to the various railroad stations. Hotel facilities are abundant and reasonable in price. The meetings will be held on the new campus of the University of Minnesota. The splendid lecture hall of the Northrup Auditorium will be used for the evening general sessions.

Several prominent scientists have been secured for the addresses at these sessions, but the exact dates are not yet adjusted. The various biological sections and affiliated societies are planning extensive programs with emphasis upon the relations of biological sciences to medicine as naturally associated with the meeting of the Minneapolis State Medical Society at the same time. Similar emphasis is being laid upon the important relations of various fields in pure and applied science to prominent questions of land planning, soil erosion, stream control and utilization, and other features intimately related to Minnesota and the adjacent regions.

In accordance with the general plan which has operated successfully in recent summer meetings, programs are being primarily devoted to symposia, discussions of significant regional problems and joint sessions between sections. The afternoon is left open for field work, round tables, informal conferences and social gatherings. Some unusual opportunities will be given for seeing striking features of the region and for longer trips at the close of the sessions. Members of various sections desirous of presenting papers or participating in discussions will communicate with section secretaries, who will see that requests are properly forwarded. In accordance with previous custom it is not expected that section secretaries should attend and be responsible for programs of two meetings within the year. Unexpected complications prevent the publication at this time of the list of acting secretaries who will serve the various sections for the Minneapolis meeting. Communications may also be sent through the office of the permanent secretary, Smithsonian Institution Building, Washington, D. C.

Railroad rates, while not yet officially announced, will be favorable as usual. Those residing at a distance will probably find summer excursion rates most advantageous. Further announcements on this and other points will appear in later issues of SCIENCE. The preliminary program will be printed as usual the last of May.

HENRY B. WARD, Permanent Secretary

IN COMMEMORATION OF DR. G. CARL HUBER AND DR. DAVID WHITE

IN commemoration of the association with the National Research Council of Dr. G. Carl Huber, of the University of Michigan, and of Dr. David White, of the U. S. Geological Survey, extending over many years, the administrative committee of the council adopted the following resolutions at its meeting in Washington, D. C., on February 16:

WHEREAS, the National Research Council has learned with deep regret of the death of Doctor G. Carl Huber, professor of anatomy, director of the Anatomical Laboratories, and dean of the Graduate School of the University of Michigan, and a member of the faculty of the University since 1887; and

WHEREAS, the National Research Council recalls with full appreciation the high value of the services which Dr. Huber has generously given to the administration of the fellowships of the Medical Fellowship Board of the council; and

WHEREAS, the National Research Council recognizes the many contributions which Dr. Huber has made to medicine and to medical education in the United States, it is

Resolved, that the National Research Council records its high esteem for Dr. Huber and extends its sympathy to the members of his family, and directs that a copy of this resolution be sent to Dr. Huber's family.

WHEREAS, the National Research Council has learned with deep regret of the death of Dr. David White, special scientist in the United States Geological Survey and a member of the survey since 1886; and

WHEREAS, Dr. White has been constantly associated with the National Research Council since 1919, as a member of the Executive Board of the Council and through the council's Division of Geology and Geography in which he served as a member for many years and as chairman of the Division from 1924 to 1927 and as a member of committees of the Division; and

WHEREAS, the National Research Council is greatly indebted to Dr. White for sound advice and unfailing support during these years, it is

Resolved, that the National Research Council places on record its recognition of the especially meritorious services which Dr. White has rendered in carrying out the purposes for which the council was established, in advancing the science of geology, and in stimulating research in other fields of science as well, and that the council extends its sympathy and directs that a copy of this resolution be transmitted to Dr. White's family.

SCIENTIFIC NOTES AND NEWS

THE council of the Royal Society, London, has recommended for election into the society seventeen candidates, as follows: N. K. Adam, research chemist, University College, London; E. N. da C. Andrade, Quain professor of physics, University of London; Sir Frederick G. Banting, professor of medical research, University of Toronto; S. P. Bedson, professor of bacteriology, London Hospital; E. J. Bowen, fellow of University College, University of Oxford; G. E. Briggs, lecturer in plant physiology, University of Cambridge; H. G. Cannon, professor of zoology, University of Manchester; W. E. le Gros Clark, professor of anatomy, University of Oxford; J. S. Foster, professor of physics, McGill University; A. L. Hall, lately assistant director of the Geological Survey of the Union of South Africa; W. H. Hatfield, Brown-Firth Research Laboratory, Sheffield; J. de Graaff Hunter, lately of the Survey of India; B. A. Keen, Rothamsted Experimental Station; R. A. Peters, Whitley professor of biochemistry, University of Oxford; J. Read, professor of chemistry, University of St. Andrews; R. N. Salaman, director of the Potato Virus Research Station, Cambridge, and R. Stoneley, lecturer in mathematics, University of Cambridge.

