## RCHID WORLD



ODONTOGLOSSUM SMITHII.

# ORCHID WORLD.

A Monthly Illustrated Journal entirely devoted to Orchidology.

EDITED BY

#### GURNEY WILSON, F.L.S.,

Member of the Scientific and Orchid Committees of the Royal Horticultural Society.

3

VOL, II. With 130 Illustrations.



HAYWARDS HEATH, SUSSEX.

Kenneth A. Roberts Boon S. Roberts MANASTER, PASSMORE & SONS, LTD., PRINTERS,



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G G 9

MILTONIA VERILLARIA LAUGHOUTEN-Seedlings, the result of self-fertheling this distinct variety noted for the elegant crimson blotch election on the labellum, have recently here showered by Mr. W. Belton, of Warriegtus. In one, flowering for the first time, the contract of the contract of the contract of the labellum is self-fertheling to the consult speed with the contract of the labellum. It is very distinct and gives provide of still further improvement.

2 45 20

CATTLEYA IRIS. A fine variety of this beautiful hybrid has recently been flowered by Mr. J. Shelton, The Wildernesse Gardens. Sevenoalss. It has the peculiarity of two perfect flowers on one stalk, the two ovaries being connected by a thin membrane.

ES ES ES

CATTLEYA HARDYANA COUNTESS OF DERBY. This magnificent variety originally appeared in the Stand Hall collection in September, 1804. It was at first considered to be a variety of Cattleva Warscewiczii, but the unmistakable characters of Cattleya Handyana shown in the flower caused it to be soon afterwards regarded as a very rare This season it has flowered in exceptionally good form in the noted collection of L. I. Holden, Esq., Southport, and Mr. Johnson, who has so successfully srown the plant, sends the three flowered inflorescence. The sepals and petals are very broad and well-formed, of a remarkable creamy-white colour, an extremely rare condition due to the absence of the purple piement normally possessed by Cattleya Warscewirzii. The lin is intense purple almost covered with the rich crimson-purple derived from the Cattleya aurea parent, the side lobes being conspicuously marked with the bright yellow blotches which are always to be seen in Cattleya Warscewiczii, and with rich purple and gold markings extending to the base of the column

MEDALS FOR ORCHIDS—A: the recent Carlis's and Cumberiand Horticultural Show Gold Meskls were awarded to Sir Benjamin Scott, Linden House, Stanwix, Carlisle, and to Messrs, Mansell and Hatcher, Ltd., Rawdon, Yorks.

THREE-SPHERED ORCHID.-At the Scientific Committee meeting of the Royal Horticultural Society, August 20th, Mr. Botting Hemsley showed a drawing of a British Orchid found on Reigate Hill in the third week of April last. Beside other abnormalities, it had three sours, but no polker, Although somewhat resembling Habenaria viridis it was impossible to connert it with imaccountable. As three-opured Orchids are rarely found, it is interesting to note similar instances recorded by Mr. Botting Hensley in 1908 (Journ. Line, Soc., vol. of the lateral sensils. A second specimen was on example of true peloria, all the sourced organs being of the inner or petal series. In both examples all the flowers on the spike were transformed, and the ovary was not twisted. Mr. Sommier, of Florence, also describes an example of false peloria (Bullettino della Società Botanica Italiana, n. 6, July. (868 p. (86) in which two extra spurs were being transformed. The specimen was

#### 0 0 0

OBITIARY—We much regret to amoustic the doubt on August 134 of Mr. Jehn Rob-son, Altrincham, Cheshine. For more than 6fty years Mr. Alsonen Indi becar a grower of Occhids. As far back as March 26th, 1866, he exhibited at the Royal Horicultural Society agroup of Octnetglossoms for which as "Special Certificate," was awarded. On the same day he also received a First-class Certificate for Demokration. The

original cards announcing these awards are

ROYAL INTEXACTIONAL EXAMINIONS—INITIONAL FAMILIATION AND ADMINISTRATION AND ADMINISTRATION AND ADMINISTRATIONAL EXAMINISTRATIONAL EXAMINISTRATION OF COMMON PARTICIPATION OF C



Cattleya labiata Alice Britton,

A bountiful more white sariety in the collection of
Clowest Moore, Eas., Hackeryath, N.L., U.S.A.





#### THE FIRMIN LAMBEAU GOLD MEDAL.

The large Gold Medal generously presented by Mons, Firston Lambeau to the Royal International Exhibition, 19(2), is to be wen by the exhibitor whose collection contains the most interesting hybrial Orichids ranced by himself. The figure of the goddens Elora on the obserue side was engaged by the late Leopold Wiener and between from the Museum of the Belgiau Mint. The medal is encoused in an elegant piece of chassed silversarily\* work of Louis XVI, style, which greatly adds to its appearance and beauty. This unique work of art is valued at poor france. We are much indebted to Mons. Louis Gentil, Editor of La Tridam. Horizoth, for via kindness in lending the idools.

#### HINTS FOR AMATEURS.

WHEN necessary always open the venulators on the opposite side of the house to that on which the wind is

blowing.

Never use pots or baskets which are too large for the plant; a safe rule to follow is allow just runn enough for one more new

bulo to be made.

An extra amount or compact surrounding a plant will not make it grow any better; it will probably turn sour and cause many of the roots to rot off.

When watering always give enough to soak every particle of the compost in the pot or basket; listle and often is a had method, for frequently it is not sufficient to reach the lower part, and this may be dust dry while the

Never leave the new growths full of water at night time; they are very likely to damp off when a drop in the temperature takes place. Use, if possible, min-water of an almost equal temperature to the house; this does not apply to the tap-water used for damping down.

A guide as to the condition of the moisture in the pot may be seen in the ordour of the sphagurus mosts, it is bright green when wet and almost white when dry.

Do not forge: that Orchids are like other plants, and are accustomed to a lower temperature at might time.

It is better to ripen the pseudo-bulbs of Orchids by allowing a free circulation of air than to burn them by a sudden exposure to the rays of the sun.

If is not advisable to the the new growths to the galvanised wire of suspended pans or baskets in such a way that direct contact takes place; this wire is frequently in an acid state, and burning of the tender surface of the plant often results.

#### ITALIAN ORCHIDS.

By W. HERBERT COX.

MONG all that host of flowers which blossom in the Italian fields in the Spring, the most beautiful, certainly the most fantastic, see the numerous examples of the Ortold family. In mid-May they are to be seen everywhere in their thousands, from earliest spring—allmest winter in the

reast—some kind may be found, and they go on well into the autumn. In the north, however, May sees them at their very best. On the lifts surrounding. Florence, the towers of which gleam in the surlight with the silvery thread of the Armo flowing between they flourish exceedingly.

The Castello di Poggio, a real castle stronghold, probably formerly occupied by a one robber chief, judging from its appearance, stands high on those falls and leoks according to the great valley below. It is surrounded by towering back Coppressus, rules of fresh green seruh Oales and patches of herthery tand on

of heathery land on which golden Broom and pink and white Cytinus (morspessalanus and albidus) are all ablane. The three kinds of vegetation give rise to a great variety of flowers, the Orthalist taking so fall an ackinatage of it that within a few hundred yards of the Catello as many as thirty varieties may be found without the

The first to appear here is the Spider (Ophrys aranifera) in early April, dull, brown bodies just like the creatures after which they are named. They come in various telays, old bulbs and seedlings, so that the flowering season is continued for quite a long time. The late Spider (O. arachintes), which is not found until May, has pinis petals with a blueish strests, and a protracting appendix. The Bee (O. applica), still later, has rose.

flowerets on which a bee seems to be sitting, sucking benney. Two other varsetus of Ophrys are found there, O. Berteloni, which the Lagarians call "the little bird looking as steelf in a nureor," which it retainly does suggest, and the dingy O. fanera, believed to be

large class, varying much in colors, size, and appearance. The Meadow (Orchis moreio) and the Orchid of Prevince (O. provincials) form large diffus, the purple of the former mingling beautifully with the soft primures of the latter. A leedily plant is O. fusca, standing up loadily from its big.



Ophrys Bestelonii. The Bird and the Loubing-gass Orchal.

glossy leaves, its head in a brown leader, and a multipersy-coloured tongue longing down. The Molneky Co, Simich has an animal vanck of opening at the top of the stem is thought the first instead areas and legs, but it is eather are here. The Please of Feathers to Co, tridentially is a pretty lake flowered kind. The claret flowers of the thin bevord O, Lindenta look well in the change, sphangman grown spots. Neither of the common purple finisk, lamons as O, maculata and O, mascalis,

grow here, though they are found at several places in the neighbourhood.

A truly remarkable species is Limodecum abortivum, for its stems, which are quite leadings, are frequently four feet high and grow in clumps of perhaps a dozen in the clearings among the Stone Pines. The whole of the plant, stem, flowers, and bracts are of a metallic shade of purple, the flowers having glints of good tops the lip. There are also crowds of Serapia's highes, locally called the Her's Month, hanging flows that tronguess, and the ther's Month, hanging flows that tronguess,

I was extremely fortunate in finding them were year hybrid Orchi-Serapas complicata, a cross between O. Jaxifora and S. Shingua. The discovery caused great interest at Kew, which has now my deed specimen. It is a beautiful bille thing, with larges maronned coloured flowers baving a tribloral play quite out of all prepareits to the rest of the plant. Another rarity is Habennia intata, with pills striped flowers and sported leaver; it is admitted into our flora as it grows in northwest Ireland.

The Butterflies (Habenaria bifolia) show their long tailed white wings, the sub-variety laxificat flowering with them, whilst flocks of swallow-halfed real butterflest dance above. The beautiful Cephalauthera cusifolia, with sworf-tike leaves, in another white kind; C. pallens grows with it, but it is not so ornamental. An Epigactis, a near relation, is is putting forth its leaves, but its time of blossoning is not yet. The rosy-pink pyramid of Anacuspits pyriquidals has just

opened its flowers.

Perlaps the most interesting of all these plants Orderia Law left and the last, the great Loral (Orderia huccus). All the water the great Loral (Orderia huccus). All the water left and the great Loral (Orderia huccus). All the water left and the set of the follogs surrounding it, then great last early of the follogs surrounding it, then great last early of May the long greenish purple Lorach have of May the long greenish purple Lorach have only death with the Orderia, yes, all the save only death with the Orderia, yes, all the glossts of trees thus usual, for they are in glosses of trees thus usual, for they are in glosses of trees thus usual, for they are in which a photosic contrast is a field of pale answer fas with search! Popples interminged many fast with search! Popples interminged.

#### THE ATMOSPHERE OF THE ORCHID HOUSE.

N the early days of Orchal growing nearly all are and expensive plants were given an abundance of heat; an infart, the permanent plant severed almost agoid to the permanent of the permanent of the several ordination. We also become the save of th

All this has come about by the rational treatment accorded to their cultivation. In stead of looking upon Orchids as some strange, little understood wonder, we now treat them, from a cultural point, merely as a very interesting and rare portion of the earth's vegetation, and to obtain success when grown in the somewhat artificial atmosphere of our greenhouses it is only mecessary, therefore, to give them, as near as possible, the same climatic conditions which they or, in the case of hybrids, their parents have enjoyed in the past.

This treatment can only be allowed them when their natural climate has been studied. Not only should the temperature and the raisfall be noted, but the situation in which the plants are found should be considered. Some things are found should be considered. Some can be suffered to the studies of the sound of the suffered to the suff

receive a large amount of sunshine and hot drying winds. Such different kinds of atmosphere clearly suggest that we cannot expect all Orchids to do well when grown in one house having little or no difference in its

growing conditions.

The stainment of good resolts will, therefore, depend on client policies; para to some control of the control of the control of the client policies. The control of the client between the leg state of the client. But there are many analysis who are windle, or various reasons, to ever or emaint in a large range of germinates to ever or emaint in a large range of germinates of the client policies. The control of the client policies who are windle, or extract a client policies of the control of the client policies and the control of the client policies and it cover carried out. The unable the control of the client policies are the control of the c

This method certainly allows the greatest number of plants to be stored in a house, but it cannot by any means he considered the tivation. The smallness of a plant should be no reason for placing it, either suspended in a pan or placed on a shelf, near the roof where the ten or more extra decrees of heat, which usually pervade this part of the house. would entirely prevent the plant obtaining the good health is might enjoy when grown in the cooler and moister position below. And, also, because a beat-loving plant happens to be represented by a large specimen it is frequently placed in the lower and cooler part of the house instead of having a position more suitable to its requirements.

Many an amateur is satisfied when, by the neatness of arrangement, he considers his house to be in order; but to one educated in the correct requirements of the occupants of the house, satisfaction is only obtained when the plants are placed in such manner as to obtain every possible advantage of the growing conditions which existing circumstances admit.

Instances might be given where an Orchid has almost refused to grow on one side of a house, but when removed to the other a perceptible difference has been noticed in a few days, and after a week or so, the plant has grown with vigour. Surprise has often been expressed at such occurrences, but they are cutrely due to the removal of the plant to a position where the environment is either more suitable or possesses serveral similitudes to that of its native country.

The nature of the floor of the house has much to do with the creation of a suitable atmosphere. Concrete and clazed tiles were tion of a thin layer of water on the surface. which quickly evaporates, these materials are non-perous and cannot be recommended. Ordinary bricks, or clinkers covered with cinder ash form an admirable material, for by capillary action fresh supplies of water are continuously brought to the surface and evaporated. A layer of broken coke contains a far greater evaporating surface than a sheet of water, and if some two or three inches of it are placed under the staging and scaled once or twice a day with water, an atmosphere convenial to the occupants of the

Other growers have oblassed excellent results by placing a lattice-word four cover the national contrib. To grevent sources covering attention must be given by occutional contribution of the contribution of the lattice of the contribution of the contribution of the contribution of the contribution of the lattice of the contribution of the contribution of the contribution of the contribution of the state of the contribution of the the losses, a similarity to the natural forest beam of the Ordels being (see produce) and the losses of the Ordels being (see produce) and the losses of the Ordels being (see produce) and the losses of the Ordels being (see produce).

Moisture, one of the most essential things in the cultivation of Orchids, may also be produced by suspending pieces of damp sacking from the edge of the staging. These should be moistened during the hot and dry weather, considerable benefit to the planes resulting from the rapid evaporating of the water. It is hardly necessary to state that a large amount of atmospheric moisture is derived from the watering of the plants, and the usual procedure of "damping down."

The atmosphere always holds, in invisible suspension, a varying quantity of moisture. It is, in point of fact, never dry, or in any way near dryness. Even when the gir seems parching hot, drying the skin and withering vegetation, it is easy to demonstrate by the aid of chemical avents the

The air has a wonderful power of absorbing water, the amount held in suspension being correlative with the degree of atmospheric lacat at the time. The higher the temperature, the larger the amount of water absorbed by the atmosphere; when all its intensices are full, it is then said to be at its point of saturation, and any further supply of moisture becomes visible in the form of

This saturation point can be produced at any temperature, for it only depends on there being sufficient water to fill all the interstices of the atmosphere. It is easily understood that when the air is in a cold and, therefore, condensed state there are few interstices to fill, consequently very little water will be required to produce this point of saturation. A rise in the temperature expands the air, with the result that more interstices are formed and a corresponding amount of water will be taken un.

Therefore, whatever amount of moisture has been absorbed by a certain degree of temperature that amount will be lessened proportionally with the cooling of the atmosolvere, and the result must necessarily be a deposition of moisture, or, in other words, a

How does this law of Nature concern the atmosphere of the Orchid house? The temperature at the break of day is usually at its lowest, but increases rapidly with the advancement of the morning until, about mid-day, it is at its highest. During this given off from the ground, has taken place, the Orchids greatly enjoying this delightfully warm, moisture-laden atmosphere.

As the daylight fades so the atmosphere becomes cooler and much of the suspended moisture is condensed on the plants in the form of dew. This dew is very beneficial to cool growing Odontoglessiums, but somewhat detrimental to plants, such as Cattlevas, in flower. Hence we see that much success in growing Orchids will depend on the correct application of methods for controlling the moisture in the atmosphere.

In houses where a continuously moist atmosphere is required, the temperature must be insintained at night-time by artificial means, or considerable deposits of mosture will be formed to the detriment of the plant.

In houses occupied by plants in flower, or those requiring a drier atmosphere for produring ripering of the bulbs is autumn, a cooler night temperature is beneficial. Therefore, to prevent drip and the formation of dew, much of the atmospheric moisture must be disposed of by means of judicious ventilation. It will be found that by allow ing the top ventilators to remain slightly open same rate as it is squeezed out of the air by contraction due to the falling temperature. G. W.

The Orchid Catalogue of the Julius Roebrs hand. Consisting of 36 pages with many great value to Orcind growers, more especially to those in the United States. In a short cultural note, with which we entirely agree, it is remarked: "Some people still have the impression that Orchids are difficult to grow. but, with the exception of some few rare varieties, quite the contrary is the case. In fact, they are no more difficult of culture than the ordinary greenhouse plant. In this country (United States) many Cattleyes after finishing one growth will start another, an action which should be encouraged as these bulbs will be fully developed and ready for flowering." The short English season will. unfortunately, not allow of more than one bulb being made during the year.



### The Glebelands Collection,

South Woodford, Essex.

N the beautiful, old-fashioned garden at Glebelands, the residence of J. Gurney Fowler, Essa, can be seen many of the arts and crafts of horticulture, and whether it he roble trees and flowering shrule, or hoticosee plants and tender flowers, all alike reflect the entiassistic interest taken in them by their owner. Schlege's words:

"All rare lobosoms from every elimit Grew in that garden in perfect prime," may well be used as descriptive of its iseasty, for the Orchid houses are well filled with choice exotic speciments selected youne with for many years has been an admirer of all things rare and beautiful in bort callure.

The range of greenhouses is devoted to the culture of many kinds of fruit, decorative plants, and the safe keeping of a world-famed collection of Orchids, from which numerous specimens have frequently been exhibited at time

Royal Horticultural Society and on many occasions received the highest awards. Projubly the most pleasure is obtained from

Promary the most pleasure is obtained from the Odontoglossuri house, a structure which has been built as near to perfection as possible, and which produces such excellent rultural results as to merit a description of its construction.

This house is span-roofed, 70 feet long and 20 feet wide, all the woodwork having the bars grooved to earry off the drip, and the glass cut on the curve with the same object. Canvas blinds, placed a short distance above the glass are used for shading, and by means of a perforated water-pipe running from end to end along the ridge, the house

so end along the riege, the noises
may be kept cool and damp during the hot days of summer.
On the inside of the brick wall a
similar perforated pipe is placed
which enables the

kent continuously

moist. These

pipes are supplied from the district water mains, and by me as a so for valves, the arrival water is not allowed to enter the tasks specially reserved for the shoringe of minewater. In water protect of the function that the protect of the function of the function of the form of the function of the fun

whole heating system is incased in moistone holding a moistone holding microsal. The ECC. March 14th, 1911.

Society and on many is raised about two feet above the tiles, time

allowing a free circulation of the moist air which is so conducive to the welfare of Orlonteglessums.

The adjoining illustrations of a few of the Odostoglossums give a comparatively poor conception of the degawee of the varieties contained in this lause. When it is stated that almost the whole of it is occupied by these specially fine forms, the impossibility of

white forms.

describing them all will readily be seen. The many beautiful Odontoglessums make a very grand display of bloom in the spring time, and the marvellous range in the method of spotting and blotching which they possess creates in them an attractive interest. The following are

a few of the best and most noted varieties of Odontoglossum crispum:—

pom :—
Odontoglossum crispum
Angela, reoeived an
Angela, reoeived an
Aven who
Apral 6th,
tooglossum
Aven who
Apral 6th,
tooglossum
Apral

Lucianii, s grand form, which received a First-class Certificate when exhibited by Mr. Linden, March 25rd, 1897: O. c. mortebeekense: O. c. Mrs. J. McBean, one of the hest blotched varieties; O. c. Olive, see illustration; O. c. oftondum. a very fine variety with dark blotches, and of excellent shape; O. c. solum, a variety with the lip entirely covered with purple; O. c. The Jewel; O. c. waltonense; and O. c. Wannie, a fine blotched form with long bulbs. There are also many distinct unnamed varieties including several pure-

It is little more than ten years ago that the hest Odonseries ago the hest of t

tions.

The Globelands collection contains one of the richest selec-

tions of Odontogloesam hybrids. The enumeration of them all must give place to the mentioning of only a few which will suggest to the reader the high

standard of excellence here maintained.

Odontoglossum amabile Fowlerianum and the Glebelands variety of the same both of



I. Gurren Fouler, Fig.

which have received Awards of Merit; O. ardentissimum Dorothy Fox, a flower of extra good shape; O. Arnoldianum, with reddish× crispum), one of the most distinct hybrids with blueish-purple flowers, and the nearest approach to the long wished for blue Odonto-



Cypripediam Daisy Barclay. F.C.C., July 4th, 1905, Godefrogw leucochilum × Rathschildianum.

brown sepals and petals, received an Award of Merit, April 19th, 1910; O. Devossiana with very red flowers; O. Europa (exculcum

Rathehldianum. glossum, received a First-dass Certificate, June 20th, 1911; O. eximium is represented by several grand varieties; O. Fowlerianum (Rossii rubescens × cirrhosum), an extremely pretty hybrid which received a First-class Certificate, March 6th, 1900; and a specimen

The very fine variety of Odontoglossum illustrissimum (see picture) is the result of crossing O. Lambeauianum and ardentissimum, and shows the great improvement in shape and colour which the hybridist has produced. O. Jasper (amabile x crispum) has bulbs resembling large polished chestnuts; O. Jesnette (Rossii rubescens × zmabile

heatonense), grand variety densely marked with rich darkbrown spots, received a Firstclass Certificate, March 14th. mit: O. percultum 1. R. excellent forms and O. Othello.

Odontovlossam Smithii, the sub-

Odontoglossum illustrissimum, Lambsaujanum × ardentissimum

a rare and beautiful hybrid between Rossia rubescens and crispo-Harryanum. The plant, of nine bulbs and three security; when exhibited on December 5th, 1005, it was ever seen, was added to the collection in 1904-O. Wicanianum is an extra strong grower. by the names I. Gurney Fowler, Miss Louise Fowler, William Pitt, and Pitt's variety.

The potting material consists of Osmunda fibre top dressed with a mixture of peat fibre and sphagnum moss, a few leaves are also used, preference being given to those from the beech which contain less tannin than those gathered from oak trees. This method suits the plants exceedingly well, and it is seklom that such very remarkable vizour and good

The collection of Cochlioda hybrids in

variety. Another interesting speci-M. Warscewic-

zii? The middle staging of this by large plants of Oncidium maproduced a spike healthy specibidjums, and

other tall growing Orchids. Odd corners contain many curious species of Wasdevallias and a few

The Cypeipedium house is of great interest, especially so to the many Orchidists who are now occupied with the study of the numerous varieties and hybrids of these autumn flowering plants. The majority are large specimens. and, therefore, yield blooms of considerable size and good texture. The collection contains many choice forms of the popular C. Lecanum; the finest variety of this hybrid. known as " J. Gurney Fowler," consists of 11

Odontoglossum nebulosum Gurneu Wilson.

strong plants. It received a First class Cer-

tificate, January 24th, 1005.

Cypripedium Daisy Barday is a scarce and beautiful hybrid obtained by crossing C. Godefroyae leucochilum with C. Rothschildianum. It received a First-class Certificate. July 4th, 1905. In this house may also be seen the Glebelands variety of C. nitens. several plants of C. Troilus, C. Thalia Mrs. F. Wellesley, the massive C. Beeckmann, seven plants of C. calloso-Rothschildianum (F.C.C., July 10th, 1006), the very distinct C. l'Ansonii (F.C.C.,

June 28th, 1808). and large plants of ferent times, re-Ernest Read, C. Miss Louisa Fowler. C. Mrs. Alfred Fowler, C. Memoria Jerninghamiæ, C. Baron Schröder, C. Olivia, C. Chanmanii, C. aureum Œdippe, C. Transvaal superbum, and C. Fred. K. Sander, the latter being a

very fine hybrid raised from C. Applie Measures v. C. bellatulum. It received a Firstclass Certificate, October 18th, 1904. As may be expected in such a representative collection many of the rare albino forms are to be seen

The collection of Lælias and Cattlevas contains many of the figurest forms of the leading species and hybrids. Cattleya Menforms of this species in existence. There are large plants of Cattleva Rosa Leemann, C. Mantinii, C. labiata Amesiana, C. Trianæ, C. Schröderæ Fowler's variety, C. intermedia alba, C. labiata alba, C. labiata Princess of Wales (F.C.C., November 7th, 1899), C. labiata Mrs. E. Ashworth (F.C.C., October 13th, 1806), C. Gaskelliana alba, C. Lüddemarniana Stanleyi, C. F. W. Wigan, Brasse-Cattleya Digbyane-purpurata King Edward VII., B.-C. The Baron, Lælia tencbrosa Walton Grange variety, Cattleya Warscewiczii Frau Melanie Beyrodt, C. Mossiae Lady Dorington, Laelio-Cattleya. Henry Greenwood, and L.-C. Canhamiana alba

In other houses almost entirely devoted to Orchids may be ,

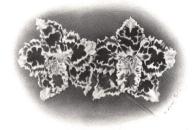
seen a large plant Peetersiana, the

of Lycaste Skinner. and L. Ballize superba, Zygopetalum Perrenoudii. Sobralia macrantha alba which has just 350 flowers, many varieties of Thunias. the rare Araenanthe a First-class Certificate was granted on October 18th. Neumoorea irrorata. a selection of the best Stanhoneas

A. M., May 3rd, 1904. growing in baskets, many excellent specimens of Phalænopsis, and a number of healthy

> Of this multitude of plants it may truly be said that they all show apple evidence of the many correct items of culture which are bestowed on them by Mr. J. Davis.

> In concluding these comparatively short notes on such an important collection, it seems hardly necessary to call to memory the fact that Mr. J. Gurney Fowler, besides holding many other important positions, is Chairman of the forthcoming International Exhibition.



Odostoglossum crispum Olive. From a painting by Miss M. Walters Amon.

Treasurer of the Royal Horticultural Society, and Chairman of the Orchid Committee. His work, therefore, towards the advancement of horticulture is continuous and praiseworthy, and in the words of Carlyle it may truly be said: "What a man can do is his greatest ornament."

G. W.

#### NEW PLANTS.

ADDION ST. FUNCING (ADM. AUGMATILACE)

S. COCHLIDON NOTZILKAS).—A new
logicacies hybrid exhibited at the Royal
begicacies hybrid exhibited at the Royal
Heritalizard Scriety, August 20th, 1911.

I by Moon Herit Graire, Amiera, Fonce. The
John Carried an erect aplace of some flowers,
scriet colors. The labellum leving shade
scriet colors. The labellum leving shade
CATTLEVA REMULA GRANTILOSA WAR, MYAR PAREASS.—A BERTEASS.—A BERTEASS.—A BERTEASS.—A BERTEASS.—A BERTEASS.—A STREAMS.

portioned flower, the sepals and petals light

mazwe with a slight yellowish tinger, the lip purple with a yellow isbums. This interesting hybrid was exhibited by Meass. Hassall and Co., at the Royal Horticultural Society, August 20th, 1911. The frequent result of crossing from white Cattleyas is a coloured hybrid, due, it has been suggested, to the parents not being from ealth of the color Mrs. Myra Peeters, a hybrid between C. Castlellauxa alla and C. Warneri alls, produces, lowever, a white flower, from which it has been arqued that the parents were true a binos. In C. Remula, therefore, we should expect a hybrid with the obse-greenish yellow flower of C. gramulous alightly increased in size with a diminishing quantity of colour. But such is not the result, the purple tinted flowers proving that, by some means or other, reversion to the possession of purple pigment has taken place.

LALID-CATTLEYA SCAMPSTONENSIS (L.-C. LA FRANCE & C. AUREA': A large, elegant flower, the senals and petals vellow almost covered with rich reddish copper, giving a very warm and pleasing tone to the flower. The lip is elongated, somewhat narrow at the base, but broadened and crisped at the apex, almost without side lobes or shoulders, and of a rich purple colour. Raised by Mr. F. C. Puddle. Scampston Hall Gardens, Rillington, York, Lælio-Cattleya La France, a hybrid between L. tenebrosa and C. bicolor, was first exhibited at Paris by Mons. Mantin in 18:38. By crossing L.-C. La France with C. aurea a hybrid containing & C. aurea, I C. bicolor and ! I., tenebrosa has been produced, or exactly what would be obtained by crossing L.-C. huninosa with C. Iris. These are examples of how the same proportions of the results will agree remains to be seen.

LEGIOCATTIENA EXQUESTA (C. SHARE-BEARME (BRAGUESA » REY, » L.-C.
ELSTRAI GEM (RANTHEA » BICOLON)—
A very pleasing flower with canary-yellow sepals and peta's, and a deep-purple liga. It is interecting to note that all the four parental species are practically without purple in the sepals and petals. Exhibited by Messrs.
Sander and Sons, Royal Horticultural Society, Sept. 12th, 1911.

L.ELIO-CATTLEYA DAMON (CRISPA × CALLISTOGLOSSA).—In form and size the flower much resembles a good Leala crispa, but the labellum is magenta-purple weined with dark purple. The tips of the petals are prettily marked with purple feathering. Raised by Messes. Sander and Sons, St. Alburs.

SOPHRO - L'ELIO - CATTLEYA JEANETTE (L.-C. MARTINETTI × S. GRANDIFLORA),

from Messrs. Cluriesworth and Co, Haywards Heath. One of the finest results obtained by the two of the cantel S, grandifion. The large flower is bright sermitionred, with somewhat darker vesting slightly taged with one; the large of the lip is just taged and the control of the large slightly transitionally assarded a Kira-Cawa Certificate, when calabited at the Royal Horticultural Soviet's Somewhet 12th 121.

Lellio-Cattleya Sappio (Becolor × FURPURATA).—The result of crossing two long bulbed species both having richly coloured lips. The lip is the only good feature in this flower. Raised by Messis. Sader and Sons, Sc. Albans.

(ATTLEYA NISTOR (HARRISHEE K BRS).

A delicate soft-manne flower with a syellowish underlying ordour. The segments are well preportioned and give premise of further developments. This hybrid somewhat resembles the well-known Cattleya Mrs. Pett, but the influence of C. bicolor can be tracted in the atthems and broad front lobe of continued to the continued of the state of the stat

CATILEYA VERSICOLOR (VELUTINA x MOSSIA).—The bromy-copper sepals and petals of this hybrid are very attractive. The helium is magenta purple slightly veined with a darker colour, the throat is yellowishbown. Exhibited by Messes. Sander and Sons, at the Royal Horticultural Society, Scot. 12th, 1011.

LELIA-CATTLEYA FABIUS (L.-C. bletchleyensis × L.-C. clegans).—A disappointing result, the flower being inferior to both parents. Raised by Mesers Sunder and Sons, St. Albane.

LEGUO-CATTLEYA CALLISTOR (RECOLDS CALLISTOGLOSSA)—The parental species are noted for their rich purple lips, and much of this colour has been trunsmitted to the flower of the seedling, which has a specially well coloured by Raised by Mestra, Sander and Sons, St. Albans.

### BRASSAVOLA DIGBYANA IN CONJUNCTION WITH A LÆLIA AND A CATTLEYA

100б, р. 134.

N the last two issues of this journal the Brawso-Letheyas and Beason-Cattleyas were caumerated. There is still a thin class of Brassavada hybrid to consider, viz., Brassavada Diglayana, in conjunction with a Lealian and a Cattleya. Every Orchidist is so accustomed to the same Leido Cattleya that hadden of a Brassavada to this hybrid suggested the name Brassa Laile Cattleya, under the control of the control of the control of the control of the cattley o

## beside possessing certain other advantages, certainly makes a more pronounceable word. Brassavola Diggrana with a Lielio-

The following nine hybrids are composed of one-half Bersenvola Digbyana and a quarter each of a Leelia and a Cattleya species. They have, therefore, the same proportion of Brassavola Digbyana in their parentage as the Beasso-Leelias and the Brasso-Cattleyas.

B. L.-C. Edgar Wigran, obtained by crossing B. Diglyyans with L.-C. Aphrodite (C. Merdelin & L. purpurata), is noted for being the first instance in which B. Diglyyans was used with a hybrid. When exhibited by Sir Frederick Wigan at the Royal Horticultural Society, May, 1901, it obtained a First-eless Certificate

B.-L.-C. Markayi was named in honour of Mr. Mackay, orchid grower to Mr. Joseph Chamberlain. It flowered in 1503, the parentage being B. Digbyana x L.-C.

B.J.-C. Arderiae was raised by Mesars. Sander and named in honour of Mrs. Ardem, Stockport. The plant afterwards passed into the collection of Samuel Gratris, Esq., Manchester, and received an Award of Merit from the Manchester Orchid Society, November, 1994. It is the result of crossing B. Digbyana with L.-C. callistogloss, the rich colouring of the two parents in this hybrid producing a fine result.

B.-L.-C. balarucensis (B. Dighyana × L. C. Schilleriana) was raised by Mons. F. Denis, and is recorded in the Orchid Review,

B.-L.-C. Lico was first flowered by Mons. Ch. Maron in 1906. The parents are B. Dig-

Ch. Maron in 1960. The parents are B. Digpians and L.-C. Herry Greenwood (L.-C. Schillerians x C. Hardyans), and from the complexity of the parentage great variation may be expected in the seedlings from this pod.

B.-F.-C. Rowens was raised in the

Westonbirt collection by crossing B. Digbyana with L. C. Doris. When exhibited at the Royal Horticultural Society, Septcuber 3rd, 1907, it received a First-class-Certificate.

B.-L.-C. Hippocrates also originated in the Westonbirt collection during the same month of 1907. It is the result of crossing B. Digbyana with L.-C. Hippolyta. B.-L.-C. Dielovano-Ermestii was shown by

Mons. Maron at the Royal Horticultural Society, September 29th, 1908. The parentage is B. Digbyann v. L.C. Ernestii, the latter plant being a hybrid between C. Percivaliann and L. flava. B.L.-C. Thera, obtained by crossing B.

Digbyana with L.-C. G. S. Ball, was raised by Messrs Charlesworth, and flowered in 1900.

The flowering at the above bloids proved that Beasswood Diglyana possesses very strong characteristics, which are too much in cordinate in the bloid blood b

#### BRASSO-CATTLEYA WITH A LÆLIA

B.L.C. Veitchii is the only recorded plant of a Brasso Cattleya combined with a Laelia. It is the result of fertilising L. purpurata with B.C. Digbyano-Mossia, and was excibited by Messra Veitch at the Royal Hotricultural Society in 1997. It is the first recorded instance of the proportion of Brassavola Digbyana being reduced to a quarter share.

#### BRASSO-LÆLIA WITH A CATTLEYA.

The following six hybrids are the result of crossing a Brasso-Lasha with a Cattleya species. The combination reduces the proportion of Brassavola Digbyana to a quarter share in each case. It is interesting to note that in four of these hybrids Lasha ciumbarian has been used with the intention of producing a state solore.

B.-L.-C. Agamedes, obtained by crossing C. labiata with B.-L. Mrs. Gratrix (cinnabarina × Digoyana), was raised by Messa. Charlesworth and catalogued by them in 1909. B.-L.-C. Surprice (C. bicolor × B.-L. Digbyano-purpurata) was exhibited by Mr. Walker at the Royal Horticaltural Society, December, 1000.

B. L.-C. Fuerstenbergii is recorded and figured in the Orchis, 1910, p. 57. It is the result of crossing B.-L. Mes. Gratrix with C.

Triana.

B.-L.-C. Thompsonii, a hybrid hetween C. Gaşkelliana and B.-L. Digbyano-purpurata was catalogued by Mesars, Charlesworth in

B-L<sub>x</sub>-C. Fowleri produces a large, good shaped, reddish-orange Fower. It was obtained by crossing C. Schröderze with B-L<sub>x</sub>-Mrs. Gratrix, and when exhibited by Mr. J. Genrey Fowler at the Royal Horticultural Society, April 30th, 1907, it received a Firstclass Certificate.

B.-L.-C. Cooksonii is a beautiful hybrid with golden yellow flowers slightly soffused with red, the result of crossing C. aurea with B.-L. Mrs. Gratrix. It received an Award of Merit when exhibited at the Royal Horticultural Society, February oth, 1909.

#### BRASSO-CATTLEYA WITH A

#### LÆLIO-CATTLEYA.

In the next five hybrids the theoretical proportion of the species is the same, viz., one-quarter Brassavola Digbyana, one-half Cattleva, and one-onarter Ledia.

B.-L.-C. Elatior was exhibited by Mesers. Vcitch in 1909. It is derived from L.-C. Hippolyta × B.-C. Digbyano-Mossie.

B.-L.-C. Lutetia was exhibited in 1200. It is one of Messrs. Charlesworth's hybrids obtained by crossing L.-C. highburyensis with B.-C. Mrs. Locmann.

B-L.-C. Triune (L.-C. Hyeana × B.-C. Digbyano-Schröderre) was shown by Sir Tevor Lawrence, Bart., in 1911. It produces a large flower of rosy-mauve colour with

duces a large flower of rosy-manye colour with a fringed lip marked with purple. B. L. C. Pink Beauty was exhibited by Messrs Veitch in 1000. It is the result of

crossing L.-C. Hippolyta with B.-C. Digbyano-Mosaiz.

B.-L.-C. Baron Hénin was exhibited by Mons. Firmin Lambeau at the Brussels

Horticultural Meeting, August 20th, 1911. It was obtained by crossing L.-C. callisteglossa with B.-C. Mrs. Leomann.

#### BRASSO-LÆLIA WITH A LÆLIO-CATTLEYA.

In the following four hybrids Brassavola Digbyana is responsible for one fourth, Luclia one-half, and Cartleya one-quarter of the parentams:

B-L.-C. King Emperor, obtained by crossing B-L. Dighyano-purpurata with L-C. Dominiana, the latter-being a scarce hybrid between L. purpurata and C. aurea, first, flowered in 1611, and is described in Vol. 1, and is described in Vol. 1.

B.-L.-C. Nereus is described in Vol. 1, p. 223, of this journal. It was exhibited by Mesers. Cypher in 1911, the parents being B.-L. Mrs Gratrix and L.-C. Hyeana.

B.-L.-C. Lus was catalogued by Messes. Charlesworth in 1909.

L.cionabarina C.Schröders: B.Digbyana L cinnabarina

L.-C.G.S.Ball B.-L. Mra. Grats

#### B.-L.-C.

The above will show the very large perportion of Leals cinnabarna: in this hybrid. The cinnabar colour is made in evidence, although the shape of many of the flowers is rather poor. Still, out of the many plants from this pod, there is always the remote possibility of one appearing having the size

from this ped, there is always the remote possibility of one appearing having the size and shape of Cattleya Schröderze, the fringed lip of Brassavola Dighyana, and the rich colour of Ladia cinnabarina; and, if so, what a triamph for the ruiser. B.L.-C. Winnifred was first flowered in

1010 by Mesers Charlesworth, the bright yellow colour of the flower being derived from the Ladia flava in the following ancestry:—

Digbyana Leicnabarina L.flava C.Triance

B.-L. Mrs. Gratrix L.-C. Myra

Ik-L-C, Winnifred

It he no means follows that all the seedliness from this pod will produce yellow flowers, for the L. cinnabarina and the C. Trianse will affect the colour and shape in many of them. There is an advantage in working with species for more than one shade of colour is frequently produced in the final results. As the object in view was to obtain more colour one might wonder why such a light coloured species as Cattleya Triana is included in the parentage. But a hybridist frequently finds that the plant he desires to work with is either unobtainable or not in flower at the requisite time, hence he is forced to use a hybrid containing this particular species in the hope that its characters will ultimately produce the desired result. It should also be noted that B. Digbyana, L. cianabarina, and L. flava are all very narrow petaled flowers, and, therefore, without the inclusion of one or more broad petaled kinds, such as C. Trismæ, the hybrid would be of a poor, starry nature. G. W.

#### TRICHOPILIA SUAVIS.

This very sweet hawthorn-scented cool house Ortical usually blessome during the mentrs of April, May, and June. The bulis are trather thin and bear a large single leaf somewhat resembling that of Odomteglossum grande. The flowers, three to five of which are produced on short horizontal spikes, are creasing white, the lip yellow in the throat, and spotted with rose-plank on the sides.

The following particulars as to its habital are given by E. Morren in the Belgique

forticale for 187.

"This charming flower was discovered in 1848 by Warscewicz, in Costa Rica, on the Cordillera at an altitude of 5,000 to good feet. The finest specimens were met with on the volcano of Chiriqui, at an altitude of 8,000 feet, where the thermometer ranges from 50 to 00 degrees F.; some of the plants measuring two feet in circonference, and bearing from forty to eighty flowers at a time. Warserwicz sent the plants to M. Skinner, of London, remarking that they grew on the trunks of oaks, species of Trichilia, and on Cussonia clabra, at from 20 to 40 feet above the ground, but never age or any other circumstance, the Trichopilias soon languish and die. At Chiriqui, at this altitude, there is a dry season lasting from November till April, when there is neither rain not dow, and the wind is often very violent, but throughout the remainder of the year both rains and dews are copious and

In the year 1850 it flowered in the collection of R. S. Holford, Esq., at Westonbirt, and about the same time in the collections of Mrs. Lawrence, at Esling, and of Messrs. Lordriges, at Hadeney. Some two years later it was figured in the Botonical Magazine, t. 4051, from a plant which flowered in the mursery of Messrs. Lorombe, Pince and Co.

#### AUTUMN NOTES

that the growing season of many Orchids has come to an end. The occupants of the Cattleva house have done exceedingly well during this record year of sunshine; large plump bulbs with strong collection. This encouraging result will greatly assist the plants through the forthcoming winter, and cusible them to produce their flowers in great perfection. The tendency to produce second growths must always be discouraged, for, except in a few favourable climates, the season does not As soon as a plant has almost finished making its bulb it should be removed to a cooler and given to prevent shrivelling. This prevention of further growth will allow the plant to concentrate all its energies on the production of thick textured flowers of lasting properties.

similar, but even more sumbine may be given with beneficial results. These plants have the advantage of being able to withstand, during their season of rest, even cooler tem peratures than those accorded to Cattleyas. In some instances multiplication of the existabundance of flowers. This can easily he accomplished with Dendrobiums, for if the plants are kept in a warm and moist atmosphere during the autumn and winter, ripening of the bulbs will be prevented, and in place of the usual flower buds in the spring-time many of the nodes will produce young plants. These, after a few months, will produce roots of their own, and may then, with a niece of the old halb, be posted separately. The autumn, therefore, is the time to decide whether flowers or young plants are required.

Orlantinglossims have, by this time of the year, made new growths of considerable size. Although much of the necessary portion is already been done, there are always a few late plants which require attention during the month of October. It is not advisable to

repo; any Orchid during the depth of winter, growth is then very slow and the plant takes considerable time to re-establish (tself. Therefore, any plants not ready for potting at the end of this month had better be left until early in the new year.

Cypeipedians are, unstoatectly, at their bast during the aurunn months. The snpply of flowers from these plants continues till well into the new year, many of the individual flowers lasting a month in perfection. Cypripultums must always be kept moist and centinually wastheed for the presence of thrijs on the flower buds and in the centres of the new growths.

Shading on all houses may now be entirely dispensed with. Where Orioid houses me situated near large rowns the planes will be greatly benefited by laving the glass washed on frequent scenarions. It in surprising what a large amount of worly notifier is annually deposited. Many grovers abovects the frequent wasting of the inside of the house with a good insectic de for the removal of injurious.

First will now be required at might time. Once he may need to be considered to the form of the form of

Three growers who have the advantage of lath roller blinds can leave them on the bouses through the winter meants. On cold nights they may be used for protection against wind and frost; several degrees of heat are saved, and the formation of drup is less likely to occur. In expected positions some means should be used for fastening them at the loose of bettom ends.



#### GRAMMATOPHYLLUM SPECIOSUM.

▼ IIIS wonderful Orchid is very rarely seen in cultivation, for the enormous size which the plant must attain before flowering prevents its inclusion in our comparatively small houses. Mr. A. Keyser, Selangor, records (Gardeners' Chronicle, (800, i. p. 264) a large plant which he found prowing on a Durian tree, and which re-2ft. 2in. high and 13lft, across, and carried seven spikes of bloom, the longest being 8ft, 6in, high, Mr. I. H. Veitch records one in the Botanic Gardene at Penane as 42lft, in circumference, the stems from six to seven feet long, and one of the preceding year's racemes, of which there were thirty, 71ft. long.

In the Buitenzorg Botanic Garden, Java. a luge specimen grew on the trank of a Canary tree. The specimen flowered in 1892, and produced about 50 flower spikes, each of them bearing 60 to 100 blossoms. Mr. Rilley records a plant which was

brought down from Mulacca to Singapore, and weighted, with the portion of the tree on which it grew, three-quarters of a ton. Specimens in the Penang and Singapore Gardens measure over forty feet in circumference.

The flowering season is August and Septland, the most noteworthy occasion being in August, 16%, when it profiles it a spice of August, 16%, when it profiles it a spice of August, 16%, when it profiles it a spice of the profiles of the august it is a spice of the august it is a spice of the august it is workered to make more room for the fast succession. The plant, however, only that it is specimen. The plant, however, only that it is specimen. The plant, however, only that it is specially a spice of the august is a spice of the special time and a spice of the profile of the special time and smaller profile of the preciously mentioned flower spike, which the preciously mentioned flower spike, which the preciously mentioned flower spike, which the rest of six tackes in

#### THREE USEFUL DENDROBIUMS.

DENDROBULY infondiblesin is a most beautiful species for supplying puretit belongs to the migor birster, so which flowers for decorative perspects, to belongs to the migor birster, so re blacklatiful, stem section of the germs, and reviews as specific name from the execution of which the supplying the section of the special standards which are belonder beinging with narrow, acute, unequally hidehold leaves. The flowers, which are home ingrant portlams during the spring worstle, are large, result) four insides across, prevenitive, to the present the special belongs to the special belongs to the bound part of the whorst.

Dendrobium James sianum, named in iscnour of the late Mr. James Veite, is considered by some to be a vaniety of D. infundibulum. It has rarely, if ever, been found growing with it; each species being confined to its own range of mountains in Moultmein, and there are also many distinctive points. The bulbs are stoater, not nearly so high, the nigro-

hiszare nature is more discernible, and the flowers have a climabar stain on the liq, the side lobes of which are experated. Both infundibalum and Jamesianum are high mountain species, and succeed admirably in the cool bouse during the summer months, but being usually sorter-growing species at somewhat higher temperature is advisable during this period.

Dendrobism furnosom is a compact, growing species with stoutist his-chained seems about a foot high. The leaves are of lander than either infunctivolum or Jamesianum, and the flowers, which last more than a mouth in perfection, are purewhite with a bright yellow furnow down the centre of the lip. This species widely distributed on the low-lying fulls at Amhers, and enjoys a considerably higher temperature than eather of the previously mentioned species.

#### ROYAL HORTICULTURAL SOCIETY.

August 29th, 1911.
MEMBERS of the Ordind Committee present:
Harry J. Vestch, Esq. (in the chair); and
Messes Jas. O'Brien (hou see), W. H. White,
W. Holton, Gurney Wilson, H. G. Alexander,
D. Dve, W. H. Hatcher, W. P. Bound, J.

Charlesworth, W. Cobb, J. E. Shill, A. A. McBean, and Stuart Low.

The Duke of Mar borough, Blenheun Palace (gr. Mr. Hunter), was awarded a Silver-gili. Flora Medal for an exceptionally well-grown exhibit of Vanda corrules. More than 80 plants were included, and their graceful bright blue flowers were users much admired.

Messes. Caarlesworth and Co., Haywards-Hon, were awarded a Silver Flora Medal for an attractive group containing a strong plant of Oncidente Inribates, a grand specimen of Ærides Sanderinum, the rare Houlletia Wallisii which obtained an Award of Mert, several Sophromits hybrides, Cyenochea densi florum, Stanlopea octalas, and the elegant

Resear, Statut Law and Cu., Bush Hill Path, Resear, Statut Law and Cu., Bush Hill Path, reversied a Silver Barksian Medial for a good group in which several active silver of very search those of special merit, and except search active silvers of the search search curries Mandeshala mirals, Barbophyllace harbigenium, the elegant One-diam Lancestonium, a large flowered variety of Dentifoxium formosom, Varieta correles, and a large assortiment of Cartiles hybrids.

ment of Cattleya nyelss.

Messas Hassall and Cn, Scattligate, received a Silver Banksian Medal for a well arranged group in which several very distinct varieties of Cattleya Adula and the pretty Cattleya rindescens were specially noted. Other Orchic's included the richly coloured Miltonia Moreliana, a good plant of Stanhopea Wardii ceulata, Cattleya Iris, and a specimen of

Mr. E. V. Low, Vale Bridge, Haywards Heath, was awarded a Silver Banksian Medal for a group containing many excellent Cattleya hybrids. Included in it were some fine varieties of Cattleya Adula and C. Iris, C. Pittama, a good variety of Brasso-Cattleya. Mdm. Chas. Maron, several well-flowered plants of Cypropedium Maudae, and Cattleya. Gaskelliana Phyllis, a distinct form.

Sir Trevor Lawrence, Bart, K.C.V.O., Barford (gr. Mr. W. H. White), showed the cut spike of a variety of Dendrobium undulatum having 10 bright yellowish-green flowers with a white crest, the sepals and petals being twisted and mixhalated.

Messrs Sander and Sons St. Albans, showed Catasetum reflexum, an interesting species with dark greenish-yellow flowers

barred with brown purple.

R. G. Thwaites, Esq., Chessington, Streatham Hill (gr. Mr. J. M. Black), exhibited several good plants of Cattleya Adula, C. Pittana, the distinct Odontioda Thwaitesii, and Cattleya Roupelhama.

C. Kirch, Esq., fo, Uplands Road, Hornsey, exhibited a very strong plant of Cattleya Adela which carried a spike of five well developed flowers.

Messes, Jas. Veitch and Sons, Chelsea, exhibited two specimen plants of Lælio-Cattleya Dominiana (C. aurea × L. purpurata).

Mons. Henri Graire sent Adioda St. Fuscien (Ada aurantiaca × Cochlioda Norzliana). See "New Plants."

#### AWARD OF MERIT.

Houlletia Wallisi, from Messes, Charlesworth and Co, Haywards Heath—A very beautiful and interesting species originally described by the late Professor Reicheubach in the timidate's Chronick, June 5, 1892, p. 611. The inflorescence is short and documbent, the large, was-like flowers being of a pale yellow colour spotted inside with reklishpurple.

#### CULTURAL COMMENDATION.

To Messrs. Charlesworth and Co., for a magnificent plant of Ærides Sanderianum with four spikes of flowers. MEMBERS of the Oreled Committee present: Ilerry J. Veitch, Esq (in the Chair); Messes, Jas. O'Drien than seed, Sir Jeremial Cohnan, Bart, F. Sander, R. G. Thrautes, A. A. McBean, W. Cobb, J. Charlessawth, J. Cypher, W. H. Hatcher, C. H. Curtis, W. H. White, Gurney Wilson, W. Bolson, de Barri Cawshay, and H. G. Alexander. many other rare and interesting Orchids were

Mesers Charlesworth and Co. Haywards Heath, were awarded a Silver Flora Medal for a small group of societ. Orrhids, the finest being the new Sophra-Lavin-Cattleya Jeanette (see Awards). Other good things included Lavin-Cattleya Anthela, Cattleya, Rhoda with a very good list. C. Gaskellians.



Houlletia Walissi,

Received on Award of Merit when exhibited at the Hoyel Harticultural Society, August 29th, 1911, by Mesors, Char exceeds & Co.

Messrx Sander and Sona, St. Albara, were awarded a Sibwergit Medal for a large group including many new hybrids. In the centre were three specimen plants of Vanda Sanderiana, one bring a good resy variety. Some 15 varieties of Laclio-Cattleya Water Gott, a specimen of Acineta chrysattha, the new Lacio-Cattleya coquista, L. C. Colmani, L.-C. Damon (callistoglossa, x-crispa), and

alba, Miltonia Blemana nobilior, a pretty variety of Odontoglóssum Lambeauianum, Cycnoches maculata, and the interesting Stanhopea occulara.

Sumuel Larkin, Esq. The Ridgways, Haslemere (gr. Mr. Hales), received a Silver Banksian Medal for a very effective group of various Orchids. Included in it were good plants of Phalymansis violacca, Dendrobian MacCarthin, Ledio-Cattleya Henry Greenwood, a very nice variety of Cattleya Pittians, and the bright-yellow Oncidium varicosum.

Messes Stuart Low and Co, Bash Hill Park, received a Sixer Banksian Medal for a sell-arranged group containing many fine specimens of Oucidium varicosam. In the centre was a well-lowered plant of Houletin Brocklehmstrians. Other good Orchids included Mittenia Rocalia alla, Cynnoches marcilatum, Vanda ocrukea, Dendrobum sangunofentum and its rare allom variety, and

many hybrid Cattleyas.

Messes. Hassall und Co., Southgate, received a Silver Banksian Medal for a very good group containing many excellent varieties of Cattleys uncessers (ficolor > Electrady), sone being of a heartific, copper ration, others ranged in colour from yellow to rospy-purple, but all had purple labellman. A

Mr. E. V. Low, Vale Dridge, Haywards Heath, was awared a Silver Bankaan Meial for a very attractive group. Incheded in it were several good forms of Cittleya Adult, C. Gascellama alba, C. Thurgoddama Vale Bridge variety, the crematable Belloo phyllom grandforms, B. gurnlatma, and Cattleya, Em var, E. V. Low, a fine fower with yeldowish sepals and petals of

particularly good shape.

R. G. Thwaites, Eq., Chessington, Christchurch Road, Strewland, Qr. Mr. J. M. Blezkl, exhibited sump excellent varieties of varying thirds of colour on the spick and petals. The pore-white Cattleya Disseldoriei Undine, several distort forms of Cattleya Euphrasia and Lebis-Cattleya Detechieyusis were also shows were slow.

W. P. Burkinshaw, Esc., Hessle, sent Cypripedium Venus Hessle variety, a fine

way like flower

Lady Audley Neeld, Grittleton, Chippenham (gr. Mr. Pitts), exhibited Cypersedium Esseination (Fascinator s. imagne Harefield Hall), a large flower with a well formed dorsal sepal and bread petals; also Cyricedianus). Dallas (Curtisii exquisitum x Fatricianus). H. S. Goodsen, Esq., Fairhawn, Putney (gr. Mr. G. E. Day), sent Lælin-Cartleya Colmanii Goodson's variety, a grand flower with a rich purple lip and threat veined with gold; also a good form of Cypripedium Lord Derby.

hibited a remarkable Bulbophyllum of the B. mandibulare section, with reddish brown flowers, and somewhat resembling B. orthoglossum. It has been provisionally named

glossum. It has been provisionally named B. nigrum. Messrs. James Veitch and Sons King's

Messers. James Veitch and Sons, King's Road, Chelsea, sent Cattleya Carmen (Luddemanniana × Warscowiczii), a large flower of good substance, with a rosy-purple fronlohe to the lin.

#### AWARDS:

Sophro-Lacko Cattleys Jeanette (L.-C. Martinetti × & grandiflora), from Mesers. Charlesworth and Co., Haywards Heath.— See "New Plants."

#### LULTURAL LOSMENDATION

To Mr. W. II. White, Orchid grower to Sir Trevor Laurence, Bart. KCVO., for a large specimen of Dendrobium glemeratum with over 10 rose-coloured flowers with orange-coloured labellums.

## MANCHESTER ORCHID SOCIETY.

September 1 jth, 1911.

Ward, Esq. (in the cludy), and Messas, R. Ashworth, W. R. Lee, C. Parker, H. Thorp, J. C. Cowan, J. Cypher, W. Holmes, A. J. Keeling, F. K. Sander, and H. Arthur (Secretary)

Z. A. Ward, Esq., Northender (gr. Mr. Weatherby), was awarded a Silver-gilt Modal for a magnificent group of Cattleyas of the Iris section, prominent amongst which was a fine form, Ward's rar, a large flower, brilliant in colour, with an intersely coloured lip, (F.C.C.) Amongst the Cypripediums were noticed Rossetti, Trimiplatus, and Lecanum Corons. A Cultural Certificate and Bronze Medal were granted to the gardener for the evolution troops of the Coloural Certification.

Col. J. Rutherford, M.P., Blackburn (gr. Mr. Lapton), staged a nice group, to which Siver Medal was navarded. Cattleya Gaskellians alba, C. Dominiana langleyense, and C. Iris sanguinea were very good, as were Cypringelum Rossettii, C. Chorltonia, and

Lycaste Skinneri alba,

W. R. Lee, Esq. Heywood (gr. Mr. Woodhouse), was awarded a Silver Medal for a group of choice plants. Cattleya Thurgoodiana nobilor (F.C.C.). C. Gaskelliana allou, Laello-Cattleya Maqueda, Brasso-Cattleya, Mes. J. Leemann, Dendrobiam Phalenopsis Colmanii, Cypripedium Rossettii, amongst others, making a niee display.

Dr. Hodgkinson, Wilmslow (gr. Mr. Moore), staged an interesting plant of Lælia Berni (tenebrosa × mainlis).

R. Ashworth, Esq., Newchurch (gr. Mr.

Gilden), staged an immanied variety of Catasetum macrocarpinii. J. McCartney, Esq., Bolton (gr. Mr. Holmes), staged Laclio-Cattleya Rubens magnifica,

a good variety.

Messra J. Cypher and Sons, Cheltenham, were awarded a Silver Medal for a group containing the following Cypripediums:

Niobe superhum, Milo, Leonæ, and Fair-rieanum. The dark-coloured Mikonia Mortelliana, Vanda corrulea, Odontoglossum grance, and a nire plattar of Phaio-Cyphidirus chand.

warense were also well shown.

Messas, Keeling and Sons, Bradford, staged
a group to which a Bronze Medal was
awarded. The best Cypripediums being
Kimballianum, Lord Derly, Rolfee sucer-

bum, Artherianum, and gigas Corndoan var. Messrs. Hassall and Co., Southgate, staged a few plants of merit, Cattleya iridescens cuprea being succially noticeable. Examples of Lelio-Cattleya Walter Gott, and a Cypripedium hybrid between Harefield Hall and Hitchinsize were also shown.

Mr. E. V. Low, Haywards Heath, staged Cattleya Gaskelliana Phyllis, C. Adula, a fine variety, Cypripedium Mirablis, and C. Amboyne.

Mr. W. Shackleton, Great Horton, staged a plant of Cypripedium Lord Ossulston, Chillingham variety.

#### .

#### First-class Certificates.

Cattleya Thurgoediana nobilior, from W. R. Lee, Esq. A splendid flower of good form and substance. Dendrobium Phalenopsis Colmanii, from the same exhibitor, a large full flower, well lined in the lin.

Cattleya Iris Wards var., Irom Z. A. Ward, Esq. One of the finest forms of the type sees, sepals and petals very brillient, with intense colouring in the lin

#### AWARDS OF MERIT.

Liclio-Cattleya Maqueda (G. Woodhams × Lord Rothschild), from W. R. Lee, Esq.

Cattleya Adala, var. Maronii, from Z. A. Ward, Esq., also C. Iris "St Giles," and "No. 3," both fine forms, from the same

exhibitor.

Lelia Bertii (tenebrosa × majalia), from Dr. Hedgkinson. A large flower of deep rolour.

Esq. A well-flowered plant of a supposed new variety.

Livio-Cattleva Rubens magnifica, from L.

McCortney, Esq. A very nice variety of good form. Cattleya iridescens exprea (bicolor × Eldo

rado), from Messrs, Hassall and Co. A very distinct form, brilliant in colour.

Miltoria Crashlayana alba, from Messrs. A. J. Keeling and Sons. A very distinct variety of the type.



A LARGE OROTHO WESSATE—At the end of a recent performance at the Imperial Opera, St. Petershurg, the stage was literally covered with flowers, and one wreath of rare Oreliids was presented over 7 feet in diameter.

#### 12 13

CAPILEVA LAJIATA.—This well-known numbering species is now to be seen at its best. In the Oresid establishment of Mr. Ed. V. Low, Haywards Heath, a plant in a 12th. basket is carrying to less than 46 large flowers, a really grand display for one

#### 137

An DIFORTANT SHOW. The Manchester Orchid, and North of England Societies will hold a grand Orchid show at Manchester on February 2 and, 19,2. There is every prospect of the combined elbors of these two influential Societies meeting with great

#### 3 0

ROYAL INTIDATONAY FABRITION-The judging of the Orbols at the exhibition will be according to the star-dural of the Royal Horticalizard Society; armagenous will be made to have the large collection of jointings available for reference on this sovereon, as if the ordinary fortingthy meetings. A Per-Coop has been offered by Mons, Julias Hy-Coop has been offered by Mons, Julias Hy-Coop has been offered by Mons, Julias Hy-Coop has been offered by Mons, Julias Mittonic vestillatins, its varieties, and hy-wells, in a space not exceeding too and extra the magnetic processing too and the second template paying a vext to Mesers Monoello Michaello standaliment at Rawdon, and Histories standaliment at Rawdon, Vorks, will be interested in bearing that Appring Bridge, the nonester flagway station, is famous for losing the spot where the first plant of Plonis grantifolius which flowered in this country was cultrated in 1750. It had been sent there to Mrs. Hird. by first unde, Dr. Forbegell, in a black Chinese pot, full of off locus, in which it had been inoprated.

