

It was the contention of Prof. Cockerell that he was merely an amateur botanist, that his professional work was zoological. However, the many evidences of his zeal for botany and the range of his interest in this field leave little doubt that it continued to hold an important place in his interests, even though he was able to do research in it only from time to time. Among his botanical contributions were a number of descriptions of new plants from New Mexico, a revision of the genus *Hymenoxys*, studies of the wild roses, including fossil forms discovered at Florissant, paleobotanical studies involving other plants, and his floricultural achievement in developing the red sunflower—now widely known over the globe—from a single wild plant discovered by Mrs. Cockerell.

Yet in spite of his preoccupation with entomology, conchology, and botany, not to mention other responsibilities, he still found time for research in additional fields. His studies of fish scales as an aid in the classification of the fishes won the attention of ichthyologists, and he concerned himself with other problems that lay beyond the scope of his principal interests. In 1904 he became a reviewer for the Chicago "Dial" and for a number of years discussed books over a wide range of topics.

It is impossible to write about Prof. Cockerell without emphasizing the part of Mrs. Cockerell in making

his work a success. For nearly 50 years she shared his aspirations and was the intimate partner of his undertakings. She accompanied him on his field trips, whether these were made to nearby fossil localities like Florissant and Green River, or to distant parts of the world. She also took part in his scientific research, and several papers were the product of their joint authorship. On the lecture platform, too, they often appeared together to champion an issue or elucidate a problem in which they were jointly interested.

As one looks back over the career of Prof. Cockerell and tries to evaluate the qualities that enabled him to achieve so greatly, one must pay tribute, I think, not only to his keen mind, but in equal degree to his enterprise and devotion. He kept faith throughout the years with the subjects that interested him, turning his back on the smaller things that sidetrack the efforts of so many individuals and dedicating himself wholly to the attainment of goals worth while. But in this exclusiveness of effort he was never the closeted recluse. He had an inexhaustible interest not only in the depth and breadth of nature, but in his fellow man, exemplified in his cordial relations with his students, in correspondence with a host of co-workers and friends, and in cooperative acts without number.

HERBERT F. SCHWARZ

The American Museum of Natural History

NEWS and Notes

James B. Fisk has resigned his position as director of the Division of Research, U. S. Atomic Energy Commission, to become professor of applied physics at Harvard University. Dr. Fisk had been on leave from Harvard since his appointment with the AEC in January 1947.

Robert L. Pendleton, of the Office of Foreign Agriculture Relations, USDA, and the Department of Geography, Johns Hopkins University, has been appointed a special fellow to study tropical soils and land use practices in the Belgian Congo by the Belgian American Educational Foundation. Dr. Pendleton sailed August 31 for the four months of field work in the Congo. During this time his address will be c/o U. S. Consul General, Leopoldville, Belgian Congo.

Edwin J. Hart, formerly a research chemist with the U. S. Rubber Company, recently joined the Chemistry Division of the Argonne National Laboratory as a senior chemist.

C. A. Knight recently accepted an appointment as associate professor in the Virus Laboratory, Department of Biochemistry, University of California. Dr. Knight will continue his research on the chemistry of viruses in which he was engaged while an associate of the Rockefeller Institute for Medical Research.

Freddy Homburger, former head of the Department of Clinical Investigation, Sloan-Kettering Institute for Cancer Research, has been named research professor of medicine and head of the cancer research and control units at Tufts College Medical School. **William H. Fishman**, another new appointee at Tufts, will serve as research professor of biochemistry and associate director and chief biochemist in the cancer units. Dr. Fishman formerly served on the staff of the University of Chicago.

Elmer D. West and **Geraldine Spaulding** have joined the staff of the American Institute for Research, Pittsburgh, Pennsylvania. Dr. West was formerly associate professor of psychology at the University of New Hampshire, while Miss Spaulding served as editor, National Teachers Examination Project, Educational Testing Service.

Robert Howland Denison, assistant curator at Dartmouth College Museum, was recently appointed curator of fossil fishes in the Department of Geology, Chicago Natural History Museum. Dr. Denison spent the year 1947-48 as a member of the University of California African Expedition.

Nathaniel C. Fick has been named deputy executive director of the Committee on Basic Physical Sciences, Research and Development Board. Mr. Fick was formerly associated with the Battelle Memorial Institute as a metallurgist.

