News and Notes

Special AAAS Notices

Hotel headquarters for the Boston Meeting of the AAAS are announced as follows:

General Headquarters: The Statler Hotel will serve as the general headquarters of the Association, housing the meetings of the Council and Executive Committee.

Headquarters of the sections of the Association and of the societies meeting with the Association follow:

Statler Hotel: Section on Medical Sciences (N), Subsections on Dentistry (Nd) and Pharmacy (Np); Academy Conference, American Microscopical Society, American Society of Naturalists, American Society of Parasitologists, American Society of Zoologists, Genetics Society of America, Ecological Society of America, Limnological Society of America, National Association of Science Writers, Sigma Delta Epsilon, Society for the Study of Evolution, Society of the Sigma Xi, United Chapters of the Phi Beta Kappa.

Bradford Hotel: Sections on Anthropology (H), Psychology (I), and Education (Q); American Nature Study Society, National Association of Biology Teachers, National Science Teachers Association, Pi Lambda Theta.

Commander Hotel: Sections on Astronomy (D) and Geology and Geography (E); American Astronomical Society, American Meteorological Society. Meetings of these sections and societies will be held at Harvard University.

Copley Plaza Hotel: Section on Botanical Sciences (G); American Fern Society, American Society for Horticultural Science, American Society of Plant Physiologists, American Society of Plant Taxonomists, Botanical Society of America, Mycological Society of America, Phi Sigma Biological Society, Sullivant Moss Society.

Kenmore Hotel: Sections on Physics (B), Chemistry (C), Social and Economic Sciences (K), History and Philosophy of Science (L), and Engineering (M). Meetings of these sections will be held at the Massachusetts Institute of Technology.

Hotels adjacent to the Bradford are the Avery and Touraine; those adjacent to the Copley Plaza are the Charlesgate, Fensgate, Pioneer (for women), Copley Square, Lenox, and Vendome; those adjacent to the Kenmore are the Puritan, Braemore, Myles Standish, Sheraton, Buckminster, Gardner, and Minerva.

The Lincolnshire, Commonwealth, Bellevue, and Parker House hotels are grouped about the Boston Common and are within convenient walking distance of the Statler and Bradford hotels. The Commander and Continental hotels are adjacent to Harvard University.

Chemistry Section (C). Persons desiring to present general papers on various phases of chemistry at the Boston Meeting of the AAAS are invited to submit abstracts in triplicate to Dr. E. F. Degering, Department of Chemistry, Purdue University, Lafayette, Indiana. Abstracts should not be over 200 words and will not be considered if received after 21 October. Please indicate the approximate delivery time and, if projection equipment is desired, specify the type and size.

About People

E. F. Phillips has retired from the Department of Entomology, College of Agriculture, Cornell University. Dr. Phillips has been professor of apiculture at Cornell since 1924 and in 1935 was president of the American Association of Economic Entomologists.

E. D. Merrill resigned as director of the Arnold Arboretum, Harvard University, on 31 July. He remains at the institution in his capacity of Arnold professor of botany until his retirement in 1948.

Arthur M. Ginzler, for four years chief of the Section of Experimental Pathology, Medical Division, Chemical Warfare Service, has returned to his former position as pathologist and director of laboratories, Sydenham Hospital, New York City.

Jacinto Steinhardt, director of research of the Navy's Operations Evaluation Group, has been awarded the Medal of Freedom for his work with the Seventh Fleet in the Southwest Pacific.

Demorest Davenport, recently relieved from active duty with the Aviation Physiology Program, Army Air Forces, has been appointed assistant professor of zoology, Santa Barbara College, University of California.

T. A. Merrill, formerly associate professor and research associate in horticulture, Michigan State College, has been appointed professor and head of the Department of Horticulture, College of Agriculture, and chairman of the Division of Horticulture, Agricultural Experiment Stations, State College of Washington, Pullman.

William J. K. Harkness, chief of the fish and wildlife division of the province of Ontario and a faculty member of the University of Toronto, received the

degree of Doctor of Science from The Ohio State University on 14 July, in ceremonies at the Franz Theodore Stone Laboratory, Put-in-Bay, Ohio.