#### 0.0

ALINO CVERNIQUES—Messes. A. J. Kevling, Bradfach, have recently flowered as number of recently flowered as number of recently flowered with the supplementary of the supplementar

#### 2 (9) (9)

New Ording Catalogue.—Messrs. Hassall and Co., Southgate, have just issued a most useful catalogue of their large stock of Orchids. A copy may be had on application, nost free. GRAMMATOPHYLATM SPECIOS.<sup>128</sup> With reference to a look in our last size concerning this giant Orchól, a correspondent informs to that this species, shough they nature an epitybe, readily adapts itself to terrestral retrievene and requently gooss with increased retrievene and requently gooss with increased Peradensya, where it was formedly treated as an epitybe, this plant is now groom on a specially prepared sod, with the result that it flowers regulatly every year.

#### 8 0 0

CATTEAN IRIS RESC ENOUGH VIII. A Brown of the very fine verify has been ased by Mr. G. E. Day, Orchal grower to H. S. Goodon, Exp. Jailwayn, Patriey, I threasance §§ incides across the broad, golden-ambler coloured penhals the lips 24 judies were been growth of the coloured penhals the lips 24 judies when coloured penhals the lips 24 judies were brengt unduled the coloured penhals the lips 24 judies which before the level of the level position of the level p

#### \$2 KE \$3

LATIO-CATTIANA ST. GOTHARD (L.C. CATTIANA ST. GOTHARD) (L.C. CATTIANA) GOTTOGNAN C. C. HARDWANN, "This is un-other elegant hybrid from the same collection. The form of the flower is perfect, every segment being well proportioned. The colour is sery risch, that of the lip being crimsen-purple and extending completely round the border. A first-school Certificate was awarded to the plant when exhibited by Mr. Goodson, October vill, 10-28

THE CIABLERO EXHIBITION.—At this recent great horticultural show the following methals were awarded to Orchids Gold Medal, value 250 fr.: Messis, Duchespie and Lainthoine, Watermack, Gold Medals, value 200 fr.: M. Jules Hénin, Fraciennes; M. Ch. Dietrich, Auderghem: Messis, Charlesworth

and Co., Haywards Heath, Gold Medal, value 100 fr. Mr. Herrsam Cogen, Tervuczen, Stlver-gilt Medals, value 10 fr. M. Firmin Lambeau, for the best Cattleya, the best Cattleya hybrid, and for the best Miltonia hybrid. Messes. Duchesen and Lambonie received: a Silver-gilt Medal, value 30 fr., for the best Cogenecium.

17 13 13

CYMBIDIUM ERVTHROSTYLUM - Little more than six years ago this species, which is closely allied to C. ebarneum and C. Parisloi. was discovered in Annam by Mr. Micholitz when collecting for Messrs, Sander and Sons, It was first flowered in this country by Sur Fred. Moore at the Royal Botanic Gardens, Glasnevin. The purc-white flowers are very elegant and attractive, the senals being broader than the petals, about an inch in width at the apex, vellowish-white, and lined throughout with reddish-purple, the lines breaking up into dots at the margin of the side lobes. The column is bright crimson, in allusion to which the specific name was given. Mr. H. G. Alexander, Orchid grower to Sir George Hulford, K.C.V.O., Westorbirt, has forwarded a truly magnificent inflorescence consisting of 14 large flowers, each one measuring four inches from tou to bottom, and without any suspicion of colour on the senals and petals. This example is certainly a

#### 3 8 4

BOLDOWINLESS ADMITS AND ADMITS.—OF this interesting species, a plant of which as recently flowered in the Mandham collection, Mr. Robert Parallel pas recorded Colesidas of the Schlein Hundrays) the following in-circlent, which themses some light on the fortheation of the grous generally. "One of the many visibles to the plant on my table of the major visibles to the plant on my table the plant of the major visibles to the plant of my table the plant of the major visibles to the plant of my table the plant of the my table to the plant of the my table to the plant of the my table to the plant of the plant of the my table to the plant of the plant of

As the fly absorbed the nextre on the outcome part of the lip it gradually approached morer and nextre the base, seeking for smee. As in got to the part of the lip which behal down to just the coloren the rip began to rise, and to the part of the coloren the rip began to rise, and the coloren day and the part of the part of the coloren and was for some time held a prisoner. After some strangles it namaged to escape, carrying off one of the pollulas glood to the theoret. This mixtest may assort to throw the part of the part of the part of the lip so characteristic of this green and of Carlieperaham?

COLOGYNE CRISTATA.—At this season of the year plants of Coelogyne cristata should be brought into a slightly warmer atmosphere where a minimum night temperature of soo F. can be maintained, and a position where they can be placed well up to the light should be selected. A cool Cattleya house is very suitable, for if the plants are left in the Odontoglossum house during the winter the flower spikes are apt to turn black and damp off. If many plants are grown, one or two of the strongest may be placed in a slightly higher temperature; these will then bloom at an earlier date and the flowering season will be considerably extended. Although considered by many an easy Orchid to grow, it does not been repotted; many of the finest spikes of bloom are produced when the pot is full of bulbs growing in a mass one upon another. The flowering scason is February to March, the flowers, some six or eight on a drooping spike, are pure-white, with a prominent blotch of yellow on the crest of the lin. The varieties citrina and Lemoniana have the centre of the lip stained a delicate lemon colour; it is as well to mention that the latter variety, often erroneously speit with a small initial letter, was named in honour of Sir Charles Lemon. The variety alba, also known as hololeuca, is entirely without the yellow colour, and when first discovered large sums were paid for small pieces; now it is fairly plentiful, and nice plants can be purchased for a few shillings.

#### ORCHIDS OF GAZALAND

Titti Journal of the Linneau Society, Vol. XL., is devoted to "A Contribution in our knowledge of the Flora of Gazaland, being an account of Collections made by Mr. C. F. M. Swymerton, F.L.S.," Dr. A. B. Rendle, F.R.S., F.L.S., being reasonable for the Mesocortectory.

The tract that we commonly call Gazaland, extends roughly from some distance to the south of Delagoa Bay to the Umrumroumva, Lusita, and Bazi rivers, the sea bounding it on the east and the River Subi on the west. The Orchidaceae, of which three new species

are described, consists of :Eulophia milanjiana, Rendle. Distribu-

tion, German East Africa to Gazaland. In flower, October. Lissochilus papilionaceus, Rendle. Distri-

busion, British Central Africa. In flower, March.
L. Krebsii, Reichenb., f. Distribution, Mt.

Milanji and Morambala Mountains; also South Africa. In flower, November. L. arenarius, Lindl. Distribution, widely

diffused in Tropical Africa; Natal. In flower, November. Ansellia humilis, Bull. Distribution, Lower Zambest. In flower, October.

Eulophia Swyunertonii, Rendle, sp. nov. Habitat Mt. Pene, 6,500—7,000 ft. In flower, September and October, Common on the higher grass-covered slopes.

Angrecum rhodesianum, Rendle, sp. nov. Habitat, Melsetter. In flower, September Brachycorythis acutiloba, Rendle, sp. nov.

Habitat near Chirinda, 3,800 ft. In flower, December. A common ground Orchid. Habenaria pedicellaris, Reichenb. f. Dis-

teilution, Aloyssinia, Mt. Kilimanjaro. In flower, April. Saturium Buckanii, Schlechter, Distribu-

tion, Nyasaland. In flower, April. S. speciosum, Rolfe. Distribution, Nyasa-

land: Zambesiland. In flower, December.
S. oventum, Rolfe. Distribution, Nyasaland. In flower, Innuary.

Disa hamstopetala, Rendle. Distribution, Nyasaland. In flower, September.

#### CORYANTHES BALFOURIANA.

THIS extremely interesting Orchid is a mative of Peru, where it was discovered by Mr. Forget when collecting for

Mesurs. Sauder. The reproduced photographs have been kindly sent in the control of the control o

Of Coryanthes, Sir Joseph Paston wrote in 1828, "and such was the extraordinary form the flowers presented, that wonder and surprise were created in all who were favoored with an opportunity of

seeing them." Considering the rareness of the flowers a short description will not be unwelcome.

In habit the plant much resembles the better known Stanhopen genus. The long pendulous scape bears two or three very curiously shaped flowers. The generic name is taken from korys, a helmet, and anthos, a flower, in

allusion to the belmet-like appendage to the lin of the flower. The sepals, after opening soon collarge and assume the attitude of hat's wings at rest. The wonderful lin is as the sexuls and The lower part is converted into a horn-like appenin the right-hand flower of the large may be seen continually falling into it. When the bucket is nearly full the fluid over-(B). This spout is closely overarched by the end of the column. which bears the

position, that an



oryanthes Bulfouriana, flowering in the collection of Sir John Edwards-Moss, Bart., Roby Hall, Torquey.

it. Roby Hall. Torquing. insert forcing its way out of the backet through this passage would first rub its back against the stigms, or female part, and afterwards against the viscle diess of the pollinia, or male part, and thus removes their.



Coryumthes Balfoariama, finarering in the collection of Sir John Edusarás-Mass, Bart., 'Roby Holl. Torquoy.

The truly wonderful way in which fertiles in effected has often been observed in plants geowang in their native country. The bees, attracted either by the perfuse or the modern department of the properties of the numbers dispating with others for a place on the edge of the health. Partly by which content, and possibly introduced by the liquid they are desirable, they nowled into the backet and arms, which escape the content of the properties of the sport and carriege at the sport marked B. It is been affected to the policy of the properties of th

The insect to seener comes out than be returns again to the feast, when it is generally precipitated a second time into the bucket, passing through the same opening, and so inserting the pellentranses on to the signar, or female portion of the flower. Sometimes there are so many been assembled that there is a continual procession of them through the consequence of the period of the period of the period of the consequence of the period of the period of the period of the consequence of the period of the

Darwin was greatly increased in this genus, and thought there could not be the least doubt that the fertilisation of the flower absolutely depended an inserts crawling out through this passage. If the bucket had been dry, the bees could easily have excased by flying away. Therefore he argued that the fluid is secreted

by the horn-like appendages in such extraordinary quantity for the sake of wetting the wings of the bees, and thus compelling them to crawl out through the passage.

The Behavioral Magnetine for 1822 mentions a plant of Coryambre in the collection of Mr. Harrison, of Liverpool, the flower of which was observed by his gentlener to be rapidly filled with honey. Some of the cups were empticed in the menting, but during the same day were salf-filled with the nextractorous piece.

Coryanthes are best grown in insects or purs with moss and peet, or Osamuda tibre, and beside a brisk heat, require during their period of growth a plennful amply of water at the roots. On completing their growth the plants should be kept on the day side and placed an a position where a good light may be obtained. They do not seem to require so much slade as Stanhozoss.

Covande & Bargerothii is a native of Venezucla and Booses in the mouth of May; C. leucocays is a native of Peru and flowers in June; C. macrotha, one of the best species in the germs, comes from Carness and opens is thower during the mouths of May, Jime, and July; C. Marcer during the mouths of May, Jime, and July; C. Sarramor flowering species, and in a native of Demeracy; and C. specios, trom Brazil, has rather barge flowers which are produced in Agril and May.

## THE REDISCOVERY OF LÆLIA GOULDIANA. By J. M. BLACK.

THE rediscovery of a lost Orchist is a really important overal, and when my friend Mr. Louis Forget was recently in England he was kind enough to give me a few details of his successful funt for Leabing Gouldiana, a summary of which may be of some interest to the readers of the Orchid World.

Mr. Forget had some misgivings when he received a brief order to go and collect 3,000 plants of this Leelia, for might it not be a hybrid after all, as had been suggested? and was it really to be found in quantity?

It may be mentioned that many years ago Mr. Forget localised Larlia tenebrosa after three years of thankless rearch, and came across Lielia Jongheana accidentally when exploring for a new spot for the pretty Lielia prestans, but his impressions on those occasions were very different to those recently

Mr. Forget left Vera Graz by train in the exeming, dat only in light clothes, and suffered much from the cold in consequence during the night, and tuttl sumire, finding the interior of Mexico very different to what he had imagized. On arriving at the begints of Ortzala, he became filled with the conviction that he must surely be on the wrong tark—that to Ortchisk coald possibly survey is such

freaty regions. He determined, however, to go through with the journey he had mapped out for himself, and for has directions he rebed largely on what he had gleened from a essual conversation with the late Mr. Theimer, the oughtal discoverer of the species. Of the names and places Mr. Theimer had mentioned Mr. Forger, particularly relied upon one, but found, with resulting confuse on, that this name was owned by dozens of towns and

This contrevenps, combined with the unifiledy aspect of the cold region, had half desided him to review from further search in that direction, and it was when making a dedetour wit it he intention of returning that, on the second day, he came across a deep valley in which he found Lucka Gooddana.

Here were thousands of dovers open, some grand masses having dozens of spixes of 4-7 flowers, and all of a uniform deep-rose colour. There was also but lattle variation of form, and it may be a matter of some regret from the collector's point of view that such a showy and deegant spoxes does not offer a wider more of variaties.

and study Acacia, but Mr. Forget also found a few plants openly exposed on rocks and edges of uply ravines and growing mixed with Ladia anceps on a species of Querens; and flanking the sides of the valley, and in a scoler position, he had some Ladia majolis collected.

make it doublants is stretly explicitly, the may be said to sinsel five upon stiffs, as it mode, with extraordramy freedom, the rook and in the mode of the street of the

bunus from the leaves of the trees, and thus forms a retentive hed for the rains. Ligha Gouldiana grows and ripens its bulbs

in six months, expanding its slaepely flowers from the end of October through November, and then from November to April rests. This winter resting period Mr. Forget describes as baving dry frosty nights and rogist discoving days. The sun's rays had an unusual effect on him, as, although he felt the burning influence, he could feel the air chally at the same time.

Mr. Forget would suggest that these Cental Messian Orbeits should have mucht the same treatment as Catri, and its would pat and light whitewash on the glass for shade during the summer, and with full air on the lonest from May to September, with generous syringing and watering during suitable weether. During the winter he would advise a day temperature of §50—GeV by varying a little with cutside conditions.

The matives of Mexico are good gardeners and lovers of nature in a high degree, and Mr. Forget found that Leafa Gouldbass soons a general favorable with those in that she divide, the total statistical states and days when they are used in lavish doublance to decorate the chardenes and chopels. For this reason he found that nearly everyhooly had plasts under extraoron. Institute the chardeness of the chard

On Mr. Forget enquiring why they did not care so much for Lucha amena, they replied that Lucha Gouldiann was much fisser and much some floriforms, and Mr. Forget has no doubt that this will be the opinion of the majority of those who grow it in the glasshourse of these islands and the continent.

Laria. Gozidaza, singularly enough, has not an indigenose mone, the artires calling it. Moritar, which is the Spanish for run, the reason given for so calling it being because the little cap covering the pollinia resembles a num's bunnet; and during the short time. Mr. Forget spent in the district, the natives, did not get familiar with his same, calling him simply El hemise de los Mengis, the run mansimply El hemise de los Mengis, the run man-



THE Mundham collection of Orchids has long been renowned for the many very rare and curious specimens which it contains. Many an amateur has possessed

means a small plant, very often too small, to produce a flower spike. One is, therefore, more than pleased with the numerous large specimens contained to the very interesting



Cirrhopetalum palchrum Cliftonii. (R.H.S. Journal.)

the desire to visit the Tropies in order to see Orchide growing in their natural habitat, but travellers, would have many a weary day's march before discovering such elegant plants as exist at Mandham. It is true that many of them are represented in other collections, but represented, in the case of rarities, frequently collection belonging to the Rev. J. C. B. Fletcher, Muncham, Chirhester.

Autiquity now has many admirers, gratification being efter obtained by the acquisition of that which age has made venerable. Hybrids, therefore, the result of modern work, have, in this collection, little attention bestowed upon them; it being composed essentially of species producing the brantiful and fantastic flowers whose history age alone contell.

substantially-built spacious houses, each one

wonders of Nature. Bulbophyllum with its fragile, contina similar struction, the flowering B. great vigour. succimens: a

Rev. J. C. B. Fleicher, M.A.

largest in cultivation. There are also excellent plants of B. polythraun, with its branching rhizomes, the very remarkable B. Eriessonii and its near relation B. virescens. Notice must also be made of B. Reinwardtii and B. angesthelium.

The Circhopetalums include the elegant

C. pulchrum Chitonii, the curious C. Fascinator, C. Medusc with its remarkable flowers resembling a head with long lair, and also a variety of the sance without any spots on the scaled and petals, C. robustum, the pretty C. Anderseni, C. Thourasii, a large plant of C. Masterseni

ianum which
is nearly
always in
flower, a
grand specimen of C.
biflorum, and

elegant C.
guttulatum,
known also
as Bulbophyllum unhellatum, the
two genera
being very
closely allied.

coccinea alba
is a great
rarity and the
same may
be said of the
pure - white
thawering
Ærides strens
Sanderæ.

rrispa, Cocia macrostachya with its rosyred flowers, and the strange-look

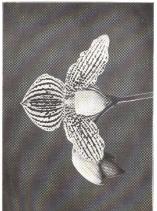
junifolium are all in a healthy condition. A plant of Eria hants curries thirteen seedpeds, all the result of self-fertilization, and suggests that insect agency is not always a necessity. The genus Eria is particularly well represented, notable examples being E. Ferox and E. vestita. An



Arachmanthe Lowii flowering in the collection of the Rev. J. C. B. Fletcher, Mundham, Chichester.

Cypripedium Fletcherianum (Geolefroyn leucochilum × W. R. Lee).

interesting plant is Cymbidium pendulum, it is frequently confused with C. aloifolium, but when the two can be seen growing side by in cultivation; the numerous bulbs and many new growths are growing on a mound of compost placed in a huge pot. The new Oncidium



side, as they do at Sikkim, a great distinction can be seen. One of the largest sperimens in the collection is Coclogyne Meyeriana, without doubt the greenest flowering Orchid Sanderse, the yellow flowering Phains flows, and Maxillaria meleagris all grow well and

Arachmanthe Lowii, certainly the finest

plant in this country, is alone worth a visit to Muncham Discovered by Sir Hugh Low in native country it delights in high trees on the banks of rivers, thick forests, and other hamid places. Owing to the length of time required

very few plants are alive when argraph was taken a few years ago, since when this wonderful specimen has greatly increased in size new prowths, and wiren flowering no less than thirteen long stens having an average feet and carrying long stems occupied very remarkable feature of this plant is the production of dimorother words, two

forms of flower on Arachnonthe Robanians. the same spike, for which no one has yet been able to discover the cause or their usefulness the base of the spike, which are widely separated from the rest, are of a tawnyyellow, spotted with crimson. The rest of

the flowers are greenish-vellow, marked throughout by large gregular blotches. mostly transverse, of a rich dark brown, Aracheanthe Robaniana is just now in

full bloom, it has two snikes with twentynmc and thirty flowers respectively; one spike has four of

> the other three; has only borne The spikes themsiderably longer of flowers being much lighter in colour than those plant is prowing siderably larger than when first

the side of streams shade, is another excellent specimen in this collection. wood plants of

moschifera, Vanda Parishii, and Vanda Vanda Dearei, a rare species from Corles, has attained the unusual height of aft, fin, the large flowers being very attractive. Vanda Sanderiana, the finest species of the ocnus, grows well,





this season it carried (welve of its beautiful

Codegore finescents is a locatiful speces, from North India; and Codegore, Micholtzin with over sixty bellus, carrier a reed pod the result of resting with C. specios allow, of which there is a large plant, isochize interaction of the control of the control of the highest and stockers most earlier in the spring and summer. Lockitaria elegency in the Trandal, bears parity yellow femers with a

The numerous species of Denochalla, vorying consideraby in their inderecentees, eccivie their share of attention, but many of the thorus are a small fall a language structure. Many of the Stanbages are great sets than Many of the Stanbages are great speciment growing in suspended based in their numerous was blee flowers are been freely internation was blee flowers are been freely internation was blee flowers are been freely at their numerous was blee flowers have been freely at the standard of the standard of their standard of t

Megaeliniam Bafe with its extremely interesting lowers, reminding once of nuncrous small frogs sitting on a flattened saude, is a great rarits. Africks Holletiana, an election species from Cochin China, Angercous Eichletinian from West Africks, and Augrecous Eichletinian from West Africks, and Augrecous Scottlanian with its pure white flowers must also be wreat.

The Dendrokum hour contains a large section of walkinson and true species. At this time of the year the plunts are resing. At this time of the year the plunts are resing, as welcome display is produced. Of the reany specimens northist ment be made of Dendrokum aggestion, D. Farmers, the Javan D. metablic, D. mostatim expecum, a very strong plunt of D. Piadracopins allam, the Australian D. Gobbel.

The Cypenselium house is well illed, the great variation in the coloration and markings of the flowers producing a pretty effect at this season of the year. The following forms are very distinct: Cypripediam Fletcherianum, Cyp. Daisy Barelay, figured on page 10, Cyp. Stonei, and Cyp. candatum with its peculiar loon perals.

Joog perals.
There are also good plants of Leria Freckeriana alba, a part of the original Cattleya Harriyana, Cattleya Borrigania Lovés var, a lugh specimen of Cattleya Mantini, the becautiful Luellic purposata Russellinaus, Platychinis filiformis with its muserous slender spikes of golden diwores, he spider-like firassia macabita, and Cattleya Luddemaninian allas with thirteen huller.

This large east valuable collection contains a vast amount of material of great interest to those studying the many various species and varieties of this wonderful order of plants. Mr. Fletcher has now here growing Orchids for more than twenty years, and to find his equal as an enthusiast would indeed be a difficult took.

G. W.

# SEASONABLE NOTES.

In this country we are now at a season of the year when the days are at their shortest and the growing conditions at their ammanian. Every accurating must, therefore, be taken of the few hours of similian which we may receive. In large towns only a moderate light can be obtained, the sun's rays being almost obscured by the trick have of smoller and rigy which so frequently overthrage a large of the control of the country of the country of the Lind is of very restal innocease to plant

logit is of very great importance to pain; fee, without a certain amount growth soon stops and the existence of the pileat is enlargered. Opelies when deprived for any length of time of their normal seasonable amount of bright light soon turn yellow, lose their leaves, and utimately die.

The leaves of plants are arranged in such a manner that a correct or suitable amount of smilght may be received by them. This arrangement is designed during their formation, and may often be noticed in plants which have been grown may a wall and have in consequence only received the light from one direction.

When arranging the contents of a house, in operation often carried out a tin shill stasson of the year, care should be taken to stage the plants in such a way that the light toay [61] an them as nearly as possible from the same direction as before. The growth of plants being either finished or it a semi-dormant condition, no alteration in the leaf arrangement can take place at this season of the year.

No good results can be expected if the under-addes of the leaves are exposed to a brighter light than that acting on the order surface, a rather unlikely occurrence with plants having comparatively thes decoping sowes, but take to happen with Orbidis possorous unpercaused are the leaves. To excute a source unpercaused the leaves to extra contractive to the contractive of the contractive to the leaves of the contractive to the contractive to the leaves to the total contractive to the leaves to the l light in a very different numer than formorly, it is a proceture to be recommended; it must always be remembered that man's idea of order may frequently be adverse to that of Nature's Plants after countless ages have excleded a retain method of construction satisfacts to their armountings and requirements, any attempt armountings and requirements, any attempt and the construction of the construction of the contained of the construction of the contained of the construction of the contained of th

There are, however, a few plants which, owing to our comparatively short growing season, may require some assistance to prevent their bulbs from discoping in an unmatural position, but, even with these, care should be exercised in the manner of tying them up, or the bulbs may be placed in a manter not only annatural but detrimental to the welfare of the slant.

# THE ATMOSPHERE OF AN ORCHID HOUSE.

EXCESS of esolutive causes the formation of adopts of such cost of the glass and soshops to the part of the glass of the support of the state, specially at night-time, and, if not soon tunni folling of drops of cold water promotion, the plantage are subjected to a contamil folling of drops of cold water the contamil folling of drops of cold water through the contamil folling of drops of cold water through the contamil folling of drops of cold water through the contamilation of the cours when the atmosphere is already in an extensive demandation and while little drops of drops of the cours when the atmosphere is already in an atmosphere is already in a fine cours when the atmosphere is already in an atmosphere is already in a fine course of the course of drops.

Where plenty of room is obtainable, the plants may be arranged 5 of the the drip, if formed, may full between them; is oratll collections: circamotones will not allow this formed, and the collection of the collection of the prevention is better than cure. It has been previously shows that cold coming in contact with most atmosphere causes, some of the mostium to condense; by covering the roof of the Orchid house with some protective material on roll onlyin, much of the condensaulation of the condensaIn all level to mercion that water falter, from a recordly-control supposed gain of looked in not so destructed supposed gain of looked in not so destructed in from the supposed gain of the strong-place are in a right cost for watering the falts, that is a right cost for watering the falts, that is a right cost for watering the falts, that is a right cost for watering table, expendent. Therefore, it will be wear, there are two distruct kinds of "one" one cannot be confirmed and the supposed for the supposed gains of the su

A highly saturated atmosphere will do tatle harm to Orchids so long as the temperature remains comparatively high; but great danger to the plants is incurred by allowing the temperature to fall and remain at a low level when the atmosphere is charged with an excess of moisture.

Vanda curulea delights, during the day time of the growing season, in a very damp and hot atmosphere, but if the temperature is lowered without disposing of the moisture, spotting of the leaves will surely result.

Boxall, when collecting Vanda correles in the Southern Shan States, the question has to contend who circumply shall be contend who circumply shall be as formed our circumply shall be contended as the sas formed our contended to the collection of the sast formed our contended to the collection of the policy of the collection of the collection from, been dying winds come and curried usayy almost all the mosture in the atmosphere, the plants, therefore, were sufficred from the effect of a saturated atmosphere at a low temperature.

"Spot" on the leaves of Orchids may be attributed to a unnatural or exercise amount of atmospheric moisture when the temperature is low, and the plant is fully charged with water. This spot disease of Orchids was in and the following experiments which be curried out are recorded in the Annual of Reducty, Vol. XX, No. XXXV, Spit, 1034.

A young bealthy plant of Hebenan Soma, perfectly ter from quef, and which up unit in a house having a temperature roughge between 7/8 and 80° E, was selected for experiment. Mining a temperature roughge between 7/8 and 80° E, was selected for experiment. Mining particles of ice were placed at intervals on the unique and an experiment of the selection of the sel

A second experiment, in which drops of water at a temperature of 45° F, were placed on the leaves instead of particles of ice, gave similar results, the spotting only occurring on the portions of the leaf which lad been moistened. Numerous additional experients aboved that "spat" outle of the produced by a fail of leas them 3° E. from the produced by a fail of leas them 3° E. from the "seer growing. It was also notified that plants which had previously been grown in a high temperature became diseased at a much smaller reduction of temperature than plants previously accessioned to a comparatively low previously accessioned to a comparatively low.

It was found impossible to produce "snot" on plants which had remained in a dry place for two or three days, or in those scantily supplied with water and kept in a low temperature. Mr. Massee's summary is briefly : That the Orchid disease known as "soot" is of non-narasitic origin: the initial cause being the presence of minute drops of water on the surface of the leaves at a time when the temperature is exceptionally low, and the mots copiously supplied with water. "Snot" in the broadest sense of the term is, in the case of cultivated Orchids, mainly, if not entirely, caused by the three following conditions:-(1) too high a temperature; (2) too much water, and not sufficient air in contact with the roots; (t) watering or suraving with a falling instead of a rising temperature.

In the early autumn and spring months the sun is frequently of sufficient power to burn the leaves of Orchids in a house when the cold winds will not allow of much ventilation being used. If the blinds are used at such times of the year expessive shade would be be lost. By closing the ventilators and thoroughly damping the floor and other exposed positions, a considerable amount of moisture will be condensed on the inner side of the glass, and this shading will prove quite sufficient to prevent the burning rays of the sun from injuriously affecting the plants, When, after a few hours, the sun has lost its power, the ventilators may be slightly opened, and any excess of moisture thereby disposed

#### AN INTERESTING BOOK FOR ORCHIDISTS.

Gatherine in the East. By Mrs. Talbot. Clifton, London: John Lone, Price

The hotanical side of Orchidology has been frequently written upon, and many ocen made, Mrs. Talbot Clifton bas, however, written a book concerning the lands and surroundings where they grow. Accompanied by her husband, whose name has so long been connected with Oxchids, a ionmey of several thousands of miles was jungles of the East. This well-written book, full of interesting geographical and botanical matters, describes the author's arrival at Calcutta, where there is a great whence passage was booked to Rangoon, closures in the shade. At Mandalay a Chinese marchant friend was met who promised to our gracies sent into the interior

The chapter on the prison system of Andanian is fall of interest, and centains many thoughtful notes on the difference between the English and Eastern code of morals. One prisoner, a mardirer, was convict nurse, his daty being to wheel a child's perambulator. The greatest punishment which can be inflicted upon a woman

sending convicts up the trees for them, as they were covered with anss. Mrs. Clifton ever seen these growing wild. Graphic descriptions are given of how she watched Mr. Clifton collect Orchids from branches parrots with long tails, and other curiously coloured birds. Ærides, Vandas. Cymbidiens, and Dendrobiums were collected. and after being carefully packed, despatched

A notable chapter on the Mergui Archithe curious food and mausers of the inhabitants. A Burman has a strong feeling against anyone walking overhead in his ladder up to the window and so clim's into

At Penang and Perak more Orchids,

The temperature usually being extremely high at these places, much interest will be taken in the account of the Malay bathroom and manner of washing. Powers, Tensporal, Magical, and Mental,

are fully described in Chroter XXIV. Rajah of Perak and his three wises, and the

visited, the Curator, Mr. Ridley, promising to nack any Orchida collected in Java. The account of the journey to Buildway meations a base mid-day west, consisting of

interesting book on the wonders of the Lastern lands where so many Orchids grow. It is illustrated by a map and fifty four excellent photographic plates of Orchids, scenery, inhabitants, y llages, and last, but not least, of Mr. and Mrs. I. Talbot

As a thorough insight into the interior of but also by all these who obtain pleasure by reading descriptive works of travel.

The two illustrations on the next page are selected from the many in this book. We are much indebted to the publishers for their kindness in lending the blocks



The Jingle where Phalemopsis totrassis was found.



Javanese Litte With Fruit and With

#### A NEW BOOK ON ORCHIDS.

manner.

Greliids for Amateurs. A Practical Guide to the Cultivation of Sixty easily-grown Cool and Fitty Warm House kinds adapted for Small Mixed Greenhouses By C. Alwen Harrison. Edited by T.

By C. Alwyn Harrison. Edited by T. W. Sanders, F.L.S. (Leadon: W. H. and L. Gelling: Sg.). Price 2s. 6d.

This meeful, we leftestrated book will be

welcomed by anatoms, for it is written in a scitable syle for those commoning the pupilist column of Orciads. It is the entropic on the part of the author, who is an earlissistic and saccessful grower of Orcides on a small scale, to interest owners of cool and warm greenhouses in the art of colitoring these quaint

The book is civided into three parts. The free is deveted to cool house Orchels, and commising particulars of some sixty, services and hybrids suitable for this house. Part III contains a list of fifty warm house Orchids, some ten different genera being enumerated. Part III, is calculy devoted to imported plants, and a list of cool and warm reproduces inhard.

which can be successfully grown with Orchids

The illustrations are well prepared and depict Odontoglossums, Cypripelums, Sendrobinum, and other kinds smatakle for avastums. There are interesting chapters on Temperature, Shading, and Watering, together with many other details respecting cultural work. The method of potting and suitable composits are described in a practice.

No attempt has been made to explain the difficulties of seed-raising; this may, in the case of a book for uncteurs, well be left out, for it is only in the hands of experts that much success can be obtained. To obtain a knowledge of the elementary principles of Cheliod-growing, it is it be bouged that this

We regret to note that all the specific names in an adjectival form are spek with a small mitial letter. Names derived from undivaduals arould be spelt with a capital letter, otherwise the monenclature is singularly

# ROYAL HORTICULTURAL SOCIETY.

MEMBERS of the Orched Committee presents. Harry J. Veitch, Esq. (in the Chair); and Messrs, Jas. Officia (hum acc), C. H. Curtis, R. G. Throaties, T. Armstrong, A. A. McBean, W. Colsi, J. Ginzicawards, J. Cypher, J. E. Saill, W. P. Bound, W. H. Hatzer, A. Dye, Gunney Wilson, W. Holton, John S. Moss, and W. H. White.

Leopold de Rothschild, Esq., Gunnersbury House, Actor (gr. Air. Findcon), exhibited some finely-grown plants of Habensria, nilitaris with dense heads of cumabar-scarlet flowers. A large plant of Cattleya Iris with nine flowers was also shown.

Sir Trevor Lawrence, Bart, K.C.V.O., Burford (gr. Mr. White), exhibited a large plant of Zygopetalam maxillare with over no flowers, a specimen of Epidendrum floribundum, and the remarkable Epidendrum

Berna Bruns Schrüder, The Dell, Engle-Beld Green (gr. Mr. J. E. Shill), showed Oddutoglossam Memeria Baron II. Schröder, a very fine hybrid, the white flowers being almost covered with beight vide to biothes. The plant carried a grand spike, ou which only a few flowers had opened; the Committee desired flowers had opened; the Committee desired

to see it again before making any award. Francis Weefeedy, Jacy, Westfield, Wolking (gr. Mr. Hopkins), exhibited Cattleys Freya var Mrs. Frederick Sassoon, which obtained an Award of Merit; Cattleya Gaskellians Delight, a good form with white sepals and petals and a purple mark on the lip; and Cypripedium Dowlei Westfield waiety. R. G. Thwaites, Esq., Chessington, Streatham (gr. Mr. J. M. Black), showed Cattleya Adula Thwaites variety, a very fine flower, and Lielia pumila alsa Purity. a pure white flower with a slight tinge of yellow in the

Samuel Larkin, Esq., The Ridgways, Haslemere (gr. Mr. Hales), received a Silver Banksian Medal for an effective group. Included in it were several good Cattleyas of the leis type, C. Waronii, C. Caduceux, and the

ocetty Vanda violacea.

W. Water Braler, Esq. (gr. Mr. R. H. Jones), w. Water Braler, Esq. (gr. Mr. R. H. Jones), exhibited a swelling between Cattleya auroand Cattleya Hardyana, the result being very similar to Cattleya Hardyana Massanano. The sepuls and petals were naribled with rose colour, and the Lip was particularly good and

H. S. Goodson, Esq., Fairlawn, Putney (gr. Mr. G. E. Day), exhibited a few good plants one being the very fine Lælio-Cattleya St. Gethard, a remarkable hybrid. Others in-

alia element Turneri

Messrs, Chorlewooth and Co., Haywards, Heath, were awarder a Silver Barlesian Medial for a group of rare Orchids. The best being their new Odentoglassom Harwoothi, "The Simblerey variety," Others included Vanda Mangaerile Marcu (teres x sauxis), Cypripedium Daisy Barchy, and a Cypripedium hybrid between Feitricanum and glaucopic/hum.

Messra, Sander and Sons, St. Albars, received a Silver Benksian Medal for a large group centaining many Cattleyas, Lechs-Cattleyas, and several rave Orchids. Tiesee of special merit being Catasceron maculatum, the curious Uropedium Lindenii, Vanda Sanderiana, and the simulaut Sievingin peruvisiona, out the simulaut Sievingin peruvision.

Messa. Staart Low and Co, Bash Hill Park, recrived a Silver Banksian Medal for a very good group containing a fine form of a very good group containing a fine form of Cattleya Iris Casart, with a rich crimson lip. Cattleya Gaskellhama The Princess, a fine form of Cattleya Hardyana, the blue flowering Dendrobium Vistoria Regna, and, along the back row, many varieties of the autumn flowering Ornicialium;

Messrs, Jas. Veitch and Sons, Chelsea, exhibited Ludio-Cuttleya Violetta, Cattleya Hardyana, Cyperpediem Maudice magnificum, and other excellent plants.

Messer Hassell and Co., Southgate, were awarded a Silver Banksian Medal for an effective group of well-grown Orchids. Included in it were the dark-purple flowering Miltonia Moreiana. Cattleya Thurgoodcane, sweral distinct varieties of Lucho-Cattleya Walter

Mr. E. V. Low, Vale Bridge, Heywards Heath, exhibited some rare and interesting Orchids. Those of special merit being a large plant of Circhoperalum ornatissimum, Cypripodium Maudiss, C. Germanne Opois, C. Rossettii Westonbirt var, aud Bruss-Laelia

AWARDS.

#### FIRST-CLASS CERTIFICATE

Odostoglosum Harvoodii "The Shrubbery variety" (inscribtum anticum x Wigminnau), from Mersos Charlescorth and Co.—A very reantable and distinct flower, being even finer than the one certificated on Junary 31st, 2011. The flowers are once what fieldy arranged, tes broad his being a desient feature. The while know is a highly latticing yellow with inch carl-puriet in a large the ligh birty secretal burge the large that he for secretal burge better.

#### AWARDS OF MER

(Mantinii nigrams × Dowians curee), from Francis Welesley, Esq., Westfield, Woking (gr. Mr. Hogkins). This large and bountful hybrid is far finer than any Mantini cross previously seen. The sepals and petals are rich rosp-reserve, and the lap reby-crimson with bright gold verings.

Epideadrum Lauschearum, from Sir Trevor Lawsmee, Bart. (gr. Mr. W. H. White). —A very remarksble species with slender pendulous racemes over two feet in length, the numerous small flowers having purplish sepals and petals and a yellow hip.

# CULTURAL COMMENDATIONS. To Mr. James Hudson for, to Loopold de-

Rothschild, Esq.), for well-grown plants Haberaria m'litaris. To Mr. W. H. Wh'te (Orchid grower to

Trever Lawrence), for a large plant of Zygo petalum maxillare with over 100 flowers. T. Armstrong, J. Cypher, W. H. Hatcher, H. G. Alexander, J. E. Stoll, F. J. Hanbury, Garney Wilson, W. Bolton, J. S. Moss, and C. L. Luras.

Owing to the Hall being reserved for the rest Fruit Show only plants submitted to the committee were shown.



Cypripedium Lucifer.

Niobe "Westonbirt var." × Hera Eurwades.

October 10th, 1011.

AWAR

MEMBERS of the Orchid Committee present:
J. Gurney Fowler, Esq. (in the Chair): and
Messes Jas. O'Brien (ton. sec.), Sir Joremiah
Colman, Bart, Harry J. Veitch, Waiter Cobb,
J. Charlesworth, A. A. McBeon, W. P. Bound.

FIRST-CLASS CERTIFICATES.

Cypripedium Lucifer (Niobe Westonbirt)

vzr. x Euryades), from Lieut.-Col. Sir George Holford, K.C.V.O., Westonbirt, Tetbury (gr. Mr. Alexander). A good-shaped flower with very attractive colouring. The dorsal senal is broad and flat, beautifully veined and suffused with rose-purple; the base being emerald green. The broad petals are purplish-

. Cypripedium Royal George (Harrisianum . smerburn × Minos Vocage), from Messrs-

Armstrong and Brown, Tunbridge Wells. A hold and extremely large Cypripedium. The dorsal sepal, three inches in breadth, shows much of the Minos Youngii, being broad and flat, with distinct dotted lines of purple. The vellowish-green petals have their appear halves tinged with purplish-brown. One of the best hybrid Cypripediums. The stock has passed into the noted collection of

Francis Wellesley, Esq., Westfield, Woking, Odontioda Euterpe (Cochlicda Noezhana x Odontoelossum Uro-Skinneri), from

# Messes Charlesworth and Co. Haywards

E. H. Davidson Esq., Borlases, Twyford (gr. Mr. F. Cooper), sent Laclio-Cattleva. Davidsoniae (L.-C. Bella × C. labiata), a very pretty hybrid with rose sepals and petals, and

exhibited Cattleva Hassallii (labiata x

four years old. Also C. Parthenia Prince of Wales.

Messrs. Charlesworth and Co., Haywards Charlesworth's variety, a very fine flower, the

lin being almost white; also Stanhopea platy-

Mesors Manuell and Hatcher Randon.

Yorks, sent Miltonia candida saperba, a very large form, the lip being white with a purple blotch; and a creamy-white variety of Cattleva aurea. J. Brisdon Scatle, Esq., Fairfield, Putney

(gr. Mr. T. W. Paice), exhibited a large speci-

Mr. E. V. Low, Vale Bridge, Haywards

Heath, sent Cattleya Thungoodiana Wivelsfield variety, a large form; and Cattleya Norba, of unknown parentage, but showing the characteristics of C. granulosa. Also C. labiata Italia, a new variety flowering for the first time, the sepals and petals pure-white, the I'm with a slight nink times.

Messrs. J. and A. A. McBean, Cooksbridge, exhibited a good plant of Miltonia vexillar:a Leopoldii, the last made bulbs having three spikes with a total of eighteen flowers.

Wells, showed Cypripedium Thyone (Pre-

#### MANCHESTER ORCHID SOCIETY. Scotember 28th, 1011. W. R. Lee, Esq., Heywood (gr. Mr. Wood-

MEMBERS of the Committee present :- Rev. J. Crombleholme (in the chair), and Messrs.

O. O. Wrigley, Esq., Bury (gr. Mr. Ropers). being included. Odontoglossum grande, Vanda corrulea, Cypripedium Fairrieanum, Cattleya Iris, and several others were well represented. A Gold Medal was unanjhouse), also staged a fine group, a feature being a fine collection of Dendrobium Phalenopsis Schröderianum (which gained for the gardener a Cultural Commendation and Bronze Medal); several fine forms of Cattleya aurea and C. Iris were also shown. A Silver-gilt Medal was awarded,

Z. A. Ward, Esq., Northenden for, Mr. Weatherby), was also granted a Silver-gilt Cypripediums, a very fine display of C. insigne Sanderæ being a feature.

I. McCartney, Esq., Bolton (gr. Mr.

Holmes), was awarded a Silver Medal for a group composed of some fine forms of Cattleyas - Armstrongae, Mautini, Mrs. Pitt, and others. Several good Cypripediums were also shown.

also shown.

W. J. Hargreaves, Esq., Burnley, staged a group of well-grown plants, to which a Silver Medal was granted. The best plants were Cattleya Mantinii, C. Parlhenia, and some good varieties of C. Jabiata. Oncidiums and

Cypripediams were also shown.

The Rev. J. Crombleholme, Clayton-le-Meurs (gr. Mr. Marshall), staged a nice group of Cypripediams, to which a Silver Medal was awarded, the most noticeable being C.

and C. Fairrieamm.

Col. J. Rutherford, M.P., Blackburn (gr. Mr. Lupton), was awarded a Bronze Medal for a group which included several forms of Lacho-Cattleyas, Lycaste Skunneri alba, and others.

R. le Doux, Esq., West Derby (gr. Mr. Fletcher), staged Odontoglossom grande unreum Clarfesworth's variety, Cattleya labiata alba, and two others which obtained awards.

Messrs. J. Cypher and Sons, Cheltenham.

were granted a Silver Medal for a nice, mixed group of Cattieya Pectersii, Cypripedinus in great variety, and Vanda Corulea, Messrs. Sender and Sons, St. Albans,

Messes. Sender and Sons, St. Albais, staged a nice group, to which a Silver Medal was awarded. The majority of the plants were fine varieties of the well-lessown autumn

flowering Cattleyas.

Messrs. Hassall and Co., Southgate, were

awarded a Silver Medal for a nice collection of Cattleyas and hybrids. Mr. E. V. Low, Haywards Heath, staged

Cattleya Thurgoodiana Wivelsfield var., and several Cypripedians.

Mesors A. I. Keeling and Sons Bentfood.

and several cyproperiums.

Messrs. A. J. Keeling and Sons, Bradford,
exhibited Ludio-Cattleya Lily (labiata ×
L.-C. Dominiana), and several Cypropediums.

#### AWARDS

FIRST-CLASS CERTIFICATES.

Odontoglossum grande Charlesworth's variety from R. le Doux, Esq. Cypripedium Thogun, from W. R. Lee, Esq. (gr. Mr. Woodhouse), one of the best Cypripediums.

AWARDS OF MERIT.

Cattleya labiata alba variety Mdm. Ir-Doux, from R. le Doux, Esq. Cartleya Empress Frederick var marlfieldense; Cattleya exquisita from the same exhibitor.

Gatleya Saurior, from W. J. Hargraves, Fug., Bunky. Cattleya laghearymas var. Mary McCartney, from J. McCartney, Esq. Gatleya Adab Ward's var, from Z. A. Ward, Esq.; Cyprapedium Zellus, from the same exhibitor. Dentaloham Piakasayais same exhibitor. Dentaloham Piakasayais same exhibitor. Dentaloham Piakasayais Lee, Esq.; Cypripedium Loed Osuskeut var. Chernbisson, from the Rev. J. Croudslelohne. Lesfo Cattleya Lily, from Mesrx. A. J. Keeling and Sauris Osiosian meetigaterius, valendrus and Cypripedium meetigaterius, valendrus and Cypripedium meetigaterius, valendrus and Cypripedium Meetigaterius of the valendrus of the Cattleya Child Co. Cattleya Thungoodiana Wivelsfield var, from Mr. E. V. Loo.

The following competitions for amateurs have been arranged:

"Ronson's " Cup.

For Odontoglossums, to include species, varieties and hybrids; also the following Miltonias:—M. vesillaria and all varieties or hybrids obtained from this species; M. Roczlii and varieties or hybrids obtained from this

species.

Odontiodas, i.e., any form of Odontoglossum crossed with Cochlida or Mesospinidium, will be included in this competition. A prize of five gainess will be awarded to the gardener

Conditions of Competition. To be won by the amateur who gains the largest number of points in two years, dating from June 23rd, 1910, such points to be awarded according to the rules of the Society. No points from

of the winner.

confirmed awards to count in this competition.

In all the following competitions points for confirmed awards will be reckoped.

# "W. R. LEE'S" SILVER TROPHY. To be awarded to the amateur cumploying

more than one gardener who gains the highest number of points during the session for groups and individual plants. A prize of three guineas will be given to the gardener of the

# "W. R. Lee's " Gold Medal.

To be awarded to the amateur who employs no megardener, who gains the highest number of points during the session for groups and individual plants. A prize of three guiness will be given to the gardener of the winer.

### "CYPHER'S" GOLD MEDAL.

To be awarded to the amateur who gains the most points during the session and for general excellence and arrangement of exhibits.

#### "SANDER" PRIZES.

A first prize of four guineas, second prize of two guineas, thatd prize of one guinea, to the guidener exhibiting the greatest number of groups during the session.

To be awarded to the amateur who gains the highest number of points for white Cattleyas, Lælias, and their hybrids, i.e., white sepals and petals. A prize of two guineas will be given to the gardener of the winner.

Plants value five guineas to the amateur who gains the highest number of points for

# THE NORTH OF ENGLAND HORTICULTURAL SOCIETY

October 18th. 1911.

The Town Hall, Leeds, was completely filled with excellent exhibits, including many good groups of Orchids. The show was opened by Lady Kathleen Pilkington, the Lord Mayor, and Major J. W. Dent.

Members of the Orchid Committee present:

Cattleyas, Laclias, hybrids of Cattleyas and Larlias, Brasso-Cattleyas and Larlias during the session. A prize of two guineas will be given to the gardener of the winner.

## "Suciety's" Prizes.

The Society offers a Gold Medal, Silver-gilt Medal, and Silver Medal for the amateur who (not engaged in other competitions) gains respectively the highest, second highest, and third highest number of points from July 20th, 1913, to May with, 1021.

Similar awards, under similar conditions, will be made to amateurs who grow Orchids without the aid of a gardener; a minimum of 25 points to quality for the Gold Medal.

The usual Methals will be awarded for occasional groups where not engaged in other competitions.

## RULES FOR COMPETITORS.

 A group to consist of not less than 12 plants.

2. In all competitions (except Robson's Cup) points gained for confirmed awards for plants will be credited to the exhibitor, and the points gained from the commencement of the session will be reckoned.

 Sectional groups put up for the various competitions, and being awarded points for same, may not be entered for the Society's Merlal awards. (Competitors for Messrs. Cypher's Gold Medal are exempt from this rule.)

 Competitors, or their gardeners, must sign a declaration of the competitions in which they wish to take part, and hand same to the Secretary.

W. Mansell, Esq. (in the Chair), and Messes. Gurney Wilson (hon. sec.), A. J. Hall, G. W. Musk, W. Shuckleton, F. W. Correy, F. C. Paddle, G. Taylor, E. Rogers, A. G. Ellwood, and A. R. Crossley.
J. H. Craven, Esq., The Beeches, Keighley.

J. H. Craven, Esq., The Beeches, Keighley, (gr. M. Corney), received a Silver-gilt Medal for an excellent exhibit of Orchids. The group contained good plants of Cypripedium Gaston Bultel, C. Germaine Opcox, many specimens of Epidendrum vitelliaum majus, Odontoglossum grande, and a rare albino

Messrs, Charlessooth and Co., Hoywards, Heath, were awarded a Silver-gelft Medal for a large group of beautiful Orchids. Those which received special attention being Cattleya Fabia alba, C. Iris, Leibo-Cattleya Elva, Brusso-Cattleya Mdm. Class. Maron, Odentiofa Lateria, a very distinct variety, Oncidian Lanceauam, and several good varieties of Cuttleya libitia.

Heath, was awarded a Selver-gilt Merial for an excellent group of rare speries and hybrids. Included in it were grand varieties of Cateleya labiata alha, Cypripedium Baron Schröder with seven flowers, Cattleya Thurgoodiana, C. Fabia, and Cypripedum Germaine Opoix. Two plants from this exhibitor receiver. First Diobanas.

Messes Maniell and Hatcher, Rawdon, Westes Maniell and Hatcher, Rawdon, Yorks, received a Silver Modal for a very effective group of Ordelsh in which were some very well-flowered plants of Pleione lageancia, Dendrobium formonum gigunteum, Odontoglossam crispum with good spikes of bloom, some well-flowered Odontoglossam grande, and numerous others.

A. C. Watson, Esq., Thornycouft, Merley Ggr. Mr. C. Gross), staged some well-grown Orcheds. Those of interest included a good variety of Cyprojection bellaxchure, Oscidium tigrinum, the pretty Cyprojections Fairrizamum. Odontoglosoum tripudisms, O. Hallii, and several good Cattleya hybrids. A bronze. Medal was awarded to this

Messrs Hassall and Co. Southgate, London, exhibited several excellent varieties of Orchids two of which obtained awards.

Mesers, A. I. Keeling, Westgate Hill, Bradford, received a Bronne Medul for a group containing a fine variety of Oricidium Forbesis, Cypropedium insigne Harefield Hall, the curious Catasetium macrocarpum, was other word Commissioner. The Liverpool Orchid Co., exhibited a number of Cattleya hyorids, including Iris, Wendlandiana, and Thayeriana. A Bronze Medal was awarded.

Mr. D. McLeod, Chorlton-cum-Hardy, Manchester, exhibited Cypripedium Chariesworthii, C. Thalia, and a good promising Cypripedium seedling.

#### FIRST DIPLOMAS.

Cattleya labiata W. R. Lee, from Mr. E. V. Low, Haywards Heath. A beau:ful large flower, the sepals and petals purewhite, the lip haying a slight pinkish blotch.

Cartleya labiata leucochila, from Mr. E. V. Low, Haywards Heath. A very distinct and fascinating variety, the sepals and petals of the usual rich mauve, but the lip bring almost

without this colour, thus allowing the soft yellow in the thrust to show to advantage. Cattleys Fabia extinuit, from Messes. Hassail and Co., Southgate. One of the finest forms of this useful hybrid. The petals are particularly broad, and the whole

Cattleya Lord Rothschild var. delirata, from Mesers. Charlesworth and Co., Haywards Heath. The heautiful distinct shade

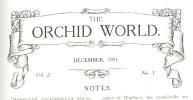
Cypripodium Sun-Actorus, from J. II.
Craven, Esq., Keighley (gr. Mr. Corney). A
trick set and handbane albivo hybrid. The
whole flower, with the exception of the upper
part of the dorsal sepal, which is pure white,
seing of a rich yellowish-green colour.

#### SECOND DIPLOMAS.

Cattleya Empress Frederick, from Messes. Charlesworth and Co., Haywards Heath. A large, held variety of this well-known

Cattleya labiata exquisita, Irom Messrs-Hasall and Co, Southgate. A very good and richly-coloured variety of this popular autumn flowering species.





DENDEGREE MACKOPHYLLUM MODIOC-CRENEL—This very floriferous variety was figured on age 565 of our first volume. In an accompanying node we started that it came from Makera, and gave it the varietal nature makecomes. We reget to say this is an arrow on our part, the plant being a native of the Molacon Islands. The varietal name must therefore, he altered to molaccornes.

0.0

MERGELINERS REED. This extraordinary process has been fund described. "Let the endor imagine a green scale to be present fittines dend feature, such ten to have a row of touch, or some such specified représe, and the scale of the scale of

8 8 8

Obscure PSEUDORULIS.—The Kase Rol-Jettin has received from a correspondent in Grand Cayman, British West Indies, a pseudorulis of Schoodburgish. Themeorisms which is used for making tobacco pures in the inches long and make useful pipe bowls. The plant is known to the natives as "Wild Bannan," In another speeces, S. Bishorins, a between one and you feet long and quite hollow and assooth inside, and are common to used by the native citaliera as transpers, wherea it is called the cowtom Orchia, wherea it is called the cowtom Orchia, their boas, too, there is a Cawaya a small hale, and masses of airs and other insects take arterinage of it in constructing their nests

(3 1/3 1/4

DESPOSED OPENIN STOOM AND CONSTRUCT.

And the secting of the Obeidal Committee of the Royal Hortesthand Society on November 7th, the Observation of November 7th, the Observation of Society of Societ

agreed to award Cups and Medals, and it was birther suggested that an Orchid Conference be held on the second day of the Show. The latter suggestion, however, the Council will consider more fully in due course.

#### 12 53 61

MEXICA OGUIDS.—The large arount of high smoking which as higher without we have revived during the post assurer has been specially flavorable in Mexica Ordroks. In Mexica Ordroks, In Mexica Ordroks, and the same is have a facilitated and the same post has a facilitate of the same post higher and the same post has a marker but of Larks and though a same paint having as many as eight. Very little shading has been used in the ordroke of the same paint having as many as eight. Very little shading has been used in the ordroke of these same paint having as many as eight.

lr. Edward Low has termina

#### 13 89 80

COMMITTION CHARTSWORTH, VAR. RIX. The very broad dorsal sepal which his great wavely possesses is beautifully versel and sufficient with rose. The petals and pusch are yell sowers-favours, afts merus feature being the pure-white stammonds. The alternation is from a bendergraph knally sent by Great, H. Mülleralbesen, Eng. The Higger, Helland, as whence collection belowers because the control of the control of

OKLIGION TIGRISMY. Some excel lent varieties of this elegant species have been sent from the collection of C. Aleyn Harrison, Eng., Lyndhurst, Watford. The large impleyellow labellum is very uttractive, and the dark tiger-lice markings on the segans and pattal give the flower additional charm. This species may be well recommended to those requiring an Orchid lawing a delivious sector. A hybrid between Cattleys, Harrisoniana and Leelia santhina is also sent from the same collection. This cross, which was recorded on page 13 of our first volume as L. C. Mars, produces cresmyyellow flowers, sometimes as many as ten flowers on a solike.

#### V2 V4 /4

CATTERN FAIRS AREA SATE—Albin forms of cathys sprice we very surely mean color not one in description of the production of the surely state of the surely su



Cypripedium Charlesworthii, our Rex.

CYPRIPEDIUM SIBYL EUPERBUM-This very distinct and attractive Cypriexhibited by Mrs. N. C. Cooksou, November 7th, 1011. The parentage was then recorded as Francisize × Fairrieanum, the former being a hybrid between callosum and Curtisii, and of which a similar plant was exhibited by Mr. G. H. Goulten on January 16th, s804, under the name Cvu. Goultenianum The correct nomenclature superbuin (Goultenianum x Fairrieanum). In the reproduced photoand scriped from the green bees with mirole. The petals, drooping as in dark purple.

13 13

fluencement of a hybrid resulting from Lathia Lations. Lacho Cattleyo Opher has been sent by Mr. E. W. Thurgood, Orchid grooser to H. T. Pat, Ear. The Lation Lating and the sent by Mr. The Lating and the sent by the considered a revenue to the printitive form of an Orchid, Another flower shows reduction from a transcross to a discress concilient, there being a dorsal and at we trial again and the sent properties of these properties of the consequence of the sent properties.

独 33 4

Howers is certainly of value.

SOURFO-LELIA GRANGEFIELDERSIS (S. GRANDELORA) - This inderesting plant seems to have been first recorded in a list which was sent out by Messex. Keeling, in October, 1300. It will always be a scarce hybrid for, apart from the



Cycripedium Sibyl soperbum.

seekla.com fact that toot Sophornia cross, are had to stag, hall longheam is not no ear had to be a had longheam is not no ease groung very well as a surm Odenoboum brace, and we may suggest that is bytent, especially S.-I., geomyddelman, will be the surm of the stage of the surm o

CATTLEYA BOWNHOUTAN THIS VERY and antimother-convention of the part of most part of

65 52 52

Velvois Kumastatota Atabe—This gravity probably to final adiasis found of the species to be recorded, have recordly downed in the enclosibilities and the enclosibilities and the enclosibilities and Merian Minnell and Hineler. The angals and petals, which are as pure obthet; by tholetian, normally of an amulgory pumps, is also pure-oblate, the only location being in the small alide boles which are implication, with a sufficient to the small control of the small alide boles which are implication, which will be a small alide boles which are implication of the small alide boles which are implicated pumps, the small alide boles which are implicated probably of the small alide boles which are in the small alide and the sma

nothing else but broken crocks are placed around the roots; in this condition they have been grown for several years and produced an abundance of 30com in the autumn mouths. The species was mound in homour of Mr. W. S Kumrall, Rochester, U.S.A., are ardent growns of Burmers plants.

#### SEASONABLE NOTES.

Phota pushing their flower back will require slightly more sworz at this time of the year than others which do not flower until the spring or early sommer meals. If the plants can be arranged in Sutches according to their flowering can be about to their flowering sea are considerable results will be assert, and the watering can be about the plants have opened their flowers they may be removed to different positions in the coses, and thus make a better floral display,

Many thoses spikes, especially those produced without a sheath, are libele, in the early stages, to be eaten by slags. This is a great disoportanest, and although ravey may be caught at night time, the only neitly successful ways into suspend the plants careed, the tip of the spike can be seen. Another conclient pain as to place cotten wood round the stem, stags and other macros are unable

Care must be exercised when watering aussended plants; they should be dipped in a tank or burket, and allowed to thoroughly drain before being lang up again much damage is likely to occur by allowing water to the allowed to be the should be the standard of the should be the should be s

During the winter-time valuable plants are represently suspended from the cook, an advantage to them, for the amount of extra light, which they thus receive in considerable, but a disadvantage to any plants that remain beneath, for their amount of light is thereby still further decreased. Unless, therefore, soft-cient room over the pathweys will allow plants to its engage, but it is found much be better up to entire place the valuable the better up to entire place the valuable in a segurate part of the bone where extra situation may be devened to them.

## VANDA SANDERIANA.

(See coloured plate.)

To the Sanderian collector, M. Roebelen belongs the honour of discovering this

He produced it towards the end of 1881; the neighbourhood of Davao, in the Philippo Islands, and writes thus of his discovery: "I had collected a few plants which bore x with any number of carriers provided I handed over to him everything in my possession, and particularly my unburella which he wanted for his wife. I set out the same day for the dwelling of a Spanical, and remained with him for a time packing my plants. He it was who accompanied me the



Vanda Sanderiuna.

A somi-established plant in the collection of Messrs, Loger & Harrell, Saxonit, New Jersey, U.S.A.

flowers, but which exculed a novelly by their babit and remains of old flower spikes still remaining on the plants. At this time, I was auddenly abundment by my escort of presoners which had been given me for carriers. I was then ooliged to descend to the plain, and after a somewhat lengthy pulawer and bargaining with the chief of a powerful tribe, be consented to supply me

first day in his small hoat, having no servants at his disposal. We landed in the evening on a small clearing by the stream which we had traversed, and there it was that I saw at the top of a tree some flowers, which appeared to my vision glorious, and some minutes afterwards, in optic of lugurants and other vernin in swarms, I hold in my hand the beautiful Vando Sanderians.

