

NEWS *and Notes*

"An American Bridge to World Science" (*Science*, May 9, p. 483) outlined the opportunities which might accrue to scientists by virtue of the provisions of the Fulbright Act. This law authorizes agreements with foreign governments for the use of money derived from the sale of surplus property to "finance studies, research, instructions, and other educational activities" of American citizens in the educational institutions of such countries and to transport their own citizens who wish to attend schools in the United States. The law further provides that the President shall appoint a 10-man Board of Foreign Scholarships to select both students and institutions and to supervise the exchange program. Last week such a Board was appointed. The only scientist member is Ernest O. Lawrence, professor of physics, University of California. Others named to membership were: Veterans Administrator Bradley; John W. Studebaker, U. S. Commissioner of Education; Francis Spaulding, New York State Commissioner of Education; Helen C. White, professor of English, University of Wisconsin; Laurence Duggan, director, Institute of International Education; Sarah Blanding, president, Vassar College; Walter Johnson, professor of history, University of Chicago; Charles S. Johnson, president, Fisk University; and Martin P. McGuire, dean, Graduate School, Catholic University. The State Department has already received 12,000 applications for study abroad, 5,000 of these being from veterans.

The \$137,550,000 made available thus far is distributed among 22 countries, as follows: Australia, Finland, France, Hungary, and the Netherlands, \$5,000,000 each; Austria, \$750,-

000; Belgium, Denmark, Egypt, and Burma, \$3,000,000 each; Czechoslovakia, \$6,000,000; Greece and Poland, \$8,000,000 each; Iran and the Philippines, \$2,000,000 each; Italy, China, and the United Kingdom, \$20,000,000 each; Netherlands Indies, \$7,000,000; New Zealand, \$2,300,000; Siam, \$4,000,000; and Turkey, \$500,000.

Science readers are again referred to "An American Bridge to World Science" and the implications of the Act as presented by William Vogt.

National Science Foundation legislation was, at the beginning of this week, in the hands of conferees from both the House and Senate in order that a compromise might be reached on such issues as appointment of a Director, allotment of research funds to states, and patent provisions. Senate conferees are: Aiken, Ellender, Smith (author of S. 526), Taft, and Thomas; for the House, Harris, Hinshaw, Howell, Priest, and Wolverton (author of H. R. 4102, discussed in last week's issue of *Science*). It seems likely that within a few days a Science Foundation bill will be on its way to the desk of the President for signature.

About People

P. A. Lehenbauer, head, Department of Biology, University of Nevada, has recently retired from that position and is succeeded by **E. W. Lowrance**.

Harold Wooster, University of Pennsylvania, has been appointed senior fellow on the Heinz Food Varieties Fellowship at Mellon Institute.

Iver J. Johnson, professor of agronomy, Iowa State College, has been appointed successor to **H. D. Hughes**, head, Farm Crops Subsection, Department of Agronomy, Iowa State College Agricultural Experiment Station, and head, Farm Crops Subdepartment, Agronomy Department, Division of Agriculture, Iowa State College. Prof. Hughes retired on June 30.

Gilbert H. Ayres, Department of Chemistry, Smith College, has been appointed associate professor in the Chemistry Department, University of Texas. Dr. Ayres will be in charge of analytical chemistry.

Rudolf Bennitt, professor of zoology, University of Missouri, has been appointed visiting professor of zoology at Washington University, St. Louis, for the current summer session.

Ruth McClung Jones, assistant professor of zoology and botany, Swarthmore College, has been appointed professor of biology at Winthrop College, the South Carolina College for Women, Rock Hill.

Norman Foster Ramsey, formerly of Columbia University, has been appointed associate professor of physics, Harvard University. Prof. Ramsey will also continue to serve as consultant to the Brookhaven National Laboratory.

Herman H. Chapman, Harriman professor emeritus of forest management, Yale University, received the honorary D. Sc. degree from the University of Minnesota at its recent commencement exercises.

