# SCIENCE

Vol. 92

No. 2396

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SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. MCKEEN CATTELL and published every Friday by

# THE SCIENCE PRESS

Lancaster, Pa.

Garrison, N. Y.

New York City: Grand Central Terminal

Annual Subscription, \$6.00 Single Copies, 15 Cts. SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary in the Smithsonian Institution Building, Washington, D. C.

# THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

# PRELIMINARY ANNOUNCEMENT OF THE PHILADELPHIA MEETING

Edited by Dr. F. R. MOULTON

PERMANENT SECRETARY

THE one hundred seventh meeting of the association will be held in Philadelphia from next December 27 to January 2, inclusive. The association was born in Philadelphia on September 20, 1848, and the coming meeting will be its sixth meeting in the city of its birth.

The march of progress of the association and of science is measured roughly by the following data concerning the six Philadelphia meetings, the registration and the number of papers at the approaching meeting being necessarily estimates. The stated membership of the association in 1940 is as of September 30.

Year	Registration	Papers Read	Membership
1848		60	461 -
1884	1,261	305	1,981

1904	890	224	4,041
1914		774	8,325
1926	3,181	1,449	14,366
1940	4,000	2,200	21,067

# REGISTRATION

Registration headquarters will be in Convention Hall, about a block from the major buildings of the University of Pennsylvania where more than half of the general addresses and scientific sessions of the meeting will be held. Branch registration desks will be located in the Bellevue-Stratford and Benjamin Franklin Hotels. A visible directory of all registered persons and their Philadelphia addresses will be available throughout the meeting at the Bellevue-Stratford Hotel. Each person registering will receive a General Program of the meeting, a book of more than 300 pages which will contain complete information concerning hotel headquarters for all sections and societies, a schedule of dinners and luncheons, announcements of entertainments and social features, a brief description of the science exhibition, complete scientific programs of all sections and societies, an index of all persons appearing on the programs, etc. Each person registering will receive also a badge of admission to all general sessions and to all programs of technical papers. Admission to certain functions, such as the Biologists' Smoker, will be limited to those having registration badges or registration eards.

#### HOTELS AND HEADQUARTERS

# General Headquarters: Bellevue-Stratford Hotel.

Headquarters of the sections of the Association and of the affiliated societies meeting with the Association in Philadelphia are as follows:

Bellevue-Stratford, Broad and Walnut Sts.: All sections of the Association except B, C, D, F, G, H, and O, Association of Symbolic Logic, American Society of Parasitologists, American Science Teachers Association, Society of the Sigma Xi, Phi Beta Kappa, Pi Gamma Mu, Gamma Alpha, Sigma Delta Epsilon, Metric Association, American Philosophical Association, Research Council on Problems of Alcohol, American Association of Scientific Workers. \*Rates: with bath--single, \$3.50-\$6; double, \$5-\$8.

Adelphia, 13th and Chestnut Sts.: Ecological Society of America, Limnological Society of America, Society of American Foresters. Rates: with bath—single, \$3.50-\$5; double, \$5-\$8.

Benjamin Franklin, 9th and Chestnut Sts.: Sections on Physics, Zoological Sciences, Botanical Sciences and Agriculture, American Physical Society, American Association of Physics Teachers, Sigma Pi Sigma, American Society of Zoologists, American Association of Economic Entomologists, Entomological Society of America, Botanical Society of America, American Society of Plant Physiologists, American Society of Naturalists, Genetics Society of America, American Microscopical Society, Sullivant Moss Society, American Fern Society. Rates: with bath --single, \$3.50 up; double, \$5 up.

Normandie, 36th and Chestnut Sts.: American Society for Horticultural Science, Potato Association of America, American Meteorological Society. \*Rates: with bath single, \$3 up; double, \$5 up.

Philadelphian, 39th and Chestnut Sts.: American Phytopathological Society, Mycological Society of America. Rates: with bath—single, \$2.50-\$5; double, \$4-\$8.

*Bitz-Carlton*, Broad and Walnut Sts.: Section on Chemistry, American Nature Study Society. \*Rates: with bath—single, \$3.50-\$5; double, \$6-\$10.

Robert Morris, 17th and Arch Sts.: Section on Astronomy, American Astronomical Society, National Association of Biology Teachers. Rates: with bath—single, \$2,50-\$4; double, \$4-\$6.

Stephen Girard, 2027 Chestnut St.: Section on Anthro-

pology, American Anthropological Association. Rates: with bath-single, \$2.50-\$3.50; double, \$4-\$6.

#### OTHER HOTELS IN PHILADELPHIA

Barclay, Rittenhouse Square, E.: Rates: with bath--single, \$4.50-\$8; double, \$7-\$10.

Belgravia, 1811 Chestnut St.: Rates: with bath-single, \$3-\$4; double, \$5-\$8.

Drake, 1512 Spruce St.: Rates: with bath—single, \$3.50-\$4; double, \$6-\$7.