L. H. Tejada-Flores, currently lecturing on electrical engineering at the

University of Southern California, has been named for postdoctorate research work under a John Simon Guggenheim Memorial Foundation Latin-American fellowship. Dr. Tejada-Flores' work on dielectric recovery will be carried on under Gilbert D. McCann and Royal W. Sorensen, of the CalTech Electrical Engineering Department.

Ivan N. Mensh, formerly a USPHS Clinical Fellow at Northwestern University, has joined the staff of the Department of Neuropsychiatry, Washington University School of Medicine, St. Louis.

F. William Sunderman, formerly professor of clinical pathology and director of the Laboratory of Clinical Medicine, Temple University Medical School, has been appointed head of the Department of Clinical Pathology at the Cleveland Clinic Foundation.

Frans Verdoorn, managing editor of *Chronica Botanica*, has been elected a Corresponding Member of the International Academy for the History of Science in Paris, and chairman of the newly-established International Phytohistorical Committee of the International Union of Biological Sciences.

Harold Vagtborg recently resigned the position of president and director, Midwest Research Institute, Kansas City, Missouri, to accept a corresponding position with the Southwest Research Institute of Houston, Texas. Dr. Vagtborg is also serving as director of the Institute of Inventive Research and the Foundation of Applied Research, as well as technical director of the Essar Ranch. **George E. Ziegler**, executive scientist of Midwest Research Institute, is assuming the administrative responsibilities of that organization until Dr. Vagtborg's successor is named.

Elizabeth E. Powelson, of Middletown, New York, has been named instructor in the Department of Biology, Hood College, Frederick, Maryland.

Robert C. Lommasson and **John F. Davidson** recently joined the staff of the Department of Botany, University of Nebraska. Dr. Lommasson, former instructor of botany at the University of Iowa, has been appointed

assistant professor, and Dr. Davidson, former instructor at the University of California, has been appointed assistant professor and curator of the University herbarium.

Raj Chandra Bose, former head of the graduate Department of Statistics, University of Calcutta, will become professor of mathematical statistics at the University of North Carolina beginning in the winter of 1949. Prof. Bose had recently served as visiting professor in the Institute of Statistics at North Carolina.

S. B. Shiveley, formerly professor of botany at the state teachers college at Superior, Wisconsin, has been appointed head of the Department of Biology at Nebraska Wesleyan University, Lincoln.

Edward H. Glass, formerly entomologist with the Virginia Polytechnic Institute and the Virginia Agricultural Experiment Station, was recently appointed associate professor of entomology at the New York State Agricultural Experiment Station, Geneva. In his new work, Dr. Glass will deal primarily with insect pests of fruit trees.

Grants and Awards

Research in soils and plant nutrition will be undertaken by the Department of Agronomy, Utah State Agricultural College, under an annual grant of \$1,200 recently established by the U. S. Smelting, Mining and Refining Company. The research will particularly emphasize zinc, manganese, and iron deficiencies which are important in the Great Basin area.

J. B. Peterson, head of the Agronomy Department, Purdue University, and **W. M. Myers**, of the Regional Pasture Laboratory at Pennsylvania State College, were named first winners of the two \$500 Stevenson Awards for outstanding agronomy research, at the recent meeting of the American Society of Agronomy. Dr. Peterson, formerly on the agronomy staff at Iowa State, received the award for outstanding research work in soils, and Dr. Myers, for his work in crops research. The Stevenson Awards, the purpose of which is to encourage

agronomic research, particularly among younger members of the Society, were made possible through a gift of W. H. Stevenson, of the Iowa Agricultural Experiment Station, and his wife.

Gerty T. Cori, professor of biochemistry in the Washington University School of Medicine, was the recent recipient of the Francis P. Garvan Medal honoring women in chemistry. Dr. Cori, sole woman Nobel Prize winner, received the gold medal during the recent Eastern Session of the 114th national meeting of the American Chemical Society held in Washington, D. C. Dr. Cori was cited for her varied and extensive research in biochemistry, particularly on carbohydrate metabolism and enzymatic reactions.

Harry Goldblatt, director of the Institute for Medical Research of Cedars of Lebanon Hospital, Los Angeles, California, is the 1948 recipient of the Charles Mickle Fellowship of the University of Toronto. This award is made to the member of the medical profession who is considered by the council of the faculty of medicine of the University to have done the most during the preceding 10 years in advancing sound knowledge of a practical kind in medical art or science. Dr. Goldblatt was honored for his research on the relationship of the kidney to arterial hypertension.

