

ORCHIDACEÆ LINDENIANÆ ;

OR,

NOTES

Upon a Collection of Orchids

FORMED IN COLOMBIA AND CUBA,

BY MR. J. LINDEN.

BY

JOHN LINDLEY, PH.D., F.R.S., & L.S.


PROFESSOR OF BOTANY IN THE UNIVERSITY OF LONDON, AND IN THE ROYAL INSTITUTION
OF GREAT BRITAIN.

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PREFACE.

THE following plants are part of a large collection made by Mr. J. LINDEN among the mountains which form a curve closing in the Gulf of Maracaybo on the south, and extending as far as Santa Fé de Bogota: a district inclosed between the parallels of 4° and 10° north latitude. A few species from Cuba, collected in the same expedition, are intermixed with them. They make a very interesting series, of which more than one-half was previously undescribed.

Of these plants many are alive in the gardens of this country or of Belgium, in consequence of Mr. Linden having furnished contributions to some of our great English collectors; and having parted with the residue, consisting of between 70 and 80 species, to M. de Jonghe, 20, Rue des Visitandines, at Brussels, who has them for sale. Under these circumstances they must be expected to find their way quickly into the possession of cultivators, and I have therefore willingly undertaken the agreeable duty of publishing a short account of them at Mr. Linden's request. In doing so, that enterprising traveller's own notes have been literally translated, placed between inverted commas, and printed in italics, by which means the reader will be able to distinguish between the result of observation in the field, and in the cabinet.

I am not sufficiently acquainted with the details of Mr. Linden's journey in Colombia and Cuba to offer any physiological observations upon this collection, except in relation to the climate in which his species grew. This, however, is of considerable interest, and deserves to be very carefully considered by all cultivators.

It was not without reason that Humboldt thus characterised the Orchids of Equatorial America. "Although," says that illustrious philosopher, "such plants are scattered through every part of the torrid zone, from the level of the sea to the height of ten or eleven thousand feet, yet it must be admitted that in the number of species, the colouring of their flowers, delicious fragrance, rich foliage and brilliant colours, none can be compared with those which inhabit the Andes of Mexico, New Granada, Quito and Peru, where the shade is moist, and the breezes mild, the mean temperature of the year at an elevation of between 4800 and 6600 feet, being from 64° to 69°." Mr. Linden's collection shows that of 129 species nearly half are found in such localities.

If, however, any general conclusions are to be drawn from Mr. Linden's useful notes, it is necessary to examine the species in detail, and for that purpose they are classified in the following lists according to their elevation above the sea; the temperature of each group being computed from the data furnished by Humboldt:—

12,000 to 13,000 feet. (Mean Temp. 40°).
Epidendrum frigidum.

11,000 to 12,000 feet. (Mean Temp. 46°). Restrepia parvifolia. _____ maculata. Masdevallia affinis.		Masdevallia polyantha. Epidendrum chioneum.
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10,000 to 11,000 feet. (Mean Temp. 49°; Min. Temp. 32°). Pleurothallis aurea. _____ Lindenii. _____ intricata. Dialissa pulchella. Masdevallia tubulosa. _____ caudata. _____ affinis.		Epidendrum tolimense. _____ fimbriatum. _____ refractum. Odontoglossum densiflorum. Pachyphyllum crystallinum. Telipogon angustifolius.
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9000 to 10,000 feet. (Mean Temp. 52°).

Pleurothallis aurea.
 ——— intricata.
 ——— roseopunctata.
 Stelis ? triura.
 ——— sesquipedalis.
 Masdevallia caudata.
 ——— affinis.
 ——— coccinea.
 Epidendrum tolimense.
 ——— carneum.

Epidendrum flavidum.
 Evelynea furfuracea.
 ——— bractescens.
 ——— lupulina
 Odontoglossum dipterum.
 ——— divaricatum.
 Pachyphyllum crystallinum.
 Telipogon latifolius.
 Acraea multiflora.
 Cranichis parvilabris.

8000 to 9000 feet. (Mean Temp. 56° ; Max. Temp. 69° ; Min. Temp. 36°).

Pleurothallis chloroleuca.
 ——— bivalvis.
 Epidendrum fimbriatum.
 ——— torquatum.
 ——— leucochilum.
 ——— tigrinum.
 Evelynea bractescens.
 ——— kermesina.
 ——— columnaris.
 ——— ensata.

Evelynea furfuracea.
 ——— capitata.
 Oncidium cucullatum.
 Solenidium racemosum.
 Odontoglossum Hallii.
 ——— epidendroides.
 ——— luteo-purpureum.
 Maxillaria albata.
 Uropedium Lindenii.

7000 to 8000 feet. (Mean Temp. 59°).

Pleurothallis bogotensis.
 ——— semiscabra.
 Restrepia maculata.
 Masdevallia coriacea.
 ——— cucullata.
 ——— Schlimii.
 Epidendrum brachychilum.
 ——— tigrinum.

Epidendrum fallax.
 Evelynea flavescens.
 ——— furfuracea.
 Oncidium cucullatum.
 ——— halteratum.
 Odontoglossum megalophium.
 Maxillaria nigrescens.
 Sobralia violacea.

6000 to 7000 feet. (Mean Temp. 62°).

Pleurothallis ruberrima.
 ——— undulata.
 Stelis Lindenii.
 Epidendrum recurvatum.
 ——— xylostachyum.
 ——— macrostachyum.
 ——— sceptrum.
 ——— tigrinum.
 ——— fallax.
 Evelynea furfuracea.
 Oncidium maizeifolium.
 Odontoglossum odoratum.

Odontoglossum angustatum.
 Nasonia sanguinea.
 Maxillaria meridensis.
 ——— longissima.
 ——— nigrescens.
 ——— pentura.
 Ornithidium niveum.
 Rodriguezia stenochila.
 Sobralia violacea.
 Ponthieva maculata.
 Altensteinia fimbriata.
 Cranichis monophylla.

5000 to 6000 feet. (Mean Temp. 65°).

Pleurothallis chamensis.
 Stelis spathulata.
 Epidendrum dichotomum.
 ——— ceratistes.
 ——— Lindenii.
 ——— carneum.
 ——— tigrinum.
 Schomburgkia rosea.
 Chondrorhyncha rosea.
 Pilumna fragrans.
 Fernandezia longifolia.
 Oncidium falcipetalum.
 ——— linguiforme.
 Brassia glumacea.
 Govenia fasciata.
 Zygopetalum gramineum.

Cyrtopera Woodfordii.
 Maxillaria scabrilinguis.
 ——— grandiflora.
 ——— melina.
 ——— nigrescens.
 ——— luteo-alba.
 Lycaste gigantea.
 Anguloa Clowesii.
 Scaphyglottis ruberrima.
 Camaridium luteo-rubrum.
 ——— purpuratum.
 Ornithidium sanguinolentum.
 Cyrtopodium bracteatum.
 Compartmentia falcata.
 Sarcoglottis picta.
 Physurus rariflorus.

4000 to 5000 feet. (Mean Temp. 68°).

Masdevallia triangularis.
 Warrea bidentata.
 Mormodes Cartoni.
 Trichocentrum maculatum.

Cleisthes rosea.
 Sobralia dichotoma.
 Epistephium sessiliflorum.
 Physurus Preslei ?

3000 to 4000 feet. (Mean Temp. 71°).

Epidendrum stenopetalum.
 Cattleya Mossiæ.
 Ghiesbreghtia calanthoides.

Habenaria maculosa.
 ——— Lindenii.

2000 to 3000 feet. (Mean Temp. 75° ; Max. Temp. 80° ; Min. Temp. 55°).

Schomburgkia undulata.
 Odontoglossum hastilabium.

Burlingtonia granadensis.
 Ionopsis pulchella.

From this we learn that a species of *Epidendrum* is found where the mean temperature of the year is about 40°, where trees are wanting, pastures only being found, and where it occasionally snows. This would be incredible upon worse testimony than Mr. Linden's, if we did not know from Professor Jamieson that one *Oncidium* (*nubigenum*) is found in Peru at the height of 14,000 feet, and rarely below it. Mr. Linden tells us that his plant, which grows at only a short distance from eternal snow, is covered all over, flowers included, with a varnish, which is perhaps intended for its safeguard. It is remarkable that all the *Epidendrum*s, with one exception, occur above 5000 feet, and that they form a continued chain of species up to the ground of *E. frigidum*.

It is, however, the Pleurothals that principally occur in such elevated regions: *Masdevallia*, *Restrepia*, *Stelis*, and *Pleurothallis* itself, constituting the most striking feature of the Orchideous flora until the mean temperature rises to 56° , where they begin to disappear.

The genus *Odontoglossum* appears to be more impatient of heat than its nearly allied genus *Oncidium*, for a species is found where the mean temperature is only 49° , and where it sometimes even freezes; the others are scattered over the mountain slopes till they reach the lowest limits of their order, where the mean temperature rises to 75° , where it is never cooler than 55° nor hotter than 80° ; in such a climate not one of the race is found except a *Schomburgkia*, a *Burlingtonia*, an *Odontoglossum*, and an *Ionopsis*. In the hot lands on a level with the sea Orchids do not seem to be able to exist.

It is evident indeed that these Colombian species have no affection for a high temperature, and that many prefer a low one. No fewer than 13 occur between 10,000 and 11,000 feet, where Humboldt tells us it is as cold as the mean of the month of March near Paris; 19 where the mean is that of May in the same city; while the mean temperature of the zone between 5000 and 6000 feet, where the largest proportion exists, is only that of Paris in August, according to the same authority.