L. R. Hafstad, director of research, Applied Physics Laboratory, Johns Hopkins University, has been appointed executive secretary of the Joint Research and Development Board, succeeding **Lloyd V. Berkner**, who resigned July 1, and who expects to return in the fall as chairman of the Division of Upper Atmosphere Physics, Department of Terrestrial Magnetism, Carnegie Institution of Washington.

R. E. Black, formerly senior research chemist, Phillips Petroleum Company, Bartlesville, Oklahoma, has been appointed professor and head, Department of Chemistry, Morningside College, Sioux City, Iowa. Prof. Black assumed his duties June 1 after the retirement of **J. A. Coss**.

Hugh Cutler, formerly of the Botanical Museum, Harvard University, and field technician, U. S. Rubber Development Corporation, Brazil, during the war, has been appointed curator of Economic Botany at the Chicago Natural History Museum.

Percy E. Raymond, professor emeritus of paleontology, Harvard University, has been elected a corresponding member of the Geologiska Föreningen, Stockholm.

Ancel Keys, director, Laboratory of Physiological Hygiene, and professor, School of Public Health, University of Minnesota, flew to England July 12

for a two-week series of addresses and conferences. Dr. Keys gave the opening address of the symposium on malnutrition at the International Congress on Pure and Applied Chemistry in London.

W. E. Krauss, head, Department of Dairy Husbandry, Ohio State University College of Agriculture for the past year, will return to the Ohio Agricultural Experiment Station at Wooster as its associate director, January 1, 1948.

David E. Green, director, Enzyme Chemistry Laboratory, Columbia University, has been appointed professor of enzyme chemistry, University of Wisconsin Medical School.

Clarence F. Goodheart, Naval Ordnance Laboratory, White Oaks, Maryland, and **Chester H. Buchanan**, professor and head, Department of Electrical Engineering, University of North Dakota, have been appointed associate professors of electrical engineering, Union College, Schenectady, New York.

Ernest A. Back, entomologist, Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, since 1907, retired June 30. On August 1 Dr. Back will leave for London, where, with **R. T. Cotton**, head of the Bureau's Manhattan, Kansas, laboratory, he will represent the Department of Agriculture at the international conference of specialists on infestations of stored products, sponsored by the Food and Agriculture Organization.

Daniel Melnick, supervisor of research, Food Research Laboratories, Inc., has been appointed director, Institute for Applied Research (successor to Applied Research Laboratories, Inc.), Dayton, New Jersey.

W. Henry Hollinshead, formerly professor of anatomy, Duke University School of Medicine, has been appointed consultant in anatomy and professor of anatomy at the Mayo Foundation and Graduate School of Medicine, University of Minnesota.

John E. Anderson, director, Institute of Child Welfare, University of Minnesota, has been granted sabbatical leave of absence for the year 1947-48. **Dale B. Harris** will be acting director of the Institute during this period.

Harold A. Abramson, assistant professor of physiology, College of

Physicians and Surgeons, New York City, and associate physician for allergy, The Mount Sinai Hospital, has been appointed active consulting physician for allergy, Seaview Hospital, Staten Island, New York.

Walter V. Bingham, chief psychologist and adviser regarding the classification of military personnel, War Department, for the past seven years, resigned June 30. Dr. Bingham will serve part time as an expert consultant to the Secretary of War, and as chairman, Council Advisory to the Director of Personnel and Administration, War Department General Staff.

William H. Chambers, chief, Toxicology Branch, **Harold E. Himwich**, chief, Clinical Research Branch, and **Leonard Karel**, toxicologist, represented the Medical Division, Army Chemical Center, at the centenary celebrations of the Chemical Society, London, July 15-17, and the subsequent International Physiological Congress at Oxford.

Warren D. Smith, head, Department of Geology and Geography, University of Oregon, retired on July 1. Prof. Smith is president-elect of the Oregon Academy of Science.