All my miseries, all my fatigues, were at that moment ingrotten. It is necessary to have travelled in order to realise the joy at the discovery of a new plant of such startling beauty and novelty as this most

The list John Doniny, the futher of fixed hybridizative, exclining them he saw Varida Sandwinns for the first time, "Thank goodneys, I have like the saw this fixed pointing Varida's and field fractioning the fixed pointing the fixed pointing the fixed contains of delight when he first sow the new heavity, rading it, the "Jewes' in the Jones," Ky Sander's occurrent an energing the fixed dried flowers of this place can be better uniquent time beginning the fixed pointing the fixed bandly, such an occurrence be so greatly as the observation.

Of the many mobile species of Orchids introduced by Me. Sander, this is of the formost reak. The late Professor Reichenbach said in "It is the grandest movelly introduced for years, and will mark a golden letter-day

in the same of the discovery of this plays and Co's vollectors, bought home a magnifecture for of plant. One of these mass did to Mr. Le of plant. One of these mass shift in Mr. Le of plant. One of these mass shift in Mr. Le of plant. One of the other size of the format of 1884, visually showed it the summer of 1884, visual to home of it the summer of 1884, visual to home of the summer of 1884, visual to the summer of 1884, visual to the other plant, deferred for make all the summer of t

Some remarkable specimens of this species are at present in the establishment of Meisers Lager and Hurrall, Summit, New Jersey, USA. One of these, a somiestablished plant in a 12-rich basket, is illustrated above. It has finiteen stems, varying in height from five to twenty-foor inches, with a total number of eighty leaves. Another fine specimen has eleven stems, varying in height from the plant of the pl

eight to twenty inches, the tallest stem being divided at the tep into two growths, and seventy-four leaves. These plants have been sent to New York via the Pacific to San Francisco, thence overland. It is evident that owing to the facilities obtained at this latter place for securing these plants from their native country, that they travel much

isciter than invostrations sent its Bampe-Thic Vanda is a bott overlett, and many tunderless of possible that the properties of the properties of the properties of the protability of the properties from residently of the properties of the properties of the properties of the properties of the prosent plants. We good provides the prosent plants with a difference in testment. Among the fixed finant Orichia sentence. Among the fixed finant Orichia sentence is the properties of the protence of the properties of the protence of the properties of the protence of the properties of the protent of the properties of the properties of the properties of the protent of the properties of the properties of the properties of the protent of the properties of the properties

## ORCHIDS OF SOUTH AFRICA.

By Harry Bolus, F.J.S., Hon D.Sc. (Cape Town). Vol. H. London: Want

(Cape Town). Vol. II. London: Wm. Weskey and Son, 28, Essex Street, Strand. 1911. Fifteen years have clapsed since the publication, in 1895, of the first volume of this

Union, so imperfectly explored and so difficultof exploration by botanical collectors, some years must chose before the same proportion of the exesting vegetation can be known, as is the case in older and more populous countries.

Exactly ror coloured plates are included in this work, a large proportion of which have been drawn from living plants only. Among those who have sindly assisted in exploring and collecting specimens must be menticed Miss Alice Pegler, of Kentani, Tembuland, Miss C. B. Newdigate, of Foecst Livil, near Pettersherg Bay and Kuysan, who sext such excellent living specimens of several rare species, such as Dea exects, Swartz, long lost to science, and scarcely known since its first discovery by Thunberg in 1773, Mr. N. S. Pillans, and Miss H. M. L. Kensit.

The text includes descriptions, in both Latin and English, and the geographical distribution of all the plants agured. To those unacquointed with the Orchids of Soath Africs, we may merition that the species chiefly belong to the following general Diss, Eulophia, Habenario, Holschr x, Polystachya,

and extyring the author remarks. "This Of Date common the process stayling of Orchads in one neighbourhood of those arbany, or Capt Town which the on the extern side of Table Mountain, and may be 'unnel through every year in October." Of Oise Charpentieriam, "a very entiress and distingt species of a group of which we are for from knowing the limits of variability. The long first very translation, and as it was about in the wind suggests a possible means of attraction for

Setyrium follosum is one of the rarest South Artican Orchiels, and has hitherto only been found in one spec, or whiln a few immbee yards of one spect. The flowers are, fortunately for its survival, a dull yellow, turning brown in age, or its extinction by the Vandals of Cape Town might be (cured within a very short time.

This work, of which the last pages were finally exercted by the author on the ext of his death, may be one-stored the leading text book on the soley, and allicospy, steasifically written for the betaining text orient mans to be applied, and allicospy steasifically written for the betaining that correct mans to be applied, and all the properties of the soley of the steasy to be applied to the steasy to be applied to the steasy that the parties turn be lound to used as way that they adjoin the descriptive text. At it is target parties that the leading to the steasy to the soley of the steasy to the steasy to the steasy that they adjoin the descriptive text. At it is target and together at the end of the volume, and reference is somewhat of them.

# AN ORCHID COLLECTOR'S TRAVELS THROUGH BRITISH GUIANA TO BRAZIL.

By ED. KROMER.

By ED.

WHEN the Original cancer as his benghish country extending over the benghish country extending over the blooms, and with planet and the length of the benghish country extending over the benghish the benghish country extended by those were who rater they have been with order the insuntain ranges of South America or other tripical party of these which may be the framework party in the southern of the professional collector, sho, with a certain marrial his treasures which the draming of the professional collector, sho, with a certain marrial but the same of the preferenced collector, sho, with a certain marrial but the same possible treasures which the damp of the preferenced collector, show with a certain marrial but the same possible marrial to the strength of the same possible, and the setting against the presents parasite of planets in the solution is time possible, and the setting segments at transport and the professional collector segments of the section of the section

ONDER

The great respect to expect, where he is a place for the trap can created by the hidrons consequence to the trap can be to factory. Of course, it does not follow that the trap can be to factory. Of course, it does not follow that the trap can be to factory to the trap can be to factory to the trap can be to factory to the trap can be traped or manufact towns, his body and traped or factory to the traped or manufact towns, his body and wherein characters are the traped or manufact towns, his body and where of the gest to traped or manufacts and produces any his shock and wherein the gest to some extent known to the startes be can profuse as on constructable body, and where if the gest to some extent known to the arrives be can profuse as only quantity or making of faints to youngly writing, a forther arrives be can profuse as only quantity or making of faints to youngly writing, a factory or making of faints to youngly writing, a factory or making the great to consider the contract them to the desired to the contract them to the contract to the contract them to the contract to th

journey I undertook some years ago, and which is the subject of this present narrative.

At that time, on my return to England after I would feel inclined to go and collect Cattleys Lawrenceana. Without besitation I accepted willingly the offer, first for the love of the of making this journey with comparatively short holiday, I did not lose much time in making all the necessary preparations. I bought a considerable stock of parter goods which had to serve as a means for business the knowledge and value of current money was completely unknown. I had a quantity of small trunks made of a next shape and size so as to be carried comfortably on the Indians' backs. In these trunks the goods, my own outfit, and a stock of provisious were packed. arrived, after a fortnight's pleasant voyage across the Atlantic, in Georgetown, the capital of British Guiana, or Demerara, on the 18th

In Rober proceeding cay fooder, it may issue will be give be well to give been a story hadop of Colony, well to give been a story hadop of Colony, because of the Colony in the years to company with his leading, was employing the proceeding of the Colony in the years to get the colony of the colony in the years to get the colony of the colony in the years of the colony of the colony of the colony of the proceeding of the colony of the colony, also called on the colony of the colony, also called on the colony of the colony, also called on machine of the extraction of the system of the colony, also called on machine of the extraction of the system of the colony, and called the colony of the colony, and called the colony of the colony, and called the colony of the c

first large consignment of it to England. The following year, in 1886, I visited that part and sanceoded in dispatching another large consignment, as also did at the same time another collector, Osners, for the United States. The plan: is among at unknown of Sir Trevor Lawrence, Birtt, the worthy President of the Rocal Hotzieburgh Society.

Royal Horischmal Society. It think longist to duscribe line geographical I think longist to duscribe line geographical I think longist to duscribe line. The most confloesation in ordinary to the continuous testing the second through the continuous testing the second through the second and treach Gaina. Of these Broist Gaina and I treach Gaina. Of these Broist Gaina and I treach Gaina. Of these districts that the second through the second through the second treach treach the second treach treach the second treach treach treach treach treach treach the second treach treach

On no arrival in Georgeown I sport the first three days is completing quickly the lost methods of the energy of the contraction of the methods of the energy of the contraction of the teneric. Had a day's not in a river detance up the mostly of the Essephilo where longith as the energy of the street of the arrival of the with the Essephilo, and from the point all garneys to sup parts of the street of the approach to long land in minimum cherological properties of the energy of the energy of the supposed to find such as immerse cherological to find such as the energy of the energy of the supposed to find such as immerse cherological processing. These only about half-andoems to be energy to the energy of the energy of the to be energy to be find as founding and probacts, sometimes of the Security of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the energy of the longest of the energy of the ener Moseumi and Essequito is admitted to the the most picturespee of any an the colony; and, strange to say, but not without reseas, the colony of the colony of the colony of the theory of the colony of the colony of the settlement and an asylum for layers for settlement and an asylum for layers for the Orderd oddstoot, also, this distraty years ago offered a egod field for operation bornatum Section's Sectio, 'Appoptation' routestom, Oracifum Lancausum, Stanapsee, Searnes, Britagiesis candida, bifurgation of colony of the colony of

From Bartilia Grave two different routes lead to the interior and the savannains; one in way of the Essequibo and the Potaro river as far as the Kajeteur Fall and then overland. this is a shorter route by water but longer overland, and this was the route taken on my first expedition. The second rome is by way of the Massarmi and then up the Cumbung river as far as the Mecrebeh Fall and then overland. This route is longer by water but shorter overland, and has the disadvantage of heing considerably more expensive. Much as I should have preferred to follow my first route I was forcibly obliged to desist from it. Ichowea and Chinapau on the Potaro river, where formerly I found every help and assistance, were given up and completely descried by Indians, and that it would have been out of the question to get there sufficient hands as carriers and guides. For this reason I selected the second route by way of the Massaruni.

On the 24th September at last everything was made revoly for a tart, the large stack of lastre goods, provinces, logsgee, etc., was trainferred to a begood, provinces, logsgee, etc., was interferred to a begood, and marted by a massed crew of all colours, blade, white, and constaining of a caption, who was a half-caste, a hormone, when we are a magic martine an angion of the state of the stat

acquaintance, Dr. Law, at the convict settlement; then we were really off, leaving seen all traces of civilined life behind, meeting still for the first faw days an occasional ocatiful of gold-diggers returning from their placers, and publied along through the dark tropical forest with the monkeys and macuns keeping up a lively music over our heads.

Now, before going any further, a word of sisted of might be of some interest; one or another might irel a craving to make a similar journey one day. It is a curious and varied by an Indian is, of course, a gun; in proud possession of a gun the Indian considers himcaps, 2 boxes of gunnipoles, 1 duz. packets of fish'hooks, in various sizes, 1 doz. axes, 1 doz. curlasses, 1 dez. American hatchets, 6 dez. butcher knives, in various sizes, 3 doz. porket razors, 3 doz. files, 6 doz. pipes, 3 doz. tin cheap Birmingham jewellery, 6 gross common glass buttons, 6 doz. combs, in various sizes, 6 doz. small mirrors, 6 doz. small packets of needles, ditto pins, 6 doz. reels of thread, white a doz. vests, 75 lb. small glass beads, in blue, white and red, 6 pieces red and white calico red or coloured large handlserchiefs, and a few more odds and ends. All these articles must But the most important article-next to the know salt at all, or only from hearsay, and, once tasted, look upon it as a first-class delicacy, to the same degree as our youngsters appreciate

have enough of it.

# The Auburn House Collection,

SOUTHPORT, with its beautiful bright atmosphere, could boast, many years ago, of one of

the finest collections of Orchids in the country. There are still a few Orchidists who remember the many large specimens which were then in the houses of Mr. in his honour by Prof. Reichenbach. who, in describing "This Cartleya may great enjoyment." Although this collection has four since gratifying to know at the present time. an even better collection in the possession and that Reichen-

species, is equally applicable, for "this collection proves a source of great enjoyment to the owner."

a level and within a very short distance from

the sea; in fact, they are built on the actual sand of the shore. The saline atmosphere

seems beneficial to the Orchids, yet great difficulty is experienced in growing roses and other garden planes, although the soil in which they are planted has all been brought from a place many miles inland.

The Cattleya house contains a large assistant of latewater prima; one long the whole passes through the rain-matter tank and data keeps the washed passes and data keeps the whole condition for the containing the condition of the containing the co

in flower, and of



these mention must be made of C. Harrisonians alba, with eight flowers, C. labiata alba, a fine form baving but little of the usual orange colour in the threat, C. Warneri alba, of which there are two good plants, C. labiata



Cattleya Her Majesty.

Sepals and petals pure-white, labellarm golden-yellow spotted with rose-purple.

Amesiae, a lovely variety having pure-white sepals and petals, and a light blosh tinge on the labellum, C. labiata Empress, C. Fabia Cattleya Holdenii (intermedia alba x Warneri alba), which are good growers. From one of last year's bulbs two have been produced.



:Cypripedium Holdenii. (Moudia × callosum Sandere.)

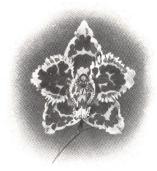
alba, and C. Maggie Rephael alba; the two latter have pure white sepals and petals and a richly-coloured labellum.

There are also grand specimen plants of

which are now carrying thirteen flowers. The elegant C. Mossie Wagneri, C. Luddemannians alba, and the distinct variety known as Stanleyi, which has a prettily marked labellum, are well represented. There are a number of albino Cattleya hybrids, the most noted being C. Suzanne Hye de Crom, the stock of which now consists of five large

Mention must also be made of Cattleya. Queen Maud, and the wonderful variety of C. Trianæ, C. Mossiæ Holdenii, a very beautiful form, and many of the best Cattleya hybrids. Two very interesting plants in this house are Cattleya labiata Peetersii and C. Hardyana Massaiana.

The Brasso-Cattleyus are well represented and include some unique specimens.



Odontoglessum Dorothy Holden.

C. Hardyana "Countess of Derby," described on page 1 of the present volume, the reputation of which has extended to every country of the world where Orchids are grown.

During the spring time a welcome display is made by a large selection of Cattleya Schrödere, several fine varieties of

Suspended from the roof is a large plant of Trichopilia Backhouseana; its beautiful flowers are much admired.

The Odontoglossum house at this season of the year does not present such a grand show of bloam as may be seen in the spring time. There are, however, a few choice plants in flower, and from them a good conception of the greet beauty of these exceedingly pretty species and hybrids may

Ociontoglossum: crapum is represented by some of the finest forms, notable examples bring O. c. Lindenii, O. c. Lucianii, and O. c. Hudenii, a very lurge, white flower, and the marriellum O. c. Kanthotes Warburtoni. The Ociontoglossum hybrids include some of the finest results of the hybridist's work.

The Cypripedium house is gain resided with a courte path. On both sides is a row of sixer leafed Parismu weignating at the back of which are several hundred childy-choined Cypripedium flowers, the whole making a trial wonderful chiphy such as is rarely possible with any other kind of plans. Species, varieties, and hybrids seem to vie with cach other in attracting one's attention. Beld flowers now is caloried in Cypripedium.



#### Odontoplessum Dreadnought.

The range of colour is remarkable, some bigitivelyton, others deep-neptle. A few have immense purple bleethes on a page white ground, others are almost oververal with small spots on a rong ground. Od annihil would spot on a rong ground. Od annihil to bleethe with the bleethe was a small post on a rong ground. Od annihil to be supplied to the bleethe shall be supplied to the supplied to the bleethe shall be supplied to the shall be supplied to the bleethe shall be supplied to the bleethe shall be supplied to the shall be shall be

Aeson giganteun, C. Deendrought, and C. insigne Harefield Hall; rete varieties may be seen in C. Aetasus Biznea, C. Holdenn with its broad dorsal of 34 in diameter, and C. The King; while perty varieties indude C. Fairrisanum, C. Brons Schrüder, and C. Miros Youngi, of which there are ten plants. The healthy condition of all these is very marked.

Of the other Cypripedium hybrids which

are now in flower mention must be made of C. Gaston Bullet, a magnificant flower, C. Arrise Neill, C. Leenaum Corona, C. Berkeleyauran, C. Dores Crawalow, and C. Berkeleyauran, C. Dores Crawalow, and C. Beltonii, or atmost pure-white form. With such a large number in flower at it impossible to record more than a few, and words will not adequately describe thou or give an idea. Of the fine effect produced when they are grown

Besides many excellent Dendroliums there are serveral plants of the worderfol Bulbophyllum virescens, the elegant Cymbidium erythrostylum, and other interesting Orchida. The genias Lyosade is well represented, there are good plants of L. Skinmen alba, L. Luenanii superhum, L. Deppai, and L. Mary

The above short account of this large collection gives but a comparatively poor idea of the very numerous species and hybrids which it contains, and when it is recutioned that almost every one of those has been brought together during the last three or four years one will have some alight idea of the intense interest which Mr. Holden takes in

All the cultural details are carried out by Mr. R. Johnson with his autocomy excellene, and in every section of this large collection there is evidence of his thirty years' experience in Ordizi growing. It is a great pleasure to see plants growing as well and wordering such excellent foriferous results.

# NEW PLANTS.

SCHEILD - CASTLEY & MISSIPE (CASTLEY & MISSIPE (CASTLEY & MISSIPE ) and the BURDY AS A SO THEOL LESSA MILLATON ASSASS. — In this blywid monter such ease has been achieved, the search colour of the Sophranis grandifien having created of the Sophranis grandifien having created of the Sophranis promise have been according to the control of the Sophranis process, but, of course, much larger technically all J. S. Godson, Kog, at the Royal Porticultural Society, September 26th, 1911.

BRASSO-LALID-CATTLEYA BAUCIS (L.C.
MARN)—A somewhat disappointing result;
flowers creamy white and rather small. Exhibited by Mous Maron at the Royal
(Hortenhard Society, October 24th, 1911.

TIANA (L.-C. LUMINOSA × B.-C. MRS. J. LEEMANN). —A grand hybrid, flowers golden yellow speckled with purple, the lip mauve, and fringed. Exhibited by Mons. Maron, at the Royal Horticultural Society, October 24th, 1011.

SOPHRO-LEHOCATTERVA ALEC (\$8-1c.
INGATORESES & C. MER. SETTY — A very
pleasing hybrid with resy-scarlet flowers.
The labellum is broad with a wide theoat, and
allow, the yellow colour so often seen in the
threat of the latter parent. Raised by Mr.
Giles, Orchid grower to F. du Cane Godman,
Essen. South Ledge, Horbatta

LUBBEDIANNIANA × L.-C. ANDROMEDA). A very bright, golden-yellow flower exhibiting prossising qualities. Shown by Mons. le Courte Joseph de Hemptinne, St. Denis, Weatern, Giecut, at the Royal Horticultural Society, October 24th, 1911.

LEGIO CATTLEMA Adduling the ALLYONG C. CAUGEST The ferrow panett is a hybrid between L. flava and C. Seld-leriwan, the dearer being to produce a golden-yellow seguled and petalled flower with a rich-ritinson Libellian. A good example washown by E. R. Ashton, Esq. at the Royal Unrienhand Society, November 7th, 1011.

LIKLIO CENTELVÃ OPIRENT [C. LAMATA A. L. C. ADOSCHIEG. CL. GLASSYAMINA » C. ALLANDRIS,—This new hybrid has been raused in the calculation of W. H. S. Quanta, M. L. C. Parolli, who series a howeve with the following note: "You will notice the following note: "You will notice of continuous in the influence of L. camadurata. I really ancide her event to see if the special continuous co

flower, in which the characteristics of this species may possively suc proserily be more in cidence, which, of cearse, would certainly ocur but I reconsed Le.C., Adolphus with C. Adolphus with C. Adolphus with C. Adolphus with to but I thought it would be more interesting to but I thought it would be more interesting segment to try with some other species, which would have present the species of the flower. The segment went to see insulary-sellow segulas and petulis and a purple blotthoid balblum. CATHENA, Chart. (Falsance, was

PARTHENIA PRINCE OF WALES — A pleasing flower with almost white sepals and petals; the labellow has profile motifing in front of a yellow disc. Shown at the meeting of the Royal Horticultural Society, Noviencher 7th, 1911, by Francis Wellesley, Eaq.

CYPERFORM A. J. H. SEITH (HEEGA CYPERFORM) A. J. H. SEITH (HEEGA EUNYAGES & NIVECUS)—A flower slightly langer than the latter parent, and rearnifolds for baving the upper half of the petitic considerably darker than the other parties of the flower. Raised by Mr. H. J. Chapman. Ordaid grower te Mrs. N. C. Gookson, Wylam, LEHLON-CATTLINYA SAMPHALATA (L. C.

CAMIAMIANA × C. MANDIA).—The flower of this new hybrid rescalibles the former parent in size and form, but the hp is almost covered with a mass of blueisly-garde verisderived from the pellen perent. Raised by Messes, Single and Sons, S. Albaia.

# ODONTOGLOSSUM HELLAS. Halbii Harrysoxui

note.

To many this would use commend itself, but it is rune who an acclaimy Helbi as it in from the man acclaimy. Helbi as it might almost be thought it would be. In officer it appears the three which waven gramewhat incurved petals. In colour it goes to Halli, having the three wholes of bleeches peculiar to it, the linear spotting in the losses of the petals being castly recogniside, the ground colour of best speaks and petals being ground colour of best speaks and petals being ground colour to the petals being ground colour.

The hp is a very handsome segment, and is large, creamwork to with a central red brown spot, and having a run of marginal spots at the lower half of the side, its creek being almost that of a pure Halli; the column very like Hallii, but the cirrbi almost suppressed. I used a fine variety of Hallii (ecoglowum, hence the general light colors of the hybrid. It bloomed April zand, 1911.

at b. Criticality, arrestment acon, 1911.

8 8 8

# ODONTOGLOSSUM MOMUS.

Harryanom Audersoniacum Bradshawier

Oc. Bradshawae and its hybrid Monus,

which I blowned in May, 1650, are unique plants; some may say "a good taing, too," but if no one raised anything out who; was certain to be "fire and valuable," we should not have learny perhaps that which we know now, and we, or at least some of m, might still be saying "blottede crispiana are not hybride." I wonder if there is any new whose aff this is so.

Monus has a rich-yellow ground colour evenly spotted with red-brown, thicker in the sepals, the bashar nacrings derived from triumphans being strongly marked, and in form it is like the same parent; the petals have the central basal line peculiar to

The lip is almost white-ground colour, having a contral arrow-head shaped blotds of red-lirows that has the sleen possibility triumphans, the crest, colours, and wings are almost that of a pore triumphans, which species predominates very besuly, almost different processing the contral saccies.

It is here seen how powerful a true triumplans from the Ocaria cistrict is; the reason being that it is almost a pure species, so little hybridity has taken place there, so different from triumphans latterpalum, which is so mixed up among or spoon, Hunnewelliamum,

de B. Crawshay, Yourmber 20th, 1911

## ODONTOGLOSSUM WALTRAUTE.

September 27th, 19:0, and proved to be a remarkably pretty thing. Imagine a very strong and heavy spike of navium much bright light-yellow, copiously spotted with regents, and you have a mind picture of a

ODONTOGLOSSUM KASHIMA. Lindleycoom Harryannes

supposed, but a very shy bloomer as all very fine spikes of large flowers. Sepals and petals light-vellow marked with brown, in form intermediate. The lip very large, oblemy, of same colour, with a large oblong the edge of the brown. I bloomed it in

September, 1911.

ODONTOGLOSSUM GALBA.

This meagre result I bloomed October 22nd, 1910, and I have been writing (and am to publish it upon. A dirtier muddy mauvishbrown it would be difficult to make, and most

The whole flower is almost a solid ground colour as in sceptrum, and save that it is an hardly worth recording. Fortunately, they are good growers, and make a fine spike of

#### AN ORCHID HOUSE. THE ATMOSPHERE OF

THE maintenance of a suitable temperaregistering, by means of a thermometer, the whence it is produced. Not only is the topic of special interest at this season of the year, but a good knowledge of the subject is of

Without discussing the theoretical quesfor our purpose to state that heat monifests itself in three ways, viz., by conduction, preheusion of these principles will greatly ture of the atmosphere of an Orchid house may be artificially maintained.

Conduction. If two short rods of similar length, one composed of silver and the other of iron, have one of their ends placed in a fire the other end of each will gradually become warm, but not at the same rate, the rad of silver becoming her in a ranch less space of time. This is because silver is a much better conductor of heat than iron, and it may be

cannot be directly applied to the water an must be used. Also, if the hot-water pipes sible for the heat of the water to have any wrought-iron, and lead. The great cost of the first three compels us to utilise cast-iron for the construction of the bailer and pines.

Although a saving in the cost of the hesting apparatus is thus obtained, it must be remembered that the greater the difficulty of heat of the water to the surface of the pipes, the larger will be the amount of fuel cenwe may, in the near future, have to consider whether it will be more advantageous to spend a larger sum of money in erecting any ammunitus composed of some material, such as copper, having a higher power of

conductivity. Radiation, from ratho, to easit, or give off, rays. The air, by direct contact, receives a pines. It is not sufficient for hear to be often have heard a remark to the effect that although there are plenty of pipes in the be. This is an interesting point. Those who have been up in a balloon, or a flying machine, and colder the further they so away from the earth, set at the same time they are vetting nearer to the sun. This is because the rays of heat always 1808 through the air without affecting it; it is only when they come in centred with heat absorbing substances that these bodies are gracically made warm. The acr is warmed by direct contact with these

It will, therefore, be seen that it is absolutely pecessary for the pipes to give off rays warm the nie in climet contact with them.

material of the pines, but entirely on the nature of their outer variant or skin. If the

would, when feeling extremely not rachate or give off very little heat. If these alver pines were polished will less heat would be obtained from them. This is because allow one of the very best and most suitable rach ating materials. If the silver pines are conted with this substance we have the fires: conductive material radiating, or giving off,

Cast-iron pipes come very more to those of giver, but even with these a creso deal will depend on whether the surface is rough or polished. If in the latter state mor results are bound to occur, but if coated with lamp black the radiating power will be in the temperature of the house will be

Therefore, it will be plainly seen that in jest uself on the outside of the piper those must be made of a material baying a bigh-

but it is almost impossible for the best to pass through a long length of pipe. Resource, is therefore, taken of the difference in the the lowest part and so forces the hot-water them in reaching the highest point. When

unberg. As sover us the nie is suggested by contact with a hested body it rapidly ascends. its place being accupied by air of a lower temperature. The circulation of air takes place at a neigh more rapid rate than that

#### SEASONABLE NOTES.

Many Orchido rest materally during the winter mostly, and do not require the heat and moisture necessary when the plant is in full growth. It is surprises which an immunof cold some plants will stand when it is obtated. A sadder change from growing conduction of the sadder of the sadder of stringlike; all plants should be gradually handered off and the felsing peopely material for the sadder of the decided change of stronghere. Species and hybrids vary so much that me challeng date on the pipers for the consenerament or ending of the resting assocs; every plant much be tracted entirely according to its one wants. While some may eally experisations of the state of the state of the state activation of the state of the state of the activation of the state of the state of the old yadicates asset should be given to prevent the table from dejaveling, may excess is likely to came the plants to commone a new growth at a most understands there of the year.

# ROYAL HORTICULTURAL SOCIETY.

Mambras of the Orichder Afth, 1911.

Mambras of the Orichder Committee present:
J. Gurney Fowler, Eug. (in the cosin), and
Mesers, Jas. O'Rineir, (box. -cc.), Sir Jevenish
Colman, Bert. Harry J. Vedch, Sunct J. Greenish
Ref., Theories, J. F. Janesen, W. Colds, J.
Carlesworth, J. S. Moss, J. Cypher, W. P.
Dornd, W. H. Hatcher, H. G. Akszuder, A.
Dye, W. H. White, Gursey Wilsze, and W.
Bolton.

Mesers Charlesworth and Cos, Haywards Heath, received a Silver Flora Medal for a group of excillent Orchelas. The best being Cattleya Pabia al'io, the rare Oncidium varicosum concolor, and a fine variety of Odontoclosum. Airmorth.

Messes Sander and Sons, St. Albums, received a Silver Flora Medal for an excellent group containing good plants of Saccolabium acutifolium, Spetiroglottis Fortunci, the curious Bulbophylam Meduse, and several

Meisers Armstrong and Brown, Thorntong-Wells, secured a Silver Flora Medal for set attractive group in which were several good forms of Cattleya Fezia, some interesting Bulbophyllums and Cirrhepetalurs, the elegant Cologyne fulginosa, a nice selection of Cattleya hybrids, and many excellent Cypripediums.

Mesars, Cypher and Sons, Cheltenham, were awarded a Silver Flora Medal for an

excellent group of autumn-flowering Cattleyas, Cypcipediums, and hybrids, those of special merit being Cattleya Mantinii, C. Portia, several race Masdevadhis and Bullyophyllums, and good plants of Varda coerulea.

Messis Flassia, and G. southgare received a Silver Floor, Medal for a group containing many very fine forms of Cattleya Iabata, several having remarkably good lips. The rare Angrecore infundbulare and Era stellara were also shown.

Messis, Shuart Low and Co., Bush Hill.

Park, Enfield, were awarded a Silver Flora Medal for a bright and attractive group. At the back were many well flowered plants of the varieus Oneidiums, and in front good examples of Cycnoclass marulatum, Masdevailla macrura, many fine forms of Cattleya labiata and C. gigus, and the elegant Oneidium St. Leanning.

Mesers, J. and A. A. Melfeau, Cooksbridge, were awarded a Silver Banksian Metal for a good group, containing many elegant Orchids. Mention must be made of Odontiola Clarksworthii, Cattleya Warseewiczii with 16 flowers on four leads, C. aurca, and a very fine Leelio Cattleya St. Gorbard.

Francis Wellesley, Essi, Westhell, Wolting (gr. Mr. Hopkins), showed Cattleya labiata Lady Leese, a beautiful pure-white form with a violet-purple blotch on the lip; Laelio-Cattleya Mrs. Phayre, and the reverse cross of the cross. Licut: Col. Sir George L. Holfoed, K.C.V.O., Westorbirt: (gr. Mr. II. G. Alexanders), esh ibited Leelo: Cattleya broinesa aurea, the pretty: Cypripedium. Oberon (Euryades × Fairricanum), and a very five variety of Bearra Cattleya Mah. Chr. Marca 1997.

Mons Ch. Maron Brunoy, L'ance, received a Bronze Banksian Methal for a small group of choice hybrids, the hest being Cattleya Fahra Vigeriana, a very thric variety, a nioe form of C. Fañisa alba, C. Marg. Marca, and

several good Brasso Cattleyas.

Frank Lloyd, Esq., Coombe House, Croydon (gr. Mr. E. Mills), exhibited a nice variety of Saches Ladio grazafiddings.

f Sophro-Lelia grangefieldiensis Sir Trever Lawrence, Bart, K.C.V.O. (gr.

of Octomeria Baurei. W. P. Burkinshow, Esq., West Hill, Hessle.

Hull (gr. Mr. Barker), exhibited Cypripocini Goston Bulte; and C. Lard Ossniston, holwell grown plants. C. I. Phillips, Essa, The Globe, Severnous

exhibited Oncidium Forbesii "Glebe" vari one of the largest forms som.

Westrem, Ghent, exhibited Liebo-Cuttleya Steppe-tediana. See "New Plants." Mr. E. V. Lew, Vals Bridge, Haywords

Heath, showed a very fire carrety of Brasso-Cattleya Queen Alexandra and a magnificent specimen of Cattleya labiata.

(gr. Mr. W. Carr), sent Cypripedium Gipsy, a fine flower, darkly coloured, and resembling C. Harrisianum superium.

#### AWARDS.

### FIRST-CLASS CERTIFICATE

Leilio Carticya luminosa aurea (L. tenelueae Wikhos Grange, "surety x C. aurea), from Lieut-Col, Sir George Holford, K.C.V.O., Westobliet (gr. Mr. II. G. Abexander). A pilitat of great interest and beauty. By using this albino form of tenebrosa the sepals and petals of the lyioril are of a clear, yellowishgold colour; the lip being very dark reddishchart rolours. Ladio-Cattleya St. Gothard "McBean's" variety (L.-C. Gottoiana x C. Hardyana), from Wessrs. McBean, Cooksoridge. A remarkably good shaped flower, all the segments being very broad and of a rich rosy-purple colour. A cross acoustilion

#### AWARD OF MERH

Vanda Kinexullianu alku, irom Mesers. Manuell and Hatcher, Rawdon, Yorks. A very distinct and beautiful a'bino form of this mall buson Berman areas.

November 7th, 1911-

J. Garrey Fooder, Esq. (in the Chair), and Mosco, Jas. O'Brian (hou. sec), Sir Jeromiah Colman, Bart. Herry J. Veisch, Carney W. Cobb, J. Charles, W. Taorrpson, G. F. Moore, T. Arnelstong, A. A. McBean, W. Cobb, J. Charlesworth, J. E. Shill, J. Cypler, W. H. Hatther, H. G. Alesander, A. Dey, C. H. Curtis, J. Wilson Potter, W. Bollon, R. Brooman-White, J. S. Moos, G. B. Crawshaya.

G. F. Moore, Esq., Bourton-on-the-Water (gr. Mr. Page), was awarded a Lindley Medal for a very fine group of Dendroham Phalenopas Schrödersamm, the vorieties varying from pure-solite to dark ruby. Several excellent Cypripechums were

B. R. Ashten, Esq., Broadlands, Cauden-Park, Tunbridge Wells (gr. Mr. A. Voung), received a Silver Flora Medal for a very showy and effective group. In it were good specimens of Brasso-Cattleya Mrs. J. Lecmann, Cattleya Phregin, C. Lueger, and the

beautiful pur-white C. Dusseldorfei Undine.

Messrs. Charlesworth and Cu., Haywards
Heath, received a Silver Flora Medal for
some excellent Orchids. Mentica must be
made of Cattleya Inbiara Penelope, C. Fabia,

Stanbopes convoluta and a carious Mormodes.

Messex, Sander and Sons, St. Albars, were
awarded a Silver Flom Medal for a fine group containing many rare species.

Several Cattleys, hybrids, Dendrobium Sandere, and Gongoru cassides were also shown. Messes, J. Cypber and Socia, Cheltenham, were awarded a Silver Flora Medal for an interesting group of Cype-pediums, amongst which were specimen plants of Dendrobrom formation, and social hybrid Odontoglessum-

Messrs, Bassall and Co., Southgate, received a Silver Banksian Medal for a group of excellent varieties of Cataleya labiata, C. Fabia alba, and some choice Confinediums. Several very interesting botanical Orchids

were also shown.

W. R. Lee, Esq., Plumpton Hall, Heywood

or, Mr. Woodhams', showed the grand Cypri-

in excellent condition.

Francis Wellesley, Esq., Westfield, Woking (gr. Mr. Hopkins), showed Catileya Olai (labata aloc. × Perthenia), a nice zure-white flower with rose markings on the lip.



Calouthe Cooksonia (Harrisii × cestita).
Philograph by H. J. Chapman.

Messes, Smart Low and Co., Bush Holf Park, were awarded a Silver Bankenm Mehal for a good group of autumn flowering Cattleyas. The best were Cattleya Fabia, C. Armstrongee, and C. Minucia. Messes, J. and A. A. MeBean, Cocksbridge.

Mesers, J. and A. A. Millean, Cooksurings, were awarded a Scheer Banksian, Michallor a group of well-grown Orchods. Those of special merti included Ludio-Cattleya Arachne, Odontioda Charlesworthii, and a large plant of Cypripellium insigne Sandlera. Mesers, Amstrong and Brown, Tumbridge

Mesers. Armstrong and Brown, Tunbidge Wells, received a Bronze Medal for a good group containing many grand Cypripediums. H:s Grace the Duke of Devonshire, Chatsworth (gr. Mr. Jennings), exhibited Renanthera eccenter, a strongly flowered plant, for which the Committee pussed a Vote of Thanks.

Mr. E. V. Low, Vale Bridge, Haywards Heath, examined Cattleya labinita W. R. Lee, a very fine variety, Lacla-Cattleya Decia alba, and several excellent Cypripedium hybrids

J. Gurney Fowler, Esq., exhibited a very strong spake of Cymbidiam Tracyanum.

Mrs. N. C. Cookson, Oakwood, Wylam, exhibited Cypripedium A. J. H. Smith (Euryades x niveum), Calanthe Harrisii, and

F. Du Cane Godman, Esq., Horsham, sent ense x C. Mrs. Pitt).

The Rev. I. C. B. Fletcher, Mundham Meduse alba, Cataseton Gnomis, and

E. H. Davidson, Esq., Borlases, Twyford, exhibited Odontioda Dora, and Cypripedium

C. J. Lucas, Esq., Warnham Court, exhibited a nearly white variety of Brasso-

Cattleya Digbyano-Mendelii. exhibited an interesting peloriate form of

Cattleya Ashtonii alba (Haerisoniana » Warscoviczii), from Messes, Sander and Sons,

broad and with bright orange-vellow in the Calanthe Cooksonie (Harrisii x vestira). from Mrs. N. C. Cookson, Oakwood, Wylam

(gr. Mr. H. J. Chapman). The largest and best pure-white Calanthe hybrid, a great advance on the parents.

Cypripedium Sibyl sanerbum (Francisisx Fairricanum', Iron Mrs. Cookson-Sec.

Cattleya Venus lutescens (iris x aurea). from Mesers J. and A. A. McBeau, Cuolosbridge-A very large variety with lemon vellow squals and netals, and a broad lin-

glessum cirrhosum × Oncidium Ferbesch, from I. Gurney Fowler, Esq. (pr. Mr. Davis). -An extremely pretty hybrid, the senals and lowish ground. The labellum is large, yellow in the centre, and marked with bright

MEMBERS of the Orchid Committee present : I. Gurney Fowler, Log. (in the chair), Mr. James O'Brien (hon. sec.), and twenty-five

His Grace the Duke of Marlborough, Blenheim Palace (gr. Mr. Hunter), was awarded a Gold Medal for a magnificent collection of well-grown plants of Vanda specimen having as many as 3.1 flowers, and a large variety of other Orchids.

H. S. Goodson, Esq., Fairlawn, West Hill, Putney (gr. Mr. Day), received a Silver Flora Medal for a grand show of Cypriperlium insigne Sandene, the plants being exceedingly well flowered. Other Orchids in this exhibit included Cypropedium Maudia; Cattleya labiata Schofieldama, with white sepuls and petals, and several fine varieties of Laclio-Cattlevas.

Messes, Charlesworth and Co., Haywards Heath, were awarded a Silver Flora Medal for a group of Epideadoun vitelliaum majus, the erange red colour being very effective. Vanda Sanderiana, Cattleva labiata James Lowther, a pure-white variety with a slight suffusion of rose on the labellum, and several mod Cattleyas were also shown.

Messes. Sander and Sons, St. Albanis, received a Silver Flora Medal for a large group of antumn flowering hybrids, the very

Mesars, Stuart Low and Co., Bush Hill Park, were awarded a Silver Banksian Medal for a group containing many excellent Catt-

interesting botanical soccies, and other rare

Mesers, James Cypher and Sons, Cheltenham, received a Silver Banksian Medal for a grand collection of Cypripediams, notable examples being Felicity, and albino forms of

Mr. E. V. Low, Haywards Heath, obtained

group of choice Cattleyas, Cypripediums in great variety, and the rare Odontoglossum

great variety, and the rare Odontoglossum grande aureum.

Mesars, W. B. Hartland and Sons, Ballintemple, Cork, were awarded a Silver Banksian

Medal for a good group of Orchids Messrs. Hassall and Co., Southgate, N., ohtained a Brouze Banksian Medal for a well-

obtained a Brouze Banksian Medal for a wellarranged group of Cattleya bicolor hybrids, the elegant Augracum infundionlare, and

Mesers, J. and A. A. MeBean, Cooksbridge, staged a very effective group of well-grown. Orclids, the Cattleya Fabias being specially fine. A new Latio-Cattleya was also shown.

fine. A new Lælio-Cattleya was also shown. Mesura James Veitch and Sons, Chebea, staged a very pretty group of the pure-white Calanthe Harrisii, and Cypripedium James O'Brien, an imprevement on insigne Harefield.

Sir Trever Lawrence, Barts, K.C.V.O., Barford, Dorking (gr. Mr. White), exhibited the elegant Zygopetalum Ballii.

St. Whitlaw, Esq., America, Taplow, Bucks (gr. Mr. Mitchell), exhibited Cypripedium americase. Mrs. T. B. Haywood, Woodhatch, Reigate

Mrs. I. B. Haywood, woodnatch, Regate (gr. Mr. Barrett), sent a good shaped Cypripediam hybrid between Euryades and Harrisianum.

Mr. Hopkins, staged Cattleya labiata Her-Majesty The Queen, a large white flower. Capt. J. F. Laycock, Witeton, Brodry (gr. Mr. Musk), sent a well-grown plant of Laclio-Cattleas Heavy Greenward.

Mr. Mysk), sent a well-grown plant of Leette-Cattleya Henry Greenwood.

Meszer. Mansell and Hatcher, Rawdon, Yorks, exhibited a good plant of Angreecus Kolschyi growing on a piece of tree. It

carried two long spikes of flowers.

### AWARDS.

### FIRST-CLASS CERTIFICATES.

Odontoglossum Thais, from W. R. Lee, Esq., Plumpton Hall, Heywood (gr. Mr. Woodhouse). A beautiful specimen, having very large, broad sepals and petals heavily

blotched with reddish-purple, the lip slightly nundurate.

Odentoglessum Chiere, from W. R. Lee, Esq. A very richly-coloured hybrid, resembling O. illustre. A distinctive feature is the

Leito-Cattleya Prince of Orange (L-C. Hippolyta x C. aurea), from Lieut-Coi. Sir Geonge Holord, K.C.V.O. Westolki, Tetbury (gr. Mr. Alexander). A very beautiful hybrid. The sepals and petals orange sightly shaded with red, the lip night

slightly shaded with red, the lip oright cinnabar-purple.

Brasso-Catlleya Diglyrano-Mossiae Holford's variety, from Lieux-Col. Sir George Holford, K.C.V.O. An extremely large and

almost white, the lip deeply fringed.

Cypripedium Chapmanii Westanbirt var, from Lieut-Col. Sir George Holforth. Δ very great improvement both in size and colour on the original variety.

# AWARDS OF MESTI. Cyurised am Elatior (Lecanum × Baron

Schrobery, Oxford (gr Mr Balmforth). An attractive hybrid, the broad dorsal is beautifully marked and spotted with purple.

Lælio-Cattleva, Dengamii (C. Downana ×

L.-C. (Lapper), from Francis Wellesley, Lisq., Westfield, Wolking (gr. Mr. Hopkinn). A pleasing hybrid with reddish-copper sepals and petals, and reddish-purple front lone to the lip.

Brasso-Cattleya Leucothea (B. noclosa × C. Schröderre). An almost pure-solute flower, the lip expanded and entirely without spots. From Messrs. McBean, Cooksbridge. Lacho-Cattleya W. J. Biggs. from Messes.

Ladio-Cattleya W. J. Biggs, from Messes. Wm. J. Biggs and Co., Enheld. A richlycoloured hybrid of unknown parentage. The sepals and petals are copper-colour, the labellum reddish purple.

### CULTURAL COMMENDATIO

to Mr. W. H. White, Orchid grower to Sir Trever Lawrence, for Maxillaria picta, M. phrenicanthera, and Trichosma suavis.

### MANCHESTER ORCHID SOCIETY.

November 2nd, 19

MELIGIERS of the Committee present, Rev. J. Crombleheidme (in this Chair); R. Ashworth, J. Ramber, W. R. Lee, C. Parker, G. H. Peace, H. Thorp, Z. A. Ward, J. C. Cowan, J. Cypher, W. Holmes, A. J. Keeling, D. McLoyd, W. Stevens, and H. Arthur Nameters, Phys. Rev. Lett. 12, 120 (1997).

(Secretary).
Ziba Ward, Esq., Northeaden (gr. Mr. Weatherby) received a Silver-gil; Medal for a fine group of Cypripediums, a special feature being the alono forms, of which fifty plants were shown of Cyp, insigne Sanderas.

W. R. Lee, Esq. Heywood (gr. Mr. Woodhouse), was awarded a Silver-gil: Medal for a good group of Dendrobium Phalamopsis,

Cattleyas, and Cypripediums.

O. O Wrigley, Esq., Bury (gr. Mr. Regers),
exhibited a very nice group which was
awarded a Special Vote of Thanks. One of
the most interesting plants in this exhibit was

four feet long earrying twenty-eight flowers.
J. McCartney, Esq., Bolton (gr. Mr. Holmes), was awarded a Silver Mcdal for a group containing many good Cattleyas, excel-

Col. J. Rutherford, M.P., Biackburn (gr. Mr. Lupton), received a Bronze Medal for a group consisting of varieties of Cattleya labata and its hybrids, and various Cypri-

Rev. J. Crombicholme, Clayton-le Moors (gr. Mr. Marshall), received a Bronze Medal for a good group of Cypropediums.

for a good group of Cypespedians.

R. le Doux, Esq., West Derby (gr. Mr. Fletcher), staged Catilova labiata alba var.

Richard le Deux.

Win, Thompson, Esq., Stene (gr. Mr. Stevens), exhibited a fine form of Outage glossum crispuri hololucum Walton Grange variety, and uveral excellent Controllings.

 J. Holden, Esq., Southport (gr. Mr. Johnson), exhibited a fine form of Cattleya Harcisoniana alba with two flower spikes, and

G. H. Peace, Esq., Monton Grange (gr. Mr.

Mace's showed a good plant of Oncidium ornithorynchum album with several good spikes.

J. H. Craven, Esq., Keighley (gr. Mr. Corney), staged fine examples of several

excellent Cypripediums.

Messes, J. Cypher and Sons, Cheltenham,
were awarded a Silver Medal for a mod

group of various Orchids.

Messrs, A. J. Keeling and Sons, Bradford,

Messrs, A. J. Keeling and Sons, Bradford showed Cypripedium Mellone (Hitchense » insigne), and others.

Messrs Charlesworth and Co., Haywards Heath, showed several good Cattleya hybrids, Messes, Suart Low and Co., Bust Hill Park, staged four fine plants of Cattleya Fabia.

Messis, Hassall and Co., Southgat exhibited some interesting Cattleya hybrid

#### AWARD

### PRESI-LIASS CERTIFICATES.

Cattleys labiata var. Richard le Doux, from R. le Doux, Esq.; Cattleya labiata var. W. R. Lee, from W. R. Lee, Esq.; Oncidium arnithorynchum album, from G. H. Peane,

#### AWARDS OF MERIT.

Cattleys, labiata var. Helène, and Lælia Pella (purpurata » majalis), both from W. R. Lee, Esq.

Cattleya Armstrongiae Ward's var.; C. Armstrongiae var. Mrs. Ward; C. Miss Williams; Cypripedium Perfection Ward's var.; C. Actreus Ward's var.; all from Z. A

Ward, Esq.
Cattleys Fabia var. Prince John from

J. McCartney, Esq. Cypripedium Pyrrha Thompson's var.; C. Grittleton (Stevensii × Currisii); C. hybrid Spiterianum × Thompsonii); Orlanteglessum erisoum holobicum Walton Greuge vor.;

all from W. Thompson, Esq.



MANILLARIA PICIA.—A grand speciance of the collection of Col. Stephenson R. Clarke, C.B., Borde Hill, Cackfield. The plant is under the care of Mr. E. Johnson, who inferms us that it now outsists of over 400 balbs and has recently produced more than 250 flowers.

0 0 0

OBCRID SALE,—At a recent sale of duplicates from the "Oakwood" o'. collection, Odentical Bradshowier Costson's var, three balbs, realzed 5 gainess; Odottoglossan criscona. Luciani, four bello, mode 13 gainess; Odotto, criscona Locand Perfect, three bulls, went for 33 gainess; and Odotto, crisquar Harold, two bullse and a strong growth, found a purchaser at 40 gainess.

0. 13

CHLIGOTHE BARBATA—A correspondent has had considerable trouble in heing unable to produce flowers on this useful cachbonic species. The plants grow well, but every year, notwithstanding all care, some kind of black liquid forms in the heart of the sew growths and rosts the spike. Will successful growers, lividly better the same they along for this plant?

\$2 52 5V

ORCHID V. CAMERA.—A Lendon Evening Paper contained the following account of a

plant which seems to answer to the name of Bulboohyllum berbigerum : "The trembling Orchid exhibited at the Temple Show has caused some amusement by its eccentric behaviour towards a Press photographer. For an hour and a half it defied all his efforts to take its picture. Every time the operator fixed his camera and posed his subject this plant with nerves began to quiver violently. man brought to a state bordering on desa hand camera. Its tremors, however, only increased. Finally it was carried to the Temple conservatory, where it was surrounded by old friends, and its nerves thus being quietened the photographer was rewarded for his patience."

8 8

Oncome Flowurgs, DOURLE WARKINGS-Many of our ordinary placts one wife recalled deable flowers to a prelabel condition of the stants: a not uncontron controlled with the control of the stants and the stants and the whole the stants are stants and the stants are stants what are, also generally surse from pertallisetion of the stants, or flowersh the makes these deable flowers the more interest to the stants and the stants are stants and the condition, of some of all of those stants are whenly apprecised, so that the morphological whenly apprecised, so that the morphological theory, becomes already resident A. good example of the above has occurred with Mr. A. W., Jensen, Landfield, Haywards Heath, who has recently flowered for the second time a plant of Odontoglessum crispum, having flowers possessing twelve to fifteen sepals and petals.



Rhunchostulis retusa alba.

RIVNCHOSTYLIS BETUSA, Rluma. This clegant species has received many names; Lindley called it Sacrodivian guttauron under which it is, perlops, better known in gardens. It is widely distributed from Irdia to Java bat many local varieties have been too often treated and named as species. The flowers are usually white or joint, with numerous

wieder pumple markenings, the front Johe of the in being wholly pumple. Our illustration is of a pure white sarriety which was sent, about reche meants ago, to the well-known collection of Gust; II. Müller-Alcken, Eeq., The Hagan, Holand, where it has recently produced two fine pendiduos returns, only one of the control of the pendiduos returns, only one of which had been the fine the control of the might and did not show the slightest sign of fading. 6 in 6

(805-The following note, which is taken be uninteresting. "Mr. Robert Warner, in from his gardens at Broomfield to the International Hesticultural Exhibition at St. Petersburgh. These plants were caresteamer across the Channel, eight days being occupied in the transport. When unpacked and staged they were in excellent condition, having suffered during the journey no more than they would have done in the houses at home. That these plants should travel to St. Petersburgh in such excellent condition is undoubtedly the greatest feat in connection with horticultural exhibitions that has stated that they were all large plants amorast them Phalapoosis Schilleriana, with with about half the number; Vandas, with numerous spikes; Trichopilia crisps, with a hundred open flowers; Cattleyas, Dendrobiums, Odontoglessums, Cypripediums, Atrides, and several other genera, the whole being profusely bloomed. A remarkable most delicate flowers was given in the case of the plant of Odontoglossum crispum exhibited in this collection, which, after standing at the St. Petersburgh Exhibition for a fortnight, was again packed up and exhibited three weeks later at the Royal Horticultural Society's Gardens at Kensington, with the loss of only one or two flowers."

LEAR CHROMADIA (I RICHOSMA SIGMYS)—The above protograpa of this interesting Orched, known to many as Frichosma swars, mas been instally sent by Sir John ranwards-Moss, Bartt, Roby Hala, I orquay, in whose collection this grand specimen has posluoed many fine spaces of bloom, some many fine spaces of bloom, some maning as many us six flowers.

This species was mist intermediate by Limbley, who described in in the Batancial Register of 1841 under the name Cyclogyne concurran, with the semark that it rame from the Chierce clarific of the Khosca nills of India, where it was found by Giosun, when in that country collecting for the Duke of Dexonstruction.

The following year, 1842, he published a figure or it in the same

work, and remarked; "When this point was sent to me from Chatsworth I be hashly referred it to the genus Coologyne, mided by a certain similarity of appearance and structure. It is so very different in several circums ances, find I feel obliged to recognise in it a genus stdisted from any betterto described." He gave it the name Trechosana savis, the Sweet-secretic Hair Orchiis

Gibson found it growing upon trees in densely-shaded woods near the summit of the bills. The strong perfune, somewhat resembling Mein-grows, is highly externed by the wood-cutting natives, who are found if adorning their hair with its blessens, and it was the custom that give Gibson the elne to its discovery.

Lindley, however, in 1853, finally removed this species to Eria, of which genus he formed for it the section Trichosma, and recorded it in the Journal of the Linnean Society, III., 52, as Eria suavis. Griffeth has given it the name Bria evilutions la.

King and Pantling, in Orchids of the Sikkim-Himaloya, state "There is, therefore, good authority in favour of treating this plant as an Eria rather than as the solitary member of a distinct genus. When Lindley



Gria coronaria (1 richisma ituati

changed the generic name from Coclogone to Trichosona, he ought to have kept up the specific name coronaria. In consequence of the not having done so, the artifucishin of the species as an Eria falls to Recikenhach filini." See Cardanri's Christicki, 1876, 1, 234. The plant requires to be kept most during

The plant requires to be kept most during the whole of the year, but a high temperature is not recommended, excellent cultural results having been obtained when it has been grown in the cool-house.

### PELORIA IN ORCHIDS.

now applied by loaturists to all flowers which pass from irregularity to regularity. The lip of an Orbidi is really a petal which has become irregular in form, and when, as secuetimes happens, this re-assumes the shape of the petals the flower becomes regular; it is very possible that this represents an ancestral condition of the flower.

In other instances the two petals have assumed the form of the lip, making three lips in all, whence Reichenbach's term "tribabellia", In such cases when the flower becomes regular by the increase of the irregular portions the term irregular peloria is used. It may be regarded as a torm of increased development, a good example being Dendrobium nobile Cooksoniamum, in which the petals have purise blockes similar to that on the lin.

instances are universely in the during spins assuming the form; and marking of the latellium. In Dendrobium Wartharum Fowirmann the lateral sepals have orange coloured dises with dark-graphe blottesse, time stocking lightless, as the lakellium and the two petals constitute the inner whorl, and the two petals constitute the inner whorl, and the trive sepals the outer whorl, of the periantity, examples where reproductions of the light perianetic appear on the sepals are termed

In the collection of Sir Jeremiah Colman, Bart., Gatton Park, Reigate, are two varieties of Cattleya labiata which produce regularly each year flowers differing from the normal type. Mr. I. Collier kindly sends specimens of Cattleya labiata monstrosa, exhibits evidence of ialse peloria, the two lateral senals being streaked with vellow, and somewhat connivent, thus attempting the fermation of another lip. The other form, known as Cattsexuls still further advanced in the process of lio formation, and, what is still more interesting, the dorsal sepal has entirely assumed the shape and form of a petal. Regularity, therefore, has been partially obtained by the segments of the outer whorl imitating those of the inner whorl. Both plants are good growers and do not exhibit any deviation from the usual type.

# SIR JOSEPH HOOKER. The death of Sir Joseph Hooker will be

mourned throughout the whole world of science, for not only was he the greatest of British botanists, but lie was one of the great outstanding men of his age.

Born at Halesworth, Suffolk, June 30th, 1817, he obtained his M.D. degree at Glasgow in 1839, and the same year was appointed sangeon and naturalist to the estateon expension led by Sir James Ross in the Ereors. Darwin predicted for Hooker a great career, and subsequent results proved this to be correct.

In 1847 he went out to the district of the Sikaim and Nepaul Himalayas, where he obtained much information on the geographical distribution of plants. Humboldt engracterised his work as "a perfect treasure of important observations."

He undertook such elalorate travels in Syria and Palestine, Morocco, and North America, as to cause Professor Ass. Gray to say of him: "No hotanist of the present century, perhaps of any time, has seen more of the earth's vegetation under natural conditions."

In was Booker and Lydd who advised Darvin sheet he channel where the spallish a perlamenty metric or im "Origen of Species". This was soon adversards communicated to the "Origen of Species" which most pleased Darvin was that viette to by Hooker in the pages of the Gardont's Chemnike. At the pages of the Gardont's Chemnike and the pages of the Gardont's Chemnike and the pages of the Gardont's Chemnike. At the pages of the Gardont's Chemnike and the pages of the Gardont's Chemnike and the communication of the Darvin-Wallace joint pages of pages of joint wignors speech receible upon a material speech of joint wignors speech receibles the great creation were the great of joint wignors speech receibles and the great creation were described to the pages of joint wignors speech receibles and the great creation were described to the pages of joint wignors speech receibles and the great creation were described to the pages of joint wignors and pages of joint wignors are pages of joint wignors and pages of joint wignors are pages of joint wignors and pages of joint wignors are pages of joint wignors and pages of joint wignors are pages of joint wignors and pages of joint wignors are pages of joint wignors.

Hooker succeeded his father as Director of Kew in 1865, and here his wast knowledge enabled him to still further increase the great reputation which he had already made. Of the numerous honours which Hooker received mention must be made of his attainment in 1873 to the highest position upon to a British man of science—the presidency of the Royal Society.

For a full account of his life and work a very complete and excellent account may be found in the Gardener's Chronicle of Dec. (4th and following issues.

In 1909 Sir Joseph Hooker hostoured the Editor of the Orchirl World by nominating him for the Fellowship of the Linnean Society.

## DENDROBIUM PIERARDI.

THIS showy Dendrobium is a native of Sikkim, where it is found in tropical

Bengal, and Tenasserim and India Dr. Royin honour of M. troduced it into nine of 1824, t. 2184, it is debranch of a tree. to it by a string through a small vessel above : that, so treated. the length of six feet, covered with leaves decay, at stated by Dr.

Dendrobium Pierardi, a soonderful specimen.

Phitograph by J. Gregory.

The prevailing colour of the flower is a beautiful rose or pule purple, and the texture is translucent, the lip being pale-yellow with radiating lines of purple at the base.

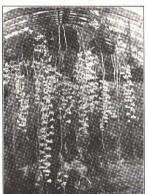
as native country the slexder, pend-

stems are two to four feet long, but under cultivation stems considerably longer than these have been produced. The first illus-

tration is of a grand specimen flowering in the collection of Frank Lloyd Frank Lloyd Hongs, Cowdon, where it has been so ascecasfully grown by Mr. M. E. Mills. In this plant the growths four feet long, but particularly well covered with flowers, making, probably, one of the finest specific properties of the finest specific properties of the decorated with the company of the decorate of the company of the decorate of the company of the decorate of the company of the company of the control of the company of the collection in the control of t

illustration depicts three wonderful plants grown more than twenty years ago by Mr. J. Gregory, at Birdhurst, Crowdon. The

in length from eight to twelve feet, and although a number of buds dropped off owing to a dense fog, which, however, did not affect the open flowers, the plants presented a most beautiful sight for several weeks. This species varies but slightly. In the variety latifolium the stems are stouter and darker in colour, and the flowers are slightly larger than in the type. Another variety, which has smaller flowers, was described by grown in a suspended basket with a compost of Osmunda fibre, or fibrous peat and Sphagnum moss in equal parts. During the period of growth, this Dendrobium enjoys very strong heat and an abundance of moisture



Dendrobium Pierardi, as grown by Mr. J. Gregory.

Robert Brown as a species under the name D. cucullatum (Bot. Reg. t. 548), but this Sir Joseph Hooker considers to be merely a variety of D. Pierardi; it is found chiefly in the western coast of Southern India.

From its pendulous nature the plant is best

both to the roots and in the atmosphere. When the plant has completed its growth, it should be removed to a cocler house where it can be hung close to the glass and obtain full exposure to the sun, and during the day-time have a free circulation of air to ricen its

bulbs. It is quite natural for many of the perature should be gradually lowered, a good that the flower buds are beginning to show. more morsture at the roots and a higher temperature may be allowed, and the plants may, with advantage, be replaced in their

### SOME IDEAS ON ORCHID HYBRIDISATION. By J. M. BLACK.

(Continued from Vel. 1., page 278.)

