Italian) must be sent to the president of the congress during the month of May (1932). Those desiring to give experimental demonstrations are requested to specify their requirements, not later than May.

A list will be published in due time of the hotels in Rome and Naples with prices for board and lodging. All necessary information for reserving accommodations in these hotels will be given. To members coming from America, Australia, etc., information will be given in due time concerning the boats upon which passage to and from the congress may be procured. The Italian Government will grant a reduction in the prices of railway tickets from the Italian frontier or from the Italian port of landing to Rome and Naples as well as from Rome or Naples to the frontier or to the Italian port of sailing.

PRESENTATION OF A PORTRAIT OF PROFESSOR CHARLES E. MUNROE TO THE COSMOS CLUB

AN oil painting of the distinguished chemist, Professor Charles E. Munroe, of the Bureau of Mines, was presented to the Cosmos Club of Washington, D. C., on December 9, by Dr. Henry G. Knight, chief of the U. S. Bureau of Chemistry and Soils, on behalf of more than 200 friends, associates and former students of Dr. Munroe. The painting, which represents Dr. Munroe seated, glancing up from a manuscript which he has been reading, was the work of a Washington artist, Mr. Hermann Ludden.

At the presentation exercises presided over by Dr. Knight, Dr. Marcus Benjamin, of the Smithsonian Institution, and Dr. Henry S. Washington, of the Geophysical Laboratory, spoke of Dr. Munroe's achievements; Dr. Munroe and the artist responded; Dr. Knight presented the portrait, which was accepted for the Cosmos Club by Dr. William C. White, president, and Dr. Lyman J. Briggs, chairman, of the art committee of the club.

Dr. Munroe has been active in scientific circles in Washington for fifty years. He has been president of the Cosmos Club, the Washington Chemical Society and the American Chemical Society and is an honorary fellow of the American Institute of Chemists. For many years he was dean of the Graduate School of George Washington University and served for several years as a member of the National Research Council.

The plan to present the portrait was sponsored by a distinguished committee which included Dr. A. C. Fieldner, of the Bureau of Mines; Dr. R. E. Gibson, president of the Washington Chemical Society; Dr. H. G. Knight; D. F. J. Lynch, president of the Washington Chapter of the American Institute of Chemists; former Chief Justice Walter I. McCoy, president of the Harvard Club of Washington; Dr. Cloyd H. Marvin, president of George Washington University, and Dr. H. S. Washington, of the Carnegie Institution. Dr. J. F. Couch acted as secretary-treasurer for the committee.

SCIENTIFIC NOTES AND NEWS

DR. ALBERT EINSTEIN, of the University of Berlin, passed through the Panama Canal on December 19 on his way to California, where he plans to spend two months at the California Institute of Technology and the Mount Wilson Observatory.

PROFESSOR A. B. LAMB, of Harvard University, has been elected president of the American Chemical Society for 1933. The president for 1932 is Dr. L. V. Redman, vice-president and director of research of the Bakelite Corporation, who succeeds Professor Moses Gomberg, of the University of Michigan, on January 1.

DR. IRVING LANGMUIR, of the General Electric Company at Schenectady, a former president of the American Chemical Society, was elected to honorary membership in the Chemists' Club, New York, at a meeting of its members on November 11.

THE John Scott Medals of the City of Philadelphia, for inventions in science and industry that "may add to the comfort, welfare and happiness of mankind," were presented at the recent annual meeting of the American Society of Mechanical Engineers in New York City. The recipients were Albert Kingsbury, of Greenwich, Connecticut, "for the invention of a thrust bearing for use in ships and heavy machinery"; Albert H. Emery, Jr., of Stamford, Connecticut, "for the invention of the Southwark-Emery testing machine, a mechanical device for testing materials"; and Willis H. Carrier, of Newark, New Jersey, "for the invention of a process and apparatus for cleaning, purifying, and humidifying the air." At the same meeting of the American Society of Mechanical Engineers Mr. Kingsbury received the society's gold medal, for research work and development in lubrication.

THE employees of the Abbott Laboratories, North Chicago, Illinois, have presented an oil portrait of himself to Alfred S. Burdick, celebrating his tenth anniversary as president of the company. Resolutions signed by the 750 employees of the company were also presented to Dr. Burdick, voicing their affection and appreciation of his leadership in the ten best years of the company's history.

THE *Journal* of the American Medical Association reports that in memory of Professor Arkovy, professor of stomatology in Budapest, the Hungarian Society of Stomatology has created a gold medal to be awarded every three years, by an international committee, to the stomatologist adjudged the most eminent. The first award of the medal has been to Dr. Chompret, stomatologist to Paris hospitals, who will retire at the end of this year from active service. He was the founder and has remained the director of the principal dental school of Paris.

