monument against a background of his table of the periodic system of elements; the ten and fifteen kopek denominations bear a portrait of Mendeléeff, also against a background of the table of the periodic system of elements. All the stamps bear the commemoration date 1834–1934.

The British Medical Journal states that the issue of the *Schweizerische medizinische Wochenschrift* for June 9 is a Festschrift in honor of the centenary of the foundation of the University of Berne, and contains portraits of the most distinguished professors of the medical faculty during the last hundred years.

SCIENTIFIC EVENTS

THE BRITISH NATIONAL PHYSICAL LABORATORY

THE General Board of the National Physical Laboratory held its annual inspection of the laboratory on June 26, when about 2,500 guests were received by Sir Frederick Gowland Hopkins, chairman of the board, and Sir Joseph Petavel, the director.

According to an account given in the London *Times*, the new acoustics laboratory was open for inspection for the first time. Here unrivaled facilities are offered for the study of sound, which owing to modern conditions of life is becoming an increasingly important problem. It was pointed out that not only is noise increasing at the source, but modern buildings are becoming more and more pervious to it. The steel frame of a big modern building provides a continuous structure through which sound can be easily transmitted, while the walls are so thin that they readily admit sound. At the same time the heavy hangings and furniture of Victorian days, which used to deaden sounds, are not in favor to-day.

These and other problems are being studied at the National Physical Laboratory. A room in which no two walls are parallel and in which the ceiling is at an inclination to the floor provides that sound in it is uniformly distributed, thus ensuring ideal conditions for experiment. The room is carried on cork pads and encased by two sets of walls, so that extraneous sounds are not admitted. In these conditions a sound made in the room reverberates for a long time. But if two steel doors in a wall are opened so as to expose an absorbent material, *e.g.*, asbestos, the sound does not reverberate for so long. In this way it is possible to arrange wall materials in the order of their sound-absorbing powers.

Another experiment in the same building shows how a double window, if properly spaced, will deaden such irritating noises as the clanking of a dust-bin, but the astonishing result has emerged that if the sheets of glass are not properly spaced the effect may be to increase the sound, as compared with the sound transmitted by a single sheet.

The Radio Department showed an instrument devised at the laboratory to give warning on board ship at the approach of other ships in fog. Although this is actuated by wireless signals, its operation does not prevent ordinary wireless telegraphy, even on the same wave-length. The indicator consists of a glass disk marked "fore and aft," "port and starboard." Wireless signals from a neighboring ship (which may be as short as 1-100 sec. in duration) cause a luminous line to flash out on the disk in the direction of that ship. If the neighboring ship is approaching the observing ship, the length of the line increases. If the ships are heading for a collision, the direction of the line remains fixed. The instrument immediately indicates any change in the direction of the approaching ship by a change in the direction of the indicating line.

Another instrument developed in the Radio Department indicates automatically, by the lighting of a red or green lamp, the instant a ship deviates from a set course. Known methods of remote control can be incorporated to ensure that the deviation from the course is automatically corrected. This invention should be of great utility in flying as well as at sea.

THE LEVERHULME FELLOWSHIPS

AWARDS of Leverhulme Research Fellowships in 1934, and grants to research workers, are announced by the Advisory Committee, and are given in the London *Times* as follows. The number of applications for awards this year was approximately the same as in 1933. The Advisory Committee has recommended and the trustees have approved twelve nominations to fellowships, tenable for varying periods up to two years. Three fellowships awarded last year have been extended for a further period of one year.

On the recommendation of the Advisory Committee the trustees have also approved the award of nine grants to research workers to assist the completion of their programs. These grants are held under the same general conditions as the fellowships.

The names of the fellows and the subjects of the researches in so far as they concern the sciences are as follows:

E. Ashley Cooper, D.Sc., lecturer in chemistry, University of Birmingham, "The Activity of Enzymes of Bacteria."

E. E. Evans-Pritchard, Ph.D., assistant professor of sociology, University of Cairo, Egypt, "A Detailed

Ethnological and Sociological Study of the Pagan Galla of Western Abyssinia."

R. Maclagan Gorrie, D.Sc., Indian Forest Service, "The Correlation of Erosion Damage and Grazing in Forest Lands."

Miss M. M. Green, late Government Education Department, Nigeria, "Anthropological and Linguistic Research among the Ibo Tribe of Southern Nigeria." (Joint research with Mrs. S. H. Leith-Ross.)

