and minimum of formal paper-reading. To this end papers at the morning sessions, printed at length in advance of the meetings, will be limited to ten minutes in statement, and discussion will follow. Afternoons will be given over to meetings of committees, prepared discussions not on the regular program, and recreation and sight-seeing. General sessions, designed to appeal widely to laymen, will be held on several evenings.

Members of the program committee are: Dr. Williams, chairman; Dr. C. Macfie Campbell, director, Boston Psychopathic Hospital and professor of psychiatry, Harvard University; Dr. William Healy, director, Judge Baker Foundation; Dr. Lawson G. Lowrey, director, Institute for Child Guidance, New York City; Dr. Howard W. Potter, assistant director, Psychiatric Institute and Hospital, New York City; Dr. Arthur H. Ruggles, superintendent, Butler Hospital, Providence, R. I.

In addition, persons residing in twenty-eight different countries are represented on the advisory committee on program. Besides these, the following are serving on the same committee, representing fields related to mental hygiene: *Anthropology:* Franz Boas, professor of anthropology, Columbia University; *Education:* V. T. Thayer, educational director, Ethical Culture Schools, New York City; *Eugenics:* Charles B. Davenport, director, Department of Genetics, Carnegie Institution of Washington; *Industrial Psychology:* Walter V. Bingham, director, Personnel Research Federation, New York City; *Nursing:* Effie J. Taylor, professor of nursing and superintendent of nurses, Yale University School of Nursing; *Philosophy:* M. C. Otto, professor of philosophy, University of Wisconsin; *Psychiatric Social Work:* Mildred C. Scoville, president, American Association of Psychiatric Social Workers; *Psychology:* Lewis M. Terman, professor of psychology, Stanford University, California; *Religion:* A. Eustace Haydon, associate professor of comparative religion, University of Chicago; *Sociology:* Ernest Watson Burgess, professor of sociology, University of Chicago.

# SCIENTIFIC NOTES AND NEWS

SIR ERNEST RUTHERFORD gave his presidential address to the 267th annual meeting of the Royal Society at Burlington House on November 30. He then presented the awards which, as already announced, were as follows: Copley medal, to Professor Max Planck, Berlin; Royal medals to Professor J. E. Littlewood, Cambridge; Professor Robert Muir, Glasgow, and Professor G. N. Lewis, the University of California, and the Hughes medal to Professor Hans Geiger, Tübingen.

DR. L. E. J. BROUWER, professor of higher mathematics in the University of Amsterdam, has been elected a corresponding member of the Prussian Academy of Sciences.

THE Oscar Carlson gold medal of the Society of Swedish Chemists has been awarded to Professor Sven Odén for his work on sedimentation analysis and related subjects. The medal, which is awarded every five years, has been awarded only once before when it was given to Valdemar Jungner, inventor of the Nife alkaline storage battery.

A DINNER was given by his colleagues in honor of Dr. Herbert Osborn, research professor of entomology in the Ohio State University, on December 17. Dr. Osborn joined the faculty of the university in 1898.

AT the annual general meeting of the Cambridge Philosophical Society Mr. G. Udny Yule was elected president. The vice-presidents are Professor H. Lamb, Professor S. J. Hickson and Professor A. Hutchinson.

DR. VERANUS A. MOORE, who recently retired as dean of the college of veterinary medicine of the New York State College of Agriculture at Cornell University, has been named superintendent of the Ithaca Memorial Hospital. Dr. Moore recently visited New York to study problems of hospital administration.

PROFESSOR HEINRICH RIES, head of the department of geology at Cornell University, has been named to assist Dr. M. M. Leighton, chief of the Illinois Geological Survey, in working out plans for the Chicago Century of Progress Celebration in 1933.

W. A. MAW, assistant professor of poultry husbandry at Macdonald College, has been elected chairman of the program committee for the Canadian section of the Fourth World's Poultry Congress to be held in London, England, in July, 1930.

LEE A. STRONG, assistant director of agriculture of the state of California, has been appointed chief of the plant quarantine and control administration of the U. S. Department of Agriculture. Dr. C. L. Marlatt, who has been filling the two positions of chief of the Bureau of Entomology and chief of the Plant Quarantine and Control Administration since July 1, 1928, retires at his request from the latter position in accordance with a plan which was authorized some two years ago.

A. D. LEWIS, state director of mines and minerals for the last five years, tendered his resignation to Governor Louis L. Emmerson, of Illinois, on December 7. The resignation was made without explanation.