These, and many more interesting facts of a similar kind, will strike every intelligent observer; they seem on the one hand to show to the gardener the great importance of studying well the climate of the plants he cultivates, and on the other they ought to teach the collector the incompleteness of any memoranda in which the details of climate are not fully given. General observations are not sufficient; particulars are indispensable. Suppose, for example, on the assertion of some generalising traveller, we were led to believe that the *Masdevallias*

all require a cool climate, because the mass of them disappears below 9000 feet, how erroneous would be that conclusion when we find a species peculiar to a zone 5000 feet lower, and possessing a mean temperature 16° higher.

It must not, however, be supposed that temperature is the only influence to be considered in the cultivation of these plants; it should in all cases be regarded in its relation to humidity, light, and atmospheric pressure; but unfortunately we have little information concerning the first, and the two last are beyond our control.

ACTON GREEN,

Nov. 1, 1846.

ORCHIDACEÆ LINDENIANÆ.

SUB-ORDER I.—MALAXEÆ.

PLEUROTHALLIS, R. Br.

1. *P. aurea* ; (Lindl. in Ann. nat. hist. xii. p. 397).

“Forests of the Sierra Nevada, in the province of Merida, at the height of 10,000 feet; August.” (No. 634.)

2. *P. Lindenii* ; (Lindl. in Ann. nat. hist. xii. p. 397).

“An epiphyte, from the highest regions of the Sierra Nevada, in the province of Merida, at the height of 10,000 to 11,000 feet; August.” (No. 630.)

3. *P. bogotensis* ; folio oblongo acuto basi rotundato racemis duplò breviorè, sepalis petalisque æquilongis setaceo-acuminatis, labello hastato basi tuberculato auriculis rotundatis.

“A terrestrial plant, from the forest near the Salta of Tequendama, in the province of Bogota, at the height of 7740 feet; November.” (No. 1271.)

Very near Pl. Mathewsii, but with longer racemes and a different lip.

4. *P. intricata* ; cæspitosa, folio obovato coriaceo marginato caule sub-breviore, racemo capillari erecto flexuoso 4-5-floro folio multò longiore, bracteis vaginantibus cuspidatis pubescentibus, pedicellis elongatis, sepalis aristatis glaberrimis diaphanis lateralibus ultra medium connatis, petalis ovalibus acutis, labello lineari hastato glaberrimo.

“On the scrubby trees of the Paramo de la Tulata, in the province of Merida, at the height of 10,000 feet; August.” (No. 668.)

Near Pl. aristata.

5. *P. ruberrima* ; folio cordato oblongo-lanceolato acuminato apice tridentato, floribus aggregatis longè pedunculatis, ovario pubescente, sepalo supremo oblongo inferiore cochleato acuminato longiore, petalis

linearibus acuminatis brevibus glabris, labello ovato-subrotundo pubescence lævi.

"An epiphyte, in the forests of the neighbourhood of Merida, at the height of 6000 feet; August." (No. 670).

Very near *Pl. grandiflora*.

6. *P. roseopunctata*; caule angulato folio oblongo longiore, spathâ coriaceâ, spicis folio longioribus strictis, bracteis cucullatis membranaceis, calyce bilabiato, labiis oblongis obtusis coriaceis inferiore bidentato, petalis ovatis acutis labelloque orbiculari membranaceis nanis.

"An elegant species, with white flowers dotted with rose. Forests of the Sierra Nevada, in the province of Merida, at the height of 9000 to 10,000 feet; August." (No. 629).

Near *Pl. pulchella*.

7. *P. chamensis*; caule alato folio oblongo longiore, racemis duplò brevioribus, sepalo inferiore bidentato, petalis duplò brevioribus lanceolatis serratis, labello oblongo obtuso lævi.

"Flowers yellow. On the rocks of the Rio Chama, in the province of Merida, at the height of 5000 feet; July." (No. 639).

Near *Pl. luteola*.

8. *P. undulata*; (Pöppig and Endlicher, i. 48.)

"Flowers yellowish. Forests of the Sierra Nevada, in the province of Merida, at the height of 6000 feet; August." (No. 674).

9. *P. chloroleuca*; folio ovato-lanceolato caule multò longiore, floribus sub folio densè aggregatis, sepalis aristatis lateralibus omnino connatis, petalis setaceis brevioribus, labello oblongo cuspidato bilamellato nano.

"An epiphyte, from the neighbourhood of the Salta of Tequendama, in the province of Bogota, at the height of 8000 feet; March. Flowers yellow, with a white and green lip." (No. 1269).

Near *Pl. succosa*, but ten times as large.

10. *P. bivalvis*; folio oblongo basi altè cordato imbricato caule tereti multò brevioris, floribus aggregatis, pedunculis capillaribus, sepalis 2 ovatis sub-æqualibus concavis indivisis, petalis linearibus serratis duplò brevioribus, labello

"On trees and on the ground, in forests on the Savannah of Chiquarâ, in the province of Merida, at the height of 8000 feet; June. Flower yellow (large) striped with red." (No. 1480).

Near *Pl. grandiflora*.

11. *P. semiscabra*; folio caule tereti multo brevioris ovato-oblongo basi subcordato apice acuminato tridentato, floribus aggregatis subsessilibus, sepalo supremo ovato inferiore orbiculari indiviso, petalis æquilongis obtusis cucullatis, labello nano cordato obtuso inferiùs lævi dimidiâ superiore scabro.

"An epiphyte, on the slope of the Sierra Nevada, in the province of Merida, at the height of 7000 or 8000 feet; August. Flowers small, reddish." (No. 669).

Near Pl. bidentata.

DIALISSA, Lindl.

12. *D. pulchella*; (Lindl. in Ann. nat. hist. xv. p. 107).

"Terrestrial, in the forests on the slope of the peak of Tolima, at the height of 10,000 to 11,000 feet; January, 1843. Flowers yellow." (No. 1275).

STELIS, Swartz.

13. *S.?* *triura*; folio lineari-lanceolato apice tridentato caule laxè vaginato angulato pluries brevior, racemis pluribus erectis filiformibus multifloris folio brevioribus, bracteis minimis cucullatis mucronatis, sepalis æqualibus liberis setaceo-caudatis subcordatis.

"A little epiphyte, with reddish flowers, from the Paramo de la Tulata, in the province of Merida, at the height of 9000 or 10,000 feet; August." (No. 680).

This species has somewhat the habit of a *Lepanthes*. Its petals and lip are unknown to me.

14. *S. spatulata*; (Pöppig and Endlicher, nov. gen. et sp. l. t. 80.)

"On the rocks that border the Rio Chama, in the province of Merida, at the height of 5000 feet; August. Flowers yellow." (No. 638).

15. *S. atra*; folio lanceolato coriaceo obtuso basi angustato caule triplò longiore, spicâ folio æquali, sepalis glabris 3-nerviis altero subrotundo alteris ovatis minoribus, labello tridentato petalisque truncatis.

"An epiphyte, on the Paramo de la Tulata; August. Flowers purple." (No. 687).

16. *S. sesquipedalis*; folio horizontali oblongo obtuso basi angustato cauli æquali racemo secundo stricto fere triplò brevior, sepalis glabris subrotundo-ovatis semitrinerviis dorsali minore, petalis membranaceis subrotundis, labello conformi cucullato.

"Forests on the sides of the Sierra Nevada, in the province of Merida, at the height of 9000 feet; August. Flowers pale yellow." (No. 632).

17. *S. Lindeni*; folio oblongo obtuso in petiolum angustato caule æquali, spicis pluribus erectis folio paulò longioribus, floribus secundis, bracteis acuminatis amplexicaulibus, sepalis ovato-subrotundis glabris anticis subquinqnerviis, venis lateralibus cum centrali infra apicem confluentibus, labello tridentato petalisque truncatis carnosis.

"Forests of Valle, near Merida, at the height of 6000 feet; August. Flowers yellow." (No. 679).

RESTREPIA, *H. B. K.*

18. *R. parvifolia* ; caulescens, foliis ovali-lanceolatis acuminatis in petiolum angustatis subtus pallidis, pedunculis unifloris folio subæqualibus, bracteâ sub flore brevi cucullatâ cuspidatâ, sepalis ovato-lanceolatis caudato-acuminatis subæqualibus, petalis conformibus paulo minoribus.

“*This singular species grows on the ground on the slope of the peak of Tolima, among mosses and on old scrubby trees, at the elevation of 12,000 feet. Flowers yellow, slightly streaked with red ; January, 1843.*” (No. 1278.)

The caulescent habit of this plant is that of *R. cucullata*, but the leaves are little more than an inch long, very pale underneath, and somewhat longer than the peduncles.

19. *R. maculata* ; acaulis, folio oblongo obtuso pedunculi filiformis longitudine, sepalo inferiore ovato-lanceolato, caulis vaginis nigromaculatis.

“*An epiphyte, on the oaks which border the Salto de Tequendama, in the province of Bogota, at the height of 7740 feet ; in November. Flowers yellow dotted with purple ; scales of stem spotted with deep purple. (No. 1270)* “*Also on the Paramo of Portachuela, in the province of Merida, at the height of 12,000 feet ; in June, growing in the ground.*” (No. 1481).

The spots on the thin sheaths of the stem, which is about four inches long, readily distinguish this species.

MASDEVALLIA, *Ruiz and Pavon.*

20. *M. coriacea* ; (Lindl. in Ann. nat. hist. xv. 257). Var. β ; calyce intus subvillosus, majore, purpureo punctato.

“*An epiphyte from the forests of Fusagasuga, in the province of Bogota, at the height of 7200 feet ; December. Flower yellow, spotted with purple.*” (No. 1281).

21. *M. tubulosa* ; folio lineari-oblongo obtusè tridentato in petiolum angustato scapo filiformi unifloro nudo brevioris, calyce regulari angustè tubuloso lævi laciniis linearibus acuminatis, petalis. . . .