McAlpin, 10th St. at Chestnut: \*Rates: with bath-single, \$2.25-\$2.75; double, \$4-\$5.

*Rittenhouse*, 22nd and Chestnut Sts.: \*Rates: with bath —single, \$2.50 up; double, \$3.50 up.

Spruce, 13th and Spruce Sts.: Rates: with bath—single, \$1.75-\$2.50; double, \$2.50-\$3.75.

Sylvania, Juniper and Locust Sts.: Rates: with bath-single, \$3-\$5; double, \$5-\$7.

Warburton, 20th and Sansom Sts.: \*Rates: with bath-single, \$3; double, \$5.

#### TRANSPORTATION

Philadelphia is readily accessible by railroads, planes and buses. Holiday rates will probably be in effect on all railroads during the period of the meeting. Information respecting these special reduced rates should be obtained from local agents of the transportation companies.

The regular (not reduced) round-trip railway and airplane fares to Philadelphia from representative cities are as follows:

-	Railroad fare	Pullman fare	Airplane fare
Atlanta	\$36.70	\$12.10	\$ 78.80
Boston	21.00	5.30	29.30
Chicago	44.70	11.60	72.26
Cleveland	27.50	6.30	41.76
Minneapolis	63.05	16.90	99.76
New Orleans	58.50	18.90	125.10
St. Louis	52.30	14.20	87.66

By special arrangement, the Yellow Cab Company of Philadelphia will have on sale at the various hotels strips of four tickets for \$1.00 which will be honored between any centrally located hotel and the University

\* Hotel has single and double rooms without bath. The Y.M.C.A., 1421 Arch Street, can provide rooms without bath for men only or for married couples. A small number of rooms are available at the Y.W.C.A., Crozer Hall, 2039 Cherry Street, and at the Central Branch, 1800 Arch Street. of Pennsylvania or Convention Hall, the fare for one person being two tickets and for more than one person one ticket each. The Philadelphia Rural Transit Company will provide bus service over a route of easy access from all central city hotels at a round-trip fare of 25 cents on special schedules to meet the varying demands of those attending the scientific sessions that will be held at the University of Pennsylvania. In addition, street cars out Walnut Street go on Woodland Avenue near the principal buildings of the university. The walking time from the Bellevue-Stratford Hotel to Irvine Auditorium, near the center of the university buildings, is about 30 minutes.

## OFFICIAL MEETINGS

The Executive Committee of the Council will meet at 4:00 P.M. on Thursday, December 26, in the permanent secretary's rooms in the Bellevue-Stratford Hotel, and thereafter as it shall determine.

The Council of the association will meet at 2:00 P.M. on Friday, December 27, in the Junior Room of the Bellevue-Stratford Hotel, and thereafter as it shall determine.

The Academy Conference will be held on Friday, December 27, in the Junior Room of the Bellevue-Stratford Hotel at 3:30 p.m., or immediately after the adjournment of the council. The conference will be followed by a complimentary dinner to one representative of each affiliated academy and to designated representatives of the association. Since the address of the retiring president will be delivered on the same evening, the dinner will begin at 6 o'clock.

The Secretaries Conference will begin with a dinner in the Bellevue-Stratford Hotel at 6:00 P.M. on Sunday, December 29, and will be followed by the discussion program.

## ANNUAL SCIENCE EXHIBITION

The annual science exhibition will be held in Convention Hall from 10:00 A.M. on Friday, December 27, to 1:00 P.M. on Tuesday, December 31. In general, the exhibition will be open from 10 A.M. until 6 P.M., but on Friday it will be open until 8 P.M. so that it may be conveniently visited before the presidential address of Dr. Walter B. Cannon, which will be delivered in the Auditorium of the same building.

#### GENERAL SESSIONS

All evening general sessions, except the address of Dr. Walter B. Cannon, will be held in Irvine Auditorium, which is located at the northwest corner of Spruce and 34th Streets, on the grounds of the University of Pennsylvania.

On Friday, December 27, at 8:15 P.M., Dr. Walter B. Cannon, George Higginson professor of physiology in Harvard Medical School, will deliver his address as retiring president of the American Association for the Advancement of Science on "The Body Biologic and the Body Politic."

On Sunday, December 29, at 8:15 P.M., Walter Lippmann, author, editor and columnist, will deliver the sixth annual Phi Beta Kappa lecture in Irvine Auditorium.

On Monday, December 30, at 4:30 P.M., Dr. Edmund Ezra Day, president of Cornell University, will deliver the second annual Phi Kappa Phi address in Irvine Auditorium on "The Discipline of Free Men."

On Monday, December 30, at 8:15 P.M., Dr. Anton Julius Carlson, emeritus Frank P. Hixon professor of physiology in the University of Chicago, will deliver the nineteenth annual lecture under the joint auspices of the American Association for the Advancement of Science and the Society of the Sigma Xi. The subject of Dr. Carlson's lecture is "Science versus Life."