It is reported in the daily press that for the last four months the removal of Mr. Lewis from the head of the state department has been demanded by the Illinois district of the miners' organization and other labor organizations.

PROFESSOR R. B. THOMSON, head of the department of botany and professor of plant morphology of the University of Toronto, has been appointed a member of the International Scientific Agricultural Council with headquarters in Rome, Italy. This appointment has been made by the permanent committee of the institute.

LIEUTENANT-COLONEL W. P. MACARTHUR, professor of tropical medicine in the Royal Army Medical College, has been appointed consulting physician to the British Army in succession to Colonel J. C. Kennedy, who has been transferred to India.

At the University of California, Asher Hobson, professor of agricultural economics on the Giannini Foundation, who has been on leave for three months, loaned to the Federal Farm Board, has been granted an additional leave to June 30, 1930. It is understood that Professor Hobson will remain with the Federal Farm Board for one or two years. Dr. W. L. Howard, professor of pomology and director of the branch of the college of agriculture at Davis, has been given leave from April 1 to June 30, and Dr. W. I. Terry, clinical professor of surgery in the medical school, has been given leave from October 17 to February 1.

DR. W. V. BALDUF, of the University of Illinois, is spending a sabbatical year in Washington and has made arrangements to study Hymenoptera in the National Museum during a considerable part of the time.

DR. H. H. GRAN, of the University of Oslo, Norway, will again work on marine diatoms at the Puget Sound Biological Station in the summer of 1930. The work he did on the diatoms and the waters in the region of the station in 1928 with Dr. T. G. Thompson, of the University of Washington, and with Dr. E. C. Angst, of the University of Oklahoma, is partly in press and may be expected to appear in the publications of the station before next summer.

DR. EDMUND V. COWDRY, Washington University, St. Louis, has been asked by the British government to make a study of parasites in East Africa.

R. KENT BEATTIE, principal pathologist of the office of forest pathology of the Bureau of Plant Industry, who has been in Japan, Korea, Formosa and China studying chestnut blight and collecting blight-resistant chestnuts since July, 1927, expected to sail from Tokyo for Shanghai on November 29. From Shanghai he probably will go to Indo-China, Siam and the Straits Settlements, to study species of Castanea and Castanopsis. He expects to spend some time in the mountains of India and Burma. He will return through Europe, in order to study herbarium specimens and to examine plantations of Asiatic chestnuts.

THE Huxley Memorial Lecture of the Royal Anthropological Institute was delivered by Baron Erland Nordenskiöld in the lecture theater of the Royal Society on November 26. Baron Nordenskiöld chose as the subject of the address "The American Indian as Inventor."

THE fifth annual Norman Lockyer lecture in connection with the British Science Guild was delivered on November 19 by Sir Walter Fletcher, secretary of the Medical Research Council. The title of the lecture was "Medical Research: the Tree and the Fruit."

PROFESSOR G. P. THOMSON, of the University of Aberdeen, who is visiting lecturer at Cornell University this year, will address the Northeastern section of the American Chemical Society in January on "The Waves of an Electron."

THE Jacob H. Schiff Foundation Lecture of Cornell University was given on December 13 by Dr. Charles J. Chamberlain, professor of morphology and cytology in the University of Chicago, on "Field Studies of the Cycads in Australia, South Africa and Mexico."

DR. ERNEST W. GOODPASTURE, professor of pathology in the Vanderbilt University School of Medicine, Tennessee, delivered the third Harvey Society Lecture at the New York Academy of Medicine on December 19. His subject was "Some Phases of the Filterable Virus Problem."

AT a meeting of the Boston Bacteriological Club held at Walker Memorial Building, Massachusetts Institute of Technology, on December 7, Dr. George F. Reddish, chief bacteriologist of the Lambert Pharmacal Company of St. Louis, gave an address on "Methods of Testing Disinfectants and Antiseptics." Dr. Reddish was formerly chief bacteriologist of the food, drug and insecticide board of the Bureau of Chemistry in Washington, D. C.

DR. CHARLES E. SAUNDERS, formerly Dominion cerealist at the Central Experimental Farm, Ottawa, delivered an address before the Royal Canadian Institute, on "Wheat and Civilization" on November 3.

PROFESSOR ALEXANDER SILVERMAN, head of the chemistry department of the University of Pittsburgh, addressed the Cleveland section of the American Chemical Society on December 12 on "Some Recent Developments in Glass Manufacture."