Paul P. Weinstein, S. A. sanitarian (R) of the Parasitology Section of the Laboratory Division, Communicable Disease Center, U. S. Public Health Service, was recently assigned to the School of Tropical Medicine, San Juan, Puerto Rico.

John G. Thompson has been appointed chief of the Metallurgy Division at the National Bureau of Standards. Dr. Thompson has been chief of the Bureau's Chemical Metallurgy Section since 1930 and assistant chief of the division which he now heads since 1942.

James T. Jardine, chief of the Office of Experiment Stations, U. S. Department of Agriculture, since 1931, retired on 31 July. He was succeeded by R. W. Trullinger.

Theodore M. Sperry was appointed assistant professor of biology, Kansas State Teachers College, Pittsburg, on 3 June. The appointment followed his release from four and one-half years of service in the Army Air Forces.

Emil Ott and *Eero Erkko,* Hercules Powder Company, left for Europe on 7 August on a two-month tour of chemical plants in England, Sweden, Switzerland, Holland, Belgium, and France. Dr. Ott is director of research of the Company.

B. F. Daubert and *Leo S. Mason* have been promoted to research professor and associate research professor, respectively, in the Department of Chemistry, University of Pittsburgh.

Robert Bryan Payne, formerly instructor in psychology, Indiana University, Indianapolis Division, has joined the Research Staff, Department of Aviation Psychology, Randolph Field, Texas. He has been associated with the Aviation Psychology Program of the Army Air Forces for the past four and one-half years.

Charles O. Warren, assistant professor of physiology and anatomy, Cornell University Medical College since 1942, joined the staff of the Commonwealth Fund on 1 August as medical associate.

Lincoln C. Pettit, formerly assistant professor, Washington and Lee University, and after the war a member of the teaching and administrative staffs at Biarritz American University, France, has been released from active duty as a lieutenant colonel in the Army and has been appointed assistant professor of biology at St. Lawrence University, Canton, New York.

Sidney Paige, senior engineering geologist, and since 1935 in the North Atlantic Division, Army Engineers, has been named visiting professor of engineering geology at Columbia University.

Rudolf J. Noer has been made professor of applied anatomy, Wayne University College of Medicine, while retaining his position as associate professor of surgery.

Thomas B. Douglas, formerly on the Manhattan Project, has been appointed assistant professor of chemistry, Western Reserve University.

John A. Russell has been appointed assistant professor and head of the Department of Astronomy, University of Southern California. The appointment became effective on 1 September.

Hugo Osvald, professor of plant husbandry at the College of Agriculture, Uppsala, Sweden, and secretary of the Executive Committee of the Seventh International Botanical Congress, has been visiting the United States. On 20 July he was the guest of the American officers of the Botanical Section of the International Union of Biological Sciences, at Harvard University, with whom he discussed plans for the next Congress, to be held in Stockholm in the early summer of 1950. Frans Verdoorn, botanical secretary of the Union, has, at the request of the Executive Committee, undertaken the preparation of a new international plant science register and directory, similar to the early volumes of *Chronica Botanica,* which will be issued about a year before the Congress.

James B. Finn, Jr., associate professor of biology at Mount Mercy College and lecturer in biology at the University of Pittsburgh, has joined the staff of the W. B. Saunders Company, Philadelphia, as an educational representative.

B. J. Kaston, Zoology Department, Syracuse University, has been appointed associate professor of biology at the Teachers College of Connecticut, New Britain.

Eugene Kisch left for South America on 25 July in order to give two lectures on "Bone and Joint Tuberculosis" at the Institute of Tuberculosis, Faculty of Medicine, Montevideo, Uruguay, and one on "Prevention of Tuberculosis" at the Departamento Nacional de Salubridad, Buenos Aires, Argentina. Dr. Kisch also presented two papers on "Postwar Tuberculosis" at the National Academy of Medicine in Rio de Janeiro and São Paulo.

Eugene C. Crittenden, associate director of the National Bureau of Standards, has been made a member of the International Committee on Weights and Measures. The International Committee, consisting

of 16 scientists chosen from the 32 member nations, is engaged in developing scientific standards of measurement and in securing their uniformity throughout the world. The meetings of the Committee, interrupted during the war, are now to be resumed, and the first postwar session will be held at Sevres, France, beginning on 22 October 1946.