“*A white-flowered epiphyte from the Paramo de la Tulata, in the province of Merida, at the height of 11,000 feet ; July, August.*” (No. 685).

A small species. Scape three inches high. Tube of the calyx half an inch long. Near *M. minuta*, but much larger.

22. *M. cucullata* ; folio oblongo coriaceo obtusissimo in petiolum longum canaliculatum angustato, scapo unifloro, bracteâ coriaceâ cucullatâ tubo calycis æquali, calyce subæquali campanulato laciniis in caudam subulatam productis, petalis. . . .

“*An epiphyte from the thick forests of Fusagasuga, in the province of Bogota, at the height of 7200 feet ; December. Flowers purple.*” (No. 869).

Leaf large, seven inches long without the petiole. Sepals rather more than two inches long.

23. *M. triangularis*; folio ovali-lanceolato pergameneo acuto obsoletè tridentato, scapo filiformi unifloro, bractea minimâ acuminatâ, calyce æquali patulo laciniis triangularibus in setam longam acuminatis, petalis membranaceis carinatis apice tridentatis, labello unguiculato obsoletè rhombeo-trilobo apice convexo intus carinato obtuso dentato.

"*Epiphyte*; Quebrada of Murmuquena, near Bailadores, in the province of Merida, at the height of 4800 feet; June. Flowers yellow, dotted with purple; the tails deep red." (No. 1471).

Leaf four inches long. Sepals scarcely two inches long, with very slender tails.

24. *M. caudata*; (Lindl. gen. et sp. orch. p. 193).

"*An epiphyte from the province of Cauca, on Quindiu, at the height of 10,000 feet, between los Volcancitos and Paramillo; February. Sepals greenish-yellow, the upper slightly dotted at the extremity and streaked with red; the two lower dotted with violet.*" (No. 1479).

25. *M. affinis*; folio ovali-lanceolato in petiolum ipsi æqualem angustato, scapo unifloro prope basim vaginato brevior, calyce æquali brevi campanulato intus piloso laciniis in setam productis, petalis oblongis semicordatis, labello lineari pubescente.

"*Growing on the ground and on trees in the forests between Pan de Azucar and Boqueron, on the slope of Tolima, at the height of 9000 to 12,000 feet; January. Flower yellow.*" (No. 1273).

Near *M. lævis*, from which it differs in the flowers being hairy inside, the leaves narrower, and the sepals drawn to a finer point.

26. *M. coccinea* (Linden MSS.; folio oblongo spathulato obtuso basi longè angustato scapo unifloro nudo duplò brevior, calycis valdè inæqualis tubo brevi sepalo supremo apice subulato lateralibus semi-oblongis acutis.

"*This magnificent species grows on the ground on the southern slopes of the high mountains near Pamplona, at the height of 9500 feet; April. Its brilliant flowers resemble, at a distance, those of the Bejarias, Vacciniums, and other plants of those lofty regions.*" (No. 1262).

A most remarkable plant. Leaves four to six inches long; scape fourteen inches high. Lateral sepals an inch and a half long.

27. *M. Schlimii* (Linden MSS.); folio oblongo coriaceo basi angustato scapo multifloro brevior, floribus secundis longè pedunculatis, calyce valdè inæquali tubo brevi sepalo dorsali antico parvo subulato lateralibus oblongis posticis semiconnatis caudatis.

"*An epiphyte on the old trees of Valle, near Merida, at the height of 7500 feet; August. Leaves thick, fleshy. Stem tall, many flowered; flowers deep purple, with paler tails.*" (No. 666).

Named by Mr. Linden after Mr. Schlim, his half-brother and travelling companion, by whom it was discovered. Leaves nine or ten inches long. Scape rather taller. Lateral sepals,

together with thin tail four inches long. Bracts worn off; apparently large and membranous.

28. *M. polyantha*; folio oblongo coriaceo basi angustato scapo multifloro brevior, floribus secundis, pedunculis quam bracteæ magnæ membranaceæ cucullatæ paulò longioribus, calyce valde inæquali tubo brevi sepalo dorsali antico parvo subulato lateralibus oblongis posticis intus verruculosus semiconnatis caudatis duplò longioribus. . . .

“An epiphyte at the entrance of the Paramo of Portachuela, in the province of Merida, at the height of 11,500 feet, between Bailadores and La Grita; June to September. Grows in thick tufts, with fleshy leaves and numerous deep-red flowers; their base, and tails reddish yellow.” (No. 705).

Very near *M. Schlimii*, but the flowers are much smaller and more compactly arranged. The details are, however, in both cases, not made out, and they require further examination. Lateral sepals, together with their tails about two inches long.

SUB-ORDER II.—EPIDENDREÆ.

EPIDENDRUM, *Linn.*

29. *E. Tolimense*; (Lindl. in Bot. Reg., 1845, misc., No. 70).

“An epiphyte. Flowers dull yellow. In the forests of Tolima, at the height of 10,000 feet; January, 1843.” (No. 1272).

30. *E. dichotomum*; (Lindl. in Bot. Reg., 1838, misc. No. 146; not of Presl).

“An epiphyte. Flowers green. Forests of Merida, at the height of 5500 feet; June, 1842.” (No. 647.)

31. *E. fimbriatum*; (H. B. K. i. 351).

“Terrestrial, in the Paramo del Zumbador, at the height of 11,000 feet. Flower white, dotted with violet.” (No. 1473). “Tufts in the open spaces of the vast forests of Quindiu, between Palmilla and El Moral, in the province of Mariquita, at the height of 8400 feet. Flower white, spotted with rose.” (No. 1288).

32. *E. ceratistes*; (Lindl. in Bot. Reg., 1844; misc. No. 92).

“Sierra Nevada of Santa Martha, at the height of 5000 feet. An epiphyte with roundish oval pseudo-bulbs. Petals dull yellow; lip white. Flowers very sweet.” (No. 1658).

33. *E. blepharistes*; (Lindl. in Bot. Reg., 1844; misc. No. 24).
In gardens, from Mr. Linden; not in his herbarium.

34. *E. Lindenii* ; (Lindl. in Bot. Reg., 1845 ; misc. No. 59).
 “Rocks in the neighbourhood of Merida, at the height of 5000 feet. There are three varieties of this species ; one with bright carmine flowers, another with rose-coloured, and a third with yellow-orange.” (No. 636).
35. *E. recurvatum* ; (Lindl. in Bot. Reg., 1845 ; misc. No. 70).
 “An epiphyte with rosy flowers. Heights of Bailadores, in the province of Merida, 6000 feet above the sea ; June.” (No. 1472).
36. *E. frigidum* ; (Linden in Bot. Reg., 1845 ; misc. No. 70).
 “This singular species grows on damp rocks a short distance from eternal snow, at the height of 13,000 feet, on the Sierra Nevada. It is remarkable for a varnish, which covers the whole plant, including the flowers, which are pale-rose ; August and September.” (No. 643).
37. *E. xylostachyum* ; (Lindl. in Bot. Reg., 1845 ; misc. No. 70).
 “Peñon du Pan de Azucar, on the side of Tolima, at the height of 6000 feet ; February. Flowers greenish white.” (No. 1280).
38. *E. chioneum* ; (Lindl. in Bot. Reg., 1845 ; misc. No. 70).
 “On the ground. Paramo, between Venta Quemada and Tunja, at the height of 12,000 feet ; March. Flowers white.” (No. 1344).
39. *E. refractum* ; (Lindley in Ann. nat. hist. xii. 398).
 “High regions of the Sierra Nevada, in the province of Merida, at the elevation of 10,000 to 11,000 feet ; August. An epiphyte, with pseudo-bulbs six or eight inches long. Leaves fleshy. Flowers blood colour.” (No. 618).
40. *E. stenopetalum* ; (Hooker in Bot. Mag. t. 3410).
 “An epiphyte with deep rose-coloured flowers. Forests in the neighbourhood of San Christobal, at the height of 3000 feet, October.” (No. 710).
41. *E. macrostachyum* ; (Lindl. in Bot. Reg., 1845 ; misc. No. 70).
 “On the rocks of the Pan de Azucar, on the side of Tolima, at the height of 6000 feet. Flowers greenish, fleshy. Stem two to three feet long ; February.” (No. 1279).
42. *E. torquatum* ; (Lindl. in Bentham’s Plant. Hartweg. p. 149).
 “A terrestrial species, from the Quebrada between Montserrate and Guadalupe, in the province of Bogota, at the height of 8160 feet ; March. Flowers yellowish.” (No. 1268).
43. *E. purum* ; (Lindl. in Bot. Reg., 1844 ; misc. No. 75).
 Flowers small, paniced, pale-green. Not in the herbarium.
44. *E. phœniceum* ; (Lindl. in Sertum Orchidaceum, t. 46).
 “Epiphyte, in the forests of Guantanama, in the island of Cuba ; July and August, 1844. Pseudo-bulbs oval roundish oblong. Leaves coriaceous. Sepals deep red ; lip rose and purple.” (No.—).

45. *E. Boothianum* ; (Lindley in Bot. Reg., 1838 ; misc. No. 7)

"*Epiphyte in the forests of the coast of Saltadero, Guantanama, &c., in Cuba; August, 1844. Pseudo-bulbs like those of Broughtonia. Flowers sweet-scented, yellowish orange, spotted with purple. Lip white.*" (No.—).

46. *E.* (*Encyclium*) *oxypetalum* ; pseudobulbis parvis ovatis acuminatis, foliis rigidis linearibus scapo paniculato flexuoso æqualibus, sepalis petalisque lineari-lanceolatis acutis, labelli tripartiti laciniis lateralibus elongatis obtusis pubescentibus intermediâ unguiculatâ ovatâ acutâ venis scabriusculis.

