

a working basis and that further investigations into the exact mechanism of elephantiasis should be carried out. Under treatment, Dr. W. H. Wright stressed the inadequacy of information of the lethal action of 'Hetrazan' on the adult worms. The role of anti-histamine drugs and antibiotics, such as penicillin, was discussed. The control and prophylaxis of bancroftian filariasis in the South Pacific was in the hands of Dr. H. K. Beye, field director of the Pacific Tropical Diseases Foundation, University of California, who cited instances where mosquito control had resulted in decrease in the microfilaria rates. Present observations relating to mass drug therapy and mosquito infection rates indicated that the most effective procedure is to keep the blood permanently free of microfilariae. Dosage schedules of 'Hetrazan' now under investigation give promise of meeting this object. The value of educational and other measures was discussed. Especial importance was paid to the training of native personnel in filariasis control. The subjects of standardization and procedures regarding blood examination and documentation had universal support. Standard methods of recording mosquitoes or their larvae, the laboratory diagnosis for microfilariae, the recording of clinical manifestations and standards for intradermal tests were agreed upon.

An annotated bibliography of filariasis is being drawn up especially as regards the South Pacific. Finally, it was decided to publish the final report of the conference as a public document.

As the original work on filariasis in the Pacific was undertaken by a member of the staff of the London School of Tropical Medicine in 1910, and as his results were reinforced and expanded later by O'Connor, Prof. P. A. Buxton and others, it is a considerable source of satisfaction to record that, not only has their work been confirmed, but also that it is now being placed upon a practical basis, so that this, the chief scourge of the Pacific, may soon be eliminated altogether. PHILIP MANSON-BAHR

## THE ANCIENT KHMER EMPIRE

AN entertaining and scholarly history of the Khmer Empire from the first to the fifteenth centuries, entitled "The Ancient Khmer Empire"\*, has been written by L. P. Briggs. The data are derived from Chinese dynastic histories and Oriental travellers' accounts; Sanskrit and Khmer epigraphy; Buddhist and Brahmanic iconography; architecture, art and sculpture; bas-reliefs; and excavations.

Three periods are distinguished: the Funan (first to sixth centuries); the Chenla (sixth century to 802); and the Kambuja or Angkor (802-1431). The Funan period is that of a small kingdom on the Mekong delta, inhabited by a people who may have had negro racial elements and have spoken a pre-Khmer Austro-Asiatic language. They are believed to have been conquered in the first century by a foreign invader (possibly Malay) who married their queen and introduced clothing among their women. Direct relations with India and China date from the third century. An Indian Brahman is recorded to have become king of Funan in the fifth century, and to have introduced, among other customs, state

worship of the Siva-linga and a Central Indian alphabet.

Funan was conquered and became a vassal kingdom of Chenla to the north in 550, the Chenlas being a Mon-Khmer people who had obtained their own kingdom by an earlier conquest of the Chams. The Chenla people were already acquainted with the Siva cult and with the Sanskrit Puranas and Epics. The united kingdom of Chenla and Funan was temporarily conquered by the Malays some time in the eighth century.

The Kambuja period opens with a line of kings who considered themselves incarnations of Siva and who founded a Devaraja cult, each new king being appointed by the head of a family of Brahman *purohitas*, among whom, unlike the rest of the population, descent was matrilineal. This was the classical period of Cambodian history, marked by a great expansion of the empire, a magnificent flowering of architecture and art, and a unique syncretism of Saivism, Vishnuism and Mahayana Buddhism. With the increasing influence of Buddhism, the Devaraja cult gave place to the cult of a Buddharaja. There was a decline in art and architecture in the thirteenth century, probably coincident with the introduction of Hinayana Buddhism. The period ends with the Siamese sacking of Angkor in 1431, and the removal of the capital to the south-east part of the kingdom. Though the Khmers gave to the world no system of administration or ethics, no literature and no philosophy, their civilization saw the summit of Oriental architecture and decoration.

KATHLEEN GOUGH

## FOREST RESEARCH IN SWEDEN

VOL. 39 of the memoirs of the Forest Research Institute of Sweden\* contains a number of articles of varied interest. Erik Holmsgard discusses height increment, development of the crown, self-pruning, etc., in young beech stands. His investigations seem to show great variations in height increment in various years, and this does not necessarily depend upon changes in climate; thus, the highest trees in a young stand will not necessarily remain so. The growth in height of the lateral branches and the height increment of the lower trees are more influenced by the light conditions than by the climate. It is impossible to give here the author's detailed conclusions, for which the paper should be consulted.

Henrik Petterson deals with the application of the new forestry conservation law passed in 1948, which aims in general at economic forest utilization with a constant yield. Mr. Petterson admits that it may seem futile under present conditions, when the outlook is so uncertain, to attempt to direct the utilization of forests toward an economic goal. The law differentiates between well-grown forests and those which are badly grown or tended: the former, apart from thinnings, may not be clear-felled without the consent of the Forest Conservation Bureau; and the latter must not be treated in such a manner as to result in further deterioration. Further, such measures must be carried out as will result in an improvement of the stocking of the forest within a reasonable time. The paper discusses the methods by which the law can be carried out. There is no indication

\* "The Ancient Khmer Empire." Pp. 295, with 17 maps and 58 figures. (*Trans. American Phil. Soc.*, 41, Part 1; 1951.)

\* Meddelanden fran Statens Skogs-Forskningsinstitut, Band 39, 1950-51 (Stockholm, 1951).