1953–56, not quite two-fifths came from continental Europe, and less than one-tenth came from the British Isles; by contrast, the proportion of immigrants from Europe and the British Isles was at least nine-tenths prior to World War I.

Female immigrants have outnumbered the males in each of the postwar years, reflecting the special entry provisions for wives of citizens and of resident aliens. About two-thirds of the newcomers were between 18 and 49 years old, and nearly a fourth of the total were under 18 years of age.

Publication Series in Microbiology

The Institute of Microbiology at Rutgers University is initiating the publication of a series of book-length manuscripts on subjects that relate to microbiology. The series has a twofold aim: (i) to offer an outlet for specialized contributions in microbiology that are of relatively limited interest to commercial publishers and to existing scientific journals; (ii) to make available biographical and historical studies in microbiology.

This program is operating with the financial assistance of the Foundation for Microbiology. Although volumes for the series are being assembled by invitation, comments are welcome with reference to desirable subjects, or in regard to authors qualified to fill existing needs. Prospective contributors are invited to describe their interests. Comments or suggestions may be sent to Vernon Bryson, Institute of Microbiology, Rutgers University, New Brunswick, N.J.

Radio Noise Recording

The National Bureau of Standards has set up 16 radio-noise recording stations throughout the world as part of the International Geophysical Year program. These stations will record radio signals generated by the more than 50,000 thunderstorms occurring daily on earth. The noise recording program is being conducted by W. Q. Crichlow, R. T. Disney, and F. F. Fulton, Jr., of the NBS Boulder (Colo.) Laboratories.

During the past year the atmospheric radio-noise recorder developed at NBS has been accepted internationally as appropriate for use in a world-wide measurement program. The receivers provide continuous recordings of the average power of the noise received on a standard antenna at 8 discrete frequencies in the range from 15 kilocycles to 20 megacycles per second. In addition, some have been modified to record also the average noise voltage and the average of the logarithm of the noise voltage. It has been shown that these three statistical characteristics of the noise provide a reasonably comprehensive picture of the physical nature of its amplitude distribution.

Some man-made radio noise will also be recorded and studied; however, most of the recording sites will be as far as possible from sources of interference. For example, one station is installed at Marie Byrd Base in Antarctica, which is far removed from the radio noise of civilization and from the belt of high thunderstorm activity circling the equator. Information will be gathered at this base about the radio waves that travel long distances through the atmosphere.

The antarctic site is also an ideal place to study radio noise originating in the sun and the stars. Moreover, the station is inside the auroral zone—the belt around the pole where the southern lights appear during magnetic storms—and thus will provide information on the effect this zone has on radio waves passing through it.

Stations planned for operation by the Boulder Laboratories or other U.S. agencies will include, Marie Byrd Base, Antarctica; Maui, Hawaii; Thule, Greenland; and Balboa, Canal Zone, in addition to the stations within the continental United States. Stations which will be operated by other governments but equipped by NBS will be located at Accra, Ghana; Cook, Australia; Johannesburg, Union of South Africa; Rabat, Morocco; San Jose dos Campas, Brazil; Singapore, Malaya; Stockholm, Sweden; and Tokyo, Japan. India will cooperate in the network by furnishing and operating two stations.

All data from the various stations will be forwarded to the Boulder Laboratories for analysis. The results of this study will not only provide information about radio propagation and meteorology but will also establish an engineering basis for assigning frequencies to stations. For the commercial and military radio users who must know which frequencies are best for use at a given time and place, forecasts will be made of the amount of unwanted noise that will interfere with their communications. With other information provided by the bureau, broadcasters will be able to tell the minimum transmitter power than can be used to get their information to the receiver in spite of competition from noise of natural origin.

Proposed Legislation

Of the many bills introduced in Congress, some have a special relevance to science and education. A list of such bills introduced recently follows.

HR 7798. Protect the public health by amending the Federal Food, Drug, and Cosmetic Act to provide for safety of chemical additives in food. Delaney (D N.Y.) House Interstate and Foreign Commerce.

HR 7841. Authorize a 5-year program of grants for construction of medical, dental and Public Health educational and research facilities. Fogarty (D R.I.) House Interstate and Foreign Commerce.

S Res 142. Print additional copies of the "Report on the Development of Scientific, Engineering, and other Professional Manpower." Humphrey (D Minn.) Senate Government Operations.