Frederic C. Schmidt, associate professor of chemistry, Union College, has been appointed associate professor at Indiana University, effective September 1. Dr. Schmidt is succeeded at Union College by **Harry F. Herbrandson**, at present a research fellow at Harvard University.

F. C. MacKnight, formerly geologist with The Texas Company, New Orleans, has been appointed professor of geology and geography at Evansville College, Evansville, Indiana.

Raymond L. Taylor, resident head, Department of Biology, Sampson College, Associated Colleges of Upper New York, has been promoted from associate professor to full professor.

Morgan Upton, industrial psychologist, Murray Corporation of Detroit, has been appointed professor, and chairman, Department of Psychology, Rutgers University.

R. E. Buchanan, director, Agricultural Experiment Station, Iowa State College, and **C. H. Werkman**, head, Department of Bacteriology, participated in the 4th International Congress for

Microbiology, held this month in Copenhagen, Denmark. Dr. Buchanan helped prepare an international code of bacteriological nomenclature which was presented at the Congress, and Dr. Werkman, one of the principal speakers, discussed cellular metabolism.

Simon H. Ingberg, chief, Fire Resistance Section, National Bureau of Standards, Washington, D. C., has recently retired from this position.

Harry Eagle, Johns Hopkins University School of Hygiene and Public Health, has been appointed scientific director of the National Cancer Institute. Dr. Eagle will have charge of an extensive program of research within the Institute, which is a part of the U. S. Public Health Service.

Henry M. Burlage, professor of pharmacy, University of North Carolina, has been appointed dean, College of Pharmacy, University of Texas, effective September 1, 1947.

David B. Hand, director of research and quality control, Sheffield Farms Company, Inc., has been appointed professor of biochemistry and head, Division of Food Science and Technology, New York State Agricultural Experiment Station, Geneva. Dr. Hand succeeds **Elmer H. Stotz**, who has been appointed professor of biochemistry and chairman, Department of Biochemistry, University of Rochester School of Medicine and Dentistry.

Robert F. Loeb has been appointed Bard professor of medicine in the College of Physicians and Surgeons, and director of the Medical Service at Presbyterian Hospital, according to announcement by Frank D. Fackenthal, acting president, Columbia University, and Charles P. Cooper, president of Presbyterian Hospital. Dr. Loeb has been Lambert professor of medicine at Columbia and attending physician at the Hospital and, during the war, served as consultant to OSRD and chairman of the Board for the Coordination of Malarial Studies. Dr. Loeb succeeds **Walter W. Palmer**, who has become emeritus professor of medicine and consultant of the Hospital.

Edwin R. Whitehead, since last October half-time research professor of electrical engineering and consultant in electrical engineering in general charge of the AC network calculator at Armour Research Foundation, Illinois Institute of

Technology, has been appointed director of the latter's Department of Electrical Engineering. Dr. Whitehead succeeds Louis T. Rader, who will join the staff of the General Electric Company.

George H. Young, on the research staff of Mellon Institute since 1935 and executive assistant to the director for the past three years, has been promoted to an assistant directorship of the Institute. During the war Dr. Young was a special consultant on corrosion and protective coatings to the War and Navy Departments.

William W. Ray, associate professor of botany and plant pathology and associated plant pathologist and mycologist in the Agricultural Experiment Station, Oklahoma A & M College, has been appointee professor of botany at the University of Nebraska, and mycologist in the Department of Plant Pathology of the Agricultural Experiment Station.

Nicholas Polunin, Oxford University graduate and research fellow, has been appointed Macdonald professor of botany, McGill University, to succeed **George W. Scarth**, who has retired.

Ernest H. Ward, formerly professor of psychology, Wittenberg College, Springfield, Ohio, has joined the Los Angeles staff of Rohrer, Hibler & Replogle.

Gleb Krotkov, professor of biology, Queen's University, Kingston, Ontario, is spending his sabbatical leave at the University of California, Berkeley, where he is doing research in carbohydrate metabolism in plants. Mrs. Krotkov is occupying a temporary instructorship in mathematics at Berkeley.