WE learn from *Nature* that the following have recently been elected foreign members of the Royal Academy of Sciences, Stockholm: Dr. Robert Robinson, professor of chemistry in the University of Oxford; Dr. Frank D. Adams, emeritus Logan professor of geology in McGill University; Dr. Ejnar Hertzsprung, professor of astrophysics in the University of Leyden, Holland; and Dr. A. V. Hill, Foulerton research professor of the Royal Society, formerly Jodrell professor of physiology in University College, London.

THE George W. Carpenter Prize of the Academy of Natural Sciences of Philadelphia, awarded each year for the best piece of original scientific research, was presented at the annual meeting to Dr. Henry A. Pilsbry, curator of mollusca. In addition to a cash prize, the award carries with it the publication of the research work of the recipient, which in this case will consist of a study of land mollusca of North America.

BRONZE medals and citations were conferred by Rutgers University on March 1 on Dr. Walter T. Marvin, dean of the College of Arts and Sciences, "for able and devoted service" and on Dr. Thomas J. Headlee, professor of entomology and entomologist at the New Jersey Agricultural Experiment Station, "as a valued servant of the university and the state."

THE award of the Charles A. Coffin Foundation, the highest honor which the General Electric Company can bestow upon an employee, was made on March 1 to August Kayser, a tool designer at the company's plant at Fort Wayne, who has been with the company forty-four years. The award was given to Mr. Kayser for ingenuity in designing, building and making improvements in special automatic machines.

HARVARD UNIVERSITY has announced the following changes: The resignation of Dr. Alice Hamilton, assistant professor of industrial medicine at the Harvard Medical School since 1919, to take effect on September 1; the promotion of Dr. Joseph Leonard Walsh to a professorship of mathematics, and the election of Hassler Whitney to an assistant professorship of mathematics and of John Gilbert Beebe-Center to a lectureship in psychology.

DR. LILLIAN MOLLER GILBRETH, consulting engineer, has been appointed professor of management at Purdue University, the appointment to become effective next September.

Dr. ARTUR HAAS, professor of physics at the University of Vienna, has been invited to serve as visiting professor of physics next year at the Drexel Institute of Philadelphia. He delivered a lecture at the institute on February 26.

THE Natural History Museum of San Diego, California, has announced the addition to its staff on February 1 of Adriaan J. van Rossem, formerly research fellow in the department of vertebrate zoology at the California Institute of Technology.

F. A. SILCOX, chief forester, has announced the following reassignments in the research organization of the Forest Service of the U.S. Department of Agriculture: C. L. Forsling, director of the Intermountain Forest and Range Experiment Station at Ogden, Utah, will become director of the Appalachian Forest Experiment Station, with headquarters at Asheville, N. C.; E. H. Frothingham, who has served as director of the Appalachian Station since its organization in 1920, has, at his own request, been relieved of the directorship so that he may concentrate his efforts on silvicultural research; Dr. Reed W. Bailey, associate professor of geology at Utah State Agricultural College, who for the past year has been serving as conservationist at the Intermountain Station while on leave from the college, will become director of the station, with headquarters at Ogden.

L. J. GRAHAM and F. E. James, of the department of agricultural and biological chemistry, Pennsylvania State College, have accepted research positions with the G. W. Carnrick Company, of Newark, N. J., and the Ralston Purina Company, of St. Louis, Mo., respectively.

GEORGE H. FANCHER has resigned as assistant professor of petroleum and natural gas engineering at the Pennsylvania State College to accept a position with the York State Oil Company, of Caney, Kansas.

DR. PAUL C. KITCHEN, assistant professor of histological and clinical dentistry at the Ohio State University, has been named assistant editor of *The Journal of Dental Research*, published by the International Association for Dental Research. He is also secretary of the program committee on research of the American Dental Association.