The American Pharmaceutical Association, at its recent annual convention in San Francisco, awarded the Kilmer Prize to Charles R. Chase, Jr., of Stockton, California, and the 1948 Ebert Prize to Harry W. Hind, of the Barnes-Hind Laboratories, San Francisco.

Mr. Chase, a recent graduate of the University of California College of Pharmacy, received the Kilmer Prize, an inscribed gold key, for his system of identifying botanical drugs by their fluorescent glow when exposed to invisible, near-ultraviolet rays. As recipient of the Ebert Prize Medal, Mr. Hind, a practicing pharmacist and co-owner of the Barnes-Hind Laboratories, was cited for his skillful research on methods for preparing drug solutions for use in the eye. In this work, Mr. Hind was aided by Frank

M. Goyan, assistant professor of chemistry at the College of Pharmacy, University of California. Dr. Goyan received an honorable mention for his contribution to the investigations.

W. T. Salter, professor of pharmacology, Yale University School of Medicine, was selected to receive the first \$1,000 Iodine Educational Bureau award. This award will be presented to Dr. Salter at the next annual meeting of the Association, when he will present a review paper on his investigations. Dr. Salter was recognized for his "long and continued basic research relating either directly or indirectly to iodine, and his impressive contributions of more than 30 publications on this general subject during the past 10 years."

Colleges and Universities

The University of California at Los Angeles has announced that preliminary studies are under way for a new Chemistry and Geology Building. The new structure, consisting of about 150,000 square feet, will include geological and chemical laboratories and libraries, together with 5 large lecture rooms. On completion of the new building, UCLA's present Chemistry Building will be remodeled as a Social Sciences Building. An appropriation of over \$5,000,000 has been made to cover erection of the new building and conversion of the present Chemistry Building.

The Department of Zoology, State College of Washington, through its chairman, Herbert L. Eastlick, has announced a group of staff additions which have just become effective. In the subdivision on wildlife management, Irven O. Buss, former chief of wildlife research, Wisconsin Department of Game, has been appointed professor, and Helmut K. Buechner, until recently working on his Ph.D. at Oklahoma A & M College, has been named instructor.

In the subdivision on zoophysiology, Morris Rockstein, NRC Fellow at the University of Minnesota, has been appointed professor, and Verner L. Johnson, formerly assistant professor at Pacific Lutheran College, will assume the duties of instructor and continue work on his doctorate.

Robert Whittaker, who recently completed his Ph.D. requirements at the University of Illinois, has been appointed instructor in zoology and will also develop courses in ecology.

The Department of Physiology, New York State Veterinary College, Cornell University, presented a series of lecture-demonstrations in physiology for teachers of physiology or pharmacology during the week of July 5-10. Thirty-six persons representing 27 U. S. and Canadian colleges and universities attended the sessions, which included many demonstrations on the blood, heart and circulation, urine secretion, respiration, alimentary tract, nervous system, and muscular activity.

The Gamma Chapter of Alpha Epsilon Delta, national premedical honor society, has been installed at the University of Miami as the 47th chapter of that society. H. E. Setterfield, of the School of Medicine, Ohio State University, national president of the society, and Emmett B. Carmichael, of the Department of Biochemistry, Medical College of Alabama, national counselor of Alpha Epsilon Delta, conducted the initiation of the charter members with the assistance of W. H. Steinbach, former national president of the society and head of the Department of Chemistry at Miami, who is faculty adviser for the Florida chapter. Honorary members initiated at the installation were E. Morton Miller and Julian D. Corrington, of the Department of Zoology, and Harry P. Schultz, of the Department of Chemistry.

Alpha Epsilon Delta, an affiliated society of the AAAS and a member of the Association of College Honor Societies, was established April 28, 1926, at the University of Alabama. Its objective is to encourage excellence in premedical scholarship, to stimulate an appreciation of the importance of premedical education in the study of medicine, to promote cooperation and contact between medical and premedical students and educators in developing an adequate program of premedical education, and to bind together similarly interested students. In the 22 years since its founding, its total membership has increased to over 7,200 members and

its 47 chapters have spread throughout the United States.