Jessie L. King, chairman, Department of Physiology and Hygiene, Goucher College, Baltimore, retired in June. Dr. King is succeeded as professor of physiology and chairman of the Department by **Phoebe J. Crittenden**, who has been head of the Department of Toxicology, Merck Institute for Therapeutic Research.

John G. Kirkwood, professor of chemistry, Cornell University, has been appointed Arthur Amos Noyes professor of chemistry, California Institute of Technology, effective in September. Dr. Kirkwood is the first to be appointed to this professorship which was recently created in honor of Dr. Noyes, first chairman of the Division of Chemistry.

Arno B. Luckhardt, professor of physiology, University of Chicago, has been designated a distinguished service professor of physiology at the University.

Austin L. Rand, formerly acting chief, Division of Biology, National Museum of Canada, Ottawa, has been appointed curator of Birds at the Chicago Natural History Museum. Dr. Rand assumed his duties there July 7.

H. W. Straley, III, consultant in geology and geophysics, Worthington Consulting Service, since 1940, has been appointed valuation engineer in charge of geological, geophysical, and mining research, World Bank, Washington, D. C.

Jiles W. Haney, chairman, Department of Mechanical Engineering, University of Nebraska, since 1926, will retire as professor emeritus on September 1. **Niles H. Barnard**, formerly associate professor of mechanical engineering at the University, has been named acting chairman.

H. B. H. Cooper, chemical engineer, Calco Chemical Division, American Cyanamid Company, has been named new head of the Department of Chemical and Mining Engineering, Iowa State College, and will assume his new duties early this fall. **O. R. Sweeney**, head of the Department since 1920, will devote his time to research in the Engineering Experiment Station and to teaching in the Department.

Leonard S. Kogan, Psychology Department, University of Rochester, has been appointed assistant director, Institute of Welfare Research, Community Service Society of New York.

P. L. Magill, who has been associated with the DuPont Company for a number of years, has been appointed to the staff of the Stanford Research Institute, where he will direct some of the work in chemistry and chemical engineering.

Visitors to U. S.

Mme. Dobrovolskaia - Zavadskaia, Curie Institute, Paris, plans to attend the Fourth International Cancer Research Congress, St. Louis, Missouri, September 2-7. After the Congress she plans to devote some time to lecturing and conducting scientific discussions on problems connected with "Life and Death Phenomena in Cancerous Cells" and "Possible Role of Some Intermediary

Metabolites in Pathology." While in the United States her address will be: 2242 Washington Street, San Francisco, California.

Pei-sung Tang, National Tsing Hua University, Peiking, China, wishes to confer with Chinese graduate students in biology, agriculture, biochemistry, and agronomy with a view to possible appointments in China. Dr. Tang will be in this country approximately from August 1 to August 15. Anyone wishing to confer with Dr. Tang is asked to write to him in care of the China Institute, New York City, before August 1.

Members of the South African Council for Scientific and Industrial Research scheduled to visit this country include: J. N. van Niekerk, of the National Physical Laboratory, who arrived July 14; W. S. Rapson, director, National Chemical Laboratory, arriving August 9; E. P. Carman, also of the Chemical Laboratory, arriving August 9; and W. J. Lutjeharms, professor of botany, University College of the Orange Free State, who is traveling on a grant from the Council, arriving sometime in August.

Grants and Awards

Charles Allen Thomas, executive vice-president and technical director, Monsanto Chemical Company, was the recipient of the medal given by the Industrial Research Institute, Inc., of New York City, for "inspiring leadership in the development of the American research system and for the participation thus in the American chemical enterprise." The medal was presented by Herbert W. Graham, senior past president of the Institute, at the annual meeting held June 5 in Swampscott, Massachusetts.

Lawrence H. Bailey, chief engineer, F. J. Stokes Machine Company, Philadelphia, received the annual medal of the Stevens Institute of Technology, June 4, at the third annual medal lecture sponsored by the Powder Metallurgy Laboratory of the Institute. The medal was awarded in recognition of his outstanding achievement in the field of powder metallurgy.