Fred D'Amour, professor of zoology at the University of Denver, has recently been appointed director of the University's newly established Bureau of Physical and Biological Research and chairman of the Department of Zoology.

Garvin L. Von Eschen, formerly of the University of Minnesota, has assumed his duties as chairman of The Ohio State University's new Department of Aeronautical Engineering.

C. Ladd Prosser has been released from the Manhattan Project after three years of service at the Metallurgical Laboratory, University of Chicago, and has returned to the Department of Zoology and Physiology, University of Illinois, Urbana.

Maurice M. Shapiro has been appointed senior physicist at the Clinton Laboratories, Oak Ridge, Tennessee. During the war Dr. Shapiro was a group leader at the Los Alamos Laboratory of the University of California and was formerly chairman of the Association of Los Alamos Scientists.

Frederick W. Smither, chemist at the National Bureau of Standards since 1914 and authority on the analysis of soaps and other detergents, retired on 31 August after 39 years of continuous Government service. He has been chief of the Section on Detergents and Miscellaneous Materials for 22 years, and from 1917 to 1924 was chief of the Section on Platinum Metals and Chemical Reagents.

Arthur B. Cleaves has been appointed associate professor of geology in the Department of Geology and Geological Engineering, Washington University, St. Louis.

J. Gordon Carlson has recently resigned his position as associate professor of zoology at the University of Alabama to accept an appointment as senior biologist in the Industrial Hygiene Research Laboratory, National Institute of Health, Bethesda, Maryland, where he will continue his research in the field of radiation cytology.

Walter W. Lewis, transmission engineer at the central station engineering division of the Schenectady General Electric works, has been appointed professor of electrical engineering at Union College.

Howard Bennett Sprague, formerly head of the Agronomy Department, New Jersey Agricultural Experiment Station, and professor of agronomy, Rutgers University, has been appointed head of the Agricultural Research Division, Texas State Research Foundation, Dallas. Dr. Sprague will assume his new duties on 1 January 1947, upon his release from active duty as a major in the Army Air Forces.

Lindsay S. Olive has been appointed associate professor in the Department of Botany, Bacteriology, and Plant Pathology, Louisiana State University, Baton Rouge.

B. S. Pickett became professor of horticulture at the University of Georgia on 1 September. For the past eight years he has been associated with the Experiment Stations of Texas.

J. A. Shellenberger has just returned to his duties as head of the Department of Milling Industry, Kansas State College, Manhattan, after serving for several months as a consultant to the Institute of Inter-American Affairs on an assignment to the Republic of Peru.

Announcements

The "Electropult," an electric catapult, may soon be capable of launching the Nation's largest airliner after a take-off run of only 500 feet, according to Westinghouse engineers. The Electropult, which was originally designed for the Navy during the war for the purpose of reducing the length of runway required for take-off on small Pacific islands, has been described as an electric motor, turned inside out and rolled flat. The device consists essentially of a turtle-like shuttle car, 5 inches high, to tow the plane to be launched, riding on a 1,380-foot track mounted flush with the ground and containing more than 300,000 sheets of electrical steel and nearly 17,000 high-resistance metal bars in its core. The power, which is supplied from a plant housed in a sunken concrete chamber beside the track, is thus delivered in a straight line instead of in the rotating pattern of the usual motor. At recent tests at the Naval Air Test Center, Patuxent River, Maryland, the car built up a speed of 226 miles an hour in slightly less than 500 feet, while running without a load. Possible applications of the Electropult in the commercial aviation field are: on floating airports for refueling purposes; on barge-type airports for cities with suitable harbors; on mid-city airports, in which slum elimination projects may be combined with airport development; and for rearrangement of outgrown or overgrown airports.

Scientific and technical personnel, peculiarly qualified to work on research and development projects by reason of their education and experience, will be assigned in the Army by a newly established War De-

partment technical detachment. Personnel directed by the technical detachment will be classified as critically needed specialists and will be assigned only to such duties as will make effective utilization of their educational and professional backgrounds. On completion of each project, such persons will report back to the Director of Research and Development, War Department General Staff, for release or reassignment.

