climatology and soil classification, soil survey, texture, structure, color and water relationships of soils; minor elements in relation to plant growth; methods for the determination of trace elements, including chemical, spectrographic and polarographic methods; soil acidity and lime requirement, including use of the glass electrode; the conductivity method for the determination of soluble salts and the electrometric method for the determination of soluble chlorides; wet and dry combustion methods for the determination of soil carbon; soil-rhizobium relations; a one-day excursion through the country near Adelaide, with examination of several soil profiles.

Dr. A. Walkley, of the Waite Institute, is secretary to the school.

THE FIELD PROGRAM OF THE NATIONAL MUSEUM OF CANADA

SIX parties have been placed in the field this year by the National Museum of Canada, according to an announcement made by the Mines and Geology Branch of the Department of Mines and Resources, Ottawa. The program includes biological investigations in British Columbia and New Brunswick; botanical studies in Ontario; ethnological researches in British Columbia and the Prairie Provinces, and archeological work in Ontario and Quebec. The work is directed toward the gathering of new information on Canadian fauna and flora and native races, and the acquiring of new specimens for the National Museum.

C. M. Barbeau will make ethnological studies of the Indians of the northern coast of British Columbia, in a resumption of work first undertaken many years ago.

J. D. Leechman will collect anthropological specimens from the tribes of Indians of the Prairie Provinces.

W. J. Wintemberg will make excavations of prehistoric village sites at Tadoussac and Chicoutimi, Quebec, and at Dunnville and Port Maitland, Ontario. Last year he established the site of the Mission of St. Ignace II, the scene of the martyrdom of Fathers Bréboeuf and Lalemant.

H. M. Laing will continue the biological survey along the Pacific coast of British Columbia which has been in progress for some years.

T. M. C. Taylor will make a botanical survey in the vicinity of Heron Bay on the north shore of Lake Superior, Ontario.

W. E. Godfrey will collect zoological specimens and record wild-life observations in the western part of New Brunswick.

SYMPOSIUM ON GROWTH AND DEVELOPMENT

A SYMPOSIUM on "Growth and Development" will be held from August 7 to 11, sponsored by the editors of *Growth*, at Truro Central School, North Truro, Mass.

The announcement of the objects of the symposium reads:

Biologists are finding themselves increasingly perplexed by the lack of an adequate conceptual framework with which to guide their own investigations and to bring the results of many specialized studies into a more coherent and meaningful relationship. There is an especially acute need for bridging the gap between genetics and embryology and examining the implications of highly diverse findings of experimental biology for an understanding of growth and development. The editors of Growth have therefore decided to inaugurate a Conference on Growth and Development at which discussions of these theoretical issues will be held in the hope of achieving some clarification and unification of thinking in these areas. Grants towards the cost of the conference have been received from the Macy and Rockefeller Foundations. Each session will be opened by a presentation of one paper, the discussion of which will be initiated by a designated leader for that topic, and during the course of the conference moving pictures related to growth and development will be shown. It is hoped that the last day of the conference may see some efforts at generalizing and synthesizing the outcome of the previous days' discussions. It is planned to issue proceedings of the conference, at least in summary form, as a supplement to Growth. It is expected that a society will be formed by persons interested in growth during the period of the conference.

The sessions will last from 9:30 in the morning to 3 o'clock in the afternoon, excepting on Friday, when there will be only a morning session.

The program follows:

August 7—"Cell Division and Differentiation," W. H. Lewis and P. W. Gregory.

August 8-"Genes and Development," Curt Stern and C. H. Waddington.

August 9-" 'Chemical Factors, 'J. Needham.

August 10-" 'Regeneration," O. E. Schotte; "Organization," E. W. Sinnott.

August 11-" 'Concept of Organism," J. H. Woodger.

Discussion Leaders—L. G. Barth, H. S. Burr, L. B. Clark, A. B. Dawson, O. Glaser, H. S. Greene, V. Hamburger, L. Rapkine, K. V. Thimann, Paul Weiss.

Members of the program committee are N. J. Berrill, C. B. Davenport and D. M. Whitaker. Those interested should write to Dr. Philip White, Rockefeller Institute for Medical Research, Princeton, N. J., or to Dr. F. S. Hammett, Provincetown, Mass., for specific invitation and for further information.