THE Mackenzie-Davidson Medal of the British Institute of Radiology and Röntgen Society was presented on the occasion of the annual dinner on December 4 to Professor Hans Holfelder, of the University of Frankfurt.

AT the forty-ninth meeting of the American Ornithologists Union, Joseph Grinnell, of the University of California department of zoology, was reelected to the presidency. Other officers are: A. C. Bent, Taunton, Massachusetts, and J. H. Fleming, Toronto, *vice-presidents;* T. S. Palmer, Washington, D. C., *secretary;* W. L. McAtee, Washington, D. C., *treasurer.* Additional members of the council are James P. Chapman, Ruthven Deane, H. C. Oberholser, J. L. Peters, C. W. Richmond, T. S. Roberts and P. A. Taverner.

AT the forty-second annual meeting of the Association of American Medical Colleges, held in New Orleans on November 30, December 1 and 2, the following officers were elected for the ensuing year: *President,* Dr. Louis B. Wilson, director of the Mayo Foundation of the Graduate School of the University of Minnesota; *Vice-president,* Dr. H. G. Weiskotten, dean of the Syracuse University School of Medicine; *Secretary-treasurer,* Dr. Fred C. Zapffe, 25 East Washington Street, Chicago (reelected); *Members of the Executive Council,* Drs. C. C. Bass, Tulane University, and G. Canby Robinson, Cornell University. The next annual meeting will be held in Philadelphia, probably during the first week in November, 1932.

THE American Pharmaceutical Association has announced as the result of the mail ballot for officers of the association, the election of the following: *President,* W. Bruce Philip, San Francisco, California, now of Washington, D. C.; *First Vice-president,* Rowland Jones, Gettysburg, South Dakota; *Second Vice-president,* G. H. Frommet, Miami, Florida; *Members of the Council* (for three years), J. H. Beal, Camp Walton, Fla.; C. H. LaWall, Philadelphia, Pa; C. E. Caspari, St. Louis, Mo. These officers will be installed at the next annual meeting which will be held in Toronto, from August 22 to 27, 1932. This meeting will be a joint meeting with the Canadian Pharmaceutical Association.

DR. EDWIN O. JORDAN, professor of bacteriology at the University of Chicago, was elected president of the Institute of Medicine of Chicago at its annual meeting on December 1, to succeed Dr. Otto L. Schmidt. Dr. Arthur R. Elliott was elected vice-president, and Dr. George H. Coleman was reelected secretary; Dr. John Favill is treasurer and Dr. Ludvig Hektoen, chairman of the board of governors. Dr. Schmidt's presidential address was entitled "The Rôle of Medical and Hygienic Museums in Education."

THE New York section of the American Chemical Society has chosen Dr. Walter S. Landis, vice-president of the American Cyanamid Company, as its chairman for 1932, succeeding Professor Arthur E. Hill, of New York University. Professor V. K. LaMer, of Columbia University, was named vice-chairman, and Dr. David P. Morgan, Jr., of Scudder, Stevens & Clark, secretary and treasurer. Dr. J. G. Davidson, of the Carbide and Carbon Chemicals Corporation, was named to the executive committee, other members of which are Mr. J. G. Detwiler, Professor Arthur E. Hill and J. M. Weiss.

DR. HUGO ROESLER, formerly of the University of Vienna, Austria, has been appointed assistant professor of radiology at Temple University School of Medicine, Philadelphia.

DR. JAY ARTHUR MYERS has been promoted from associate professor to professor of preventive medicine at the University of Minnesota School of Medicine.

DR. DENK, who was recently appointed professor of surgery at the University of Vienna as the successor of Professor Hochenegg, took as the subject of his inaugural address "Modern Methods of Combating Cancer."

CHARLES MILTON, Ph.D. (Johns Hopkins, '29), has been appointed geochemist and Kenneth D. Lohman, A.M. (California Institute, '30), assistant geologist in the U. S. Geological Survey.

PROFESSOR GEORGE W. PIERCE, director of the Cruft Memorial Laboratory at Harvard University, and Professor Alfred C. Lane, of Tufts College, are conducting in the Harvard physics laboratory a series of investigations to determine whether or not samples of uraninite ore mined in the Wilberforce Area, Ontario, Can., contain a sufficient amount of radium to make the ore commercially workable.