The University of Illinois is to receive \$87,850 in Federal Government grants for research and training in the field of psychology. The grants include

\$32,000 from the Navy for research in aviation psychology; \$4,000 from the U. S. Public Health Service for fellowships, and \$7,250 for additional staff; and \$44,000 from the Veterans Administration, including income provided by provisions of the G. I. Bill for training in clinical psychology.

The Association for Advancement of Research on Multiple Sclerosis, Inc., has recently made a first grant of \$64,350 for specialized research on multiple sclerosis. The three years of research provided for will be under the direction of Elvin A. Kabat, assistant professor of bacteriology, Columbia University. The major part of the project in research in the study of allergies in connection with multiple sclerosis will be conducted at the Columbia University College of Physicians and Surgeons and at the Neurological Institute of New York.

Fellowships

The Arctic Institute of North America is offering two Research Fellowships of \$2,000 each for scientific work in the North American Arctic and Subarctic during 1948. Research must include field investigations either in Alaska, northern Canada, Labrador, Newfoundland, or Greenland. The Fellowships are open to anyone who has demonstrated his ability to carry out research work of superior quality in some field of science. Applications must be received by November 1, 1947. Forms may be obtained from The Arctic Institute of North America, 805 Sherbrooke Street West, Montreal, Canada.

The University of Nebraska Foundation has announced the establishment of a geology fellowship by the Shell Oil Company Fellowship Committee of New York City. The fellowship carries a stipend of \$1,200 yearly, tuition and fees, and \$300 to cover costs of materials and equipment. Recipients will be selected by the chairman of the Department of Geology, with the approval of the dean of the Graduate College.

Colleges and Universities

The University of Michigan has announced the establishment of several distinguished professorships. Among those appointed to these posts were: Werner E.

Bachmann, Moses Gomberg professor of chemistry; George G. Brown, Edward DeMille Campbell professor of chemical engineering; Thomas Francis, Jr., Henry Sewall professor of public health; Howard B. Lewis, John Jacob Abel professor of biological chemistry; Dewitt H. Parker, Robert Mark Wenley professor of philosophy; and George E. Uhlenbeck, Henry Smith Carhart professor of physics.

The University of Toledo has announced the establishment of a four-year undergraduate program in glass technology leading to the degree of Bachelor of Engineering. The new program, scheduled to start in September, will be administered by the University's College of Engineering. Clarence L. Babcock, Research Division, Owens-Illinois Glass Company, will have charge of the initial course in glass technology. Further information may be obtained from Walter V. Burg, Department of Chemical Engineering, University of Toledo, Toledo, Ohio.

The Case Institute of Technology has announced the following promotions: Erwin F. Shrader, Department of Physics, to associate professor; Charles S. Smith, Department of Physics, to associate professor; William A. Lynam, Department of Mechanical Engineering, to associate professor; and Hugh Winn, Department of Chemical Engineering, to assistant professor.

The former University of Newark is now merged with the State University of New Jersey, maintained by the Trustees of Rutgers University. Herbert P. Woodward, formerly professor of geology and acting dean, University of Newark, is now dean, Newark College of Arts and Sciences, Rutgers University; Carl A. Olson, formerly professor of chemistry, is director, Division of Natural Sciences; and John Keosian, formerly associate professor of biology, has been promoted to professor of biology, Newark College of Arts and Sciences.

The University of Chicago has begun construction of a \$1,250,000 ion accelerator building to house a 100,000,000-volt betatron, the University's cyclotron, and a new cyclotron of the most modern construction. The laboratory will be used primarily for researches in nuclear physics and radiochemistry conducted by the Institute for Nuclear Studies. Facilities for medical

research with high-energy positive ions and gamma rays will be included and used by the Institute of Radiobiology and Biophysics and the Division of Roentgenology of the Department of Medicine in their programs. In this new building, which will be ready for occupancy in the spring, 98 University scientists will conduct basic researches.