# ENTERTAINMENT, LUNCHEONS AND DINNERS

The Local Committee will hold a reception for the officers and members of the association and their guests in the Ball Room in Convention Hall, immediately following the address of Dr. Walter B. Cannon on Friday evening, December 27.

The Local Entertainment Committee is planning a tea and music for registrants at the meeting from 3:30 to 6:00 on Sunday afternoon, December 29, in Exhibition Hall.

The American Society of Naturalists, in cooperation with other biological societies and with the association, will hold the Annual Biologists' Smoker at 9:30 P.M. on Monday, December 30. Admission to the smoker will be limited to persons registered for the meeting.

Section on Physics, the American Physical Society and the American Association of Physics Teachers will hold a joint dinner on December 27.

Sigma Pi Sigma will hold a luncheon on Friday, December 27.

Section on Chemistry will hold a dinner on Friday, December 27.

Section on Astronomy and the American Astronomical Society will hold a joint dinner on Tuesday, December 31.

Section on Geology and Geography will hold a smoker at Bryn Mawr College on Saturday, December 28, under the auspices of its Department of Geology.

Section on Zoological Sciences and the American Society of Zoologists will join in their annual dinner for all zoologists on Tuesday, December 31.

The American Association of Economic Entomolo-

gists and the Entomological Society of America will hold their annual entomologists' dinner on Saturday, December 28.

The American Society of Parasitologists' luncheon will be on Tuesday, December 31.

Section on Botanical Sciences and affiliated societies will hold the annual dinner for all botanists on Tuesday, December 31.

American Phytopathological Society's annual dinner will be on Saturday, December 28.

American Society of Plant Physiologists will hold its annual dinner on Monday, December 30.

The Ecological Society of America's annual dinner will be held on Saturday, December 28.

The Genetics Society of America will hold its annual luncheon on Tuesday, December 31.

The Section on Anthropology and the American Anthropological Association will join in a dinner on Saturday, December 28.

The Sections on Psychology and Education will hold a joint dinner on Monday, December 30.

The Subsection on Dentistry of the Section on Medical Sciences will hold a luncheon on Saturday, December 28.

Pi Gamma Mu will hold its annual luncheon on Tuesday, December 31.

Sigma Delta Epsilon will hold a luncheon for all women in science on Friday, December 27.

#### SECTION AND SOCIETY PROGRAMS

In addition to the 15 sections of the association, about 40 affiliated and associated societies will participate in the meeting. The programs of some of the sections and participating societies are not yet available.

The Section on Mathematics and Affiliated Societies (Dec. 27-28) will hold sessions on Friday morning and afternoon and a joint session with the Association for Symbolic Logic and the Eastern Division of the American Philosophical Association on Saturday morning.

The Section on Physics and Affiliated Societies (Dec. 26-30). The program of the American Physical Society will begin on Thursday morning, December 26. The Section on Physics, the Section on Geology and Geography and the American Physical Society will hold a joint session on Friday morning on "Some Applications of Physics to the Earth Sciences." Papers will be read by L. Don Leet, Chester R. Longwell, William D. Urry and Robert E. Horton. On Friday afternoon the section will hold a joint session with the American Physical Society and the American Association of Physics Teachers, at which John Zeleny, president of the American Physical Society, will deliver an address on "Ions as Gases," and Ernest O. Lawrence, retiring vice president for the Section on Physics, will speak on "Higher Energies." The third paper of the session will be by Robley D. Evans on "Applications of Nuclear Physics." On Friday evening the section and the two affiliated societies will have a joint dinner at which the Duddell Medal of the Physical Society of London will be presented by the British Ambassador, Lord Lothian, to Ernest O. Lawrence.

On Saturday morning the American Association of Physics Teachers will hold a session for contributed papers on "Demonstrations and Laboratory Equipment"; and in the afternoon a session for invited papers on "Medical Physics." On Sunday the society will visit the annual science exhibition in Convention Hall and the laboratories of physics of Bryn Mawr, Haverford and Swarthmore colleges.

On Monday morning the American Association of Physics Teachers will hold a joint session with the American Science Teachers Association for the presentation of the Oersted Medal and for witnessing a demonstration lecture on television. On Monday afternoon the society will hold a session for the presentation of contributed papers on the method and the philosophy of teaching and on related subjects.

The Section on Chemistry (Dec. 27-30). The program of the section will consist of two sessions on each of three days—Friday, Saturday and Monday. On Friday the program will be a symposium on "Organometallic Compounds," which will be introduced by Henry Gilman, retiring chairman of the section. Other participants will be Avery A. Morton, Edgar C. Britton, A. V. Grosse, Charles P. Smyth, Robert A. Kehoe and George Calingaert. Following the dinner of the section in the evening, Dr. Gilman will deliver his address as retiring vice president of the association on "Some Biological Applications of Organometallic Compounds."