"*An epiphyte from the forests of Guantanama, in Cuba; July. Pseudo-bulbs oval, rounded, acute. Leaves linear-lanceolate, coriaceous. Scape a foot high. Flower dull yellow.*" (No.—).

Very near *E. fucatum*, but it differs in the characters expressed in the definition.

47. *E.* (*Spathium*) *leucochilum* ; (Klotzsch in Gartenzeit., 1843, p. 145).

"*This beautiful species occurs on half-submersed rotten trees in the marshes of Laguneta, in the province of Merida, at the height of 8000 feet; July. It is three or four feet high. The flowers are large, numerous, arranged in an umbel, of the purest white.*" (No. 684).

Dr. Klotzsch describes his plant with yellowish-green flowers and a white lip ; but the want of light in a German forcing-house is probably the cause of the greenness.

48. *E.* (*Spathium*) *flavidum* ; foliis coriaceis obtusis, spathâ magnâ solitariâ pedunculo longiore, umbellâ brevi cernuâ, sepalis petalisque lineari-lanceolatis patentissimis, labelli trilobi lobis lateralibus magnis obliquè orbiculatis intermedio ovali basi trilamellato, clinandrio cucullato truncato.

"*A terrestrial plant from the cold region near Chitaga, in the province of Pamplona, at the height of 9000 feet; April. Leaves fleshy, oval, acute. Flower yellowish.*" (No. 2213).

49. *E.* (*Spathium*) *carneum* ; foliis oblongis obtusis, spathâ solitariâ falcatâ v. rectâ carinatâ pedunculo æquali v. brevior, racemæ nutante, bracteis setaceis, sepalis linearibus acuminatis, petalis filiformibus, labelli hastati lobis lateralibus subrotundo-cuneatis planis intermedio carnosulo lineari acuminato basi trilamellato, clinandrio integerrimo marginato.

"*A terrestrial plant from the forests of Jaji, in the province of Merida, at the height of 5000 feet; August. Petals yellow. Lip flesh-coloured.* (No. 675). *An epiphyte from the forests of Pamplona, at the height of 9000 feet; November. Flowers yellow.*" (No. 1266).

These two plants are very near *E. Trinitatis*, but they have larger flowers, much broader leaves, and a much shorter and wider spathe. They seem to be mere varieties of each other.

50. *E.* (*Osmophytum*) *Sceptrum* ; foliis lanceolatis obtusis emar

ginatisque racemis basi spathaceis pluries brevioribus, sepalis lanceolatis, petalis obovatis acutis, labello subrotundo-hastato medio basi pulvinato pubescente, clinandrio trilobo.

"This splendid plant is very rare. I only found a single specimen on a rotten tree in the neighbourhood of the Indian village of Jaji, at the height of 6500 feet; August. Pseudo-bulbs a foot long, compressed; raceme one to two feet long. Flowers very numerous, arranged in spikes. Petals golden-yellow, very brilliant, spotted with purple. Lip bright purple, white at the base." (No. 650).

Very near *E. fallax*, but perfectly distinct.

51. *E.* (Osmophytum) *brachychilum*; foliis ligulatis obtusissimis racemo basi spathaceo brevioribus, sepalis petalisque ovalibus acutissimis, labello trilobo convexo disco villosa apice glabro petalis præviore, clinandrio marginato dentato, columnâ pubescente.

"An epiphyte from the thick forests of the slope of the Sierra Nevada, at the height of 7000 feet; August. Pseudo-bulbs like *E. fragrans*. Petals yellow, spotted with brown. Lip bright yellow. Flowers very fragrant." (No. 648).

52. *E.* (Osmophytum) *tigrinum* (Linden MSS.); foliis oblongis coriaceis racemo basi squamato duplò brevioribus, sepalis petalisque lanceolatis, labello obovato piloso callo magno transversè corrugato, clinandrii trilobi lobis rugosis dorsali bidentato.

"A native of earth or trees at Jaji in Merida, at the height of 5000 to 9000 feet; July. Pseudo-bulbs a foot or a foot and half long, compressed. Petals orange-yellow, spotted with red. Lip white, washed with purple." (No. 1468).

A very handsome plant in the way of *E. variegatum*.

53. *E.* (Osmophytum) *fallax* (*E. Lindenii*, Lindl. in Ann. of nat. hist. xii. 397); foliis lanceolatis obtusis emarginatisque racemis basi squamatis duplò brevioribus, sepalis petalisque lanceolatis, labello semilibero æqualiter trilobo concavo medio tomentoso laciniis lateralibus rotundatis intermediâ sub-cordatâ acutâ.

"Epiphyte, on trees in the thick forests of the Sierra Nevada, at the height of 6000 to 8000 feet; August. Pseudo-bulbs like those of *E. fragrans*, —a, Petals reddish. Lip purple, edged with white. (No. 624). —b, Petals orange-yellow. Lip white, mixed with purple. Sweet-scented." (No. 645).

These two varieties seem to differ in nothing but colour. They are very near *E. venosum*, the middle lobe of whose lip is much larger than the side ones. The first is my *E. Lindenii* in Taylor's Annals, which I there erroneously referred to *Encyclium*, on account of the lip being nearly free from the column. I believe, however, the plant must be regarded as an Osmophytum near *E. fragrans*.

LÆLIA, *Lindl.*

54. *L. Lindenii*; scapo gracili tereti apice 4-10-floro, sepalis ovalibus acutis, petalis oblongis obtusis, labellò multò majore obovato subrotundo bilobo venis omnibus infra medium dentatis, columnâ basi bidentatâ.

"Cuba, June. This charming species grows on single trees in the Savannahs between San Andres and the Saltadero. The flowers are large, pale rose colour; the pseudo-bulbs are small and compressed; the leaves are fleshy, lanceolate, toothed." (No. 1805).

This is probably the same as *Cattleya*? *domingensis*. I have not seen the leaves.

CATTLEYA, *Lindl.*

55. *Cattleya Mossiæ*; (Hooker in Bot. Mag. to 3669).

"Near Caraccas, at the height of 3000 feet, flowering in March, 1842."

SCHOMBURGKIA, *Lindl.*

56. *Schomburgkia undulata*; (Lindley in Bot. Reg., 1844; misc. No. 21.)

"On rocks near Pandi, the Natural bridge of Icononzo. Petals dull red. New Grenada, in the province of Bogota, at the height of 2400 feet, flowering in December, 1842." (No. 862).

57. *Schomburgkia rosea*; (Linden in Bot. Reg., 1845; sub t. 53).

"This magnificent plant grows on the rocks of the northern slope of the Sierra Nevada de Santa Martha. The bracts, peduncles, and lip, are of a bright rose-colour; the petals are deep red. Between the villages of S. Antonio and S. Miguel, on the territory of the Ouruhucos Indians, at the height of 5000 feet, flowering in February, 1844." (No. 1664).

BLETIA, *Ruiz and Pavon.*

58. *Bletia patula*; (Hooker in Bot. Mag. t. 3518.)

"Sandy hills of Yatera, in Cuba, May 1844. Flowers large, bright purple. Leaves lanceolate, a foot and half long; pseudo-bulbs very strong, roundish oval; stem a foot and half high." (No. 1761).

EVELYNA, *Pöppig and Endlicher.*

59. *E. bractescens*; ramulosa, vaginis subsetosis scabris, foliis lanceolatis subseptemnerviis acuminatis emarginatis, strobilis ovalibus,

bracteâ infimâ apice herbaceâ, labello fimbriato emarginato callis duobus magnis ovatis in fundo et laminâ transversâ.

"On old stunted trees skirting the Paramos of the province of Merida, at the height of 8000 to 10,000 feet; July. Flowers red." (No. 2215).

Near *E. aurantiaca*.

60. *E. flavescens*; ramulosa, vaginis scabriusculis, foliis lanceolatis 5-7-nerviis acuminatis obtusis, strobilis oblongis basi laxis, bracteis inferioribus apice herbaceis, labello integerrimo emarginato callis duobus parvis ovatis in fundo.

"Terrestrial; between Humucaro-bajo and the Agua de Obispo, in the province of Truxillo, at the height of 7000 feet; May. Flowers yellowish." (No. 625).

Leaves much smaller than in the last; and bracts far narrower.

61. *E. kermesina*; ramosa, vaginis sublævibus, foliis lineari-lanceolatis subtrinerviis mucronatis margine scabris, racemis flexuosis, bracteis navicularibus, labello crenato subpubescente callis 2 parvis ovalibus in fundo et laminâ transversâ.

"An epiphyte, from the forests of Tolima in the province of Mariquita, at the height of 9000 feet; January. Flowers bright carmine." (No. 1276).

The petals are obovate and emarginate; the leaves very narrow and hard; sheaths nearly smooth. Flowers quite distinct from each other, on account of the bends of the rachis.

62. *E. columnaris*; simplicicaulis, vaginis lævibus, foliis lanceolatis multinerviis acuminatis abruptè acutis, racemis oblongis elongatis compactis obtusis multifloris, bracteis membranaceis obtusis, labello apice ovato integerrimo basi bifoveato ecalloso.

"A large terrestrial species three or four feet high. Agua de Obispo and Sierra Nevada, at the height of 9000 feet; May to August. Flowers white and purple in spikes." (No. 620).

Leaves a foot long, and nearly two inches broad. Racemes between four and five inches long, with the lowest bract leafy. Near *E. strobilifera*.

63. *E. lupulina*; simplicicaulis, vaginis brevibus scabridis, foliis multinerviis acutis, racemo oblongo obtuso multifloro, foliis floralibus basi ventricosis, bracteis lineari-lanceolatis apice dilatatis floribus duplò longioribus, labello medio constricto apice rotundato callo magno didymo in fundo concavo.

"A terrestrial plant from the vicinity of the Paramo of the Sierra Nevada, at the height of 10,000 feet; August. Plant four or five feet high. Flowers rose-coloured in spikes." (No. 642).