"THE YELLOW" IN CATTLEYAS AND LELIAS.-The "vellow" and albinism in cannot just remember an instance among Cattleyas or Leelias where the two are entirely dissociated. In the rare L pumila albs the yellow has puled off almost into a densities are present in the theoats of the various albinos of the labiata section of variety from another, as no two are exactly the same in this perpect, the shade and area covered never exactly corresponding. The Pereivaliana alia that I know. There can be although were whites are clearer than others, almost detect a cream tint, and "creamywhite" is not an unusual expression when describing an albino. It will also be observed creamy in tint, but clear up to pure white as the flowers ripen and become set. The seat of the yellow in albino Cattleyas and Ladias is invariably in the labellum, but normally white ground Odentorlossams, like crispum and Pescatorei, have in the albino forms occasionally a few vellow scots on the other but these spots are erratic and only come out strongly when the plants are well grown.

in the albino forms of all Cattleyas and Lælias, exists in all the coloured forms as well, and in the same varying degree as regards density and distribution, and on the same narrowly defined area of the throat and front lobe of the labellum. This one quality of yellow colour, then, is common to coloured forms and albinos alice. In Cattleya Mossian and C. Percivaliana there is in the coloured forms usually more yellow than in C. Gasyellow than the two latter, which is but consistency. In whatever light we regard the as a fixture which no juggling with hybrid-

It might be somewhat of a wild socculation to suspend that probably all Cattleyas and Laclius were vellow once, and the albino form is the nearest approach to a sport back to the primeval colour that they are now able to effect at the distance. That is a proposition that I submit as an explanation of the recurring apprarance of tisese albinos and albinus appear all over these two generathe way to our producing the much sought But accepting my rather far-fetched suppothe purple pigment, we must recognise the if possible, into the generation of yellow Cattleyas that we propose producing-

I have pointed out in a previous article how careful one must be when crossing for albinos

-how if the least particle of the dominant rose or purple pigment is present in either would derive a lesson from this well ascertained fact as a guidance in our present endeavour. Just as we rightly regard the pure white and yellow flower as an albino, so we must regard the pure yellow lower as an albino, and I shall henceforth call it a vellow-albino. I would also surgrest to those whose duty it is to look after the nomenclature of Orchids, that they insist on the words alba and albam being given to those varieties. and vellow in all segments and not to varieties that have purple lins, for these latter have no claim to be so named. The careless use of the word alba is misleading and mischievous. until a strict rule is passed and enforced. I would also make the same distinction between the vellow-albino and the vellow Cattleva or Lælio-Cattleva having a coloured lip. Now to produce this vellow-albino by hybridisation, my theory is that we must exercise the same care and discretion in selecting parents as for an albino, our only concern being that there are very few yellowalbino species in either the Cattleya or Ladia genus to select from, and these few are sailly wanting in shape or other qualities that we bloom. Let us first examine our material

There is no dearth among Cattleyas of species containing some vellow on other parts of the perianth besides the labellum, but as these usually contain a mingling of rose as well, besides purale on the labellum, they will ac uscless for producing a pure vellow-albino breed of hyorids. I shall discuss these various species in a future article, and shall no doubt find some of them useful for the production of the Cattleya with vellow sepals and petals and coloured lip, but which frankly has no pretensions to being a yellow-albino. In the Cattleya genus there is only one Cattleva that I would venture to call a pure yellow-albino, and that is Cattleya citrina. This is no sport from a coloured form, but is

typically and fixedly pure. Cattleya citrina has been sadly projected by the hybridist but it is by no means negligible. It is a very pretty object in itself, dainty and sweetand flowering, and the great dissimilarity between it and the other members of the genus, have no doubt led to its being left out of the hybridist's reckoning. We can only guess at its potentialities, as with the exception of Brasso-Cattleya H. G. Alexander (C. citrina × Brassavela Digbyana) the few occasions on which it has been used in hybridisation it has been misused. B.-C. H. G. Alexander was sufficiently meritorious to receive an A.M. Irom the committee of the R.H.S., when exhibited on March 5th, 1907, and the Orchid Review described it as follows: "The plant bears erect, somewhat compressed pseudobulbs and dark green fleshy leaves, and is thus like the Brassavola in liabit; but the flower is more like the Cattleya parent, being somewhat pendulous and on a rather long pedicel, while the segments are somewhat connivent, fleshy and light yellow in colour. The lip is entire, but somewhat fringed at the margin, and primrose yellow in front, passing into greenish towards the base. It is a very distinct and remarkable species." This was thus an entirely satisoff the C. citrina's habit of growing and flowering head downwards.

It Diglyman is not by any memon an alliand, being marrially sufficient with reso, capitally on the externer surface of the speak, and the subtice generally succeeds in operating in its hybrid any bollaunce there may be in any active of Cattlyin but it is matter with a Parvariety of Cattlyin that it is matter with a Parvariety of Cattlyin that it is matter with a tar-pollom complete annihilation who helded with the plant. One of the cleanest yellows among Leels canadowns helpful in Parison Leels [226] canadowns helpful in Parison Leels [226] canadowns helpful in Parison Leels [226] and an annihilation of the properties of the bearing, and I am going these two illustrations to show that a whate and yellow in tensor to show that a whate and yellow in hybridisation produce yellow, and have selected two B. Digbyana hybrids for this purpose, as I can find no record of a pure albino having been used with a yellow albino, the whitish B. Digbyana being the acarest approach to this that I can find.

There are among Latian more self yeldows has among Cativas, but as only the best for our purpose need interest us at present, I should select. Lectures, as it has the trithes good shape, but neither love thrus, harpen popular, formalisms, nor manaphyllis, framberium, nor manaphyllis, framberium, nor manaphyllis, framberium, nor manaphyllis, framberium, and mone to full so best it will not when mirrid and mone to full so best it will not when mirrid before the first three self-dense continues to the self-dense three three self-dense can it, and the level yields that name the formal for a purent have maranally been good, and it is too cases, not williamsing that coloured winters were not so it, it they were self-visites a marky will have the self-dense formalisms and the self-dense formalisms. Let General C. L. General

Instances of this kind would seem to indicate that the way to produce yellow hybrids would be to mate coloured species (und not their allam forms) with the yellow species, and no doubt many good yellows have been no medicated as prisonary hybrids; but it would be quite impossible to continue the process to the near generation in pursuit of aire and shape: their inherent weaknesswithout introducing robour true to hisfilliam, and, with the exception of cases where G. Dowlina would be need as the next presen,

The condusions that I have been endeasoring to come to are, briefly, that with Cattleya cirrino, a yellow-albino, with Lesia Comania, a yellow-albino, and with the albinosof the labriat group of Cattleya, it ought to be possible to boild up a self-yellow Cattleya, of perfect shape. This would not be the work of the first cross, but secondaries and tettiages should were not been

We have plenty of instances our record where species with narrow segments have become incorporated into perfectly shaped hybrids while transmitting at the same time a full measure of their own particular and desirable characteristics, as solitoseads, for example, in Casilia Cattlage Firmusia, a hybrid composed of L. riwalkerius, C. Woosie and C. Doosies, and in Brassa-Cattlage Cliffornia, and in Brassa-Cattlage Cliffornia, composed of Brassavoita Diglorous, Casilia Ca

As the abinos of the blaint section have the largest and best, forms, when good, the hybrids will have to rely upon them for rise and shape, but my allien that rankes for this cause for the control of the control of

But will the white not anowshi the yellows is a purey that suggests rested. It do not think see, and there is nothing to point in that direction, but unsee to testily the revene. The yellow in L. Cowanii and C. cirinis in very different to the pale and under clarkeside yellow in C. Dowsina, which to often losssfull when crossed with a white versity of another Catallys, the white exercise to play a desponsible again in the hybrid pale. In the contraction of the pale of the pale to my force article on the yellow Catallys, who can wint observable and the pale of the pale of the pale with observable pales.

If we in our endeavours to produce a perfect alley-flow. Cattley, conflice our selection of parents to the alliano varieties of coloured species and the yellow-alliano species, that I a have named, of one thing I am convinced, and that is that our hiphright will never develoany other colour than yellow; and nan in whatever direction the hybrid new it can whatever direction the hybrid new; it can never be other than yellow or whate, and both and the selection of the produce of the produce of Levin correct and their correction unserging.



I T has been jokingly said that to have a large and important collection of Orchids one most also own the Bank of England. However, although only separated by

about four miles, "Rosslyn," for many years the residence of H. T. Pitt, Lesq, possesses a collection of Orchids as celebrated to Orchidists as the Bank is famous to Lumbon.

tion of Mr. Pitt's name with that of Orchids will be perpetually executibered, for, although still an ardent anualeur of this fascinating pursuit, it was during the period when blotched varieties of Odonto-glossers crispum were rising in

popularity a nut value that he was the centre figure of attraction. Not only were his plants continually receiving the highest possible awards and being illustrated in the leading horticultural publications, har his very leven appreciation of, and determined with to possess the very finest varieties gave such complete confidence to others that for many years almost all interest in Orchods was concentrated on the rare varieties of Odontoglosum crispum. It is still fresh

in the memory of many that the record price, viz. \$2,4500 for V. \$

Orchid which can be selected for its worldwide reputation surely it must be Odontoglessum

aners. Gold Medels and other awards have unanimosally been granted to it, and on March 22ml, type6, at a sale of duplicases from this collection, the record price of 1,150 guiness was paid for a plant, consisting of three bulls, of this wonderful variety. It is

fashionable resort the only two items of important news to be announced were the winner of the English Derby and the record

At the same sale one bulb and a growth of

various forms many kinds of

Odontoglossum crispan Pittianum with O. c. Pittie, O. c. Lindenci with O. c. Pittiw, O. c. F. K. Sander with O. Edwardii, and O. Rossii with O. Rolfess; a very interesting young plant is O. cordatum × O. c. Pittianum.

The intermediate Cypripedium house is full of choice varieties of these slipper-like flowers. Mention must be made of the pretty Cvp. Thalia Mrs. F. Wellesley, the largethe elegant C. Spicerianum, which is so useful for producing flowers in mid-winter, and a Huttonii grows well in this house, and the same may be said of many of the Bulbophyllums and Cirrhopetalums, which genera are well represented. Several good plants of Chondrorhyncha Chestertonii are nearly

In the Vanda house may be seen many Augrariums and Vandas, all in excellent health; it is regrettable that these interesting

neach as they fashionable.

enetty Southoplants of the sctums, and other butanical one to spend time in studying their various forms tion. On the



Odontoglossum crispum Pittianum.

this lean to house are about 1,500 Cattleya and Leclio-Cattleya seedlings, although, as yet, about large bulbs during the last growing season. A good selection of the various species of Phalastopsis appreciate the atmosphere of this house.

The gool intermediate house contains a large assortment of the various Lycastes, Maxillarias, and Epidendrums. The elegant Houlletia Brecklehnretiana, Nanodes Matthewsii, and a rare hybrid Skinneri album and O. bictonense album, bota parents being also represented by large plants. The Cymbidinus include Lowianum Pitt's variety and Loworinum the latter now uroducino three strong flowerspiles. Miltonis vexillaria grows here almost entirely without spotting of the leaves; the varieties include many beautiful forms, of which mention must be made oi "Queen Alexandra."

In the Mexican-house are grown the various Angulous, such as Cliftonii, Rucleri, and Clowesis, and the many select varieties of Locka anceps now making a fine display with their long, graceful flower-spikes.



Odontoglossum crispum Pittie



Odontoglossum circhosum Piii's sor.

One specious house is entirely devoted to selected varieties of Odontoglosum erispum and Oneidium species, the latter including macrattium, serratum, and insculptum.

house is entirely filled with exceedingly chance varieties of Odomoglossum crispum. To cartino the names of Pittlarum, F. K. Sander, Astrworthinarum, Pessimmon, and Magnum Botem is to recall plants which have caused, on their first appearance, intense excitoment among other Orchid amsterns.

The Demirohium house is just commencing its annual display of bloom; there is no other Orched so useful at this time of the year. Another Cypripedium house is mainly devoted to specimen plants of this ever popular genus. Among the many hybrids of special merit are excellent varieties of Oliva, Felicity, Wortonia, and William Lloyd. The albinos are well espresented, many being trees traceters (C. C.).

large specieseus. O is the back staging of this house are several are boarined. Orehids, Angeceum pertusous, now producing eight spikes of bloem, Bulbophyllum Ericsonia, a large specimen with unwards of thirty haibs, and one of the most wonderful and cerious of all species, and circum of all species, and conputer of the most conference of the produced perturbation of the produced perturbation of the produced perturbation of the produced of the lection of other Orchids. In a house, started

In a house, stated to have been built seventy-eight years ago, are many more excellent Cypripedians, a large number of which are still in flower.

lieuse, with a centre staging, certains several theoreand Cattleyas and Lazino-Cattleyas and I and in excellent health. Only those who have kept the records of the many different roosse know to what extent hybridisation has been carried on among them. Of the immense number of hybrids which this lieuse covering assumed to the control of the control o

house contains stention must be made of Cattleya Iris "His Majecty," the finest variety yet seen, Cattleya Hardyana "Countess of Derby," a well-known rure variety, Cattleya Hardyana Massaiana, and Lacilo-Cattleya Hardyan Massaiana, and Lacilo-Cattleya Hector (Martinettii x aurca).

Of the finest species notable examples are Cattleya chocoensis aftia, and two superh varieties of Cattleya Warzecwiezi, known respectively as "Rosalyn" and "Wigan's." A smaller house contains about 24xxx

scedlings, the majority being the result of crossing specially fine varieties of Cattleya Mantinii with the best turns of Cattleyas Iris

January with the best torms of Cattleyas Iris, aurea, Haroldiana, laminesa, and Lord Rothschild.

Such a large collection as this demands considerable spaces to do it justice, not these few notes will give some idea of its sace, the immense variation of the species and hybrids, which is centains, and last, but not least, of the enthus stastic admiration which her. Pitt has for so many years decored to these ever-beautiful and rare plants.

To Mr. F. W. Thurgood many words of praise are due for the very excellent condition of the whole of the plants, his skill in raising Orchids from seed, and the keen in the collection during the lass fourteen years.



NEW PLANTS.

L. PLIO-CATTLEYA I HURGOODIANA (L.-C. MARTINETTI & C. HARDYANA)—A somewar remarkable result, the scyals being much lighter in coloar than the petals. The yellow colour, derived from the C. unre in the latter parchtal hybrid, is still visible in

all parts of the sepals and petals, the latter barving considerably more of the rose flush ing than the former. The labellum, as may be expected from the parents used, is very nich; coloured with crimson-purple whele, extented over the sale follows to the base of the column; the throat is veined with golds agrower to H. T. Pitt, Eug., Stanford Hill, N. CATTENN, GERMERO PETE C. MOSCILLE CATTENN, GERMERO PETE C. MOSCILLE

s. C. Perr. 2).—The latter paecut is a hybrid between C. Schillerian and C. Harrischian and C. Lander and C. Lander and L. Lander and L. C. Schillerians being noticed in the three deals of C. Schillerians being noticed in the three deals of C. Schillerians being noticed in the three deals of C. Schillerians being noticed in the three deals of the control of the control

CATTLEYA ACIS (MARONII × AUREA).—
A great improvement on Cattleya Maronii,
a hybrid between C. velutina and C. aurea,
the additional influence of the latter species
thas much increased the size and form of the
flower. Raised by Misses. Armstroug and

Brown, Tunbridge Wells

CVPRETHING CLUS (BOXALLE & FAIR-BLAKOS2)—The his, another of the many Fairricanum laybrids which have recently been produced, the evidence of Boxalli can be seen in the dark brownish-purple median streak of colour in the darist layse, while the drouping nature of the petals is divised from Fairricanum. In other respects this hybrid is internactiate in form and colour between both parents. It resemble is close relation Cyp. Cypl. Spender Clay (villoum × Fairricanum). Raisold by Meera Armstong and

SOPIRO-CATTLEVA LOTTE MÜLLER (C. PERTERSII × S-C. NYDIA), from Messes. Charlesworth and Co., Haywards Heath A very remarkable and elegant hybrid with broad sepals and petals of a beautiful rich

rose-red. The lip is broad, crisped at the margin, and of a ruby-crimson colour with gold ceining in the throat. Received a Firstclass Certificate when exhibited at the Royal Harticalural Society, December 5th, 1911.

Leelio-Cattleya Nella (Domaiana Langlerensis y Lerlata), from Messex Verth and Sons, Cliebea—A very beautiol hybrid of a bright, rich vroy-purple colour. The petals are very broad, and the darker coloured lip is also well formed. Received a First-class Certificate at the Royal Horicultural Society, December 10th, 1011.

Leelo-Cattleva Flower (Dulaya & C. G. Robertson)—The flower of this new laybed much resembles a good variety of Cattleya Trains. The petals are very broad, of a delicate shade of mawe, and with a trew purple markings at the tips; the tip is rosypergle with a narrow white margin. Exhibited by Mr. Sidney Flory at the Royal Horticultural Society, December 19th, 19th.

Activities of the property of

CATTLEYA LABRATA—The illustration on next page depicts a wonderful specimen of this autumn flowering species in the establishment of Mr. W. A. Manda, South Orange, N.J., U.S.A. The mass was imported two years ago, and has recently produced 1; 0 flowers, the majority of them four and flow on a long stout stem. The special of the flowers is about six from the special of the flowers is about six feet.



lega lobiaia. A wonderful specimen.

# AN ORCHID COLLECTOR'S TRAVELS THROUGH BRITISH GUIANA TO BRAZII.

By ED. KROMER.

(Continued from page 57.)

OW we continue our journey. On the third day of our trip we reached the foot of the second of the 33 Falls or rapids which we had to pass to reach our destination by water. It was the famous, or rather infimous, Capuri Fall, not only the widest and highest, but also the most puzzling and dangerous of all the Falls on the Massaruni river, as some menths cost on our homeward journey. This obstacle, whenever met with, makes it necessary to cargo a considerable distance overland or buthe water again on the other side of the Fall. Very often the traveller is numing great risk. cither going up or commy down, of losing his boot in these rapids, more so in both water and not unfrequently the loss of life besides has to be recorded. On some days during our five of these rapids in succession, not count no the smaller currents.

On the eighth day of our journey, while we were just engaged in preparing our mid-day was suddenly observed at a distance coming down the river, and on its approach I had the satisfaction of shaking hands with a Wr. Bartika Grove. He was returning from an unsuccessful prospecting trip to some creek higher up, where he had a claim, and, when hearing of my intention of coine to Roraina. he at once became so enthusiastic over it that he proposed to accompany me as soon as he had quickly settled his business in town. His offer I gladly accepted, and, the banks of a river further inland. He wave me much valuable information, which he gained when accompanying, some three years previously, an explorer by this same route to

After another week's monotonous paddling we came to the picturesque laucing place of a once important Indian village, called Camacussa. The village itself, like most Indian settlements, was lying some distance inland, hidden in the bush, and it owed its in no small measure to the enterprise of the Colony as a naturalise for the British Moreum, Here I hoped to be able to engage some Indians to come with us as carriers, but in this attempt, infortunately. I failed. I neticed only a small number of people, and they as strangers to the place; they gave me, however, this consolation, that I would probably meet with better luck at a place called Potaring, some distance higher up the river. Potarino, which indeed we reached three the thick forests just above the mouth of the Curalway, in the Massargui; it was only recently created by an American centleman. Mr. Barnard, one of the few successful golddiggers, as a piantation of cassava, yam, pumpkins, plantums, benanas, and other tropical produce for his placer a few miles higher up than this spot. Here at last I succeeded at once in engaging a few Indians. and acting upon a hint given by my interpreter. Peter, to wait another day or two longer, I decided to stop so long; indeed,

From Potaring we branched off up the Carabang even on the right side of the Massarum, and two days later arrived, with the Indians in their cames, at the landing stage below the Merchebh Full, which here made further navigation impossible. Here we unloaded the boat as the next stage of our journey was to be overland, and, after writing

some more Indians turned up, whom I had no

difficulty in engaging as well-no doubt the

sight of so many useful goods in the trunks

had a tempting effect on their minds.

the last letters, I sent the boat back the next day with instructions to the captain to call at this place again about the middle of Decemher with a still larger hoat to take us back again. During the next three days I occunied myself in petting the stock of provisions and words ready into small loads of an equal weight of about 70 lbs, to be carried on the backs of the Indians. At the same time I awaited patiently the arrival of more people, who, as Seyler informed me, were formerly living in great numbers along the Curubung. My patience, however, was badly rewarded as only a few more Indians turned up ready to go, and from them I learnt that many of their people had since died of measles, and of the arrival of the dreaded gold-diggers.

rocks, roots and wood of all sizes and shapes. On one occasion only, on the third day, where in the dense forest an accidental fire once caused a tiny clearing, were we able for the first time in three days to see the bright sun and the clear open sky. One cannot imagine any kind of marching more wearisome than this long slow progress, lasting for so many days in a stiffing heat, under a dense roof of foliage which does not admit the slightest bit of light. Besides, one's whole attention is always occupied and strained, for there is a covered with leaves, which make the unwary traveller fall heavily to the ground; there are overhead numberless bush 100cs-lianashanging down, coiled, looped or tangled,



Under these conditions I would not wait any longer, and on the 10th October I started with eighteen men, all of the Acawoi tribe, and all heavily looded, not, however, without leaving a dozen loads behind. We had to cross the Curubang Mountain, and within the first hour we came to the foot of an almost perpendicular cliff, some 500 feet high, the ascent of which to me was particularly trying, masmuch as from the last three weeks comfortable sitting in the boat my limbs became rather stiffened through want of exercise. For four days we had to tramp through the densest virgin forest in a continual semidarkness, over a disagreeable profusion of round the neck or knock his hat off and cause him to stop, much to his great discomfort. Moreover, one's sense of sight, sound and touch become nearly annihilated, and more than once I walked along with my eyes closed, half asleep, till a treacherous root or a stone wakened me out of my dream. It was therefore a pleasant feeling when, in the morning of the fourth day, we could hear the sound of rushing water at a distance, and about midday we came to the banks of the Membaru river, after having descended a similar cliff to the one we climbed on the other side of the mountain-

Here another obstacle presented itself: the

journey had to be done agoin by water for several days, and no toust—or, better called by their peoper mans, passelfains—ever to be out. These sociolates the following the second called Carmoll). They are to 2) feet wise to called Carmoll). They are to 2) feet wise, to 20 of \$100 galles-bettoment, and find leaks, only one-shird to held an under some overtices and the second to the second to the contraction of the second to the second to the converse had been as the second to the contracting the second by the collection of varieties and the second to the collection of the Camazing river in second of one code, dam, while a dozen men went back up in the least second to the least of the leaks which are the first of the least while a dozen men went back up in the least second to the second to the second to the second to the least while a dozen men went back up on the least second to the least while the leaks while the west by balance (or the least while a dozen men went backs (or the least while a dozen men went backs (or the least while a dozen men went backs).

During the absence of these men I occupied the time with Pctor, either in short becanical excursions along the river or with the remaining four men went out fishing or hunting, and thus providing our mess table with excellent game and fish. In the immediate vicinity of our camo I found a beautiful, white-flowered, terrestrial Aroid, which afterwards Seyler informed me was named Anthurium Osmersiamum, and also a quaint and interesting terrestrial Orchid. Governia deliciosa, whose small white flowers had a deliciously powerful scent; it grew in quantities in the dense shade of the forest, and I intended collecting some on our return journey; as it turned out, enfortunately, all the tubers perished afterwards on their voyage to Europe. On the branches of many of the smaller trees overhanging the river I noticed a quantity of Scuticaria Steelii. Sobralia sessilis. Houlletias, a kind of Corventhes, but not in bloom, and less botanical value. Not the least interesting feature to be studied here, and one which I also observed in my travels in other countries, was the complete absence of any of these lands of Orchids further inside the dark forest: while, for instance, a good many of these trees overhausing the banks of the river were literally covered with one or another of quite impossible to discover a single plant of any of them on trees standing, say, 100 yards away from the river. This for the Orchid grower is a hint so far, as it shows that these species vegetate with preference in a moist atmosphere, in clear light, and avoid the darkness and dry atmosphere.

On the fourth day of our waities, towards the report of several revolver shots, and at once concluded these signals were given by Mr. Seyler; indeed, half-an-hour afterwards he put in an appearance, bringing with him three get hold of at Camacussa. Later in the afteryour the other twelve men with the rest of the loads also turned up from the Carobung side, having made the journey there and back to make our happiness complete, towards evening our two messengers, who volunteered three cances and some more Indians, and the wekome news that another nine woodskins were awaiting us below a big Fall a short distance down the river. That whole night, in a bright, glorious moonshine, there was an uninterripted going and coming of the three crafts carrying all our baggage and at last ourselves to that Fall, and in the morning we were able to make a fresh start with a fleet of twelve woodskins and thirty-six men all teld.

We went down the Membaru to its mouth is the Massaruni, then up the latter for a distance of a comple of miles and entered the mouth of the Camarana river on the left of the Massaruni. Here at one place we met with another peculiar feature of travelling-We reached a point at which, under the direction of one of our new friends, who evidently acted as headman, we unloaded everything, carried loads and beats over a slightly elevated ground for some fifty yan's and entered the very same river again, having thus cut off one whole day's journey, as we the first Indian settlement, whose chief, a strongly-built elderly fellow, boasting of the name of Robert had sent all those men and

(To be continued.)

## CALENDAR OF OPERATIONS FOR JANUARY.

By J. T. BARKER, The West Hill, Hessle, East Yorks.

WE have now reached that season of the year when we may expect our plants to show signs of renewed activity, but during the present month the winter treatment must be continued, as there is much danger in unduly pushing our plants are constituted.

Temperatures. The atmospheric temperatures of the houses should be maintained, a nearly as circumstances will permit, at the

following figures:—
Cool house, day 50 deg. -55 deg., with sun 60 deg., might 50 deg.

Intermediate house, day on deg -63 deg, with sun co deg, night 57 deg - 60 deg.

65 deg., with sen 68 deg., night 58 deg. 60 deg.

East Indian house, day 65 deg. 70 deg, with sun 75 deg, night 65 deg.

The charges which occur so suddenly an the climate mole at almost impossible to maintain these exactly. It matters bitle how maintain these exactly. It matters bitle how maintain these exactly, it matters bitle how maintain these exactly and the control of the

houses, and the alasts should be afferded a supply of fresh air on all fravarrable occasions; a stageant atmosphere is injurious to the plants. With a little recolle it is assonishing what can be accomplished even in admitting air on unfavourable occasions. Droughts must be strictly avoided, as undoubtedly they are as injurious to plants as to ourselves. Atmospheric mosticure. The amount of mois-

ture in the air must be regulated according

to the amount of fire heat word, and other incremistances. All the paths and wells must be damped once or twice a day according to the ourside conditions. On a during, moist, mild day they will not require so much is on a clear begind thy. Much depresses on the proper balance of atmospheric necessaries being marketine, and atmospheric necessaries being marketine, and atmospheric necessaries being the marketine in an highing one of the more the Waterine must be done with caution, no

plant should be allowed to suffer from too lattle or too much water; the cultivary should be theroughly satisfied that has plant requires it before any is given. When a plant is dry and requires water, I believe in thoroughly mostsching the compost in which it is growing. To my mind the whole secret of plant culture depends on the giving and with-

Insect and other posts must be diligently searched for, as it this enson they are often very troublessuse, and if allowed to get a footing they are hard to eradicate. The bouse should be vapourised at intervals as a preventative against attacks of thing and other posts. Sings and cockraches do an increme amount of harm, devouring roots flower spikes, and, in fact, almost everything.

Change, Should the bouses not have had been used water denoted have attention at enear. In substitute stands have attention at enear. In substitute stands have attention at enear. In substitute stands are attention at the substitute stands and the substitute stands are substituted as the substitute s

Miltonia vexillaria, and its hybrids, in the

intermediate house will now be growing actively, and as soon as the costs can be seen pushing through the compost more water may be given, taking care that the carripost is dry before applying it; the water should ke control to the control to the

Odontoglossums. Many of these will be pushing their flower spikes, and these, as soon as they get long enough, should be tied to stakes, so that they get the benefit of all the light possible. Any plants of this groups which were missed at the autumn cetting may. if they require it, he done towards the end of the month. The compost I use, and which I find satisfactors, is equal parts of neat libre Cross which all the fine particles have been taken), polypodium fibre, osmunda fibre, and sphagnum moss, all mixed together, with a fair amount of drainage in the bottom of the pet. All newly potted plants should be placed by facinselves and kept on the dry side until the roots can be seen pushing through the compost. A few Odostoglossums are now in bloom, and with Masdevellia tovavensis M. Schröderiana, Sophronitis grandiflora, and a few Oncidiums enliven the house at this time of the year by making a nice display

Sophomics grandifiers. Should any of these require to poting a in best does after the flowering period, as new roots are then probing from the partially sood percubolles. Stallows pass are the best receptables, using a saze just large rounding to accommodate to plant and above about 4 inch 10 justice of composit to be placed about 10 work, the composit of the placed about 10 work, the composition of the placed about 10 work, the composition of the placed about 10 work, the control of the placed about 10 work and 10 work and 10 work and in the placed to the placed to light and sir; the rood losses will all them best source of the sir; the rood losses will all them best source and the placed about 10 work and 10 work 10 work

Cypripediums. The winter flowering section of this most useful geaus will now be making a great show, and in places where fogs are prevalent they are indispensable if a amply of flowers is equired during the wister mouths. I find they succeed best in the following mixture:—I'we parts best fibrous pect, one part played into flow, and one part fibrous loam, with a liberal mixture of sphapmum moss. Keep those newly patted on the dry safe; the others must have water as they required. The later varieties, and not C. the perfect of the property of the perfect of the should not be allowed to suffer from wast of water, or malignered flowers with the treath.

Cattless will mostly be at rest, and should be carefully watern! There will not be many in flower, but where any quantities of Cattleya hybrids and Latile-Cattleyas are grown there will always be some in thosu Cattleya Perciolism and C. Triome are should, but purhage up their flower speller, these should have safet wherever been been always to be a superior of the contraction of t

Lazia arcejes and its Graeticas are now in full flower, and, where grown in quantity, and well done, are a most desirable class of Orchial. A house of it with its allies L. Gealdiana and L. automnalis, with its variety alba, make a delightful picture, and the flowers come at a most acceptable sensou. The plants should be kept medirately cry, but in no case should they be allowed to suffic-

Coologyne cristata, and its varieties, pushing up their flower spikes are best accommodated at the cool end of the intermediate bouse.

Deuthokiums that are in their resting quarters should be looked over from time to time, only mongh water being given to prevent darivelling. How flowering seems should darivelling. How flowering seems should say to be the flowers at an early seaton, for they will come much finer if allowed to develop shouly and nationally. D. Phalaceoppia and its allies should have a good rest when being exmoved to mather heuses; as soon as moderate quantities.

Towards the end of the month many species of Acrides and allied genera may, if they require it, be repotted; I am not an

advocate of top-dressing-

Petting materials. A stock of all those things which are required to make the various composts should be obtained, so that when the busy season arrives there is no delay; the various materials, through being either to wet or to of try, are often in an unfit condition for use. A little torethought will save much vailable time.

General treatment. The best possible above Ca orgice for the present month is to book well after the temperatures and Emperier centifies, generally, avoid extremes of less and cool, set and drought, make to untempt to force greath, moistin the plants in a bealthy condition, admit all the light possible, and give air and moistine in accordance with the amount of fee heat necessary to maintain the requisite temperature with the content of the best necessary to maintain the requisite temperature.

## ROYAL HORTICULTURAL SOCIETY.

Decomier 5th.

MEMBLES of the Orchid Committee presents:
J. Gurney Fowler, Ess., fin the chair), Sir
Jeremish Colman, Bart, and Mesars, James
O'Brien (hon. sec), Harry J. Veiché, F. J.
Hanbury, R. G. Thwattee, W. Waters Hutler,
T. Armstrong, C. I. Curtis, W. Cobb, J.
Chafesworth, J. Cyphen, J. K. Shill, W. H.

Hatener, H. G. Alekander, W. P. Bound, A. Dye, W. H. White, J. Wilson Potter, W. Bolton, Gurney Wilson, J. S. Moss, and R. Broonsen-White.
J. Gorney Fowler, Esq., Gleiselands, South Woodford, was awarded a Silver Flora Meddle for an excellent group of Cypripediams, the

for an excellent group or Cypripations, to finest example being C. Lecanum "J. Gurney Fowler," The beautiful Odontoglossum Smithit was also shown in fine form.

Francis Wellesley, Esq. Westfield, Woking, exhibited Ladio-Cattleya Epicasta "The Premier," a good form with a violet-purple lip. Cattleya St. George, an affective hybrid, suggesting the parents aurea and Harrlyana, was also shown.

Lieut-Col, Sir George Holford, K.C.V.O. (gr. Mr. H. G. Alexander), staged Cypri pedium Nydia (Nione "Westunbirt var." × Charlesianum), with a rose-purple dorsal of excellent shape.

Sir Jeremiah Colman, Bart, V.M.H. Gatton Park, Reigate, exhibited the heautiful Coologyne Mooreana, Malura citrina, and a good variety of Cypripedium insigne.

F. Bostock, Esq., Springfield, Northampton, showed Cypripedium Actaus "Mrs. F. Bostock," a good variety with a broad, white dorsal having a green base spotted with purple; also C. Actirus springfieldenss, a strong grower with four flowers laving a green dorsal sepal with a white margin. Mrs. Norman Coolsson, Oakwood, Wytani

exhibited Cypripedium Levanum Gratrivies, Calanthe Chapmanii rosca, and Odontoglossum crispum Chapmaniae, a ricidy blotched variety.

E. H. Davidson, Esq., Twyford, exhibited Cartleya armainvillieriensis alba, a very pleasing hybrid between Mendelii and gigns.

C. J. Phillips, Esq., The Globe, Sevenoules, sent a good variety of Cymbidium elegans. R. Brooman-White, Esq., Arddarroch (gr.

Mr. J. Smith", exhibited some magnificent cut spikes of Odontoglossum crispum. Mesors, Charlesworth and Co., Haywards

Heath, were awarded a Silver Flora Medal for a group containing the ranginicout Sophiro-Cattleya Lette Miller, Odomfoglossum Goodsenii, which was awarded a F.C.C. Argust 17th, 1969, the pretty Sophiro Ladio-Cattleya Pandroa, and many other seasonable Orelinds Messars Armstrong and Brown, Orchidhurst.

Ansats Arnatong and How de Silver Flora Held for a well-arranged group in which some excellent Cypripedams were staged, several being new. Odontioda beechensis, several new Catleya hybrids, and other notable Orchids were also shown.

Messrs Jas. Veitch and Snn, Chelsen, received a Silver Flora Medal for a large group, in the centre of which was the extremely fine Odontoglossum Aurora (Rossii rubescens x Lambrauiana), a very richlycoloured flower resembling Odouto, Jeaneste. Several good Cypripediums and some attractive Cattleyas were also included.

Messirs, Jia. Cyphier and Sons, Cheltenhom, were awarded a Silver Flora Medal for a well-arranged group of Cypripediums, the most noticeable being Endshawenae, Gaston Bullel, and varieties of Thalia. Messirs, I. and A. A. McBean, Cooksbridge,

were awarded a Silver Flora Medal for a good group of excellent species and hybrids. Mention must be made of Cartleya Lucque, C. Fabia, the richly-coloured Sophro-Laclio-Cattleya Marathou, Lycaste Skinneri alba, and several good Coprincediums.

Messrs. Sander and Sons, St. Albans, received a Silver Flora Medal for some excel lent Orrhoks, many being very rare. The very beautiful Cattleya Dowinna Rosita, Stanhopen insignis, Cartheya Cooksoniae manidis and Odentioda Gratiseana were shown

m good form.

Messrs. Smart Low and Co., Bush Hill Park, Enfield, received a Silver Bankeisan Medal tor a good group of winter flowering Orchids. In it were large plants of Vandal corrulea, Sacciolabum giganteniu, the tare Honlettia Drocklehurstiana, and many Cypriuchiums.

Mesers. Mansell and Hatcher, Rawdon, Yorks, received a Bronze Bonksian Medal for a group of well-grown Cypripediams, the rare Dendrobium Phalkuopsis album with its uure-white llowers, and Calanthe vestita.

Mr. E. V. Low, Vale Bridge, Hayweards Heath, was awarted a Bronze Bunlesian Medal for a group of excellent rare and beautiful Cypripediums, Cyp Minos Yuangi with five flowers, C. Baron Schroder with nine flowers, and C. Gaston Beltel were specially good.

Mesurs, Hassall and Co, Southgate, exhibited several well-grown Orchids of special merit. Ladio-Cattleya Rubens, Cattleya Aliciae, and C. St. Gilles were much admired.

Miss Walters Anson, The Studio, Broadway, Streatham, exhibited many excellent examples of her skill in Orchid painting.

#### IWARDS.

FIRST-CLASS CERTIFICATE.

Sophro-Cattleya Lotte Miller (C. Pectersi × S.-C. Nydia), from Messrs Charlesworth and Co. See "New Plants."

### AWARDS OF MERIT.

(inagar-Harefield Hall × Hera Euryades), from Lieut-Co.l Sii George Holford, K.C.V.O., Westonbirt ggr. Mr. H. G. Alexander). A very fine hybrid of excellent form. The broad dorsal sepad is greenish-yellow spotted with dark purple, the aprex having a white margia. Petals and lip are yellow, tinged and marked with mobionity.

Trichopilia Gouldii (suavis × fragrans), from Mesers. Charlesworth and Co.—This pretty, fragrant hybrid has silver-white sepals and petals spotted with rose, the lip being similarly marked.

December 10th, 1911.

MEMERIES of the Orchiol Committee present;

J. Gurney Frowler, Esq. (in the chair), James
O'Brico (ison, sec.), and Messrs, Harry J.

Veitch, J. Charleswerth, T. Armstrong, E. J.

Harbary, W. H. Hatther, J. E. Shill, Gurney
Wibon, A. Dye, C. J. Lacas, W. Bolton, H.

G. Alexander, C. H. Curtis, and A. A.

Mellean

Only plants for Certificate were allowed at this meeting.

Sir Jeremiah Colman, Bartz, Gatton Park, Reigate, exhibited Cypripedium insigne Gatton Park variety, and Odontiola Diana (C. Noezliana × O umabile), a good shape flower of soft-red colour, the lip being slightly reflexed.

F. Wellesley, Esq., Westfield, Woking, showed Linho-Cattleya Rubers Westfield variety, a richly-coloured hybrid, and Brasso-Lielio-Cattleya Veitchii, a large flower which has previously received a First-class Certificate.

The Hon. Lady Neeld, Grittleton, Chippen ham. Wilts, showed Cattleya Venus, a large flower with a rather flat lip, and of excellent colouring.

Messrs, Charlesworth and Co., Haywards

Heath, exhibited Larlio-Cattleya Myrrina flavescens (L.-C. Gottelana x aurea rosita), a pleasing flower with ambery-cyllow sepals and petals, and a rosy-purple marked lip; also Odonticida Cooksenies venastum, of excellent colour, and Oncidium authoreme having two spikes with an aggregate of over rinery flowers.

Mr. E. V. Low, Vale Bridge, Haywards Hais, showed Cypripedium Samuel Gratris, wath a large, firead dorsal sepal; C. Napoleou, a good-shaped flower with a large white bettler to the dorsal; C. Peryl Westpoint var.; C. The Maharajah; and C. The Gaek-

war (Ceres × Lecanum).

Messrs, Veitch and Sons, Chelses, exhibited
Concinedium, Snowlen, a heartful albino

form, C. Clioni

(see "New Plants") and Cypripedium vil-(see "New Plants") and Cypripedium vil-

Messrs. Stuart Lew and Co., Bush Hill Park, Enfield, showed an almost pure-white

form of Vanda Amesiana.

Messrs. Sander and Sons, St. Albans, showed Cypripedium Tredus invinciole, a large flower resembling insigne Harefield Hall, and an unmanned Cypripedium of merit.

from their gardens at Wisley a variety Calanthe, which the Committee thought to Calanthe Sedenii.

#### AWARDS.

### FIRST-CLASS CERTIFICATE.

Laelio-Cattleya Nella, from Messrs, Veitch and Sons, Chelsea. See "New Plants." Cypripelium Royal Severeign (Hera × Urania), from Mesers, Sander and Sons, St. Albams, a beautiful result. The large white dorsal sepal is flushed with rose, and peetily marked with vectical lines of purple specs. The lip is large and of a bright cosybrown tint.

### AWARDS OF MERIT.

Cypripedium Lord Wohrer Westorbist variety, from Leur-Co. Sir George Holfords, K.C.V.O. (gr. Mr. II. G. Alexander). A very distinct and beautiful hybrid with a broad white dorsal sepal prettily spotted with persels, the base locing timeled with green. The ventral sepal is broad and somewhat similarly marked. The peths are yellow, almost covered with light brown, and of excellent feet.

Cypripedium insigne Gatton Park variety, from Sur Jeremih Column, Bart, Gatton Park, Reigate. A home-raised seedling between insigne montanum and insigne Harrfield Hall. The flower is large, the dorsal flat, spectted with purple, and with a broad white margin. Altogether a grand variety. Odomoglossum crispum Aleyene, from J. Gursey. Fowler, Eus. Glebelands. Scath.

this popular species. The petals are very bead, criped at the morgin, and with numerous purple spots, the sepals having larger spots. The plant carried a long spike with nazy flowers, and was greatly admired. Cypripedium Actures var. Durber, from Messrs. Charlesworth and Co., Huywards Heath. A large thick-set flower with missive segments. The green doesal spal in spected with howard many large through the property with the spectral with rows.

### MANCHESTER ORCHID SOCIETY.

November 3cth, 1911.

MEMBERS present:—Rev. J. Crombleholme (in the chair), R. Ashworth, W. R. Lee, C. Parker, H. Thorp, A. Warburton, Z. A. Ward, J. Cypher, J. Evans, W. Holmes, A. J. Keeling, D. McLood, and H. Arthur (Secretary).

W. R. Lee, Esq., was awarded a Silvergilt Medal for a good group, in which were some very fine Orlentoglossums, Cattleyas, and Convendings. R. Ashworth, Esq., received a Silver-gilt Medal for an effective display, which included many excellent Cattleyas, Vanda corrulea alba, and other good Orchids.

alba, and other good Orchids.

Z. A. Ward, Esq., staged a nice group, to which a Silver Medal was awarded.

Col. J. Rutherford, M.P., was awarded a Silver Medal for Odontoglossums in variety, several good Cypripediums, and Sophro-

J. McCartney, Esq., was awarded a Bronze Medal for a group of Cattleyas and Laclio-Cattleyas.

Rev. J. Crombleholme staged a group of Cyuripediums, for which a Bronze Medal was

A. Warburton, Esq., received a firefixe Modal for a group of Cypripediums, the insigne section being well represented G. H. Peace, Esq., staged a nice group of

G. H. Peace, Lsq., staged a nice group of Cypripediums, to which a Bronze Medal was awarded.

Win. Thompson, Esq. was uwarded a Bronze Medal for an interesting group,

albino Cattleyas and the grand Odontoglossum Bronze Dragon.

R. le Doux, Esq., staged some good Odontogloseoms and Cypripediams. H. J. Bromilow, Esq., exhibited Cypripe-

H. J. Bronnlow, Itsq., exhibited Cypripedium Leeanum var. Mona. I. Walmsley, Esq., staged Cypripedium

J. Walmsley, Esq., stagest Cypespenium Mrs. Alice Walmsley. H. Thorp, Esq., exhibited several Cypri-

pediums.

Messra Cypher and Sous were awarded a

Silver Medal for a good group.

Mesars, Stuart Low and Co. staged semod Cattlevas.

Messrs, A. J. Keeling and Sons received a Silver Medal for a group of excellent

Cypripediums.

Messrs. Sander and Sons staged Cypripe-

diums, etc.
Mr. D. McLood exhibited a number of
good Cypripediums and several seedlings.

good Cypepenims and several seconds: Mr. H. Arthur staged Cypripedium usigne Sandere and good forms of other well-known varieties.

#### AWARDS.

CERTIFICATES.

Odontoglossum crispum Briseis and Odonto, Thais, from W. R. Lee, Esq.

Cattleya Roehrsiana Ashworth's var. and C. Gildenii (Hardyana × Maggie Raphael), both from R. Ashworth, Esq.

Cypripedium Our King (insigne Harefield Hall × Niole), from W. Thompson, Esq. Odoutoglossum Bronze Dragon, from J. J.

Holden, E.sq., one of the most beautiful Odontoglossums; also Cattleya labiata albanescens.

## AWARDS OF MERIE.

tonia Leopoldii nohilior, and Cattleya kabiata Virgin Queen, all from W. R. Lee, Esq. Odontoglosunu crispum Rosemount, O. eximum Nubian, and Vanda cerulcu alba,

eximum Nubian, and Vanda crerulea atos, from R. Ashworth, Esq. Cypripedium Corneyanum var. Marie

Louise, C. Alcihiades Ward's var., and C. James Renwick insigne Harcfield Hall ×

Cypripedium Benar Law (J. Howes × Actieus), from Col. Rutherford, M.P.

Lzelio-Cattleya Captain Starkie (L.-C. Aphrodite × C. labiata), Irom J. McCartncy, Esq.

son, Esq.
Cattleya O'Brieniana alba, from J. J.

Odontoglossum Dora var. Mrs. H. B. Irving (Lambeauinnum × Pescatorei), Cattleya Hybla var. Mrs. Frank Hurndell, and Suphro-Lælio-Cattleya Miss. Edith d'Abrew (S-L. heatroneusis × C. Iris), from R. le Donx, Esq.

Cypripedium Leeanum var. Mona, from H. J. Bromilow, Esq. Cypripedium Mrs. Alice Walmsley, from

Jas. Walmsley, Esq. Cypripedium Hitchinsia giganteum and C. U. masmificum, from Messrs, A. J. Keeling and

Cypripedium Seymoure (Lecanum × Clinkaberryanum × Fairricanum), from Mr. D. M.-Leod



DONOTOGLOSSIAP PESCATOREI SIAVE—A very weed-scender draefy of this pretty coslhouse Orchid has recently flowered in the rediscion of J. B. H. Goodden, Esq. The Manor House, West Golers Veoral. It is rarly one comes across allower of this special with such a distinct adoor, and it will be interesting to note whether this peculiarity will continue in foture years.

ABSONAL, OBDOTTOGIOSTIVE—A regional case assumed to the fission of two flowers basecured on a plant of Obdottoglossus cruptum in the collection of Malcolas Codes, Evq., Tankscrijk, Kiagaton Hill. The specume has few spaje in the outer whole and three peths and two libellums in the inner short while the two colomon, which have prefet politic maners, are sumewhat observed. Defen maners, are sumewhat observed of of a side wing to the column has become petaloid. The stalk also shows civilence of the fusion of two courses.

0 0 0

ONCHID REGORDS—The Manchester Orchid Society gives notice that the owners of plants receiving First-class Certificates shall give a flower to be painted, or shall gives a flower to be painted, or shall gives the painted of said gives a flower to be painted, or shall gives to a painting of same to the Society for future reference. This is a step in the right direction, and it is to be looped that if the painting is not fortheouning the award shall be widtherwar. Perhaps in the near future the rule may be made to a painty to Awards of Mirri also.

Exhibitors are asked to note that no cut flowers and fronds of ferns will be allowed in the staging of competitive groups. All plants exhibited at the meetings of this Society are to be shown to the best advantage, and all paper is to be removed from the flowers.

0 0 0

ORCHID SMED.—A 1912 catalogue of garden seeds contains the following:—
"Orchidos greenhouse perennial, i. ft. in height, one permy per packet of 24 seeds. Remarks, many grand kinds." We hope some purchasers may be so fortunate as to find 26 seeds in their packets, for the additional one may be

0.0

Your Sitow, 1912. The fifty-fourth annual show will be held on June 19th, 20th, and 21st, in Bootham Park, York. Eight classes and nearly £100 in prices are specially reserved for Orchids. Entries should be sent in before the 12th June to Mr. Fred. Arey, Davyhall Chambers, Davygute, York.

10 10 10

DONGASTER SHOW, 1912. The Royal Agricultural Society of England will hald a Hotteuthural Eschibition at Doncaster on July 17th 6. In the schelded of Prices Class 2 is for a Callection of Orchrist arranged for effect on a stage or os sparse feet. The First Price, Gold Medal and 270: Second Price, 25; Third Price, 51. Entries, which close Friday, May 1814, should be sent to Mr. Peter Engir, Ternthum Gerleen, Stoben-Terntz.

is of a group of Orchids ex-Kent, at the local Flower Show in November last. The plants were staged by Mr. Warner, who used a high frame which slanted against the wall, and from a mass of maidenhair fern the Orchids showed to great advantage. Mr. Easton, in winning the lated on his success, for gardener one day a week, his plants give excellent results. This interesting exhibit disproves the theory that of gardeners is kept. The varieties include Odontoglossum crispum, O. Rossii, Dendrobium Phalaenopsis, Cattsum, O. Kramerianum, and



a sort of network at the base of the bulb. growing not only on the branches of living trees, but very often high up on the bare in the angle formed by the junction of an arm with the trunk of a large native true, adhering to the trunk, a bunch of moss, or a cluster of Orchids, or both mingled together, vigour, and often in full flower. More than one tall have trunk twelve or eighteen inches mounted, or surrounded near its summit, by a cluster of Augracanes, with their long, swordshaped, fleshy leaves, or what was more of bird's-nest fern. The contrast between the white, shining, barkless trunk, and these verdant clusters of plants on the top, was sometimes very striking; especially as the Orchids were often in flower, and by their growth altogether suggested the idea that by the decay of their own roots a receptacle was formed for the moisture or the rain by which life and death, growth and decay, presented one of the most singular amongst the many, CATHALAMNYA. A MY A VERY MACKET STATE OF THE ACT OF THE



LYCAST SCHMMITALIA—A very remarks bette specimen of this speces, is in the best specimen of this speces, is in the specimen of the specimen of



g Plant of Cameya lastala ground an a title, of area

piece obtained some ten years ago, and writer, with five others, he purchased as the ordinary Lyeaste Skinneri. It is worthy of note that these also grow well with him.

SCELOCITIUS VARIEGATUS — Six Jereman, Coman, Bart., exhibited this rare species at the Royal Herricultural Society, January 9th, 1912. A Botanical Certificate was unanimously awarded to the plant by the Scientific Committee. bigeneric hybrid reveals the future possibilities of the hybridist's work. M. Firmin Lambeau made the errors with the express purpose of proving the practicability of uniting the genera-Miltonia and Odortorlossum. Odontonia Firminii was exhibited at the Royal Horticultural Society, January oth, 1012. It has a large white flower, the labellum being very broad at the apex and with a slight pink flushing at the base. The suggested parentcrismum: but as some doubt as to the correctness of the Miltonia species was expressed by members of the Orchid Committee the plant was submitted to the Scientific Committee, who were of opinion that probably Miltonia Phakenopsis had been used instead of M. vexillaria: but, before giving any award, they desired to see other results from this or closely allied crosses which would probably decide the point at issue. However, M. Lambrau has certainly achieved a noteworthy result, and although only plain varieties were used in this example, hybridists will be able to judge of the duced by crossing superb varieties, such as M. vexillaria "G. D. Owen" and O. crisoum Lucianii. This is not the only record of the Lairesseæ, obtained by crossing O. crispum

62 62 63

GLIAGOVER IMMATA—We have received several outmunications regarding the cultivation of this elegant species. The general contractions of this elegant species. The general constant injectives a temperature state, what is several is the contraction of the c Collier obtains considerable success by cultivating the plant in a cool intermediate house, where it flowers well in company with other Coelogyue species and hybrids, amongst which may be mentioned C. Colmanii (cristata x speciosa). Other growers suggest that only just sufficient water should be given during the winter time to prevent shrivelling, for if the compost remains sodden during a short spell of cold weather, or even a sudden drop of temperature, black spots or rot frequently manifest themselves; more especially is this the case when the plant is pushing its flower buds. It is also stated that this plant is a shut up in a close over-heated sweaty atmosphere.

8 8 8

POLYSTACHYA LUTEOLA -- This pretty little oreen-flowered Orchid was known about a hundred years ago as Dendrobium polystachion, under which name it was beautifully foured in Lindler's Collectanca Botanica, 1821 In 1826 it was figured in Hooker's Exotic Flora from a plant in the Liverpoolcollection, to which it was sent from the East Indies by Dr. Wallich. Hooker in describing the species states, "Dr. Lindley has given an admirable figure and description of the plant in his Callectanca Rotanica; but he had not seen the pollen-masses in a perfect state. Still, indoing from the habit of the individual, it from Dendrobium. The nature of its pollenmass is indeed quite different, and the general of either Dendrobium Pierardii or D. fimbriatum; hence, not finding that this plant would agree with any ecross of Orchideous plants. hitherto described, I have constituted a new one Polystachya, derived from the Greek for 'many spikes,' in allusion to its numerous spikes borne voon the same scape; a circumstance so unusual in this family." Mr. F. C. Puddle Scaroston Hall Gardens Rillington. York, has recently sent some cut flower spikes of this Orchid, which beside having numerous flowers carry many seed pods, the species evidently being self-fertilising. It is interesting

to note that the plant from which these spikes were cut was collected in South Trinidad by E. G. Meade Waldo, Esq. whilst on a cruise in the yacht Valkalla, under Lord Crawford, in the autumn and spring of 1995 and 1906. The plant was found growing on a tree forn very near the highest point in the

10 (1 (3)

CHORDIS CYPRIEGIMMS.— Two Cypripedino hybrids in the establishment of Mesers, J. Verkch and Sons, Chedsea, have produced flowers in which the ladellum is entirely wanting. A total suppression of this organ is rarely net with, but in this case it is apparently permanent, for an exactly similar coincidence occurred in the previous year on the same

LALBO-CATILEYA KATILERN JOSES-This new and legant hybrid, which has been rained by C. Alsyn Harrison, Euq. 1-yndhurst. Walford, is the reast of crossing Cattleya Maggie Rapiael with Liella prestars. In from and shape the flower most resembles the I selts present, but the liberliman so calls are made to be a self-special to the control of high roop manney, and the yellow underhying colour, derived from Cattleya aures, is very descendible.

0 0 0

CATASETON GARRETTANDM.—A good hower spile of this interesting Orchel comes from the collection of J. S. Bergheim, Esq. Belaise Court, Hampstead, N.W. The species, which belongs to the section Myanthus, in which the In of the flower is undermeable, is fully described in the Footnical Magazine, 17,505, the Blazactasis baving because of the Magazine to the Section of the Modern of the Magazine to the Court of the Modern of the Magazine to the Magazine to the Modern of the Magazine to North Braid, 1889.

Q 19

ZYGOPETALUM MACKAVI CHARLES-WORTHE. This Brazilian species was originally deribosed; worm, who is have been in



Zugopetalum Mackoyi Charlescorthii.

cultivation since this date, the credit of flowering the first albino form is due to Messes. Charlesworth and Co. This rare variety has greenish-yellow sepals and petals and a pure white labellum.



Blenheim Palace. The South Front.

# The Blenheim Palace Collection.

Woodstock, Oxford

INCE their creation the gardens at Blenheim have always been among the most famous in the country, and the horticultural craft as carried on here in the post has inspiration to many generations of gardeners. The Dukes and Duchesses of Marlborough have been consistent patrons of horticulture, and the present Duke is specially interested in the Orchid collection, which is extending rapidly, and for which a great development in the near future is prophesied.

His Grace takes a great interest in the boys. are taken on in the gardens when they leave school. The idea of the Duke, ably seconded by Mr. Hunter, is to train these boys in hortiof twenty, they are in a position to earn a good wage, having received first-class instruction already passed through Mr. Hunter's hands, and are on the way to becoming canable jour-

Everything at Blenheim is on a generous scale, but as the scope of these notes does not go beyond the Orchids, restriction must be kept to the following details:

The Palace has four fronts, answering roughly to the points of the compass, that or the north being 348 feet from wing to wing The interior is proportionally magnificent. The Park is 2,700 acres in extent, and twelve miles in circuit, and was laid out by "Capability" Brown. The kitchen garden. in which are ranges of fruit houses, etc., is a large rectangle covering twelve acres, and surrounded by a high wall. Outside this wall, on a fine open site, are the principal ranges of plant and Orchid houses; it is with the latter that we are concerned.

The main range of Orchid houses, four in

number, lead out of a commodious, spanroofed corridor fourteen feet wide, houses have centre and side staging, are substantially built, and are fitted with gearing for the manipulation of the ventilators; they are 100 feet in length and 25 feet wide, and have been built some twenty years.

Three of these houses are well-filled with

it will be the collection as the Blen

ton on these theycommence in earnest to

gives evidence that thought is being put into the work. I have laboured somewhat in these pages, in my notes on hybridisation, to emphasise the importance of a careful selection of parents in the beginning and there are few places affording the boundless scope of Blenby this means. The Blenheim collection is no new thing, but like other old established tudes, and it is not until recent years that it entered upon its present and most promising and Mr. G. Hunter, the head curdener, is an expenenced and practical Orchid grower.

On entering the first of these houses, one noticed a fine flourishing batch of about two

handred hybrid Calanthes ding Bryan, etc.

Florence, bella, Wm. Murray. tionally strong, many having two leads, and as three. equal parts of Osmunda fibre, fibrous loam, and from June to

was mainly filled with Lælio - Cattleya



The Duke of Murlborough, K.C., P.C.

Cattleya Canhamiana alba, the albinos of Cattleya Gaskelliana, chocoensis, labiata, and other species. There were also good plants of dorfei, Undine, etc. Many robust plants of the highly coloured

comprising all the best known kinds. Mention

may be made of Cattleya Fabia alba, Lælio-

and heter known hybrids of commerce were also moted; these include Lebis-Cattleya callistoglossa, C. Octave Doin, C. Empress Frederick, Brasso-Cattleyas in variety, and others too namerous to mention. A good sprinkling of Cattleyas were in flower, considering the season, among which was a cress between Leiho-Cattleya Doris and Brassavola Dgsbyani; this was a fair yellow colour.

anceps, Dendrobiam Deari, D. Dalhouseianum, D. formosum, D. Phalamopsis, white a large number of Ladio-Cartleya and Cattleya seedlings were being grown on the shelves.

In the next house one half had been cleared to make room for numerous seedlings. The side stages of the other half were already full of these interesting plants, Cartheyas on one side and Cypripediums on the other; while



The Vanda ocrulea House.

Many fine varieties of Cattleya Iris, Lælio-Cattleya Berthe Foarnier, and the Blenheim variety of Cattleya labiata, etc., were making a good display.

About a hundred plants of Miltonia vexilaria were growing at the cooler end of this louse, while suspended from the roof a strong plant of Sophro-Ladia Eros in flower arrested attention; it is a charming variety and has been used considerably in crossing.

The corridor was filled chiefly with Lacia.

the centre staging was occupied, wit's adult Cypripedrum in great variety, including Earl of Tankerville, Trodus var. Lord Welson, Mrs. E. V. Low, Fulshawanse, Venus Oalswood variety, Queen of Italy, and Lorc Ossultton, etc. A vigorous little batch of Cypripedrum iellerlation had been raised from seed in this country, and among them the pure-white variety.

The remaining house in this range was filled with Odontoglossums, principally

O, erigun, of which there are 5,000 grown for our flower purposes. Berider many blackfield circipatum there were the three allianes xan thotes Charlesworthi, Suow Queen, and vergonike. There were also a few of the better known Odomiodas, and other interesting things, and ampended from the roof a number of good plants of Odontoglossum grands. The Vanda house is fee add feet by 25 feet, and here 1,000 pleats of Vanda occurbe are to be seen in perfect health and vigour. This loose has given immense satisfaction for some time, and two excellent groups were shown at the Royal Herticultural Society has year, one receiving a Silver-gilt Medal and the other a Gold Medal.

sporting of the leaves frequently occurs on



The Odontoglossum House.

Apart from this range is another large bouse. measuring too feeb by a (eet, which is devoted to the popular species of Ledia and Cattleys. Large batches of Cattleys speciososima, C. Large batches of Cattleys speciososima, C. Large batches a heigh format species are considered to their flowers. Good batches of Vanda of their flowers. Cool batches of Cool batches of Vanda of Cool batches of Cool b Vanda cerralea, and atthough those at Blemium sees slightly affected in 1914 it was entirely absent during the 1st, arminm. The plants are a good colean, well excited, and with leaves down to the pet. One large plant with a double beauth has reveally profused as uples of abone, and among have given brightly and the production of the pet. The pet of t

in growing it, his method of culture may be of some considerable help to others less fortunate. The acrebes his success in a orest measure to

He ascrabes his ancesse in a great measure to giving runnilance of air when the outside conditions will permit. He endeavours to secure a minimum day temperature during the growing months of 70 deg. F., and this with top and bottom ventilation. The house is provided with side lights which open besides sufficient water is given to prevent shrivelling, and a buoyant, intermediate temperature of 45 to 50 degrees is maintained. The plants are potted in Osmunda fibre, moss, and

were many strong plants of Epidendru vitellinurs in fine productive growth.