The Indiana University Medical Center, Indianapolis, recently announced that two major construction projects had been approved for the Center. One is the expansion of the Department of Radiology; the other, erection of a research wing to the James Whitcomb Riley Hospital for Children. The former will add 5,600 square feet of floor space to the Department, provision being made to employ the latest safeguards for use of radioactive materials and X-rays. The latter, for which the state has allocated several hundred thousand dollars, will provide laboratories for research on children's diseases. A grant of \$250,000 has been approved by the Riley Memorial Association in support of this research over a 5-year period.

A Mechanics Colloquium has been planned by Illinois Institute of Technology to include a series of 8 monthly meetings for the coming academic year. Prominent eastern and midwestern scientists will speak before the Colloquium meetings, which are open to the public. All meetings, except that scheduled for October 6, will be held on the Illinois Tech Campus, 3300 South Federal Street, Chicago. Lectures, scheduled for 8:00 P.M., will be preceded by a dinner at 6:30 P.M.

The Colloquium schedule is as follows: October 6, "Interpretation of Service Fractures," R. E. Peterson, manager, Mechanics Division, Westinghouse Research Laboratories (lecture to be held in Technological Institute, Northwestern University, Evanston); November 3, "Latest Developments in Jet Propulsion," J. T. Rettaliata, dean of the Division of Engineering, Illinois Tech; December 1, "An Applied Mathematician's View of the Problem of Elastic Stability," J. J. Stoker, professor of mathematics, Institute for Mathematics and Mechanics, New York University; January 5, "Evaluation of Brittle Coating as a Tool for Experimental Stress Analysis," A. J. Durelli, research engineer in mechanics, Armour Research Foundation; February 2, "Some Phenomena of Nonsteady Flow," W.

Spannhake, research scientist, Hydrodynamics Section, David Taylor Model Basin, Washington, D. C.; March 2, "Bridges and Aerodynamics," D. B. Steinman, consulting engineer, Robinson and Steinman, New York City; April 6, "Aircraft Flutter Problems," N. C. Myklestad, professor of theoretical and applied mechanics, University of Illinois; and May 4, "Stress, Strain Rate, and Strain Relations in the Plastic Range, Including an Analysis of Finite Homogeneous Strains," A. Nadai, consulting engineer, Westinghouse Research Laboratories.

Individuals desiring regular announcements of the Colloquium meetings are requested to notify R. L. Jones, Illinois Institute of Technology, Technology Center, Chicago 16, Illinois.

Industrial Laboratories

The world's largest X-ray development laboratory was dedicated September 13 by the General Electric X-Ray Corporation, Milwaukee, Wisconsin, as a permanent living tribute to William D. Coolidge, X-ray pioneer and director emeritus of the G-E Research Laboratory, Schenectady, New York. Known as "the father of the modern X-ray tube," Dr. Coolidge has been honored by 13 medals and 7 honorary degrees from scientific and educational organizations.

The new G-E laboratory, representing an expansion program begun over two years ago, includes the William D. Coolidge Laboratory together with expanded facilities formerly located in Chicago. The new units will provide for volume output and extensive experimental work for new X-ray applications in medicine and industry.

Speakers at the dedication ceremonies, held on the laboratory grounds, included, in addition to Dr. Coolidge, Arthur C. Christie, professor of clinical radiology at Georgetown University Medical School and chairman of the Committee on Radiology, NRC, Charles E. Wilson, president of the General Electric Company, and others.

The Westinghouse Research Laboratories have recently appointed Richard C. Hitchcock as science lecturer for the Laboratories.

As his first assignment, Dr. Hitchcock is directing the Westinghouse "Theater of Atoms," an atomic energy show prepared for New York City's anniversary celebration. Later, Dr. Hitchcock, who has spent over 30 years in research and lecture work, will tour the country with special, popular shows of current scientific achievements.

Meetings and Elections

A Symposium on Polymer Chemistry in England, sponsored by the Institute of Polymer Research, Polytechnic Institute of Brooklyn, will be held in the Institute's Student Lounge, 99 Livingston Street, Brooklyn, on September 25, under the chairmanship of P. J. Flory, of Cornell University. Participants include E. K. Rideal, of the Royal Institution, London, whose topic will be "Surface Chemistry of Macromolecules"; R. G. W. Norrish, of the University of Cambridge, who will speak on "Low-Temperature Polymerization"; and G. B. B. M. Sutherland, also of the University of Cambridge, who will discuss "Infrared Investigation of Macromolecules."