At the sessions on Saturday a group of invited and carefully selected contributed papers will be presented, the first of which will be on "Sulfathiozole and Sulfapyridine," by George W. Raiziss, of the Abbott Dermatological Research Laboratories.

On Monday, under the leadership of C. A. Browne, of the U. S. Department of Agriculture, the program will be a symposium organized in commemoration of the hundredth anniversary of the publication of Liebig's celebrated book on "Organic Chemistry in its Applications to Agriculture and Physiology," and presented at joint sessions with the Section on Agriculture. The several participants in this symposium will present the influence of Liebig and his pupils on various branches of agricultural science, such as soils, fertilizers, plant physiology, enzymology, crop production and animal nutrition, and their present states. It is expected that the papers of this symposium will be of such a high order of merit that they will be published by the association as a monograph.

All meetings and functions of the section will be held in the Ritz-Carlton Hotel. Sessions will be arranged so that it will be convenient for the members to visit the science exhibition and to attend some of the general addresses. Chemists who are not members of the association may attend the sessions of the section by paying the registration fee of one dollar.

The Section on Astronomy and the American Astronomical Society (Dec. 30-31). The section will hold joint sessions with the American Astronomical Society throughout Monday and Tuesday at the Franklin Institute. At the close of the session on Monday afternoon there will be an official welcome at the University of Pennsylvania and a tea at the Flower Observatory, followed by a visit to the Cook Observatory. On Monday evening there will be a special demonstration at the Fels Planetarium and an inspection of the Astronomical Section of the Franklin Institute.

Tuesday will be devoted to sessions for the presentation of papers. The address of Everett I. Yowell, chairman and vice president for the Section on Astronomy, will be on "Motions of the Stars." On Tuesday evening the section will join with the American Astronomical Society in its annual dinner.

The Section on Geology and Geography (Dec. 27-30) will hold eight sessions, starting on Friday morning and ending on Monday afternoon. The program of the first session will be a joint symposium by the Section on Geology and Geography, the Section on Physics and the American Physical Society on "Some Applications of Physics to the Earth Sciences." On Friday afternoon there will be a session on the geology of the Atlantic Coastal Plain, with a series of papers on the Cretaceous-Tertiary problem.

In joint sessions with the Geological Society of America, the section will devote Saturday and Sunday to "Appalachian Geology." A special feature will be a symposium on "Igneous Phenomena in the Appalachians," arranged by the Philadelphia Geological Society. In connection with this symposium Harry H. Hess, retiring president of the society, will deliver an address on "The Appalachian Peridotite Belt."

The retiring chairman of the section, Kirk Bryan, will deliver his vice presidential address at Bryn Mawr College on Saturday evening, on "The Geologic Antiquity of man in North America." At the conclusion of Dr. Bryan's address, there will be a smoker under the auspices of the Department of Geology of Bryn Mawr College.

Monday has been set aside for a joint meeting with the Association of American Geographers. The program will include a few general papers, but will be concerned primarily with the geography of national defense. Special map exhibits are being arranged to illustrate this topic, as well as the historical development of the Philadelphia district. There will also be an exhibit of areal photographs and mosaics, with special reference to the Atlantic Coastal Plain.

The Section on Zoological Sciences (Dec. 31) will hold a business meeting on Tuesday noon and a joint dinner with The American Society of Zoologists on Tuesday evening, at which Leon J. Cole, vice president for the section, will deliver his retiring address on "Each after His Kind."

The American Society of Zoologists (Dec. 30-31, Jan. 1), on Monday afternoon, will hold a special joint session with The Ecological Society of America on "Population Problems in Protozoa," at which six papers will be presented, the speakers being Lorande L. Woodruff, G. Evelyn Hutchinson, Richard P. Hall, Willis Johnson, W. H. Taliaferro and W. C. Allee.

A second special session will be held on Tuesday morning on "The Endocrine Control of the Mammalian Reproductive Cycle," at which papers will be read by Frederick L. Hisaw, William C. Young and Edwin B. Astwood.

A third special program will be presented at a joint session with The American Society of Naturalists on Wednesday afternoon on "Experimental Control of Development and Differentiation." The large general programs of the society of 300 or more papers will be arranged under its various sections as usual.

American Association of Economic Entomologists and The Entomological Society of America (Dec. 27-30). In addition to sessions for the presentation of general papers, the societies, on Friday afternoon, will join in a symposium on "The Breeding of Cultivated Plants Resistant to Insect Attacks." The participants include R. O. Snelling, J. G. Bigger, C. M. Packard, S. F. Bailey and R. H. Painter. On Saturday evening the societies will join in their annual dinner.

Harry S. Smith, president of the American Association of Economic Entomologists, on Friday morning will deliver his presidential address on "The Segregation of Insect Populations into Races and its Significance in Applied Entomology."

