than twenty-five years he represented Ireland at the annual meetings of the International Council for the Exploration of the Sea. He was elected to membership of the Royal Irish Academy in 1912. A year ago he was elected an honorary member of the Challenger Society for his work in marine biology, and shortly before his death he was preparing to attend one of the joint meetings of the Society in London.

We regret to announce the following deaths:

Mr. W. C. Chesterman, O.B.E., assistant secretary of the University Grants Committee, on January 29, aged fifty-nine.

Dr. F. H. A. Marshall, C.B.E., F.R.S., formerly reader in agricultural physiology in the University of Cambridge, on February 5, aged seventy.

NEWS and VIEWS

Physics at the National Research Council, Canada: Dr. G. Herzberg

Dr. Gerhard Herzberg has been appointed director, Division of Physics, National Research Council, Canada, in succession to Dr. R. W. Boyle, who retired in October 1948. Dr. Herzberg is a Canadian citizen who has been on the staff of the Division of Physics for some months as a principal research officer, having gone to this post from the Yerkes Observatory, University of Chicago, where he had been professor of spectroscopy for nearly three years. During the preceding ten years, he was research professor of physics at the University of Saskatchewan, Saskatoon, Sask. Before that, he had worked in Germany at Darmstadt and Göttingen, and in the University of Bristol. Dr. Herzberg is a leading authority on spectroscopy and molecular structure, and is the author of three standard textbooks and numerous scientific papers. At Saskatoon he established a spectroscopy laboratory for graduate research and thus greatly strengthened the graduate school in physics and chemistry. He and his coworkers made important contributions to interpretation of data on spectral lines of distant stars and of comets. These investigations led up to his work at the Yerkes Observatory, where he built the world's longest multiple optical path (5,000 m. at atmospheric pressure) for the study of planetary atmospheres and to gain information on molecular structure. Using this equipment, he carried out important work on the infra-red absorption spectra of hydrogen, which has made it possible to detect hydrogen in planetary atmospheres. Dr. Herzberg will continue his varied researches in his new post.

Dr. L. E. Howlett, M.B.E.

Dr. Leslie E. Howlett has been promoted to be associate director of the Division of Physics, National Research Council, Canada. Graduating in mathematics and physics in the University of British Columbia in 1927, he went to the University of Toronto as a research fellow, proceeding eventually to McGill University for his doctorate. Since 1931 he has been on the staff of the National Research Council in charge of the optics section. During the War he aided in the development of the optical instrument industry, for which he was awarded the M.B.E. in 1943. He served as chief scientific liaison officer in London and later in Washington. Since July 1948 he has been assistant director of the Division, and his advancement to the post of associate director is a tribute to his success in the organisation and management duties entrusted to him.

Another Big Sunspot

Misty or foggy conditions in Britain on February 4 made it possible to see with the naked eye a big group of sunspots that had grown rapidly after February 1. Another factor which contributed to its 'discovery' by many members of the general public was the favourable position of the spot group near the centre of the disk. At central meridian passage on February 5·4, the group passed within 2° of the centre of the disk, and its area was then greater than 2,000 millionths or 1/500 part of the sun's hemisphere. Although in size the present sunspot was only about half that of the four giant spots seen in 1946–47, it has attracted more general interest, because of the recent atmospheric conditions for its easy visibility, and also because of the earlier big spot group of comparable size a fortnight earlier, with the associated auroral display on January 24–25 (see *Nature*, February 5, p. 203). Observers of the setting sun, seen through the London mist on February 4, could also pick out with the unaided eye two other spots.

Government Expenditure on Universities in England

In a written Parliamentary reply to Mr. Kenneth Lindsay on January 18, Sir Stafford Cripps, the Chancellor of the Exchequer, said that the non-recurrent payments to the Universities in England during the years 1945–49 were as follows: 1945–46, £620,895; 1946–47, £566,996; 1947–48, £1,920,508; 1948–49 (to January 14, 1949), £1,980,686. The principal projects covered by these grants are the purchase of sites and buildings, the erection of new buildings (including new teaching blocks for science and technology and halls of residence) and the provision of new equipment. The amounts paid to individual institutions have varied according to the opportunities for building and the degree of expansion of numbers in an individual centre. Sums in excess of £200,000 are listed as follows: University of London, £1,283,348; University of Durham, £504,011; University of Nottingham, £319,083; University of Birmingham, £292,485; University of Leeds, £270,418; University College of Hull, £240,813; University of Bristol, £230,521; University of Oxford, £217,507; University of Reading, £215,645; University College, Leicester, £213,902.

The Oil Position in 1951

Middle East oil is again prominent in the American Technical Press, this time in a paper entitled "The Place Middle East Oil will occupy in World Markets", read by C. J. Bauer, of the Standard Oil Company, New Jersey, at the annual meeting for 1948 of the American Institute of Mining and Metallurgical Engineers. As is now generally appreciated, the function of Middle East oil, once pipe-lines to the Mediterranean are completed, will be to relieve the strain on western hemisphere petroleum resources, that is to say, the United States and Caribbean region, from which at present most of West European