The seedling house is 33 feet by 12 feet,



The Cattleya House.

the usual bottom vestilater over the pipes, and all are opered to their fall capacity or, suitable days. A considerable amount of top ventilation is felt on the houses at taght during the summer. The plants are watered in the afternoon, and whom in earlier growth are frequently syringed, and at the period constitution of the properties of the properties of the constitution of the properties of the properties of the roots. During winter, when the roots well over and growth is reduced to a minimum, just and has a heated case boilt on one staging to slope with the gliess. The bottom of the case is made of perforated zime, over which splage, man mose is placed, and in this the seed paraare plunged to half their depth. One relies largely on brisk, most heat for ransing the Cattleys and Lacks seed, and this was germaning and growing with great freedom, and the trany thousands of seedings that were the trany thousands of seedings that were distributed over the various busses, only a very brief sketch of which has been given. There have been between four and filehundred different crosses raised at Dlenhein. The next house is of the same dimensions as the proceeding, and in this are a number of Mastevallies, and a limited number of Odostro-

glossum seedlings, etc.
It is a matter of congratulation that such an

important and presperous collection of Orchids finds a home at Blenheim. It may, however, he said that many of our other noted English mansions snight still further earlich the interest of their gardens by acquiring a thoroughly representative collection of Orchids, and thus follow the excellent example set by Blenheim.

T M B

# AN ORCHID COLLECTOR'S TRAVELS THROUGH BRITISH GUIANA TO BRAZIL.

By ED. KROMER. (Continued from page 90.)

TIIIS important chief, Robert, received us with a certain retiring, patronising air, surrounded by his three wives and a large number of people, all gesticplating, singing, or rather howling, and dancing about the place like mad. At the sight of this spectacle, we remembered at once that we had just arrived at a time when the whole neighbourhood from far and wide had assembled to hold one of their yearly Paiwari feasts a sort of a harvest festival-which always last for several days, and during which, as we both had witfemale, young and old, indulge in the most senseless and wildest of opries. Luckily for us, friend Robert, who alone seemed to have was the last day of the festival. After having explained to him the object of our fourney, he not only promised to provide us with provisions, but also to facilitate our further progress with woodskins and more extra hands if we would stay another day or two. The offer seemed reasonable enough: indeed, the next day a good quantity of foodstuffs was brought to us in shape of some big baskets full of cassava bread, vains, plantains, pumpkins, sweet potatoes, sugar-cone, and even venison. We were well off then. before us huge calabashes of their inevitable mixture of vesetable matters in an advanced

state of fermentation: to refuse it would mean offence, so not to create any ill-feeling we just moistened our lips with it, and passed it on to our own Indian companions; they made short work of it. In a friendly that in the evening with Robert, I succeeded in making a contract with him for the building of at least four more woodskins during our alisence for the easier conveyance of our cullections and ourselves on our homeward journey, and as a guarantee I presented him file, and such articles as may be useful for timber work. Robert apparently was pleased, but still something second to trouble him; was not a fully engineed Indian; he had no gun, and what sort of a man is an Indian without a gun. So he first suggested, and then insisted, on getting a gun besides. For my part I objected, as I failed to see what connection there could nessibly be between a gen and shipbuilding; Robert, however, laconically declared, what a man needs he must have, and well, well, we were in the lion's den; Robert got his gan. How illshown to us later on instead of the promised

Thanks to Robert's masterly superintendence we could start after a day's rest in full strength for once, but to avoid any shipwreck we had to keep a sharp eye on some of the effects of the previous day's debauch. branched off in the Ataperoo river and arrived in the evening at the usual landing-stage of the Indians below a great Fall, which was real overland journey began. previous day at one point, where the river was prevailed suddenly amongst the advance guard of our leet, when the Indians spied a tiver on the opposite bank, and under the that direction, but before they reached the mid-stream the beast had disappeared in the thick underbush, and the volley fired by Seyler and some more proved to be a miss I mention this episode simply because it was the only one occasion on our whole expedition on which we came across a ferocious animal. Snakes, of course, small and large, were of such daily occurrence, that is time we did not pay special attention to them, but killed them whenever we could.

and them assessed we configure we said goal by the Modert and his comparison, and statted towards Rorams on Look. After another mortisan accord ferrorbed steprans and sender mortisan accord for the deep men and sender conditions in on the another mortisan accord for the deep men and sender conditions in our time that the sender mortisant and the sender mortisant s

we perceived one particular sweet scent, so source of it, and to my agreeable surprise I Sobralia liliastrum, which grows there some six to eight feet high, and was then covered with its volden-vellow blossoms. Growing with this Sobralia we also met with horse clumps of another Ozchid, Epidendrum Schomburrkii, with its red and purple flowers, and sisted of a bountiful scarlet-flowered, s'srubby Justicia, also in full and picture-like blcom, intermixed with extensive growths of Abolhoda scentrum, whose large spiny rosettes on long dried flower-stalks, were everywhere visible. Looking in every direction the eye met with extensive batches, bordering almost every stream, of the majestic Palm, Mauritia flexuosa, whose hard and broad

The grandest secuery, however, presented fixed to us on earlier, showing an simmensely long range of mountain formations, consisting of the most pecularly shaped froms of the Unyslave be in the freeground, behind it the third contracts to the contract of the contract of the contract of the distance when the first polymer of the freeground, and for the distance the flat topped at a further distance the flat topped when the contract of the first polymer of the first po

On the outstart of one of these workishinds we devided to stop for a few days, as Seyler informed me that in this particular, as Seyler informed me that in this particular, and himself had found the Catheya Lewland of the seyler in the seyler namely those two had selement the reason of the mills, and little jet for me to find, with a good amount of searching, were about we roughly built a sort of a stage catherantic way we roughly built a sort of a stage catherantic and a start was made on the jeth Nevenber, after again leaving some looks beliand in change of a gund, a some of our new one flowing some Camatang declared that they would not go terms. So we paid them off and let them on. Two days later, after a difficult march over mostly stony and more hilly ground, we on the Yurnáni river, called Waibéna; the old chief gave us a most cordial recrution my hammock was sleng, we could gather a few plants. We placed, therefore, before leaving this place a huge order with the kind chief to have as many plants collected as possible: this speculation, however, we found later on, was a complete failure. We of such formidable steepness that all the former ascents seemed only child's play



travellers whom he honoured with his hospitality-Anoun. Whiteley particularly, point of destination on Roraina, which was then only another one and a half day's journey away. In the wood-island, where we had our camp adjoining the village, we discovered some more Cattlevas growing. compared to this one, and the following day at noon we came at last to the village of still in Venezuelan territory, and separated from the southern slope of Roraima mountain only by the narrow but steep bed of the Kukengam river, which here divides Venezuela from Brazil.

The fame of our approach had preceded but, and surrounded by his numerous family

and loyal subjects, the old chief Jeremiah, the king of Roraima as he calls himself. whose shrewd old face I had no difficulty in recognising at once after an absence of five years. One of his ladies presented us with a huge calabash of Kasiri, the drink of welcome. We found the village of Teroota itself half in decay, but a more pleasant, and at the same time half comical, sight met our eves when looking down the valley across the Kukenaam river. There we noticed some twelve houses scattered about over the plain, and at the very end of the settlement once extraordinary large building with very high roof, which we were told was the church. But in the centre of all this, which formed a square, we observed a large number of people hurrying up and down and arranging themselves in two rows, while a tall, dark figure in their midst seemingly directed all their movements, allotting to each his place.

Expecting to find with more facility a house for ourselves down in the valley amongst these people, we harried down the

stocp hill and crossed the Kukenaam river up to our waist in water. On reaching the square the strange-looking, strongly-built figure, whom we had already noticed from the hill-top, briskly stepped forward, and with a stern, grave countenance and extending his hand greeted us, repeating in an almost thundering voice the word "gmani, gmani," an unsuccessful imitation of "good morning!" He wore a pair of weollen trousers, much too tight and too short for him, with an even thicker long overcoat, over which were crossed a pair of braces, and his head covered with an old battered silk hat; there at least was a proof how civilisation had progressed in these parts. He gave us to understand that he was the clergyman. Then we passed along the two rows of people, the ladies all on one side, the gentlemen on the other, and we shook hands with all of them from the tallest to the smallest youngster. Our

(To be continued

## CHYSIS AND THEIR CULTURE.

LTHOUGH this genus contains but a few species, is is worthy of notice. The succies are decidaous, losing inhabit the northern part of South America. The stems are very thick and fleshy, about a foot long, and produce their elegant flowers in lateral racemes, with the young growth, Their cultural requirements are easily maintained. Although frequently seen growing well when fastened on flat blocks of wood. they produce much finer results when grown in pans or baskets and suspended in the Cattley a house, for during the growing season A cooler temperature and very little water should be given them during their resting season. Any requisite potting should be attended to after the plants have finished flowering; they succeed well in good Osmunda fibre, with plenty of drainage

material. The following are the best known species:-

Mexico, whence it was first imported by Mr. George Barker, who flowered it in April, 1840. It was described by Lindley in the Botanical Register, 1841, t. 23, with the remark "It forms the third of the genus now known, and is readily distinguished by its large white, not yellow, flowers, and greatly inflated leafy bracts. Its pollen-masses show yet more strongly than those of the original species the singular structure upon which the genus is founded. In this, as in most other be paid to the markings and elevations of the labellum, for they furnish the most constant and exact characters for distinguishing species." This species blossoms in April and May, the waxy flowers are two to three inside of the lip, and the disc having five to seven fleshy lamellae between the erect side tobes. It is one of the commencest Orchids in the coast woods of Mexico, and is said to have be inhabit the loads add.

C. Invis is considered by many to be the finest species of the genus. The finiform stems are about fifteen inhers long, producing from the young growths in June pendiducas raccines, each bearing eight or more flowers, and orange in the apper part, and the lip is goldow with crimons specific, and the finite goldow with crimons specific, and the finite goldow with crimons specific, and the finite fleshy kindle on the sline. It is a native of Mexico, and wasult flowers in the early

C. auree is a beautiful species from Venezuela. Its period of flowering is uncertain; although frequently producing its drooping racenes in the early summer, it sometimes flowers twice in the same year. The flowers, which schlom fully expand, have yellow sepals and petals, and a tawny-yellow lip marked with crimson. It, is also found in Mexico, where it grows at an altitude of from 3,000 to 4,000 feet.

C. Lizadinghei frequently professes three flower splots ince a single growth. The flowers which are not so large as those of C. autor, are way-shite, blotched to etained with bright purple, the sale below of the lipsection search gloves about April and May, being the pears 1854 to 166 Meers, Section search [lowers about April and May, bring the years 1854 to 166 Meers, When the pears 1854 to 166 Meers, which were the pears of the pears of the pears of the deviced from C. Isoladon, and C. Scholi, as concess with C. Cholosi, and C. Scholi, as

hybrid between C. bractescens and C.

# CALENDAR OF OPERATIONS FOR FEBRUARY.

By J. T. BARKER, The West Hill, Heule, East Yorks.

This important for the month should creasin as advised for Junary, excepting that a rise of a few diggress may be allowed with am beat, aboud it prevail. In all matters relating to seatering permitty, and a second control of the conmouth are qually estable for the areason scane, and the control of the considerable month are qually estable for the areason scane, and the control of the considerable country experienced in some considerable required production of the considerable expect may be a second of the considerable control of the control of the expect may be a second of the control of the con-

Shading. In some parts of the country it will be necessary during this month to place the blinds upon the houses; but with us we can generally manage without them until the first week in March. However, these useful articles should be taken in hand at enea, and any remeable and repairs attended to. It was the first th

Mexican Ladia are now post for this season. They have made a bold show for some weeks, and as the bright weather of last season untied then the flower splies were more plantful than usual. It is not easy to find a rone useful Orchid, providing the plants are well grown; if not they are unstatisfactory, from the season of t

want of water at any season, neither must they be overwatered. Should any of the plants require attention in the way of re-notting it should be proceeded with as soon as it is seen that new roots are ready to much from the base of the bulbs. The compost I recommend for them is equal parts of peat, polypodium, osmunda, A.t. Fibre, and clean sphagnum moss, with a fair sprinkling of half decayed oak leaves which have been rubbed through a half-inch sieve. All the earthy particles should be removed from the different fibres. The newly potted plants should be carefully watered until the new roots are seen to be pushing through the compost. They may be according to the weather, until they get reestablished. They delight in the brightest

Dendrohiums of the deciduous section are new showing flower buds in various stages of development. The species and hybrids of this section when grown in quantity, as they deserve to be, will make a beautiful show for some weeks. A house in full flower is a thing to be remembered, and amply repays the cultivator for any trouble bestowed upon them. They should not be burried, as the flowers are much finer and larger if allowed to come ture of the Cattleys house will answer their ianum will make a brilliant show from this time This plant usually thrives and flowers abundantly for the first few years after being imported, and then generally dwindles and dies. This is not as it should be if we properly understood their requirements. For this season some plants have already reached this country. I would advise that some be precured at once so that they may have ample time for growing during the coming summer. The imported plants should their comfortably, using crocks for drainage, best rooting medium I find for them is equal parts orannals, polypotonia, A.1 Fåtre, and pringingum mos. They should not be patted too firstly, and the pseudobalbs should be too markly ned up as a stake placed in the centre of the part for that purpose. Very life, water will be required until the new growth, pasking from the base, are seen to be renoting nicely in the new compose. This species is best accommodated in a cool, sire position in the intermediate bases, are seen to deep renote the best accommodated in a cool, sire position in the intermediate bases, as suppended well up to the light. When in full growth they delight in an abundance of modelium.

Cypripediums, as they pass out of flower, should be re-petted, so that the majority are done before the lusy mouth of March is upon us. I do not believe in top-dressing this class of Orebird, and I generally find the smaller plants pay for re-porting each season. If these plants are to succeed, they must have a nice sweet rooting medium. Mardevallias. Amy plants that were left

over from the autum, or that now appear to require new compact, may be done at this scoop, using the compact as adviced for Milrenias, with the addition of a little force form. The smaller varieties are best grown in shallow pairs suspended from the roll, using the compact with the loans. They all succeeds

Decidinate of the winter forering varieties will accommonly tigous, and when about to path each from the one growth may see that the path each from the one growth may see that the path each from the condition of the cold house. Oundation surveystima, and others of this section, possible up their thorse splars, such as the condition of the cold house. Oundation surveystima, and others of this section, possible in the section of the condition of

Cattleyn Perrivaliana and C. Trianæ will now be at their heat, and where they are grown in quantity will make a display in the Cattleyn house. It should be the aim of every cultivator to make, as far as possible, a display in each house all the year round. These two species are nort ascell, as leagth two first to flower their pirighest one of the dullest meants of the year. After flowering this good returned to root, and any requisite attention as regards respecting may be done. Any hydroff calless are laided stretches are regarded to the contract and their piritudes of the contraction. I am northwest period was pulling that class or plant showt, but if the composite at all decorpt, or won, I would recommend going them are composite to root. I am detail the contraction of the contra

These will be commence to gow, and they may be reported when the new growth is seen to be justing out new ross. I find these plasts por for reporting-covery assume as the large amount of water which they require when in full growth decays the composily specced in a composit of equal parts per and learn, the latter at theses as possible, with a fine openhaling of ulter and. They require a large lage temperature with a require a large lage temperature with a spears upon their leaves. They will succeed best in a serial Celture's loans.

Orientoglossum crispum, and many hybrids, will now be developing their flower spikes; they should be frequently examined for stugs. otherwise the spikes may be rained before the cultivator is aware that they are showing. Keep the plants fairly moist, but do not given water until it is seen that the composit is fairly dry. As the spikes push up they should be secured to meat stakes, and may weak plants be dishudded down to two or three flowers. Or grande, O. cirronnum, O. neduloum, O. grande, O. cirronnum, O. neduloum, O. better at rest in the cool Cartleys house, giving them could be supported by the country of the cool stringly and O. Ero-Skinneri will still be strivelying.

General remarks. Do not he in a hurry to pass any plant into new growth, as, so far, we have not had any cold weather this winter. A sadden fall in temperature when plants are naking fresh growth right do a great teal of harm. Therefore, try, and keep everything resting, and wage a continual warfare against all moset used.

The amateur Orchad house. It has often been asked how an arrather is to grow all the different Orchids in one house; of course, it is an impossibility, but norm select, those that will succeed in the house he possesses, be it either warm or cool. I am quite of the opinion that every greenchouse will grow Orchids of some description, it is only a matter of attention and selection.

# HYBRID EUROPEAN ORCHIDS. By W. HERBERT COX.

LINKS the last few years, ground and accelerate the last beau beau beau made towards the fuller base beam made towards the fuller made towards the property of the last section of the last section of the last section of the green dealers from the program of the last section of the green dealers to the green dealers the green dealers the green dealers the green dealers the green green green green green dealers the green gree

Another great reason is the difficulty of their callivation, for but law growers the have had any success with them. In a later will be of use in this matter. At renoundous will be of use in this matter. At renoundous amount of trouble and fourthrought has been leaving to the control of the control of leaving the control of the control of the control leaving the control of the control of the control search of the control of the control of the control search of the control of the control of the control will be amonged the most valued cransments of our gendens, and millionaires will then greatly and the control of the control of the control profit has the pass whose their Crebiothouse.

Nature has realised the neglected state of these heautiful things and has set about in her own way to remedy the cvil. Darwin to most Orchids, which may be observed for the numerous structures they have for this purpose, yet," he went on to say, "selffertilisation ensures a larger supply of send."

There are numerous hybrids among all Nigritella, Cephalanthera and Epipactis, Biochia, whilst Orchis hybridise freely with Serapias (see page 3 for Orchiserapias complicata), Aceres, Leroglossum, Ceologlossum, Platanthera, and Gymnadenia, vet strangely enough the Othrys only hybridisc amount to be between Ophrys apifera and Cephalanthera rubra, found near Conegliano in Italy, for example Ophrys apifera, fertilise themselves, the caudicles of the pollinia being rigid enough to stand upright as in other Ophrys. O. scolopax, the Woodpecker, according to Moggridge, does not show any Cannes the pollen masses naturally fall out of the cells and strike the stigma. This, says the same authority, is probably due to the insects which assist the plant being more common in one locality than the other.

Of Oplays arounders. Delphine states that is to lat the visited by inexts, and in Ligarua Inzul'y one flower out of 3000 sets a capsula, though our Flowerse rather more are produced. I rather doubt his attrievant is suffered to the state of the state o

Linneus grouped Ophrys apifera, O. aranifera, O. arachuites, and O. scolopax together to form a single species, which he called insectifera on account of the cross hybridisation between them, but later botanists have separated them and most carefully distinguished all the different crosses.

As a rule these hybrids are rare everywhere, but occasionally they are met with in great quantities, for instance, Nigritella suavcolens is said to be so common that in the Pusterthal of the Tyrol hundreds of specinens may be counted in the same meadow.

Cephalopactis speciosa (Cephalaunhera palleus and Epjactic atronucens) which is found in the Erlatthal, Lower Austria, is of special interest as it shows peculiarities resembling two species growing in very remote countries, the Japanese E. Thambergii and E. gigantea from Texas and other southern United States. There is also the peculiar Orchiceologiosum Erdingeri, also from Austria.

It is sometimes extremely difficult to elliwhether a plant in a species, variety, or hybrid, Sernjass oliuki sian example of bixen and though aperating intermediate best sense. S lingua and S longspetals Vergun, laving scarcied in vain the those species on the infirms of Genn where it grows, deer unconsider at to be a hybrid. The diffiams was consider at the an hybrid. The diffiams was consider at the angle of the properties of the next which the maintain are flyeric by the octed with the maintain are flyeric by the solid parts. Gamas bittle at may be a fixed cross for narry years reproducing itself by mee helios.

There is some doubt of another plans which I have found growing in great quartities at Rapallo, on the Italian Rivera, and lowering in March. Bals agrees it as Opinys amnifers variety nicerosis, other authorities describe it as swirety speculars; but Canas calls in sub-species arachimifornia. It night cauly be between O. aranchites, for in general characteristics at resembles the former, but a color and minor resembles the former, but a color and minor

Above I have tried to show how extremely interesting these natural hybrids are, and I should now like to suggest that an enormous amount of useful work might be done by some careful grower amongst other hardly Orchids.



The Large Cattleya House of Messrs, James & A. McBean, Cooksbridge, Sussex, Mossy plants of Onetdism conforms advanther voy with shirt long sprays of bright sellow flusters.

## ROYAL HORTICULTURAL SOCIETY.

Mounters of the Orchid Committee present : J. Gurney Fewler, Esq. (in the chair), and Messes, James O'Brien thon, sec.), Harry J. Brooman-White, de B. Crawshay, W. H. White, A. Dye, H. G. Alexander, J. F. Shill. W. H. Hatcher, J. Cypher, W. P. Bound. Walter Cobb, J. Charlesworth, A. McBean, J. S. Moss, Stuart Low, and Sir Jeremiah

Sir Jeremiah Colman, Bart, Gatton Park, Medal for a good group, in the centre of which speciosum nitidum having 36 trusses of blcom. Epicasta, Coelia bella with numerous purple tinted flowers, and Phaio-Calanthe rosea were also shown in excellent form.

Francis Wellesley, Esq., Wesefield, Woking, best being C. Miss A. Willen (Lecanum ×

Sir Trevor Lawrence, Bart, K.C.V.O., Burford, Dorking, exhibited a well flowered Hera "Burford var," and C. Eury-biades (Furvades × Alcibiades).

Westonbirt (gr. Mr. H. G. Alexander), sent Cattleya Peetersii "Westonbirt var.." beautiful flower with white sepals and petals Cvp. nitens-Leeanum aureum, and Cvp.

F. J. Hanbury, Esq., Brockhurst, East

G. Hanbury, Esq., Blythewood, Burnham. exhibited two specimens of Calanthe vestitaEarly Stanboue, Chevening Park, showed

Heath, were awarded a Silver Banksian Medal

ismum × Dreadnought) and Cyp. Jucundum were specially good. Other plants included Cyrebidium Holfordianum, several good

Messes, Steart Low and Co., Bush Hill Park, Enfield, were awarded a Silver Flora Medal for an interesting group containing several good Calanthes, Cattleya Percivaliana alba.

Wells, were awarded a Silver Flora Medal for Some good Calanthes and Masdevallias, and a

of Cypripedium insigne and good Odonto-

Messes, L. and A. McBean, Cooksbridge, long graceful flower spikes being much admired. Soplaro-Cattleya Thwaitesii, a good

Messrs. J. Cypher and Sons, Cheltenham, received a Silver Flora Medal for an excellent and Victor Hugo. Several Masdevallias, Lycaste lasioglossa, and Calanthe Harrisii

Lycaste lastoglossa, and Calanthe I. were shown in good form.

Mr. E. V. Low, Vale Bridge, Haywards Heath, was awarded a Silver Banksian Mcdal for some excellent specimens of Cypripediums. A pure-white variety of Dendrobium Phalenopsis, and the curious Bulbopstyllum

Mesers, Hassall and Co., Southgate, were awarded a Bronze Banksian Medal for a group containing good examples of Cattleya Albertians, Odontoglessum Dora, O. laudatum, and the beight Lelia-Cattleya Charlesworthii.

### AWARDS.

### .....

Læbio-Cattleya Bella alba (L. purpurata × C. labiata), from Baron Bruno Schröder, Englefickel Green (gr. Mr. J. F. Shill).—A very beautiful hybrid with six large flowers having pure-white sepals and petals and a rich crimson purple lip.

### AWARDS OF MERIT. Cypripedium San - Acteus "Westfield

variety," from Francis Wetlesley, Esq. Westfield, Woking. A good hybrid with a large pure white dorsal prettily spetted with purpls. Laribo-Cattleya Mrs. W. Hopkins (L.-C. Haro'diana x. L. Iona nigricans), from Francis Wellesley, Esq.—A very distinct hybrid with yellowisia sepals and petals and a violetcrimson lip.

Odontoglessum crispum "Queen of the Morn," from Walter Cobb, Esq., Normanhurst, Rusper.—A large and brautiful rose-tinted flower of the true Pacho type, the petals being very broad and overlapping the sepals.

Cypripedium Jucundum (Akcibiades x Veronica), from Messrs. Sauder and Sons, St. Albans.—The dorsal sepal of this large flowered hybrid is pure white with a green base and prettily spotted with purple. A good result.

Cattleya Maggie Raphael alba "Orchidburst variety," from Messrs. Armstrong and Brown, Tunbridge Wells. A very superior form having broad pure white petals and a magenta-crimson lip with gold veining in the throat.

Cymbidium rosefieldiense (grandiflorum ×

Tracyanum), from de B. Crawshay, Esq., Rosefield, Sevenouks.—A very elegant hybrid and one of the best of the green flowered section. The broad emerald-green sepuls and petals are prettally spotted with red. Cyprigodium intens—Beeckense (nitens ×

Beeckmani), from J. Gurney Fowler, Esq., Glebelands, South Woodford.—A very large, bold flower exhibiting the characteristics of both parents, the petals being particularly broad.

Leonidas), from the Duke of Marlborough, Bleuheim Palace.—A very pretty hybrid with a dorsal sepal much resembling the former parent.

January 24rd, 1012.

MEMBERS of the Orelind Commutee presents. J. Gunney Fowler, Esq. (in the chair), Sir Jeremiah Colman, Bart., James O'Brien (hon. sec), and Messs. Harry J. Veitch, Gurney Wilson, F. J. Hambury, G. F. Moore, T. Armsstreng A. McBean, W. Cobb., Charlesworth, J. Cypher, W. P. Bound, J. Shill, A. Dye, W. H. White, W. Wilson Potter, de Barn Crawshay, W. Bolton, H. G. Alexander, and J. S. Moss.

Sir Jeremiah Celman, Bart, Gatton Park, Reigate, received a Silver Flora Medal for a beautiful group of the various varieties of Ladia anceps, the white forms being very attractive. Good plants of Phaso-Calambia Colmanii were also shown. Lieut-Col. Sir George Holford, K.C.V.O.

Westonbirt (gr. Mr. H. G. Alexander), was awarded a Lindley Medal for a group of specially well-grown Orchids; included in it were Vanda Watsoni, Læba anceps Amesian with 2n flowes, L. antumnals alba, and Latio-Cattleya Cappei "Westonbirt var." with 13 Oosees

F. Wellesley, Esq., Westfield, Woking, exhibited Cypripedium King Emperor, and Cyp. Thalia "The Baron" (insigne Sanderae × Baron Schröder), the latter having a large white dorsal marked with green at the base and with dark purple spottive.

Pantia Raili, Esq., Ashstead Park, Epsom (gr. Mr. Farnes), exhibited a small group of choice Orchids. Those of special merit being Cattleya Trianac alba "Ashstead Park var, a good dark form of Lycaste Ballin, Cymbidium Hookerianum, and Ladio-Cattleya J. F. Birbeck alba (L.-C. Henry Greenwood × C. Mendelij), with white senals and petals and beautiful bluish-purple labellum.

Mr. Day), exhibited Odontoglossum Ceres "Goodson's var.," Odontieda Cooksonge var. Royal Scarlet, and Larlio-Cattleva Wellsiana

"Goodson's var."

de Barri Crawshay, Esq., Rosefield, Sevenoaks, showed the very choice Odontorlossum Zygopetalum brachypetalum, and Od. Yula (Adrianæ × Lambeauianum), a new hybrid with a pinkish flower having the sepals and petals blotched with reddish-purple and margined with a row of smaller spots, the labellum is slightly pandurate and shows the influence

C. J. Phillips, Esq., The Glebe, Sevennaks, showed Cymbidium Pauwelsii, with creamyvellow senals and netals and the labellum

Messrs, Charlesworth and Co., Haywards Heath, were awarded a Silver Flora Medal for a good selection including Odontioda Diana, Lacho-Cattleya amabilis with pure white sepals and netals and a mottled labellum, Calanthe violacea, and others.

Messrs, Sander and Sons, St. Albans, were awarded a Silver Flora Medal for an excellent group in which were many botanical Orchids. Cattleya Percivaliana alba, a good variety, Odontogiossum eximium, and many choice Cypripediums were shown in fine form,

Messrs, Stuart Low and Co., Bush Hill Park, interesting exhibit of Miltonias, a good selec-

Messrs, Armstrong and Brown, Tunbridge

Wells, were awarded a Silver Flora Medal for a very attractive group containing many excellent varieties of Cattleva Maggie Raphael alba, Masalevallia Schröderiana, a very dark form of Lælio-Cattleva Wilhelmina, and

Messrs, I. and A. McBean, Cooksbridge, Sussex, received a Silver Banksian Medal for a group of select and beautiful Orchids, Included in it were Brasso-Cattleva Mrs. L. Leenami. Cyprinedium Saturn, a good selection of white Lielia anceps and Cattleya chocoensis.

Messes, J. Cypher and Sons, Cheltenham, extensive group of Cypripediums which included Thompsonii, Minos Youngii, Mrs. F. Godman, and Mrs. Mostyn.

Messes. Hassall and Co., Southgate, exhibited Cattleva Octave Doin, a very distinct variety of Lycaste Skinneri, and excellent

Od. Lambeauianum. Mons. Mertens. Ghent, exhibited Cypri-

Mr. W. A. Manda, South Orange, N.I., U.S.A. and St. Albans, showed a small group of different varieties of Cattleya Triange.

Mr. E. V. Low, Vale Bridge, Haywards Heath, exhibited a choice selection including Cyo, Laconia (Leeanum giganteum × Sallieri

aureum), a pretty flower of a vellowish Messrs, Veitrh and Sons, Chelsea, showed

Odontoglossum Doris (crispum × Ossulstonii), a pretty flower with numerous small spots, insigne Harefield Hall), and Cyp. Actieus.

### FIRST-CLASS CERTIFICATE.

Cypripedium Norali (Mons de Curte × (Edipe), from Sir George Holford, K.C.V.O.

sepal is very broad, white, slightly flushed with purple at the base and with vertical lines of purple spotting. The petals and lip are of good form and substance, yellow with

### AWARDS OF MERTI.

Zygo-Colax Charlesworthii "Cobb's var.", from W. Cobb, Esq. -A great improvement on previous forms of this elegant hybrid; the labellum is broad and richly marked with violet-purple.

violet-purple.

Cypripedium Duke of Marlhorough, from
the Duke of Marlhorough.—A large flower
with a hroad white dorsal sepal, the other

segments being equally well formed.
Zygopetalum Mackayi Charlesworthii, from
Messrs. Charlesworth and Go. An extremely
beautiful albino form of the true Mackayi,
sepals and petals greenish-yellow, labellum
pure white.

Cymbidium Schlegelli (Wiganianum × insigne), from Messrs. J. and A. McBean. A pretty hybrid intermediate in form and colour between both parents, and apparently a good grower.

Lacho-Cattleya amabilis (L.-C. Fascinator × speciosissimi), from Messra Charlesworth and Co.—One of the prettiest hybrids. Sepals and petals pure white, labellum mottled with resy parple.

# CULTURAL COMMENDATION.

To G. Hanhury, Esq., Blythewood, Burnham, for Calanthe Wm. Murray.

# MANCHESTER ORCHID SOCIETY.

### December 28th, 1911.

MEMBERS of the Committee present: Rev. L

Crombleholme (in the chair), R. Ashworth, C. Parker, Z. A. Ward, J. C. Cowan, J. Cypher, J. Evans, W. Holmes, A. J. Keeling, D. McLeed, and H. Arthur (Secretary).

Silver Medals were awarded to W. R. Lee, Esq., Heywood, for a gro

Z. A. Ward, Esq., Northenden, for a group of Odontoglossums and Cypripediums.

R. le Doux, Esq., West Derby, for choice Cypripediums and Odontoglossums.

Ladia anceps, Odontiodas and Lycastes, R. Ashworth, Esq. Newchurch, for a goo

group containing many choice Orchids.

J. McCartney, Esq., Bolton, for some

Messrs, J. Cypher and Sons, Cheltenham, for an excellent exhibit.

Mr. J. Evans, Congleton, for a small but choice group. Bronze Medals were awarded to —

Rev. J. Crombleholme, Clayton-le-Moors, for a small group of Cypripediums.

O. O. Wrigley, E.sq., for a group of about 20 plants of Vanda corrulea.

The Liverpool Orchid Co., Gateacre, for Cypripediums. Others exhibitors included -

S. Gratrix, Esq., Wholley Range (gr. Mr. Brown); J. J. Holden, Esq., Southport; H. J. Bromilow, Esq., Rann. Lee; Messrs. A. J. Keeling and Sons, Bradford; Messrs. Hassall and Co., Southgate; and Mr. W. Shackleton,

# AWARDS.

IRST-CLASS CERTIFICATES TO

W. R. Lee, Esq., for Odontoglossum crispum Ansami, a very fine variety with heavily blotched segments; O. crispum sandhotes var. Golden Gem, with yellow markings on segments; and Cypripedium Holen II. "Westonbit var "a very fine variety."

S. Geatrix, Esq., for Cypripedium Royal Sovereign, a magnificent flower; and Cyp. Helen II. "Westonbirt var."

S. Gratrix, Esq., for Cypripedium Magos (Adrastus × Euryades splendeus).

J. J. Holden, Esq., for Cypripedium Aurori Borcalis.

Bagshaw (Alcibiades × Standard), Cyp. Hazel Vicars (Lord Ossulston × Actavis), and Cyp. Dora Jameson,

R. Ashworth, Esq., for Cypripedium Acteus ashlandense Nos. 1 and 2; and Odontoglessum Œsopus, parentage unknown.

I. McCartney, Esq., for Ludia anceps Holmesii, a fine variety of the Chamber-

lainiana type. January 12th, 1912.

Members of the Committee present: Rev. I. Cromblehelme (in the chair), R. Ashworth, W. R. Lee, C. Parker, H. Thorp, Z. A. Ward, I. C. Cowan, J. Cypher, J. Evans, W. Holmes, A. I. Keeling, D. McLeod, and H. Arthur,

Z. A. Ward, Esq., Northenden, was awarded a Silver-gilt Medal for a good group of Odontoglossums and other special Orchids.

W. R. Lee, Esq., Plumpton Hall, Heywood, was awarded a Silver Medal for a nice group, Col. J. Rutherford, M.P., Blackburn, received. a Silver Medal for an excellent miscellaneous

groun W. I. Hammeaves, Esq., Burnley, was awarded a Silver Medal for a group of

Cypripediums containing many fine varieties. J. McCartney, Esq., Bolton, secured a Silver Medal for a group of various Orchids.

Rev. 1. Crombleholme, Clayton-le-Moors, was awarded a Bronze Medal for a small, but

G. H. Peace, Esq., Monton Grange, received a Bronze Medal for a group containing some

O. O. Wrigley, Esq., Bury, was awarded

a Vote of Thanks for a collection of Cypripediums.

S. Gratrix, Esq., Whalley Range (gr. Mr. Brown), exhibited several excellent specimens. J. J. Holden, Esq., Southport, staged some rare Orchids, one of which secured a First-

class Certificate. H. L. Bromilow, Esq., Rann Lee, staged Cypripedium Reginald Young and other seed-

I. H. Craven, Esq., Keighley, exhibited some Odontoglossum seedlings and a good

R. le Doux, Esq., West Derby, staged

Cypripedium Beechense superbam. H. Thorp, Esq., Middleton, staged Cypri-

pedium St. Albans. Messrs. J. Cypher and Sons, Cheltenham, staged a good group of Cypripediums.

Messrs, Sander and Sons, St. Albans, exhibited several most Orchids. Messrs, Stuart Low and Co., Enfield, exhibited Sophro-Cattleya Saxa "Low's

Messrs, A. I. Keeling and Sons, Bradford, staged some attractive Cypripediums.

Messrs, Hassell and Co., Southgate, exhibited some excellent Odomoglossums. Messes, Charlesworth and Co., Hawwards

Heath, staged a few very choice Orchids. a variety of Odontoglossum Rossii with petals

spotted to the tips. Mr. D. McLeod, Chorlton-cum-Hardy,

Lælio-Cattleya Myrrha grandis (Gottoiana × Dowiana Rosita), a grand flower with a large lip; Cypripedium Actiens "Durbar," a large round flower; Odontoglossum crispum xanthotes perfects, a very beautiful variety

Odontoglossum Delhi (augustum eximium), from J. J. Holden, Esq., a very fine flower, good size, almost solid colour.

Odontoglossum crispum xanthotes "Gratrixia," from S. Gratrix, Esq., a well-shaped flower with bright yellow markings.

### AWARDS OF MERCE

Cattleya Maggie Raphael pulcherrima, and Odontoglossum Milky Way, both from W. R.

Cypripedium Jasper (Alcibiades × Hitchinsia), and Odontoglossum Eric, both from Z. A. Ward, Esq.

Cypripedium scedling (hirsutissimum × aureum Hycanum), from S. Gratrix, Esq. Cypripedium Actaeus major, from Col. J.

Cypripedium caudatum Sanderse, and Cyp.

Jucundum, from Messrs. Sander and Sons. Sophro-Cattleya Saxa "Low's var.," from

Cypripedium Lion (Mrs. Mostyn × Euryades), from Messrs, A. I. Keeling and Sons.



HABEMARIA REGNIERL—A coloured illustration of this scarlet flowering hybrid between II. militaris and H. carace, is given in the issue of Le Jardin for February 5th,

CYPRIPEDIUM HOCHBERGIANUM. — This new hybrid between C. Mustersianum and C. glaucophyllum is recorded and figured in Moller's Deutsche Gartuer-Zeitung, 1911, p. 246.

ORCHID AWARDS. The Royal Horticultural Society granted, during the year 1970, 34 First-class Certificates and 77 Awards of Merit; and during the year 1971 37 Firstclass Certificates and 30 Awards of Merit.

WEATHER PRINCETON. "A certain and save peediction for a severe wanter," writes Mr. Wm. Boltor, of Werrington, "may be taken from the insulate of hees, for when these intelligent builders double the walls of their hises with an extra liming of wax in the autumn if is a sign of a forthcoming exceptorally rold winter. Many beckepers reported this peculiar action last autumn; the offling provided august the recurrent extreme offling provided august the recurrent extreme

### 1 3 13

KEW GARDENS, -During the year 1911 704,606 persons visited the Royal Botanic Gardens, Kess. These figures show an increase of 183,842 over those of the previous year and are the langest our coord. Additions to the Gardens include Orchids from Darjecting, a quantity of Orchis foliosa from Darjecting, a quantity of Orchis foliosa from Darjecting, and Sabralias Dark Gardens, Malcira, and Sabralias Dark Gardens of Court, Horsham Court, Horsham

### 12 63 60

CATTLEA GITTATA—A pistograph of a tree variety of this species comes from M Peters de Mello, Aventak Costn 25, States, Bezal. The separals and petals are highly greenisk-yellow, and entirely without the usual erimon spetting, the column and labellum are pure white. Owing to the apparent total elimination of the rimson or pumple pignent this flower may be regarded as an allium form of the species.

Hauramia Cukopera Ataa—This me and beautiful hardy Orchid is ligared in the Gurdaney' Chemida, 1912, p. 68, from a daughter, flowering in the rock garden er. E. A. Bowles, Eng., Weltham Cross. This species is fairly abundant at England and Scotland, but the whate form is extremely acceptance for the species of the superage of the control of the cont

MESSES, THE PRATWICES AND CO. MERRIAL LEEK. LEEKINE HESTIGES, THE ISSUE OF FEBRUARY 384, 1912, gives illustrations of February 384, 1912, gives illustrations of Brasso Cattleys Mrs. Pitt. "sinc exque", 2nd Brasso Cattleys Secretic uff. Brast, all meritorious Orlendes in their collection. Forcusts precial price offered by M. Jules Tipe ide Cross which has recently been won for the first time by Messess. Panwels and Co.

LETIOCATTIAN IAION. The spacetage of this new hybrid is LC. Myra [1 flava × C. Trianc) × C. Ortave Dem (flexibit) × annex), and the results very according to the different very in which the specific characterism than the contraction of the

CYPETERORY CURTO-ENTELLUM—Under this name two good flowers of a hybrid between Cypetpedium Curtain and C. glaucophylina are sent from the edlection of H. T., Pitt. Eug., Stanford Risk. Hybrids of this polymorphylina and the conference of the Concollection of De. Hune Goldschook, Issuen Ruirs, Germany, but they do not appear to have been named. The flowers are very intermediate in forms and colour, the chearateristics of both parents is ring plantly visible.

LEMING-CATTIEVA GOLDEN GER. This is one of those much appreciated hybrids having a bright golden-yellow colour. The parentage is Lexius Latona (cimularina x purpuranta) x Lario-Cattleyo Ophir tsanchina x aurea), from which one world expert a Lurge proportion of yellow flowering seed-lings. This new hyurid, which is flowering on

a very small plant, has been raised by Mr. Imagood, Orbida govers to H. T. P. M. So, When the plant recomes accept larger and dictions of the control of the control of the condition of the control of the control of the state of the control of the control of the conlocation of the control of the control of the between Colorody lower of new hydrobetween Colorody lower of new hydrobetween Colorody lower of new hydrober of the control of the control of the state of the control of the control of the angular control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of the control of the control of the state of the control of th

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ALBINO HYBRIDS, Hybridisation has violded many unthought of results, the crossing of albino forms being a notable instance. One would expect pure-white flowers on the hybrid seedlines raised from albino parents, but such, as experience has proved, is not always the pleasing result. Dendrobium nobile viorinale, a pure-white variety, has, healthy seedlings, every one of which has results in all cases being the same. Cypripedum insigne Sandera: has also yielded albino seedlings, and so have some of the albino Cattleya species. By some unknown reason there is absolutely no certainty regarding the results when two different albino species are united: sometimes albinos are produced, at other times the normal coloured forms, and, colour. In the Cypripedium genus we have instances of two alono success producing an results; and, recently, Dendrobium has been added to the list. Mr. F. C. Puddle, Scampston Hall Gardens, Rillington, York, has Dendronium pobile virginale and D. Findlayanum album. By the appearance of the bads on of this hybrid is Dendrobium Cybele album.



The Vanda ceraka House of Mess, Maton & Sons, Braney, France, Photographal December 20th, 1911.

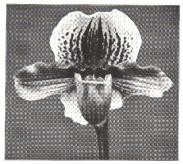
VANDA CHARLESWORTHIL This rare hybrid between V. coerelca and V. Bensonii has recently flowered in the establishment of two parents grow together in Burma, and it is not surprising, therefore, that an occasional hybrid between the two should appear. The flower has blue-blue veining on a grevish rounded auricles, as in V. Bensomi. This hybrid was first recorded in the year 1894. M. Maron, it will be remembered, flowered, in 1903, the very remarkable Vanda Marguerite Maron, a hybrid which he obtained by crossing V, teres with V, suavis. From the above photograph it will be seen how very useful Vanda cornles is for Christmas decoration, the large blue flowers upoving very attractive. The plants in this bouse are almost entirely without spotting on the leaves.

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STANHOPEA PERUVIANA.—This Peruvian species is figured in the Betantial Magazine for February, t. 8417. The plant from which the figure was prepared was discovered by Mr. Forget when collecting for Messas, Scader, It is allied to the Mexican S. Warkh, but has smaller flowers with narrower petals, while the hypochite of the lip differs materially in shape and is not distinctly angled at the lone. S. pereviana is remarkable for the unusual width and almost based-like firmness of its dark-green, plirate leaves.

...

THE ABESTORIZE OF PLANTS—Orbids are the must beautiful and criticus of all stature's productions; they are tail in every stature's productions; they are tail in every sign and interaction above, because it is a sign and furnature, but above, because it emission and artsogeneous aromatic persons, or entirity for most corressing and continuity formation of their Bookers, the entire temporal summation attains, beauts include in section, formation of their Bookers, the entire stope of ammation datume, beauts include in section around a project over excepted their native curriculus. In section, and repulse, nor has the human projects over excepted their native curriculus; and repulse, the dominated The Artivorsity of Plants—Payer's Orbids. 1825.



Cypripedium North. Mans. de Custe × Œdipe.

Photo by F. Wolfeels.

The above filteration gives a segregary for the excellent yeard point, processed by this hybrid Cappington. The processed by this hybrid Cappington. The species contained in the aparentage are Spiere, name, evidence of which can be s6m in the target white the along which was separated as sequentially a segregary of the spiere of the formation of the board in the medical vertical lines of color on the dozsal, and to the formation of the board point. A fracticles Certificate was sometimed to the sequential of the sequential point of the capping of the sequential point of the sequential point of the capping of the sequential point of the seque

Certificates and 20 Awards of Merit have been awarded to plants which have encasted from the Westonhit collection, the most noted being Actures Bianca, Alchi'ades magnificun, Antinous, Lucifer, Minotaur, Mocabeam, Saftau, Shogun, and Norah.

### 2 32 39

ORGIDO CATALOGUE,—A very unstul electriptics list of Orchiels, has recently been issued by Mr. Edward V. Low, Vale Birdger, Bisywards Heath. Many of the rare species and a large rumber of hybrids are precal. The collection of Cattleya Idolata albas comprises in less than 31 items in the Catalogue, and the list of Cyprijectionus includes some 250 different and distinct forms.

# SOME JAMAICAN ORCHIDS.

J AMAICA, the largest of the British West Indian Islands, has contributed many notable species to our Orbidi collections, and although these are not equal in elegance to the grand varieties obtained from South America and other countries there are, nevertheless, several of considerable interest and heauty.

Cypragediums are entirely absent in Jamaica, and the genus Galanthe, so widely distributed in other tropical countries, is only represented by a single species. Of the many other terrestral laints that of Pheirus grandifolius is the only one worth mentioning, but even this is not believed to be indigenous, it has become naturalised by cultivation.

and consider distribution by cultivation, and consider distribution of the control of the contro

Zygopetalum flabelliforms, better known as Z cochleare, under which name it was figured by Lindley in the Balancal Register, is noted for its very frugrant flowers; the sepals and petals are greenish-white, and the lip blue with a purple limed crest.

Onedman pelchellum, as its name derotes, is a very perity Oscidism, its generial branched spike of small white flowers per duces a welcame change from the usual yellow colour of the flowers of this genus. It is entirely wildout peeudo bulls. Onediam guttatum with its brownish flowers marked with perity of the perity of the

Brassia maculata with its spike of about 12 spider like flowers is a showy early summer blooming species; the sepals and petals are yellowish-green spotted with reddish-brown. Brassia caudata produces flowers with the sepals about five inches in length, of a yellowish-green colour, and with a few large purplish-brown spots.

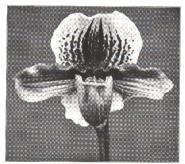
Boughtonia sanguinea grows our neels fully exposed to the influence of the sun, and this fact explains why the plant is so often successfully entirely even placed on a block of the plant in a little moss, and suspended in a very summary and the most plant in a very and the plant in the plant in the plant in a very and the prefix most plant forwars, which had in perfection about a month, are preduced inbout of the plant in the plant in the plant in the plant of the plant in the plant in the plant in the plant of the plant in the

The genus Epidenfroms, with its 5700 species, as well preparent dis Januarie, was to see more at which may be oblicted in the content of the content of the content of the sees the content of the sees the perfuse which it yields. E. coldstarms in our of all view perfuses which it yields. E. coldstarms in our of all view perfuses which it yields. E. coldstarms in our of all view perfuses which it yields. E. coldstarms in our of all view perfuses the content of the cont

Lucha monophylia is the only representative of the genus in Jamaica. It is a dwarf growing species found at an alritude of about 4,000 ft, and it produces bright crangescalet flowers with a purple anther can Some difficulty is often experienced in its cultivation.

Pleurothallis, a large genus of about 600 species, is represented by about 50 different kinds, all more or less interesting; and there are also many other genera of botanical

Vanilla planifolia, which produces the best vanilla beans of commerce, and three or four other species are frequently met with.



Cypripedium Norah. Mons, de Custe × Œdipe. Photo by F. Woldock.

The above flucturing gives a very true representation of the coreflorat good points representation of the corefloration good points processed by the the presentage are Spiters among, reduced as the presentage are Spiters among, reduced which can be seen in the page white does a step, when he is along white the spiter, which is hereaften when the spiter is spiter and to the formation of the broad hereaften when the probability of the processed of the processed and to the formation of the broad hereaften when the probability of the processed of the probability of the processed of the probability of the processed of the processed

certificates and so Awards of Meril have been awarded to plants which have emanated from the Westonbirt collection, the most noted being Activus Bianca, Alcibiades magnifition, Antinous, Lucifer, Minotaur, Moonbeam, Sultan, Shogun, and Morah.

ORUMO CATALOGUE — A very useful descriptive list of Oreinde has recently been issued by Mr. Edward V. Low, Vale Bridge, Haywards Henth. Mrny of the rare species and a large number of hybrids are preed The collection of Cattleya laisata albas comprises no less than 31 iroms in the Catalogue, and the list of Cypripediums includes some 250 different and distinct forms.

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The control of the cont

Zygopetalum flabellifornic, better known as faz. Cochlearc, under which name it was fagured by Lindley in the betavital Register, is noted for its very fragrant flowers; the sepals and petals are greenish-white, and the lip blue with a purple lined crest.

Oncidum polichium, as its name denotes, is a very pertly Oncidum, in graceful branched spile of small white flowers per diaces a welcome change from the usual yellow colour of the flowers of this genus. It is entirely without pound to hallo. Oncidum spill the colour of the flowers of this genus. It is entirely without pound to hallo. Oncidum with its brownish flowers marked with purple, and O. Iuridum with yellow flowers spotted with ciniamon-brown, are also well worth greenwill worth greenwill.

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sepols about five inches in length, of a yellowish-green colour, and with a few large purplish-brown spots.

firsuphtonia singuinea grows car rocks fally exposed to the influence of the sain, and this late regislates why the plant is so often succostilly califord when placed on a black of the plant of the most supported in a reverse of the plant of the plant is a superior of the frequency of the plant of the plant of the plant of the perty rocs-flat flowers, which last in percietion about a month, are produced about every or eight tecepter at the ages of a long

The genus Epidendous, with its zynesyees, is well crysterant (it I pinnick, you species, is well crysterant (it I pinnick, you so or more of which may be collected in the properties of the sweet leading deserves a piloco as account of the sweet leading which is good to account of the sweet leading thread only a very deficiency species, but is one of only a very deficiency species, but is one of the lovellour, it is usually discovered on tones at New in 1975. E. noctions have been a simple of the lovellour, it is usually discovered on tones and stocky land. F. polybulhow is un interplated by its good marrow medial by the lovellour in the product of the polybulhour in the product of the product of the crystery distance, each carry two lexers about 1 mels in length. E. Ottomor produced on creeping thintance, each carry two lexers about 1 mels in length. E. Ottomor considered from the product of t

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Pleurothallis, a large genus of about 600 species, is represented by about 30 different kinds, all more or less interesting; and there are soon many other genera of botanical

Vanilla planifolia, which produces the best vanilla beans of commerce, and three or four other species are frequently met with. life-time, yet during the whole of this period specimen plants have been

ailded to the well-known collection at cesidence of the Rev. R. V. C. Kinleside. Here then is the oppor-Orchids in which ama been interested during

The species Vandas and of which so their stately

are well represented their distichous, evergreen leaves and white fleshy roots at all rare and curious Masdevallias, for which, not long ago, many guineas were naid for small pieces consisting of but two or three leaves, are here in large specimens. The elevant in foliage and flowers, are examples of the Orchids from

vation more than thirty being on the side starring suspended in

P. intermedia

honour of Mr. W. E. Brymer, Hsington House, Dorchester, is very rare. P. amabdis and P. examples of the contents of this house.

In the Cypripedium house a grand display



Rec. R. V. C. Kinleside.

of bloom has exerted throughout the diffusion water mutule, species as well as hybrids creating considerable interest by the turnes and the second of the se

specimens. The spacious Cattleya house contains much of interest, for many of the best Cattleyas from the celebrated Downside collection have passed into the prosession of Mr. Kirdeside. At the dissecollection have pressed into the plants were sold by auction, and they

prices were realised by Messars Protheres and Morris :—Cattleya Triame Osnamii, 7 bulbs, 100 guiness; C. Triams Dodgomii, 8 bulbs, 100 guiness; C. Triams Dodgomii, 8 bulbs, 27 guinesa. All these varietess are represented in the Sunbury Hoese cellection. A number of distinct plants of Cattleya Triams, recently imported, are among the latest additions. All the cetter well known.

species of Cattleyas are cultivated in this house.

The Odontoglossum house at this season of
the year is very bright with numerous flowers.

The hybridist's work has very much increased
the beauty of this section, the various

coours being remorkanie, Odontioda Dama and O. Bizadahosaie being ecodent plants and examples of the irreduction of scalet-and examples of the irreduction of scalet-cooperation of the cooperation of the

by good erispuns, a large and remarkably

thick textured Pescatorei, and the useful pul che'll um majus. Many of the handsome blotched crispuns are a useful addition, one of the best crispuns are pure the best crispuns. Blowers with much vigour. O'dnitogloss sum Harryanium, the maker of som any truly be nutiful be nutiful.

dia Brymeriana. hybrids, has proved of value in this as well as almost every collection; needless to say, there are many of its seedlings in this house. Odontoglessum

Merit, May 26th, 1908.
In another house, chiefly used for choice Dendrobisms, are several strong pieces of the large flowering D. Wardianum, but as in other places it is found impossible to enlitwate this species successfully for more than three years; the only way out of the trouble is to replenish the stock by purchasing newly invocated about

The rare and beautiful Suphro-Cattleya



Phalanopsis intermedia Brymeriana.

Doris with its searlet-red flowers has a similarly coloured companion in Sopher-Larias Psyche, a hybrid between L. cimusbarinas and S. grandiflora. Catalyses of the albino section are represented by many kinds, the labitan stabs being worthy of special mention. As one would expect in such a large collection there are marrows varieties of Cymbidinus, Calanthes, and Crologynes. Miltonioda Harvocoli is one of the most

remarkable of the recent additions, the

CATTLEYA

crossing of Miltonia vexillaria with Cochlida Norzhana has resulted in a fairly large flower effectively suffused with scarlet.

The unabated interest which Mr. Kinleside takes in horticulture generally is also visible in the other glass-bouses devoted to various ornamental plants, orange teers haden with tipe frust, and numerous flowering plants. At the formation of the Oreidi Committee of the Royal Horticultural Society, March 26th, 1888, Mr. Kinkside was selected as a member.

## CATTLEYA SCHRÖDERÆ.

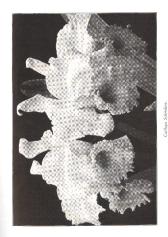
OF full the spring flowering Cattleyon more is to effected in colorogie as Cartleya Schroderra, so slight is the ideal tut on many of its varieties the seasibility capta. It full several pure allows experience to the season of the contraction of growers have found to their disoppositional that varieties with ruly the slightest force of color in the flowers have, when dowering the 160 wang your developed a preceptible purple in. The pure allimos of this spracy probably the seconded Cattleya Schrödere allow are emirely devold of purple pignants.

The locatiful orange-yellow in the throat of this species is a detentive feature, and of this species is a detentive feature, and more than one Ordeld grower has enriched his collection by the acquisition of varieties since for the possessing this special charm. The labellmanning is prottly original and coloured with a slightly deeper note that than that of the segula and elegation of the period of the pe

With a speries possessing such distinctive features and of comparatively easy culture it is not surprising to find that much use has been much of it by hybridists. When cosseed with a Cattleya species various results have been obtained the best laroon being Cattleya Robert de Wavvin, in which Cattleya Schilenians was the other prent. As may be expected the labellum of this hybrid is particularly good, the sayles and petals usually narrow. About eleven other Cattleya hybrids, in which Cattleya Schiledern has taken part, are lower, the most remarkable being Cattleya Captley, the result of sing Cattleya aures. Acyone attention to reproduce this plybrid will encounter make difficulty in securing the two parents in flower ar the same period. But whatever the difficulties are the range will be fully encounted in knowing that the possesses seeklings likely to be of permanent retemens; this is, surely, more than can be said of many hybrids.

Carticos Schrockers when combined with a Lelles speces has yielded many ment sacrial and bonation hybrids. For several years the presc pil Occhia groups at the Temple Show presc pil Occhia groups at the Temple Show the Carticos and the Carticos and the Schrockers hybrid Isonova as Ledio-Cattleya Fascinator. (Le purparta x C. Schrödene), in fact, one grower, realising the usefulness of the hybrid for this purpose, has raised a large number of plants. The variation in the design and prescribed the prescribed prescribed and the control searcher two leign alloy.

In Leibe-Cattleya G. S. Ball (cinnabarinas S. Schwiebera) Se laice another need and delicately columed hybrid. The cinnabar pig-ment of the Lafea panear combines with the soft colour of the Cattleya in a very pleasing manner, but, as in most of the cinnabar lighting, the shape is somewhat poor. It is rather strong that no such has reacted a hybrid between L. C. G. S. Ball and C. Schwiebera the extra induces obtained by the second the control of the con



A cery beautiful curiety in the collection of Clement Moere, Esq., Hackensock, NJ., US.A.

Laclia, a sufficient amount of cinnabar

In Laclio-Cattleya Mercia /flava x Schrödene) the canary-vellow colour of the Ladia nigment; the flowers of the hybrid are somerally of a good vellow colour, but are In this also improvement would be effected by crossing the labrid with C. Schrödere, and thereby obtaining a greater percentage

dene) is a beautiful hybrid, the Imppy combination of the distinct yellow-ridged thron; of the Cattleva being very effective. in the Ladia genus. Another reward awaits C. Schröderse and L. pumila: at present,

several of the highly coloured Larlio-Cattleyas has vielded some excellent results, and, as in other hybrids of three or more species, also many poor ones. Those who raise the largest number of plants from a seed-god have the best chance of success, for it is only when the seedlings arrive at the flowering stage that always that the most vigorous seedlings have the best flowers, some of the weakest crow-Thousands of seeds from every pod are never grown, far less are they even germinated, and

very possible event, but the entrancing idea of a blue Ladia or Cattleys is likey to remain binations of pigments in the flowers of livbrids which suggest the appearance of blue, and it is somewhat remarkable that in Schröderæ has taken a part in the parentage. A few Cattlevas are known to possess a blue the working up of these slight visible radiments into an ideal blue flower is almost beyond the possibilities of imagination

### DISEASE OF ORCHIDS

Orchids and other plants, caused by Bulletin, 1012, p. 44. A number of Cypripe-

and decayed, and covered on the surface with a dense, black, crusty layer consisting of the in a damp chamber at the ordinary temperature of the laboratory, the white Milowia stage of the fungus developed within a few days.

Of the symptoms of the disease in Orchids, Mr. G. Massee, the author of the article, states: "I have only observed the disease on cultivated species of Cypripedium, of which abundant material was sent to Kew, and it was stated to be present on most of the plants occupying a large house. The roots are which gradually become brown and assume plant falls over. The snow-white Milowia fruit was produced in abundance when the decayed portions were placed under favourable conditions for its growth. It was in all probability the spores of this condition of the lungus that spread the disease from one plant to another in the house, the minute spores

Of the preventive measures, Mr. Massee remarks: "It is practically impossible to cure a plant that is once infected, as the mycelium is located in the living tissue of the root, and mycelium, without at the same time killing or materially injuring the host plant. Hence the fungus is by the adoption of preventive

### SOME SWISS ORCHIDS.

By W. HERBERT COX.

Uner a treatment test As the smoot was during a treatment test. As the smoot mediance on the the plants do not appear until higher than rheshest and then rose altegether than rheshest and then rose altegether than the short and then rose altegether than the short and the state of the short and t

Of all the Swiss Cantons the Bernese Oberland is, in my experience, the richest in Orchids: the other Cantons have many but Orchids of the highlands and Orchids of the large towns many Orchids may be found. Around Interlaken for example, is a rich between the lakes of Thun and Brienz, there is a piece of marshy ground upon which many sprays of the beautiful terra cotta, pule lipped flowers of Epipactis palustris, give quite a distinctive character to the field; contrasting tailed white Butterflies (Platanthera bifolia) and the common, almost everywhere, Spotted Palmate (Orchis maculata) in varying shades land kinds, other less expected things may be seen in the soharnum as the Dwarf (Orchisustulata) and the sweet-scented Gnat (Gymndriest and barest hill-sides. The former by the heat of the sun's rays, but is a charming little thing for all that. The

at a stypical woodland plant, but carbole in as taste, and may occasionably be found in as taste, and may occasionably be found in as taste, and may occasionably be found in the control of the state o

after leaving Tracisellauenen by the "Bergwerk," two almost inseparable companions blossom together, the dainty heart-leaved Twayblade growing in the fissures between expect to find a filmy fern, and the Coral soil made by the falling needles of the Christgnarled branch of coral, the root, a stem, some bracts and a few vellowish spotted flowers, no leaves, no, nothing more at all, site, but that has since been disproved, and I think my own experience helps that, for near there, by the wonderful Schmadribach waterfall, I came across a plant flowering on a bare lump of stone in some pine needle humus which had collected in a proove. The same woods around Ober Steinberg, and also under the trees on the cliffs around the much admired Oeschinen See, many miles away, Near the waterfall, too, is said to grow the very rare saprophyte Epipogium aphyllum. always difficult to find, as it frequently allows many years to pass without sending up a single spike of its strongly seemed, rather large, flowers, resting content to grow only underground. Not far away, at Steehelberg, I have found the Early Purple (Orchis unsocial) in full perfection as large as the end of June.