S 2189. Promote the increase and diffusion of knowledge of the Antarctic. Wiley (R Wis.) *et al.*

July Scientific Monthly

Articles appearing in the July issue of *The Scientific Monthly* are: "History of tension," A. Huxley; "Guiding migrant salmon," P. E. Fields; "On the rejection of the Martian canal hypothesis," W. A. Webb; "Mathematics, abstract entities, and modern semantics," A. Pap. Thirteen books are reviewed.

Scientists in the News

JOSEPH W. GOLDZIEHER, chief of the endocrine laboratory in the department of physiology and biochemistry at the Southwest Foundation for Research and Education, San Antonio, Tex., has been named chairman of the foundation's newly established department of endocrinology.

GERALD A. THOMAS, business manager of the Florida Section of the American Chemical Society for 10 years, will become chairman of the division of natural science at San Francisco State College next fall. Located on a new campus of 92 acres in the southwestern San Francisco area, this college has 9000 students. More than 40 professors and instructors make up the division of natural science, which also includes mathematics.

FREDERICK F. WANGAARD, professor of lumbering at Yale University, began a year's leave of absence on 15 June. For 6 months he will serve as forestry adviser for the Philippines Forest Products Laboratory, under the auspices of the Food and Agriculture Organization of the United Nations. Following his service in the Philippines, he will go to Oslo, Norway, on a Fulbright grant. There he will conduct research in woodworking and technology at the University of Oslo and at the Norwegian Institute of Technology.

WILLIAM J. ENEY, head of the department of civil engineering at Lehigh University, has received the university's $2000 Hillman award as "the member of the Lehigh faculty who has done the most toward advancing the interests of the university."

JAMES McGINNIS has been appointed chairman of the department of poultry at the State College of Washington. He replaces J. S. CARVER, who is now acting director of Washington Agricultural Experiment Stations.

BENJAMIN D. VAN EVERA has been appointed dean for sponsored research at George Washington University. A professor of chemistry, he has served the university since 1946 as coordinator of scientific activities. In his new post he will coordinate all research, scientific and nonscientific.

PAUL HARTECK, distinguished research professor at Rensselaer Institute, has been awarded the gold medal of the Chemical Society of Belgium. The award was made largely in recognition of his discovery of a direct path from fission energy to chemical energy. The new method eliminates the use of large quantities of electricity, or an expensive equivalent, for producing nitrogen used in fertilizers, explosives and other chemical products.

RUSSELL R. LAW, formerly director of research and development for the CBS-Hytron division of Columbia Broadcasting System, Inc., has joined Hughes Aircraft Company as director of new-product development for Hughes Products Group, the company's commercial activity. Law will make his headquarters at the Los Angeles International Airport facility of Hughes Products. His responsibility in the newly created position will be to coordinate and expedite the expansion and commercial application of technical developments from the Hughes Research Laboratories at Culver City, Calif.

JACOB M. SKILKEN, chemistry teacher at Walnut Hills High School, Cincinnati, Ohio, has been named the outstanding high-school science teacher in the United States by the Armed Forces Chemical Association, which has selected him to receive its $1000 National Science Teacher award. Among the various prizes awarded to Skilken's students are the Westinghouse Talent Search award and awards of the science fairs of the Engineering Society of Cincinnati. Letters from former students indicate that Skilken is an inspiring teacher whose influence has led many into outstanding careers in science, medicine, and engineering.

The University of Michigan has announced the following appointments.

FREDERICK P. THIEME, associate professor of anthropology and a member of the faculty since 1949, has been appointed chairman of the department of anthropology for a 5-year term beginning with the university year 1957–58. The current chairman, LESLIE A. WHITE, has served since 1940 and has requested that he be relieved of the responsibilities in order that he may concentrate on an extensive program of writing.

GEORGE W. NACE, who has been on the Duke University faculty since 1951, has been appointed associate professor of zoology, effective 1957–58.

MYRON H. NICHOLS, a member of the Michigan faculty from 1946 to 1949 and again from 1951 to 1954, has been appointed professor of aeronautical engineering. He has been with the Ramo-Wooldridge Corporation, Los Angeles, Calif.

SYDNEY CHAPMAN has been appointed visiting professor of areonautical engineering from 1 Nov. 1957 through 28 Feb. 1958. Since 1951 he has been professor of geophysics at the University of Alaska.

FRANCIS M. HENDERSON was reappointed Fulbright lecturer in engineering mechanics for the first semester of 1957–58. He came here on the Fulbright appointment for the 1956–57 year and in February of 1958 will return to the University of New Zealand, where he has been a senior lecturer in hydraulics since 1952.