The policies for the operation of this detachment will be established by a committee composed of representatives of the following: Director of Personnel and Administration, WDGS; Director of Research and Development, WDGS; Commanding General, AAF; Commanding General, Army Ground Forces; and The Adjutant General, acting for the technical services. This committee will examine the qualifications of all personnel suggested for this work and make recommendations for assignment to the technical detachment.

Columbia University has received the Naval Ordnance Development Award for its wartime research and development of torpedoes and gun sights, according to Frank D. Fackenthal, acting president of Columbia. In addition to the award, certificates were also presented to the University's Special Studies and Applied Mathematics Groups for work on the Torpedo Mark 25 and on Gunsights Mark 18 and Mark 23, respectively.

Field work in a comprehensive study of cosmic rays at various altitudes has been completed jointly by the National Geographic Society, U. S. Army Air Forces, and the Bartol Research Foundation of the Franklin Institute (see *Science,* 1946, **103**, 81). The investigations, made in a B-29 bomber equipped as a laboratory, involved round-trip flights ranging between Latitude 50° North, in southern Canada, and Latitude 20° South, off the coast of northern Chile, near the magnetic equator.

The plane arrived in Washington, D. C., on 12 August, after having made five round trips over its 4,800-mile course. Two of the round-trip flights were at an altitude of 5,000 feet, and three others were at 15,000, 25,000, and 35,000 feet. The complete records of the flights are now under study at the Bartol Research Foundation. In the joint project, the National Geographic Society is represented by Lyman J. Briggs, chairman of its Research Committee; the Army Air Forces, by Maj. Gen. Curtis E. Le May, deputy chief of air staff in charge of research and development; and the Bartol Research Foundation, by its director, W. F. G. Swann.

The principal apparatus in the airplane consisted of multiple banks of Geiger counters occupying a space six feet by two feet. Counters were arranged in vertical banks of three in order to register only particles moving vertically downward. A shield of lead six inches thick, immediately above the counters, screened out all rays and particles with lesser energies than protons and mesotrons. The passage of each ray through a unit of three counters was recorded as a dot on a moving strip of sensitized paper, so that the greater the cosmic ray intensity, the more numerous the recorded dots.

The only previous studies of cosmic ray intensity covering such a great range of latitude were made at sea level, notably those of A. H. Compton and R. N. Turner, and J. Clay.

The U. S. Department of Agriculture, in order to fulfill its exchange agreements during World War II, held in storage its new bulletins and issues of periodicals intended for countries outside of the American Hemisphere. The material was placed in addressed envelopes and kept in shipping boxes that held, on an average, about 850 publications in envelopes. Shipment was started in January of this year, and in six months 219 boxes were forwarded to 34 countries. Still held in September were 86 boxes for 9 countries. The largest number of boxes, almost double the number for any other country, was accumulated for Japan.

The Laboratory of Vertebrate Biology, University of Michigan, announces the following appointments and changes in staff: L. C. Stuart has been transferred from the Museum of Zoology and placed on a full-time basis in the Laboratory as assistant biologist; C. W. Cotterman has been promoted to assistant geneticist, with the rank of assistant professor of zoology; William Hovanitz has been appointed assistant biologist, with the rank of assistant professor of botany and research associate in the Botanical Gardens; James V. Neel, formerly in charge of the Heredity Clinic, was granted a leave of absence on 1 August for service in the Medical Corps; Harold F. Falls, Ralph Hile, and Claude W. Hibbard have accepted appointments as research associates in the Laboratory; and Mary Jane Lagler and Avery R. Test, as collaborators.

The Ninth Annual Louis Gross Memorial Lecture will be delivered by Roy R. Grinker, director of the Institute for Psychosomatic and Psychiatric Research and Training, Michael Reese Hospital, Chicago. The address, on "Psychiatric Objectives of Our Time," will be given at 8:30 P.M. on 23 October at the Jewish General Hospital, Montreal, and is under the auspices of the Montreal Clinical Society.

The Northwestern University Chemical Lecture Series opened on 1 October with a lecture by Pierce W. Selwood on "Applications of Magnetochemistry to Catalysis." The general topic for this fall is "Special Techniques in Chemical Research" and is, in a sense,

a continuation of the topic of the 1944 series. The admission fee for the complete series is $20.