Raceme very compact, four inches long. Bracts very long, and narrow.

64. *E. ensata*; simplicicaulis, vaginis apice verrucosis, foliis lineari-lanceolatis rigidis acutis multinerviis, racemo oblongo multifloro, folio

florali ventricoso, bracteis ovatis setaceo-acuminatis floribus longioribus, labello medio constricto apice rotundato apiculato callis 2 angustis acuminatis in fundo concavo.

"*Terrestrial. Sierra Nevada, at the height of 8000 feet; August. Flowers in spikes, bright carmine.*" (No. 664).

Leaves six inches long, and scarcely more than half an inch broad. Raceme two and a half inches long, nodding.

65. *E. furfuracea*; simplicicaulis, tenuis, vaginis furfuraceis, foliis ovali-lanceolatis acuminatissimis multinerviis, strobilo paucifloro, bracteâ infimâ foliaceâ supremis subtrotundo-ovatis acutis, labello oblongo rotundato crenato emarginato, lamellis 2 in fundo concavo, et lineâ elevatâ transversâ.

"*An epiphyte, forests of Merida, at the height of 5500 feet; June. Flowers scarlet.* (No. 619). *Also from Agua de Obispo, at the height of 9000 feet; May. Flowers fleshy, bright rose.*" (No. 627).

A slender thin-leaved species with from four to seven flowers in a head.

66. *E. capitata*; (Pöppig and Endlicher, nov. gen. et sp. ii. 32, t. 56).

"*On the slope of Sierra Nevada, in Merida, at the height of 8000 feet; August. Flowers white, glutinous.*" (No. 671).

SUB-ORDER III.—VANDEÆ.

ANGRÆCUM, *Thouars*.

67. *Angræcum Lindenii*; (Lindl. in *Gardeners' Chronicle*, 1846, p. 135.) aphyllum, acaule, radicibus numerosissimis intricatis, sepalis petalisque lanceolatis, labelli trilobi cucullati lobo medio bilobo mucronulo interjecto laciniis longissimis caudatis divaricatis, calcare longissimo filiformi, capsulâ ovali lævi stipitatâ.

"*This remarkable plant is a true parasite, if we can judge from the manner in which its roots are planted upon the bark of trees, to which they seem inherent. The flower, of the purest white, is sometimes a foot in length, including the spur up to the point. When out of flower it is difficult to discover the plant, so much do the roots assume the colour of the bark in which they grow. Found September 1844, at St. Yago de Cuba, in the dense forests of Sagua and Nimanima.*" (No.—).

CHONDRORHYNCHA.

GEN. NOV. Epiphyta, ebulbis. Scapus radicalis? uniflorus. Flos explanatus, speciosus. Sepalum dorsale carinatum dorso columnæ insertum; lateralia basi obliqua recurva. Petala membranacea, basi,

obliquè inserta, sepalum dorsale et lateralia connectens. Labellum maximum, cucullatum indivisum, cum pede haud producto columnæ articulatam. Columna elongata, semiteres; rostellum lineare, cartilagineum, elongatum; pollinia 4, cereacea, inæqualia, concavo-plana, glandulæ longæ acuminatæ molli annexa (♂ ♂).

68. *C. rosea*. Folia spithamæa, papyracea, obovata, acuta. Flos candidus, roseo suffusus, $2\frac{1}{2}$ pollices latus. Sepalum dorsale brevius; lateralia lanceolata sesquipollicaria. Petala obovata, plana, obtusa, sepalis æqualia. Labellum obovatum, venosum, margine crispum.

"A bulbless epiphyte from the deep and damp forests of Merida. Flowers rosy white. Jajá, at the height of 5000 feet; July, 1842." (No. 651).

This genus seems to be allied to *Helcia* and *Trichopilia*; but the extremely oblique insertion of the sepals is a most remarkable feature, as is the long cartilaginous bristle-like rostellum, which is covered by a broad soft acuminate gland.

PILUMNA, Lindl.

69. *P. fragrans*; (Lindl. in Bot. Reg. 1844, misc. No. 74.)

"Pseudo-bulbs compressed, long, oval, obtuse. An epiphyte from the dark and damp forests of Merida, at the height of 5000 feet. Flowers white as snow; July, 1842." (No. 649, *Trichopilia?* *candida*).

FERNANDEZIA, Ruiz and Pavon.

70. *F. longifolia*; foliis lanceolatis acuminatis elongatis corymbo paucifloro sessili contracto longioribus.

"A yellow-flowered epiphyte from the neighbourhood of Venezuela, in the province of Merida, at the height of 5000 feet; July, 1842." (No. 660).

The structure of the flowers unknown to me.

ONCIDIUM, Swartz.

71. *O. Lemonianum*; (Lindl. in Bot. Reg. t. 1789).

"A little epiphyte with bright-yellow flowers growing on old Coffee trees of the Sierra Maestre, and on the scrubby trees of the plain of Guantanamo, Cuba; May—August." (No. 1758).

72. *O. variegatum*; (Lindl. Gen. et sp. Orch. p. 198).

"A graceful epiphyte from the same locality as the preceding. Flowers white; base of the petals and lip, rose. Cuba, April—June. This species varies according to station; a large state with a creeping rhizome is found in the Pine forests of Yatará; its flowers are sometimes rose, sometimes white. A smaller form occurs on the Coffee trees of the Sierra Maestre and Mount Liban." (No. 1759).

73. *O. bicolor* ; (Lindl. in Bot. Reg. 1843, t. 66).

Not in the herbarium.

74. *O. cucullatum* ; (Lindl. Sertum Orch. sub t. 21).

"An epiphyte with oval obtuse ribbed pseudo-bulbs. This magnificent species has deep red petals, and a two-lobed violet lip spotted with purple. Forests of Quindiu, at the height of from 7800 to 8700 feet; February. The Gallegos call it Hierba buenal and la Mesa." (No. 1287).

75. *O. (Cyrtochilum*) halteratum* ; foliis ensiformibus tenuibus acutis, racemis laxis longissimis, bracteis cymbiformibus obtusis, sepalis longè unguiculatis supremo cordato-subrotundo lateralibus ovatis obtusis, petalis sessilibus ovatis undulatis obtusis brevioribus, labello carnoso lanceolato acuto subtus carinato supra cristâ elevatâ etiam carinatâ pubescente aucto basi utrinque dentato, columnæ dorso sub apice glanduloso alis linearibus retrorsum falcatis.

"Epiphyte from the forests of Quindiu, in the province of Mariquita, at the height of 7800 feet; February. Flowers deep yellow." (No. 1289).

A very fine species allied to *O. undulatum* and flexuosum. Flowers more than two inches across. Leaves thin, scarcely an inch broad.

76. *O. (Cyrtochilum*) falcipetalum* ; foliis lanceolatis acutis pergameneis 7-9-nerviis, floribus densè paniculatis, bracteis cymbiformibus obtusis, sepalis brevè unguiculatis supremo subrotundo cordato lateralibus ovato-oblongis obtusis, petalis sessilibus brevioribus oblongis crispis complicatis falcatis recurvis, labello carnoso hastato acutissimo basi utrinque corrugato et lamellis dentatis aucto, columnâ lævi, alis parvis semiovatis unidentatis, clinandrio postice mucronato pubescente.

"Both epiphyte and terrestrial, from the forests of Merida, at the height of 5000 to 6000 feet; August. Pseudo-bulbs oval, compressed, two or three inches long. Stem twenty feet long, scrambling. Flowers very large, brown." (No. 626).

A noble species, with flowers more than three inches in diameter. Leaves eighteen inches long, one and a half wide.

77. *O. (Cyrtochilum * *) linguiforme* ; foliis ensiformibus acutissimis, paniculâ divaricatâ, sepalis lanceolatis patentissimis lateralibus unguiculatis disjunctis, petalis latioribus, labello linguiformi subrhombico basi angustato lamellis 5 inæqualibus, columnæ nanæ alis rotundatis.

"An epiphyte from the province of Merida, at the height of 5000 feet, July. Pseudo-bulbs oval compressed ribbed. Petals yellow. Lip rose colour." (No. 672).

Leaves eighteen inches long, and from three-quarters to one inch broad.

78. *O. (Heteranthium) maizæfolium* ; foliis lanceolatis multi-

nerviis, paniculâ ramosissimâ intricatâ ramulis flexuosis, sepalis petalisque lineari-oblongis obtusis undulatis patentissimis, labello apice reniformi basi triangulari pubescente cristâ multidentatâ, columnæ alis acinaciformibus sursum elongatis.

“Forests on the slope of the Sierra Nevada, in the province of Merida, at the height of 7000 feet; August. Pseudo-bulbs oval, ribbed. Stem two feet high. Petals bright-yellow, spotted with red. Lip pale-yellow.” (No. 681).

One of the herd of species allied to *O. reflexum* and *pictum*. The downy triangular base of the lip is one of its best characters. The leaves are a foot long, or less.

SOLENIIDIUM.

GEN. NOV. Sepala et Petala æqualia, explanata, libera. Label- lum ungue longo canaliculato apice bidentato, laminâ subrotundo- ovatâ obtusissimâ. Columna aptera haud pede producta, alata, apice triloba: lobis lateralibus rotundatis dorsali lacero. Pollinia 2, cereacea, in caudiculam incumbentia, glandulâ parvâ subrotundâ.— Folia ensiformia, tenuia, basi angustata. Racemus laxis multiflorus. Bracteæ minutæ, pedicellis gracilibus sigmoideis pluries breviores.

This curious genus is near *Oncidium* and *Brassia*, from both of which it is distinguished by its narrow stalked wartless lip, three-lobed anther-bed, and very peculiar pollen masses, which are bent down upon their caudicle, while in the anther.