Higher in the mountains, in the beds of Alpen roses, whortleberries and heather, Birchis albida succeeds well. They are dear little plants, seldom more than six meles high, companion and near relative, the Guat devoted couple of companions are found, the head and ball-typped pink petals, and Nigritella angustifolia, which we English from its unusually dark colour, or sometimes the Vandla, of which it is scented, like so many of the European kinds. The Swiss, however, call it "Mannestrea," and amount them a bunch of it accompanied by the Edel-These two also biossom together high on the Vaud. With them in both localities may be the little green Frogs (Coologlossum viride) berg, besides those already mentioned. I woodland species, but there growing on the

trees the broad-leaved Epipactis latifolia, a late kind not yet in olossom, Orchis latifolia, the Bird's Ness and the small greenish Hernamium monorchis, usually called the Musk, though the secut to me is decidedly more commarable to hone.

Now I will leave Canton Berne. I have already spoken of some of the plants of Canton Vaud, but will also give away a few other localities. Around Leysin the most characteristic plant is the Bird's Nest (Necttia nidas avis), which seems so appropriate to that looks as though it were dving, its dingy, brown flowers rising, leafless, from a thick name. This plant appears really happier in splendidly at Kohlfirst and Diessenhofen by the Falls of the Rhine, accompanied in the particular about the Beech and grows well in the Oak woods near Aigle (Canton Vand) with C. rubra and Euissetis latifolia. Around Leysin also grow the commor. Twayblade and the Gymnadenia. From there up to the Diablerets, by the Ormonts, the post road rich claret-coloured Orchis latifolia with its hollow stems and spotted leaves. Here I have only given my own experiences of the

# CALENDAR OF OPERATIONS FOR MARCH. By J. T. BARKER, The West Lill, Hessle, E. Yorks.

TEMPERATURES. With the longer days these may be advanced a lew degrees in every house, and with the increased sunshine the rise will be considerable; this will be of great benefit to the plants.

Atmosphere. With the increased temperatures

moisture may now be distributed more freely, for with the increased power of the sun by day and the fire heat in the papes at night evaporation will take place more quickly. The various lossess may be damped down twice a day, at the least, at this season, but as different houses vary the cultivator will have to carefully avoid an over dry and an over set atmosphere. The great thing to avoid is a wet and cold atmosphere, for this is most harmful to all classes of plants.

Watering mest still be done with disentionation, for at this seeson it is much easier to wet the composit than to get it dry again, and no plant should have water applied to the roots unless it is dry. If the proper ladance of atmospheric moisture is maintained no harm will occur to plants being hept and the dry side, even for a day or two, for they are capable of taking a certain amount of moisture from the atmosphere.

Ventilation. Perhaps at no season of the year is it more essential to watch the ventilation of the bounes than in this very trying month. Are must be admitted out all favourable consistons. Fresh air gives health and strength to plants, but as they are naturally delicited and tender after the winter confinent it must be admitted with discretion. Draughts of cold air must, in all cases, be accided; in all properly constructed Orehed houses it should be possible to admit air without example.

Stokeng requires porticular care at this season. A fair amount of heat in the pipes season. A fair amount of heat in the pipes at night time will still be necessary, but during leight; sumpy days this must be considerably lessened or the temperature will rise to an abnormal dupree, which may do some plangment will be required. Excess the many of the produce of the produce of the produced the

of much damage being cone; they shown as far as possible, be avoided.
Shading during this month will come into general use, but it should not be used excessively, as the plants should be gradually inured to withstand the light. It should also be borne in mind that the foliage and bullos be borne in mind that the foliage and bullos.

are tender and easily scorched.

The busy season of reporting is now upon us, and this work must be pushed on whenever possible. I do not advocate re-porting of any plants during a spell of cold weather, especially if there is any danger of the temperatures not being maintained up to the normal figures, as I believe much horm will accrue; rather postpone the worfs until

the weather takes a favourable turn. The constitution of plants must be studied if success is to be maintained, and the cultivator's aim should be to grow each plant individually.

sativations. The long cannot special between the polymers of the Walliss, restorms, and Olfrenianus are becoming active as a leave of the polymers of the poly

rather stout stakes made of hard wood. Catasetums, Cycnoches, and Mormodes, These peculiar and rather difficult plants to deal with will also show signs of activity. Having had a long dry rest in an intermediate house they will now commence to push new provides and large fleshy roots, and should be re-potted at cuce. Shake the plants out each light mixture of one-half usmunda fibre, the other half sphagnum moss, well chopped and pulled to pieces; the drainage must be ample. After potting, the plants should be removed to their growing quarters in the warmest house, giving only sufficient water to keep the compost alive until the roots get hold of the new material, otherwise the new growths may damp off. If a rather moist position in the warm house is selected for them very little water will be required for some time.

Thunias should be re-petted amoudly; the work should be done as some as the new growth proceeds from the base of the old bear the control of the control of

material. They delight in a sumy position in the warm house, close to the glass, and water must be sparnigly given them sunt the flower spike appears at the top of the new growth. To many, these plants are eiten very mantifactory, bir. for exhibition purposes they are indispensible, and on this account are worst the extra trouble to flower their satisfactory.

Plesones, such as maculata, lageraria, and Wallichama, aria mose leg resoning viaconastly: they must have mere water at the roots, and nary be occasionally sparyed on the under sade of the leaves to prevent an attack of red spiller, to which they are very subject, but it is not yet advisable to syringe them over tender. The plates do well as large game tender. The plates do well as large game in the Cattleya or internediate house; they must be shaded from strong smaller.

Deciduous Calanthes will during this month, need attention as regards re-potting, this being best done when the young growths are two to three inches high, and are about to recommended for these plants, but they will succeed admirably in the one recommended for Tinnias. I do not recommend too heavy a compost, relying rather on feeding later on with a weak solution of manure water. I prefer a good rooting medium to a close retentive compose. As regards notting the soil should be neither too wet nor too dry. and it should be thoroughly warmed before to the same temperature as the house in which the plants are growing. Calanthes should be grown in the warmest house, and needed, for if at all over watered the root action is faulty, and the growth unsatisfactory.

Angreenna, Aeristes, Saccolabiums, and Vandas, which futing the wirre mouths have been kept as dry and cool as safety will allow a will be starting age; into general, and new rootets will be poshing; a more liberal supply of mostime, both in the atmosphere and at the roots, may lieuceforth be given, and all the roots, may lieuceforth be given, and at the roots of the roots of the property of the

off with clean, living splagmum moss. Where such Vandas as teres, Hookerinar, and Mass Josephin have been rested in an intermediate beaue, it is now advisable to return them to their growing quarters in the East Indian of the warmess house where the lightest position possible should be selected for them.

Whilst overhauling these plants it is a favourable opportunity to faroughly clean them as they are often attacked by a small scale, which is very difficult to eradicate when once it goes established. Resouthers Inschootana succeeds best in an intermediate house the whole year through; it will now be pushing up its flower spikes and will need more water at the roots.

Angulous will now commence to push up their new growths: they must be carefully watered ruff, such growth gets nicely away, and when the new roots are some to be pushing may be reported, if necessary. The compost recommended for Thumss will answer their requirements, and they should be grown in the intermediate benow. The loss same remarks apply to Lycaxes, which for cultral purposes may be treated in the same manner. After being districted at the roots both kinds must be watered with ear until

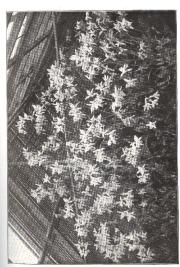
Miltonias. M. vexillaria, and its varieties,

will now be rapidly making new growth:

they will require more water at the roots. Fowards the end of the mouth these plants which they have passed the winter, and be placed at the warm end of the coul house. where the humid atmosphere will be of great benefit to them. M. Blesana with B. Ruszlii had better stand for a few more weeks at the warm end of the intermediate house. M. spectabilis, with its varieties, and others of the late summer and autumn flowering kinds, require a shady position in the interprediate house during the whole year; these plants are now making their growth and liberal supplies of water will be required. If any of the plants need new potting material it should be afforded them just before the growths produce new roots. The notting

compost may be similar to that employed for

Dendrobiums.



# AN ORCHID COLLECTOR'S TRAVELS THROUGH BRITISH GUIANA TO BRAZIL.

By ED. KROMER.

(Continued from page 110.)

Our first tern now was to centure a boson for ourselves during our skay. All first we attended to have a special house built vier to facilities a special house built vier to facilities of the property of th

I may mention here our emazement at witnessing what a most extraordinary cedesistatical annia processed these people 2: this place, called Kamaiwawong, just then, inducing them to give up all work, and instead to discuss themselves during Gaytime to such extraorgant and unintelligible characteristic as was of the pury must have seen in their travels at the mission stations on the Potam or the uncur Example.

Every slay now we set out only in the norming in the different directions reaching for the various species of Octoba and other produced on the contract of the Certifica, growing only either on hore racks or on whated manding guested trees, fully exystent to the sun, but by on means dal we proved to the sun, but by on means that we proved to the sun, but by on means that we prove the condition of the boser lead of the river, growing among growess and to high water completely convered over, we came across large change of Certificials and the contract of the contract of the contraction of Roraima, over undulated sloping ground. extends that wonderful savannah, which Schomburght described in plowing words as a true hotanical Eldorado. Here, on diserground, we gathered a quantity of Zygopetalure Burkei which was also found on bare rocks, together with Pogosia purviflora and P. tencis, Cyrtopodium cristatum, Habenaria exposed to the sun; strange to say that I again came across this latter plant some 1,500 miles away from here in Northern Peru, where, however, I found it growing in deep shade in the virgin forests. On the edge of the savannal: between enormous blocks of nigratum with its quaint little white and Some to plants were all we could get.

Still higher up the slope we noticed laria. Humboldt'i with its dark blue flowers on tall spikes, which grows here chiefly in the axils of the leaves of a Bromelia, Brocchinia conclulinoides, so in order to get the Utricuwith it. Close to this Utricularia, but confound a field of Cypripedium Lindleyanum with its vellow-brown blossoms on tall brenched stems: this plant gave us considerable trouble with its long flexing roots deep in the muddy awarms, the more we coulled to set is out the more we sunk with our feet in the soft mud. Below the forest slope, but still on swarms ground, were amonest the short grasses large batches of the South American pitcher plant, Heliamphora nutaus, with its delicate, star-shaped white flowers on reddish stems, a most welcome addition to our collection. Reaching the edge of the savannah at its highest point towards the cliff of Roraima

we cancer the forcts, after electing with difficility a path through the dense growing tambox and bramble budses, and withered high excited coloreds, angles standing budget teacher chosen standing consistent and budget the colored of Sughresting consistent as about hard belt action stacking one of the stem and benedless of the trees; it is the flower that kernys be existence of the plant. Urriculars (Lample-Bloom, a dimansive creacise we be beyond all the time on these procision gignies may well be imagined. Here, we we obtain glant randors interesting, doord groung appears on the root of Mandewillia, which afterwarding proceed to be W. guinzanis,

to the top of Roraims again was a settled though indexer doubly and at different periods. a step further. We were determined to risk what neither others nor ourselves had done for as possible a thorough good look round the place. Before putting this scheme into execution, however, I was considerably concerned over the insufficient quantity of all, were the chief object of this expedition. Cattleyas, if only in limited number, on the Rú-iméru, a tributary of the Kukensam, socie 25 miles south of Romama, I decided for a to that spot once before, and with the exception of the brothers Schomburgk and myself it had never been visited by any other traveller. So after ordering one gang of Indians to get during my absence a path cleared up the slope above the savannah as far as the cliff and then along the ledge leading to the summit and while another party under Seyler's directions had to contime the collecting of plants in the neighbourhood, I started off with six men in a southerly Our return journey to Roraina, was done by the wish of my ludians by a different costs, on which at one place they cilled my attention to a large quadrangular shaped vick, the frent adde of which was revered with symmetri cally carved, a training. I falson large great mission Waragust on the Essequible. To my disappointment, a lowest promising from the loose when we passed that 1904, which precising the from taking a photographic precising the from taking a photographic

Or my return to our care p Seyler mismed much that the path was so far cleared for our ascent. We prepared some very light loads, for some ten une, so do offered to accompany us, but we took no harmonick, as we knew there seem on teres there is along them troot, and see started early in the asserting of the oth Novender. Fortunately we are for the seem of the seem of the seem of the engineers made a fairly good clearing up the force slope as fee as the cliff only, but no further up the ledge, which came in an oblique way about 25 we fit to the summit.

way along fee that the samming swanniah, where Tassing ever the awarings swanniah, where we obtained, old site of the previously, our botamed collections, and which his s<sub>2</sub>(soc feet above see-level, we first came through a dense hush of low trees, seldom stepping on solid sed, but instead, hand and feet fully occupied, over masses of vegetation dense enough to beer our own weight; higher up. clarking over tree stumps and high recks or crawling en all flows melicroton toltens, the ground sometimes treeds round of these prices have been been subject to the subject to the subject in with one leg or another, then we tolded on the secretor of the perpendicular ell. It was to the subject to the sum of the tolge at the bottom of the perpendicular ell. It was to the subject to the sum of the subject to the tolder of the perpendicular ell. It was to the subject to we felt the cold intracely. muddy clay, and over some more rocks and shruhs, everything wrapped in a covering of beautiful, many-coloured wet mosses, which felt, however, my cold to our touch.

At last we raine to the Fall, by the Indians, called "Kamaiva," which descends in one leap some 500 feet from the top of the cliff on to the ledge. Luckly there was very little water coming down just then, but coming from such a beight it fell upon us as a very heavy rain. On the where sede of this Fall we lead to climb



Mr. Kromer, and the Interior of his House.

From this point we descended fart a thepduct axing, overgrown with a familiar leeding blackberry. Ruluss guisnensis, the ripe fruit of which was cliciciardly sweet, then we began to follow the leeling, which in many places was so narrow that we lack to keep very close to the cliff: we lost to pass through a dense network of a short-growing, but must treathesome bambeo, which defined even the sharpest wood-fault to exercit, then over very shippery, up a number of satural stone steps, covered with a shear growing Bounchig, shows bastp-pointed, servace leaves caused our Indians, who were useful resurves are books, great pain. The picker plant, Heliumphorn antans, which I mentioned before, also was here in obusilance used of such great size and beauty that it looked almost like a new species. We were now nearing the top, one more corrapposes effort and we should see

what before ourselves only three other white men were favoured to see—the top of Roraima. It was one o'clock and the thermometer registered 48 degrees F, in the sun

At this point I consider it most apprepriate to mention in connection with nade on occurrence the name of Sir Bernard in Thum, the has Gworner of the Fi I Stands, who towards the read of 1854, votable of the Sir Bernard of Action of the Sir Bernard of Read of the Sir Bernard of Read of Read

After having admired for a while in with the help of the Indians we soon found a cliff. In all haste we started gathering a quantity of the scarlet flowering Utricularia. which I mentioned once before, and which feeling the celd immensely, so that an hour the plants collected and with the injunction to come again next day and tetch as down. After a hasty lunch we had a good stroll ler collecting the various Orchids and many new to me, growing as they did at such an isolated altitude. Besides the Utricularia recutioned we found two other tiay whiteflowering Utricolarias a curious-looking Maxtwo or three Habenarias. We ascended one into the far southern distance. We saw streams running in different directions, contriAtlantic side of South America, the Orinoco, the Essequibo, and the Amezon.

But by far the most assembling, the most unrevelous, spirt one ever could below what has conglementation of the countless instantial and the conglementation of the countless instantial everywhere, and which remembled more as disorderly gallery of gigaratic stone monsters than anything clebe. The first irrepression was then of includiny to understand these surroundings; the next, that one was carturing some strange, country of night-matrix; for all countle throughout the country of night-matrix; for all countle throughout the property of the country of the

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#### NOMENCLATURE.

We extract the following from The Irida of Velenius Jud. 1912. "See Jerential Column sees: a new hybrid moned O collect." See Jerential Column sees: a new hybrid moned O collect. The property of the Irida of Irida of

If every barticulturist is correct in his spelling, succept we may expect The Field to be acquained with the elementary rules for Botanical Nomenchature adopted by the Vienna Congress, 1953. We must sensual them that specific names taken from the numes of persons are spell with a capital letter.

The Royal Horticultural Society is, and

should be, the place where horiculturies may obtain the correct name for the various Ordelius. Why then are we expected to the obtained to the plant in queries of the plant i

CATTLEYA A. DIMMOCK.-This elegant Cattleya Lawrenceana has recently flowered in the collection of Clement Moore, Esq., Hackensack, New Jersey, U.S.A. flowers are not very large, but the colour is intense throughout, and although Mr. Moore possesses some of the facest hybrids he consalers this ranks among his best. A cut flower has recently arrived from America in excellent condition, and should the plant flower annually at this period of the year, it purposes. The spike partakes very much of the character of C. Lawrenceana, and comes well away from the apex of the bulb with a long stem bearing numerous flowers. The plant, which is a rampant prower, was recently by the Horticultural Society of New York.

#### ROYAL HORTICULTURAL SOCIETY.

MEMBERS of the Orchid Committee questro.

J. Gurney Fowler, Esq. (in the chair), Sir J. Gurney Fowler, Esq. (in the chair), Sir Jermain Colann, Bart, and Messes, Jas. O'Brien (thon. sec), Harry J. Veitch, R. Beronam-White, W. Belson, Walter Cobb, Gurney Wilson, W. H. White, A. Dye, H. G. Alexander, J. K. Shill, W. H. Hafeler, J. Cypher, T. Armstrong, A. McHein, C. It-Cartis, F. H. Hambury, and R. A. Rolje.

Lieut-Col. Sir George Horlood, KCVO, a White Horlood Rev. H. G. Alexander), exbitited Sophro-Lecio-Gattleya Mezathon var. Vesavius, having a spike of six brantiful rose col flowers with a rich raby hip. Cypricefium Helen H. 'Holfort's variety," and Odontorlossum Me-lie (see Association).

Sir Jeremiah Colman, Bart, V.M.H., Gattor Park, Reigate, exhibited Odentroglossam Collien (Phoebe × ardentissimum), a very distinct purple-blotched flower, perale slightly pointed, column and lip white, the latter having a few purple markings.

Francis Wellesley, Esq., Westfield, Wokin exhibited the scarce Brasso-Cattleya Welleicyac (C. Mossia: Wagneri x B. glauca), a elegant pure while dower dishely francis. Cypripatium Duchess of Angyll (Drury: x Lecanum), a large llower of good shape and colour; Cyp, Memoria Mostynii superbini (aureum sarprise x Artruel), a very distinct genenialsyclot flower with a white margin to the dorsal; Cyp, Waterlow; and Cyp, Welkeleyæ (Venus x insigne "King Edward")

J. Gurney Fowler, Esq., Glebelands, South Woodford, staged Odontoglossum crispum Olive, a prettily spotted variety, and the elegant Odontoglossum Memoria Lily

Mesers. Charlesworth and Co., Haywards Heath, received a Silver Bashsian Medal for some rare Orchids including Catasettem Randii, Vanda teres alba, Odontioda Charlesworthii, the new Ladio-Cattleya Ixion, and Odontoolosum Doris.

Mesors, James Cypher and Sons, Cheltenham, were awarded a Silver Benlesam Medal for a good group of Cypropedium; included in it were strong plants of Bridgei and Becckmanii. Interesting species of Masdevallin and varieties of Leslia anceps were also

Messrs. J. and A. McBean, Cooksbridge,

received a Silver Banksian Medal for an attractive group containing Cattleya chocoensis alba. Odontioda Charlesworthii. Cymbidium Lowio-eburneum, and its yellow variety auriferum, several excellent varieties of Lælia anecps, and a richly coloured Bras-

Messes, Stuart Low and Co., Bush Hill Park, received a Silver Banksian Medal for a good group of various Orchids, Mention must be made of the elegant Saccolabium bellinum Cypripedium Lady Dillon, a very fine flower, the dark Pleurothallis Rozdii, the bright yellow Oncidium cheirophorum, and a distinct variety of Cattleva Triange,

Messes, W. Baylor Hartland and Sons, Cork, received a Silver Flora Medal for a large group of Odontoglossum hybrids and Mr. W. A. Manda, South Orange, New

good Cypripediums

Jersey, U.S.A., and St. Albans, exhibited Cattleya Triange American Beauty with broad petals having a well-defined median streak of purple colour, C.-T. Abe Lincoln, a dark variety of good form, and a large plant of the same species with curiously-deformed flowers.

Messrs. Hassall and Co., Southgate, staged Lycaste Skinneri alba, a broad-petaled variety of excellent quality. Odontorlossum Solon (ardentissimum × Adrianæ), Od. percultum, Cypripedium aureum lækense, and C. chrysotoxum Victor, a very fine variety.

From Tracy's Nursery, Twickenham, came a fine form of Oncidium authorrene

#### AWARDS.

#### FIRST-CLASS CERTIFICATES.

Odontoglossum Merlin, from Lieut,-Col. Sir George Holford, K.C.V.O., Westonbirt, (gr. Mr. H. G. Alexander).-An extremely beautiful form. The flowers are 31 inches across, the glistening-white segments are very broad and handsomely marked with rosepurple blotches, the column having a very much darker blotch of purple. Although the parentage is uncertain there is little sign of hybridity, and the plant may not incorrectly be described as an excellent variety of Odontoglossum crispum.

#### AWARD OF MERT

Odontoplossum Memoria Lily Neumann (parentage unknown), irom J. Gurncy Fowler, Esq., Glebelands, South Woodford. An attractive hybrid with good shaped flowers marked with claret-purple, the tips being white slightly tinged with rose.

### MEMBERS of the Orchid Committee present:

J. Gurney Fowler, Esq. (in the chair), Sir Jeremiah Colman, Bart., Sir George Holford, and Messrs, Ias. O'Brien (hon, sec.), Harry I. Veitch, de Barri Crawshay, C. J. Lucas, R. Brooman-White, Gurney Wilson, J. S. Moss, R. A. Rolfe, Stuart Low, T. Armstrong, A. McBean, W. Cobb. I. Cyoher, I. Charlesworth. J. E. Shill, W. H. Hatcher, A. Dye, C. H. Curtis, W. P. Bound, H. G. Alexander, W. H.

White, and W. Bolton. Sir George Holford, K.C.V.O., Westenbirt

(gr. Mr. H. G. Alexander), received a Gold Medal for an extremely fine and beautifully arranged group of Orchids, many of the plants being large specimens. Lælia anceps and its numerous varieties were well represented: Cyprioediums included Boltonii, Rossettii magnificum, and the elegant Alcibiades magnificum: Lælio-Cattleyas included Tigris. a very beautiful form, Pizarro (L. Jongheana × C. aurca), and other early spring flowering hybrids; Sophro-Lælias were represented by the richly coloured Orpetii; and the species by Cattleya Percivaliana Charlesworth's var. and C. Triance Hydra.

Sir Jeremiah Colman, Bart., Gatton Park, Reigate, exhibited the handsome Dendrobium Lady Colman, D. Golden Ray (Othello Colmanæ × signatum aureum), a large yellow flower with a dark checolate-brown throat, and a hybrid Cymbidium between Lowianum x Hookerianum with greenish-vellow flowers

W. H. St. Quintin, Esq., Scampston Hall. Rillington, York (gr. Mr. F. C. Puddle). showed Dendrobium Cybele album (see

W. Cobb, Esu. Normanhurst, Rusper. staged Cattleya Trianæ Cobbii, a distinct variety, Odontioda Bradshawize Cobb's var., Cypripedium Euryades, and the pretty Sophro-Ladia Psyche with many flowers.

H. Jennings, Esq., 42 Marlowes, Hemel lennings, a good hybrid, the suggested parentage being conanthum superbum ×

Mrs. W. J. Joicey, Sunningdale Park, staged a wonderful specimen of Lycaste Balliae with

de Barri Crawshay, Esq., Roscfield, Sevenoaks, exhibited Odontoglossum Valeria (Edwardii × Vuvlstekei), Od. Voluminia (Hallio-crispum × Vuylstekei), in which the × illustre), a promising hybrid with reddish-

brown blotches, and Orl, Vulcan (see Awards). F. C. Godman, Esq., South Lodge, Horsham (gr. Mr. Giles), showed Odontoglossum Godmanii (Edwardii × Rolfese), a richly

Sir Julius Wernher, Luton Hoo, Luton, received a Silver Banksian Medal for a good

Messes, Charlesworth and Co., Haywards Heath, received a Silver-gilt Medal for a grand group principally composed of Odontiodas. the rich scarlet-red flowers of which are an attraction in every Orchid collection. Other choice plants included Larlio-Cattleva Nelcus. with bright canary-yellow flowers, Cattleya Francisia, C. Triange alba of extra quality, the richly coloured Cattleya Octave Doin, and a good selection of the beautiful Odoutoglossum armainvillierense xanthotes.

Messrs. Armstrong and Brown, Tunbridge Wells, received a Silver Flora Medal for a large group containing the green flowering Corlogyne pandurata, Bulbophyllum galbinum, the pretty Cyp. Cupid Cattleya Maggie Raphael alba, Ladio-Cattleya Ernestii of a good yellow colour, L.-C. Myra, and several

Messrs, Mansell and Hatcher, Rawdon, Vorks, received a Silver Flora Medal for a choice group of various Orchids. Included in it were excellent forms of Lycaste Skinneri, Calanthe Baron Schröder with fine spikes of bloom. Odontoslossum Vuylstekei, and the pretty lonopsis paniculata.

Messrs, Sander and Sons, St. Albans, received a Silver Flora Medal for a large group containing many excellent specimens of Phalanopsis Schilleriana, the interesting and distinct Cypripedium caudatum Sanderse, Odontioda Graireana, and a dark variety of

Messrs, Stuart Low and Co., Bush Hill Park, were awarded a Silver Flora Medal for a group of choice Cypripediums, including the golden-yellow chessingtonense, a fine specimen Angræcum sesquipedale, Phalænopsis Schilleriana, the scarlet-red Renanthera Im-

Messrs, I. and A. McBean, Cooksbridge, group of Cymbidiums, C. eburneum being a notable specimen, Lycaste Skinneri, several good Digbyana hybrids, a large plant of Cattleya chocoensis alba, and many choice

Messrs, Cypher and Sons, Cheltenham, interesting group of various Cypripediums, Larlio-Cattlevas in variety, and many botanical species, several of which were of considerable rareness.

Mr. E. V. Low, Valc Bridge, Haywards Heath, received a Silver Banksian Medal for a good group of Cypripediums, notable plants Mousmé (insigne Harcfield Hall × Lecafium Clinkaberryanum). Several Odontoglossum hybrids were also shown in fine form Messrs, W. A. Manda, South Orange,

U.S.A., and St. Albans, exhibited several large plants of good varieties of Cattleya Schröderæ and Cattleya Trianæ picta. From Tracy's Nursery, Twickenham, came

Odontoglossum Pescatorci Floryi, a curious

Mr. M. Mertens, Ghent, showed several handsome Odontoglossum hybrids.

#### AWARDS OF MERIT.

Calanthe Baron Schröder var. alba flora, from Baron Bruno Schröder, Engleheld Green (gr. Mr. J. E. Shill). A very beautiful form Cattleya Brenda (Dusselderfei Undine × Gaskelliana alba), from Lieut.-Col. Sir George Helford, K.C.V.O. Westonbirt (gr. Mr. H. G. Alexander.)—A very elegant and well-balanced flower with pure-shitte sepals and petals, the lip is broad, with open shoulders, and also

white.
Odontoglossum Vulcan Crawshayanum (crispum × Vuylstekci), from de Barri Crawshay, Esq., Reseficid, Sevenoaks.—A very large and handsome flower with broad

## petals marked with large blotches.

to Mrs. W. J. Joicey, Sunningdale Park, for a grand plant of Lycaste Ballice with 20 large flowers.

#### MANCHESTER ORCHID SOCIETY.

January 25th, 1912.
MEMBERS of the Committee present:-Rev.

J. Crombleholme (in the chair), R. Ashworth, W. R. Lee, C. Parker, H. Thorp, Z. A. Ward, J. C. Cowan, J. Cypher, J. Evans, W. Holmes, A. J. Keeling, D. McLeod, F. K. Sander, and

W. R. Lee, Esq., Heywood, received a Silver-gilt Medal for a very fine exhibit of

choice Orchids.

Z. A. Ward, Fsq., Northenden, was awarded

a. Silver-gilt Medal for a good group of

Cypripediums and Odontoglosums. S. Gratrix, Esq., Whalley Range (gr. Mr. Brown), received a Silver Medal for some very choice plants, several of which obtained

Col. J. Rutherford, M.P., Blackburn, obtained a Silver Medal for a group of excellent Orchids, Odontoglessums being well

Silver Medal for a varied group containing many good Cattleyas. W. I. Hargreaves, Esq., Burnley, received

a Bronze Medal for a good group of Cypripediums G. H. Peace, Esq., Monton Grange,

meresting Cypropodiums.

Rev. J. Crombleholme, Clayton-le-Muors,
was awarded a Bronze Medal for Cypri-

O. O. Wrigley, Esq., Bury, received a Vote of Thanks for a small group of very choice

of Thanks for a small group of very choivarieties of Lycaste Skinneri.

J. J. Holden, Esq., Southport, staged several excellent Cattleyas and Cypripediums. J. H. Craven, Esq., Keighley, cxhibited Oxfontoglossums and Odontioda Corneyanum. R. Ashworth, Esq., Newchurch, staged

Cypripedium Earl of Tankerville.
H. J. Bromilow, Esq., Rann Lee, exhibited several good Cypripediums.

F. A. Hindley, Esq., Bradford, staged Courington Hindleyanum.

Mesars, J. Cypher and Sons, Cheltenham, were awarded a Silver Modal for a choice group of Cyprisediums.

Messrs. Charlesworth and Co., Haywards Heath, stuged Odontioda Wilsonii and Lactio-Cattleva Myrrub.

Mesers. Hassall and Co., Southgrate, exhibited some excellent Odontoglossums. Mesers. Stuart Low and Co., Enfield, staged two seedling Cypripediums of

Beekmanii parentage.
Mr. J. Evans, Congleton, and Mr. W. Shackleton, Bradford, exhibited various

#### AWARDS

### FIRST-CLASS CERTIFICALES. Odontorlossum Harmac (crispnin Grair-

camm x Vuylstekei), flower of good shape, deep-elaret colour, with white margin to the segments. Odontoglossum miranda, rose colour, with brownish markings: Sophro-Gattleya Mra. F. Wellesley "Lec's var.," all from W. R. Lee, Esq.

Cypripedium Alcibiades "Gratrix's var.," from S. Gratrix, Esq., a very large flower of excellent shape, with dorsal sepal over 3 inches across. A Silver Medal was awarded in addition to the F.C.C.

### AWARDS OF MERIT. Cypripedium Lady Dillon magnificum

(nitens × Mrs. Mostyn), from W. R. Lec, Esq. Cypripedium Black Knight (Mrs. Mostyn × Thompsoni), and Cyp. Princess Wilhelmina (Sallieri aureum × Leeanum), both from S. Gratriy, Eso.

(Sallieri aureum × Leeanum), both from S. Gratrix, Esq. Odontoglossum "Prince Edward Ward's var.," Odontoglossum crispum "Eric," and O.

ardentissimum "Nerman," all from Z. A. Ward, Esq.

Odontoglossum crispum Luci-Mascreel (Luciani x Franz Masercel), and Brasso-Cattleya Rutherfordii (Gaskelliana alba x B.-C. Queen Alexandra), both from Col.

Rutherford.

Cattleya Holdenii "Purity" (Warneri alba 
intermedia alba), and Ordontoglossum 
George V., both from J. J. Holden, Esq.

February 8th, 1912.
MEMBERS of the Committee present: Rev. J.
Croud-beholme (in the chair), R. Asiaworth,
W. R. Lee, C. Parker, H. Thorp, Z. A.
Ward, J. C. Cowan, J. Cypher, J. Evans, W.
Holmes, A. I. Keeling, D. McLeod, W.

Stevens, and H. Arthur (Secretary).

Z. A. Ward, Esq., Northenden, was awarded a Silver-gilt Medal for a group principally

composed of Odontoglossums. Wl. R. Lee, Esq., Heywood, received a Silver gilt Medal for a good group of choice Orchids, one of which obtained a First-class

R. Ashworth, Esq., Newchurch, was awarded a Silver Medal for a good group of

Odontoglossums and Cypripediums.
Col. J. Rutherford, M.P., Blackburn, received a Silver Medal for a good exhibit

of Odontoglossums and Cypripediums.

A. Warburton, Esq., Haslingden, received a Silver Medal for Odontiodas and Cypripe-

J. McCartney, Esq., Bolton, was awarded a Bronze Medal for a group of Cattleyas and Lelia anceps.

Rev. J. Crombleholme, Clayton-le-Moors, received a Bronze Medal for a small group of Cypripediums.

W. J. Hargreaves, Esq. Burnley, staged a

small group of Cypripedians to which a Bronze Medal was awarded. Wm. Thompson, Esq., Stone, exhibited

good Cypripediums, several of which obtained awards. J. J. Holden, Esq., Southport, exhibited

Lycaste Mary Gratrix and Cypripedium birkdalense.
G. H. Peace, Esq., Monton Grange, staged

Odontoglossum Pikebe "Monton Grange var."

H. Thorn Fon Rhodes stagged a variety

H. Thorp, Esq., Rhodes, staged a variety of Cypripedium insigne.

Mcsers. J. Cypher and Sons, Cheltenham, were awarded a Silver Modal for a good group containing excellent species and

Messes, Sander and Sons, St. Albans, received a Silver Medal for an excellent

Messrs, Hassall and Co., Southgate, staged several excellent Odontoglossums and Continuous

Cypripediums.

Messrs, A. J. Keeling and Sons, Bradford, staged several good Odontos/lossums.

Mr. W. Sharkleton, Great Horton, staged a very fine variety of Odontoglossom crispum.

#### T-CLASS CERTIFICATE.

Odontoglossum percultum purpurascens, from W. R. Lee, Esq., a fine round flower with solid bronze-purple markings, the segments edged with white.

AWARDS OF MERIT

Odontoglossum crispum Euterpe, from W. R. Lee, Esq. Odontoglossum Wilekeanum "Jasper"; O. Adriane "Vulcan"; and O. Jasper, all

Cypripedium birkdalense (insigne Sanderianum × Thalia magnificum), from J. J. Holden, Esq.

Cypripedium Hercules (Vandyke x Sultan), Draco, and Nubia (Niobe x Thompsonii), all fine varieties from W. Thompson, Esq.

Odontoglossum Orphanum, from R. Ashworth, Esq. Cypripedium Lucernale (chrysotoxum × Euryades), from A. Warburton, Esq.



LUCASTE SKINNERI ALBA - A grand specimen of this elegant Orchid with the large number of 31 flowers and buds was exhibited at the meeting of the Manchester Orchid Society, February 22nd, 1912, from the col

OBITUARY. We regret to announce the death of Mr. Herbert J. Adams, of Roseneath, Enfield As an amateur cultivator of Orchids Mr. Adams was well known. He was a life Fellow of the Royal Horticultural Royal Benevolent Institution.

beautiful and remarkable variety of this hybrid has recently flowered in the collection of I. Gurney Fowler, Esq. It is, without lateral senals overlap to the extent of one quarter of their diameter: the broad, almost is less than an eighth of an inch. The flower is handsomely marked with reddish purple blotches.

scarce hybrid between S. Lindlevanum and S. Iongifolium grows with viscour in the collection of George B. Bennett, Esq., Sunbury, Purley. It was exhibited by Messes, Sander and Sous at the Royal Horricultural Society, February 27th, 1000. and has also been raised by Mr. R. M. Grey, of North Easton, Mass., U.S.A., in the latter case under the name S. Ursundæ, Mr. a spike six to seven feet in height, with somesix months. At the present time the spike is two feet six inches, and is already half an inch in d'ameter.

sent from the Westonbirt collection by Mr. H. G. Alexander. The dowers are much netals being delicately tinted, while the labellum, which is usually an attractive part of the flower of this species, is richly coloured with bright number at the apex, the inner part being rich reddish-crimson, and the threat deep orange, this latter colour being also largely suffused on the reverse or outer side period of flowering and the remarkable coloration of the labellum make this species finest results it should be crossed with flowers having broad, open labellums, for in this way

CYMBIDIUM EBURNEUM,-This species was first described by Lindley in the Betanical Register, 1847, t. 67. It is common on the Khasia Hills, at an elevation of 3,000 to 4,000 feet. Although only one or two flowers are produced on a stem they are, nevertheless, very elegant, of a pure ivory-white colour, and have the merit of lasting a long time in perfection. The ridge on the lip is of a bright vellow colour, the column being sometimes tinged with pink. In a few examples the front lobe of the lip is slightly spotted with rose number a form of this kind having been named many years ago as eburneum Dayanum. A good form of this latter variety. and also an unspotted one, has recently flowered in the collection of Capt. Robert Twiss, Bird Hill House, Bird Hill, Limerick. A very pretty and distinct form of Cypripedium Leeanum is also in the same collection, the flower having a somewhat unusually white background with purple lines. and markings of more than the usual density of colour.

EULOPHIELLA HAMELINE ... In a useful Mess. Th. Pauwels and Co., Meirelholte, Ghent, given. One depicts a large specimen of roots, is about seven feet in height. An accompanying note states: "This very rare species is the Open of Orchids, Many attempts to introduce it have failed, in suite of the creat expense and the care taken in collecting it. This year, thanks to the experience and devotion of the collector, we have introduced about thirty fine plants in perfect order. This wonder comes from Madagascar, where it grows on the stumps of the Pandanus in very damp places, rather exposed to the sun. For successful cultivation a temperature of 65 to 70 degrees is required. It should be cultivated with a beech leaves, and sphagnum moss. The plants should be placed in a damp house where a good light is obtainable. This superb Orchid produces one or two flower

spikes about three feet in length, each one carrying from twenty to thirty flowers equal in size to those of a large Phalenopsis Rimestadiana. They are of a very bright rose colour, the labellum being of a deeper rose, stippled with golden-yellow."

CIRRHOPETALUM REPRACTUM.—This interesting and very distinct prices is remarkable for its wide distribution, being one of the few epiphytic Orchids that inhabit both the Himalayas and Java. The resemblance of the spike of flowers, with their long latend sepals, to the sales of a windmill has caused it to be known as the Windmill Orchid.

#### ODONTOGLOSSUM VULTURNUS.

Wileleanum havengtense

Kegeljani Vuytstekei

Vulturnus Richard Asl

Mr. Richard Ashworth follows his fort Regelpinal planted (onlinedense) with another whose yellow ground is as trillitar as could be wished. It is a complete union of the two parents Sepals and pertals of rich Regelpina tone yellow, two thrist covered by heavy begight towns munti blotches and tage speats. The lipin this particular wordey (the first to open) is narrow and long, locating to provide the property of the property of the country proven, and trends to convenient and inswards, as do some hybrids of Kegelpin; the lip in character is internactalist.

de B. Crawshay, February 24th, 1912.

### DISA GRANDIFLORA.

THIS elegant South African terrestrial Orchid is found on the margins of streams on the Table Mountain, at an elevation of about 2,000 feet. Owing to the reckless manner in which some collectors have

gathered the plants the species is, unfurtunately, not so common as formerly. It is, however, gratifying to know that it is also found in adjoining situations. The glorious scarlet colour of the flowers has caused it to be known in its native babitat as the Pride of Table Mountain.

Dies uniflora, the original same, was cinanged by Linnens, the younger, who thought Dies grandulora more appropriate. As it is now so well known by the latter name we have fet obliged to maintain it, especially as only when the plant is very badly grown does it produce a single flower. Ou account of the heauty of the flower the plant well descrees the name "flower of the gooks."

In its native home it is found growing in very moist black sandy peat, the atmosphere being always cool and very damp. Probably the greatest mistake in attempting its cultivation is to place the plants in too dry and too warm an atmosphere. A cool house or cold frame, in which the frost is excluded, has often produced the finest results.

Re-porting may be done as soon as the tubes connected the upper formation of the tuber of tuber

The pats or pans should be filled about onethin full of crocks, on the top of which place the compact of flurous peat, loam, sphageam moss and coarse sund. Place the ports in a coal airy house, and water carefully for the first few weeks. The growths will make rapid beadway and should, on all favourable coasions, be springed about twice a day with rain water about the same temperature as the losses. The plasts must never be ellowed to become day at the roots, or serious trouble will result.

Some growers advecate giving considerable shade, while others use but little. We believe the best results are obtainable when only a slight shade is used during the middle

of the day. It must, however, be remembered that plenty of ventilation should be given, otherwise the foliage will be quickly jurnt by the sun.

Correct calibration has proved how inappraise the same uniforation (now lower) just. The Hyde Pack House, near Coric, some thinty or Market House, near Coric, some thinty comes as 12-in, jud, bore 19 dweer steam, on which, in the aggregated, were \$4, house, and three other plants produced to flowers or a total of 100 showers on from plant. These plants were general ways from the contract of the

In the celebrated graden of Chatsworts, there was, in the your 1875, one of the finest plants which has probably ever been produced; or one spike at had twelve large bright scarled-crimson flowers veriend with pilk. Mr. B. S. Williams, a reted Orchidal of that time, stated that it was word a journey from London to Chatsworth was word a journey from London to Chatsworth house, where no contract the contract of t

In Mr. George's garden, Partysburn, Beliast, this species was cultivated with considerables success. A small piece was, in a few years, grown into a remarkable speciment, when in a 20-in, pan it carried no less than 65 quilets of bloom each bearing from two to five flowers. An illustration of the plant was correct in Tibe Genders, December 11th, 1884.

Penhabs, owing to the discontinuate of cultivating Hotals and other hardwooded plants, ome difficulty is experienced in obtaining a suitable house for greening. Doss grandiflars; we certainly to not, at the present time, see and entersible specimens as formerly. This is regrestable, for there is no other Ordelin possessing such an amount of surfect obour in its discret. In the variety known as farmelf as supplementally as noticeable, if they be described, and they are supplementally in the control of the contro



### MILTONIA VEXILLARIA "MEMORIA G. D. OWEN."

DEAUTIFICE, as all the varieties of Millouis vestilina are, not one equals the eclebrated Mr. or "Memoris GD. Owen," The very emericable block of the Color of th

large ann of azo guineas; a second plant, of two hulbs and a new growth, made 300 guineas; and the remaining perion, wo bulbs and a streng lead, made the remarkable figure of 500 guineas. The above illustration is one of four plants flowering in the establishment of Messes. Dechesne and Lanthoine, Watermack, Brussels.

Miltonia westlinatia, and its varieties, require an even temperature in which to grow, this being best attained by placing the plants is the cool loane during the sammer mouths, and it a cool Cattleya loane during the winter time. They are very lable to produce spotentiae. They are very lable to produce spotential the plants of the cool of the cool of the plants of the cool o

# RULES OF HORTICULTURAL NOMENCLATURE ADOPTED BY THE SUB-SECTION ON NOMENCLATURE AT THE INTERNATIONAL CONGRESS AT BRUSSELS, 1910.

THE Royal Harticultural Society having adopted these rules, it is necessary to fully understand them, and also to see how far they will allect the nonenclature of Orchids. To make them more explicit we have given examples, and in many cases added certain remarks which will form matter for further correspondence.

Merice 1. "Mortochusel necessitature is hased upon the rules of Bottmical Nonen-chatear adopted by the International Congress of Bottang, Held at Versma in 1995. The Hortechmand Coogress acress and the particular of the Property of the Pr

1. "In all sciences of morreculature the securital piscolege are (§10 to sim at fixtly of names; (§)) to avoid or discourage the employment of forms or pauses which are liable to produce cross or uncertainties, or to bring about continuing rate (§ it is important to avoid the evention of modess marks. Other contractiones, such as the product of the contractiones, and as the product of the contraction of the contraction of the contraction of the name or loss in general too, consideration for persons ("authority", etc., proviouslands their undisourced importance, are relatively subsidiary."

2. "Ány usage contrary to the rules may not be maintained if it citails confusion or crore. When any usage of this nature is not greatly inconvenient, it may justify exceptional treatment; it is necessary, however, to guard against extending or instating it. Finally, an default of rules, or if the applecation of the rule is doubtful, any established.

 "Each natural group of plants can only carry in science a single valid designation, viz., the most ascient, provided it conforms with the rules of nomenclature."

4. "The designation of a group by one or

4. The designation of a group of some several names, has not for its object the expression of the characters or history of the group, but is to give a means of understanding one another when wishing to speak of it."

 "No one has the right to alter a name, or combination of names, without weighty reasons founded upon a very thorough knowledge of the facts, or upon the necessity of abandoning a nomenclature contrary to the rules."

 Botanical and horticultural nomenclature commences at the year 1753 for all the groups of vascular plants."

The above is reprinted from the Journal of the Royal Horticultural Society, and the following paragraphs, distinguished by quotation marks, are also taken from the same publication.

Article II.—"It is necessary in moning beneficialized varieties of species and simple forms to employ the complete names of the aspecies with the name of the author. The couployment of Latin in maning horticultural varieties is author-sel only when the character of the plant is expressed, e.g., recently, gottland, etc. The use of Latin proper names for such varieties is in proscribed. The names of hericultural varieties must always be written in Roman characters."

Examples. Odotnoplosmus crisis put in Examples.

aureum, Ö. c. rossene, and O. c. pameratum are correct, for the third word in each case expresses the character of the flower. But Odootoglessum crispann Pittanaun, O. c. Lindenii, and O. c. Sandera would not now be correct, the use of Latin proper names being prohibited.

The probable reason for this method is not obscure. A specific name may be composed of either one or two words. We have, in the Orchidaceae, Odontogiossum orispuan and

Odontoglossum Uro-Skinneri. But suppose someone uninitiated in Orchidology were to search in a botanical library for Odontoglossum crispum Pittianum, he might reasonably conclude that this is a different species to Odontoglossum crispum, and, although the latter species might easily be referred to, there is little chance of him finding the former name, the reason being that crispum Pittianum is not a distinct species from, but only a variety of crispum. By naming varieties of species in the vulgar tongue confusion will be reduced to a minimum, and in many cases entirely eliminated. Correct examples: Odontoglossum crispum Mrs. F. Peeters and O. c. The Kaiser.

Article III .- "When the names of varieties expressed in the vulgar tongue are transferred to other languages they must not be translated, but must be preserved in the language in which they were originally

For example: Odontoglossum crispum Roi d'Angleterre must not be translated to Article IV,-"The names of varieties

O. c. King of England.

should be expressed as far as possible in a single word; and the employment of not more than three words is permitted as a maximum. The same rule applies to the specific names of hybrids."

Article V.- "The publication of a description of a variety in a dated horticultural catalogue is valid, but the mention of a variety without description in a catalogue, or in the report of an exhibition, is not valid publication, even if a figure is given. It is desirable that descriptions of new varieties also be published in periodical horticultural

The catalogue must be dated, otherwise it is impossible when the same hybrid is described under different names in two catalogues to determine which is the earliest publication. It should also be noted that valid publication dates from the date when the catalogue was published, and not from the date when the description was written.

Article VI. "In order to be valid, the

description of a new variety, or of a new hybrid, must be drawn up either in English, German, French, Italian, or Latin."

Article VII. "Hybrids between species of the same genus, or presumably such, are designated by a name and a formula. The name is distinguished from the names of succies by the sign x placed before the generic name. The formula, placed between brackets, consists of the specific names of the two parents, connected by the sign x. the name of the seed-hearing parent being placed first. The seed-bearing parent should be indicated by the sign 2."

This article needs very careful consideration, for not only is it the most essential part of the whole scheme, but it is one which specially concerns horticulturists.

Hybrids between species of the same genus must be distinguished from the names of species by the sign × placed before the generic name. For example: x Cattleya Iria, not Cattleya x Iris. The names of the parents are placed in brackets, but as the seed-bearing parent must be placed first, we fail to see the necessity of additionally distinguishing it by the sign ? Example: × Cattleya Iris (C. aurea 2 × C. bicolor).

But let us follow more closely the work of the hybridist, and see how this Article is workable with recent events. Cattleya Iris has been crossed with Cattleva aurea, the resulting hybrid being known as Cattleya Venus. The correct method of nomenclature would appear to be x Cattleya Venus (x C. Iris × C. aurca). This is reasonably clear, but suppose the second parent happened to be a hybrid instead of a species, are we, therefore, to write- x Cattleya Rhoda (x C. Iris x x C. Hardyana); or is the parentage to be expressed in full-× Cattleya Rhoda (× C. Iris (C. aurea × C. bicolor) × × C. Hardyana (C. gigas

Article VIII. "The specific name of a hybrid may be expressed in Latin or in any language that is written in Roman characters," Examples: Cattleya Mrs. Pitt (Harrisoniana × aurea) and Cattleva Pittize (Harrisoniana × Schilleriana) are both correct.

The use of a proper Latin name for a variety of a species is not allowed (Artifeel L), yet fer the specific name of a hybrid it is permissible, the reason being that as every name of a hybrid must be supported to the profixed, the hybrid nature of the plant is thereby at once indicated, and effectually prevent it being continued with any of the property of the plant is prevent in their general with any of the plant is not appeared to the property of the plant is prevent in their continued to the plant is prevent in their continued to the plant in the plant is prevent in their continued to the plant in the pla

Article IX.—" All hybrids obtained by crossing the same two species must carry the same specific name. All forms arising from the same errors, or from successive crossings of varieties of these two species, should be connected as varieties, with the same specific name."

Thus all plants arising from the crossing of Cattleya Bowringiana and Cattleya Schilleriana must be called × Cattleya lucida no matter how they may differ. The various forms will be given varietal names.

Article X.—"When the parents of a hybrid are transferred into another grous, or into a new one, the name of the hybrid follows, and the specific name is subject to the rules of priority, or others applicable to species under similar conditions, conforming with Article XLVIII.of the Rules of Botanical Nomenclature.

Thus, for example, if we admit the genus Paphiopedilum × Cypripedium Vernactianum, Rebb. f. in Gard. Chron., 1888, 1, p. 712 (× C. Euryale Veitch. Man. Orch., w. p. 83, 1880), becomes × Paphiopedilum Vernacianum and not P. Euryale Stein Orchs, p. 406 (1802).

Article XI.—"The names of horticultural varieties of hybrids should always be expressed in the vulgar tongue."

Example: Cattleya Fabia Marie de Wavrin. Cattleya Fabia Goodsonii is

Article XII.—"Crus breeds (crosses between varieties or forms of a single species) and ternary hybrids or those of a higher order (crosses between species of the same genus) are designated by a name, or a formula, following the same rules as for ordinary

hybrids (Article VII.). For ordinary use, and in the case of the offspring of well-known hybrids, the formula may be omitted, and the

Article XIII.—"By-generic hybrids are also designated by a manus and a formula. The generic name is formed by the combination of the generic name is formed by the combination of the generic name is formed by the combination of the generic names of the parents into a single word, composed us far as possible zo that the names of the two genera cattering into the composition of the hybrid are easily exceptibable; it is preceded by the sign x, and followed by a specific name. The specific name is subject to the same rules as are those of ordrinary hybrids (Articles IV, and VIII.). The formals is written conformably with

The names of the two genera entering into the composition of the hybrid are to be easily recognisable. If this is done there seems little need for the sign ×. In any case, as the generic name of bi- or multi-generic hybrids can not possibly be anything else than a hybrid, why is the sim of hybridty needed?

Article VII."

Article XIV.—"Multi-generic hybrids creeive a conventional generic none, preferably that of a distinguished man, to which is added the termination are. A distinct generic none will be formed for each different combination of genera. Thus all combinations of the genera Bensawols. Cattleys, Laelis, and Epidendroun, no matter in what order they may be intercovered, receive the same generic mane which would be, for example, Lumentaname which would be, for example, Lumentahybrids. Bensiveattlekin and Sophrocattlekin, always and the support of the contractive of the always in me, are regarded."

To this should also be added Diacataletis. Article XV. "For a new hybrid to be considered as published it should be named according to the rules, the formula of its parentage, and a description of the hybrid itself being given. Publication is effected in the same manner as with horticultural varieties of species, as set out in Articles V. and VI."

Article XVI.—"In any case, where the rules of horticultural nomenclature would be actually contrary to practice permitted or tolerated at present, they would not have a retrospective action."



## The Val Duchesse Collection.

Auderghem, Belgium.

THE noble mansion of Val Duchesse is situated in a beautiful valley in the vicinity of Brussels. The Duchesse snot for building a priory in the year 1262: from this fact the present name "Valley of the Duchesse" is derived. The edifice is a faithful reconstruction of that which was the tionary turmoil. A large part is original and has simply been restored; the remainder has been rebuilt according to the plans on ancient documents.

From a wide houlevard which extends along the estate for nearly a mile, a very picturesque view of the whole place may be obtained. A large lake, more than twelve acres in extent lies at the bottom of the valley, the opposite hills, thickly covered with venerable trees, being reflected in the water. A large piece of enclosed land is cultivated as a French garden; this extends to the lake, a monumental flight of steps leading down to the water.

From the lower part of the estate, near the principal entrance, an imposing view of the mansion may be obtained. The owner, Mons. Charles Dietrich, takes a great wonderful collection of works of art which it contains. The unique pieces of furniture, the smeeth Gobelin and Brussels tapestries. the pictures, the curios, the old china, and the numerous ancient pieces of parchment relating to the history of the priory, are alone worth a visit to Val Duchesse. The large

Gorbic Hall and the Grand Saloon call for special admiration, for seldom is their equal

Behind the mansion, on the left, and on a prominence, may be seen the ancient chapel of Saint Anne, the outline of which stands out well against the deep blue of the forest of Soignes. By means of

rough stone steps this religious part of the historic priory may be reached. The carliest existing repord of this chapel is dated 1251, but it was probably built in the early part of the eleventh century. Close by this ancient edifice the old garden has been reconstructed, for it was here came to obtain rest frem

notices, in the smallest details, the constant wish of M. Dietrich to create all things in dignity with the place, and to avoid every thing which may be considered commonplace. In this work he is ably assisted by M. Louis Breydel, the garden architect, who carries out The condition of the magnificent trees, the of the flower beds, is a proof that he is a man

At the top of the garden a double flight of stone stens leads to the pavilion, or entrance ball, to the range of Orchid houses. This elegant buildinc. of Louis XVI style, contains in the lower part a spacious aquarium fer the culture of fish. M. Dietrich, it should be noted takes a great

Society for the preservation of river fishing in The interior of the navilion is decorated in French style, and is so arranged that a superb group of Orchids in flower may always he seen without entering the actual houses in which the plants are cultivated. By this means the uncomfortable



Val Duchesse, a Charming View in the Garden.

thay is avoided. Our illustration shows the centre of the large Cattleya house, the Orchrds in flower being grouped in jucturesque fashion on a staging decerated with Fernis; the reflection of these plants in the water of the fountain at the foot creeks a

On a table in the centre of this pavilion are arranged toe portfolios containing the numerous pointings of all the best flowers,

The Cattleys house contains a grand selection of the best species. He flowers of C. Triane are particularly velocite, for they are disnote first to be produced with the advent of early spring and beinger days. Among the numerous sortices to this species which have recently been in flower the feltowing are of special ments—tempers of India, a fine flower of good singse; Emile Giussei; Prince Leopolet of Religien, motted Giussei; Prince Leopolet of Religien, motted



Val Duchesse, The Large Lake,

both species and hybrids. These reproductions have all been executed by M. Alphonse Goossens, who carries out the details of his work with faithful exactitude.

The cultivation of the plants is under the care of M. Eugene de Munter; the neatness of the houses, the good localth of the placuts, and his general knowledge of the various genera, species, and hybrids is anapty shown in name were. for its very dark labellum; and Angelica, a distinct form having a sline hp. The autumn-dowering Cattleya labiata is

well represented. A variety, known as Isis, basting very large flowers which measure 34 inches arross the petals and 9 inches from tip to tip of petals. This fine currety was awarded the rand Prize for the best Cattleys species tit the great show held at Brussels in the autumn of trito. The heartiff libitate

Concernie and the very dark form known as Pectersii are also to be seen in this house. A grand specimen of labata, nearly six feet in diameter, produced last autumi no less than 132 fine flowers. Mention must be made of C. Gaslediania cornilea, a variety having a distinct bluish tinge.

There are many good varieties of C. Schrödera, the principal error including Hermione, Prentii, and Va. Duchesse, the The Cattleya hybris include Districhians, a grand £ower profusced by crossing grand. Cover profusced by crossing C. superba with C. Hardyans, Ortisse Doin, Sexuerant de H. Dietrich, the lange flowering Einid, and the richly coloured Empress Ferderick. In the alliests excited mass strong plants of Mrs. Myra Poeters, Hardyans 1yyan de Val. Duckers, Stazunet Hye de Crom. Faiss also, and a very beautiful variety of Iris known as Perid de Welkow.



The Pacilion, the Entrance to the Orchid Houses.

latter hering very distinct. C. Mendelin Min, Chairle Detrich is the finest form of this elegant species in the collection. C. aurea Perimer Albert is also a noted variety. C. Mossia Reissekkinn, of which there are several excellent forms, and C. Mossia allopare white varieties of C. Percivalona, and C. Hurrisuniona, the former havang been discovered by M. Dietrich in an importation of the species.

The ever popular Lenet attreyas are very memerous, the range in the colour of these hybrids being remarkable. The majestic SK Gothard, the large flowering Dominism meagnifica, leneitons Ministre Jules Renkin, a very remarkable form, Grange Nassun, Golden Oricle, Yellow Prince and a host of others, all producing attractive flowers of great beauty.

In another house are 2,000 seedlings, all raised from the hest parents. A healthy batch of Sobrulia macrantha alba seedlings grow with vigour; those which have flowered are all pare white. The small seedling pots are butled in a hed of moss; this method prevents a too rapid evaporation of the moisture in the compact.

A similar house is entirely filled with larger seedlings, many of them strong crough to flower this season. The growth and habit of the primary hybrids allows one to detect in many of them the parents which have been used, but in the case of the and C. Lecanum are grown on account of their flowers proving of great utility for decorative purposes.

The collection of Cypripedium hybrids makes most of the noted plants, those finding special favour berng: Thalia Mrs. Francis Wellesley, Gaston Butteel and Germain Opox. There is an interesting batch of albinos, and several of the best bellatulum crosses.

The Miltonias are a special favourite with M. Dietrich, so much so that a whole house



Cattleya labiata, a specimen with 132 flowers.

secondary hybrids this detection is almost impossible.

The Cypripedium hybrids occupy the

greater parl of another spacious bouse. The majority of these plants are unfloweded, and considerable interest is taken in watching the development of the flower bulls. The exhibition standard of these hybrids is very high, and a large number have to be flowered before a really good one is secured. M Dietrich has, so far, obtained mere than the average amount of success. A number of large plants of Cypripodium Lawrenceanum is dested to their celture; ann it should be also said that the mixed of culture is suitable to his genus, for there are hardy any spots to be seen on the leaves. There are more than 500 large plants, and the sarriets are as manerous, that only the following very special control of the following v



rare hybrid between M. vexillaria and C. Nozdiana, his been successfully raiser, there are a number of healthy seedlings already well advanced. A promising seed pod is Miltonia Bluntii s. M. vexillaria.

Obtotoglossums grow here with evident polycame, the graceful sprays of flowers creeting quite a floral display in the springtion and early summer morths. Compans, the lower, the best variety of this spaces as the callection being. Surprise de Val Daricase? The hybrid Obstotoglossums grow with great signer, especially those with Literyaman in the parentage. Many of the displayment of the parentage of the callection of their contractions of the spring of the called their elegant Honese in great perfection. There seems no limit to the amount of variation in obstar and narriang which these

One of the most interesting sections of the Orchids is the unique collection of varieties of Cochlieda Newlinan. This includes more than engiteen instruct forms. The following are the best: aurantiaca, superba, King Edward VII, and King Leopold. The hybridist has, therefore, every chance of selecting suitable plants for his progressive work.

Mention must also be made of the specimer: Phalmopees, the robust growing Phalms Norman, which are now flowering well, the elegant Renauthera Inschootiana, and a very large representative collection of Orchids noted for their decorative properties.

From the above comparative short account of this important collection it will be seen how very interested M. Dierich is in Orchal collute. Already eight large houses are completely filled with plants, and probably inforce long, additional ones will be creeked to contain the specimens which are scing purchased to make the collection as complete as possible.