Washington Square College, New York University, has announced the following promotions in the Department of Biology: Morris H. Harnly and Douglas A. Marsland to full professor; Albert S. Gordon, Milan J. Kopac, and Alexander Sandow to associate professor; and Savino D'Angelo to assistant professor.

Newly appointed faculty members of the University of Utah School of Medicine include: Emil G. Holmstrom, formerly associate professor in the Department of Obstetrics and Gynecology, as professor and head of the Department to succeed C. E. McLennan, who will become chairman of the Department of Obstetrics and Gynecology at Stanford University; Thomas Dougherty, formerly of Yale University, as professor in the Department of Anatomy; and William Moritz, formerly of Rochester University, as assistant professor in the Department of Surgery, to replace Randolph Shields, who recently left for China.

Swarthmore College has announced the following appointments in the Department of Zoology: Launce J. Flemister, research associate, Sharp & Dohme, Inc., as assistant professor; Jae L. Littrell and Norman A. Meinkoth, Department of Zoology, University of Illinois, as instructors; and Harald Erikson and Valentine Furst, University of Oslo, as research associates.

The Ohio State University Research Foundation has announced the signing of 15 new contracts totaling \$428,171 for scientific studies to be conducted at the University for government agencies and industrial firms. Ten of the projects will be carried out for the Army Air Force's Air Materiel Command, the Office of Naval Research, the Cleveland Ordnance District, and the Army Engineer Board, Fort Belvoir, Virginia. Research contracts for the five industrial firms total \$107,830. Research for the projects will be conducted in the fields of

fuels, antibiotics, low-temperature research, ceramics and photogrammetry, radio antennae, infrared radiation, aircraft structure design, fungicides and herbicides, poultry husbandry, and criteria for the selection of personnel for positions of responsibility.

Industrial Laboratories

The Sterling-Winthrop Research Institute, a division of Sterling Drug, Inc., will have within a year a new \$3,000,000 chemical and biological research laboratory at East Greenbush, New York, near Rensselaer, as the result of an agreement, announced July 12, between Sterling and the Mutual Life Insurance Company of New York. The latter will buy the tract of land from Sterling, finance the construction, and lease the development to Sterling for a 30-year term. Research in the new laboratory will be extended to include "penicillin-like compounds and derivatives, antibiotics, organometallic compounds, sulfa drugs, antimalarials, veterinary products, barbiturates, amino acids, diagnostic agents, streptomycin, and other therapeutic preparations." In the field of tropical medicine, special emphasis will be placed on diseases prevalent in Latin America and the Near East. In addition, research will be undertaken in packaged medicines, fine chemicals, pigments, and dyes.

Eli Lilly and Company announces the appointment to its staff of Joseph Peter Gibbons, Jr., and Darrel O. Neidigh, Jr., both recent graduates of Purdue University.

The Carpenter Steel Company, Reading, Pennsylvania, has announced the appointment of Berton H. DeLong as vice-president and technical director. George B. Luerssen, assistant chief metallurgist, will become chief metallurgist.

Meetings

Brookhaven National Laboratory has arranged several informal conferences on nonrestricted material for August and early September. The dates have been selected to coincide with the visits at Brookhaven of scientists actively interested in the general topics which follow: I. Theory of Nuclear Forces: August 25-29, "Phenomenological De-

scription of Nuclear Structure"; September 2-5, "Nuclear Energy Levels"; September 8-12, "Meson Theory of Nuclear Forces," "Production of Mesons and Protons"; II. Particle Physics: Throughout August, "Cosmic Rays: Composition of Cosmic Rays; Interaction of Mesons With Nuclei; Experimental Techniques"; and "Nuclear Spins and Moments; Interactions Between Nuclear Particles"; III. Instruments of Nuclear Science: August 11-September 12, "Super High-Voltage Accelerators, Theory of Accelerators, Analysis of Power Requirements, Detailed Design Considerations, Uses of High-Energy Particles"; and August 14-15, "Short Pulse Techniques and High-Speed Counters, Crystal Counters, Multipliers and Secondary Emission Phenomena, Cerenkov Counters, Broad Band Amplifiers, High-Speed Coincidence Techniques, Fast Geiger Counters." Information concerning transportation facilities and accommodations may be obtained from Miss Ellen Matteson, Brookhaven National Laboratory, P. O. Box 150, Patchogue, Long Island, New York.

