

thirteenth century and later. The Renaissance saw the foundation of the Ospedale degli Innocenti at Florence, with its well-known Della Robbia medallions, and there are exhibited a number of interesting illustrations of this and similar institutions.

So far as the management and treatment of children were concerned, there was little change in practice from the time of Soranus (first century A.D.) until the seventeenth century. During the sixteenth century the popular emphasis was on swaddling clothes, the bath and the baby's toilet. Prints by the Dutch, French and Italian masters depict such scenes, and sometimes show practices which are not referred to in the books of the period. The humanitarian movement in Great Britain, so well epitomized by Thomas Coram with his establishment of the Foundling Hospital, led finally to George Armstrong's dispensary (1769) and to the foundation of hospitals for sick children. The Industrial Revolution and the consequent employment of children in industry led to results which are illustrated by contemporary documents. The work of the great Victorian sanitary reformers had an important bearing on the welfare of children. But it was towards the close of the nineteenth century that French work on infant feeding was taken up in Britain and led directly to the great infant welfare movement.

The development of paediatrics as a specialty is well illustrated in this exhibition by the first editions of many of the classics of that subject, such as the books by Hieronymus Mercurialis, Thomas Phaer, Robert Pemell and Walter Harris, to name only a few of those which are shown.

Some comments may be made regarding methods of feeding infants at different periods. Some of the third-century B.C. Greek feeding bottles which are shown have artistic merit. The Roman feeding vessels are of a glass of great beauty. One of the most interesting types of feeding vessels exhibited is the so-called breast-shaped feeding bottle, used by the Greek settlers in southern Italy during the three centuries before our era, of which several examples are shown. Of a complicated design, these charming bottles must have been difficult to fill and next to impossible to keep clean. In the sixteenth and seventeenth centuries feeding bottles resembled rather large spice pots, and were made in pewter. Several fine examples are shown. The early nineteenth century saw the florescence of the boat-shaped feeding bottle, with a spout at one end and an opening for filling on the upper side. Made at first in porcelain and earthenware, some had interesting designs. Wedgwood and Spode both made such types. From these to similar glass vessels was a short step. Some fine cradles of different periods are also shown, together with the 'walking-stool' which appears in paintings by the great masters as early as the sixteenth century.

As a pendant to the historical exposition, some cases are devoted to the management of the child among primitive races. The baby-carriers used by certain African tribes and by the American Indians are beautifully made. Those of the Indians consist of highly decorated pouches of hide. The feeding of infants among primitive peoples is illustrated by several carvings. One of the most interesting of these is a fine ivory from Central Africa, showing a mother suckling her child. The exhibition also contains a very interesting series of amulets, used both by primitive peoples and by Europeans up to the present day.

EAST AFRICA HIGH COMMISSION REPORT FOR 1953

THE East Africa High Commission was constituted on December 19, 1947, to replace the East African Governors' Conference, and came into operation on January 1, 1948. It grew out of the experience of common administrative organization of the Second World War, and the scope of the Commission is due for review before the end of 1955. Its purview included on January 1, 1948, the four research organizations comprised in the East African Research Services, to which have since been added the Desert Locust Survey and Control, the East African Bureau of Research in Medicine and Hygiene, the Filariasis Research Unit, the East African Medical Survey, the Virus Research Unit, the East African Malaria Unit, the East African Inter-Territorial Leprosy Specialist and the East African Marine Fisheries Research Organization. Although the annual report of the Commission for 1953* includes as Part 3 an account of the evolution and of the constitution and scope of the Commission, out of its total of ninety-eight pages a full forty are concerned with the research and scientific services, and the record of activities thus presented is one which is of unusual interest to the scientist, whose clearly evinced support may be required if next year is to see no interruption to such services and the provision of inter-territorial financial support on an adequate scale.

During the year the East African Advisory Council on Agriculture, Animal Industry and Forestry was replaced by a Governing Body for the Natural Resources Group of the High Commission Research Services. The Body now constituted will be responsible for seeing that the activities of the four East African Research Organizations are directed to effective ends and supervising their general financial policy. To some extent the chapter of the report dealing with research and scientific services overlaps with that in "Colonial Research", but fuller accounts are given of certain activities than is possible in that report. On the other hand, the activities of the East African Industrial Research Board are covered more fully in the eleventh annual report of that Board (see *Nature*, September 4, p. 430). In the East African Agriculture and Forestry Research Organization, completion of farm buildings for the Animal Industry Division filled a main gap in research facilities, and the Plant Quarantine Station at Muguga was also completed during the year. Considerable work was carried out on breeding crop plants for resistance to disease, particular success being had with a strain of maize resistant to rust (*Puccinia polysora*). Entomological research was directed mainly towards the survey of insects attacking forest trees and timber and investigations of the more dangerous pests and the use of insecticides on field crops. Soils research was concentrated on the characteristics of a soil, determinable by analysis, that will indicate the ability of plants grown on it to respond to dressings of phosphate and nitrogen. The Veterinary Research Organization continued to work on the development of a quantitative serological test for the virus and antibodies of rinderpest, as well as field surveys of east coast fever, studies on problems of identification of the genera

* Colonial Office. Annual Report on the East Africa High Commission, 1953 (Colonial 305). Pp. ii+100+4 plates. (London: H.M.S.O., 1954.) 3s. 6d. net.