DR. E. G. CONKLIN, professor of zoology, Princeton University, delivered an address on "Fitness and Pur-

pose in the Living World" before the Washington Academy of Sciences on December 9.

DR. WALTER S. ADAMS, director of the Mount Wilson Observatory, lectured at Mount Holyoke College on December 8. His subject was "The Stars and their Motions."

DR. HERBERT M. EVANS, of the department of anatomy of the University of California, delivered a lecture on "The Functions of the Anterior Hypophysis" before an open meeting of Sigma Xi at Stanford University on December 3.

DR. E. O. ULRICH, of the U. S. Geological Survey, gave a series of seven lectures on "Eopaleozoic Stratigraphy and Faunas" from December 7 to 14 in New York City. The lectures were sponsored by Columbia University and the New York Academy of Sciences.

DR. JOHN RATHBONE OLIVER, associate professor in the history of medicine in the Johns Hopkins University, delivered on December 14 and 15 two lectures at the Duke University School of Medicine and Hospital on "Medicine from a Historical Standpoint" and on "Greek Medicine and its Development." Dr. J. W. Mayo addressed the staff and students on December 12 on "Endocrinology."

PROFESSOR ARTHUR H. COMPTON, of the University of Chicago, lectured before the Physics Club of Chicago on "Cosmic Rays and Atomic Nuclei" on December 10. This club, which was organized in Chicago last year, now has nearly two hundred members. The officers are: *President,* Dean H. G. Gale; *Vice-president,* Professor Arthur H. Compton; *Secretary,* Burke Smith; *Treasurer,* Dr. Paul E. Klopsteg.

THE seventh American Scientific Congress, which planned to meet in Mexico City in February, 1932, has been postponed to November, 1933.

THE forty-ninth annual meeting of the American Society of Naturalists will be held on December 31 in conjunction with the meetings of the American Association for the Advancement of Science and the associated societies at New Orleans, under the presidency of Dr. S. J. Holmes, professor of zoology in the University of California. In the afternoon there will be a joint session with the Botanical Society of America and the American Society of Zoologists which will be a symposium on "The Biology of Sex." Dr. C. E. Allen, of the University of Wisconsin, will speak on "Sex-inheritance and Sex-determination"; Dr. Emil Witschi, of the University of Iowa, on "The Physiology of Embryonic-Sex-Differentiation," and Dr. H. J. Muller, of the University of Texas, on "Some Genetic Aspects of Sex." The regular annual dinner will be held on December 31 at 7:00 P. M. in the Roosevelt Hotel. It will be followed by the president's address, which will be on "The Changing Biological Effects of Interracial Competition." On December 29 at 8:30 P. M. a biologists' smoker has been arranged by the local committee under the general auspices of the society. All biologists are invited to attend.

FREE public lectures on medical subjects will be given on Sunday afternoons during January, February and March at the Harvard Medical School as follows: January 3—Dr. Philip Bard, "Modern Conceptions of the Brain at Work"; January 10—Dr. R. B. Greenough, "Cancer"; January 17—Dr. C. M. Jones, "Dietary Habits in Relation to Indigestion"; January 24—Dr. M. I. Gregersen, "The Rôle of Water in the Body"; January 31—Dr. H. L. Blumgart, "Pneumonia"; February 7—Dr. R. G. Hoskins, "The Glands of Internal Secretion"; February 14—Dr. T. M. Carpenter, "Alcohol"; February 21—Dr. G. W. Holmes, "What the X-ray Can and Can Not Do"; February 28—Dr. T. D. Jones, "Rheumatic Heart Disease in Children and Adults"; March 6—Dr. L. M. S. Miner, "The White House Conference and Oral Hygiene"; March 13—Dr. F. M. Rackemann, "Asthma, Hay Fever and Allied Conditions"; March 20—Dr. M. N. Smith-Petersen, "Back Ache, Lumbago and Sacro-iliac Troubles."

THE *Journal* of the American Medical Association reports that the second International Congress of Comparative Pathology was held from October 14 to 18 at the Paris School of Medicine. The first congress was held in 1912. The war and various other circumstances intervened to prevent until this year the holding of a second congress. The president of the republic and Mr. Landry, minister of labor, were in attendance. An original idea, carried out by the society that organized the congress, is that its membership consists of physicians, veterinarians and botanists, so as to afford an opportunity to study pathologic problems simultaneously in man, animals and plants. The congress was attended by many foreign scientists, among others, from the United States, Drs. J. R. Mohler, George W. McCoy, Milton J. Rosenau, M. B. Waite, R. L. Jones and V. A. Moore. The topics on the program were: (1) tuberculosis and vaccination, (2) brucellosis in man and in animals, (3) milk and pathogenic agents, (4) mineral deficiencies, (5) ultraviruses and (6) helminthiases.