DR. HAROLD C. UREY, professor of chemistry at Columbia University, Nobel prize laureate for 1934, returned on March 9 from England and Scandinavia.

DR. CARL L. HUBBS, curator of fishes at the museum of zoology and director of the Institute for Fisheries Research of the University of Michigan, and Dr. Henry van der Schalie, assistant curator of the division of mollusks, started during the last week of January on the fourth university expedition into Central America under the auspices of the Carnegie Institution at Washington. They will search for rare species of fish and mollusks in the region near Lake Petin, Guatemala.

DR. ROBERT K. ENDERS, assistant professor of zoology at Swarthmore College, has returned from Panama, where he conducted research on animal behavior and collected several rare specimens of monkeys and sloths. He expects to return to the Barro Colorado Island laboratory of the Institute for Research in Tropical America in the near future for further research.

HENRY FIELD, a member of the staff of the Field Museum of Natural History, Chicago, has invited the Soviet Academy of Science to cooperate in an expedition for anthropological research among the peoples of the Caucasus.

DR. CHARLES A. SHULL, professor of plant physiology at the University of Chicago, will lecture before the Graduate College at the University of Iowa on March 25, on "Radiation and Life." He will also give an address before the botany seminar on "Plant Carotinoids."

ON February 28 and March 1, Dr. William Crocker, managing director of the Boyce Thompson Institute for Plant Research, lectured before the division of biology of the Canadian National Research Council at Ottawa, Canada, on "The Effect of Light and Unsaturated Carbon-Containing Gases on Plants" and on "Delayed or Distributed Germination of Seeds."

DR. ALEXANDER SILVERMAN, head of the department of chemistry in the University of Pittsburgh, addressed the members of the Franklin Institute in Philadelphia on February 7 on "Glass: An Indispensable Factor in Modern Civilization."

DR. ALFRED C. LANE, professor of geology at Tufts College and chairman of the committee on the determination of geologic time of the National Research Council, delivered a lecture at Bryn Mawr College on February 22 on "The Age of the Earth." On February 23 he spoke before the department of geology on "Correlation of the Pre-Cambrian Rocks." DR. ERNEST CARROLL FAUST, professor of parasitology, Tulane University School of Medicine, addressed the Sigma Xi Club of the University of Georgia on January 18. His subject was "Some Biological Aspects of Public Health Problems in the South."

DR. JOHN R. MURLIN, professor of physiology and director of the department of vital economics in the University of Rochester Medical School, gave the annual address before the Michigan State College chapter of the Sigma Xi on February 6. His subject was "Recent Developments in the Study of Energy Metabolism of the Human Body." He also spoke at a faculty club luncheon on "A Physiological Conspiracy."

DR. EDGAR T. WHERRY, associate professor of botany at the University of Pennsylvania and ecologist of the Morris Arboretum, lectured before the Muhlenburg Botanical Club at Lancaster, Pennsylvania, on March 6.

DR. OLAF ANDERSEN, of the U. S. Steel Research Laboratory, Kearney, N. J., formerly of the Geophysical Laboratory of the Carnegie Institution of Washington, completed in January before the department of geology, Princeton University, a series of nine lecturers on "Phase Equilibrium Diagrams of the Refractory Oxides; Their Interpretation and Application to Slags, Refractories and Igneous Rocks."

CHARLES A. EDWARDS, principal of the University College of Swansea, Wales, addressed the Washington Academy of Sciences on March 8. His subject was "Science, Education and Industry: Whither Drifting?"

A SERIES of six public lectures on aerophotography is being given at the institute of geographical exploration, Harvard University. The first in the series, on February 6, by Captain Albert W. Stevens, was entitled "The National Geographic-Army Air Corps Stratosphere Flight of 1934." The other lecturers are: Captain B. C. Hill, on February 20; Lieutenant J. F. Phillips, on April 24, and Captain D. M. Reeves, on May 1.

THE Society of Sigma Xi of the University of California has announced the following illustrated lectures to be delivered under the auspices of the chapter: February 20, Dr. W. H. Kellogg, chief of the bureau of laboratories, State Department of Public Health, "The Black Death in Modern Times"; March 6, Professor Joel Stebbins, director of the Washburn Observatory, University of Wisconsin, "The Dark Galaxy"; March 27, Dr. C. E. ZoBell, of the Scripps Institution of Oceanography, "The Occurrence and Significance of Bacteria in the Sea"; April 10, Dr. H. S. Smith, entomologist of the Citrus Experiment Station, Riverside, "Adaptations to the Parasitic Life in Insects"; May 1, Dr. Ralph W. Chaney, professor of paleontology, University of California, "Forest Migrations Around the Pacific"; May 22, Dr. P. H. M.-P. Brinton, research chemist and visiting professor of chemistry at the University of Southern California, "The Work of the Chemist in the Detection of Crime."