HORACE J. DODGE, professor in the department of preventive medicine and public health at the University of Colorado since 1947, has been appointed professor of epidemiology in the School of Public Health, effective 1 Aug.

LEON LORTIE, director of the extension department, University of Montreal, has received the 1957 Montreal medal of the Chemical Institute of Canada. This was the second presentation of this medal, which was established by the Montreal section of the institute as a mark of distinction for a resident of Canada who has made an outstanding contribution to the profession of chemistry or chemical engineering in Canada.

The American Diabetes Association presented the following awards during its recent annual meeting:

SOLOMON A. BERSON, chief of Radioisotope Service, Veterans Administration Hospital, Bronx, N.Y., received the Lilly award, a medal and $1000.

DEWITT STETTEN, JR., associate director in charge of research of the National Institute of Arthritis and Metabolic Diseases, Bethesda, Md., received a Banting medal for his contribution to the knowledge of diabetes. The medal is named for F. G. Banting who, with C. H. Best, first extracted insulin.

JOHN R. MURLIN, professor emeritus, department of physiology, University of Rochester School of Medicine and Dentistry, also received a Banting medal.

FRANCIS E. WASHER, chief of the optical instruments section at the National Bureau of Standards, has received the Talbert Abrams award of the American Society of Photogrammetry. The award is presented annually for "distinguished authorship and recording of current and historical scientific developments in photogrammetry."

The Society of American Military Engineers annually awards four special medals, one to an engineer in each of the armed services in recognition of the most outstanding contribution to military engineering through achievement in design, construction, administration, research, or development. The 1956 awards are as follows:

DEAN S. CARDER, chief, Seismology Branch, U.S. Coast and Geodetic Survey, the Colbert medal for outstanding achievement in the development and application of seismological techniques to the detection and evaluation of ground disturbances of critical importance to military operations.

Lt. (jg) RICHARD A. BOWERS, Civil Engineer Corps, U.S. Navy, the Moreell medal for determination of the precise location of the South Pole by theodolite, and for supervising the construction of the first base at the South Pole.

Col. EDWIN M. EADS, U.S. Air Force installations representative, South Pacific Region, the Newman medal for his surveillance of Air Force construction in the region, which has provided facilities embodying the best in design and construction to meet operational requirements.

JACQUE S. MINNOTTE, chief, Construction Division, Pittsburgh Engineer District, Corps of Engineers, U.S. Army, the Wheeler medal for reorganization of the Construction Division and training of the expanded work force for military construction in the district.

Col. HAROLD E. BISBORT, U.S. District Engineer, Mobile District, Corps of Engineers, U.S. Army, the gold medal for distinguished service to the society for his work in promoting the society objectives in Mobile and the formation of two new local posts and one student post of the society and the reestablishment of two student posts that had become inactive.

FREDERICK HOVDE, president of Purdue University, and C. W. BLEGEN, professor of archeology at Cincinnati University, recently received honorary degrees at Oxford University, England.

Winners of awards for the five best essays on gravity have been announced by the Gravity Research Foundation, New Boston, N.H. PHILLIP MORRISON, department of nuclear studies, Cornell University, and THOMAS GOLD, department of astronomy, Harvard University, won the $1000 first prize for their paper "On the gravitational interaction of matter and antimatter." JOHN A WHEELER, Palmer Physical Laboratory, Princeton University, won the $300 second award for his essay "Gravity can glue together energy to make matter."

The remaining awards were as follows: FELIX PIRANI, department of mathematics, King's College, London, England, third award of $200; NORMAN STRAX, a former winner of the Westinghouse Science Talent Search and a senior at Princeton University, fourth award of $150; ROBERTA CORDOVA, a senior at the University of Miami, Florida, fifth award of $100. Honorable mention was given to HUGH V. CORLEY of Faringdon, Berkshire, England.

HARVEY FLETCHER, director of research at Brigham Young University and a pioneer in the science of speech and hearing, has received the gold medal of the Acoustical Society of America. The medal, awarded every 2 years, was conferred on Fletcher for his "distinguished contribution to the society and to the science of acoustics." He was the first president of the society, from 1929 to 1931, and is the third recipient of this award.

J. P. GREENHILL of Chicago, a gynecologist and obstetrician, has received the Croix de Chevalier of the Legion of Honor of France in recognition of his efforts in the United States in making known the work of French gynecologists.

SHIRLEY D. KRAUS, formerly of the Howard University College of Medicine, has been appointed associate professor of pharmacology at Long Island University's Brooklyn College of Pharmacy. Her primary research interest is endocrinology.