DR. L. H. ADAMS, of the geophysical laboratory of the Carnegie Institution of Washington, gave an ad-

dress on December 19 before the Washington Academy of Sciences on "The Creation of the Earth and its Early Development." This is the first of a number of lectures proposed by the academy on various phases of genesis and development, or origin and evolution, which eventually, and as then brought to date by their several authors, may be assembled in book form.

THE first Aldred lecture in the seventh series at the Massachusetts Institute of Technology was delivered on December 6 by Ralph Adams Cram. His subject was: "The Building of a Great Cathedral." The lecture was illustrated and described the construction of the Cathedral of St. John the Divine. The second lecture will be given on January 17 by Dr. C.-E. A. Winslow, of Yale University, on "Health Conservation—a Problem in Citizenship."

DURING the week of November 18–23 a series of lectures was given at Vassar College with the following program: Professor Roger Adams, of the University of Illinois, "Synthetic Organic Acids as Substitutes for Chaulmoogra Oil"; Dr. Harrison E. Howe, editor of *Industrial and Engineering Chemistry*, "Chemistry in the New Competition"; Dr. Florence R. Sabin, of the Rockefeller Institute for Medical Research, "Biological Effects of Different Chemical Fractions Isolated from the Tubercle Bacillus"; Professor Hugh S. Taylor, of Princeton University, "Speed and Sloth in Chemical Reactions," and Professor Henry C. Sherman, of Columbia University, "Chemistry."

THE Pasteur Society of Central California met at the Hotel Whitcomb, San Francisco, on the evening of December 4, 1929. Dinner was followed by an address by Dr. K. F. Meyer, director of the Hooper Foundation for Medical Research, who recently returned from an extended visit through the countries of Europe. The address was followed by moving picture films of scenes and laboratories in Great Britain taken by Dr. Meyer. A picture of the Graf Zeppelin flight, a rabies film and two films on blood transfusion were also shown. The meeting was attended by 175 members and guests.

THE Second Annual Pan-American Medical Congress and Exhibition will be held at Panama City, Republic of Panama, January 30–February 5. The congress will convene in the building of the Gorgas Memorial Laboratory, a research institution in tropical medicine which has been established in Panama by all the Latin-American countries. Delegates to this congress and exhibition will include the leading physicians, surgeons and directors of public and private hospitals and clinics of the twenty-one Latin-American republics, as well as many government officials.

THE annual "Insect Exchange" was held at Frankfurt as usual at the beginning of November, according to the London *Times*. At present, as the custom goes, the chief barterers are men with butterflies and moths to exchange. The exchange is said to grow in popularity each year.

PLANS and specifications for a house to be erected on The Effingham B. Morris Biological Farm as a residence for Dr. Milton J. Greenman, director of the Wistar Institute, are being prepared by Professor Paul Cret and his partner, Professor John Harbeson, both of the University of Pennsylvania.

THE General Education Board has made a grant of $62,500 for the support of the Harvard Study of the Growth of Children, which is directed by Professor Walter F. Dearborn, of the graduate school of education.

THROUGH the gift of the J. T. Baker Chemical Company, of Phillipsburg, New Jersey, the eastern fellowship in analytical chemistry will be available for the academic year 1930–31. The secretary of the committee of award is Professor Philip E. Browning, Yale University. The fellowship will be granted to an advanced student in analytical chemistry and the stipend is $1,000 annually. It is understood that the applicant will ascertain the requirements of the institution where the work is to be done. Consideration of the application will be facilitated if five copies are sent. Further information can be secured from the committee.

To aid the Soviet Republics in the development of large-scale farming through the use of machinery, Professor E. J. Stirniman, of the University of California agricultural engineering division, will spend a year in that country. He expects to arrive at his headquarters in Verblude, near the Black Sea, late this month. He will be employed as agricultural engineer by the Grain Trust of the Soviet government. The Grain Trust has about two and a half millions of acres in 15 or 20 units, and there will be 110,000 acres in the experimental farm at Verblude where Professor Stirniman will be stationed. He will have a staff of 42 men, 10 of whom have already left for Russia; 32 still are in training in the machinery and tractor factories in the United States.