THE American Institute has announced the following lectures: March 12, "Biological Effects of Radiation of Various Wave Lengths," by Dr. Ellice McDonald, director of cancer research at the University of Pennsylvania, with Dr. Hugh S. Taylor, director of the Frick Chemical Laboratory of Princeton University, as guest authority; March 19, "Modern Fermentation Processes and Products," by Dr. Charles N. Frey, director of the Fleischmann Laboratories, with Dr. John A. W. Hartung, chief chemist of the Jacob Ruppert Brewing Company, as guest authority; March 25, "Recent Advances in the Treatment and Management of Chronic Arthritis," by Dr. William Bryant Rawls, lecturer in medicine at the New York Polyclinic Medical School, with Dr. Russell L. Cecil, clinical professor of medicine at Cornell University, as guest authority.

THE annual meeting of the Alabama Academy of Science will be held on April 12 and 13 at the State Teachers College at Florence, Ala., which is situated in the Muscle Shoals district. Titles for papers to be read at the meeting should be sent to the secretary, P. H. Yancey, Spring Hill College, Mobile, Ala., not later than March 20.

THE eleventh scientific session of the American Heart Association will be held on Tuesday, June 11, from 9:30 to 5:30 P.M. at the Hotel Claridge, Atlantic City, N. J. The program will be devoted to various subjects on cardiovascular disease.

THE committee on scientific research of the American Medical Association invites applications for grants of money to aid in research on problems bearing more or less directly on clinical medicine. Preference is given to requests for moderate amounts to meet specific needs. Application forms can be obtained from the committee at 535 North Dearborn Street, Chicago, Illinois.

THE New Hampshire Forestry Department announces that applications for research fellowships in forestry and allied subjects should be made to the Caroline A. Fox Research and Demonstration Forest, Hillsboro, N. H., not later than April 15. The fellowships are open to men and women who have completed three years' work, not necessarily in forestry, in a college of recognized standing. Projects may be undertaken in fields allied to forestry, such as botany, zoology, soil science, climatology, economics and sociology. Appointments, which ordinarily carry a stipend of \$150, are for one year from June 1. Appointees must be in residence at Hillsboro and in the field in New Hampshire for a minimum of two months.

FORMAL approval has been given by the board of supervisors of Louisiana State University to the establishment of schools of dentistry and pharmacy in the division of medical instruction. The division is to be known as The Louisiana State University Medical Center. Pending erection of a new building on the Charity Hospital grounds in New Orleans, the two schools will be housed in the main building of the center. Applications for enrolment are now being accepted.

DISCUSSION

BACKGROUND AND ORIGIN OF THE AMERICAN ASSOCIATION

THOSE who are interested in the history of American science and in the organization of scientific men will find in the most recent volume of "Summarized Proceedings" of the American Association for the Advancement of Science (for 1929–1934) a short but unusually interesting and valuable historical chapter contributed by Austin H. Clark and Leila Forbes Clark. A short review of that chapter for the readers of SCIENCE seems worth while. Beginning with a sketch of the status of science in the American colonies of England and in the mother country, about the middle of the seventeenth century, the authors point out that freedom of thought and action was at that time greater in the colonies and that there consequently arose an embryo plan, according to which some of the leaders of British science (Boyle and others) were to join John Winthrop the younger in New England, there to establish a "Society for the Promotion of Natural Knowledge." The proposed emigration did not occur, however, and the Royal Society, chartered by King Charles II in 1662, published in its *Transactions* most of the records of American research for over a century.

Under the leadership of Benjamin Franklin an "American Philosophical Society" was started about 1743, but its life was short. Another organization, "The American Society for Promoting and Propagating Useful Knowledge held in Philadelphia," was formed in 1766, with Benjamin Franklin president, and two years later its title was changed to "The American Society held at Philadelphia for Promoting Useful Knowledge." A new "American Philosophical