

in the proportion of 40 per cent of the former and 80 per cent of the latter, has been used for many years as an energizer for carburizing compounds in the case-hardening industry. Considerable proportions of barium oxide, in some cases nearly 50 per cent by weight, enter into the composition of crown and flint optical glasses used for the production of lenses. Finely divided barium carbonate is also claimed to increase the resistance of cement to the action of sulphate-containing waters.

#### Credit and the Family Budget

THE Office of Education, United States Department of the Interior, has issued a bulletin "Credit Problems of Families" (Vocational Division Bulletin No. 206, Home Economic Series No. 23) to aid teachers of home economics in guiding students in an understanding of the place of credit in family financial management and in the solution of their own credit problems. Credit has played an increasing part in recent years in the financial plans of American families, and this study, which covers both credit for everyday use and long-term uses of credit, is intended to assist the understanding of the principles governing the sound use of credit. Numerous suggestions to teachers are included.

#### Help for Scientific Research in Canada

THE Canadian Government has announced the appointment of nine members to administer funds presented by patriotic citizens for assisting technical projects and scientific investigations now being undertaken or proposed by the National Research Council with the object of increasing the efficiency of the Canadian war effort. The chairman is Dean C. J. Mackenzie (acting president of the National Research Council), and the members include Sir Frederick Banting, Mr. J. S. Duncan (Deputy Minister for Air), Prof. Maas (head of the Physics Department of McGill University), and Colonel Allen Magee (executive assistant to the Minister of National Defence). Funds given or promised amount to £225,000.

#### The *Sedov* on a New Expedition

THE Geographical Department of the Northern Sea Route Administration (U.S.S.R.) has sent out the icebreaker *Sedov* on a new expedition to the north-eastern part of the Kara Sea. It will be remembered that the *Sedov* returned to Murmansk on January 29, 1940, after a remarkable drift in the Arctic of twenty-seven months duration. The head of the new expedition is Mr. V. I. Vorobyev. The purpose of the expedition is to study one of the most important parts of the Northern Sea Route in the Kara Sea—from Izvestia Tsik Islands to Russky Island. The total length of this part is about two hundred nautical miles. The expedition is to carry out hydrographic and hydrological research: it will make systematic soundings of the depths of the sea, study the currents, wind regime, ice conditions, and carry out magnetic observations.

#### Announcements

DR. K. E. BULLEN, lecturer in mathematics at University College, Auckland, New Zealand, known for his work in seismology, has taken up an appointment in the Department of Mathematics of the University of Melbourne.

SIR ARTHUR HURST will deliver the eighteenth Norman Kerr Lecture to the Society for the Study of Inebriety on October 8 at 4 p.m. in the Friends House, Euston Road. His subject will be "Alcohol and the Organs of Digestion".

IN consequence of the War, it has been decided to postpone, for the present, the Chadwick Public Lectures which were to have been delivered this autumn.

THE following are serving as officers of the Society of Chemical Industry for 1940-41: *President*, Prof. J. C. Philip; *Honorary Treasurer*, Dr. L. H. Lampitt; *Honorary Foreign (or Overseas) Secretary*, Dr. Wm. Cullen; *Chairman, Bureau of Chemical Abstracts*, Dr. L. H. Lampitt; *General Secretary*, H. J. Pooley, Clifton House, Euston Road, London, N.W.1.

THE average mortality rate from all causes in the large cities of the United States for the four weeks ended June 15, based on data received from the Bureau of the Census, was 10.9 per thousand inhabitants. The average rate for this period in the five preceding years was 11.0.

THE Medical Research Council has received four motor-vehicles specially equipped for medical work from the United States. These were originally purchased by the American Quakers and the International Commission for the Assistance of Child Refugees for use in France. The vehicles now are to be used principally in the work of the Emergency Blood Supply depots in the neighbourhood of London.

DR. F. HOYLE, St. John's College, Cambridge, writes: "I have noticed an error in a letter by Lyttleton and myself on 'The Evolution of the Stars' appearing in NATURE of July 20, p. 97. The sentence 'Thus the effect of collisions is to excite the vibrational and rotational levels of the  $^3\Sigma$  state of the molecules, and this internal energy can be radiated by quadrupole transitions to the ground state of the molecules', should read: 'Thus the effect of collisions is to excite the vibrational and rotational levels of the  $1^1\Sigma$  state of the molecules, and this energy can be radiated by quadrupole transitions as an infra-red spectrum'."

ERRATUM. In the obituary of Prof. A. E. H. Love in NATURE of September 21, p. 393, three lines from foot of second column, for "Anthony Berry" read "Arthur Berry".