It remains to be said that M. Dietrich's energy and love for Orchids has brought him many honours. He is Vice-president du Cercle des Orchidophiles Belges, Administrateur de la Société Royale Linnéenne de Belgione, Chevallér de TOrdre de Lésonold. Officier de l'Ordre de la Couronne, Officier de l'Ordre de la Légeon d'Honneur, and Commandeur du Mérite Agricole de France, etc. G. W.

#### NEW HYBRIDS.

LETIO-CATTERNA ENGINENTIAL LC. GOGD-CREST (L. COMNAI \* C. SCHROOTER) \* L-C. MYRA (L. FIANA \* C. TRIANS\*)— L-C. MYRA (L. FIANA \* C. TRIANS\*)— Another actival distinct to be pellow scaled by Alexan. J. and A. Milleum, of Coolsindage. It is hardly expected that the flower would be section, Ind. continuing of these of the purple section, Ind. continuing the armore shape of the continuing the continuing the control of the continuing the armore shape of the hardle continuing the control of the purple section. Ind. continuing the control of the high direction. The colour of this new highest sever product congressions.

OLOSTOCIOSEN VOSTITIA ([HALLIR V VUVSTERER (WECKARNIN » ENAVERG-TENERS). The labellame of both Hallin and two-pupurema laws very spiny creats; and two-pupurema laws very spiny creats; procaced, in the lyhold, a forestedly stress the feature. The well-known times transplate labeled of orders on the spex of the transplanes from singly labellame denon-pursuema is suggested to the support of the spin of the label, language labellame denon-pursuema is played, which has been interespentations of the Barn Carashay. Esq., has a goldenglower color, and is almost covered with ange roddish owns blockes, the tips of with ange roddish owns blockes, the tips of with ange roddish owns blockes, the tips of with ange roddish owns blockes, the tips of

ODONTOGLOSICA HUNAIDES (SCEPTRAUS)

\*\*I HUNAIDELLAMISIS\*\*) A there of this rare natural hybrid cornes from the collection of the Bers Growsbay. Eag. Rosefald, colors the nature per lab blockhod with the wome colors on the outer babes and lightly spotted on the inner parts. The paradiard by is fringed at the apex and bears in the centre is large triangular choockset blocks, the states and work that and allother clotters in the centre is large triangular choockset blocks, the states can't over this and allother clotters in the

this hybrid is the dark circle of colour at the base of the lip, exactly under the crest.

ODNOTOGLOSSIS PALMARS.—This petty lives hybrid between Oldentzglossum crispollerysman and Oci Lamoresumum less recently flowered in the collection of those. We consider the collection of the

The following new hybrid Orchids were included in the Gold Medal group exhibited by Lieut-Col. Sir George Holiord, K.C.V.O., at the Royal Horticultural Society, March 5th, 1912. They have all been raised by Mr. H. G. Alexander.

REBLING \* C. ALEKA). The former parent is a hybrid between L. purparata and C. Gaskelhana. This robust-growing hybrid carried a spike of four creamy-white flowers, the magenta-purple lip being veined with rold at the base of the throat.

CATTLEYA MAGNET (MOSSLE×WHITEI)

—C. Whitei is a hybrid between Warneri and
Schilleriana. The form and colour of the
variety exhibited resembled a small flowering

variety exhibited resembled a small flowering Warneri, but, doubless, other varieties will shortly appear. LELIO-CATLEVA GROLIER (LADIATA ×

MASSANGEANA). The latter parent is a hybrid between L. tenchross and C. Schilleriana. The flower is of a reddish-copper colour, the lp-somewhat darker and distinctly veined with purple.

Leein Cattlevia Arrossy (2088)."

Nikamin—The latter parent is a hybrid between L. Dayana and C. aurea. Flowers of medium size, of a bright rosy-purple tint, the distinctive feature being the large amount of bright gold in the throat and on the side lubes of the labelium.

## CALENDAR OF OPERATIONS FOR APRIL. By J. T. BARKER, The West Hill, Heasle, E., Yorks.

TEMPERATIONES, generally spooling, should average from five to true degrees inglier than those advised for degrees inglier than those advised for degrees inglier than those advised for an any days. An exception, however, should be made with cool Odoutologous house, a temperature ranging between fifty and starty degrees should still be the sim, allowing, or course, 8 shight rise with sun best. The temperature should be lept as even as possible it in gift, and sufficient fire lext most be maintained been the different free best most be maintained been the different house at their prove

Atmosphere. With the increasing temperatures moisture may be distributed more freely, as evaporation will take place more quickly. The remarks made last mouth respecting this matter are available for April, the only thing to bear in mind is that, as the days get longer, the sun has more power, and a hot, over-dry atmosphere must, above all things be avoided.

Watering and sensitation during the anomaneed a great deal of user and attention, and need a great deal of user and attention, and leadings apply also to this. Attention in these small nathers makes all the difference between success and failure. An auttentive cultivator near reaches the highest position in his profession, and whoever wishes to the composition in any form of glain ealture most attend to the control of the profession of the control of the control of the control of a control of the control of t section in its proper season. We can safely sumise that we are now forough the worst part of the season, and we can see the result of our practice in the way our plants have passed through the winter. If any have not passed through the ordeal as we would wish, the cause must be found, so that in the future we may larve better results.

Cypracelium, as they pass set of fluorer, should have immediate attention by oring thoroughly overhanked. These that require re-porting should be done, using the composition of the previous nowher. Varieties, which is not a previous nowher. Varieties, which is not a previous nowher. Varieties, which is now the previous properties of one of the plant is worth half a dozen fuller ones. When all have been done, the plants should be the coughly element and put in their annurer parties to make their growths, allowing matters to make their growths, allowing

Coelegyne cristata, and its varieties, that potting, should they require it. These plants grow and thrive for a very considerable time without being re-potted, and where a large quantity is grown a certain portion should be ported annually; in this way no plants should be turned out of the receptacles in which they have been growing and be carefully divided, each separate growth having four to five pseudo-hulbs and as many roots as can be saved. Select receptacles according to the uses the plants are intended for, and well drain them, placing over this a good layer of sphagnum moss. The compost should consist of equal parts of peat, polypodium, osmunda fibre, and a good turfy loam, removing all the carthy particles possible, and sphagman moss. The plants should be potted moderately firm, and the bulbs should be so placed that the learling growths go entirely round the plant. The plants, when finished, may have one good watering to settle the compost about the roots, allowing them to become dry before

Dendrobiums. The numerous species and hybrids of this genus have for some

considerable time past provided a pleasing display of flowers in the warm bouses. These plants which bloomed early will require attention as regards re-potting, an operation are but a few inches high. At this stage the plants produce new roots, and these delight in a sweet, fresh compost. The plants may be grown suspended from the roof, or placed upon the stages, according to the amount of room at the disposal of the cultivator. When re-potting, very great care must be taken to prevent the roots being injured, and over-They will succeed in a compost of peat, At fibre, polypodium, osmunda fibre, and spingrum mass, the nots or pans to be well the compost. A slight suraying over head established, when they may be syringed twice a day with advantage. Scedlings of this genus may also be re-potted at this season. well-grown and in full flower, makes a

the control of the co

Cattleyas, Lækias, and Lækio-Cattleyas, as they pass out of flower, and are seen to be pushing roots, may be petted in the compost previously recommended for Lækia anceps. Cartleyas and their hybrids compraes some of the most gorgeous and most beautiful flowers in existence. To many this is one of the most difficult classes of plants to cultivate, for what reason I can hardly understand. To my mind many of them are killed by being grown during the winter months in a damp, low temperature; again, others suffer in the same manner from an insufficient supply of

water when in full growth and at other times. The cultivation of this family of plants is calendar of this description, but I hope to show from time to time how success may be obtained. The sorts that bloom during autumn and winter are just now commencing to push forth new roots, and with them new growths; fresh rooting material should now be given to any plants that require it. The sorts that flower late in winter should be re-potted as soon as possible after their flowering period is over, keeping the plant on the dry side until the roots are seen to be oushing through the new compost. This process gives the plant a natural rest, and the new growths push forth with renewed strength at their proper season. However carefully the operation of re-potting is performed the plants receive a check of a greater or less degree, and this must be kept in mind.

Healthy specimens which have plenty of roots and are in a root-band condition to the another than the place of into large receptacles willout being datasted more time in necessary. The loose compost should be carefully picked our and personal to the old half of compost be horizon up as such as peached without damaging the roots; any peached without damaging the roots; and peached without damaging the roots; and peached without damaging the roots; and the peached without damaging the roots in the peached peached without the peached without the plant is re-posted, as of the half of compost becomes a decayed mass, and all the roots that one one morate with a dis-

The size of the receptacle depends entirely on the habit of the plant; if it is a vigorous grower it may be placed in a larger one than would be advisable were it a less robust grower. The pots or pans must be well drained, and the base of the plant should be no a level with the rim of the plant. The

plants should be potted timily, and staked up to prevent recking. Any of the back pseudobulbs which are old and leafless should be removed during re-potting, as they are only parasites living on the front portion of the plant.

As y lacid table ineving good eyes, removed from plants of zero and whathle knick, may be potted up in small pans, and corefully lachelled: in most cares they sill start into growth and make valuable duplicate planes. These plants require careful watering at all seasons, and when in full growth the plant water plants of the plants of the plants of the careful plants of the plants of the plants of the water should be given to keep the leaves in a circle condition and the bulbs from sirvelling.

Militonia verillaria and M. Bleuana pushing up their flower splices should not be allowed to suffer for want of water, or clse their flowers may come small and crippled. Before their flowers may come small and crippled. Before their flower splices are far advanced it is advisable that they should be thoroughly cleaned and funigated at intervals to prevent the ravages of thip and other insect peets.

Odentoglessum citresmum, having been well rested throughout the winter, will be pushing flower-spikes from the centre of the new growths, the plants so doing may be given more water. This species is always better grown suspended from the roof, where its drooping spikes have a most graceful appearance.

Epidendrum vitellinum is a great favourite, but is often grown too warm. This plant delights in the coolest part of the cool house. It may be re-potted in the usual compost: tie. It may be re-potted in the usual compost: tie season, the summer flowering variety at this season, the summer flowering one after blooming at mid-summer.

Maxillarias. Such plants as M. grandi fora, M. ventast, M. peta, and others should be examined as to their needs for more put comm or poofing material. Such speecs, as M. Sanderiana, M. fascata, M. Inteo alba, are others that are now slowing for bloom, should not be disturbed until they have flowered. The plants will succeed in the same compost as Deutlobianus, and delight in the coal house.



This Cup, salue £100, is to be awarded to an Amateur exhibiting Orchids at the International Share, Chebson.

General remarks. Means must now be taken to prevent direct sunshine entering through the sides and ends of the houses, therefore the usual methods of shading these nortions must be used. This may be done either by canvas-covered screens fastened to the ends of the houses, or the glass may be painted over with one of the many preparations for that purpose; this latter course is the one generally adopted.

#### ROYAL HORTICULTURAL SOCIETY.

March 5th, 1912.
MEMBERS of the Committee present: J.

Gurney Foosley, Esq. (in the chair), and Lieut-Col. Sir. George Holtord, Sir. Jeremish Colman, Bart, Mesacs, Jax. O'Brien (bon sec.), Harry J. Vetch, Gurney Wilson, Shuart Low, R. A. Rolfe, R. G. Thwattes, T. Armatrong, A. McBean, W. Cobb, J. E. Shill, I. Charlesworth, H. G. Alexander, J. Cypher, W. H. Hatcher, W. P. Bound, A. Dye, Clive Cookson, W. H. White, C. J. Lucas, J. S. Moss, and

de Barri Crawshay

Lieut Col. Sir George Holford, K.C.V.O., Westonbirt Ser. Mr. H. G. Alexander), received a Gold Medal for an exceedingly fine group of well grown Orchids. Many of the most noted varieties of Cattleva Triansc were included C.-T. Hydra with 60 flowers being a noble specimen. The white Cattlevas included Cattleva Dusseldorfei Undine and its hybrid C. Brenda; the Brasso-Cattleyas were represented by many superior forms of these well known hybrids. Lacho-Cattlevas included the vellow flowering Cranstonnia "Holford's var," and the elegant Pizarro. Among the Odontoglossums were the handsome ardentissimum Norman Cookson, and several excellent varieties of Od. crispum. Many spikes of the white flowering Ladia anceps and Phalænopsis Schilleriana with a spike of 84 flowers helped to finish a most effective group.

Messas Armstrong and Brown, Tumbridge Wells, staged a remarkable group for which a Silver-gilt Medal was deservedly awarded. Many of the best Dendrobiums, including the beautiful pure white nobile, were placed in the centre. Ledio-Cattleya Ermestii, of bright yellow colour, and L.-C. warmhamensis, of a rich purple-brown, were shown in good form. The Cypripediums included hirsatissimum magnificum and a good form of Victory. Brasso-Cattleya Mrs. J. Leemann, Lycaste Skinneri alba and other excellent varieties of this species, and several fine varieties of

Miltonias.

Messes, Jaa Vetch and Sons, Royal Exotic Nutriery, Chelaga, were awarded a Silver Flera Medal for a good group, the Digbysma hybrids being well represented. Lecko-Cattleys Orann, a new hybrid between Dominians and bletchleyeniss, L.-C. bella, a pretty variety of Oblorioglossum Dora, the search Colonion Dora, and Disa sagittalis with eight spikes of flowers were conspicuous in the orans.

Messrs, J. Cypher and Sons, Cheltenham, were awarded a Silver Banksian Medal for an interesting group containing many good Dendrobiums and Cypripediums. Zygopetalium crinium, Lycaste plana, and the clegant Angracum citratum were specially noticed.

Messer, Sander and Sons, St. Albarts, wee awarded a Silver Banksian Medal for a good group of Phalaenopsis and Cattleyas. The rare Houlletia Sanderi, a specimen plant of Cologyne Baccida, Eulophia lurida, and several uncommon Maxillarias were of great

Messes. Stuart Low and Co., Bush Hall Park, received a Silver Banksian Medal for an effective group, many distinct forms of Cattleya Schrödera being included. A specimen Coelegare pandurata, Cymbidium Wigianum, and the elegant Dendrobium Brymerianum were some of the meritorious plants.

Messes Hassall and Co., Southgate, received a Silver Banksian Medal for a splendid group of Angraeum sesquipedale. Good plants of Laslio-Cattleva luminesu. Cattleya Empress Frederick, and C. Mendelii Diana, a good variety, with white sepals and petals and a slight pink tinge on the lip, were also shown.

Sir Jeremiah Colman, Bart., Gatton Park, Reigate, was awarded a Silver Banksian Medal for an attractive group of Dendrobiums. D. Lady Colman, one of the linest hybrids, D. speciosum fusiforme, and D. Golden Ray ware much administ.

Count Joseph de Hemptinne, St. Denis-Westrem, Belgium, exhibited Cattleya Trianse alba "Edelweiss," a very fine flower of excellent substance, and with broad, pure

Sir Trevor Lawrence, Bart, Burford, sent a large plant of Cymbidium Colmania: "Edenside variety," with namy flower spikes. The Duke of Marlborough, Blenheim.

showed a hybrid between Cattleya Miss Harris and Lælia purpurata.

Mr. E. V. Low, Flaywards Heath, exhibited Odontoglossum The Premicr, of anknown parentage, a handsome blotched flower.

Messes W. Baylor Hartland and Sons, Cork, exhibited a group of various Orchids. Odontoglossum Brayanum, a new hybrid, said to be between Groganize and Harryanum, was also shown.

Messrs, J. and A. McBean, Cooksbridge, exhibited a very dark form of Odontioda Charlesworthii, the elegant Dendrobium amethystoglossum, and several good Odontoglossams.

H. S. Goodson, Esq., Putney (gr. Mr. G. F. Day), sent Odontioda Diana "Goodson"s var," Odontoglossum ardentissemum Dayamum, Od. eximium Harry Goodson, and Odontioda Henryi (C. Nezliana » O. harremotensen.

F. Menteith Ogilvie, Esq., The Shruibbery, Oxford, showed Cypripedium Hera rubrum, Odontuglossum Valerie, a hybrid between cirrhosum and ardentissimum, and Cyp, Ochre

The Hon. Lady Neeld, Grittleton, sent Odontoglossum percultum Carmania, a large flower with purple spotting.

Messrs. Charlesworth and Co., Haywards Heath, exhibited Miltonia Bleuana nobilior, the pure white Brusso-Cattleya Queen Alexandra, Larlio-Cattleya Ixion, of a bright yellow colour, and Cattleya Octave Doin of excellent form.

J. Gurney Fowler, Esq., Glebelands, South Woodford, sent Cattleya Schrodere Louisa, a pleasing variety with a distinct crimson, blotch on the lip.

#### AWARDS.

#### AWARDS OF MERGT

Odontoglossum Jasper (crispum s amabile), from J. S. Moss, Esq., Wintershill House, Bishop's Waltham. A very pretty flower of good shape, nearly spotted with purple.

Dendrohium Golden Ray superbum, (Othello Columnio v signatum aqueum), from Sir Jeremish Column, Bart. A very effective and charming hybrid, the colour being particularly uncommon. The buttercup yellow flowers are tipped with rosepurple, the base of the lip heng of a purple-

#### CULTURAL COMMENDATION.

To Mr. J. Carpenter (gr. to Fred. C. Stoop; Esq., West Hall, Byfleet) for a specimen Angræcum sesquipedale with twelve large flowers.

To Mr. Collier (gr. to Sir Jeremiah Colman, Bart.) for a well-flowered specimen of Cymbidiam grandiflorum.

#### March 19th, 1912.

MERIBERS of the Orchid Committee present; J. Gurney Fowler, Esq. (in the chair), and Messrs. Jas. O'Brien (lion. sec.), Harry J. Veitch, C. J. Lucrs, Garney Wilson, F. M. Oggivie, T. Amstrong, A. McBean, W. Cobb, J. Charlesworth, J. Cypher, J. E. Shill, A. Dey, W. H. White, J. Wilson-Potter, J. S. Moss, W. Bolton, de Barri Crawshay, and H. G. Alexander.

H. S. Goodson, Fairlawn, Putney (gr. Mr. Geo. Day), received a Silver Flora Medal for a grand group of Orchida containing some splendidly grown plants of Phains Norman and P. Marthe, Ledio-Cattleyo Charlesworth Goodson's variety, and Lycaste Skinneri alba. The Odontoglossums were very varied, and included ardentissimum Dayanum, Rolf-stekese, and several good shaped crispunas. Many excellent Cypripediums and other Orchids made a useful addition to this

attractive exhibit

Mesers, Charlesworth and Co, Haywards Heath, were awarded a Silver Florm Meridal for some specially good Orchids. These included the rare New-Moorea growth with 17 flowers, the graceful Angreeous circums, Odonteglassum Gladys, with a large amount of yellow colouring; and Leilo-Cuttleya Creusa, an orange-yellow flower of great merit.

Messrs. Sander and Sons, St. Albans, received a Silver Flora. Medal for a large group containing many rare Orehids, those of special merit being Cymbidium Gottianum, Odontoglossum Groganise, Od. eximium var. Flambean, Lycaste Inschootiana, and a large

selection of Odontiolas.

Messes. Stuart Low and Co., Bush Hill Paris, were awarded a Silver Banksian Medal for a group containing excellent Brasso-Cattleyas, the elegant Bifrenaria Harrisonie, Sophronitis violacea, and the pretty Dendeobram chessingtonense var. I. M. Black.

Messrs, Hassall and Co., Southgate, Loudon, N., exhibited several attractive Orchids to which a Silver Banksian Medal was grarred. A large variety of Angascam sesquipedda, a well-flowered plant of Maxicvallia bella, Ansellia africana, and some good examples of Cattleya amelinystoglossa.

Messrs, J. and A. McBean, Cooksbridge, were awarded a Silver Banksian Medal for several distinct varieties of Cattleya Schröders, a very fine Odontoglossum nebulosum, Lælio-Cattleya Euripides, and

crispum.

G. Hamilton-Smith, Esq., Church End, Finchley, received a Silver Banksian Medal for a pretty group of Cymbidiam lybrids, and varieties of Lycaste Skinneri, the one named Mrs. G. Hamilton-Smith being particularly fine.

R. G. Thwaites, Esq., Streatham Hill, exhibited Sophro-Cattleya Atreus gloriosa, of a dark crimson-scarlet colour, and Odontioda Sanderæ, a broud lipped form of

good colour

E. H. Davidson, Esq., Borlases, Twyford, Berks, exhibited Odontioda Cooksoniae var. Eric, a very richly coloured lower of great beauty, the bright yellow crest showing to advantage on the crimson-scarlet ground colour. Odonteglessum crispium Clarisca, a bold and remarkably thick textured variety was also obless.

H. T. Pitt, Esq. Stamford Hill, showed Cymbidium Lady Colman Rosslyn yar, an elegant form with attractive flowers.

Sir Jeromiah Colman, Bart, Gatton Park, Reigate (gr. Nr. Collier), staget several well grown and interesting Orchids. The Odentiodas were very well flowered, their spakes of many flowers being much admred. Odontogossum Queen of Gatton (triumphans se percultum, Eulepha's Saundersii, with four erect spakes, and the pretty Masillaria senguinea were also shown.

de Barri Crawshay, Esq., Rosefield, Sevenoalss, exhibited a very handsome form of Cymbidium insigne, Orlontoda bella (C. Noezliona × O. bellatulum). O. excellens, and O. Saturnia (Lucasiamum × Anderson-

ianum).

Lent-Col. Sie George Holfend, K.C.V.O., Westenbirt, Tethyay (gr. Mr. II. G. Alexander), exhibited a remarkable specimen of Sophorating samuladora with nearly roo bright scarlet flowers of good shape: the plant has been in the collection about cleven years. Lacio-Cattleya. Alpha Westoubirt variety, a pleasing flower of kemon-yellow colour was also shown.

I. T. Bennett-Poë, Eug, Holmewood.

Cheshunt, exhibited Cymbidious Colmania: Holmewood variety, an elegant form with creamy-yellow, almost spotless flowers. A cut spike of Cymbidious Lowianum with 25 large flowers was also shown.

George W. Bird, Esq., Manor House, West Wickham, Kent, showed Odontoglossum crispum Luciani, a well-known variety, having

Mr. E. V. Low, Vale Bridge, Haywards

Heath, showed the elegant Dendrobium

chessingtonense var. J. M. Black, the plants manniana Stanleyi in good form, and Cypripedium aureum surprise with 7 flowers.

Messrs. J. Veitch and Sons, Royal Exotic hybrid between Lælio-Cattleva bella and

L. purpurata.

Mr. James H. Hill, Burgess Hill, showed Dendrobium Austinii var. James H. Hill, a noble flower, of good size and shape, the blotch of colour in the centre of the lip being

Mr. C. F. Waters, Deanlands Nursery, Balcombe, showed Lycaste Skinneri Watersii, a very distinct variety.

Odontoglossum crispum Samuel Gratrix, from Samuel Gratrix, Esq., West Point, Whalley Range, Mauchester (gr. Mr. Brown), -A very beautiful variety, the large flower baying petals of considerable breadth heavily blotched with scarlet-purple. respect a remarkable variety.

Cattleya Direc (Miss Harris × Warscewiczii) from Licut-Col. Sir George Holford. K.C.V.O. (or, Mr. H. G. Alexander). A handsome flower of good substance, the rosypurple segments being large and of excellent shape. The labellum shows the dark purple veining derived from Cattleya Schilleriana, one of the parents of Miss Harris.

Odontoglossum Queen of Gatton (triumphans × percultum), from Sir Jeremiah Colman, Bart., V.M.H., Gatton Park, Reigate (gr. Mr. Collicr). A very handsome flower, the broad scoals and petals are dark vellow heavily blotched with brown, the labellum

having bright rose markings.

#### MANCHESTER ORCHID SOCIETY.

February 22nd, 1012. The meeting held on Thursday, February 22nd, was a joint meeting with the North of England Horticultural Society, the following -Rev. J. Crombleholme (in the chair), Messrs, I. Bamber, C. Parker, W. Thomuson, A. Warbarton, Z. A. Ward, W. Bolton, J. C. Cowan, J. Cypher, I. Evans, W. Hatcher, W. Holmes, A. McBean, A. J. Keeling, D. McLeod, F. K. Sander, W. Stevens, and H. Arthur (Secretary), with the Rev. J. Bernard Hall, Secretary of the North of England Horticultural Society.

The proposal to hold a joint meeting met with great success, there being no less than twenty groups staged and twenty six

Z. A. Ward, Esu. Northenden, was awarded a Gold Medal for one of the finest groups which has been seen in the room, the

Odontorlossums being specially well-grown. A Gold Medal was also given by the O. O. Wrieley, Esq., Bury, was awarded a

Gold Medal for a wonderful exhibit of Lycaste Skinneri, about fifty plants in all being staged. The variety alba carried thirty-one flowers and buds. The North of England Horticultural Society also awarded a Gold Medal to this group. W. R. Lee, Esq., Heywood, received a

Silver Medal for a good group of Odonto glossums and Cypripediums, etc. A Silver Medal was given by the North of England R. Ashworth, Esq., was awarded a Silver

Medal for a group consisting principally of Odontoglossums, several of which obtained awards. The North of England Horticultural

R. le Doux, Esq., West Derby, received

a Silver Medal for Odontoglossums in variety. A Silver Medal was also granted by the

A Silver Medal was also granted by the North of England Horticultural Society. S. Gratrix, Esq. Whalley Range (gr. Mr.

Brown), was awarded a Silver Medal for an excellent group. The North of England Horticultural Society awarded a Large Silver Medal.

A. Warburton, Esq., Haslingden, received a Silver Medal for a group of choice Orchida. A Silver Medal was also given by the North of England Horticultural Society.

Silver Medal for an interesting group, including many good varieties of Cattleya Trianze. A Silver Medal was awarded by the North of England Horticultural Society.

the North of England Horticultural Society.
Wm. Thompson, Esq., Walton Grange, was awarded a Silver Medal for a very interesting group of home-raised Odontoglossams.
A Silver Medal was awarded by the

North of England Horticultural Society.
W. J. Hangreaves, Esq., Burnley, received a Silver Medal for a good group of Cyprincidiums. The North of England Horti-

cultural Society granted a Silver Medal. Rev. J. Crombleholme, Clayton-le-Moors, received a Silver Medal for a group of Cypripediums. A Large Bronze Medal was

given by the North of England Horticultural Society.

Col. J. Ratherford, M.P., Blackburn, was awarded a Beonze Medal for Orchids in wariety. A Laure Bronze Medal was awarded

by the North of England Horticultural Society.

J. J. Holden, Esq., Southport, exhibited Laelio-Cattleya amabilis, Odontoglossum

Lambeauanum Holden's var, and Odontoglossum Radium.

J. H. Craven, Esq., Keighley, staged

Odontoglossum Orpheus, and a good variety of Odontoglossum Rossii majus. Messrs Charlesworth and Co., Haywards

Heath, were awarded a Silver-gilt Medal for a splendid group of choice Orchids. A Large Silver-gilt Medal was granted by the North of England Horticultural Society.

Messrs. J. and A. McBean, Cooksbridge, was also awarded a Silver-gilt Medal for a fine group consisting principally of Odontoglossums. The North of England Horticultural Society awarded a Silver-gilt Medal.

Messrs, J. Cypher and Sons, Cheltenham, were awarded a Silver Medal for a good group of Orchids. A Large Silver Medal was awarded by the North of England Horticultural Society.

Messes. Stuart Low and Co., Enfield, received a Silver Medal for an interesting group. A Silver Medal was granted by the North of England Horticultural Society.

Mr. Ed. V. Low, Haywards Heath, received a Silver Medal for a group of well-grown plants. The North of England Horticultural Society also awarded a Silver Medal.

Mr. W. A. Manda, St. Albans, was awarded a Silver-gilt Medal for a very fine group of Cattleyas. A Silver gilt Medal was granted by the North of England Horticultural

The Liverpool Orchid Co, were also awarded a Silver Medal. A Large Bronze Medal was given by the North of England Horticallymal Society.

Messra Sander and Sons, St. Albans, exhibited some magnificent plants of Phalamopsis Schilleriana and various Cattleyas. Mr. I. Evans, Congleton, exhibited several

excellent Orchids. A Large Bronze Medal was awarded by the North of England Horticultural Society.

Mr. D. McLeod, Chorlton-cum-Hardy,

exhibited several Cypripedium seedlings.

Messrs. A. J. Keeling and Sons, Bradford,

received a Bronze Medal from the North of England Horticultural Society for several good Orchids.

Mr. W. Shackleton, Great Horton, exhibited a good blotched Odontoglossum Vuylstekee.

#### AWARDS.

### FIRST-CLASS CERTIFICATES.

Cypripedium hybrid (Thompsonii × Rupert), from W. Thompson, Esq., z fine flower, bright colour.

Zygopetalum Mackayi Charlesworthii, the

soniæ, a fine form, from Messrs. Charlesworth and Co., Haywards Heath.

#### AWARDS OF MERIT.

Odontoglossum Zulu, Od. Confidence, and Odontioda keighleyense, all from Z. A.

Odontoglossum amabile Ashworth's var. Od. Nubian, and Od. illustrissimum, from

Lælio-Cattleya amabilis and Od. Lambeau-

ianum Holden's var., from J. J. Holden, Esq. Dendrehum Othello "West Point" var.

Cypripedium Archimedes nigrum, from

Brasso-Lielio-Cattleya Lecana (L.-C. Hycana × B.-C. heatonensis), and B.-C. Perahontas albens, from Messrs, Cypher

Sophro-Lelio-Cattleya Marathon, var. Salome, from Messes, J. and A. McBean, Cypropedium Simonii, var. The Mousmé,

from Mr. Ed. V. Low.

March 7th, 1912.

MEMBERS of the Committee present: Rev. J. Crombleholme (in the chair), Messrs. R. Ashworth, J. Bamber, C. Parker, H. Thorix, Z. A. Ward, J. C. Cowan, J. Cypher, J. Evans, W. Holmes, A. J. Keeling, D. McLeod, and H. Arthur (Sccretary).

Z. A. Ward, Esq., Northenden, was awarded a Silver-gilt Medal for a group of Odontoglossums and Cypripediums,

W. R. Lee, Esq., Heywood, was awarded a Silver Medal for some fine varieties of Odontoglossums.

Col. J. Rutherford, M.P., Blackburn, staged a nice group, to which a Silver Medal was

I. McCartney, Esq., Bolton, was also awarded a Silver Medal for a group composed principally of Cattlevas,

Rev. I. Crombleholme, Clayton-le-Moors, had a small but effective group,

A. Warburton, Esq., Haslingden, was

awarded a Silver Medal for a group conwell-grown plant of Cypripedium Rothschild-

O. O. Wrigley, Esq., Bury, exhibited a

ianum with four spikes, and other Orchids, J. J. Holden, Esq., Southport, staged Cattleya, Cappei and a very fine Odontoglossum, which obtained a First-class

Wm. Thompson, Esq., Walton Grange,

H. Thorp, Esu. Rhodes, staged Cypri-

Messrs. J. Cypher and Sons, Cheltenham,

were awarded a Silver Medal for a good Messes, Sunder and Sons, St. Albans, were

awarded a Silver Medal for an interesting exhibit. Messrs. Charlesworth and Co., Haywards

Heath, showed several excellent Odonto-Messes. Hassall and Co., Southgate, staged

Mr. J. Evans, Congleton, exhibited three

Messrs. A. J. Keeling and Sons, Bradford,

Mr. W. Shackleton, Great Horton. exhibited several interesting plants.

## AWARDS.

Odontoglossum In Memoriam Kine Edward (parentage unknown), from J. I Holden, Esq., a fine large flower of solid colour, with white tips to the segments.

#### AWARDS OF MERT.

Cattleya Cappei (Triana: x Schroderæ), from J. J. Holden, Esq. Odontoglossum triumphans "Ward's variety," from Z. A. Ward, Esq.

Cypripedium Carola (Hera × Thompsonii), from Wm. Thompson, Esq.



MANCHESTER ORCHID SOCIETY .- Owing to the date of the Annual Meeting of the Royal International Show in London, the Committee have decided that there he no Meeting on May 30th, the date being altered to Thursday, June 6th, and on that day the will sit at 12 a.m. as usual, and the Meeting will be held at 3 p.m.

Brasso-Cattleya Mrs. I. Leemann .--A very pretty flower of this well known hybrid has been raised in the collection of Capt. Robert Twiss, Bird Hill, Limerick. The edge of the petals is fringed after the style of that pertaining to the labellum, but not to such a marked degree. evidently an attempt to form a regular flower by the increase of the irregular portions, and thus a form of Reichenbach's term trilabellia, or in present day language irregular peloria.

interesting Orchid, after having been lost sight of for nearly half a century, is the subject of an illustration in the April number of the When flowering for with S. Lucddemanii of Prillieux. A flowermeeting of the Royal Horticultural Society, April 2nd, 1012, by Sir Frederick Moore, and some discussion arose regarding its distinct. ness from S. undulata, but the Director of the Royal Botanic Gardens, Kew, to whom it was that species by a bright yellow crest to the lip and other differences. Some difficulty is often experienced in flowering the species of Schomburgkia. Considerable heat and a good light are necessary, and after the bulbs are completed the plants should be kept in a fairly dry condition to encourage the formation of the flower suikes.

#### 8 8 8

Messis. Charlesworth and Co.'s new Orchid Catalogue for 1012 surpasses anything previously published by this propressive firm. Consisting of 84 pages with nearly 2,000 items, it ionns a book of considerable value to Orchidists. Faithful coloured illustrations are given of the richly coloured Cattleya Rhoda illuminata (C. Iris x C. Hardyana), the beautiful vellow Odontoglossum Harwoodii, and the Shrubbery variety of the same, Lælioglossum Jeanette (O. Rossii rubescens × O, amabile heatoucuse), the very large form Shrubbery variety, Sophrocatladia Jeannette (1 .- C. Martinettii x S. grandiflora), one of the finest of the Sophrenitis hybrids, Odontioda and the very beautiful Sophro-Cattleva Lotte Muller (C. Peetersii × S.-C. Nydia).



NORTH OF EMERIANO HORSTPERTERAL TO SECRETY SHEAT. The above reproduction of the modal designed by Mr. F. Ramson for the North of England Horstrokeral Society shows the figure of Mother Earth, fanours in Latan or Green, and to Good the Greeks. She is bearing in her right land, in store of the Greeks. She is bearing in her right land, in store conclusion with Greek anythology, a hunch of poppies, and in her left hund, in store conceives the secondary of the control and the store of the control from the state of the population of the state of the model is extraorely happy, and the model is considered by those trails to the state of the s

BIASSO CATTLENA H. G. ALKANDER-This very remodable hjörda between Cattleya oftom and Biassavaib Digiyana poulous, large lancasyllor fleavers slightly poulous, large lancasyllor fleavers slightly The Brassavaib species has added a pretty finge to the clog of the bloellam, and lass semewhat stillened the flower. Aprat from the carross combination of species characters this hybrid is of combinensite stilling in the prediction of a yellow Cattleya, for flowers containing a good yellow toker are very scarce. Home Cattleya the flowers containing a good yellow toker are very scarce. Home Cattleya the flowers plant was exhibited by Leat. Cal Six George ble of at the Royal Horizaltulural Society, March 5th, 1907, it deservedly obtained an

8 8 8

ORCHID SALE .- The remaining portion of the Oakdene Collection, formed by the late Mr. E. Rogerson, was sold by auction at Messes. Protheroe and Morris' rooms on Thursday and Friday, March 28th and 29th. The following are some of the best prices: Odontoglossum crispum Oakdene Surprise, grand plant with four hulbs, o gas : O. c. White's variety, four old bulbs and one new growth, 44 gris.: O. c. Chesters Rogerson, 10 gns.: O. c. Pittianum, three old bulbs and one strong growth, 55 gns.; O. c. virginale The Onean six bulbs, one strong break, 10 gns.; O. c. Louis Sander, seven fine bulbs, 23 gns.; O. c. Mabel Whateley, three bulbs, one strong lead, 13 gus.: O. c. Graireanum, five bulbs, to ons : O c. Lucianii, three old bulbs, one growth, 17 gns.; O. c. Britannia, live small bulbs, ; ms.; O. xanthotes, var. Lord Lansdowne, four bulbs, 22 gus.; O. crispum xanthotes White's var., five bulbs, 6 cms.: O. ardcuto-cr.spum Rogersonii, four bulbs, 22 ms; O e Karthousi, five bulbs, 8 gns.; O. c. Robert McVitte, three bulbs one lead, 16 ons.: O. c. Leonard Perfect one bulb, one growth, 21 gps.; Cattleya Warneri Ardenholme var., four fine bulbs, 17 gns.; C. aurea allxa six bulbs, 20 cus : C. Mendelii Mrs. A. Lees, two plants, 12 gns.; C. Mossiæ Reineckiana, two plants, 8 gas.; Cypripedium nitens Locanum, var. Hamibal two growths: 71 gus.; C. Corneyanam, two plants, cach three growths, 54 gns : C. Hindcanam, two three growths, 6 gns.; and C. Priam, three growths, 41 gns.

#### ....

ASGRACUM ETRATUM—Some treatly or more years ago a grand specimen of this pretty Madagascan Orchid was in Mr. Corning's collection. It was grown in a shallow pot asspended from the roof of the hot house, and only broken charcoid was used as a rooting material. On one occasion it carried no least than 21 snikes and as if lowers. Oponroaciosers II is a MASTENT. This hundesome hybrid, of which the hundesome hybrid, of which the progression of the hundesome his hundesome



Odontoglossum His Majesty.

0 0 5

OPHRYS ARACHNITES. I have had under observation for several years a plant of Onlarys araclimites growing in the south of flower spike of that year was sent to M. Camus, of Paris, who wrote that he intended to give a very detailed note upon it in his Monographic des Orchides d'Europe. On April spike; the lowest flower never opened, the second had two lips, the third and fourth had each one lip and three anthers, the fifth and sixth had each one lip and two anthers. On March 25th, 1910, I found the plant with abnormal flowers, but it had not vigour enough I could see that each of them had three anthers. I did not see the plant in 1911, but and only had two flowers, the lower of which is unlike any borne by the plant in 1908, 1909, and two anthers facing each other, but no

labellum. The plant is in a favourable position, and other normal speciaers are flourishing close by, but it seems likely that this plant will not be able to flower at all next season. W. H. St. Quintin.

49 39 49

OPHINY MANIFERA—Of this, the Spider Ophys, Davis; cassimof fourteen flowers, in none were both pollina, and in three adonjournel of the spider of the spider, and the spider, in none were both pollina, and in the spider, and the spider, between the spider, between the spider, between the spider, between the spider, and the spider, and the spider, and the spider of the spider, between the spider, and the spider of the spider of the spider, and the spider of the spider of the spider, and the spider of the spider of the spider, and the spider of the spider of the spider of the spider of the spider, and the spider of the spider, and the spider of the spider, and the spider of the spider, and the spider of the

contains two perfect labellums arranged in the position usually occupied by the lateraptetals, which in this flower are entirely absent. The dorsal and ventral sepals are well developed. This ahnormality is evidently a reduction from the trimerous in a dimerous condition. The equilibrium of the third flower is entirely upset, one of the lower sepals has become fused with the labellum, and one of the authers has strayed into a lateral petal where some of the pollen grains are visible.



Caelogyne Foerstermannii flowering in the collection of E. H. Andriesse, Esq., Java,

COLONIX FORESTONANNI This expect following species is a native of Benno, Sunstate, and Malaca. It is rather on its reflections, and sunservant shy many states of the state of

The BRITTLE SNAKE IN THE OSCUMO DOUBL. The brille saile, or the slowworth, is a mility of bittin, common in worth, is a mility of bittin, common in grown it is short bette better better. It should be the short of the short better better, and can be small or military better, and can be made a per. I find the military of the production of the short better better better better of production and can be made as the production of the short better better better better better better of the production of the short better better better production. The short better better better better better production of the short better better better better production and the short better better better better the short better better better better better better the short better better better better better better better the short better better better better better better better the short better better better better better better better the short better better better better better better better the short better better better better better better the short better better better better better better better the short better better better better better better better better the short better better better better better better better better the short better better better better better better better better the short better be when he went to look at the rare plant, he found to his dieguist then, a small had made his breathast off it a most expensive breakfast, many will say. I would advise Orfolid growers to give the slow-worm a trial. They can be purchased from any dealer in wild animals. Dr. Paterson, in The Gurden, Ismary 28th, 1888.

TRADE NOTICE.—Mr. E. J. Seymour, who for the past nine years has been in the employ of Messes. Stnart Law and Co, will in future act as representative for Mr. Sidney Flory, Orend Naraeries, Amyand Park Road,

all the elements necessary to the proper This may seem strange to young negimners. a user distinction. The direct action of surlight is one tining, its indirect or refracted the nerspiratory organs of the plant. Neverare in energ health, unshaken by capricious growth is nearly completed, or say, towards growing in pots is not quite the thing to imagine that the very summit of perfection found so in the vegetable kingdom, to which it would appear our gracious Creator has sen no hounds in this respect; or if there be any bounds. I am at a less to conceive in which of our vegetable productions it has become naminest—R. Excitation, 1850.

#### NEW ORCHIDS.

A recent issue of the Kerr Bulletin contains a there-eighth Decade of New Orchids. The following species, with Lutio descriptions by Mr. R. A. Rohe, are mentioned:—

Found in a clump of Leela purpurata, and flowered in the collection of Sir Frederick Wigan, Bort, in January, 1909. The sepuls and petals are pullid, striped with purple-red, and the rest of the flower reddish-brown.

DENDIFORM (CERATORION) INTERTRINE Species, allied to D. artennatum, to which its species, allied to D. artennatum, to which its flowers bent a considerable resemblance, but far more robust in every respect. It flowered at Kew in August, 1011.

BULLOPHYLLU (OXYMIAM 3) CON-GERTLA, from Burma and S.W. Chana-Flowered in the Royal Boranic Gardens, Glasmevia, in September, 1910. It is mylerely different from B. odoratissimum in its smaller flowers, truch sherier sepals, and pale yellow, not brown lip, though in habit the two are much alike.

Christopetates Micholstysia, from American—Flowered at the Royal Botonic Gardens, Glassevin, and with Messes. Shuart Low and Co., in October, 1910. The lateral sepuls are derived preplien, and the doesal segular directal blotched with dark pumple on a piale ground, or in one case the spots were confuent into loses, but identical in other

POLYSTACHYA REPENS, from Tropical Africa.—A minuse and very distinct species which towerced in the collection of Sir Trevor Lawrence, Bart. in November, 1911. The creeping habit is remarkable and appearably marks it as a muo'r reknoed member of the group containing P. superposita. The sepals and petals are buff-yellow striped with brown, and the lip doen red-brown.

CHONERORITYNCHA LIPSCONDEZ, from Panama.—Flowered in the collection of Mrs. Lipscomb, Wimbledom, in December, 1911. It was found by her son, Mr. Lanucott, Lipscomb, when helping to clear some "bush" for rubber and eocos planting, and was sent hunne with a good many others in 1910. The flowers are white with some light norther toron to the light norther toron to

GOSGOBA TRACVANA, from Peru. Introduced by Mr. H. A. Tracy, and thowever in the collection of Mr. J. S. Bergheim, in March, 1911, and abortly afterwards with the importer. The sepats and petals are greenish yellow barrel and blotched with brown, and the lip ivory-white with a few ANGRACUM ANDERSONII, from Tropical Africa.—A curious leafless species, which flowered at the Royal Botanic Gardens, Glusnevin, in December, 1917, whence it was sent for determination by Sir F. W. Moore. The flowers are semi-pellucid white, with a broad eneral-digreen line on the sepals, a

green centre to the lip, and a green column. PHYSURLY SYALDUS, from Pern,—Flowm Pern,—Flowm Pern,—Flowm Pern,—Flowm Pern,—Flowm Pern,—Flowm Pern,—Flowm Pern, Per

iron Tropeal Africa.—A line species of which the radical leaves and the upper part of the scape only were sent. The specimen was found in open graze land.

# THE NAMING OF SPECIES AND HYBRIDS.

IIII method of naming species, and also bybrids when Latin is used, is as recovasuaded by the International Botanical Congress, held at Vienna, 1915.
The specific name should, in general, give soone indication of the appearance, the characters, the origin, the history, or the characters, the origin, the history, or the characters, the origin, the history, or the properties of the species. If taken from the respective of the species of th

Names of men und women, and also names of countries and localities used as specific names, may be substantives in the genifice (Mendelli, sabare), or adjectives (Dominana, dalmiricus). It will be well, in the future, to avoid the use of the genifice and the adjectival form of the same name to designate two different species of the same perms.

Specific names begin with a small letter, except those which are taken from names of persons (substantives or adjectives), or those which are old generic names (substantives or adjectives).

When a specific name is taken from the

name of a man, it is formed in the following way:—

When the name ends in a yowel, the letter

when the name ends in a vowel the letter i is added, thus Cappei, except when the name ends in a, when e is added, thus Trianae.

ends in a, when e is added, thus 'Transe.

When the mane ends in a consonant, the
letters ii are added, thus Mendelii, except
when the name ends in er, when i is added,

Syllables which are not modified by these endings retain their original spelling, even in the case of the consonants k and w, or groupings of vowels which are not used in

Letters foreign to the Latin of hotunists should be transcribed and diacritic signs suppressed. The German ii, ö, ii become æ, w, ue; the French é, è, è occome, in

When specific names taken from the name of a person have an adjectival form a similar plan is adopted. The same applies to the names of women.

These are written in the feminine when they have a substantival form.

## AN ORCHID COLLECTOR'S TRAVELS THROUGH BRITISH GUIANA TO BRAZIL.

By ED. KROMER. (Continued from page 139.)

ETWEEN these grotesque masses of rocks were ever so many shallow and deep pools, many of them connected by channels of smaller or greater width; one of the larger pools which I measured was 250 feet in width with hardly four inches depth of water. Of animal life the top of Roraima seems almost as good as barc, and the few specimens we observed during our short stay were all of an exceptionally diminutive size and of a uniform black or dark grey colour; in the shallow water, a small lively lizard, a few spiders, and, most curious of all, a small dark-coloured sort of a weasel, which on our approach gave a whistling sound and swiftly crept into a hiding-place amongst the rocks.

The next day at the early hour of ten o'clock a fresh gang of Indians arrived to take our collections and belongings down, staring at us in comical bewilderment to find us alive. Our companions of the previous day had quite enough of the oue ascent. We hastened to complete our collection and after mid-day began the descent, not without, however, leaving in two securely scaled bottles the record of our experience behind for future

of the ground by crawling on all fours, so in going down we passed much of the way by sliding in a sitting posture. The astonishment of the villagers at seeing us return sane and sound may better be imagined than described. As for ourselves, we felt as if having gained a great victory, being the first living men who had spent a night on the top of this

Having thus achieved the ends of our fourney and leaving a record in the history of Roraima, our plans were now directed towards home, much as we should have liked to stay a longer time. But the growing scarcity of provisions, the even much more serious exhaustion of our harter goods, the growing agrest of many of our party who ing symptoms of ill-health which Seyler, our interpreter Peter, and several more of the party had felt for some time, decided me in favour of a return homeward.

We harried on with the process of packing the plants, which a favourable fine weather had dried sufficiently well: the Indians made us with marvellous facility a sort of wicker baskets, attaching a piece of broad fibre to the ends of each basket, and in carrying them put the fibre across their forcheads and bore the burden on their back. Sevler with the main bulk started off in the direction of Waibéna, while I, awaiting the arrival of some more carriers, followed two days afterwards on the 35th November.

My farcwell to Roraima was made with curiously mixed feelings, for not often in a life-time does one come across such a place under such circumstances; for my part, to give, if only to some extent, an accurate description in adequate terms of such majestic splendour of nature would be almost a sacrilege; others, towers in the world of science, have tried it and they have failed; there are simply no words for it.

Having so far taken so much time up in

Illustrating our outward journey and our goings and doings at our destination. I will give a detailed description of our memorable homeward journey, which I am safe to say will never be forgotten by either of us, or any

of the party for all our life. (1) The continual difficulty in gerting suffi-

cient hands at the various stations; (2) The torrential rains for 25 days and nights, such as can only be witnessed in the tropics, with only an occasional hour's interruption: (1) The many and various accidents on the way: (4) The loss of our provisions and the privations we suffered therefrom with our large party during the last stage of our journey overland; and (4) the frequent unpleasant moments with our carriers would in themselves afferd material enough to be derif with in a separate chapter, which, however, would not be pleasant reading. May it suffice, therefore, to give an extract from an original note of Seyler's, sent from the centre of Curubing mountain to me on Curubing landing-stage, where our unisfortunes reached their climax; this paragraph to some ex-

to some extent will give an idea how matters were standing with us; "

Write to Mr. tell him that I will be reall he sends time but it is account of the high water. Spare me half a tin of milk have nothing left and salt and pepper Things look never mind. won't help us anything: we



Ru-instru Fall. The Cliff on the left was covered with Cattleya Lawrencema.

worry through, and a little starvation won't amount to much. I gave William a piece of my mind, because he helped himself to Cassadabread without asking, so he secum annoyed and leaves again to-day with Frederick and the Romima chap; if he wants to role thim gon"

As an endorsement of the preceding, and

also as an illustration of the manner in which we reached our starting-point, Bartika Grove, I had better give here a short extract from another letter of Seyler's, which much later on he addressed to a leading firm of Orbidi importers in England, respecting the collecting of Cattleya Lawrenceaus, and in which he says: "We had the hardest trouble now

through the wantefindament of the carry our loads. Besides this, the ramy weather set in and our leads suiced baddy for all the carry we took of them. Also, the loading of the carry of the loading baselines. Nevertheles, we got as far as the Carry of t

cured a scanty supply of provisions, but lost nearly all of them in a small creek and what

ing; we pro-

was saced was spoiling under our very cyes, it being then that the rainy season had fully started, dreaching us from morning till night. It took us nine days to get our loads over the mountains, where our boat was to reach us. And we were for two and a half days entirely without food. Besides, the Indians had opened the basilest and partly throws: the

loads away, not being able to carry the heavy soaked-through baskets over the mountains, so

Arrived a our handing we had to suit for not for boat, which arrived a week later in consequence of the river being light and, of cause, when the of provisions. Still we get sway with our loads and we reached the first gold places. But we get a support of the control of the c

### So far Seyler's experience,

On the first of January, just as a glorious sundropped like a golden apple below the borizon, our Bartisa Grove friends welcomed us with heip bes. New York's greetings on our safe return. Three days late Seyler, myself and our faithful interpreter Peter, together with three atalwart Indians from Rozaina, who ventured to accompany the white men to the finish, landed again in Georgetown after an absence of 10d days.

atheore of rife days.

New although cases sold finish that the interNew although cases and the proposed but care,
New although case and the proposed but care,
the works are not over yet, there appears the
strong arm of the law and dermands proyment
of one hundred follars for a yearly licence to
collecting Orderlis for exceptation, and on the
collecting Orderlis for exceptation, and on the
cuchs individual Orderlis. You lodge a protect
the strength of dawing collected your plants
in foreign or disputed terralory—as, in fact,
the creents have proved and hiving brought
form in transit through the Colony's list your
throat in transit through the Colony's list your
cone fine moving the sage official interpretations, "that all products of the sail brought
from the Interfor shall be deemed the the
been obtained on British territory." On the
been obtained on British territory."

the same time being of opinion that this is the

The packing up of the plants must now be done, but as this process does not occupy all our time, and the mail-back for Europe only leaves in another fortuight, we found leisure to do, in the American style, the town and a few interesting sceneries in the neighbourhood.

### NEW HYBRIDS.

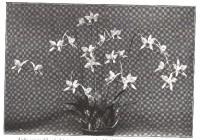
ODOSTOLICAMUM EGERIA. This hybrid, the result of crossing Halline-regular than analysis, has recently been mixed in the understoon of a Blart Crossbay. East, Rosseptials are almost covered with reddish-broad highest control and petals are refused and twisted in a manner of the control with reddish-broad and petals are refused and twisted in a manner of the control with the control with the control with the control with an elongated agree. The spin creat indicates the indicates of the Control with an elongated agree. The spin creat indicates the indicates of the control with a reductive of the contro

L.T.LIO-CATTLEYA RNIDA.—Messay. Sande: and Sons have raised this new hybrid between C. Lawrenceans and L. superbiens. The flower partaless largely of the latter parent in shape and habit. The bright yellow centre of the throat is effectively marked with numerous purple veins.

BRASSOCATLELIA JOAN.—By crossing Cattleya Octave Doin with Brasso-Lacila Mrs. Gratix, a pretty hybrid of amber-yellow colour has been obtained. The labellum has a conspicuous fringe of a slightly darker tiot. Raised by Messes Charlesworth and Co., Haywards Heath.

LEGILO CATTLEYA ENDYMON.—L.—C.

luminosa × 1.-C. callistoglossa has produced this new hybrid in the collection of F. du Cane Godman, Esq. South Lodge, Horsbarn, where it has been ruised by Mr. Gies. The large flower is reddish purple, the labellum being of a rich ruby-purple. The bright yellow discs in the throat are very effective.



Lælia arceps Chamberlainiana, as groum by Mr. H. G. Alexander, Orchid grouver to Licut.-Col. Sir George Holford, K.C.V.O., Westombirt, Tethury, Glos, Received Cohard Camusosfestive when exhibited at the Ruyal Horitenhard Society, January 31st, 1911.

# SOME NOTES ON LÆLIA ANCEPS.

ÆLIA anceps hos not received as much attention as it deservers; surchy its graceful, long and erect spikes are of considerable utility for giving to Orchid groups that nateful and finasiving tonch which is exactly on a consistent of the groups that the control of the consistent of the groups of the control of the contro

Specimen plants of Lexia anceps are particularly well adapted for placing at the back of large groups, for when so situated, the long flower spikes can be arranged to gracefully bend over the specimens which are staged in front, and thus add considerably to a natural effect being produced. To imitate nature is to have all things as nearly correct anature is to have all things as nearly correct as possible; if the annature strives to follow

nature's way of doing things he will speedily be recompensed for his trouble.

Hybridists would do well in the future to urable the various varieties of Ledis anceps, and to endeavour to perpetuate their graceful medical of flowering. On the other band, the flowers have percularities all their own, and the possibilities of producing unique crosses are greater than with many of the species which in the past have partislen so much in the creation of our present day hybrids.

Until the recent dovering for the first time of Tacho-Cattleyn McBeanians, a hybrid letween C. Schridtern and L. ancept letween C. Schridtern and L. ancept schridters and L. ancept schridters and the schridters and the schridter from these two species. Primary hybrids, it has often ocus said, have nearly all been made, and futthe chance remains for a newcomer in the hybridising would to produce anything novel.

by the use of species only. But in L.-C. McBeanian, raised by Messrs. J. and A. McBeani, Cookshridge, we have a recent example of the uniting of two species which, for generations past, have been with us in an unconnected state. Is it not possible that many other equally promising hybrids remain as yet unthrought o??

Latin amery, unlike the majority of Cattleyas and Latins which only on race occasions produce a subre flower, may be occlosed in several different districts, some producing pumple tarted, others almost pure white flowers, or with only a few perple lines in the throat. The only pure almost in the throat. The only pure almost in the commonly known on "flolits abdu." The first colorard forms are Chamberkhristian and Crawthouses.

Leafu are grown has a high segment site, but Mr. de Berri Carselmy, who has devoted crossderable time to the study of these plants, rousibles in to be a leaf post and the study of typical I. accepts for a start of the study of typical I. accepts for a start of the study of typical I. accepts for a start of the study of typical I. accepts for a start of the study of typical II. accepts for a start of the study of typical II. accepts for a start of typical III. accepts for a start of the study of typical III. accepts for a start of the start of th

Soon unter the intunt has finited flowering to see roots will commerce to pain from the base of the last made pencids that; this is a forwardle opportunity to de any necessary for the contraction of the contract of the penches of the penches of the contract of the penches of the contract of the contract of the penches of the contract of the contract of the penches of the contract of the contract of the penches of the contract of the penches of the contract of the contract of the penches of the contract of the contract of the penches of the contract of the contract of the penches of the contract of the contract of the penches of the contract of the contract of the penches of the contract of the contract of the penches of the contract of the

Lælis anceps does not like being disturbed, consequently the plants after re-potting will probably look a little unhappy, but as soon as the new roots enter the fresh compost rapid recovery will take place. The plants should be placed in a good light position, or, if possible, grown in a pan or basket suspended from the roof. Very little shading will be required, for these Mexican species are accustomed to much sanshine and plenty of air. Ventilation must be freely given to prevent burning of the foliage. Some growers have obtained excellent results by placing a thin canvas screen inside the house just under the glass. In the case of the small amateur's collection, where many different kinds of Orchids have to be grown in the same out these instructions without in some way interfering with the other occurants. Probably one end or even a corner of the house could be devoted to L. ancens and other Mexican Orchids; by so doing less risk will he incurred to the plants requiring a shady and cooler atmosphere

Every attention must be given to excessing a behalfy and storing crosh aboring a behalfy and storing growth direction the sourcer months, for without this, flowering enable storing could see a set to be gover and disappointing. As soon as the newly made balls in complete. As soon as the newly made table in complete a greated review of the ball partial review of the flower of the solutions of the flower of

### 32 43 14

Mexican Orchids are particularly liable to be attacked by insect pests; every means must, therefore, be taken to keep the plants clean by constant was img with a suitable insecticide, or cles by frequent furnigation of the house. The smallest insect often does the groatest damage.

## THE INTERNATIONAL EXHIBITION OF 1866.

Till, advent of the great International Exhibition cells to man the international Exhibition cells to make the international Exhibition cells to make it may be improvement and hydridization of Orchols amore the last cellabour, held in 1666. There are few of the left in 1666 in

At the Roanical Congress, held in the Seath Kenningshom Momenn during the period of the exhibition, Mr. Robert Mureer, read a cupyer on "Cool Univery Ordenla," a subject of that their admost starting for few enhanced and that their admost starting for few enhanced to give in a companistively ovel atmosphere. Mr. Warner explained his methods and give the decade of cultivation which time admost assepared correct. Hybrids, although not unknown, were of great rating, and the grouges were almost marked panels are designed as were almost marked.

The 1856 exhibition buildings cost LExcov. in addition to which must be added the cost of the glass subres specially made for lighting the Orbit term. These, however, proved the Cribit term. These, however, proved with the cost of the glass subres and the glass of the cost of the term of the cost of the cost of the term of the cost of the term of the provide covered as space of about profect of the bank allocated for their purpose; the judgest being Prof. Rickenback of Humburg, Mr. Anderson, of Merdodwinki, Mr. Lawrence, of 1 enhance, and Merdodwinki, Mr. Lawrence, of 1 enhance, and

In the open class for 50 Orchids, any kind, in flower, Mr. Robert Warner was the only weighbiter and consequently secured the 1st Prize of £30. In the amateur's class for 20 Orchids, the 1st Prize of £25 was secured by Mr. Turner, of £crester, Mr. W. Leaf,

of Streatham, Mrs. Treadwell, of Norwood, and Mr. Buller, of Exeter, secured the

Class 25 was for 12 Orchids, detrinet, in flower. The 1st Prize of £10 was won by Messes. Vetch and Sors, Chelses, the 2nd by Mr. B. S. Wildiams, and the 4th by Mr. Wildiams Bull, Chelses; the 3nd Prize was withheld by the proves. In the following class four noney proves were coferred, Mr. 260bs, off Reguelle Park, being placed first, and the Wildiam illustially accurage the socooney.

Class 3, west fer our new Ordnik, shown of the Hing Mine Mover. The 1st price, f. 5, was usuafed to M. J. Lindon, for Ænicks was usuafed to M. J. Lindon, for Ænicks proportion; the region of the first mention of the first proportion; the state of the first proportion of

Class 34, for one Orchid in flower, eucouraged the Duke of Northumberhand, Mr. Robert Warner, Mr. A. Turner, Mr. James Bateman, and Mr. B. S. Williams to enter for the three prizes. The class for ten variegated Orchids,

including Anoretochilas, Physuras, Macodes, Goodyera, etc., induced several exhibitors to compete; in nearly every group the varieties of Anoretochilas formed the principal part. The 1st Price of £5 wis awarded to Mr. B. S. Williams, and the 4th to Messys. S. Glenduning, Chiswick. Variegated Orchilds are rarely seen in present day collections.

# THE ORCHID CUPS AND MEDALS TO BE WON AT THE ROYAL INTERNATIONAL HORTICULTURAL EXHIBITION, 1912.



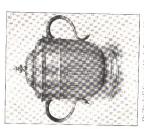
The Cup presented by His Majesty The King, to be awarded to the most meritorious exhibit in the show.



The Medal of the Royal International Horticultural Exhibition, 1912.



he Cup presented by Baron Brano Schröder for the best group of Hybrid Orchisis.

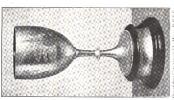


in Standard Cup presented by the Directors of the Exhibition.