D. Ll. Hammick, fellow and tutor, Oriel College, Oxford, Leverhulme Research fellow, "Investigation on the Interaction of Nitrocompounds with Aromatic Bases and Hydrocarbons." (Renewal.)

H. Stafford Hatfield, Ph.D., Leverhulme Research fellow, "The Behavior of Crystaline Substances in Electric and Magnetic Fields." (Renewal.)

N. E. Odell, associate of the Royal College of Mines, geologist to the Louise A. Boyd Expedition to North-East Greenland, 1933. "An Investigation into the Structure and Metamorphism of the Franz Josef Fjord Region of North-East Greenland."

W. H. Taylor, Ph.D., assistant lecturer in physics, University of Manchester, "The Application of the Method of X-ray Analysis to the Investigation of the Structures of Organic Compounds."

Grants in aid of research were made to C. R. P. Diver, M.A., Senior Clerk, House of Commons, "South Haven Peninsula Survey, Studland Heath, Dorset; (i) Physiography and history; (ii) Distribution of populations and ecology of several animal orders," and to Mrs. C. F. Tipper, D.Sc., research worker, University of Cambridge, "The plastic deformation of metals."

REORGANIZATION OF THE U. S. BIOLOGICAL SURVEY

CHANGES in the organization of the U. S. Biological Survey looking toward the more effective promotion of an active national movement toward wild-life restoration have been announced by J. N. Darling, chief of the bureau.

Consolidating the Division of Game and Bird Conservation and the Division of Predatory Animal and Rodent Control, a new unit, called the Division of Game Management, has been established. Under the leadership of Stanley P. Young, formerly head of the control unit, eight to twelve regional directors will administer game and other wild-life management throughout the states. Leaders of predatory and rodent control, refuge custodians, law-enforcement officers and other field agents will be responsible to the regional directors.

To keep the public acquainted with the accumulating facts and findings and with the activities of the survey, a Division of Public Relations has been established and has been placed in charge of H. P. Sheldon, formerly head of the Division of Game and Bird Conservation. In addition to giving attention to the press, the radio, public exhibits and public speakers, the new division will keep watch of the relations of the bureau with the various regions and states. It is planned to give more opportunity to investigators to write about their specialties. The Division of Public Relations includes a consolidation of the Office of Editorial and Informational Work and the Office of Exhibits, Photographs and Publication Distribution.

To promote a national migratory waterfowl program, Mr. Darling has established a new unit to be called the Division of Migratory Waterfowl. In charge of J. C. Salyer, of the University of Michigan, this division will plan for careful and thorough wild-life-refuge administration in the interests of the birds, the public and the sportsmen. Immediate objectives will be emergency acquisition of refuge areas with the special funds available, and the development of trained refuge custodians. For the present, however, existing refuges remain under the supervision of the Division of Game Management.

The duties and personnel of the Division of Administration have been amplified, placing the enlarged unit in charge of W. R. Dillon, formerly assistant in the Division of Game and Bird Conservation.

SEARCH FOR PLANTS TO CONTROL SOIL EROSION

PLANT explorers of the U. S. Department of Agriculture are now making an intensified search at home and abroad for plants that will help to control soil erosion. Two parties are abroad—one in Russia and one in Japan—and other parties will search the western half of the United States.

H. L. Westover and C. R. Enlow will visit Russian Turkestan, Persia and Afghanistan, looking for all kinds of soil-holding plants which show possibilities for the Southwestern United States. Five years ago Mr. Westover spent a year in Turkestan and Persia and brought back several strains of wilt-resistant alfalfa which are being used to build up resistance to this disease in our domesticated alfalfas.

The Russians, according to Knowles A. Ryerson, chief of the Bureau of Plant Industry, have a highly developed program of plant introduction under the direction of N. I. Vavilov, who is also head of the Agricultural Academy at Leningrad. A party of Russian horticulturists has been in the United States since the first of the year, studying our citrus industry. Two years ago when the department had two men in South America for a few months searching for disease-resistant potatoes to use in breeding work the Russians had several men there for a year for the same purpose. The second party of foreign plant explorers, including H. G. MacMillan, a veteran plant explorer, and J. L.