The tentative program for the remainder of the series follows: 8 October, "Applications of Ion Exchange to Inorganic and Radiochemical Research": J. A. Swartout, Monsanto Chemical Company; 15 October, "Measurement of Surface Area by Gas Adsorption": Paul H. Emmett, Mellon Institute; 22 October, "Chromatography": D. W. MacCorquodale, Abbott Laboratories; 29 October, "The Application of Radiochemical Techniques to Chemical Research": Nathan Sugarman, Institute for Nuclear Studies; 5 November, "The Study of Surface Chemistry With the Aid of Single Crystals": Allan T. Gwathmey, University of Virginia; 12 November, "Photography of Macromolecules With the Electron Microscope": Ralph W. G. Wyckoff, National Institute of Health; 19 November, "Ultraviolet Spectroscopy in Biochemistry": Irving M. Klotz, Northwestern University; 26 November, "Microbiological Assay": Esmond E. Snell, University of Wisconsin; and 3 December, "Fractional Distillation": M. R. Fenske, Pennsylvania State College.

The National Institute of Health Research Fellowships, which were created in 1945, will be increased in number during 1946 and 1947, according to the U. S. Public Health Service. The fellowships are awarded to individuals who have had postgraduate work in institutions of recognized standing in the various fields of science allied to public health, such as biology, chemistry, physics, entomology, medicine, dentistry, and veterinary medicine. Recipients will be offered an opportunity for study and research in association with highly trained specialists in the candidates' chosen fields at the Institute or some other institution of higher learning.

Junior research fellowships are available to persons holding Master's degrees or to those who have completed an equivalent number of hours of postgraduate study. The stipend is $2,400 per annum. Senior research fellowships, carrying a stipend of $3,000 per annum, are available to those holding doctorates.

Applications for these fellowships may be made at any time during the year, are acted upon promptly, and are effective for one year from the time of the award with the possibility of renewal for a second year. Letters of inquiry should be addressed to the Director, National Institute of Health, Bethesda 14, Maryland.

The Department of Economic Entomology, University of Wisconsin, has announced the following new appointments to its staff: T. C. Allen, professor and chairman; Floyd Andre, professor and assistant director of the Experiment Station; John T. Medler, Robert J. Dicke, Roy D. Shenefelt, and E. H. Fisher, assistant professors; and R. K. Chapman, instructor. Those associated with the Department with no change in status include: C. L. Fluke, H. F. Wilson, and C. L. Farrar, professors; J. H. Lilly, associate professor; and William C. Roberts, instructor.

A one-week course in X-ray diffraction and spectrometry, conducted by North American Philips Company, Inc., in its New York showroom during the week of 16 September, was attended by about 50 technologists. Morning lectures were given by I. Fankuchen, Brooklyn Polytechnic Institute; Herbert Friedman, Naval Research Laboratory; M. H. Jellinek, M. W. Kellogg Company; and Drs. Parrish and Nielsen, of Philips Laboratories, Inc. Afternoons were devoted to laboratory work.

The Department of Mathematics, Princeton University, has announced the appointment of Emil Artin, of Indiana University, as professor of mathematics, and the promotion of Salomon Bochner, Claude Chevalley, and A. W. Tucker to full professorships.

The American Academy of Applied Nutrition began its eleventh year with a meeting in Hollywood, California, on 1 October. N. Philip Norman presented a paper on "What Are We Doing to Solve Our Nutritional Problem?" which was later discussed by Drs. Pottenger, Hawkins, Shriber, and Royal Lee.

The School of Medicine, Washington University, St. Louis, has received a grant of $270,000 from the U. S. Public Health Service for support of research on hypertension. The grant is effective over a five-year period, $70,000 to be spent the first year and $50,000 each year thereafter. The work will be under the direction of Harry Schroeder, who has been active in the study of hypertension, having described an enzyme in the kidney which affects blood pressure. Palmer Futcher, recently appointed assistant professor in charge of the Metabolism Division of the Department of Medicine, will take an active part in the hypertension research while also engaged in a study of electrolyte metabolism in cardiac failure under a grant from the U. S. Navy.

The Department of Geography, Syracuse University, has announced the appointment of four new staff members: Hibberd V. B. Kline, Jr., and John C. Duvall are to teach in the Department at the University, while Joseph Van Riper and Sidley K. Macfarlane have been appointed for the new extension colleges at Endicott and Utica, respectively.