A symposium on "Fundamental Properties of Protoplasm" will be held October 4-6 under the sponsorship of the Detroit Institute of Cancer Research. The symposium, marking the official opening and dedication of the Institute, will also provide its first annual scientific program. The first two days of the program will be devoted to the fundamental sciences, and the speakers will include: C. A. Baumann, "Dietary Aspects of the Tumor Problem"; G. W. Beadle, "Genes and the Function of Protoplasm"; Robley D. Evans, "Quantitative Aspects of Radiation Carcinogenesis in Humans"; W. O. Fenn, "Evidence for the Conversion of CO to CO₂ by Living Tissues"; Harry S. N. Greene, "The Biological Assessment of Tissue Potentialities"; Max A. Lauffer, "Hydrations of Viruses and Proteins"; Karl Meyer, "Mucopolysaccharides and Mucolytic Enzymes"; John L. Oncley, "Human Plasma Lipoproteins"; and T. M. Sonneborn, "Cellular Transformations and Their Physical Basis." Detlev

W. Bronk and Carl F. Cori will also speak on topics to be announced later.

Speakers on clinical topics scheduled for the October 6 session include: Charles Cameron, "Cancer Education for the General Practitioner"; Bradley L. Coley, "Advances in Diagnosis and Treatment of Tumors of Bone"; Murray M. Copeland, "Benign Tumors of the Female Breast"; Stuart W. Harrington, "Cancer of the Breast"; and Thomas E. Jones, "Cancer of the Rectum and Rectosigmoid."

Scientists interested in fundamental research and its relation to the problem of malignant growth are cordially invited to attend the symposium. Further information may be obtained by writing William L. Simpson, Scientific Director, Detroit Institute of Cancer Research, 4811 John R Street, Detroit 1, Michigan.

The Society for Applied Spectroscopy recently announced its current schedule of meetings to be held the first Tuesday of each month. Speakers and lecture titles for the forthcoming 5 meetings are as follows: October 5, Van Zandt Williams, "Developments in Infrared Absorption Spectrometry"; November 9, Lester W. Strock, title to be announced later; December 7, Wallace A. Brode, "Ultraviolet Absorption Spectroscopy"; January 4, speaker to be announced later; February 1, F. Nolan, "Fluorescence in the Field of Spectroscopy." Meetings will be held at the Lecture Hall, Old World Building, 63 Park Row, New York City, at 8:00 P.M.

E. K. Jaycox, of the Bell Telephone Laboratories, Murray Hill, New Jersey, is serving as chairman of the Society, and R. R. Hampton, of the U. S. Rubber Company, Passaic, New Jersey, is acting as secretary.

At the 67th annual meeting of the American Forestry Association, to take place at Chattanooga, Tennessee, October 8-11, keynote speeches will be made by Representative Clifford R. Hope, of Kansas, and Gordon Clapp, chairman of the Tennessee Valley Authority. According to W. S. Rosecrans, president of the Association, the meeting will feature studies of co-operative land management by Federal, State, and private enterprise and will include a series of field trips to

TVA projects and examples of private forestry in the Tennessee Valley.

Reservations for the meeting may be made through the office of the Association, 919 17th Street, N. W., Washington, D. C.

The Optical Society of America is holding its 33rd annual meeting at Hotel Fort Shelby, Detroit, Michigan, October 21-23. As usual, the meeting will be open to nonmembers of the Society, and all interested persons are invited to attend. The foremost manufacturers of optical instruments will exhibit their products during the meeting. An interesting and varied program has been planned, with leading authorities in the field of optics participating.

A group of Arkansas physicians interested in the activities of the American Heart Association organized an Arkansas Heart Association on July 16 of this year and elected the following officers: president, Joseph T. Roberts, dean of the University of Arkansas School of Medicine; vice-president, Driver Rowland, of Hot Springs Arkansas; secretary-treasurer, John E. Greutter, of Little Rock, Arkansas. This organization will operate in accord with the principles of the American Heart Association.

Officers of the Institute of Navigation for the academic year 1948-49 have been announced as follows: president, Rear Adm. G. G. McLintock, USMS, superintendent of the U. S. Merchant Marine Academy, Kings Point, Long Island; technical adviser to president, Paul Rosenberg, president of Paul Rosenberg Associates, New York City; executive secretary, Samuel Herrick, chairman of the Department of Astronomy, University of California, Los Angeles; treasurer, Keith F. Smith, of Los Angeles. A number of vice-presidents, regional vice-presidents, and chairmen of the Institute's National Committees were also elected.

