

origin, cultivated in Calcutta. These were the only female flowers seen by any botanist, until others were recently obtained in Siam, where it seems to be truly wild. Siam, therefore, now appears likely to be within the region where it took origin.

In speaking of *Dioscorea alata*, the Greater Yam, Finlayson's "Mission to Siam" is quoted as being the earliest record of the cultivation of this yam in Siam. The authors, however, in going on to say that Finlayson must have been mistaken in regarding as belonging to *D. alata* an enormous tuber, weighing 474 lbs., have evidently misread the passage. Finlayson, after mentioning *D. alata*, goes on to speak of "a plant bearing affinity both to *Dioscorea* and *Menispermum*." This latter was the plant which formed the enormous tubers. No doubt it was the tuber of a *Stephania*.

One species, *Dioscorea oryzetorum*, now described by the authors, is almost confined to the great rice plain of the Inner Circles. Three varieties of this species are distinguished on the form of the leaves. All three varieties are common in Bangkok. The other two wild yams of the Bangkok area, *D. bulbifera* and *D. hispida*, are well known species.

Under several of the species are quoted valuable notes made by Mrs. Collins of Sriracha on the shape of the tubers, their preparation for food, and the Siamese names of the various varieties.

There is, as the authors point out, still a good deal of work on this genus to be done in Siam. In several species the form of the tuber is unknown, and in some cases the flowers of only one sex have been seen. No doubt, too, there are other species yet to be discovered in this country.

A. K.

Some Miscellaneous Notes on Big Trees in Siam. By D. BOURKE-BORROWES, Late Adviser, Royal Forest Department, Siam. The Indian Forester, Vol. LIII, No. 6 (June 1927).

In this interesting article Mr. Bourke-Borrowes has gathered together notes, from various sources, on big trees and big timber in Siam. These notes are illustrated by photographs of some of these giant trees.

In the author's opinion it is possible that in some parts of Siam certain species of trees attain dimensions which are equal to, or even greater than any recorded elsewhere; and he brings forward figures to support his opinion. Naturally the greatest interest centres round teak. What is believed to be the largest teak tree now standing in Siam, situated in the Province of Uṭaradit, has a girth measurement of 29 feet 5 inches, with a total height of 151 feet. Notes of several other teak trees with a girth of over 26 feet are given. The largest teak tree recorded in Professor Troup's "Sylviculture of Indian Trees" is situated in Travancore, and has a girth of 26 feet.

The largest teak log of which measurements were obtained

came from the Me Ing forest, and had a total length of 62 feet, mid-girth of 10 feet 6 inches and cubic content of 427 cubic feet. This, however, is beaten by a Burmese log, which had a total length of 82 feet 6 inches, a mid-girth of 10 feet, and cubic content of 515.6 cubic feet. As the author remarks, had systematic measurements of large teak trees been made in the early days, no doubt some striking data would have been obtained.

The measurements of a number of other large trees are given, several of which exceed records published elsewhere. The largest of all these is a *mai maka* (*Afzelia xylocarpa*), which is reported to have a girth measurement of 51 feet 8 inches; a truly enormous tree. The records of one exceptionally large takien (*Hopea odorata*), show a girth of 34 feet 4 inches and a height of 210 feet. In this case, however, there is a note that the tree is "Ficus-bound", and it is not stated whether the measurements include the fig or not.

There are two small errors in geographical names: Ohe Hom (p. 325) should be Che Hom, and Petchaburi (p. 326) should be Petchabun.

Mr. Bourke-Burrowes has done well to put these measurements on record and we hope his paper will stimulate Forest Officers and others to publish further records of the kind.

A. K.

OBITUARY.

CARL ROEBELEN.

The late Carl Roebelen must be placed among the small band of famous orchid hunters, such as Warcewicz, Roezl and Micholitz, who, at risk of life and limb, ransacked the tropics for plants to supply the great demand for orchids in Europe. The golden age of the orchid hunter was the period 1875 to 1890. During those years a constant succession of new and beautiful orchids appeared in the European markets. Since then striking novelties have become scarce and the orchid fancier has turned his attitude to hybridizing the known species.

Carl Roebelen was born in Geisslingen (Wurttemberg), on January 19th, 1855. He served his horticultural apprenticeship in the Royal Gardens of the King of Wurttemberg at Friedrichshafen. Later he gained experience in various other large gardens in Germany, Switzerland and France.

In the Spring of 1880 he entered the services of Messrs. F. Sander & Co., the great orchid importers of St. Albans. This firm sent him to the Philippines, where he discovered many fine orchids. The most famous of these is *Vanda Sanderiana*. His name was commemorated among Philippine orchids, in *Aerides Roebeleni* and *Cypripedium Roebeleni*.

About 1882 he left Sander's employ, and for the rest of his life, except for a brief period in 1884, when he returned to Messrs.