

cannot be said to add to the beauty of the flowers so distorted. This orchid is recorded in European works as producing similar flowers in other countries; but I cannot find any notice of its being peculiar to certain individual plants, which has been proved by Mr. Soutter, who now has the plant he first found bearing, amongst blooms of the normal form, several of the so-called double flowers. These are of the same colouring as the normal form, and the segments are of the usual form and size. The change takes place in the wings of the column; these are greatly enlarged and overlap each other on the face of the labellum, and end in a kind of spur at the base; the outer margin is very wavy, and thus resembles the labellum, and the resemblance is the more obvious as the colouring is the same. The attachment of these abnormal wings seems to be somewhat irregular; in the flower I dissected, on the one side the wing was attached only for about half the length of the column, the other was attached from the bottom to the top of the column. The column, like that of the yellow flowering variety (*Phaius grandifolius*, var. *Bernaysii*), shows a tendency to become triandrous.

The lesson we learn from Mr. Soutter's plant is that these malformations are, as regards plants of *Phaius*, persistent and may be perpetuated, and the number of plants increased in the usual way if considered desirable.

Order PALMÆ. CALAMUS, Linn.

Our indigenous species of this genus are sufficiently described as to the distinctive characteristics of the smaller species of "Lawyer-cane"—*C. Muellerei* and *C. caryotooides*; but such is not the case with the "Large Lawyer-cane," known to the botanist as *C. australis*. Under this name are, I believe, confused three distinct species; and in support of this, Mr. E. Cowley tells me that the aborigines at the Barron River also distinguish three kinds by name—viz., "Moti," "Jaboolum," and "Moologum." From Mr. Cowley I have stem and foliage specimens, and a promise of flower and fruit specimens when available. I should, however, be glad to receive specimens from Fitzroy Island, the locality where A. Cunningham and J. McGillivray's specimens were obtained, as well as from Rockingham Bay, where J. Dallachy collected his. The specimens of these collectors being the only ones known up to the time of the publication of the "Flora Australiensis." If, as I surmise, the distinctions between these plants prove of specific character, I would suggest arranging them as follows:—

C. obstruens, *F. v. M.*, for perhaps the Fitzroy Island and Rockingham Bay plant; for Bentham's description of this in the "Flora Australiensis" most certainly does not agree with any of the Barron River species.

C. Moti, *Bail.* Stems reclining, but ultimately climbing to a great height. Leaves 6 or 7 ft. long, including the petiole, which without the sheath is about 2 ft. Segments linear-lanceolate, 20 in. long, 1 in. broad, of 40 or more nearly opposite pairs; longitudinal ribs 5, beset with fine dark setæ; margins with minute distant teeth. Rhachis and petiole armed with recurved prickles; those of the sheath long flattish, of irregular length, dense or in more or less false-whorls.