The Institute is a nonprofit scientific and engineering society devoted to the advancement of navigation and related sciences and, as such, sponsors the coordination of study and research in navigational problems in universities, military services, government

agencies, and industrial laboratories throughout the United States.

During the International Powder Metallurgy Conference, held at Graz, Austria, July 12-17, the Technische Hochschule of Graz conferred the honorary degree of Doctor of Technical Sciences on W. D. Jones (London), Paul Schwarzkopf (Yonkers, New York), J. A. Hedvall (Göteborg, Sweden), A. F. Joffe (Moscow), and L. Neel (Grenoble, France).

Deaths

William E. Burge, 66, who was associated with the Department of Physiology at the University of Illinois for many years, died March 28 at his home in Indian River City, Florida. One of Dr. Burge's important fields of research was in catalase and metabolism of various tissues.

Benjamin F. Lutman, 68, emeritus professor of plant pathology at the University of Vermont and State Agricultural College, and plant pathologist of the Vermont Agricultural Experiment Station, died July 20 following a heart attack.

Lloyd William Taylor, 55, professor and head of the Department of Physics, Oberlin College, since 1924, was killed in a fall on Mt. St. Helens, Washington, August 8. Dr. Taylor had also served as a former associate editor of *Review of Scientific Instruments*, *Journal of the Optical Society of America*, and *American Physics Teacher*.

Robert M. Grey, 87, superintendent emeritus of the Atkins Garden and Research Laboratory, Harvard University, died August 13 following a long illness in Central Soledad, Cienfuegos, Cuba.

Scott B. Lilly, 63, chairman of the Division of Engineering, Swarthmore College, died August 19 in Philadelphia, Pennsylvania.

Samuel Chiles Mitchell, 83, former president of the University of South Carolina, the Medical College of Virginia, and Delaware College, now the University of Delaware, and more recently, professor of history and government at the University of Rich-

mond, died August 20 in Atlanta, Georgia.

Samuel W. J. Smith, 77, professor emeritus of physics and former dean of the faculty of science at the University of Birmingham, died August 20 in London, England.

Clell Lee Metcalf, 60, head of the Department of Entomology at the University of Illinois, died August 21 in Urbana. Dr. Metcalf had been on leave of absence for 2 years because of ill health.

Joseph C. Pfister, 81, former professor of mathematics and astronomy at Columbia University, died August 22 in the Presbyterian Hospital, Newark, New Jersey. In 1945 Dr. Pfister endowed the Pfister Fellowship Fund at Columbia.

Davis W. Beaumont, 31, assistant professor of chemistry at Indiana University, died August 25 at the University Medical Center, Indianapolis, of poliomyelitis.

William Ferdinand Meyer, 67, professor of astronomy at the University of California, died August 30 in Berkeley, California.

Louis Berger, 52, professor of pathology and director and co-founder of the anticancer center at Laval University, died in Quebec, Canada, August 31.

Sylvanus G. Morley, 65, internationally known archaeologist and author, and specialist in Maya hieroglyphic writing, died in Santa Fe, New Mexico, on September 2. Dr. Morley, director of the School of American Research and the Museum of New Mexico, had formerly served as an associate in the Division of Historical Research, Carnegie Institution of Washington, and directed its Chichen Itza project from 1924 to 1940.

Abraham Myerson, 66, noted neurologist, psychiatrist, and author, died in Boston September 3. Professor of clinical psychiatry, Harvard Medical School, and director of research at Boston State Hospital, Dr. Myerson was also on the staff of Tufts Medical School as professor emeritus of neurology.

Richard C. Tolman, 67, noted mathematical physicist and wartime adviser on the Manhattan Project, died September 5 at the Huntington Memorial Hospital, Pasadena, California. Dr. Tolman, dean of the Graduate School at the California Institute of Technology, had served as professor of physical chemistry and mathematical physics at CalTech for the past 27 years. Dr. Tolman was vice-chairman of NDRC, and following the war was scientific adviser to Bernard Baruch on the UN Atomic Energy Commission.

