tion principle controls in fact all categories of life units. It does not create the primary variations but it does determine the paths of development which these follow from beginning to end, and therewith all differentiations, all advances of organization and finally the general course

of development of organisms on our earth, for everything in the living world rests on adaptations.

NOTE: In general in the preceding footnotes only the earliest in a series of papers, or a later one which presents a general summary, has been cited.

## SCIENTIFIC EVENTS

## EXHIBIT AT THE MEETING OF THE BRIT-ISH MEDICAL ASSOCIATION

ACCORDING to the British Medical Journal, the Pathological Museum, arranged in connection with the annual meeting of the British Medical Association, at Bournemouth, was housed on the lower floor of the Municipal College. A rare collection of pathological specimens were arranged on benches around each room, with a large number of microscope preparations on tables in the center. The pathological specimens were grouped on an anatomical basis, and consisted chiefly of unusual lesions and "curiosities," many of which excited considerable interest. The nature of each specimen and the name of the exhibitor were announced in the catalogue. The Museum Committee expressed its appreciation in particular to the following colleges and hospitals which lent material for the museum or were responsible for exhibits: the Royal Army Medical Corps, the University of Edinburgh, Bethlem Royal Hospital, St. Mark's Hospital, St. Bartholomew's Hospital, Westminster Hospital, St. George's Hospital, the South Devon and East Cornwall Hospital, and the Cancer Hospital, London. The museum included also, according to the Journal, a number of special exhibits, some of which were intended to illustrate subjects discussed in the scientific sections. These comprised a series of specimens and photographs arranged by Dr. C. Lovell, of the Bethlem Royal Hospital, London, showing progressive pancreatitis in relation to mental states. Workers at the Cancer Hospital, London, had on view a series of malignant tumors of skin and connective tissues of mice and rats produced by methylcholanthrene, a transformation product of the deoxycholic acid of bile, and a number of specimens demonstrating the effects of oestrin in the genito-urinary system of mice. Dr. Haddow, of Edinburgh University, arranged a series of sections showing cellular transplantations of fowl sarcoma. Amongst items of more general interest may be mentioned a series of ophthalmological color drawings, instruments and books exhibited by Mr. Arnold Sorsby; the clinical picture gallery arranged by Dr. S. Watson Smith; the pedigree charts of families affected by polyposis intestini, shown by Dr. Cuthbert Dukes, and a series of pulmonary specimens of surgical interest lent by George Mason, of Newcastle-upon-Tyne.

## MEMORIALS TO PATRICK MANSON AND RONALD ROSS

THE EARL OF ATHLONE, chancellor of the University of London, on the evening of June 28 unveiled in the library at the London School of Hygiene and Tropical Medicine a memorial tablet to Sir Patrick Manson and a bust of Sir Ronald Ross at a reception to mark the incorporation of the Ross Institute in the school. The tablet was the gift of Lady Manson and family, and the Ross bust was presented by the sculptor, Lady Welby.

The Earl of Athlone, as reported in the London Times, said that the occasion was one for the honoring of the memory of Manson and Ross. Manson, after his labors overseas, alone and ill-equipped, had the vision and courage to inspire and mold teaching and research in tropical medicine, and to lay the foundations of a nobly conceived center of education. Ross, inspired in turn by the father of tropical medicine, brought to the teeming millions of the Tropics a wonderful discovery. Manson was a pioneer in the untrodden paths of medicine. After leaving Scotland at the age of twenty-one, he went to Formosa and worked there and in China for nearly a quarter of a century in isolation. He discovered by laborious experiment that the intermediation of the mosquito acted as a nurse in propagating the disease of man-the filaria worm. He made great discoveries and described several new parasites of man and several new diseases. In 1897 Manson set himself to found the London School of Tropical Medicine, and laid his scheme before Mr. Joseph Chamberlain, who appreciated its significance, and in two years' time the original school was built and organized under the aegis of the Seamen's Hospital Society in the Albert Docks.

It was Manson who inspired Ronald Ross and pointed the road along which Ross traveled towards his conquest of malaria, which they recalled now upon the incorporation of the institute which bore his name. When Ross turned to the serious study of disease he concentrated on its prevention, and after his entry into the Indian Medical Service his reaction to the misery of life in India became intensified. He saw that many of the diseases of India were preventible, and that malaria was in many tracts a greater scourge than either plague or cholera. He worked out a technique for examining the mosquito and for how malaria