ACCORDING to *Nature* the annual Congress of the Royal Institute of Public Health will be held in Belfast from May 10 to 15, 1932, under the presidency of the Marquess of Londonderry, chancellor of the Queen's University of Belfast. The inaugural meeting will be held on the morning of May 10, and the scientific work of the congress will be conducted in

the following sections: Section 1, State Medicine and Municipal Hygiene (including Port Sanitation); Section 2, Industrial Hygiene; Section 3, Women and Children and the Public Health; Section 4, Tuberculosis; Section 5, Pathology, Bacteriology and Biochemistry.

WE learn from the London *Times* that the opening ceremony on November 26 of the new building for the Ramsay Memorial Laboratory of Chemical Engineering, University College, London, was performed by Prince George, who unveiled the Ramsay Memorial Tablet. When the laboratory was instituted in 1923, the old parish vestry hall of St. Pancras in Gordon Street was taken over, modified and equipped for temporary use, and this building is incorporated with the new laboratory in the complete scheme of the tribute to the work achieved by Sir William Ramsay during his tenure of the chair of general and inorganic chemistry at University College from 1887 to 1913. The erection of the new building was made possible by a number of leading chemical and chemical plant manufacturers, who subscribed a capital fund of £26,000 and also guaranteed an annual income of £4,000 for a number of years. The new laboratory has been planned to accommodate fifty students and research workers, and is the first of its kind in this country to be designed and erected specifically for chemical engineering teaching. An important feature is an industrial laboratory for the erection, testing and operation of semi-large scale chemical plant.

THE recent report of the London School of Hygiene states that the school has been admitted as a school of the University of London in the faculties of medicine and science. The board has approved an agreement with the Seamen's Hospital Society whereby members of the medical staff of the Hospital for Tropical Diseases form the new Division of Clinical Tropical Medicine which has been established in the school. A university chair has been established in the School for Medical Industrial Psychology. Research work has continued to increase. The carrying out of much research work has been made possible by grants from such bodies as the Medical Research Council, the Department of Scientific and Industrial Research, the Industrial Health Research Board, the Empire Marketing Board, and various government departments. In the past two years £1,250 has been given to the school by Imperial Chemical Industries for the purchase of special equipment in the Division of Biochemistry.

FORMER GOVERNOR ALFRED E. SMITH laid the corner-stone of the Louis Marshall Memorial, the new Science Building at the New York State College of Forestry, Syracuse University, on December 4, 1931. The Board of Trustees of the College of Forestry, Chancellor Charles W. Flint, of Syracuse University; Commissioner of Education Frank P. Graves, Rabbi Benjamin Friedman and Dean Hugh P. Baker participated in the ceremony. The laying of the corner-stone marked the twentieth anniversary of the college and was symbolic of the rapid growth of the institution, the physical properties of which now embrace three large buildings and approximately 7,000 acres of land.

A $400,000 addition to the present quarters of the New York Academy of Medicine, Fifth Avenue and 103rd Street, made necessary by the increased needs and steady expansion of the organization, has been announced. A gift of $350,000 toward the building by Mr. Edward S. Harkness was announced at the same time. The new structure, to be of six stories, will be built on one of the three adjoining lots on East 103d Street and over the auditorium. When the present building was planned seven years ago, provision was made for additional stories to be built as the need arose, and it is expected eventually to continue the building eastward on the two other lots. Mr. Harkness made his gift on the condition that the academy raise a $400,000 endowment. This has already been done and $11,000 has been raised toward the academy's share of the new addition. The façade of the addition will be of stone for the lower three stories, and brick with stone trimmings and corners for the upper three stories. Additional facilities will now be provided for the library, particularly for the care and study of the books on historical medicine; a seminar room for teaching historical medicine; space for the care of portraits and engravings on medical subjects; a larger committee room and exhibition space.

THE Department of Geology of the University of Vermont will install a two component Milne-Shaw seismograph, to be operated in connection with the new Robert Hull Fleming Museum. A grant for this purpose has been made by the National Research Council, and it is hoped to have the instruments in operation by the fall of 1932. Seismograph stations in the northeastern part of North America are in operation at New Haven, Cambridge, Halifax, Ottawa, Buffalo and New York City. It is believed that the addition to this network of a station at Burlington will be of considerable value.