A SESSION of the subcommission for peat soils will take place in Leningrad and in Moscow, U. S. S. R. (Russia), from July 20 to August 2, 1930, in connection with the meetings of the Sixth Commission and the Second International Congress of Soil Science. The session will be devoted to the reading and discussion of papers dealing with (1) stratigraphy, (2) profile analyses and (3) cultural operations of peatlands. A comparative study of certain regional areas of "low moor" has been proposed with the view to

adopting a uniform procedure and terminology in peat investigations. Members who are interested and may wish to present papers or attend the meetings are invited to send a brief summary of their paper to Professor Dr. A. A. Yarilov, president of the organizing committee, Iljinka, Karuninskaja 1, Gosplan, Moscow, U. S. S. R.

A CALENDAR issued from the British Ministry of Agriculture shows the dates fixed for the World Poultry Congress and the addresses of the national committees in 30 countries. On July 21, 1930, there will be an official reception of delegates by his Majesty's Government, and the congress opening ceremony will take place on the following day. The congress closes on July 30, and from July 31 to August 12 the delegates will make a tour of Great Britain, Northern Ireland and the Irish Free State. January 31 is the last day for receiving applications for space for national exhibits. Live-stock entries, from home and abroad, must be made by March 31, and all papers to be read at the congress must be in the hands of the congress secretary by February 28. Already the demand for space has been so great that very little more is available, and it has been decided to provide accommodation for live stock in parts of the Crystal Palace grounds as well as in the main building. Thanks to the cooperation of several well-known horticultural firms, there will be displays of flowers and plants.

THE Harvard Botanic Garden, hitherto a separate department of the university, has been transferred to the department of botany. President Lowell has given out the following statement in connection with the change: "Some years ago a number of people interested in gardening asked the corporation to conduct the garden for horticultural objects, offering to pay the expenses involved, which the corporation was glad to do so long as the cost was thus defrayed. After a while the committee became weary of raising subscriptions, and last spring it was decided that in view of this fact, and of the comparatively small scientific value of horticulture to the university, the garden had better be used for scientific purposes. The direction of the garden has, therefore, been transferred to a member of the department of botany, Dr. R. H. Woodworth, who will use the small income of the endowment for the benefit of that department." The Botanic Garden was established in 1805. The plan of its founders was to grow in the garden "all the plants that may be procured and may be capable of preservation therein." In recent years the garden has provided the department of botany with living specimens to be used in lectures and laboratories, maintained a seed exchange with institutions in this country and abroad and offered opportunity for study to amateur gardeners and the public generally.

CONTINUOUS weather information for pilots of aircraft, and for the 24 hours of the day if flying schedules so require, is the objective of the Weather Bureau in its service for aviation, but larger appropriations than have been available will be necessary, says C. F. Marvin, chief of the Weather Bureau, in his report to Secretary Hyde for the year ending June 30. Professor Marvin comments upon the advances made in the international movement for reporting and forecasting weather at sea, and also refers to the economic returns from the Weather Bureau services of warnings against frosts and against conditions favorable to the spread of forest fires. Under informal agreement the principal maritime nations of the world now enlist ships of their own registry. These ships observe and report weather conditions at least twice a day. Forecasts indicated by these reports go into the international exchange of weather information by radio. About 50 United States ships are now making these reports while they are at sea.

DR. DEAN F. SMILEY, medical adviser of Cornell University, announces that an ultra-violet ray solarium has been installed on the top floor of the Old Armory, and that irradiations are available to all men students. This is said to be the first ultra-violet ray solarium to be established in an American university, and marks the beginning of a comprehensive effort to make available artificially the helpful effects of the rays of the sun to students at Cornell University. As a result of experiments performed over a long period of years, Dr. Smiley, together with Dr. George H. Maughan, of the department of physiology, has shown that common colds can be prevented to a considerable degree by the use of ultra-violet rays. Two types of ultra-violet rays will be available. One section will consist of 16 fifty-inch mercury tubes with aluminum reflectors. They are arranged in perpendicular positions around the room. A student taking the rays proceeds between two rows of tubes, standing in front of each position for one minute. A clock rings automatically, giving the signal to advance to the next position. In addition to the vertical tubes, there are two overhead tubes which make it possible for the entire body to receive the ultra-violet rays. The intensity of the artificial rays is stronger than sunshine at noon on the brightest day. Another section of the solarium contains 5 carbon arc lamps, and the same system prevails for advancing the patient from one station to another. The lamps have hollow carbons which contain various metals, particularly aluminum, iron and nickel. These when heated to white heat give off a high amount of ultra-violet as well as some of the visible spectrum and infra-red rays.