geologist, Miami University; Dr. Thomas Poulter, physicist, director of the Research Foundation of the Armour Institute of Technology; Richard Black, engineer surveyor, who is attached to the Division of Territories and Island Possessions of the Department of the Interior, and Paul Sipel, who was the Boy Scout member of the last Byrd Expedition and who since has taken his Ph.D. at Clark University.

# PRELIMINARY PROGRAM OF THE DUNDEE MEETING OF THE BRITISH ASSOCIATION

According to the preliminary program of the meeting of the British Association for the Advancement of Science to be held at Dundee, under the presidency of Sir Albert Seward, from August 30 to September 6, the following are among the principal subjects announced for presentation:

#### WEDNESDAY, AUGUST 30

Presidential Address by Sir Albert Seward, on "The Western Isles through the Mists of Ages."

#### THURSDAY, AUGUST 31

Presidential Addresses in the Sections:

A-R. S. Whipple, on "Instruments in Science and Industry."

B-Professor E. K. Rideal, on "Film Reactions as a New Approach to Biology."

D-Professor J. Ritchie, on "Perspectives in Evolution."

G-H. E. Wimperis, on "The Future of Flight."

L-Dr. A. P. M. Fleming, on "Education for Industry."

M—Sir Thomas Middleton, on "Practice with Science.

The Farmer's Position and the Scientific Worker's Program."

Discussions, etc., in the Sections:

A-"Television."

B, I-"Tissue Respiration."

C-"'Local Geology."

E—''A National Atlas'' (with speakers from Sections C, D, F, H, K, M).

G-"Problems of Transatlantic Aviation."

L-"Education as a Preparation for Industry."

Division for the Social and International Relations of Science—Papers and discussion on coordination of scientific research, on population and other topics.

## FRIDAY, SEPTEMBER 1

Presidential Addresses in the Sections:

E-A. Stevens, on a subject to be announced.

H-Professor W. E. Le Gros Clark, on "The Scope and Limitations of Physical Anthropology."

J-R. J. Bartlett, on "Measurement in Psychology."

K-Professor D. Thoday, on "The Interpretation of Plant Structure."

Discussions, etc., in the Sections:

A, B—"Applications of Artificial Radio-Elements." C—"Raised Beaches of Forth and Tay."

D-"The Natural History of Salmon and Trout: Exhibition of Biological Films."

F-"Scottish Problems."

G-"'Air Conditioning."

I—"The Problem of Pain" (whole-day session, at St. Andrews).

L-"Educational Facilities in Industry."

M-"Agricultural Education."

Discussion on Jute (under the auspices of appropriate Sections).

Conference of Delegates of Corresponding Societies.—
Presidential Address by Professor H. L. Hawkins, on "Local Scientific Societies and the Community"; papers and discussion.

## SUNDAY, SEPTEMBER 3

Division for the Social and International Relations of Science.—Address by Sir Richard Gregory, on "Science and Social Ethics."

### MONDAY, SEPTEMBER 4

Sectional Presidential Address:

C—Professor H. H. Read, on "Metamorphism and Igneous Activity."

Discussions, etc., in the Sections:

A-"Problems of High-speed Flight."

A-"Surface Temperature of Stars."

B-"'Light Alloys."

D-"Problems of Freshwater Biology,"

H, I-"Nutrition and Physique."

L-"Educational Research in Scotland."

M-"Grass Conservation."

Conference of Delegates of Corresponding Societies.— Papers and discussion.

## TUESDAY, SEPTEMBER 5

Presidential Addresses in the Sections:

F-Professor H. O. Meredith, on a subject to be announced.

I—Professor D. Burns, on "The Assessment of Physical Fitness."

Discussions, etc., in the Sections:

A-"'High Temperature Problems."

A-"Solar and Terrestrial Relationships."

B-"'Intra-molecular Changes."

C-"Old Red Sandstone-Carboniferous Boundary."

H-"Teaching of Anthropology."

I-"The Assessment of Physical Fitness."

L-"Discussion on Spens Report."

M-"Seed Potato Growing."

Discussion on Jute (continued from Friday).

Evening Address by Dr. Isaiah Bowman.

### WEDNESDAY, SEPTEMBER 6

Division for the Social and International Relations of Science. Discussion on Nutrition.

# THE BOSTON MEETING OF THE AMERICAN CHEMICAL SOCIETY

All the eighteen professional divisions of the Amer-

ican Chemical Society will meet in Boston from September 11 to 15 in connection with its ninety-eighth convention. Numerous symposia will supplement the regular sessions.