A new graduate Division of Applied Mathematics has been organized at Brown University as an interdepartmental project of the Departments of Mathe-

matics and Physics and the Division of Engineering to meet the needs of schools and research laboratories for engineers, physicists, and mathematicians whose training extends beyond the accepted boundaries of their respective fields. The following professors have been appointed to the new Division: William Prager (chairman), applied mechanics; John Henry Marchant (director of research), engineering; Maurice Anthony Biot, applied physical sciences; George Frances Carrier, engineering; James Arthur Krumhansl, physics; Chia Chiao Lin, applied mathematics; and Rohn Truell, physics.

Students are admitted who have excellent undergraduate records in two of the following subjects: engineering, physics, and mathematics. Training in research is stressed for the advanced students. Fellowship funds have been provided by the Rockefeller Foundation.

The Department of Psychology, Washington University, St. Louis, has announced the following changes in its staff: M. E. Bunch, promoted to professor of psychology; Phillip H. DuBois, formerly of the University of New Mexico, appointed as professor of psychology and placed in charge of the testing program of the University; and Karl D. Kryter, formerly of the Psycho-Acoustic Laboratory, Harvard University, appointed as assistant professor. J. P. Nafe is head of the Department.

The Humble Lectures in Science, to be given at its Baytown Refinery, have been inaugurated this year as an annual program by the Humble Oil and Refining Company, Houston, Texas, for the purpose of keeping its technical personnel aware of the latest developments in science and engineering. Outstanding scientists will be invited each year to present topics in their fields of special study and research. The program for 1946–47 includes the following series of lectures: "High Polymers": C. C. Price, University of Notre Dame; "Transference of Processes From Small to Large Scale": E. R. Gilliland, Massachusetts Institute of Technology; "Special Topics in Hydrocarbon Chemistry": D. R. C. Fuson, University of Illinois; and "Spectra as Related to Structure and Thermodynamic Properties of Molecules": K. S. Pitzer, University of California. Each series of lectures will be given for a period of one to two weeks and the personnel selected to attend will devote full time to them.

Opportunities will also be provided for graduate-level courses in physical chemistry, organic chemistry, and chemical engineering, which will be given by scientists from neighboring institutions, such as Rice Institute and the University of Texas. Attendance of individuals selected for these courses will be part of their regular duties.

Meetings

The Electron Microscope Society of America and *The American Society for X-Ray and Electron Diffraction* will hold a joint winter meeting on 5–7 December at the Mellon Institute of Industrial Research and the University of Pittsburgh, Pittsburgh. Joint dinners have been planned for 5 and 6 December, and joint sessions of the two Societies will be arranged if the programs permit. Those wishing to attend the dinners should make reservations with Dr. Max Lauffer, University of Pittsburgh.

It is suggested that all members of the Societies and visitors who plan to attend the meetings arrange for hotel accommodations as early as possible. Information concerning the meetings may be obtained by writing to Dr. S. S. Sidhu, local chairman of the ASXRED, University of Pittsburgh, or to Dr. Earl A. Gulbransen, local chairman of the EMSA, Westinghouse Research Laboratories, East Pittsburgh, Pennsylvania.

The Association for Research in Nervous and Mental Disease and *The International League Against Epilepsy* will meet jointly on 13–14 December at the Waldorf Astoria Hotel in New York City. The subject for discussion will be "Epilepsy." Information about the meeting may be obtained from Thomas E. Bamford, Jr., Secretary, Association for Research in Nervous and Mental Disease, 115 East 82nd Street, New York 28, New York.

Elections

The Royal Society (London) has elected the following men as foreign members: Herbert Spencer Gasser, director of the Rockefeller Institute for Medical Research, New York; Frédéric Joliot, head of the National Center of Scientific Research, Paris; Theodor von Kármán, professor of aeronautics and director of the Guggenheim Aeronautics Laboratory, California Institute of Technology, Pasadena; and Erik Andersson Stensio, professor in the University of Uppsala and director of the Riks Museum, Stockholm.—*John D. Griffith Davies, Assistant Secretary* (The Royal Society).