79. *S. racemosum*.

“An epiphyte from forests near Pamplona, at the height of 8500 feet; November. Flowers yellow, spotted with red.” (No. 1264).

ODONTOGLOSSUM, H. B. K.

80. *O. constrictum*; (Lindl. in Bot. Reg. 1843, misc. No. 25).

“A small specimen of the variety β occurs, with no other locality than Caraccas; April, 1842.” (No. 623).

81. *O. Hallii* (Lindl. in Bot. Reg. sub t. 1992).

“An epiphyte from the forests of Pamplona, at the height of 8500 feet; November. Petals yellow, spotted with purple. Lip white.” (No. 1263)

82. *O. epidendroides*; (H. B. K. I. 351, t. 85).

“Damp forests of Pamplona, at the height of 8500 feet; November. Pseudo-bulbs small, oval. Leaves strait, lanceolate. Stem twelve to sixteen inches long. Flowers fragrant. Sepals linear, golden-yellow, spotted with purple. Lip white, spotted with purple.” (No. 1261).

83. *O. megalophium*; foliis lanceolatis in petiolum tenue canalicu- latum angustatis, paniculâ strictâ racemosâ ramulis compositis

flexuosis, bracteis membranaceis acutis, sepalis spathulatis apiculatis lateralibus unguiculatis, petalis duplò latioribus sessilibus, labello subcordato-ovato obtuso sub apice carinato lamellis 2 maximis, columnâ apterâ.

"An epiphyte in the thick forests of the Sierra Nevada, at the height of 7000 feet; August. Pseudo-bulbs oval, acute, ribbed. Flowers yellow." (No. 682).

A small-flowered plant nearly allied to *O. longifolium* and *myanthum*.

84. *O. hastilabium*; foliis oblongis coriaceis, paniculæ ramis spicatis, bracteis cymbiformibus acuminatis ovario æqualibus, sepalis petalisque lineari-lanceolatis acuminatis undulatis, labello apice subrotundo-ovato acuto basi auriculis acutis lanceolatis porrectis aucto lamellis 5 elevatis, columnæ pubescentis alis obsolete undulatis.

"An epiphyte from Tesqua, in the province of Pamplona, at the elevation of 2500 feet; April. Pseudo-bulbs long, narrow. Flowers sweet-scented. Petals greenish-white, spotted with violet; lip white, purple at the base." (No. 1376.)

This handsome species has flowers three inches in diameter, with the appearance when dried of *O. læve*. But the flowers are white.

85. *O. luteopurpureum*; foliis ensiformibus basi longè angustatis, floribus racemosis, bracteis ovatis squamæformibus, labello obovato quadrilobo fimbriato lamellis quinque laceris pubescentibus, columnâ pubescente alis in cirrhis numerosos longos solutis.

"An epiphyte from the thick forests of Quindiu, at the height of 8000 feet, February. Pseudo-bulbs oval, thick, two or three inches long. Stem a yard high. Flowers large (like those of *O. Hallii*); petals bright-yellow, spotted with purple; lip yellowish-white, spotted with rose." (No. 1284).

Leaves two feet long. Flowers three inches in diameter and more.

86. *O. odoratum*; foliis angustè ensiformibus pergamenis, paniculâ amplissimâ, labello hastato lobis lateralibus rotundatis intermedio acuminato apice subundulato pubescente disco bidentato, columnæ pubescentis cirrhis duabus runcinatis setaceis duabus minimis recurvis.

"An epiphyte from the damp and gloomy forests of the Sierra Nevada, of Merida, at the height of 5000 to 7000 feet; June, August. Pseudo-bulbs oval, acute, ribbed; leaves lanceolate; flowers numerous, sweet-scented. Sepals golden-yellow, spotted with red. Lip white, purple at the base." (No. 623).

87. *O. dipterum*; foliis ensiformibus versus apicem latioribus, paniculâ stricta racemiformi, sepalis lanceolatis sessilibus petalisque oblongis unguiculatis undulatis obtusis, labelli hastati glabri lobis lateralibus porrectis suberenatis intermedio elongato, tuberculis disci duobus acinaciformibus ascendentibus quinque a fronte cuneatis minoribus, columnâ apterâ, antherâ pubescente.

"Terrestrial. Pseudo-bulbs oval, acute. Flower white, spotted with purple. Forests of Tolima, at the height of 9000 feet; January." (No. 1277).

The two unguiculate petals of this species are remarkable, and resemble those of some *Oncidiums*, to which genus it would be referable if its column had any wings. Flowers the size of *Oncidium altissimum*.

88. *O. densiflorum*; foliis lanceolatis elongatis coriaceis basi angustatis paniculâ contractâ paulo brevioribus, paniculæ ramulis brevibus flexuosis, sepalis obovatis apiculatis, petalis oblongis unguiculatis, labello oblongo obtuso plano lamellis 3 carnosis subpubescentibus intermediâ abbreviatâ lateralibus subdentatis, columnæ angulis superioribus in dentem productis.

"Terrestrial, with oval roundish pseudo-bulbs. Flowers yellow, spotted with red. The Paramo, near Boyaca, in the province of Tunja, at the height of 11,000 feet; March." (No. 1377).

Flowers small, and apparently unwilling to spread flat.

89. *O. divaricatum*; foliis brevibus oblongis coriaceis obtusis nitidis, paniculâ maximâ laxâ divaricatâ, floribus (parvis) distantibus vix internodiis æqualibus, sepalis petalisque unguiculatis lineari-lanceolatis acuminatis undulatis, labello rotundato dilatato in cuspidem longum angustato basi lamellis 3 undulatis brevissimis aucto alterâque utrinque arcuatâ elongatâ, columnæ cirrhis brevibus acuminatis.

"An epiphyte, with oval acute pseudo-bulbs, compressed at the sides. Petals yellow, spotted with brown. Venezuela, in the province of Merida, at the height of 9000 feet; August." (No. 633).

Its short, broad, shining leaves and long straggling panicles of small flowers, distinctly point out this species, which is far from a handsome one.

90. *O. angustatum*; foliis longissimis ensiformibus acutis graminis basi angustatis, paniculâ maximâ ramosâ, bracteis obtusis membranaceis ovario paulo brevioribus, sepalis unguiculatis petalisque lineari-lanceolatis undulatis, labello pubescente auriculato lanceolato convexo lamellis 2 lateralibus latis antice cirrhatis aliisque brevibus a fronte, columnâ apterâ.

"A magnificent epiphyte, from the thick forests in the neighbourhood of Merida, at the height of 6500 feet. Pseudo-bulbs oval, compressed; stem three or four feet high, covered with innumerable flowers of a brilliant white. Petals rosy-purple at the base. Lip purple." (No. 661).

BRASSIA, R. Br.

91. *B. glumacea*; foliis ensiformibus scapo laxè vaginato æqualibus, bracteis herbaceis carinatis ovario æqualibus, sepalis acuminatis subæqualibus, petalis conformibus brevioribus, labello brevi ovato acuminato convexo bilamellato glabro dentibus 2 carnosis erectis.

"An epiphyte, from the damp forests of Merida, at the height of 5600 feet; July. Flowers yellow, spotted with red." (No. 646).

The small flowers and spathaceous green bracts distinguish this. The sepals do not exceed an inch in length.

92. *B. pumila*; (Linden in hortis.)

I have only seen a single flower of this, from the late Mr. Barker; it is very near *Brassia angusta*, but my materials do not allow me to describe it.

NASONIA, *Lindl.*

93. *N. sanguinea*; foliis rectis, labello acuto, columnâ marginatâ, clinandrio integerrimo aptero.

"An epiphyte, of a bright carmine, and fleshy leaves. On the slope of Tolima, at the height of 6000 feet; February, 1843." (No. 1274).

This is a larger plant than *N. punctata*, and is erect instead of ascending. The leaves are straight, not falcate; the flowers smaller, and the lip acute, not rounded and dilated.

PACHYPHYLLUM, *H. B. K.*

94. *P. crystallinum*; foliis parvis squarrosis, floribus minimis fasciculatis crystallinis, sepalis carinatis obtusis, petalis oblongis acutis serrulatis, labello angusto rhombeo lævi medio bituberculato.

"On scrubby trees of the Paramo de la Tulata, in the province of Merida, at the height of 10,000 feet; August. Flowers yellowish." (No. 686).

An inconspicuous species near *P. parvifolium*.

GOVENIA, *Lindl.*

95. *G. fasciata*; (Lindl. in Bot. Reg., 1843; misc. No. 107; 1845, t. 67).

"An epiphyte, from damp forests in the vicinity of Merida, at the height of 5000 feet. Flowers in May; flowers yellow, in one variety striped with red, in the other dotted with red." (Nos. 644 and 654).

WARREA, *Lindl.*

96. *W. bidentata*; (Lindl. in Bot. Reg. 1844. misc. No. 78).

"On the ground in the thick forests at the foot of the peak of Tolima, at the height of 4000 feet. Stem erect, two to three feet high. Petals white and pink. Lip spotted with purple; February, 1843." (No. 1283).

ZYGOPETALUM, *Hooker*.

97. *Z. gramineum*; (Lindl. in Bot. Reg. 1844; misc. 15).

"A bulbless epiphyte, from the damp forests of Merida, at the height of 5000 feet; June. Flowers yellowish white, transparent; petals spotted with purple; lip veined with deep red." (No. 1474).

A broader-leaved variety; a beautiful little plant.

CYRTOPERA, *Lindl.*

98. *C. Woodfordii*; (Lindl. gen. et sp. orch. p. 189).

"Damp forests at the foot of the Sierra Nevada, where it chiefly occurs on the outskirts. Rhizome bulbous, creeping. Stem a yard high; sepals yellowish green; lip purple. Merida, at the height of 5000 feet; August." (No. 662).