The American Oil Chemists' Society will hold its annual fall meeting at the Edgewater* Beach Hotel, Chicago, October 20-22. G. A. Crapple, Wilson and Company, Chicago, is general chairman, and Howard C. Black, Swift and Company, Chicago, is program chairman in charge of technical papers.

Recent Deaths

Grinnell Jones, 63, professor of chemistry, Harvard University, died June 23 at Cambridge Hospital.

Franklin Sherman, 69, head, Department of Entomology and Zoology, Clemson College, since 1925, died of a heart attack June 23.

Frank Clifford Whitmore, 59, research professor of organic chemistry, and dean, School of Chemistry and Physics, Pennsylvania State College, died suddenly, June 24, at his home in State College.

The South African Council for Scientific and Industrial Research has appointed a committee headed by S. H. Haughton, director, South African

Geological Survey, to consider how best to organize a marine expedition which would seek to find more living Coelacanthid Fish like that found in the South African waters off East London at the end of 1938, and also to explore and accumulate data in various fields of science in the relatively poorly-known region of the Mozambique Channel. All societies, institutions, and individuals interested in this project are requested to communicate with J. L. B. Smith, Rhodes University College, Grahamstown, South Africa.

The Veterans Administration reference exhibit of prosthetic devices, completed after more than a year's work, was opened to the public on July 16. The exhibit contains approximately 1,000 items, including practically every available known type of device which may aid the physically handicapped. The permanent exhibit may be seen in Room 890, Veterans Administration Building, Vermont and H Streets, N. W., Washington, D. C., 10 A.M. to 4 P.M. Mondays through Fridays.

According to the Swedish-International Press Bureau, the unusual village of Vallhagar, which dates from the middle of the Iron Age and which is located on Gotland Island in the Baltic Sea, will be excavated this summer by about 70 archaeologists from Sweden, Norway, Denmark, Finland, Iceland, and England, who will be aided by geologists, botanists, osteologists, Swedish Air Force photographers, and mine-clearance troops. The object of the excavations is to make a detailed investigation of the settlement in order to determine its design and character. Excavations are expected to be completed by the end of September, and the results will be published jointly by the participating scientists.

The American Society for Research in Psychosomatic Problems has announced the appointment of a new Board of Editors for its journal, *Psychosomatic Medicine*. Carl Binger, psychiatrist, and formerly associate professor, Columbia University, is editor-in-chief. He will be assisted by Franz Alexander, Dana W. Atchley, Walter Bauer, George E. Daniels, Lowell Davis, David M. Levy, Howard S. Liddell, Milton J. E. Senn, John C. Whitehorn, and Harold G. Wolff.

The U. S. Civil Service Commission has announced an examination for filling Geologist positions at salaries ranging from \$4,149 to \$7,102 a year. Vacancies are located in Washington, D. C., and vicinity in various Federal agencies, and throughout the United States in the Departments of Agriculture and Interior. Competitors for these positions will not be required to take a written test. To qualify, they must have completed either a four-year college course leading to a Bachelor's degree in geology, or a time-equivalent combination of study in geology and technical experience. In addition, they must have had professional experience in geology. Graduate study may be substituted for a part of the required experience.

Further information and application forms may be obtained at most post offices, from Civil Service regional offices, and from the U. S. Civil Service Commission, Washington 25, D. C. Applications will be accepted in the Commission's Washington Office until further notice, but persons interested in being considered for positions which will be filled immediately should apply by August 15, 1947.