The Royal Swedish Academy of Sciences elected H. J. Muller, Indiana University, to Foreign Membership at a meeting held on 22 May.

The Society for the Study of Development and Growth elected the following officers for the coming year at its sixth symposium, held at Rhode Island State College, Kingston, on 27–30 August: Ross Harrison, Yale University, president; George S. Avery, Brooklyn Botanical Garden, secretary; Francis O. Schmitt, Massachusetts Institute of Technology,

treasurer. Ross Harrison, and J. W. Marvin, University of Vermont, were elected to the Executive Committee.

Recent Deaths

William Shand, Jr., 27, instructor in chemistry at the University of California, Berkeley, was instantly killed in an automobile accident in Elko, Nevada, on 11 August.

Clarence J. Addis, Jr., 24, fellow in biology at Rice Institute, Houston, Texas, until he received his Ph.D. degree in parasitology in 1945, died on 4 July as the result of a brain tumor.

Sir James Jeans died on 17 September at his home in Surrey at 69 years of age. From 1905 to 1910 he was professor of applied mathematics at Princeton University. Upon returning to Cambridge he lectured in mathematics for a short time and later became secretary of the Royal Society for the decade 1919–29 and professor of astronomy at the Royal Institution. He was best known, however, for his popular books, of which *The mysterious universe* (1930) caused the most comment in the United States.

A Society for All Biologists

Many biologists believe that there is need for an organization for biologists comparable to the American Chemical Society, the National Society of Professional Engineers, the American Medical Association, the Institute of Physics, etc., in which the welfare of the individual members and the advancement of the profession are equal in importance to the dissemination of knowledge. During 1945 a group of biologists in Atlanta, Georgia, organized the American Society of Professional Biologists in an effort to meet this need. For the past year it has been promoted through personal correspondence, personal contact, and public presentation to several large groups of biologists assembled at national meetings of established scientific societies. The reception of the organization has been most encouraging, and formal establishment of the Society is progressing rapidly. In order to acquaint biologists with the proposed American Society of Professional Biologists, a brief summary is presented.

Biology, probably more than any other science, has branches or fields that attract thousands of people to them as hobbies. Therefore, among the essentials for the establishment of a professional group are (1) that the individual members be engaged in biology as a profession, and (2) that the individuals must have had sufficient training or experience in the field to be recognized as "qualified biologists." Three sets of qualifications for membership have been proposed:

Group I—a Ph.D. in a specialized field of biology with at least 8 years of training or experience;

Group II—a M.S. in a specialized field of biology with at least 9 years of training or experience;

Group III—a B.S. in biology, at least 10 years of training or experience, and the satisfactory passing of an examination in the field of specialization chosen by the candidate.

(Academic years would be 9 months each, "years of experience" would be 12 months each, and both would have to be obtained after completion of high school.) There would be the usual "grandfathers' clause" for those who have already established themselves in the field. Junior or associate membership would be open to those preparing to meet the requirements for full membership.

The objects of the Society would be to advance the public welfare through the activity of biologists; to promote the professional, social, and economic welfare of all professional biological scientists; to obtain public recognition of biological scientists as professional men and women; to establish and have recognized a Code of Ethics for biologists; to encourage the interest and participation of professional biological scientists in scientific, educational, and public affairs; to aid in the improvement of the training received by biological scientists; and to encourage cooperation in all matters of mutual interest to scientific societies whose membership is composed predominantly of professional biological scientists.

One of the problems confronting biologists today is the question of "licensing, certification, or registration," which is admittedly an important and delicate one and one that would soon have to be faced by the Society. In consideration of such programs, it must be borne in mind that several states are already taking action in that field, and the question may soon be: "Shall we, as biologists, prepare the standards and requirements that are to be used by these states, or shall we allow others to set those standards for us?" It is a subject in the consideration of which the science as a whole must take precedence over individual beliefs and pet ideas and about which much discussion must take place.

The following facts concerning the proposed American Society of Professional Biologists (American Society of Professional Biological Scientists has been suggested as a more appropriate name) should be emphasized:

(1) It is the only biological society to the knowledge of the organizing committee that requires high qualifications in training and experience for membership and in which the individual is of equal importance to the scientific program promoted.

(2) Its purposes do not conflict with any of the existing societies.