THE British Museum (Natural History) has given £2,000 to the University of Cambridge for the use of the Scott Polar Research Institute. The sum represents part of the unspent balance of a fund which was subscribed to meet the cost of working on the collections and publishing the scientific results of Captain Scott's "Terra Nova" expedition.

THE contributions from the Boyce Thompson Insti-

tute for Plant Research, Yonkers, New York, dealing with all phases of plant research, which formerly were issued only as reprints from other journals, are now published from the institute only and collected in yearly volumes of not less than five hundred pages. Subscribers will also receive reprints of the professional papers dealing usually with practical applications of the research work. Persons carrying on investigations or teaching along the lines discussed will be placed on a mailing list for notices of publications as issued, and furnished with copies on request. Others may purchase such reprints.

DISCUSSION

GAMBUSIA IN FOREIGN LANDS

IN about 1920, apropos of the successful use of Gambusia for the control of mosquito breeding in the extra cantonment zone of a U. S. Army camp in 1918, the International Red Cross made an appeal through diplomatic channels to the Bureau of Fisheries for broodstocks of this fish for Italy and Spain. The shipment that went forward to Italy was a failure, very probably due to improper care of the fish while en route. However, the fish sent to Spain arrived in fairly good condition. A rapid multiplication appears to have taken place, and within a year or so Italy was able to obtain a broodstock from Spain.

In a paper entitled "Recent Developments in the Control of Malaria"[1] given before the National Malaria Committee (conference on malaria at Louisville, Kentucky, November, 1930) by Dr. L. W. Hackett, of the Rockefeller Foundation, who had been stationed in Italy, collaborating with the Italian National Health Department, stated that the introduction of Gambusia into Italy led to unexpected results. He points out that multiplication was unusually rapid and the density of the Gambusia population in some localities apparently now exceeds that of the most favorable places in our Southern states. Standing water in some sections has become fairly clogged with the fish, so much so that the peasants complain that the cattle refuse to drink the water. To illustrate the density of the fish population, Dr. Hackett says:

> From one lime sink in Istria about an acre in extent we took over four million Gambusia for distribution purposes last year without apparently diminishing the number per unit of area. No horizontal vegetation, however thick, can protect anophelene larvae from the fish, large and small, which constantly patrol every square inch of water surface. In the area of about eight square miles which we have had under observation for five years in Istria, the spleen index in a scattered rural population has gone down from 98 per cent. in 1924 to about 10 per cent. in 1930.

(It may be explained here that malaria causes the spleen to become enlarged and the examination of people, especially school children, for enlarged spleens is a common method of determining the prevalence of malaria in a community.)

In regard to the effectiveness of Gambusia for the control of malaria in the area referred to in the preceding paragraph, Dr. Hackett says:

> Acute epidemic malaria is reduced to sporadic cases, and a tuberculosis preventorium for Viennese children can now be operated throughout the year instead of being closed from June to October. There has been no case of malaria among the 300 children in the last two years. Nothing but Gambusia distribution has been done in this area.

Although Gambusia is very effective in standing water, Dr. Hackett points out that in Italy *Anopheles maculipennis,* an efficient vector of malaria, breeds along the edges of running streams, and for the eradication of this mosquito the fish have not been successful, since Gambusia, as is well known, does not frequent running water.

It is understood that Gambusia has been distributed, from the original introduction into Spain, to nearly all countries of Europe from Germany and Austria southward. The results claimed for Gambusia in southern Europe, and especially in Italy, as an eradicator of mosquito larvae far exceed those secured in this country.

The great value of Gambusia as an eradicator of the aquatic stages of the mosquito was first clearly shown in the wide use made of the fish in the extra cantonement zone of Camp Hancock at Augusta, Georgia, in 1918.[2] Other studies were undertaken after this invesitgation was completed and the results published, and the great value of Gambusia as an agent for the control of mosquitoes and malaria became definitely established. Various prior claims were made for Gambusia and other small fish as eradicators of mosquito larvae, but they were not based on well-founded or extensive evidence. In an effort to secure an enemy of the mosquito which will work every day in the year without cost or care, Gam-

[1] *Journal Southern Medical Association,* xxiv: 5, pp. 426–430, May, 1931.

[2] "Fishes in Relation to Mosquito Control in Ponds," by Samuel F. Hildebrand. U. S. Public Health Reports, May 23, 1919, pp. 1113–1128, 3 double pls., 3 figs. Reprint No. 527. Also Appendix IX, Report, U. S. Commissioner of Fisheries, 1918 (1920), 16 pp. Pls. I–VI, 3 figs. Bureau of Fisheries Document No. 874.