DONALD W. DUNIPACE, chief physicist for the Libbey-Owens-Ford Glass Company, has been named director of development. He succeeds I. G. FOWLER, who is retiring after 34 years of service with the company.

A symposium in commemoration of the 250th anniversary of the birth of Carolus Linnaeus was held at the University of Uppsala, Sweden, 29–30 May. There were 22 foreign and six Swedish participants. On 31 May the following were granted honorary degrees by the Faculty of Mathematics and Natural Science: H. H. ALLAN (New Zealand), J. BRAUN-BLANQUET (France), E. H. FRIES (Sweden), J. S. HUXLEY (Great Britain), J. IVERSEN (Denmark), H. LINDBERG (Finland), E. MAYR (Museum of Comparative Zoology, Harvard), R. NORDHAGEN (Norway), J. RAMSBOTTOM (Great Britain), B. RENSCH (Germany), and J. WESTERDIJK (Netherlands). In addition JENS CLAUSEN of Stanford University and JAY L. LUSH of Iowa State College were given honorary doctorates in agronomy.

DAVID RIESMAN of the University of Chicago, lawyer-sociologist who wrote *The Lonely Crowd* and various other studies of American culture, will be the first Henry Ford II professor of social sciences at Harvard University. He will join the faculty a year from next fall, when he will fulfill a roving commission to teach, without departmental restrictions. The purpose of the Ford professorship, and of another new professorship named for former President A. Lawrence Lowell of Harvard, is to provide for the appointment of distinguished men from different fields of knowledge to enrich further the undergraduate program at Harvard.

This year's honorary degree recipients include the following:

ROGER ADAMS, chemistry professor and long-time head of the chemistry department at the University of Illinois, past president of the AAAS, from the University of Illinois.

HANS T. CLARKE, professor emeritus of biochemistry, Columbia University, from Columbia University.

LEE A. DuBRIDGE, president of California Institute of Technology, from Columbia University and the University of Wisconsin.

W. E. KNOWLES MIDDLETON, senior research officer in the division of applied physics of the National Research Council of Ottawa, Canada, from Boston University.

IRVINE H. PAGE, director of research at the Cleveland Clinic Foundation, from the Albany Medical College of Union University.

THADDEUS H. PARKS, retired entomologist with the Agricultural Extension Service, from Ohio State University.

CHESTER R. ROBERTS, director of the division of natural sciences and mathematics and chairman of the department of chemistry at Colgate University, from Ottawa University, Ottawa, Kansas.

FRANCIS O. SCHMITT, institute professor of biology at Massachusetts Institute of Technology, from the University of Chicago.

PHILIP SPORN, president (formerly the chief engineer) of the American Gas and Electric Company, from Ohio State University.

Recent Deaths

BYRON L. BENNETT, Pittsburgh, Pa.; 49; associate of Jonas Salk in the development of the poliomyelitis vaccine; 9 June.

LAWRENCE CURTIS, Swarthmore, Pa.; 67; former chief of plastic surgery at the Graduate Hospital of the University of Pennsylvania and chief of surgery at Presbyterian Hospital, a founder of the American Board of Plastic Surgery; 8 June.

FRANCES DENSMORE, Red Wing, Minn.; 90; research associate in the Bureau of American Ethnology, Smithsonian Institute, specialist in Indian music; 5 June.

ESTELLE FORCHHEIMER, New York, N.Y.; 83; former assistant professor of psychology at Hunter College; 5 June.

MURRAY P. HORWOOD, Cambridge, Mass.; 64; professor of sanitary science at Massachusetts Institute of Technology; 4 June.

WALTER A. JAMIESON, Indianapolis, Ind.; 67; retired director of the biological research division of Eli Lilly and Company; 5 June.

WALTER C. MENDENHALL, Chevy Chase, Md.; 86; retired director of the U.S. Geological Survey, former president of the Geological Society of America, and vice-president of the AAAS section on geology and geography, 1924; 2 June.

HARRY S. ROGERS, Brooklyn, N.Y.; 66; president of Polytechnic Institute of Brooklyn, formerly dean of engineering at Oregon State College, twice president of the American Society for Engineering Education; 6 June.

H. O. SIEGMUND, West Orange, N.J.; 61; military development engineer in charge of a control systems section, Bell Telephone Laboratories, one-time professor of physics and electrical engineering at Drexel Institute in Philadelphia; 5 June.

KATHARINE TUCKER, Flourtown, Pa.; 72; retired director of the department of nursing education in the University of Pennsylvania's School of Education and former executive director of the National Organization for Public Health Nursing; 6 June.