R. E. Snodgrass will deliver the annual public address of The Entomological Society of America on Friday evening, his subject being "The Evolution of the Arthropods." On Monday morning the society will hold a joint session with the Ecological Society of America on "Insect Ecology."

The American Society of Parasitologists (Dec. 30-Jan. 1) is one of the sponsors of the symposium on "Human Malaria" (Section on Medical Sciences). On Tuesday morning David H. Wenrich, president of the society, will deliver an address on "The Morphology of Some Protozoan Parasites in Relation to Microtechnique." The society will hold a luncheon on Tuesday noon and a demonstration program of 31 papers will be presented on Tuesday afternoon. The program, consisting of 77 papers and demonstrations, is the largest in the history of the society.

The Section on Botanical Sciences and Affiliated Societies (Dec. 28). On Saturday afternoon the section will hold a joint session with its affiliated societies, the program of which will consist of the address of the retiring vice-president for the section, Neil E. Stevens, and of invited papers. The title of Dr. Stevens's address is "Botanical Research by Unfashionable Technics." The invited papers are "Comparative Studies on the Structure of the Shoot Apex in Seed Plants," by Adriance S. Foster, "Plants and Exchangeable Calcium of the Soil," by William A. Albrecht, and "Chlorophyll as a Part of the Photosynthetic Mechanism," by O. L. Inman.

The Botanical Society of America (Dec. 30-Jan. 1) will hold sessions of its four sections on Monday, Tuesday and Wednesday. On Tuesday morning the Physiological Section will join with the American Phytopathological Society and the American Society of Plant Physiologists for a session on "Physiological Aspects of Plant Diseases." In the afternoon the same section will participate in a joint session with the American Society of Plant Physiologists and the American Society for Horticultural Science to discuss "Selected Aspects for Plant Nutrition."

On Wednesday morning the society will join the Genetics Society of America and the American Society for Horticultural Science in a symposium on "Polyploidy." On Wednesday afternoon it will join the American Society of Naturalists for a symposium on "Experimental Control of Development and Differentiation."

The annual dinner for all botanists will be held on Tuesday evening, at which Carl M. Wiegand, retiring president of the society, will deliver an address.

The American Phytopathological Society (Dec. 27-31) will participate in six joint sessions, hold one symposium and two special conferences. In addition, it will hold one demonstration session on Sunday afternoon. The annual dinner of the society will be on Saturday evening.

The society will hold a joint session on Saturday with the Section on Botanical Sciences; on Monday morning, with the American Association of Economic Entomologists; on Tuesday morning, with the Ornamental Section of the American Society for Horticultural Science, and also with the Physiological Section of the Botanical Society of America and the American Society of Plant Physiologists; and on Tuesday afternoon, with the Mycological Society of America, and also with the Potato Association of America. On Monday evening the society will hold a symposium on "Better Undergraduate Training for Future Plant Pathologists."

The American Society of Plant Physiologists (Dec. 28-31), in addition to a joint session with the Section on Botanical Sciences on Saturday, will hold two symposia, one on Monday on "The Structure of Protoplasm" and one on Tuesday afternoon in collaboration with the American Society for Horticultural Sciences and the Botanical Society of America on "Plant Nutrition." The participants in the symposium on the "Structure of Protoplasm" are Laurence S. Moyer, Charles Hock, George Scarth, O. L. Sponsler, Warren H. Lewis, Douglas A. Marsland, Noburo Kamiya, C. L. Huskins and William Seifriz.

The society will hold joint sessions with the American Phytopathological Society on Tuesday morning and with the Society of Naturalists on Wednesday afternoon. At the annual dinner of the society on Monday evening, J. W. Shive will deliver a combined Stephen Hales-presidential address on "Significant Roles of 'Trace' Elements in the Nutrition of Plants," and at the same session, the recipients of the Charles Reid Barnes and the Stephen Hales awards will be announced. A special session on the teaching of plant physiology will be held on Tuesday evening. General sessions will be held on Monday afternoon, Tuesday morning and Wednesday morning and afternoon.

The Mycological Society of America (Dec. 28-31) will hold a joint session with the Section on Botanical Sciences on Saturday, and on Monday afternoon a joint session with the American Phytopathological Society. General papers will be presented at sessions on Saturday, Monday and Tuesday mornings. The principal feature of the program will be the presidential address of D. L. Linder on "The Mycologist and His Relation to Others."

The American Society of Naturalists (Dec. 30, Jan. 1) will hold a symposium, arranged by Karl Sax, on Wednesday on "Experimental Control of Development and Differentiation," the speakers being G. W. Beadle and E. L. Tatum, A. F. Blakeslee, B. H. Willier and K. V. Thimann. The Biologists' Smoker, admission to which will be limited to persons registered at the meeting, will be held on Monday evening and the Naturalists' Dinner will be held on Wednesday evening, at which J. H. Bodine will deliver his presidential address on "The Cell—Some Aspects of Its Functional Ontogeny."

