiological action and the therapeutic value of that potent substance have, since its discovery, been the subject of intensive study by a number of investigators.

The joint discussions between sections were particularly successful features of the meeting. Apart from the fact that "discussions" between scientists always promise interest to the lay mind, the subjects were particularly suitable to the place. Such topics as "Diminishing Returns in Agriculture," "Canadian Forestry Problems," "Liquid and Powdered Fuels," "Canadian Electrochemical Industries" "Educational Training in Secondary Schools for Overseas Life," and "The Pre-Cambrian Rocks of the World" were aptly chosen, and produced much profitable interchange of views among English, American and Canadian scientists. Many of the other subjects would excite popular interest in any community owing to their direct significance for such departments of every day life as Public Health, Industrial Efficiency, Education, Sociology, and Economics. Accordingly large audiences attended the conferences on "Vitamins," on "Physiological and Psychological Factors of Muscular Efficiency in Industry," on "Tests for Scholarships and Promotion," on "Racial Mental Differences," and on "Diminishing Returns in Agriculture." The interest displayed was not confined to the audience, however, for many letters to the editors of local papers showed that the general public, through press reports, had eagerly followed the communications. The value of these discussions was greatly enhanced by the generous collaboration of scientists from the United States.

Some sectional popular lectures justified their description as "popular" by exciting a great deal of outside interest. The lectures by Dr. C. W. Kimmins on "The Sense of Humour in Children", and that by Professor J. C. Drummond on "Cod Liver Oil," have both been the subject of correspondence in the newspapers. The evening discourses attracted larger audiences than is customary for this portion of a British Association programme. They are open only to members of the Association, who throughout the day have been surfeited with lectures, papers, and discussions, and con-

fined in sultry lecture-rooms; and it is scarcely to be expected that large numbers will turn out again in the evening to a formal lecture. In Toronto, however, in spite of a capacity of about two thousand, Convocation Hall was well filled for the beautiful discourse of Professor D'Arcy Thompson on the "Shell of the Nautilus", and an unexpectedly large audience attended the more technical discourse of Sir Thomas Holland on "Formation and Destruction of Mineral Deposits." No fewer than five free lectures, or one for each business day, were delivered to citizens during the meeting in different parts of Toronto. This rather large number of citizens' lectures in a week's programme was justified by the attendance. At each lecture every available seat was occupied, and Professors E. P. Cathcart and A. S. Eddington, Sir Henry Fowler, Mr. Julian Huxley and Sir Robert Robertson must have felt amply repaid for their labour of preparation by the appreciative attention of their large audiences.

Perhaps the most charming and certainly not the least important addresses delivered during the meeting were the free lectures to children. Sir William Bragg's lecture on "Diamond and Black Lead" was reminiscent of Christmas lectures at the Royal Institution. At the end of his address he repeated his experiments, surrounded by an eager crowd of children, diluted, it must be confessed, with a considerable admixture of older people. Professor J. H. Priestley's lecture on "Plant Waterproofs" kept the children amused while it instructed, and Captain Dudley Buxton's charming lecture on Mongolia provided less science but a great deal of enjoyment to his fascinated listeners.

In view of the fact that one of the avowed objects for which the British Association holds these annual meetings is the dissemination of a knowledge of the achievements of science among the general public, perhaps one of the real successes of the 92nd meeting was the publicity it received. From the moment when the main body of visiting scientists landed in Quebec until their departure from Toronto, columns of the daily press of Canada were devoted to their doings; while during the meeting itself the local papers allotted more than two pages of space daily to the reports of lectures, discussions and papers. The provincial papers of Canada and the leading papers of the United States devoted only little less space to the meeting. This, together with the large participation of United States scientists in the programme, served to emphasise the complete freedom of intercourse and the co-operation in science between the British Empire and the United States, just as the

coincident meeting of the International Mathematical Congress in Toronto, to the programme of which many of the British and American members of the British Association contributed,

displayed a like international character.

The place of meeting at the University of Toronto provided more than the usual degree of comfort. Close proximity of spacious and well equipped laboratories and lecture-halls facilitated the arrangement of the scientific sessions and particularly of the joint discussions. The Secretariat and a large proportion of other members were housed in the colleges and university residences which surround the campus. Meals were provided at low cost in the Great Hall of Hart House where over 600 were served each day at luncheon. The various sectional dinners were held in the smaller refectories of this building, which was also the scene of the conversazione, one feature of which was the performance of Canadian plays in the Hart House Theatre. In the sultry weather which prevailed during the earlier half of the meeting many members, both men and women, enjoyed a cooling swim in the Hart House pool.

A most profitable aspect of scientific conventions, which is always especially emphasized at meetings of the British Association. is the opportunity afforded for social intercourse among the members. This was not neglected in Toronto, and at the garden parties, including one at Government House, receptions, luncheons, harbour and other excursions, British, American, European and Canadian scientists found opportunities for relaxation and for the establishment of personal relations which a crowded programme and the less informal atmosphere of the lecture-rooms would not otherwise have permitted. These social activities terminated in a University garden party and a cricket match, somewhat marred by rain, between a British Association team and a local team, in which the former was rather ignominiously defeated. On the last day of the meeting the university held a Special Convocation at which the honorary degree of D. Sc. was conferred on Sir David Bruce, Sir Ernest Rutherford, Sir Charles Parsons and Sir John Russell. At the same Convocation, honorary degrees were conferred on four members of the International Mathematical Congress.

The Government of Ontario arranged a special Northern Ontario Excursion for botanists to Lake Timagami and for the geologists to the Timagami iron formation and other geological features, to the silver mines and the concentrating and refining plants of Cobalt, and to the Kirkland Lake and Porcupine gold

mines. These joined a main western-bound party which left Toronto on the 17th of August for Vancouver. For the western excursion a full programme was arranged and carried out, which included scientific sessions at Saskatoon, where the chemistry, zoology and agriculture sections held meetings, and at Edmonton, where the physics, geology and botany sections met formally for papers and discussions. Public meetings with addresses by the visitors were held at Winnipeg, Saskatoon, Edmonton, Vancouver, Victoria and Regina. At many of the stopping places, district committees took charge of the entertainment of the visitors and conveyed them to places of local and scientific interest.

It was thus arranged that widely separated portions of Canada, and not Toronto alone, entertained the Association and enjoyed the opportunities afforded by the visit of so many distinguished scientists of the Empire. This aspect of the 92nd annual meeting was mentioned in the final resolution of the concluding meeting on August 13th, when Sir David Bruce, the president, after the customary vote of thanks to the Toronto local organization,

moved "Thanks to Canada."