

Too often the universities have taken over from the world of affairs a conception of useful knowledge and a concept of usefulness that would have chilled the heart and stirred the indignation of Franklin. Practical men, it has been said, are those who practice the errors of their forefathers.

But this society remains true to Franklin's tradition. He knew, and we do not forget, what Sadi Carnot's reflections on the motive power of heat and Pasteur's studies of wine making, of anthrax and of rabies illustrate, that there is common ground for the theoretical and the practical, just because the most abstract knowledge is the most general, and thus the most useful, and again because what is important often owes this to the operation of an important principle.

Let this pass. It is not the changes in the universities, it is the national organization of science through national societies, councils and committees that one holds in smallest esteem to-day—this, and the dependence of such organization upon money, upon money provided in the expectation of a return and in the hope, occasionally, of a disproportionately great return.

There has grown up in America as a legacy of the war an activity that is administrative, an administration that is bureaucratic, a bureaucracy that is unconsciously guided by any consideration but that of the true interest of science, or, in the proper sense, of true usefulness.

The men of science of America, in their corporate capacity, happily only not through this society, now find themselves allied and almost in partnership with industry and business for the study of such questions as the place of sandwiches in the diet; they have been won for the support of the researches of the Baby Goose Society and are about to consider an alliance with the National Selected Morticians.

From this state of affairs escape will be difficult. The fact is that a mechanism, excellent for some purposes, and conceived with the highest motives, has all but taken control of the men whom it should serve. Such a mechanism can not be actuated by the forces which actuate true science, but in spite of every difficulty it *must* be controlled by them.

To its honor and glory our society has had nothing to do in bringing about this disgraceful and ridiculous condition. May it, by continuing to cultivate its garden, contribute to the cure of that which it has not caused.

LAWRENCE J. HENDERSON

### THE BRITISH ASSOCIATION AND THE TORONTO MEETING

The British Association for the Advancement of Science, which was founded in 1831, meets annually

for one week or longer at important centers, other than London, England, and it occasionally meets in other parts of the British Empire. The association has met in Canada on three previous occasions, *viz.*, in 1884, 1897 and 1909. Other overseas meetings have been held once each in South Africa, 1905, and Australia, 1914.

The average attendance at annual meetings of the association for the 83 years previous to 1920 was 2,330. A proportion of the attendance consists always of residents in the locality where the meeting is held, but the large proportion are visitors. The Toronto meeting affords an exceptional opportunity for intercourse between British, Canadian, American and European workers in science.

A preliminary program will be forwarded on application to the local secretary, British Association, Physics Building, University, Toronto, and those who intend to be present at the meeting are particularly requested to apply for this as soon as possible.

No technical qualification is required on the part of an applicant for admission as a member of the association, nor is there any limitation in respect of nationality. The form of membership of most interest to Americans and Canadians, who are very cordially invited to join for 1924, is that of annual member.

Payment of \$7.50 made before or at the meeting entitles the annual member to attend the meeting and to receive the report. Payment of \$5.00 entitles the member to attend the annual meeting and the membership ticket admits the holder to any of the sectional meetings and to the various popular lectures, receptions, local excursions, etc., which are features of the meeting.

Membership tickets for the meeting may be obtained from the local Honorable Treasurer, British Association, Room 50, Physics Building, University, Toronto; cheques should be made payable to the British Association for the Advancement of Science.

Arrangements are being made with the railway companies for reduced rates on the return fares of those who hold membership cards. Hotel accommodation should be reserved in advance of the date of the meeting.

#### SCIENTIFIC MEETINGS

The inaugural general meeting will be held on Wednesday, August 6, when Major-General Sir David Bruce, K.C.B., F.R.S., will assume the presidency in succession to Professor Sir Ernest Rutherford, F.R.S., and will deliver the presidential address.

The association is organized in thirteen sections with presidents for 1924 as follows:

A. Mathematical and Physical Science: Sir Wm. Bragg, K. B. E., F. R. S.

- B. Chemistry: Sir Robert Robertson, K. B. E.  
 C. Geology: Professor W. W. Watts, F. R. S.  
 D. Zoology: Professor G. Elliott Smith, F. R. S.  
 E. Geography: Professor J. W. Gregory, F. R. S.  
 F. Economic Science and Statistics: Sir William Ashley.  
 G. Engineering: Professor G. W. O. Howe.  
 H. Anthropology: Dr. F. C. S. Shrubbsall.  
 I. Physiology: Dr. H. H. Dale, C. B. E., F. R. S.  
 J. Psychology: Professor W. McDougall, F. R. S.  
 K. Botany: Professor V. H. Blackman, F. R. S.  
 L. Educational Science: Principal Ernest Barker.  
 M. Agriculture: Sir John Russell, F. R. S.