The divisions and their chairmen are: Agricultural and Food, Dr. Roy C. Newton, of Swift and Company, Chicago; Biological, Dr. Joseph J. Pfiffner, of Parke, Davis and Company, Detroit; Cellulose, Professor George L. Clark, of the University of Illinois; Chemical Education, Martin V. McGill, of Lorain High School, Lorain, Ohio; Colloid, Professor Lloyd H. Reverson, of the University of Minnesota; Fertilizer, Egbert W. Magruder, of the F. S. Royster Guano Company, Norfolk, Va.; Gas and Fuel, Dr. Frank H. Reed, of the Illinois Geological Survey; History of Chemistry, Professor Tenney L. Davis, of Massachusetts Institute of Technology; Industrial and Engineering, Dr. Walter L. Badger, of the Dow Chemical Company, Ann Arbor, Mich.; Medicinal, Professor Walter H. Hartung, of the University of Maryland; Microchemistry, Lawrence T. Hallett, Eastman Kodak Company, Rochester, N. Y.; Organic, Professor Werner E. Bachmann, of the University of Michigan; Paint and Varnish, Professor William H. Gardner, of the Polytechnic Institute, Brooklyn, N. Y.; Petroleum, Dr. Per K. Frolich, of the Standard Oil Development Company, Elizabeth, N. J.; Physical and Inorganic Chemistry, Professor George Scatchard, of Massachusetts Institute of Technology; Rubber, Dr. G. K. Hinshaw, of the Goodyear Tire and Rubber Company, Akron, Ohio; Sugar Chemistry and Technology, A. R. Nees, of the Great Western Sugar Company, Denver, Colo.; Water, Sewage and Sanitation, Professor Alvin P. Black, of the University of Florida.

The divisions will hold symposia as follows:

The Division of Agricultural and Food Chemistry is sponsoring a symposium on Nitrogen-Free Extracts, with Dr. C. A. Browne, of the U. S. Bureau of Chemistry and Soils, Washington, D. C., in charge, and another on Plant Hormones. Together with the Division of Medicinal Chemistry, the food chemists will cooperate with the Biological Division in a program on Vitamins and Nutrition. Papers on other agricultural and food topics will also be heard.

The Division of Biological Chemistry will devote a day to a symposium on Methods in Protein Chemistry. It will also join the Medicinal Division in a symposium on Sterols and Related Compounds. General papers in the field of biological chemistry will be given at other sessions. The Cellulose Division will hear a variety of general papers.

Dr. Mary L. Sherrill, of Mount Holyoke College, will be chairman of a symposium on the Training and Opportunities for Women in Chemistry to be held by the Division of Chemical Education. The Colloid Division will participate in a symposium on X-Ray Studies of Substances of High Molecular Weight, with Dr. Maurice L. Huggins, of

the Eastman Kodak Company, presiding. The Fertilizer Division will have a program of general papers in three sessions.

A symposium on the Combustion of Solid Fuels under the chairmanship of Martin A. Mayers, of the Coal Research Laboratory of the Carnegie Institute of Technology, will be sponsored by the Gas and Fuel Division. A comprehensive session on Industrial Wastes is planned by the Division of Industrial and Engineering Chemistry and Water, Sewage and Sanitation Chemistry. Dr. Walter A. Schmidt, president of the Western Precipitation Company, will be chairman.

A third Unit-Process Symposium will be held by the Industrial and Engineering Division, with Professor R. Norris Shreve, of Purdue University, presiding. A symposium on Resins and Plastics from Hydrocarbons is planned by the Petroleum, Paint and Varnish, and Rubber Divisions.

The Division of Physical and Inorganic Chemistry, of which Professor Harold C. Urey, of Columbia University, is secretary, will have a program of a hundred and thirteen papers. Professor F. G. Keyes, of the Massachusetts Institute of Technology, will preside at a symposium on Low Temperature Research, and Professor W. C. Fernelius, of the Ohio State University, at a symposium on Compounds with Elements in Unusual States of Valence. Dr. Scatchard, Professor Charles P. Smyth, of Princeton University, and Professor Urey will be chairmen of the sessions on physical chemistry, while Professor G. Frederick Smith, of the University of Illinois, will preside at the sessions on inorganic and analytical chemistry.

A symposium on Vulcanization in addition to a special celebration of the centenary of the discovery of the vulcanization of rubber by Charles Goodyear will be sponsored by the Rubber Division. Numerous general papers on rubber chemistry are also scheduled.

# RECENT DEATHS AND MEMORIALS

Dr. Wendell Clay Mansfield, geologist of the U.S. Geological Survey, died suddenly on July 24 at the age of sixty-five years. His principal line of research was the late-Tertiary mollusks of the southeastern states, particularly of Florida.

Dr. Burtis Burr Breese, who retired two years ago as head of the department of psychology at the University of Cincinnati with the title of professor emeritus, died on July 31 at the age of seventy-two years.

John Ritchie, of Malden, Mass., died on July 22 at the age of eighty-eight years. Mr. Ritchie was interested in astronomy and for many years was in charge of the collection and distribution of astronomical news from the Harvard Observatory. He also was active in conchology and in other scientific subjects.

JOHN HARVEY LOVELL, known for his work with bees, biological editor of "Cyclopedia of Bee Culture" died on August 2 at the age of seventy-eight years.

PROFESSOR ARCHIBALD YOUNG, Regius professor of