

ducts; petroleum refining and extraction; and primary metals financed 90 per cent or more of their research and development. The average cost per scientist and engineer in research and development was 34,300 dollars, varying from 20,200 dollars in food and kindred products to 42,300 dollars in aircraft, and from 20,400 dollars in companies with fewer than 1,000 employees to 37,400 dollars in companies with 5,000 or more. Wages and salaries averaged 51 per cent of research and development costs in 1957, ranging from 46 per cent in the electrical equipment industry to 67 per cent in the paper and allied products. Company-financed research and development (excluding that federally financed) averaged 1.6 per cent of net sales, and varied widely from less than 1 per cent in food and kindred products, paper and allied products, petroleum refining and extraction, and primary metals, to 6 per cent in scientific and mechanical measuring instruments; but including federally financed research and development the average was 3.3 per cent of net sales.

Employment of Librarians in the United Kingdom

THE recent annual report of the Manchester Public Libraries Committee referred to difficulties which were being experienced through the rapid turnover of staff and the progressive weakening of professional experience. The Library Association has been increasingly disturbed in recent years by the extent to which it has been necessary for public libraries to fill professional posts with partly qualified staff; whereas in 1957 only 16 per cent of administrative, professional and technical posts were occupied by unqualified staff, in 1960 it had risen to 27 per cent, and at the end of 1960, out of a total of 2,738 posts, 277 were vacant and 998 occupied by unqualified staff. This situation led the Library Association to seek information from 484 public libraries regarding their turnover of staff since January 1959, and replies received from 352 showed that 47 per cent of qualified staff leaving were lost to the service, only 56 per cent of the vacated posts were filled by qualified librarians and 10 per cent remained unfilled. There was a loss of 299 qualified librarians to other types of library and public employment.

These and other figures were quoted by Mr. A. Fitch, who raised the subject in an adjournment debate in the House of Commons on March 1 and referred to the estimate in the Roberts report that an increase of more than 2,000 qualified librarians in the public library service was required for an efficient service. He suggested that the shortage was to be attributed to the unsatisfactory salary scales, and that the recommendations of the Roberts Committee were being ignored by the library authorities. In replying on the debate, the Parliamentary Secretary to the Ministry of Education, Mr. K. Thompson, referred to the Minister's announcement on December 15 that it was the Government's intention that the Minister of Education should have general responsibility for the supervision of the public library service, and that after certain preliminary work had been completed legislation would be laid before the House. Mr. Thompson said that this preparatory work was actively proceeding and broad measures of agreement already existed on many of the problems. Whatever new duties might be laid on the Minister of Education, the library service would continue to be an essentially local authority service, with

Ministerial intervention limited to the minimum consistent with ensuring the maintenance of uniformly high standards. The Government accepted the view of the Roberts Committee that standards of staffing should be high both in numbers and quality, but he insisted that salary scales and conditions of service must be negotiated between librarians and the authorities employing them and that the Minister had neither the power nor the duty to intervene. As regards wastage of staff, Mr. Thompson thought that in so far as this applies to staffing of libraries elsewhere it might be to the advantage of the library system as a whole and encourage inter-library co-operation.

Abstracts of Human Developmental Biology

Excerpta Medica has issued the first of a new monthly journal called *Abstracts of Human Developmental Biology* (1, No. 1; January 1961. Pp. 52. Abstracts No. 1-164. Published monthly. Amsterdam and London: Excerpta Medica Foundation, 1961. Subscription rate: £6 18s. per annum). The new journal covers the experimental and clinical aspects of normal and pathological human development, including fundamental aspects of general morphogenesis, of reproduction, of transplantation in post-natal life, and of pathological growth, as compared with normal development, differentiation and growth. The new journal, developed and published with the aid of a grant from the United States Public Health Service, will contain approximately 2,000 abstracts a year, and will include classified subject and author indexes. It will thereby contribute to collaboration between specialists in the field of obstetrics, surgery, paediatrics, social medicine, embryology, experimental teratology, genetics and immunology, by integrating information in all these disciplines so far as they concern the problems of normal and abnormal development, reproduction and transplantation.

Florida State Museum, University of Florida

THE Director's report for 1959-60 of the Florida State Museum, University of Florida, has recently become available (Pp. 19+2 plates. Gainesville, Fla.: University of Florida, Florida State Museum, 1960). This Museum, which serves the people of the State and the University community in particular, is much hampered by lack of space and also of staff. The Department of Exhibits operates in three distinct areas of service. New exhibits are produced and loan exhibits are scheduled for the halls in the headquarters museum, a major reconditioning operation to modernize the archaic exhibits in the Seagle Building is in progress, and its influence also works in the aptly named 'out-reach exhibits'. Among the special exhibits are "You and the Atom", which illustrates the basic principles of nuclear energy and peace-time applications in medicine, agriculture and industry.

Control of Red Scale in Citrus Fruit

RED scale is the most important insect pest of citrus fruit in Australia. Standard control methods involving oil sprays or fumigation with hydrocyanic acid are by no means satisfactory. Mr. B. H. Martin and Dr. R. F. Black, of the Griffith Irrigation Research Station, have studied the possibilities of heat treatment as a control measure. An essential feature of any such treatment is that it will kill the scale without damaging the tree or the fruit. The experiments