up in several categories, including one covering scientists and other professionals. What's more, because of peculiarities in the working of the system under the old and new laws, scientists from Britain and certain other countries will find themselves far down on the waiting list once the law becomes fully effective on 1 July. Here's how this curious circumstance came about.

Under the old national-origins quota system, each foreign country outside the Western Hemisphere was alloted a specific quota of visa numbers, set according to the proportion of individuals of that nationality in the American population in 1920. This system assigned almost 70 percent of the annual visa numbers to just three countries—Great Britain and northern Ireland, with 65,631; Germany, with 25,814; and Ireland, with 17,756. Since the quotas in these three countries, and certain others, exceeded annual demand, any scientist—indeed any citizen—could emigrate to the United States almost at will. Meanwhile, the quotas assigned to other countries often fell far short of demand. Italy, with 5666, was heavily oversubscribed, and most Asian and African nations were limited to only 100 immigrants per year, far short of the demand. Not surprisingly, some countries developed waiting lists that were years long.

These backlogs were supposed to be wiped out by the new law, and, except for the case of Italy, this has happened. But during the transition period, new waiting lists have unexpectedly developed. The new law allows an annual maximum of 170,000 immigrants from the Eastern Hemisphere—somewhat higher than before—and it allots certain percentages of the total to various "preference categories." The numbers allotted to the first, second, and fourth categories—covering various relatives of American citizens and of aliens already resident in the U.S.—are more than ample. But the totals assigned to categories for professionals, skilled and unskilled workers, and brothers and sisters of American citizens have proved inadequate to meet the demand.

It is the third category, covering members of the professions or persons of exceptional ability in the sciences and arts, that affects the brain drain. The law allows entry of only 17,000 professionals each year. Yet the backlog of applicants—from countries with oversubscribed quotas—is expected to reach 48,000 by the time the new

NEWS IN BRIEF

● **GRAD STUDENT STUDY**: Most U.S. graduate students are married, attend school part time, and pay their own way, the U.S. Office of Education reports. About 17 percent of the students surveyed during the spring of 1965 received grades averaging A− or better, while 42 percent scored B− or lower. The highest grades were achieved by students in philosophy and religion, while students in business administration and some education fields reported the lowest. The women's grades were slightly superior to those received by men. Tuition and fees ranged from a median of $600 per year in public universities to about $1500 in private institutions. The report also noted that expenses for full-time graduate students ranged from less than $1000 to more than $9000—with a median of just over $2000 a year. Copies of *The Academic and Financial Status of Graduate Students, Spring 1965* (OE-54042) are available without charge from the National Center for Educational Statistics, U.S. Office of Education, Washington, D.C.

● **ENGINEERS' SALARIES**: A report on engineers' salaries by geographic region and by size of employer has been published by the Engineering Manpower Commission of Engineers Joint Council. The report indicates that engineers with 12 to 14 years of experience receive the highest wage if they work in the Middle Atlantic states, averaging $14,700 annually, and the lowest, about $11,750, if they are employed in the West South Central states. Other data show that experienced engineers generally earn about 12.5 percent more if they are employed by large firms rather than by small ones. Copies of the *Special Analysis by Region and Company Size,* at $10 each, are available from the Engineering Manpower Commission, 345 East 47 St., New York 10017.

● **PALYNOLOGY ORGANIZATION**: The American Association of Stratigraphic Palynologists was formed in December to promote palynology—the science of live and fossil spores. Membership is open to persons who are interested in that science and in the objectives of the association. Annual dues are $5. Additional information may be obtained from the association's secretary-treasurer, Alfred Traverse, at the Department of Geology and Geophysics, Pennsylvania State University, University Park, Penn. 16802.

● **R&D FORECAST**: Research and development expenditures are expected to increase 3.3 percent over the estimated 1967 level to $26.5 billion in 1968, according to a forecast prepared by Battelle Memorial Institute. The forecast also estimates that federal spending for research in the social sciences will increase at a greater rate during 1968 than spending for research in the physical sciences. The forecast attributes the shift in emphasis, in part, "to a sharply reduced rate of growth of military, space, and atomic energy research programs" and also "to a national concern with education, health, urban, employment, and welfare problems." According to Battelle, federal R&D expenditures will total approximately $17.2 billion in 1968 compared with other anticipated R & D spending of $8.3 billion by industry, $865 million by colleges and universities, and $265 million by other nonprofit institutions. The Battelle forecast notes that "in 1968, it is estimated that Federal funds will account for approximately 65 percent of the total funds available for R & D. . . ."

● **NATIONAL SCIENCE MEDALS**: The 1967 recipients of the National Medal of Science are Kenneth S. Cole, biophysics, National Institutes of Health; Harry F. Harlow, psychology, University of Wisconsin; Alfred H. Sturtevant, professor of biology (emeritus), California Institute of Technology; Michael Heidelberger, immunochemistry, New York University; Edwin H. Land, president, Polaroid Corporation; Igor I. Sikorsky, retired engineering manager, Sikorsky Aircraft Division, United Aircraft Corporation; Paul J. Cohen, mathematics, Stanford; Jesse W. Beams, physics, University of Virginia; Francis Birch, geological sciences, Harvard; Gregory Breit, physics, Yale; Louis P. Hammet, retired professor of chemistry, Columbia; George B. Kistiakowsky, chemistry, Harvard. The medal is the federal government's highest award for achievement in science, mathematics, and engineering.