The Hayden Planetarium is presenting during September a vivid demonstration entitled "The 200-Inch Telescope" by which visitors may seemingly enjoy a night within the world's largest astronomical observatory itself. In this unusual setting, the lecturer will review the evolution of telescopes with a discussion to follow on the comparative possibilities of Palomar Observatory's 200-inch Hale reflector and Mount Wilson's 100-inch reflector, the next largest of its kind.

A large new institute for general scientific research which will be open to the scientists of the world is to be created in the Belgian Congo, according to a preliminary report released September 1 through Harlow Shapley, director of the Harvard College Observatory. The international character of the new institute, which will have an initial endowment of \$9,000,000 and an additional annual subsidy of more than \$500,000, is emphasized through the recent appointment of Dr. Shapley, E. B. Worthington, English biologist, and A. Chevalier, French botanist, to the Board of Administrators by the Belgian Government. The director of the new scientific foundation, which will naturally specialize on problems of the tropics, is Louis van den Berghe, professor at the Institute of Tropical Medicine in Antwerp and visiting professor of tropical medicine at Tulane University.

The purpose of IRSAC (Institute pour la Recherche Scientifique en Afrique Centrale), according to the statement submitted by Dr. van den

Berghe, is the fundamental study of the tropical environment, human, zoological, and botanical. Several research stations will be erected in the next two years, the main one, most probably, on the high plateau region between Lake Kivu and Lake Tanganyika. A second station will be erected before the end of the current year in the Province of the Equator, not far from the mouth of the Congo, and a third in southeastern Katanga. Also, two stations, one in the east and another in the west, are planned for seismologic and ionospheric measurements.

Field work has been started, or will develop soon, on the lines of social and physical anthropology, climatology, nutrition, hydrobiology, geology, plant and animal ecology, and a party is in the field searching for a most suitable site for a high-altitude astronomical observatory.

IRSAC will provide fellowships and subsidies to the scientists established in the Congo. Its aim is to coordinate and inspire the various scientific institutions and services there. It will have its own scientific and technical staff and will act as an agency of information for visiting scientists to the Congo and provide them with material help and various facilities for their explorations and researches. Work tables and other facilities will be kept at the disposal of Belgian and foreign scientific institutions in the different stations of IRSAC. It is planned that the institution will assemble an important and appropriate library at its main station. American scientific institutions that are able to contribute current and past publications should address them to IRSAC, Costermansville, Belgian Congo.

Dr. van den Berghe, the director of IRSAC, is already established at Costermansville, on Lake Kivu in the high mountainous region of the eastern Congo.

The Belgian Congo offers much virgin territory for explorations by scientists and affords also a wide variety of conditions, varying from mountains that rise above the tree line to the equatorial jungles. In the high plateaus in the regions of the Great Lakes and the Kivu Mountains, Europeans can live with comfort, even

though but a few degrees south of the equator. Around Lake Kivu there are extensive agriculture developments, with coffee, grain, pyrethrum, and cotton among the products.

The region is especially suited to new researches in anthropology. Among the native tribes are the pygmies and the giants that live east of Lake Kivu on the borders of Tanganyika. The Congo is also famous for its radium deposits, and it is one of the largest sources of uranium ores.

The president of the Board of Administrators of IRSAC is E. deBruyne, of the University of Ghent, who was formerly Minister of Colonies in the Belgian Government. Among the administrators are many of the most distinguished scientists and educators of Belgium, representing, among other fields, geology, biochemistry, astronomy, mining, engineering, ethnology, sociology, veterinary medicine, physics, agronomy, and paleontology.

Although no scientific journal will be maintained by IRSAC, a scientific report, with general subjects and abstracts of the papers of the members and guests of IRSAC published elsewhere, will appear annually and will be distributed widely among scientific institutions of the world.

Outstanding scientific and technological developments of the last 41 years of aviation will be displayed to the public on September 18, Air Force Day, at Bolling Air Force Base. Features of the large-scale show will include the arrival of a pilotless drone B-17 and its "mother" ship from Elgin Air Force Base in Florida; a display of guided missiles; many static exhibits which will draw attention to the work of the Air National Guard, the Materiel Command, the Air Engineer, and the Air Surgeon; and a mock bombing raid on the Base with seasoned pilots at the controls of the fast new ships.

Speediest AF fighter plane now in production is the F-86 (see cover), a North American product powered by a J-35 jet engine and featuring swept-back wings and tail surfaces. The plane has a maximum speed of 650 miles an hour and a combat range of 1,000 miles.