Addresses will be delivered by the sectional presidents of the respective sections and papers will be read on and after Thursday, August 7, until the conclusion of the meeting.

Joint meetings of various sections will be held also at which the following are among the subjects to be discussed:

- A and B Crystal Structure and Colloid Solutions.  
 A and G Optical Study of Elasticity.  
 B and I Vitamines and the Relation of Light to their Action.  
 B and G Liquid and Powdered Fuels.  
 C and E Changes of Sea-level in relation to Gravitation, Continental Shelves and Coral Islands.  
 I and J Physiological and Psychological Factors of Muscular Efficiency in Industry.  
 D and K Species Concept.  
 D and M Soil Population.  
 J and L Tests for Scholarship and Promotion.  
 F and M Diminishing Returns in Agriculture.  
 H and J Racial Mental Differences.

During the week of the meetings a number of popular lectures will be delivered by prominent visitors. Among the titles which have been announced are:

- Human Heredity and National (or racial) outlook: Professor W. McDougall, M. B., F. R. S.  
 Seeing is believing: Professor E. P. Cathcart, M. D., F. R. S.  
 Work in the Himalayas: Professor J. W. Gregory, D. Sc., F. R. S.  
 Voice Production: Sir Richard Paget.  
 Disintegration of Atoms: Sir E. Rutherford, F. R. S.  
 The Importance of the Infinitely Small in Nutrition: Professor J. C. Drummond, D. Sc.

A lecture to the Workers Educational Association will be delivered by Professor R. H. Tawney, of Oxford University.

The subject of the presidential address by Sir David Bruce will be "Advances made in our knowledge of disease (with special reference to methods developed during the war)."

Additional information will be gladly supplied by the Local Secretary, British Association, Room 50, Physics Building, University, Toronto, Canada.

## SCIENTIFIC EVENTS

### THE BIOCHEMICAL LABORATORIES OF THE UNIVERSITY OF CAMBRIDGE

THE new building of the biochemical laboratories were formally passed over to the Earl of Balfour, chancellor of the university, by Sir Jeremiah Colman on May 9.

The laboratories, which are situated opposite Pembroke College, have been made possible by the decision of the trustees of the will of Sir William Dunn, a city merchant, who died in 1908, to devote to biochemistry the residue of the estate, which was left with instructions that it was to be used for the "alleviation of human suffering." The sum of £210,000 was allocated to this purpose. The actual building, designed by Sir Edwin Cooper, has cost about £96,000. Besides a spacious general laboratory at the top of the three-story structure, there are about twenty rooms, fully equipped on most modern lines for research. There is a large library, for the endowment of which Sir Jeremiah Colman, chairman of the trustees, has presented £2,000.

*The British Medical Journal* writes:

At the present moment the building contains no fewer than thirty-six people engaged on research, a number which it may be necessary to diminish in view of the limited space and funds available. The largest group of workers, under the general direction of Professor F. Gowland Hopkins, are dealing with oxidation processes both *in vivo* and *in vitro*. . . . Four workers are examining bacterial metabolism by exact quantitative methods similar to those which are used on larger organisms. Several workers are dealing with carbohydrate metabolism from different standpoints. Others are dealing with the synthesis of various sulphur compounds in the animal body, and with the remoter effects on human metabolism of changes in the hydrogen-ion concentration of the tissues.

Besides four plant biochemists, who are mainly concerned with oxidases, individual workers are dealing with problems which range from inositol metabolism and the sulphur content of diseased crabs, to the structure of the haemoglobin, casein and thyroxin molecules. Some hitherto neglected aspects of the vitamin question are being dealt with, and a start is being made on cancer research.

The present research community includes three Australians, a Canadian, a New Zealander, an Irishman, an Indian, an American and a Norwegian, while last year Switzerland was represented. Eleven of the researchers are women. Six—namely, Professor Hopkins, Dr. Hele, and Messrs. Cole, Haldane, Roughton