Rhipicephalus and *Hyalomma* and on paramphistomes of domestic ruminants and on the larvæ of *Haemonchus contortus*.

Good progress was made with the construction of the Central Trypanosomiasis Research Laboratory at Sukulu, Uganda, and fields-trials to determine the role of biting-flies in the spread of animal trypanosomiasis in tsetse-free country were continued, while treatment with 'Antrycide' pro-salt at two-monthly intervals for a limited period protected cattle exposed daily to attacks of the tsetse *Glossina austeni* even after cessation of treatment. Research on the race of *G. morsitans*, which occupies about a hundred thousand square miles of the western fly-belt of Tanganyika, was extended to include the race of *G. morsitans* inhabiting a different type of vegetation in some ninety thousand square miles of eastern and southern Tanganyika. Important advances in the determination of blood meals taken up by tsetse flies have been made and were due to be published.

A comprehensive collection of hydrological data from Lake Victoria by the Fisheries Research Organization indicated a significant lack of sulphates in the waters of Lake Victoria, and the complicated water movements in this lake have to some extent been related to the variable growth of plankton in different areas. Data on the growth-rate of *Tilapia* indicate that the quality of the food may be more important than the amount. Some successful fish-marking experiments were carried out in the Kavirondo Gulf, while in marine waters the Marine Fisheries Research Organization made extensive studies on pelagic fish as well as correlated investigations on the plankton or biological content and the hydrography of the area. Good progress was made on the construction of a new headquarters building for the Meteorological Department, which was occupied mainly with providing a forecast service covering East Africa and an area of the Indian Ocean and with the collection and collation of climatological records.

At the end of 1953 the total strength of the Desert Locust Control and Survey was 174 officers and 522 vehicles and, besides the major operations in the Somali Peninsula and in Kenya against the increasing extent and intensity of the plague of the desert locust, fifty swarms of which invaded British East Africa early in 1954, control measures were carried out in Aden, Yemen, Kuwait and Oman. About £1 million was expended on control and research during the year. The Filariasis Research Unit began to operate on July 1, 1949, and the report gives a brief general review of the results achieved by the Unit in its study of bancroftiasis and onchocerciasis methods of control. The reduction of staff in the early stages has necessitated an extension of the scheme before the work in East Africa can be completed. The first phase of the East African Medical Survey also terminated in December 1953. In the five years work reviewed in this report, the surveys conducted in Kenya and Tanganyika have yielded statistical data which illustrate the relation of such influences as agriculture, animal husbandry and domestic practices to the health of the community.

Early in 1953 the Virus Research Institute undertook an investigation which has elucidated the nature of dengue-like fever around Newala in south Tanganyika. Work on yellow fever was less extensive, but a survey was made at Newala; and the Institute is also studying the inter-relation between a virus and

its insect host, using rift valley fever and *Aedes aegypti*, and the relation between virus and the host's tissue, using influenza virus and the embryonated hen's egg. Although the activities of the Malaria Unit were restricted by absence of staff, an investigation of the epidemiology of malaria in Buganda was initiated, and one on residual house spraying with 'Gammexane' in the Northern Province of Tanganyika, which was concluded, indicated the uncertainty of house-spraying over a limited area as an anti-malarial measure. Use of mass house-spraying technique indicated that the total anopheline population in an area was about 40 per acre.

The Inter-Territorial Leprologist estimates that £200,000 a year over ten years would be required to attack leprosy on a broad front in all the Territories simultaneously, with good prospect of reducing it to negligible proportions in that period; there are at present some 216,000 leprosy cases, with eighteen leprosaria and various out-patient and rural schemes. Good results are being obtained with sulphone and other specific drugs, and under the regional leprosy surveys of the Territorial Leprologist, rural leprosy work developed particularly well in Uganda.

INTERNATIONAL CONFERENCE ON ELECTRON MICROSCOPY

LONDON, 1954

DURING September 1950 an international conference on electron microscopy was held in Paris, and at an informal meeting of members of the various national groups it was decided that some international organization should be set up to arrange international conferences at regular intervals. The British Group, namely, the Electron Microscopy Group of the Institute of Physics, was asked to investigate the best method of attaining this object. Mr. F. W. Cuckow, who was secretary of the British Group at the time, approached the International Council of Scientific Unions, and it was eventually decided to set up a Joint Commission on Electron Microscopy on which the scientific unions interested in the subject would have representatives. It was the privilege of the Committee of the British Electron Microscopy Group, together with those members of the Joint Commission who could attend committee meetings in London, to organize the first International Conference under the auspices of the Joint Commission, at the London School of Hygiene and Tropical Medicine, during July 15-21. The detailed organization was carried out jointly by Mr. F. W. Cuckow (acting as secretary of the Joint Commission) and Dr. C. E. Challice (as secretary of the British Group). Office facilities were made available by the Institute of Physics. A programme committee, consisting largely of the secretaries of the national groups, was set up, with Dr. V. E. Cosslett (chairman, British Group) as its secretary. At the beginning of the conference the Joint Commission held its first meeting and before the conclusion of the conference a committee had been set up, under the Commission to co-ordinate future international meetings.

After the Conference had been formally opened, three invited survey papers were read. First, Prof. B. von Borries (Technische Hochschule, Aachen), a