Make Plans for—

American Mathematical Society, First Annual Symposium in Applied Mathematics, August 2-4, Brown University, Providence, Rhode Island.

American Veterinary Medical Association, August 18-21, Cincinnati, Ohio.

New England Association of Chemistry Teachers, 9th Summer Conference, August 18-23, Wellesley College, Wellesley, Massachusetts.

American Pharmaceutical Association, August 24, Milwaukee, Wisconsin.

American Society of Mammalogists, August 24-27, Higgins Lake, Michigan.

Americal Institute of Electrical Engineers, Pacific General Meeting, August 26-29, San Diego, California.

American Association for the Advancement of Science, 114th Meeting, December 26-31, Chicago, Illinois.

COMMENTS

by Readers

So much valuable material is included in Robert M. Salter's paper on "World Soil and Fertilizer Resources" (*Science*, May 23, p. 533) that criticism would seem carping were it not that the treatment of the problem is dangerously misleading. It manages to pile up on both the Scylla and Charybdis what the general semanticists call elementalism and identification (Alfred Korzybski, *Science and sanity*, 1933).

It is elementalistic in its isolated discussion of soils, and of fertilizers, which are without meaning, in the world food complex, except as components of the total environment. It overlooks our profound scientific ignorance of how to cope with tropical environments, where only an insignificant amount of research has been carried on. It disregards the illiteracy rate (often 100 per cent) of tropical peoples—and what might be called the ecological illiteracy everywhere of leaders, including legalistic and "economy"-minded legislative bodies. It begs the question of whether terror-ridden bureaucracies will be able to cope with wind erosion on the chernozem soils of Central Asia. It ignores the instability and corruption of many governments, which seem to exist primarily to line their own pockets.

What of disturbed hydrologic regimes, with their sequelae of floods, drought, falling water-tables, erosion, that have effectively removed from potential circulation millions of acres in Asia, Africa, and South America? What of the burning, overgrazing, overcropping, and deforestation that have made Africa moribund (Jean-Paul Harroy, *Afrique, terre qui meurt*, Brussels: Marcel Hayez, 1944)? What of the folkways of Asiatic and African primitives and American pressure groups that measure their wealth in destructive numbers of cattle rather than long-time yields? What of the plague of shifting agriculture that, under increased population pressures, every year sends more millions of tons of soil down the world's rivers, especially those of the tropics? What of the need to resettle

hundreds of millions of people already on the land, to give them a decent living standard, and halt erosion? Of what use are millions of tons of fertilizer to India, where 60 per cent of the population has an annual per-capita income of \$9.30 (S. Chandrasekhar, *India's population*, 1946)? How available are the soils of the tropics, when those who work them face almost certain early death from malaria, dysentery, schistosomiasis, sleeping sickness, and a number of other ills, the control of which is inordinately expensive? What of land tenure systems, tenantry, the colonial and American industrial attitude toward the land, which operates in terms of *this year's* profits? All these factors, it should be borne in mind, are interrelated in a dynamic complex in which it is rare that one does not have an influence on all, or most of, the others.

The paper further suffers from identification of U. S. conditions with those of the rest of the world—it has been done in Iowa; therefore, it can be done in Albania. I have never been in Albania, but I have traveled in many other countries; most of them are decades, perhaps centuries, behind the United States in land-use techniques. Not, of course, that we are sitting pretty. We are still losing the battle of soil conservation. We continue to go into the red, from the forest point of view. It is touch and-go whether our western ranges can be saved from the sheep and cattle men. Many of our rivers have been turned into open sewers. Even so, there are few countries outside western Europe that are not far worse off than we.

Meanwhile, the world population is daily increasing at the rate of 50,000 empty stomachs. According to our notions, they should be filled three times a day. It is pleasant to think of 1,300,000,000 available acres and x million tons of fertilizer with which to do it. Unfortunately, for practical purposes, these are as unavailable to hundreds of millions of the earth's people as the gold at the end of the rainbow. And because of man's