MAXILLARIA, *Ruiz and Pavon.*

99. *M. scabrilinguis*; (*Cyrtopera scabrilinguis*, Lindl. gen. et sp. orch. p. 189).

"An epiphyte, and also growing on rocks, in Merida, at the height of 5000 feet; June. Petals white; lip yellow." (No. 659).

100. *M. meridensis*; caulescens, ebulbis, vaginis foliorum scabris, foliis lineari-lanceolatis acutissimis, floribus axillaribus subsessilibus, bractea supremâ flore duplo brevior, petalis acuminatis, labelli oblongi trilobi laciniis lateralibus brevibus intermediâ tereti carnosâ appendice ovato concavo.

"On trees and the ground, near Merida, at the height of 6000 feet above the sea; July. Flowers yellow." (No.—).

101. *M. grandiflora*; (Lindl. gen. et sp. orch. p. 147).

"An epiphyte, with oval flattened pseudo-bulbs, petals white as snow, and a powdery yellow lip. Forests of Jaji, in the province of Merida, at the height of 5000 to 6000 feet; August." (No. 631).

This is a true Maxillaria, with a lunate gland of the stigma.

102. *M. albata*; acaulis, scapigera, foliis oblongis acutis longè petiolatis scapis debilibus flexuosis pluries longioribus, vaginis linearibus acutis supremâ adpressâ ovario longiore, sepalis petalisque linearibus, labello trilobo laciniis obtusis lateralibus divaricatis intermediâ oblongâ sub-emarginatâ callosâ, appendice brevissimo transverso lamellisue 2 brevibus pone basim.

"An epiphyte, with long, compressed, oval, blackish pseudo-bulbs. Flower and lip pure white, very sweet. Forests of Jaji, at the height of 8000 feet; June and July." (No. 1469).

Very near *M. splendens*, but that species, according to Pöppig, has a yellow lip, of a different form, and a fringed anther-bed. Leaves two feet long ; sepals two inches long.

103. *M. melina* ; acaulis, scapigera, foliis oblongis acutis scapo longioribus, vaginis laxis carinatis acutissimis sub-falcatis supremo ovario sub-breviore, sepalis petalisque ovato-lanceolatis obtusiusculis, labello ovato obtusè acuminato carnosio apice corrugato, appendice sub-trilobo laciniâ intermediâ retusâ.

"An epiphyte, with oval obtuse pseudo-bulbs and dirty yellow flowers. Forests of Merida, at the height of 5600 feet; June." (No. 641).

Leaves one and a half inch broad, overrun with Scale-mosses : scape six inches high ; sepals an inch long.

104. *M. longissima* ; acaulis, scapigera, folio oblongo-ligulato basi angustato, bracteâ supremâ acutâ ovario longiore, sepalis longissime acuminatis, petalis conformibus minoribus, labello oblongo sub-rotundo trilobo laciniis rotundatis intermediâ oblongâ crispis, appendice piloso apice ovato.

"Epiphyte, with oval flattened pseudo-bulbs. Flower deep red. Forests of Merida, at the height of 6000 feet; July." (No. 2215).

The long narrow strap-shaped sepals are between three and four inches long.

105. *M. nigrescens* ; acaulis, scapigera, foliis oblongo-ligulatis acutis basi complicatis, vaginis imbricatis inferioribus ovatis superioribus elongatis summâ ovario longiore, sepalis elongatis lato-linearibus, petalis acuminatis, labello oblongo indiviso undulato apice pubescens appendice rotundato.

"An epiphyte, with oval, compressed blackish pseudo-bulbs ; deep blood-red petals and a purple lip. Merida, at the height of from 5000 to 8000 feet; June." (No. 628).

Leaves one and a half inch broad ; sepals two inches long ; scape about four inches long.

106. *M. luteo-alba* ; acaulis, scapigera, foliis oblongis obtusis basi complicatis, scapo ; sepalis oblongo-linearibus elongatis petalisque obtusis, labello trilobo basi concavo piloso margine undulato laciniis obtusis intermediâ obovatâ emarginatâ medio convexâ, appendice ovato subcordato concavo.

"An epiphyte, with oval, obtuse, compressed pseudo-bulbs, and a yellow flower spotted with white. Forests of Merida, at the height of 5000 to 6000 feet; June and September." (No. 678).

Leaves nearly two inches broad ; sepals two and a half inches long ; and three-eighths wide.

107. *M. pentura* ; acaulis, scapigera, foliis lanceolato-ligulatis papyraceis acutissimis scapo vix longioribus, vaginis linearibus convo-

lutis obtusis supremâ ovario longiore, sepalis linearibus caudatis petalisque brevioribus acuminatissimis, labello oblongo undulato trilobo laciniâ intermediâ majore cochleatâ appendice acutâ canaliculatâ.

"An epiphyte, with oval, compressed pseudo-bulbs, and a reddish flower. Forests of Merida, at the height of 6000 feet; July." (No.—).

Scape six inches high; sepals three inches long; leaves three-quarters of an inch broad.

LYCASTE, Lindl.

108. *L. fulvescens*; (Hooker in Bot. Mag. t. 4193).

Not in the herbarium. This is labelled *Maxillaria Barringtoniæ* in some gardens, and also bears the name *Lycaste crocea*, which I called it before it was published in the Botanical Magazine.

109. *L. gigantea*; (Lindl. in Benth. Plant. Hartweg. p. 153).

"Pseudo-bulbs very strong. Petals golden yellow; lip red. Forests of Merida, at the height of 5000 to 6000 feet; August." (No. 663).

This seems to be a variety differing in the colour, and larger size of the flowers.

ANGULOA, Ruiz and Pavon.

110. *A. Clowesii*; (Lindl. in Bot. Reg., 1844; misc. 29. t. 63).

"In low bottoms, in the midst of forests, near the Indian village Jaji, growing on the ground." Found only in one spot in the province of Merida, at the height of 5500 feet; flowering in August, 1842." (No. 622).

111. *A. uniflora*; (Fl. Peruv. Syst. p. 228, Bot. Reg., 1844; t. 60).

My specimen of this plant, from Mr. Linden, has no number, and is marked as found May, 1844, in Cuba, on the Sierra Maestre, "Both epiphyte and terrestrial. Petals dirty yellow; lip whitish." But there must, in this case, be some error in the ticketing, for it flowered in April, 1844, with Mr. Barker, of Birmingham, just one month earlier than the date of this ticket. It is no doubt Colombian.

112. *A. Ruckeri*; (Lindl. in Bot. Reg. 1846, t. 41).

No specimen of this noble species exists in Mr. Linden's herbarium. My knowledge of its being one of his discoveries is derived from the plant which flowered with Mr. Rucker.

on the lip. Damp forests in the neighbourhood of Merida, at the height of 5500 feet, June—July." (No. 640).

Perhaps a variety of the last.

CATASETUM, Richard.

118. *C. planiceps* ; (Lindl. in Bot. Reg. 1843, t. 9).
Not in the herbarium.

MORMODES, Lindl.

119. *M. Cartoni* ; (Hooker in Bot. Mag. t. 4214).

"Flower extremely variable. Found on *Erythrinas*, in the temperate regions of the Sierra Nevada, of St. Martha. The sepals are flesh-coloured; lip fleshy, rose. The same plant was found by Mr. Funck, at Minca, near S^a. Martha, in the province of Rio Hacha, at the height of 4000 feet." (No.—).

CYRTOPODIUM, R. Brown.

120. *C. bracteatum* (Linden in herb.) ; racemo simplici, bracteis magnis membranaceis, labelli disco pulvinato verrucoso lobis lateralibus oblongis undulatis versus basim tuberculatis intermedio transverso truncato indiviso margine in papillas soluto.

"Scorching Savannahs, near Merida, at the height of 5000 feet; July. Flowers and bracts bright yellow, spotted with red." (No. —).

Differs from *C. punctatum* in its simple raceme, and in the form and markings of the lip.

TELIPOGON, H. B. K.

121. *T. angustifolius* ; (Humb. Bonpl. and Kth. I. 336. t. 75).

"Terrestrial at the entrance of the Great Paramo of Mucuchies, near the Indian village of Chachopo. Leaves fleshy, imbricated, alternate. Flower pale yellow; petals transparent, rayed with purple; pollen masses surrounded with violet hairs. Venezuela, at the height of 10,500 feet." (No. 621).

122. *T. latifolius* ; (H. B. K. I. 336).

"Both terrestrial and an epiphyte. Flower large, golden yellow; petals faintly streaked with purple. Violet hairs in the centre. The vast forests of Quindiu, in the province of Cauca. Height 9840 feet; los Volcancitos, February, 1843." (No. 1285).

RODRIGUEZIA, Ruiz and Pavon.

123. *R. stenochila* ; foliis oblongis planis, racemo laxo erecto

paucifloro, floribus divaricatis, sepalo inferiore bilobo obtuse calcarato, labello angustissimo apice hastato basi sagittato, columnâ apterâ.

"An epiphyte, from the forests of Jaja. Flowers pale yellow, streaked with red. Venezuela, at the height of 6000 feet; July, 1842." (No. 659).

Of this species I have only a leaf and a couple of loose scapes; the latter are about three inches long, with two or three sharp keeled distant sheaths, and four flowers, about the size of those of *R. secunda*. The very narrow lip and thick lumpish column are quite peculiar.

BURLINGTONIA, Lindl.

124. *B. granadensis*; foliis oblongis acutis, racemo erecto (?) 5-floro, bracteis minimis apiculatis, labello bilobo subrhombico trilamellato basi unidentato, columnæ alis 2 erectis laceris 2 latis truncatis porrectis duplò majoribus.