(3) It is so organized that it can readily cooperate with the existing societies to the benefit of all, and all branches of the biological sciences, *pure* and *applied,* are of equal importance.

(4) Once established, it presents a common meeting ground and clearing house for all qualified biologists through which the development of the science and the welfare of the individual may be advanced.—*Norman C. Laffer,* temporary chairman (University of Maryland).

In the Laboratory

A Collapsible Metal Stirrer

J. David Reid and Edmund M. Buras, Jr.
Southern Regional Research Laboratory
New Orleans, Louisiana

A collapsible stainless steel stirrer, designed in this Laboratory, has been found satisfactory for vigorous and turbulent stirring in narrow-necked flasks. It may be used with either a mercury seal, a stuffing box, or a pressure-tight bearing which can be made conveniently by reaming a hole slightly larger than the shaft in a 2-inch length of stainless steel rod and lubricating well during use.

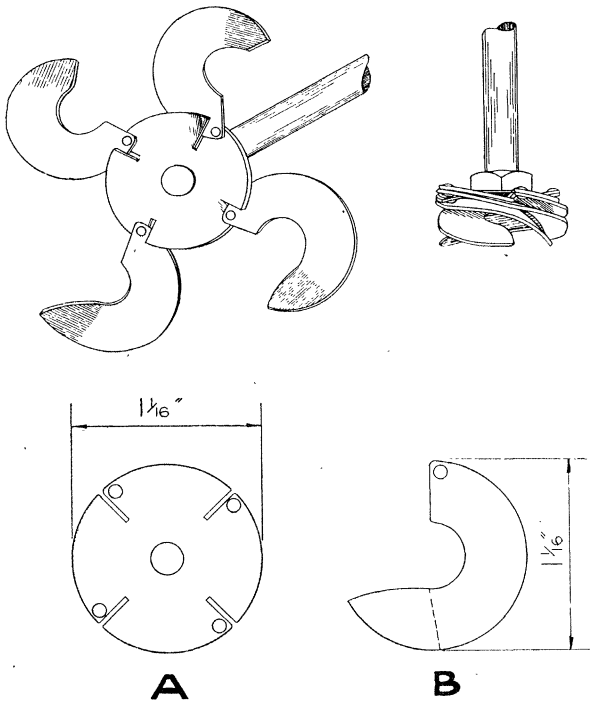

Fig. 1

This stirring device, shown in Fig. 1 in closed and open positions, is designed for insertion through a 34/45 standard taper joint. Five discs, 1 1/16 inch in diameter, were cut from a 16-gauge stainless steel sheet. A 7/32-inch hole was drilled in the center of one of these discs. Four rivet holes were then drilled and four 1/4-inch slots were cut in the periphery (Fig. 1, A). A 5/16-inch hole was bored in the center of each of the other four pieces, which were then cut to vane shape, and rivet holes were drilled (Fig. 1, B). Part of each vane was bent from the vertical plane at an angle of 30° at the point indicated by a dotted line (Fig. 1, B). (It is easier to drill or punch the center holes before cutting the discs from the original sheet.) The design shown is for a stirrer rotating counterclockwise and must be reversed for a motor rotating in the opposite direction.

A 1/4-inch stainless steel rod of appropriate length is then threaded, and on the upper side is screwed a stainless steel nut which, although not strictly necessary, serves to increase rigidity. Piece A is tapped and then screwed on the threaded rod against the nut, and the slight bottom projection is peened over. The quadrants of A are twisted through an angle of 15°. The four vanes are then riveted loosely to the underside of A. It is advantageous to drill rivet holes slightly larger than the rivets, since the latter tend to expand during the riveting operation, particularly if made from stainless steel rod. If the stirrer is properly assembled, each vane, when thrown open by centrifugal force, will rest against the upper side of the quadrant following it. When folded, the stirrer has a diameter no greater than that of A; when open, a diameter of approximately 3 inches.

An alternative design, using half discs instead of three-quarter discs for vanes, is much simpler to construct, requires but three original discs, and, being flatter, extends deeper into round-bottomed flasks—a particularly important consideration with small flasks. With such a stirrer, however, the action obtained is much less turbulent than that obtained with the bent three-quarter vanes.