The Ecological Society of America (Dec. 27-30) on Friday afternoon will join the Section on Social and Economic Sciences in a symposium on "Human Ecology," the speakers at which will be F. H. Pike, J. Russell Smith, Bruce L. Melvin and E. C. Lindeman. On Saturday morning the society will hold a joint session with the Society of American Foresters, on Saturday afternoon a joint session with the Limnological Society of America and on Monday morning a joint session with the Entomological Society of America. An imformal banquet will be held on Saturday evening. On Monday afternoon the society will join with the American Society of Zoologists in a symposium on "Population Problems in Protozoa." The annual luncheon of the society will be held on Tuesday noon.

The Genetics Society of America (Dec. 30-Jan. 1) will hold two demonstration sessions, one session for invited papers and one for short papers, and will join with the American Society for Horticultural Sciences and the Botanical Society of America in a symposium on "Polyploidy," at which the speakers will be R. E. Clausen, S. L. Emsweller, C. L. Huskins and L. F. Randolph. On Wednesday afternoon the society will join with the American Society of Naturalists in a symposium on "Experimental Control of Development and Differentiation." The annual luncheon of the society will be held on Tuesday noon.

The Limnological Society of America (Dec. 28–30) will hold three sessions for the presentation of general papers, and on Saturday afternoon it will hold a joint session with the Ecological Society of America.

The Section on Anthropology (Dec. 27-30) will meet jointly with the American Anthropological Association, the American Folklore Society and the Society for American Archeology. Papers are planned on disciplinary studies with special references to integration with cultural and biological disciplines. On the cultural side attention will be focused upon relations with sociology and psychology; on the biological side, upon the relationship of physical anthropology with basic principles of biology, with anatomy, and with medical and dental sciences generally. At the annual dinner on Saturday evening, the retiring president of the American Anthropological Association, J. M. Cooper, and the retiring vice president for the section. N. M. Judd, will both deliver addresses. The section will hold a dinner on Saturday evening, and on Sunday evening it will sponsor an illustrated lecture by Douglas Oliver on "Social Climbing in a Melanesian Plutocracy."

The Section on Psychology (Dec. 28-30) will hold a session in two sections on Saturday morning, one session on Saturday afternoon, a session in two sections on both Monday morning and afternoon and a joint banquet with the Section on Education on Monday evening. The session on Saturday afternoon will be devoted to a symposium on "Psychology and the National Emergency," and one of the sections on Monday afternoon will meet in a joint program with the Section on Education. The Section on Social and Economic Sciences (Dec. 27) will join on Friday with the Ecological Society of America in a symposium on "Human Ecology," the participants in which will be F. H. Pike, J. Russell Smith, Bruce L. Melvin and E. C. Lindeman.

The Eastern Division of the American Philosophical Association (Dec. 26-28) will hold its meeting from Thursday evening to Saturday afternoon, the Saturday morning program being a joint session with the Section on Mathematics and the Association for Symbolic Logic. The Saturday afternoon program will be a joint session of the American Philosophical Association (including its Eastern Division) and the Section on Social and Economic Sciences of the American Association for the Advancement of Science. Principal papers on this program will be "Science and Value," by Wilbur M. Urban, "Fact and Value in Social Science," by Frank H. Knight and "The Science of Value and the Value of Science," by Ralph Barton Perry. The formal papers will be followed by discussions participated in by Harlow Shapley, Gregory Bateson, Morris R. Cohen and O. H. Taylor.

A plenary session of the society will be devoted to a symposium on "The Nature of Man," participated in by Brand Blanshard, C. I. Lewis and W. H. Sheldon. The subject for consideration at another session will be "The Problem of Religious Knowledge," at which J. S. Bixler, R. L. Calhoun and H. L. Friess will present papers. The president of the Eastern Division of the society, Charles W. Hendel, will deliver his presidential address on a date to appear in the General Program.

The American Association of Scientific Workers (Dec. 27-28) will present a symposium on "The Scientist and American Democracy" on Friday afternoon and Saturday morning. The session on Friday afternoon will be introduced by A. J. Carlson in "The Scientist's Concept of a Democratic Society," which will be followed by a discussion of various aspects of "The Scientist and Technology," by A. C. Lane, Charles E. Kellogg and W. Rautenstrauch. At the session on Saturday morning Kirtley F. Mather will read a paper on "The Responsibilities of the Scientist as a Citizen of a Democratic Society," which will be followed by a discussion of various aspects of "The Scientist and Social Problems," by Thomas F. McSweney and Donald E. Montgomery. The session will close with a discussion of "The Preservation of Science," K. A. C. Elliott presenting a paper on "Science in the Belligerent Countries" and L. E. Carmichael a paper on "Science and American Democracy."

Pi Gamma Mu (Dec. 31) will hold its usual social science luncheon on Tuesday noon.

