No. 1.

DIOTHONEA IMBRICATA.

D. *imbricata*; caulis articulati internodiis fusiformibus sulcatis basi squamis imbricatis, foliis linearibus apice retusis aut emarginatis denticulo interjecto, pedunculis terminalibus 2-3-floris paritèr imbricatis, labello ovato acuminato sepalis petalisque conformi.

The two plants which form the subject of the accompanying plate are represented from drawings brought home from Guayana by Mr. Schomburgk, who has favoured us with the following account of their native situations.

"The Diothonea was met with on the high mountain chain between the 65th and 66th meridian, and the 4th parallel of latitude, at an elevation of 6 to 7,000 feet above the sea. The summits of those elevations are thickly covered with two species of lichen, the Cladonia rangiferina and reticulata, the white colour of which conveys entirely the supposition that the ground is covered with snow. The thermometer stood frequently in the morning at 57° F., and this decrease of heat became sensible to our body, and communicated to the nose a reddish appearance. This, connected with the snow-white lichens, powerfully reminded us of a winter landscape. And, indeed, the stunted trees, with grey tortuous branches and their foliage, would have assisted to make the picture more perfect, if numerous Orchidaceæ, conjointly with green mosses, had not clothed the branches and trunks of trees. Indeed it was the Orchidaceæ alone which gave the vegetation a tropical aspect neither Palms nor Heliconias nor Uranias were to be seen. The Diothonea, with its bright red blossoms, looked beautiful among the tufts of mosses and white lichens, and I was so delighted with meeting this pretty plant, which grew in such abundance at these heights, that I collected it again and again, although I knew how little chance there was of bringing a specimen alive to England; for I had yet to cross upwards of 1,500 miles by water and land before I could reach the sea coast of Demerara.

"I have already observed that it grows in tufts and among the moss which clothes in such profusion the trunks and branches of trees in that situation. Mosses are generally found in humid places, and here, where every thing bore the stamp of dryness, this profusion of mosses and lichens was surprising. The former covered the ground to such a thickness that on sitting down one might have fancied oneself reclining on the softest cushion. Among the moss on the ground I observed numerous specimens of Sobralia liliastrum and Evelyna. Mosses it appears do not always require humid atmosphere, nor Sobralias a sandy soil and sunny situation. I need not say how surprised I was to meet the Sobralia again at Esmeralda among the ridge of heaped up blocks at a short distance from the village, and which is called Caquire. I found numerous specimens growing in the vegetable soil, which had collected between the blocks. Duida is, however, of the same formation as Roraima, in the vicinity of which I found the first Sobralia liliastrum in Guayana. We discovered the Maxillaria near Mount Maravaca, which belongs to the same sandstone-formation. It grew in abundance on trunks and branches of trees at a height of about 5 to 6,000 feet

above the sea, where a humid atmosphere was prevailing. Maravaca is about thirty miles in a N.N.E. direction from Esmeralda."

The genus Diothonea differs from Isochilus only in having the lip united to the column, by an intervening membrane, and it therefore bears the same relation to that genus, as is borne to Epidendrum by Encyclium. It may therefore be regarded as either a distinct genus, or a mere form of Isochilus. The original species, however, collected by the late Colonel Hall in the valley of Lloa, on the western face of the Cordilleras of Peru, has a lip very different in form from the other divisions of the perianth, and both have a strong double callosity at the base of the fore part of the lip; in the true species of Isochilus, on the contrary, the lip has either one tubercle only at that part, or none at all.

Fig. 1. represents the column and lip of this plant.

Neither this nor the following species have yet appeared in our gardens.