SUMMER MEETINGS OF MATHEMATICIANS

THE summer meeting and colloquium of the American Mathematical Society and the twenty-second summer meeting of the Mathematical Association of The meetings of the American Mathematical Society will begin on Tuesday afternoon. A series of three colloquium lectures to be delivered by Professor M. H. Stone, of Harvard University, on "Convex Bodies" will be given on Wednesday morning, on Thursday afternoon and on Friday. A second series of four lectures by Professor A. A. Albert, of the University of Chicago, on the "Structures of Algebras" are planned for Tuesday afternoon, Wednesday, Thursday and Friday mornings. Sessions for the presentation of papers will be held on Tuesday and Thursday afternoons and on Wednesday, Thursday and Friday mornings.

A joint dinner of the society and the association will be given on Thursday evening at 6:30 at the Loraine Hotel. The charge will be \$1.25 per plate.

Wednesday afternoon will be left open for recreation. No formal excursions are being planned, but boat rides, pienics, visit to the Forest Products Laboratory of the United States Government, a visit to the Banta Publishing Company or visits to near-by scenic spots may be planned. There will be informal teas in the refectory building on Monday and Tuesday afternoons, following the meetings.

SCIENTIFIC NOTES AND NEWS

AN oil painting of Dr. James B. Conant, president of Harvard University, previously Sheldon Emory professor of organic chemistry, has been presented to the university by the class of 1914, of which he was a member. The gift was made in connection with the twenty-fifth reunion of his class. It is planned to hang the painting in the faculty room of University Hall.

DR. JOSEPH SWEETMAN AMES, of the Johns Hopkins University, who became president-emeritus in 1935 and who, before his election to the presidency in 1929, was professor of physics, celebrated his seventy-fifth birthday on July 3.

MEMBERS of the American Committee for Democracy and Intellectual Freedom and others have signed a letter congratulating Dr. Franz Boas, professor emeritus of anthropology, Columbia University, on the occasion of his eighty-first birthday, which occurred on July 9. Messages have also been sent to him by President Roosevelt and Secretary Wallace.

A LUNCHEON in honor of Dr. Charles F. Kettering, president of the General Motors Research Corporation, will be given by the Chamber of Commerce of Los Angeles on July 18. Dr. Kettering will make an address entitled "Industry's New Horizons."

M. MARC TIFFENEAU, professor of pharmacology and materia medica in the faculty of medicine of the University of Paris, has been elected a member of the section of chemistry of the Paris Academy of Sciences, in succession to the late Professor G. Urbain.

THE degree of doctor of music was conferred at the commencement exercises of the University of Chicago on Dr. Carl E. Seashore, research professor of psychology and emeritus dean in the State University of Iowa, in recognition of "his contributions to the science of music."

THE honorary degree of doctor of science was conferred by Williams College at commencement on Dr. Louis Frederick Fieser, professor of chemistry at Harvard University.

BATES COLLEGE, Lewiston, Me., conferred on June 19 the degree of doctor of science on Dr. Herbert E. Walter, emeritus professor of biology at Brown University, and on Dr. H. O. Whitnall, professor of geology at Colgate University.

DR. GEORGE T. HARGITT, professor of zoology at Duke University, received the degree of doctor of science at the commencement exercises of Syracuse University.

TRINITY COLLEGE, Hartford, Conn., conferred on June 19 the doctorate of science on Dr. Willard Cole Rappleye, dean of the College of Physicians and Surgeons of Columbia University, who was the commencement speaker.

In conferring the doctorate of laws on Dr. William Herbert Hobbs on June 17 at the University of Michigan the following citation was made by President Ruthven: "Professor of geology and director of the Geological Laboratory for twenty-eight years; since 1934 Professor Emeritus, whose achievements in science and influence in research will remain memorable in the annals of the University. To every task undertaken he brings an informed opinion and resolute will. His scholarly publications, many in number, range literally from pole to pole. Learned societies have elected him to office; mountains and glaciers bear his name; explorers buffeted by ice and storm value his share in their unending quest."

THE College of Physicians of Philadelphia awarded on July 14 the Alvarenga prize to Dr. Harry Goldblatt, professor of experimental pathology and associate director of the Institute of Pathology, of the School of Medicine of Western Reserve University, for his "contributions to the pathogenesis of hypertension." This prize was established by the will of Pedro Francisco