respectively by individual firms, industrial research associations, government research stations, technical colleges and universities. It gives rise to many original suggestions, some of them not free from controversy. Apart from research undertaken by individual firms, the report calls upon industrialists collectively to aim at maintaining some twenty-five research associations which would employ between them four or five thousand scientists and technicians and would cost about £4,000,000 a year in running expenditure, to which should be added £2,000,000 or £3,000,000 for development work. This demand is reasonable and moderate and it is a matter for regret that the past attitude of the majority of industrial firms has driven the signatories to conclude that it may not be possible to set research associations properly on their feet without compelling each firm in an industry to make its financial contribution to the appropriate association.

The report rightly insists that lack of facilities for experimental development is still the most serious shortcoming to be remedied if the time-lag between scientific discovery and practical application is to be reduced. It makes a suggestion which requires serious attention—that a state development fund should be created to subsidize experimental work of potential public benefit. The government is also called upon to assume greater direct responsibility for research, to be constantly on the watch for new scientific ideas which may have social or economic value, and, where necessary, to take the initiative in trying them. Most important is the further proposal, of which little has been heard in recent discussions, that the government should, on behalf of the consuming public, arm itself with all powers needed to review industrial costs and margins and, where desirable, to promote standardization of the types and qualities of products in order to ensure that the consumer gets the full benefit of the application of science to industrial processes. It is good, too, that the statement lays stress on the practical importance of the much neglected biological sciences, and that it is well aware of the danger of too exclusive a concentration upon physical and chemical research to the neglect of social, economic, psychological and management studies, all of which, as the report says, are of no less importance to the well-being of the community than industrial research in the narrow sense.

BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH

SIR THOMAS LEWIS, F.R.S., has been appointed to succeed Profesor T. R. Elliott, F.R.S., on the Board of Trustees of the Beit Memorial Fellowships for Medical Research, and Dr. A. N. Drury, F.R.S., has been appointed acting secretary.

The following fellows have been elected with permission for each fellow to be seconded at any time for war duties:

W. HOLMES, D.PHIL. To continue the study of the regeneration of nerve-fibers after injury. At the department of zoology and comparative anatomy, University Museum, Oxford.

MARY F. LOCKETT, M.D. To continue the study of renal pressor substances responsible for experimental high blood pressure. At the Laboratory of Pharmacology, Cambridge.

J. C. BOURSNELL, PH.D. To study the fate and functions of trace and some other elements in the animal body, using radio-active isotopes. At the department of biochemistry and chemistry, of the Medical College, St. Bartholomew's Hospital.

G. A. LEVVY, D.SC. To study the adaptive enzymes in the animal body with special reference to the rôle of glucuronidase in the metabolism of steroid hormones and related substances. At the department of medical chemistry, University of Edinburgh.

H. J. ROGERS, PH.D. To study the biochemistry of hyaluronidase, and the rôle of such enzymes and other bacterial antigens in infection. At the Lister Institute, Elstree, Herts.

G. J. ROMANES, PH.D. To study the relationship between the developing mesoderm and the motor apparatus of the spinal cord supplying it. At the department of anatomy, University of Cambridge.

F. SANGER, PH.D. To study the chemical structure of proteins with special reference to insulin. At the Sir William Dunn Institute of Biochemistry, Cambridge.

S. P. V. SHERLOCK. To study the hepatic function in disease by biopsy methods. At the department of medicine, British Postgraduate Medical School, London.

C. WAYMOUTH, PH.D. To study the factors influencing tissue growth *in vitro*. At the department of physiology, University of Aberdeen.

E. C. WEBB. To study the ultimate mode of action of drugs and poisons in living tissues. At the Sir William Dunn Institute of Biochemistry, Cambridge.

TWENTY-FIVE YEARS OF BOTANY AT BUTLER UNIVERSITY

IN connection with a banquet on September 15 to celebrate the twenty-fifth anniversary of the department of botany of Butler University, the following account of its work has been sent to SCIENCE by Dr. John E. Potzger, associate professor of botany in the department:

A quarter century has passed since Dr. Ray C. Friesner joined the faculty of the department of biology at Butler University, and there offered the first course in botany. One year later (1920) it was divided into a department of botany and a department of zoology.

The first courses in botany had an enrollment of 43 students. During the peak in the first semester of 1941 the enrollment reached 304. Beginning with an offering of 15 credit hours (3 courses), the department expanded until at present it offers 107 credit hours (25 different courses). During the quarter century, 130 Butler students majored in botany; of these 49 now hold M.A., and 19 Ph.D. degrees. Eighteen teach in colleges and universities, 18 hold membership in Sigma Xi.

The department has at present three full-time professors, and two instructors in the evening division. Each