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.