The Section on Historical and Philological Sciences is planning to present a symposium on "Scientific Basis for Ethics." The Section on Engineering (Dec. 31) will hold a session on Tuesday morning which will be opened with remarks by Robert L. Sackett, followed by a paper on "Technical Progress in Aviation" by Jerome C. Hunsaker. The remainder of the session will be devoted to discussions of the relations between the Americas, including a paper by Cloyd Heck Marvin on "Cultural Relationships between the Americas" and a paper by Raymond Clapper on "The Press and Inter-American Relations."

At 12:30 the section will have a luncheon at the Engineers Club of Philadelphia at which the speakers will be William Culbertson, former U. S. Ambassador to Chile, and Dr. Carlos Davila, former president of the Republic of Chile.

At the afternoon session Fred Lavis will read a paper on "Engineering Developments in South America"; C. L. Warwick, a paper on "Inter-American Relations in the Field of Engineering Materials"; and P. G. Agnew, a paper on "Exchange of Standards between the Americas."

The Section on Medical Sciences (Dec. 30-Jan. 1) will present a symposium on "Malaria" sponsored jointly by the American Society of Tropical Medicine, the American Society of Parasitologists and the National Malaria Committee. The symposium will deal exclusively with human malarias and will be limited in scope to North America, Central America and the West Indies. A total of 39 papers by experts in their separate fields will be presented at six sessions on the mornings and afternoons of Monday, Tuesday and Wednesday. Each author will be limited to 15 minutes for the presentation of his paper, leaving ample time for free discussion. The contributions have been grouped under the headings: "Introduction," "Parasitology," "Anopheline Vectors," "Epidemiology," "The Human Infections: Symptomology," "Pathology," "Therapy" and "Control and Eradication." Abstracts will be prepared and circularized in advance of the meeting, and it is anticipated that the papers will merit publication as a volume in the monograph series of the association.

The Subsection on Dentistry (Dec. 28) will present a symposium on "Periodontal Disease." Among those participating will be Balint Orban, E. H. Hutton, J. O. McCall and I. Hirschfeld.

The Subsection on Pharmacy (Dec. 28) will hold sessions on Saturday morning and afternoon.

The Research Council on Problems of Alcohol (Dec. 27-29) will hold six sessions for the presentation of formal papers in addition to a final session on Sunday evening, at which Thomas Parran, surgeon-general of the U. S. Public Health Service, will deliver an introductory address to be followed by an address by Abraham Myerson, of Harvard Medical School, on "Alcohol—Some Social Considerations."

At the first session, on Friday morning, Wilfred Overholser will deliver an introductory address, which will be followed by eight papers on "Physiological and Chemical Considerations." The participants in this session will be A. C. Ivy, F. A. Hitchcock, H. D. Palmer, H. Newman, Frederick Gibbs and Hallowell Davis, Curt P. Richter, A. Grollman and Thorne Carpenter. At the Friday afternoon session on "Alcoholism—Clinical Aspects," papers will be presented by Philip Piker, H. H. Merritt, W. W. Jetter, Arthur W. Wright, Norman Jolliffe, Timothy Leary and A. J. Carlson.

The general subject for the session on Saturday morning is "Alcoholism—Neuropsychiatric Features." Papers at this session will be read by Foster Kennedy, Leo Alexander, Ross A. McFarland, David Weehsler, Nolan D. C. Lewis, Paul Schilder and E. M. Jellinek. At the Saturday afternoon session the general subject is "Alcoholism—Treatment and Prevention." The participants in this session will be Wilfred Bloomberg, Robert V. Seliger, Karl M. Bowman, Charles E. Parsons, Harry M. Tiebout and Bernard Glueck.

The general subject of the papers to be presented on Sunday morning is "Alcoholism—Social and Legal Problems." At this session papers will be presented by Lawrence Kolb, Edwin R. Keedy, Jerome Hall, Morris Ploscowe, Austin H. MacCormick and an author to be announced. Discussion of the same general subject will be continued in the Sunday afternoon session in papers by Horatio M. Pollock, Donald S. Berry, George S. Stevenson and two others to be announced.

The Section on Agriculture (Dec. 30) will join with the Section on Chemistry on Monday in the symposium on "Organic Chemistry in its Applications to Agriculture and Physiology."

The Society of American Foresters (Dec. 28) will meet on Saturday morning with the Ecological Society of America.

The American Society for Horticultural Science (Dec. 30-Jan. 1) on Monday morning will present its program in four sections-nutrition of fruit trees, nutrition of vegetable crops, ornamental plants and blueberries. On Monday afternoon the program will be a joint session of the Vegetable Crops Section of the society with the Potato Association of America, a general session on physiology of fruit trees, a session on quality and production of vegetable crops and a session on floriculture and ornamental horticulture. The Tuesday morning program will include a joint session of the Ornamental Horticultural Section and the American Phytopathological Society, a general session on fruit trees, a session on breeding vegetable crops, a session on breeding and production of small fruits and a session on storage and processing of horticultural products. On Tuesday afternoon there will be a joint session with the Physiological Section of the Botanical Society of America and with the American Society of Plant Physiologists on "Ion Availability." Tuesday evening will be devoted to round table discussions on nomenclature and varieties, educational methods, experimental design and blueberries.