"Leaves fleshy; flowers white, or, in a variety, yellowish. An epiphyte on *Psidium*s, between Chinacota and Chopo, in the province of Pamplona, at the height of 2500 feet; April." (No. 1260).

A fine species with flowers an inch and a half long. The lower sepal is bent backwards, so as to resemble a pendulous boat-shaped process.

IONOPSIS, H. B. K.

125. *I. pulchella*; (H. B. K. nov. gen. et sp. pl. 1, 348, t. 83).

"Flowers of a fine violet. An epiphyte on old Coffee trees of Yatera and Mount Liban, in Cuba, 2000 to 3000 feet; June, 1844." (No. 1760).

COMPARETTIA, Pöppig and Endlicher.

126. *C. falcata*; (Pöppig and Endlicher, Nov. gen. et sp. pl. 1. 42. t. 73).

"An epiphyte, on the *Psidium*s and *Crescentias*, in the neighbourhood of Merida, at the height of 5000 feet; July, 1842. Flowers bright carmine." (No. 658).

TRICHOCENTRUM, Pöppig and Endlicher.

127. *T. maculatum*; foliis lineari-oblongis carnosis obtusis, bractea cucullatâ, sepalis petalisque oblongis obtusis, labello obovato bilobo obtusissimo medio bilineato calcare longissimo, columnæ alis carnosis truncatis dentatis.

"An epiphyte, with very thick fleshy leaves, spotted with red. Flower large, with a very long spur; petals white, spotted with purple. Lip with a yellow crest. New Grenada, in the province of Rio Hacha, at the height of 4500 feet, on old trees, on the border of the river San Antonio, in the Sierra Nevada of Sta Martha; February, 1844." (No. 1666).

GHIESBREGHTIA, *A. Richard.*

128. *G. calanthoides*; (A. Richard in Ann. sc. ser. 3: III. p. 28).
 "Petals yellowish white, dotted with rose. Edges of the forests of Mount Liban and the Sierra Maestre, Cuba, at the height of 3000 feet; August, 1844." (No.—).

SUB-ORDER IV.—OPHREÆ.

HABENARIA, *Willd.*

129. *H. maculosa*; (Lindl. gen. et sp. orch. 309.)
 "Terrestrial. Moist places at San Cristobal, in Merida, at the elevation of 3000 feet; October. Flowers white." (No. 706).

130. *H. Lindenii*; caule alto folioso, foliis oblongis acutis, spicâ elongatâ densâ multiflorâ, bracteis foliaceis floribus æqualibus, petalis lineari-oblongis indivisis, labello lineari indiviso carnoso sepalis longiore basi callis duobus carnosis truncatis subasperis aucto, calcare longissimo versus apicem compresso.

"Terrestrial; Caraccas, between Las Coquisas and San Pedro, at the height of 3000 or 4000 feet; August. Flowers white." (No. 1477).

A very fine species, three feet high. There are no radical leaves.

SUB-ORDER V.—ARETHUSEÆ.

CLEISTES, *L. C. Richard.*

131. *C. rosea*; (Lindl. gen. et sp. orch. p. 410).
 "Mountain Savannas of Merida, and at St. Pedro, near Caraccas, at the height of 4000 or 5000 feet; July and September. Flower large, bright rose; lip pale rose, deep purple in the centre, and veined with purple at the extremity." (No. 1475).

SOBRALIA, *Ruiz and Pavon.*

132. *S. dichotoma*; (Ruiz and Pavon. syst. 232, prodr. t. 26).
 "This remarkable plant grows as much as six or eight feet high, on rocks

near Tipacogue, in the province of Tunja, at an elevation of 4500 feet. The flowers are large, somewhat fleshy; petals rose, sometimes whitish rose; lip white and purple; March." (No. 1375).

A magnificent plant.

133. *S. violacea* (Linden in herb.); glabra, foliorum vaginâ rugosobrâ laminâ ovali acuminatâ superiore flore longiore, strobilo sessili plurifloro, labello maximo explanato lævi.

"Abundant in the high regions of the province of Merida, at the elevation of 6000 to 8000 feet; July. Flowers pale violet. (No. 617) or white with a yellow crest." (No. 615).

The two numbers are supposed by Mr. Linden himself merely to represent two varieties. The white kind has, however, narrower leaves than the other; but whether that difference is connected with others in the fructification the impossibility of examining the dried flowers prevents my ascertaining.

EPISTEPHIUM, II. B. K.

134. *E. sessiliflorum*; foliis oblongis amplexicaulibus apiculatis pergamenis, flore solitario intra folium supremum cucullatum sessili, labello unguiculato cucullato margine serrulato.

"Savannahs near S. Antonio, on the Sierra Nevada of Santa Martha, in the province of Rio Hacha, at the height of 4500 feet; February. Flowers purple, three inches in diameter." (No.—).

SUB-ORDER VI.—NEOTTEÆ.

PONTHIEVA, R. Brown.

135. *P. maculata*; (Lindl. in Ann. hist. nat. xv. 385). *Schöleinia benigna*, Klotzsch in litt.)

"Both on trees and on the ground, in forests of the Silla de Caraccas, in the colony of Tovar, and province of Merida, at the height of 6000 or 7000 feet. This singular plant, whose velvety foliage resembles that of *Arnica montana*, occurs in the forests of the cold region. Lower sepals white, dotted with red; upper white, streaked with rose; February." (No. 140).

ACRÆA, Lindl.

136. *A. multiflora*; foliis, spicâ oblongâ multiflorâ, petalis membranaceis lineari-lanceolatis sepalo apice agglutinatis, labello margine glanduloso crenato lobo medio villosa.

"Terrestrial; Savannahs of the Sierra Nevada, at the height of 10,000 feet; August. Flowers yellow, striped with red." (No. 673).

The many-flowered oblong dense spike and hairy lip offer a ready mode of distinguishing this from *Pterichis galeata*. It differs from *Acræa triloba* in being larger, less hairy, and having the edge of its lip very glandular.

ALTENSTEINIA, H. B. K.

137. *A. fimbriata*; (H. B. K. I. 333. t. 72).

"Terrestrial. Flowers white, in a close spike. Quebradas of the Sierra Nevada of Santa Martha. San Miguel in the province of Rio Hacha, at the height of 6000 feet; February." (No. 2214).

CRANICHIS, Swartz.

138. *C. monophylla*; folio solitario cordato acuminato longè petiolato, vaginis scapi acuminatis, spicâ multiflorâ laxâ, labello ovato-oblongo, sepalis petalisque glabris subæqualibus.

"Terrestrial. Flowers greenish. Forests of Merida, at the height of 6000 feet; July." (No.—).

139. *C. parvilabris*; foliis 2 radicalibus ovalibus petiolatis, scapo ter squamato, racemo paucifloro secundo, sepalis ovalibus obtusis membranaceis cum ovario parè pilosis, petalis membranaceis margine altero ciliatis sepalo apice adhærentibus, labello minimo glabro unguiculato subquadrato apiculato complicato.

"Terrestrial. Paramo of Zumbador, in Merida, at the height of 10,000 feet; June. Flowers white." (No. 1470).

The flowers hang down after withering, and are larger than usual in this genus. The minute unguiculate lip is very remarkable.

SARCOGLOTTIS, Presl.

140. *S. picta* β ; (Lindl. gen. et sp. orch. 475).

"Terrestrial, in the forests of Jaji, in the province of Merida, at the elevation of 5500 feet; August. Flowers yellowish white." (No.—).

PHYSURUS, L. C. Richard.

141. *P. Preslei*? (Lindl. gen. et sp. orch. p. 501).

"Damp forests near Ibagua, at the height of 4200 feet, in the province of Mariquita; February. Flowers yellow." (No. 1282).

I am not sure that this is the same as Presl's Peruvian plant. Its lip appears to be less sagittate; indeed it is not sagittate at all, being furnished with two short diverging lobes. Its flowers too are less hairy, according to the memoranda in my herbarium. The two plants, however, if not the same, are very nearly so.

142. *P. rariflorus*; caulescens, foliis ovato-lanceolatis acuminatis undulatis 3-nerviis scapo glabro multò brevioribus, floribus distantibus præsertim infimo, petalis linearibus cuspidatis erectis, labello concavo carnoso margine incrassato apice obscurè trilobo obtusissimo, calcare pendulo obtuso angusto.

"Terrestrial. Forests of Galipan, in Caraccas, at the height of 5000 feet; March. Flowers yellow." (No.—).

SUB-ORDER VII.—CYPRIPEDÆ.

UROPEDIUM.

GEN. NOV. Omnia *Cypripedii*, sed labellum planum et petala longissimè caudata. Anthera sterilis trilobo-hastata.

143. *U. Lindenii*.

"This singular and magnificent plant grows on the ground in the little woods of the Savannah, in that elevated part of the Cordillera which overlooks the vast forests at the bottom of the lake of Maracaybo, and situated on the territory of the Indians of Chiguará, at the height of 8500 feet. Sepals oval-lanceolate, pale yellow, streaked with orange. Petals purple, orange at the base. The flower may be from fifteen to twenty inches long in its greatest diameter. Leaves thick and fleshy; June 1843." (No number).

The habit of this curious plant is exactly that of *Cypripedium insigne*. The leaves are a foot long, blunt, unequally two-toothed at the point, shining, spotless, and longer than the downy scape. The bracts are two, of which the exterior is spathaceous, compressed, blunt, coriaceous, and much longer than the inner. The peduncle is six inches long, downy, and one-flowered. The upper sepal is ovate-lanceolate, and four inches long; the lower are united into one of the same form, but rather wider. The petals are linear-lanceolate, extended into a long narrow tail, and are probably eight or nine inches long, but in my specimens they are broken. The lip is of exactly the same form, but broader, and like the sepals is shaggy at the base.

THE END.