On Wednesday morning there will be a joint session on "Polyploidy" with the Genetics Society of America and the Botanical Society of America, and sessions on rootstocks and propagation, nutrition of vegetable crops and nutrition of ornamental plants. Wednesday afternoon will be given over to the business session of the society, at which matters of organization and publication policy and changes in the constitution and by-laws are scheduled for thorough discussion.

The Section on Education (Dec. 30-31) will hold a symposium on Monday morning on "Conservation Education." On Monday afternoon it will hold a joint session with the Section on Psychology, at which M. R. Trabue will deliver his address as retiring vice president on "Educational Research and the Defense of Democracy." At the same session E. L. Thorndike will present a paper on "Notes on the Psychology of Migration." On Monday evening the section will join in a dinner with the Section on Psychology.

On Tuesday morning the program will be divided into two sections. The program of one section will consist of papers by Donald D. Durrell, G. M. Ruch, P. J. Rulon, Marion Richardson and D. D. Lorge. The papers in the second section will be by Harry J. Baker, Arthur T. Jersild, Milton B. Jensen, Edward G. Olsen, W. C. Eells, and Marjorie T. Bingham and Edward T. Boardman. The Tuesday afternoon session will consist of papers by M. W. Keller, D. R. Shreve and H. H. Remmers (two papers), S. L. Eby, Paul A. Witty, Harold F. Clark, Harold C. Bingham and Alice L. Brown.

The Society of the Sigma Xi (Dec. 30) will hold its annual convention on Monday at 4 P.M. On Monday evening the nineteenth annual lecture under the joint auspices of the association and the society will be delivered by Anton J. Carlson on "Science versus Life." The American Nature Study Society (Dec. 26-28) will begin its meeting on Thursday evening with a program, arranged by Charles E. Mohr, on "Acquainting Philadelphians with Natural Study through Field Trips and Amateur Research Projects." The program on Saturday, arranged by E. Laurence Palmer, will be on "Nature Education's Contribution in an International Emergency." At a Saturday morning breakfast George W. Jeffers will be the guest speaker.

The American Science Teachers Association (Dec. 30) will hold two sessions and a luncheon on Monday. At the morning joint session with the American Association of Physics Teachers, Albert E. Marshall will present a paper on "New Types of Glass and New Techniques," Richard M. Sutton, president of the American Association of Physics Teachers, will present the Oersted Medal to an outstanding teacher of physics, and T. F. Joyce will present a discussion and demonstration of television. At the luncheon Albert F. Blakeslee will deliver an address on "Taste and Smell." The program for the afternoon session is a symposium on "The Place of Science in General Education," the speakers on which include Watson Davis, Oscar Riddle and K. Lark-Horowitz.

Gamma Alpha Graduate Scientific Fraternity (Dec. 28) will hold a luncheon on Saturday noon.

Sigma Delta Epsilon Graduate Women's Scientific Fraternity (Dec. 27-Jan. 1) will hold a luncheon for all women in science on Friday noon.

The National Association of Science Writers (Dec. 29) on Sunday morning will present a symposium on "Science Reporting in the World Crisis." After the presidential address by G. B. Lal, retiring president of the organization, there will be a series of brief addresses by such scientists as Albert F. Blakeslee, Edwin Grant Conklin and Walter B. Cannon. Then Waldemar Kaempffert, of the New York Times, David Dietz, of the Scripps-Howard Papers, Howard Blakeslee, of the Associated Press, John J. O'Neill, of the New York Herald-Tribune, Jane Stafford and Watson Davis, of Science Service, Thomas R. Henry, of the Washington Star, and probably other science writers for the daily press will participate in short discussions.

# **OBITUARY**

#### HARRY BURR FERRIS

HARRY BURR FERRIS, son of Samuel Holmes and Mary Clark Ferris, was born in Greenwich, Connecticut, on May 21, 1865. His death occurred on October 12, 1940, after a brief illness. Educated at the Stamford, Connecticut, High School and Yale University, he received the degree of B.A. in 1887 and his M.D. in 1890.

For more than forty years, as E. K. Hunt professor

of anatomy, Dr. Ferris served the Yale School of Medicine, the university and his community with devotion and unceasing effort. Beloved by every one who knew him, his generous sympathy, rare understanding and calm judgment will be missed by all. An extraordinary teacher, he gave of himself without stint in furthering the interests of students and in aiding them to lay a firm foundation for the practice of medicine.

He began his teaching of anatomy immediately after