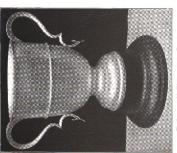








Ose of three Caps presented by Messrs, Bull & for the best Odomlode, Hybrid Calliego, Hybrid Odomloglossem.



The Cup presented by W. Duncan Tasker, Esta., for a group of Orchidi (Trank).

# THE ORCHID JURY OF THE ROYAL INTERNATIONAL SHOW, 1912.

The following have accepted the invitation to act as Members of the Orchid Jury of the Royal International Horticultural Exhibition, 1912:—

Alexander, H. G., Westenbirt Gardens, Tetbury. Ashworth, E., Wilmslow, Cheshire. Beyrodt, Otto, Marienfelde, Berlin.

Bolton, W., Warrington, Lancs. Chapman, H. J., Oakwood Gardens, Wylamon-Tyne.

Cobb, W., Rusper, Sussex.

Crawshay, dc Barri, Sevenoaks.

Cybber, J., Queen's Road, Cheltenham.

Davis, J., Glebelands Gardens, S. Weodford de Crom, Jules Hye, Glient.

de Hemptinne, Count Joseph, St. Denis-Westrem, Belgium. Dietrich, Ch., Auderghem, Brussels.

Dietrich, Ch., Auderghem, Brussels. Hanbury, F. J., Brockhurst, East Grinste. Hurst, C. C., Hinckley, Leicestershire. Kunz, Karl, Vienna, Austria. Lambeau, Firmiu, Brussels. Lee, W. R., Heywood, Lancs. Low, Stuart, Enfield, Middlesex. Maron, Ch., Brunoy, France. Moore, G. F., Bourton-on-the-Water, Glos. O'Brign, James, Harrow oe-the-Hül.

O'Brien, James, Harrow ou-the-Hul. Pecters A. A., St. Gilles, Brussels. Sander, Fred., St. Albans. Shill, J. F., The Dell Gardens, Englefield

Sander, Fred., St. Albans.
Shill, J. E., The Dell Gardens, Englefield
Green.
Thompson, W., Walton Grange, Stone.
Thwaites, R. G., Streatham Hill, S.W.

Treyanowsky, J., Moscow, Russia. Vuylsteke, C., Ghent, Belgium. Wellesley, F., Woking, Surrey. White, W. H., Burford Gardens, Surrey. Wilson, Gurney, Haywards Heath.

# CALENDAR OF OPERATIONS FOR MAY. By J. T. BARKER, The West Hill, Heade, E. Yorks. Intermediate. Cattleys, and Mexican

Plants, in all departments, will now be anking new growth, and every encourage ment should be given to induce them to haid up their growths quiedly. Soft, sappy growth, although extremely large, does not always produce the most, of the best flowers; therefore we, as cultivators, should grow our plants under these conditions when years, and soft the properties of the product of the protact of the product of the product of the prosentant they may be able to withstand any hardhims they may have been feet for concounter.

Temperatures. As an indicement to the various plants to make rapid growth, the summer temperatures should now be brought into operation. The figures given below should be maintained as nearly as possible, but should a spell of cold, inclement weather pressal, no harm will accure from the temperatures being a few degrees lower than those given:

Cool house, day 60 deg, to 65 deg, night 55 deg, to 60 deg. houses, day 70 deg. to 80 deg., night 65 deg. to 70 deg.

Warm house, day 75 deg. to 80 deg., night 75 deg. Speaking of temperatures, I do not wish

to imply that the thermometer, or rather the degrees of heat in the various houses, should be riveted to a certain figure. Some discretion should be used according to the outside climatic conditions as regards the amount of fire heat ased to maintain the various temperatures. An excessive amount of fire heat is hourful at any time, but at this season of the year it can be counteracted by attrosphere moisture.

Moisture. As the weather gets brighter and warmer, more moisture must be maintained in the houses to keep our plants in a leasthy condition and us a preventive of insect pests. When the weather is hot the floors and staging of our houses cannot be

kept too wet, and spraying and syringing can be freely included in, but not indiscriminately.

Watering. The plants will now take up considerable quantities of water at the roots, but still all plants should be watered with caution, for the whole secret of plant cautions, for the whole secret of plant cautivation depends entirely on the amount of intelligence brought to bear upon this branch of our practice. Care should be taken that every plant requires water before

Shading. Considerable care and attention must be given to our plants as regards the amount of shade we give them; sunshine is life to some, and death to others.

Ventilation must still have great attention, as on minute promitting the regular supply of fresh air is essential to good cultivation. Excepting for an hour or so when the houses are closed in the evening. I always have one or more ventilators open, according to the outside conditions and the different houses. Cypripediums of the water flowering to the property of the property of

section, as regards porting, should be brought to a conclusion as 5000 as possible, for the longer the season of growth the better for them. The summer flowering section, such as C. niveam, C. Lawrenceanum, C. Godefroyac, Cuttisli, and their various hybrids, school be cleaned and placed in their flowering marters.

Cartleyas, Lælias, and Lælio-Cattleyas now coming into flower should be thoroughly cleaned and the flowering growths neatly staked up, and, if possible, a house should be entirely devoted to their where the atmosphere can be kept a little drier and the temperature somewhat cooler; this will be the means of the llowers lasting longer and the conditions more comfortable for those who wish to see the plants. Any plants that have passed out of flower and need re-potting should be done at once, providing they have commenced to push new roots, or are about to do so. C. Mendelti, C. Mossiæ, and C. Schröderæ should be grown in a house a few degrees lower than that in which C. gigas and many of the hybrids are cultivated.

Dendrobiums. D. Phalamousis Schröder-

ianum, if not previously attended to, should have attention at once and new rooting material provided if necessary. The evergreen species and varieties which flower at this season are beautiful and attractive plants. D. densiflorum, D. Farmeri, D. thyrsiflorum, D. chrysotoxum and others, usually commence developing their flower spikes simultaneously, and by the time the flowers are faded the roots from the base of the young growths are somewhat advanced: at this stage any necessary re-patting should he done. The plants, when well established, should be grown we'll up to the light, using only sufficient shade to prevent scorebing. D. a cool intermediate temperature, and when The other kinds are best grown in the warm house. A similar controot as that advised for Dendrobiums last month should be employed for all the species. Exercise the usual care in watering all newly notted plants, and afford them extra shade on

Zypocishan Mackayi and Z craitium, so such plants as floricy. Persotress, sud plants as floricy. Persotress, sud promoness, which, for cultivaring purposes, may all be classed under one head grow in dense shade, and where the atmosphere is were youlful, and the temperature averages, which are precised as growing paids. The foliage shead he superyed, especially on the under side, with tepal rain water three or our times a day, and willicent water must be applied to keep the compost moist. These profits must also be predeted from even wood before the compost moist. These profits must also be predeted from even wood with the profits must also be in a forwarded once for any present must be recovered within 50 controls.

Ödnetoglossums of the grande, Insleayi, and Ura-Skinner: section which have commenced to push fresh roots from their new growth will need attention as regards re-potting. Up till now, fites plants, since their last ballos matured, have been kept on the dry sice, but now that growth has recommenced root action will soon follow. This section may now be placed at the warm

end of the Odontoglossum house, which is a suitable place during the hot months. Cool house Orchids, which are very soon injured by heat, must now be kept as cool as possible. The temperature should be kept down during hot weather by heavy shading and the thorough damping down of every available space several times a day.

Cymbidium eburneum, C. Lowianum, C. grandiflorum (Hookerianum), C. Tracvanum and C. giganteum, also their varieties and hybrids, which have passed out of flower and are on the point of making new roots from their young growth are in a desirable condition for being re-notted. The compost I recommend is equal parts fibrous peat and loam, with a fair quantity of sphagnum moss and coarse silver sand. It should be used rather rough, and the plants should be potted moderately firm and much the same as ordinary plants. After re-potting special care must be given in applying water, as overwatering at this stage means absolute ruin; one good watering after the plant has been re-potted will suffice for a considerable time. Cymbidiams will thrive in a cool part of the intermediate house; they must be shaded from direct sunshine. The same compost will answer the requirements of any Phains that require attention. These succeed in a warm, moist, shady corner of the Cattleya house, and when the pots are full of roots abundance of water must be given. A little

Angulous which have passed out of flower may also be re-potted, using the compost recommended for the green-leaved Cypripediums. The same remarks apply also to Lycastes: they both thrive in a shady place in the cool intermediate house.

Sobralias that are showing their flower spikes, especially if at all pot bound, will benefit by an occasional watering with weak liquid manure water; this will greatly assist them in developing their flowers. Manure when in full growth, or when pushing up flower spikes, but it should never be used in

Stanhopeas, if they require it, may now

be placed in larger baskets. These should be shallow ones, and instead of crocks I prefer a layer of fern rhizome placed at the bottom in such a manner that the flower spikes can easily push through. A suitable compost is equal parts peat, osmunda fibre, and sphagnum moss. This mixture should be made moderately firm, and water should be applied with caution until the new growth is well advanced. Stanhopeas succeed in a snarly position suspended from the roof of the warm house: they should be frequently prevent the attacks of red spider.

Coclogyne pandurata. With many this Orchid often fails to grow satisfactorily. It remines plenty of heat and a shady position in the warmest house, and when a suitable position has been found for it, it is a most victorous prower. The compost given last requirements, and the best time to do any re-petting is after its flowers have faded, Corlowynes at all times resent being disturbed at the roots, therefore this operation should be done with care, giving ample room for the plants to develop. The back pseudobulbs should be removed to two or three behind each lead, so that the plants may be placed in moderate size pans. C. Dayana and C. asperata will succeed under the same treatment. These plants when in full growth require an abundant supply of water and comprise some of the most thirsty Orchids in cultivation.

General remarks. In case insects should make an annewrance just while the plants are making new growth fumigate at once, for these, if allowed to gain a footbold at this season, are difficult to cradicate. Cleanliness is one of the greatest aids to successful cultivation. The posting of the different plants will occupy the whole of our time and attention, and the sooner it is done the better. Keep the atmosphere of the houses sweet by the admission of air on all favourable occasions, as the health of our plants depends on their needs being satisfied, and a supply of fresh air is as essential as a supply of

### ROYAL HORTICULTURAL SOCIETY.

April 2nd, 1012.

McMauszes of the Orchid Committee persons, J. Gamus Frowker, Eus, Gm the chuir, and Messes, Jas. O'Brien (hon sec), Harry J. Vettelt, Gurney Wilson, R. A. Roffe, R. G. Ibwatkes, F. Sander, F. M. Ogdivic, T. Armstroug, A. McHean, I. Charlesworth, W. H. Hatcher, J. E. Shill, A. Dye, H. G. Arcausder, W. H. Wilter, J. Wilson Potzer, A. Charlesworth, W. H. Hatcher, J. E. Shill, A. Dye, H. G. R. Brooman-White, de B. Grawstay, J. S. Moss, and F. J. Hatsbury,

Mesers. Sander and Sons, St. Albans, were awarded a Silver-gilt Medal for a large group containing many face forms of Cartleya Schrödezw, a well flowered plant of Miltonia St. Andre, and a good selection of Leslio-

Cartleyas.

Mesors. Charlesworth and Co., Haywards Heath, were awarded a Silver Flora Medal for some excellent Orchids. Mention must he made of Larlio Cattleya Peronja, Sarcochilus Fitzgeraldii, the carbosa Dendrobiumsenile, and several good Odontogloscum hybrics.

Messes, Stuart Low and Co., Bush Hall Park, were awarded a Silver Flora Medal for an excellent selection of Dendrobiums and bright yellow Oncidiums. Some good varieties of Cattleyas Schrödera, and various Cymbidiums were also shown.

Messrs. Hassall and Co., Soutingate, received a Silver Banksian Medal for some interesting Orchids. Cattleya Trians: Backhoustana, Odontioda Zephyr, and Cymbidium

churneum were specially good.
Messus, J. and A. McBean, Cookshridge,
réocived a Silver Banksian Medal for a very
effective group containing an excellent
variety of Odontioda Charlesworthii, the
pretty Phaius Norman, the blue-lipped

Zygopetalum Perrenoudii, and Cattleya gigzs. R. G. Thwaites, Esq., Chessington, Streatham (gr. Mr. J. M. Black), eshibited a group of Odontiodas for which a Salver Banksian Medal was awarded. The varieties included Cooksonie, Sanderæ, Zephyr, and Charlesworthii.

(gr. Mr. H. G. Alexander), exhibited Cattleya

Olaf "Westonbirt var."

Arthur Legge, Esq., Hemefield, Worthing, exhibited seedling varieties of Dendrobium nobile of good shape and colour.

Sir Trevor Lawrence, Bart., Burford, Dorking, showed several very pretty Musdevallias, and a number of yellow flowering Dendrolviums.

Messrs, Armstrong and Brown, Tunbridge Wells, showed an excellent hybrid Cypripedium between C. Prewetti and C. Gernaine Opoix, the broad dorsal sepal was greenish-bown flushed with purple. A well

Lowered plant of the clegant Coolegyne pandurata was also shown, de Barri Crawshay, Esq., Resefield, Sevenoaks, exhibited a good rose tinted

form of Odentoglessam Lämbeauianum. Mr. E. V. Low, Vale Bridge, Haywards Heatli, showed Cattleya Transe Empress of India, a good variety, C. Schröderæ The Käiser, with an apricot-yellow throat, and the clevant C. Luddenmuinar Stanlevi.

F. M. Ogilvie, Esq., The Shrubbery, Oxford, exhibited Brasso-Cartleya Cliftonii magnifica, an albino form of Cypripedium Antigene, and Miltonia. Bleuana rosea, a very large form.

Mrs. Norman Cockson, Oakwood, Wylam, exhibited Ocontoglossum percultum pallidum, O. p. fuscum, and O. crispum nigrum.

E. H. Davidson, Esq., Borlases, Twyford, Berks, exhibited Lycaste Skinneri alba, of

Francis Wellesley, Esq., Westfield, Woking, showed Cattleya Trianae F. McBean,

a large light tinted flower, the lip being magenta-purple.
Messra Veitch and Sons, Chelsen, showed

Luclio-Cattleya Dominiana langleyensis, and two others which obtained awards.

Mr. C. F. Waters, Balcombe, Sussex,

showed good varieties of Cattleya Mendelii.

### AMMARTS

### FIRST-CLASS CERTIFICATI

Cymbidium Pauwchi "The Dell variety" (Lowanum v. insigno), from Baron Bruno Schröder, The Dell, Egham (gr. Mr. J. E. Still). A very attractive hybrid, the large flowers are creamy-white, with faint purple lines on the sepals and petals, the lip being blottched with red. The plant was well grown and carried a spike of 20 flowers. Ladio-Cattleva Thirting (Tanase × Myra).

from Sir Trevor Lawrence, Bart, K.C.V.O. Burford. A beautiful orange yellow flower

of good s

Lichio-Cattleya McBeaniana (L. anceps Schröderiana v. C. Schrödera). A remarkably distinct hybrid. The large flower has white sepals and petals of good form and size, the lip is marked with crimson-purple on the front, the throat being yellow.

# AWARDS OF MERIT. Odontorlossum His Majesty (parentage

unknown), from Licut-Col. Sir George Holford, K.C.V.O. (gr. Mr. Alexander).—A noble llower, handsomely marked with chocolate-numbe blotches.

chocolate-purple blotches.

Cypripedium Roger Sunder (Godefroyee
glaucophyllum).—A distinct hybrid intermediate in size and colour, the labellum

spotted rose-purple.

Lelio-Cattleya Invincible var. Orama.

[Dominiana v bletchleyensis], from Messes.

las. Veitch and Sons, Caclsea—A righly

coloured flower, the lip being specially good. Ledio Cattleya Frederick Boyle "Veitch's variety" (L. anceps. Sanderiana × C. Trianse). A delicately tinted livbrid, the

bread margin to the front of the lip is rosepurple. From Messars, Jus. Veitch and Sons. Orienticida Cooksenian "Cobbl's variety" (O. ardentissimum x C. Noszlana), from Walter Cobb, Esq., Normanhurst, Rusper.—

(O. ardentissimum × C. Nozzliana), from Walter Cobb, Esq., Normanhurst, Rusper.— One of the pretiest of the Odomiodas, of a deep red colour, margined with rose, the apex of the lip white. April 16th, 1912.

SIXMERS of the Orchad Committee present: J. Gamuey Poolser, E.W., (in the chair), and Messix, Jas. OBrien (from. sec.), Harry J. Vetich, Garuey Wilsou, F. Souder, H. G. Alexander, H. J. Chapman, T. Armstrong, J. Charlesworth, W. H. Hatcher, J. E. Sholl, W. P. Bound, A. Dye, W. H. White, F. Peeters, J. Wilsen Potter, I. S. Moss, F. J. Haolbury, J. Cypher, C. J. Lacas, Stuart Low, R. G. Thwaires and R. A. Rolfe.

Mrs. Norman Cookson, Oakwood, Wylam (gr. Mr. Chapman), received a Silver Flora Medal for an effective group of Odontoglessums and Odoutiodas, urany of the blotched flowers being of excellent shape and

Baron Brano Schröder, The Dell, Englefield Green (gr. Mr. J. E. Shill), showed Cattleya Schrödera Empress, a fine specimen with eleven large flowers.

Francis Wellesley, Esq., Westfield, Woking, exhibited Leelio Cattleya Bertram and L.-C. Mrs. Henriques, the latter a hybrid of C. Hardvana.

J. Gurney Fowler, Esq., Glebelands, South Woodford, exhibited two distinct varieties of Cattleya Schrödern and two Orchids which

J. T. Bennett-Poë, Esq., Holmewood, Cheshunt, sen; a well grown spike of Cymbidium Lowianum "Holmewood variety," with

24 flowers. A. Warren, Esq., The Cedars, Epsom, sent a white form of Ærides virens.

Sir Jeremiah Colman, Bart., V.M.H., Gatton Park, showed Odontiona gattenensis, of good orm and colour.

E. H. Davidson, Esq., Rorlases, Twyford, exhibited Cattleya Schröderæ alba "Borlases variety," one of the whitest forms, and of good them.

F. D. Godman, Esq., South Lodge, Horsham, staged Lælio-Cattleya Endymion (luminosa × callistoglossa), Odontoglossum Godmanii, and Pleione yuunanensis. Mons. Firmin Lambeau, Brussels, showed

Miltonia Hyeana Vogelzang, a very large flower, almost pure white, with a slight rose flush on the base of the petals. wellow disc.

Mesers. A Peeters and Sons, Brussels, variety with rose flushing and a brownish-

Mons. F. Claes, Brussels, exhibited three

plants of his very distinct variety of Cattleya

H. T. Pitt, Esq., Rosslyn, Stamford Hill. made of Cypripedium Chapmanii and Larlio-

Messis, Sander and Suis, St. Albans, were awarded a Silver Flora Medal for a good merit included Lælio-Cattleya Cora var. ignea, the new L.-C. rigida, and some excellent

Messrs, J. Cypher and Sens, Cheltenham, Silver Flora Modal. In it were several good Masdevallias, Miltonia stellata, and a large form of Dendrobium primulinum

Messrs. Hassall and Co., Southgate, were awarded a Silver Flora Medal for a group containing many good varieties of Lælio-Cattleya Olivia, the elegant Trichopilia Backhouseans, the pretty Epidendrum Stamfortianum, and many good Cymbidiums.

for some choice hybrids, including Odontioda Charlesworthii, Brasso-Cattleya Queen Alexandra, B.-C. Digbyano-Warneri, and Brassocatlælia loan, a new hybrid between

Enfield, received a Silver Banksian Medal for a proup containing many useful Dendrobes. A number of Odontiedas, Odontoglossum

J. Crombleholme (in the chair), Messra C.

Parker, H. Thorp, A. Warburton, Z. A. Ward,

J. Cypher, J. Evans, W. Holmes, A. L.

hybrids, and the rare Cymbidium Devonianum

Messes, McBenn, Cooksbridge, were awarded a Silver Bauksian Medal for a group of choice Orchids. Included in it were some very fine Odontiodas and Odontoglossums; O, solon and O, ardentissimum being specially

The Liverpool Horticultural and Nursery Co. received a Silver Banksian Medal for an effective group of hybrids, those of Laclia

Odontoglosum crispum Saga, from J. Gurney Fowler, Esq., Glebelands, South Woodford. - A remarkably fine crispum carrying a spike of 17 flowers of excellent shape and righly blotched with reddish-

## AWARDS OF MERCE.

Cattleya Mendelii Thule, from J. Gurney Fowler, Esq. -An almost pure white variety, the only colour being a slight blush tint on the

Westfield, Woking. - A very distinct hybrid of a golden-yellow colour, the sepais and petals being effectively flushed with crimson. The

## CULTURAL COMMENDATION

to Mr. Stables, gardener to de Barri Crawshay, Esq., Rosefield, Sevenoaks, for a magnificent plant of Odontoglassum Souvenir de Victor Hye de Crom. The spike was oft am in height and carried 21 flowers and buds.

# MANCHESTER ORCHID SOCIETY.

MEMBERS of the Committee present: Rev.

Keeling, D. McLcod, and H. Arthur Silver-gilt Medals were awarded to Z. A. Ward, Esq., Northenden, and Samuel Gratrix,

Esq., Whalley Range.

Silver Medals were awarded to W. R. Lee,

Esq., Heywood, Col. J. Rutherford, Blackburn, and J. McCartney, Esq., Bolton.

A Bronze Medal was granted to Rev. J. Crombleholme, Clayton le-Moors,

Mrs. S. Gratrix, Whalley Range, staged Lycaste Susan, a natural hybrid. O. O. Wrigley, Esq., Bury, exhibited a

plant of Lycaste Skinneri aloa with 26

A. Washarton, Esq., Haslingden, C. Parker, Esq., Preston, H. Thorp, Esq., Middleton, and H. Arthur, Esq., Blackburn, exhibited

Mesors Sander and Sous, Charlesworth and and Co, were among the trade exhibitors.

Odontiona Charlesworthii "Ward's var.," flowers not very large but intensely dark,

Odontioda Schroderi var. Leeana, a very fine flower, three inches across.

Cymbidium Parishii "Rutherford's var.," pure white flowers with purple markings on

## AWARDS OF MERIT.

Lycaste Susan, from Mrs. Gratrix; Od. amabile var. Monarch, Od. crispan Ethel, man, from Z. A. Ward, Esq.; Cattleya Suzamic Hye "Gratrix's var," and Cyp. Prince Albert var. Alport Derby, from S. Gratrix, Esq.; Laclio-Cattleya bella Lecaua, pubile Lecana, from W. R. Lor, Esq.; ford: Od. Rossii immaculatum, from H. Arthur, Esq.; Cattleya Schrödera enfieldensis, from Messrs, Strart Low and Co.

### CULTURAL CERTIFICATE AND BRONZE MEDAL

to Mr. Brown (gr. to S. Gratrix, Esq.), for a plant of Odentoglossum crispum Samuel Gratrix carrying a magnificent spike.

The plant of Odontoglossum Delhi (F.C.C.) exhibited by J. J. Holden, Esq., Southport, on January 1115, 1912, has been entered on the records of the Society as Odontoglossum

April 4th, 1912. MEMBERS of the Committee present: Rev. 1. Crombleholme (in the chair), Messes. R.

A Silver-gilt Medal was awarded to Z. A.

Silver Medals were awarded to Col. J. Rutherford, M.P., Blackburn; Rev. Crombleholme, Clayton le Moors; and J. McCartney, Esq., Bolton, Other exhibitors included W. R. Lee, Esq.,

Heywood; I. J. Holden, Esq. Southport; A. Warburton, Esq., Haslingden; R. le Doux, Whalley Range: Mr. I. Birchenhall, Alderley Edge; and Mr. J. Evans, Congleton.

memiliant flower of good form and colour; a very round flower of almost solid colour, and with a white margin to the segments,

(Wilekeanum x Harryaman), a magnificent flower of rich solid colour, 4 inches across,

Cymbidium Pauwelsii (Lowisnum × the lin. from Col. I. Rutherford, M.P.

Cattleya Trianae var. Iris, and C. Schrödera: var. (Enone, both from W. R. Lee, Esc. Brasso-Cattleva Maria: var. Maggie (Warneri alba x B. Dig'syana), and Cattleya Schrödere var. Luminos, both from I. J. Odontoglossum Telemachus, parentage unknown, from Z. A. Ward, Esq.

Odontoglossum crispum Madouxianum, from A. Warburton, Esq.

Cattleya Trianze var. Ada le Doux, from R. le Doux, Esq.

April 18th, 1912.

MEMBERS of the Committee present: Messes, Z. A. Ward (in the chair), R. Ashworth, J. Bamber, C. Parker, H. Thorp, A. Warburton, J. C. Cowan, J. Cypher, J. Evans, W. Hohnes, A. J. Keching, D. McLeod, F. K. Sander, and H. Arthur (Secretary).

Z. A. Ward, Esq., Northenden, was awarded a Silver-gilt Medal for a face group of miscellaneous Orchids, the Odontoglossums

being a special feature.

R. Ashworth, Esq., Newchurch, received a
Silver-gilt Medal for a spleadid group

Silver-gilt Medal for a splendid group containing many fine Odentoglossums. Col. J. Rutherford, M.P., Blackburn, was awarded a Silver Medal for an effective

group of Cattleyas, and others.

J. McCartney, Esq., Bolton, received a

 McLartney, E.sq., Bolton, received a Silver Medal for a good group composed principally of Cattleyas.
 A. Warburton, Esq., Haslingden, received

a Bronze Medal for a small group of Odontoglossums.

O. O. Wrigley, Esq., Bury, staged a nice

O. O. Wrigley, Esq., Bury, staged a nice batch of Cypripediums and Oncidiums.
J. J. Holden, Esq., Southport, exhibited

 J. Houch, Esq., Southpor., exmined several choire Orchids.
 J. Leemann, Esq., Heaton Messey, staged

Mesors Cypher and Sons, Cheltenlaus, were awarded a Silver Medal for a good group.

The Liverpool Orchid Co. received a Silver Medal for a nice exhibit. Cattleyas being a

Messrs. A. J. Keeling and Sous, Bradford,

exhibited many choice Dendrobiums.

Messes Stuart Low and Co., Enfield, staged

Messrs. Hassall and Co., Southgate, exhibited some interesting Cattleya hybrids. Mr. W. Shackieton, Bradford, staged a good

form of Od, crispum.

Mr. J. Evans, Congleton, exhibited Odontoglossum harvengtense aureum.

### AWARDS.

### ISS CERTIFICATES

Odontoglossum crispum xanthotes "Lady of the Suow," one of the best albinos yet seen, a well grown plant carrying a spike of over a dozen flowers.—From A. Ashworth, Esq.

Odontoglossum eximium xanthotes, a beautiful albino with very round flowers having pale orange spots on all the segments —From A. Warburton, Esq.

## AWARDS OF MERIT.

Odontioda Hyeanum var. Willie; Od. crispum var. George; Od. The Moor; all from A. Warburton, Esq.

Otlontoglossum crispum Leeana, Odontioda Diana "Ashworth's var."—Both from R. Ashworth, Esq.

Odentoglossum eximium "The Premier."— From L. I. Holden, Exp.

Sophrocatkelia Sandhage (C. Enid x S.-L. heatonensis), and Brasso-Cattleya Cliftonii, both from L. Leemann, Esq.

ROYAL CAURDONIAN SOCIETY'S EXHIBI-TION. -Orchids, as may be expected, had the place of honour at the Royal Caledonian Society's Horticultural Exhibition held on the toth and 11th of April. It was the opinion Market Hall, Edinburgh, where the show was held. The 1st Prize was a cun and three! guineas presented by Messrs. Sander and Son, St. Albans, for the hest group of Orchids, variety, quality, and effective arrangement to be considered. This prize was won by R. Brooman-White, Esq. (gr. Mr. I. Smith), Arddarroch, and the 2nd Prize was secured by James Wood, Esn. (gr. Mr. F. Henderson). Wallhouse, Torphichen, Bathgate. Messrs. Sander and Son, Messes, Stuart Low and Co., and Mr. D. Macleod also exhibited interesting Orchids. The Marquis of Tullibardine performed the opening ceremony, and during the afternoon and evening a selection of music was played by the hand of the Black Watch.



CALANTH VALUESH:—A very profule halo of Calauthe Vecidity with 10 less than differen new growth's springing from its base in the subject of a priority springing from its base been taken by Mr. T.W. Carr. Orchid grower to W. D. Shane, Eag., Elin Court. Lernos, Mass., U.S.A. These new growths are engularly arranged completely round tile halb; certainly a remarkable means of rapid propagation.

0.0

BRASS-CATLELIA AUSDOZI. This new plotfol Jestema Linici Carlipse imminos and fiscaso-Lalia Mrs. Gratzis has been raised a fiscaso-Lalia Mrs. Gratzis has been raised a Scampton Hall, Bit J. St. Quantita C. F. C. Paddle. The large bright orangleyleto flower in newly six raises my superplication of the control of the control of the plotfolia of the control of the control of the plotfolia of the control of the control of the season of the control of the control of the season of the control of the control of the season of the control of the Garden of the control of the c

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ORCHIS MASCULA ALEA—An albims variety of this pretty species, commonly known as the Eurly surple Orrbis has been discovered by Mr. G. Betting in Mid-Sussex. The typical species is found growing in almost every kind of soil and situation. The Rowers vary in colour from rich, deep purple

to a very light rose tint, but the pure white form "alba" is very rarely seen. The Orchis genus produces the nutritious matter known as salep, that produced from O. mascula being regarded as the best.

EUROPEAN ORCHIDS. - Of remarkable interest and beauty are many of the European Orchids growing in the garden of W. II. St. Quintin, Esq., Scampston Hall, Rillington, York. A varied selection of these has been kindly sent by Mr. F. C. Puddle, who states that some 67 different species are grown, the Mr. St. Quintin in various parts of Europe. As examples of these pretty flowers, mention may be made of Oplays scolopax with its singular representation to an insect, and the beautiful sky-blue colour of its conspicuous sepals; Ophrys atrata, with its dark, downy a spider; O. spifera with its bee-like labellum, the end of its column; and O. latea with its flowers of bright greenish yellow colour. Not less elegant are the various species of Serapias, that known as S. lingua having a likeness to an animal hanging out its tongue. Serapias cordigera is a robust and richly coloured species with flowers somewhat larger than those of its relations, while S. of culture. It is somewhat surprising that these interesting and mimicing Orchids are

# THE ORCHID JURY OF THE ROYAL INTERNATIONAL SHOW, 1912.

The following is a complete list of the respective members of the six sections of the Special Orchid Turv (---

NON-COMPETITIVE CLASS.

President, Count Joseph de Hemptinuc, Westrein, Glicat, Referêr, Guraey Wilson, Haywards Heath,

Sussex.

I. Cypher, Queen's Road, Cheltenham.

W. R. Lee, Plumpton Hall, Heywood, Lancs.
James O'Brien, Marian, Harrow-on-the-

CLASSES 65, 66, AND THE LAMBEAU GOLD MEDAL

President, Firmin Lambean, Brussels, Bel-

Reporter, James O'Brien, Harrow-on-the-Hill. H. G. Alexander, Westenhirt Gardens,

> Tetbury, Glos. C. Beranck, Rue de Babylone, Paris.

C. Maron, Brimoy, France, W. H. White, Burlord Ledge Gardens,

Gurney Wilson, Haywards Heath, Sussex.

Classes 68, 70, 80, 85, And Messrs. Wm. Hull. and Son's 3 Cups

Reprier, de Barri Crawshay, Rosefield, Sevenoales, Walter Cobb, Rusper, Horsham,

J. Davis, Glenelands Gardens, South Woodford.

F. A. Wellesley, Westfield, Woking,

CLASSES 83, 84, AND 86.

President, J. Troyanowsky, Moscow, Russia. Reporter, H. Chapman, Onkwood Gardens, Wylam-on-Tyne.

E. Ashworth, Wilmslow, Cheshire. J. Charlesworth, Haywards Heath,

Sussex.
S. Graire, Amiens, France.

Prince Metschersky, Station Dougii Russia.

Fred. Sander, St. Albans.

CLASSES 75, 76, 77, AND M. JULES HVE BE CROW'S CUP FOR THE BEST MILTONIAS. President, O. Beyrodt, Marsenfelde, Berlin.

Reporter, R. Thwaites, Streatham Hill, S.W. W. Bolton, Wilderspeed, Warrington.

A. A. Poeters, St. Gilles, Brussels, J. E. Shill, The Dell Gardens, Englefield Green.

CLASSES 89, 90, 91, 334, 335, AND 336.

President, Jules Hye de Crom, Ghent,

Belgium.
Reporter, C. C. Hurst, Hinckley, Leicester.

Shire. F. J. Hambury, Brockhurst, East Grin

Stuart Low, Bush Hill Park, Enfield. G. F. Moore, Chardwar, Bourton-ou-the-

C. Vnylsteke, Loechristi, Ghent, Belgium,

The Members of the Jury nett proceeding 37,700 am, on the opening day of the Show and completed their that about below models, the same norming. After the depentare of the King and Queen the indiges were entertained to function in a large marquee. The Date of Portland presided, and there was a large number of Colonial and Foreign perpenentatives. At the conclusion of the lunchous Sir George Holferd and Mr. Harry Verich were vigorously cheeref for the important part they had taken in the welfare of the Show the

1 -6(2-6(2-66-62-6

The Chairman of the Royal International Horticultural Exhibition (I, Gurney Fouler, Esq.) odmiring a specimen Orchid in his group. The plant is Cohonluglissom Hustre Europe, and was ossurded the Cup presented by Messrs. Win. Bull and Sons for the finest Odontoglossom hybrid in the Shose achibited by an amatted by an experimental processing the control of the Cohong Colorate Cohong Coh



Lalio-Cattleya Bedsuin, a spesimen Orchid in Six George Holford's group at the International Show.

# THE ROYAL INTERNATIONAL HORTICULTURAL EXHIBITION, 1912.

CHIELSEA, se entinently suitable for the presence. Show, has long been famous for its association with horticulture. So long ago as 1750 the Society of Apottaccarics founded the Chelsen Physic Garden, Dr. Lindley, the great Orchiologyst, holigating the position of Hertus Prefectus from [Six1-1850].

The great Show of 1912 was formally opened by the King and Queen, who were accompanied by Princess Mary, Princess Victoria, Princess Christian, and Princess Louise of Schleswig, Hofstein

The Royal Party was received by the Duke of Portland and the Directors of the Exhihition. Among those present were the French, Austriam, Japanese, Italiau, Russian, and United States Archassardors, and the Netherlands, Chilian, Swedish, Belgian, and other Ministers, the Duke and Duchess of Somerset, and the Rt. Hou. Walter Russian man. President of the Board of Agriculture.

The Duke and Duchess of Portland gave on "At Home" at 3, Grosvenor Square, to welcome the representatives of foreign countries and the Colonies, May 21st.

Mr. Leopold de Rethschild invited the foreign and other members of the Jury to dirace at Guanersbury Park, May 23rd.

The Royal Herticultural Society gave a banquet to the Foreign and certain members of the Jury at the Society's Hall, May 24th,



Sir Trevor Lawrence, Bart., gave a luncheon and garden party at Burrord, May 25th.

Sir Frank Crisp held a reception at Friar Park, Henley, May 20th.

There were also special visits arranged to the Royal Gardens, Windsor, Kew Gardens, and many of the large private gardens and principal trade establishments. During the Exhibition the King conferred

the honour of knighthood upon Mr. Harry J. Veitch, the father of English borticulture. Mr. Veitch is well known to all Orchidists for his early work in raising seedling Orchids.

The outstanding feature of the slow was the magnificant group of Ordrick stoged by LearLoCd. See George Holleder K.C.Y.C. See George College and the short electric state of the Holleder K.C. See George Endoted and Mr. Alexander See George Endoted and Mr. Alexander Holleder K.C. See George Endoted and Mr. Alexander Calministic congraptiations which they received when a became known that they had seered the Kingle Cup for their group of Orchals the next mentionise calculate the See George George College Col

The large Ordali Jent measured 2xo feet in high and 70 feet in width, the carear in large in 190 feet in width, the carear feet in 190 feet in width, the carear feet in 190 f

Reval Horticultural Society for special plants, particulars of which will be found in the list The background was draped with material specially tinted to harmonise with the plants, and in front of this several immense palms rose to a height of ac feet, nobile nobilius, n. virginale, the golden Ophir with 66 flowers, Dalheusicanum luteum with Brymerianum, and Wardianum album. At Oncidiums hung gracefully ever the rich nursle flowers of the plants beneath, the arranged and adding greatly to the appearance of the huge Orchid tent. The Laelio-Cattleyas, for which the Westonbirt collecto the group that stately and dignified appearance which only Orchids, "the aris-Cattleyas included Goldcrest, one of the best vellow hybrids, Golden Glory, one plant of which carried three spikes with 21 flowers. the Westonbirt variety of Britannia, Lustre variety Buddah, and Lustre variety Lavingebeing specially good, and one of the finest selections of Canhamianas which has ever the finest quality, the Westonbirt variety of Queen Alexandra, and B.-C. The King were two of the finest and most admired plants in the group. Cattlevas, as may be expected. occupied considerable space, the albino varieties being very select. Mention must be made of Cattleva Mendelii Oueen Mary, which obtained a First-class Certificate, C. Skinneri Temple's variety with 52 flowers, and the white form of the same with 80 blooms. The chaste C. Dusseldorfei Undine was also well shown. Cyprinediums were visible in many parts of this important exhibit, a good example being callosum Sanderac with 16 flowers, and an equally fine specimen of Maudia. The Odontoglossums bestowed a



specirem plant in the large group exhibited cleary, Glas. (gr. Mr. H. G. "Hexander). Digbarno-Mossie, Westenbiri sariety, A specinar Sir George Holford, K.C.V.O., Westenbiri, Tetbery,

light and fairy-like appearance to the front part of the group, some 300 large plants of Ool, crispina and is large number of hybrinds were used. Miltonia Memoria Barrat Schröder and Miltonia Memoria G. D. Owen were two of the finest and most noteworthy specimens of this useful decorative Orchail. Mention must also be made of Miltonia Mention must also be made of Miltonia.

Renanthers: Imschootians, and along the front row was a varied selection of Botanical Orchids, many of great rarity.

Messes. Charlesworth and Co., Haywards Heath, staged a wonderful exhibit, having a frontage of 78 feet and covering a space of 700 square feet. It was the handsome Coppresented by Lieut-Col, Sir George Holford,



Cattleya Lawrenceana Mary Regins.

A rare albino exhibited by Mesars, Charlesworth & Co. at the International Show.

sexillaria Westonbirt variety with 33 flowers. Cymbidums, including Parishii, hybrids of insigne, and Alexanderi, were very much admired, some of the species being noble specimens. Touches of searlet were visible in many places by the inclusion of Sophronitis lubrids and well-flowered plants of the Exhibition Large Gold Medal, and the Large Gold Medal presented by Mons Firmin Lambeau for the group of Orchids containing the most increasing hybrids raised by the exhibitor. The centre was occupied by a mass of Cochhoda hybrids, over 20 distinct ones being noticed, over which hung elegant



Miltonia Memoria Baron Schröder.

Exhibited at the International Show by Lieut-Col. Sir George Hotford, K.C.V.O.

suravs of the white Phalænopsis Rimestadtiana. This group contained more than 100 distinct hybrids, probably a record number for one exhibit, the coloration and form being remarkable, The Brasso-Cattleyas were represented by specimen plants of vigorous habit, the Cattlevas by a very fine variety of Empress Frederick, and the Sunbrocathelias by some righty coloured Marathons, Nearly 20 Lælio-Cattleya hybrids of distinct parentage and about 40 different Odontordossum hybrids were included, besides many Odontonias, Odontocidiums, and Miltoniodas, the whole forming a most interesting display of the hybridist's art and the future possibilities of hybridisation. A plant of great rarity was the elegant Cattleya Lawrenceana Mary Regina, the only albino form of the species vet discovered. Another extremely interesting plant was Eulophiella Hamelinij with a spike of rosepurple flowers; the Eulophiells Elisabethae being also represented by a good specimen. Odontioda Queen Mary was awarded a Firstclass Certificate, and Odontoglossum Her Majesty received a similar award. A very becutful crispun of thick substance was to be seen in a variety called White Star, and a new hybrid in Leiho-Cattleya Ulysses (L.-C. Fassimator & C. Mossie), the latter being shown in two varieties, one having a slight shown in two varieties, one having a slight, and the pure white. As a record of the hybrids exhibited at this show will be of considerable importance and utility in future years we shall give, as far as assumed as complete bit.

Mesors, Sander and Sons, St. Albans, exhibited a marvellous selection of rare species and hybrids, the whole occurving an area of 700 square feet. It gained the large Wiltshire Cup and the Large Exhibition Gold Medal. Included in it were superb specimens of Ærides, Vandas, Saccolabiums, and many excellent specimens collected in Burma and the surrounding country. Two prominent stands were gaily decorated with Phalmnopsis Rimostadiana and the scarlet-flowering Renanthera Imschootiana, and in recesses were numerous botanical Orchids, their small, but highly interesting flowers being much admired. The front part of this wonderful group was covered with emerald-green moss,



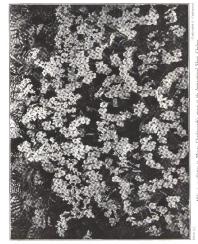
Lelio-Cuttleya Gladiator.

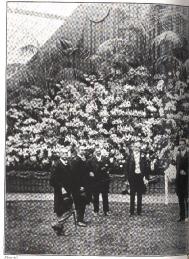
A grand specimen plant exhibited by Lieut-Col. Sir George Holford at the International Show,

the specimen Orchids being staged on tage. A rare plant was to be seen in Odontoglowum crispum solum, and a very complete selection of Odontiodas attracted considerable attention. Odontoglossum amabile Duke First-class Certificates from the Orchid Committee. Od. majesticum James W. Whitten and Od. arrabile Princess Mary obtained was a beautiful flower righly marked with claret-purple. Cyompediam Charles Stadden. one of the best varieties, Cyp. Parishii, and of these elegant flowers. The background contained a large specimen of the Vanilla Orchid, several distinct varieties of Cymbidiums, Sobraha macrantha alba, Stanhoucus in variety, and many Enidendroms.

F. Menteith Ogilv'c, Esq., The Shrubbery,

Oxford (gr. Mr. Balmforth), won the First Prize, Messrs Sander and Sons' Cup and £10. for the best exhibit shown by an amateur in a space of 500 square feet. This highly meritorious group contained no less than 300 fine varieties of Odontoglossum crispum, A pleasing effect was obtained by massing several doscu large plants of Dendrobium cheesingtonense, and also by the mass of callosum Sanderse. Many excellent varieties. of Cattleya Mossiæ, some richly coloured forms of Cattleya Mendelii, including C. M. Pearl McBean, filled up the middle rows. In prominent positions we noticed the rare Odontoglossum Harwoodii, the very large Od. Ossulstonii The Shrubbery variety, and excellent varieties of Od. illustrissimum. Lælio-Cattleva Canhamiana was well represented, about 60 spikes of flowers adding a good effect to the group. There were also





The wanderful group of Orchids shown by Lieut-Col. Sir George Holford, K.C.V.O.-Westoshiri, Gloss, at the International Show. It was awarded the Cap presented by His Majesty the King for the most meritainess we think in the Show, the Exhibition Large



Gold Medal, and the Cup presented by Mons. Jules Hye de Crom for the best Millonia. The partraits of the "Non-conpetitive Jury" are, from left to right, Mr., Wm., R. Lee, Count Joseph de Hemptinne, Mr. J. Cypher, Mr. J. O'Brien, and Mr. Garney Wilson.

and interesting Botanical Orchids, the whole forming one of the fixest groups ever staged by Mr. Oralvie.

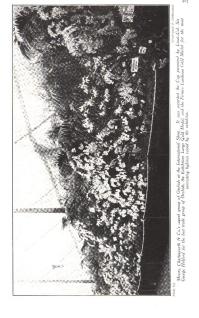
Sir Jeremiali Colman, Bart., Gatton Park, Reigate (gr. Mr. Collier), secured the Charlesworth Cup and £7 for an exceedingly wellarranged exhibit containing many of the The Odontoglossams were particularly well grown and included the handsome Queen of Gatton, Rolfen, about 20 strong plants of Thompsomianum, and numerous Harryanum crosses. Ahout 20 plants of Cartleya William Murray, some 20 specimens of Epidendrum Boundia, and a consurce-hensive collection of



Cyperipedium Moudia. A specimen echibited by Lieut. Cd. Sir George Holford, at the International Show.

excellent Dendrobiums for which Gatton Park is so justly celebrated. The centre of the group consisted almost entirely of Cochlioda hybrids. These included 25 plants of O. Bradshawiz and many others of great merit. other well known hybrids. The very attractive Spathoglottis Colman i, Cymbidium Colmane, and Odontioda Papilio gattonensis were much admired.

J. Gurney Fowler, Esq., Glebelands, South



Woodford (gr. Mr. Doxiy), was awarded the Cap presented to the Evhibition of the Evhibition of the South of Heroford International Conference of the Confere

Leopold de Rochschild, Esq., Gunnersbury Park, Acton, received a Gold Medal for a magnificent eshibit of Vauda teres, the splendid specimens bearing a total of over you spikes. The foreground was occupied with Odontogloisum crispum effectively arranged with the use of Madenhair ferns. This very beautiful exhibit was greatly admired by a

constant stream of visitors.

Muns. Firmin Lambeau, Beussels, received the First Price, a Gold Medal, for the best exhibit of 50 Orbids in not less than 25 shortly, shown by an anature. The selection for the best Odomical in the selection of Cup presented by Mesers. Win. Ball and Suntor the best Odomicals in the short exhibited by an anature; Matonia Hyeona, a splendid variety with a very petty centre; Odomical, Ajax, of Vergret; and several very good Brassavola Wagneri; and several very good Brassavola

Mons Ch. Dietrich, Val Duchesse, Bussels, was awarded a lange Silver Cup in or excellent non competitive exhibit of Orchids. The finest plants were Odostical Maetedinck with 35 large flowers almost eritiely covered with sorder-level blockes; a grand variety of Cattleya Mendelli, Cattleya Schrödera alia, with 12 flowers; Lucio-Cattleya Fascinstor; Le-C. Aphrodie; and a fine selection of

Mons Jules Hye de Crom, Ghent, Belgium, was awarded a Silver Cup for a group of Odontiodas and Miltorias. The latter included Miltoria Duchess of Portland, a lacastiful rosp tinted flower with a reddich-purple blotched centre having radiating lines of the same colour. Also Miltonia Jules Hye de Grom, a grand variety which obtained a First class Certificate from the Orchid Com-

E. H. Davidson, Borlases, Twyford, Berks, received a Silver Cup for a very well arranged and effective group. Excellent examples of Lycaste Skinneri alba. Lefla purparata in severual varieties, Odontoglossum Uro-Skinneri, Cattleya Mossie in fine form, and a varied collection of special crispans were much admired.

Mons, Vacherot, France, received a Silver Cup for a group of Orchids and Carnations. Mons. Alex. Regner, Fontency, France.

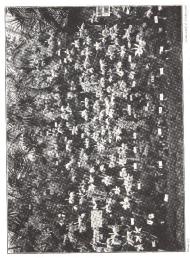
received a Silver Medal for an interesting group of hybrid Habenarias.

Mons. A. Goossens, Brussels, was awarded

a Silver Medal for an excellent collection of Orchid paintings.

Messrs, Mansell and Hatcher Rawdon, a very grand group occupying a space of 340 square feet and containing a large selection of species and distinct hybrids. Special mention must be made of Odontioda Cleopatra (Lairessei x C. Neezliana), a bright flower with white segments spotted with chocolatered, Odontioda Bradshawire, Od. crispum Black Prince, a very good selection of Lacho-Cattleya Fascinator, large masses of the scarlet Renanthera Imschootiana, Vanda teres and choice Cattlevas. This group was noted for the number of interesting Botanical glossums, such as Dora, percultum, and ardentissimum, were well shown. Several choice varieties of Miltonia vexillaria and some elegant Brasso-Cattleyas were much admired. One of the largest and best groups ever staged by this Yorkshire firm.

Wells, were awarded Baron Bruno Schröder's Cup for the finest exhibit of Orchid hybrids in a space not exceeding 200 square feet. Brasso-Cattleya Shillii, a new hybrid between



B.C. Diglyano-Mosse and C. Mossic, was shown in the form, B.C. Thomtoni and several other excellent varieties of Brasswood, hybrids ecopored prominent plot. There were also many district varieties of Laties were also many district varieties of Laties and the graceful flowering Oshodison Thompositoms. Cypreportume scaled the beautiful Holderin, and special mention must be made of Cyrisdenius Workshoot, and sensition. This evidence is a sensitive of the ferential of the the remarkably licelihy contribute of the the remarkably licelihy contribute of the the varieties.

Messes, J. Cypber and Sons, Cheltenham, were availed the Second Prize, a Silver-gitt Cup, for the next heat exhibit in the above class. One noticed many superior Bordrobinuss. Lerion-Cartileyas, such as Hyoma, Wellsians, and Fascindor, several very pretty Cypripothium, select Hussos-Cartleyas and Wellsians, and Fascindor, several very next Capring-view and several specimens. Leck-Cartleys, well-awa carried no less than 13flowers.

Messes, Susat Low and Ce, Besh 1101

Park, were awarded the First Price a Gold Medal, for the best exhibit of species and varieties of species in a space not exceeding 200 square test. This species included Cattleys Mossiz also, Cartleys Mendeli in many excellent varieties, Cabanthe veratrifola, the prett Bifernario Harrisonia, Cytropolium Ardersenii, and several interesting Mastlevallius.

Messes Cypher and Sous Cheltenlann, were awarded the Second Pring a Silver-offic Cup, for a good exhibit of species and varieties of species in a space not exceeding 200 square feet. Included in it, were specimen plants of Cattleya Mendeln, excellent forms of Cattleya Mendeln, excellent forms of Cattleya Mendeln, and selection of Botair cal species, and many others, all of special merit.

Messes, Ch. Maron and Sons, Brunop, France, obtained the First Prize, a Silver Cap, for the best group of 25 plants, Ladias, Cattleyas, and Brassavolas, their varieties and hybrida. The selectrio meladed Epic Cattleya striata (C. Mossika × E. fragram), Epi-Cattleya distincts (L. harpophylla × Epi-Cattleya distincts (L. harpophylla × Epiatropurpureum), a very bright flower of Brasso-Cattleya Vilmoriniana, and B.-C. Ornheus variety biliette Waller

Mr. Sálnzy Flory, Tracy's Nussexy, Trukckmhan, recived a Salver Cay for an excellent exhibit of Orchids Mention must be made of good varieties of Cattleya Mendelli. Mossin, and Silmerti, and of some fixely-flowered Oblanteglossum reispum. The Odontiolas and Onedissus were much admired, and the muncrous varieties of Miltenia vevillaria and the highly interesting (Edumical Cockids handle up an effective group.

Mons. H. Graire, St. Funcion, Amieris, Funces, was swarded a Silver-gill Medial for a very interesting group of O'Sontiodas and Ooluntoglossams. The former included Lutrepe. St. Fuscien, and delsistance variety St. Fuscien; the latter Supplo, very dark, eximina, Othello with a many flowered spike. and a good byteid between trimphana, and Rossifi. The group was very effectively staged with the assistance of Machinshi rferus.

Sr Jeremiah Colman, Barta, Gatton Park, secured the First Prize, a Sakver-gilt Medal, for a group of Botanical Ordella, not necessify in flower, in a space not exceeding 20 square feet. The wonderful construction and the curious ferms which many of these interesting plants possessed cuased cuasificatible attention and elicited many appreciative cenaries from the visitors to the Exhibition.

Mesos. Armwining and Brown, Loubidge Wells, secoused the first Prize, a Gold Welda, Wells well be first Prize, a Gold Welda, to the lear exhibit of two Orchels, in not less than 25 writeless. The specimens isolated, with a good object, the prize of the Cook, and the Cook, public, the case Milloran exciling 16, D. Owen, Cattleys Sazanne Hye de Cook, Caclegyer pundeates with a spike of 13 thoses, Kelleys and the self-over to thorem, Kelleys Lawrencesson Hyesanov.

Messes Strart Low and Go., Bosb Hil-Park, Enfield, were awarded the Second Prize, a Siver Cup, for an exhibit of 100 Orchids in not less than 25 varieties. These included Orlentiods Bradshawie, Lesbu-Cattleya G. S. Ball, L.-C. Dusseldorfel Undine, Cypripedium Maudier, and Miltonia versillaria.



Oncidium phymatochilum. A specimen plant in the Gold Medal group exhibited by Mr. H. Dixon,

Mr. H. Dixon, Spencer Park Nursery, Prize, a Gold Medal, for the best exhibit of tieda Charlesworthii of excellent colour. Odontioda Vuylstekca, O. Diana, O. Bradtochilum with four spikes having a total cf 323 flowers (see illustration), and a specimen

Mr. W. A. Manda, South Orange, New lersey, U.S.A., and St. Albans, secured the

an excellent exhibit, the back of which was filled with specimen Renanthera Inschooliana; the foreground contained a number of remarkable varieties of Miltonia vexillarias, many of great beauty.

received a Silver-gilt Medal for some very beautiful hybrids Ociontioda Queen Mary, exquisitum, a large dark red flower with a

Mr. C. Birchenall, Alderley Edge, Cheshire, was awarded a Silver Medal for a good group containing Cattleya Unique magnifica, a good

for 12 specimen Orchids. The best were Vanda tricolor and a specimen Cattleya Mossice.

Mr. W. A. Manda, South Orange, New Silver Cup, for six specimen Orchids: These included Cattleva gigas with 14 flowers, C.

Mr. W. A. Manda won the Second Prize, a Silver-eilt Modal, for a specimen Orchida Cattleva gious with 26 flowers.

1. McCartney, Esc., Hey House, Bolton, secured the Third Prize, a small Silver-Gilt Medal, for a specimen Orchid: Oncidium J. McCartney, Esq., was awarded the

Second Prize, a Silver Medal, for Luclias, Cattlevas, and Brassavolas, 12 plants. The Undine, C. Mossie Arnoldiana, C. Mendelii, Brasso-Cattleya Digbyano-Schröderæ, Lælia purpurata Amie Louise, and L. cinnabrosa.

Mr. W. A. Manda secured the First Prize daianum, very similar to Cymb. l'Ansonii, flowers creamy-brown with dark brown

Mr. W. A. Manda also won the First Prize for a variety of a species by showing a good broad form of Cattleya Mendelii with six flowers. He also staged C. gigas Mandaiana,

a form of Handyana. I. McCartney, Esq., Belton, exhibited

Francis Wellesley, Esq., Westfield, Woking. exhibited Cattleya Mossia: Graham White, and Ladio Cattleya The Seltan (Iona nigrescens x 1,...C. bletchlevensis), an extremely

F. I. Hanbury, Esq., Brockburst, East Grinstead, exhibited Odentoglossum Lambeauianum Brockhurst variety, a fine variety with

the Royal Horticultural Committee.

Gurney Wilson, I. Cypher, H. G. Alexander, W. H. White, H. Chapman, E. Ashworth, I. R. G. Thwaites, W. Bolton, J. E. Shill, W. Moore, and Sir Fred, Moore,

Cattleva Mendelii Queen Mary, from Lieut Cri. Sir George Holford, K.C.V.O., Westonbirt (gr. Mr. H. G. Alexander),-A very beautiful flower with pure white sepals and petals of rood shape, the labell in having a slight rose flush of colour. The spike

Brasso-Cattleys The King, from Lieut-Col. Sir George Holford. -An enormous flower of considerable amount of Cattleva Mossia:

Dendrobium Dalhousicanum lateum, from Lient-Col. Sir George Holford.--A well vellow flowers with dark maronn blotches on the side lobes of the labellum.

Cattlesa Diree magnifica, from Lieut-Col. purple flower of good shape and thick substance, with the petals slightly splashed at the tips with a darker shade of purple. The plant carried a spike of four flowers, and was also awarded the Cup presented by Messra. Wm. Bull and Sons for the finest Cattleva hybrid in the Show exhibited by an amateur. Larlio-Cattleva Lustre variety Lavingo, from Lieut-Cel. Sir George Holford.-A good hybrid between C. Lueddemarniana and

Bruno Schröder (er. Mr. Shill) - A very distinct variety of this Brazilian succies.

Firmin Lambeau, Brussels,--A very large creamy-white flower with a slight amount of rose-murple in the centre.

Menteith Ogilvie, Esq., The Shrubbery. Oxford. A large flower with white ground

Odontoglossum eximium variety Excelsion (ardentissimum × crispum), Irom Mons. Ch. -Vuylsteke, Luochristi, Belgium.-One of the

Odontorlossum Her Majesty, from Messrs. Charlesworth and Co. Haywards Heath.-A very fine flower, of good alsape and of a rich purple colour, the labellum being specially

Co. A very remarkable and handsome hybrid. The centre and larger part of all the marginal line of the same colour runs round the sepals and petals. Odontoglossum amabile variety Duke of

handsamely blotched with purple.

Odontovlossum eximium variety King of the finest Odontoglossum hybrids. covered with purple blotches. Labellum white at the apex and pandarate in shape.

Column very dark. Miltonia Jules IIve de Crom (Hyeana ×

vexillaria', from Mons, Jules Hye de Crom, Belgiam. A beautiful, pure white flower with a rich numle blotched centre, having radiating lines of the same colour.

### AWARDS OF MERT

Odontoglossum ardentissimum variety Carmen, from F. Menteith Ogilvic, Esq., The Shrubhery, Oxiord.—A fine variety carrying a spike of about 20 round flowers heavily swotted with murale

a spike of about 20 round flowers heavily spotted with purple Cattleya Mossiæ variety Madame Jules Hye, from Mons Firmin Lambeau, Brusse's.

 A beautiful and distinct variety of this spring-flowering species.
 Orlontoda Bradshawar variety Vocebanz.

Odontroda Bratishawae varnety Vogeleang, from bloms. Firmin Lambeau. A good spike of 10 pinkish white flowers blotched with scarlet-rose. A pretty rose margin is on all

Lacho-Cattleya Lustre variety Buddah, from Lieut.-Col Sir George Holford.—A large flower of good shape and substance, the labellum sweekled and blotched with recon-

purple.

Lachio-Cattleya Gladiator, from Lieut.-Col.
Sir George Holford. A large flower of unrecorded parentage having an immense

very broad.

purple blotched labellum.

Odontoglossum amabile Princess Mary, from Messys. Sander and Sons, St. Albareta.

A good flower with white sepals and petals blotched with reddish-mursle, the labellum

Odontoglossum crispum James McNabh, from Messrs. Sander and Sons.—A fine variety with handsome blotching, after the style of the well-known variety Franz Mascreel.

Otlontoglossum majestirum James W. Whitton (extinium × percellum), from Messes. Sandre and Sons. A very peetly hybrid of good shape with the margins of the petals crisped and toothed. The purple markings arranged as in a good variety of anabile.

Le-Fin-Cattleya Uysses (L.-C. Faucinator # C. Mossie Reinerkiana), from Messrs. Charlesworth and Co. Haywards Heath.—Flowers of good shape and substance, the petals being more erect than often seen in L.-C. Fascinator. Flowers pare white with a slight arcelding of numbe on the inner side lubes of

the labellum.

Likio-Cattleya Ulysses alba, from Messrs.

Charsesworth and Co. A pure white variety

Octontioda Chanctler, from Messes, Charlesworth and Co., Haywards Heath. A large flower of solid scarlet-red colour, much resembling an immense variety of Cochdioda

Zygopetalum Armstrongæ, from Messrs. Armstrong and Brown, Tunbridge Wells. A very handsome hybrid with elegant sepals and petals, the labellum crimson-purple.

# CALENDAR OF OPERATIONS FOR JUNE. By J. T. BARKER, The West Hill, Hessle, E. Yorks.

TillE temperatures given last menth are also suitable for the present one, and the general conditions, as regards ventilation, atmosphere insoiture, and watering are also applicable. It is desirabled during the summer months, especially with the during the summer months, especially such that might be the contractive to the standard the weather be extremely hot, to admit at at might by the bottom ventilators, but this schedul not be done to the exercit of activately should not be done to the exercit of activately to be removabered that the creditions of the stanosphere play a most important part in the cultivation of Orbets.

Cattleyas Plants of Cattleya gigas,

whether showing down should in the young powers or not, should now be placed in the lightest position possible, and should be electrated close to the roof glass of the house. The potting of these plants is lost deferred and after they have discretified and the new seen to be pushing new roots from their base. C. Mossin, C. Vendedili, and others, as they pass out of flower and are seen to be pushing new roots from their base plants and the proposition of the pushing the roots, may have attention as using a compost as previously advised the thick class of plants. C. Dowims, and its thick class of plants. C. Dowims, and variety aures, having started well into growth should be placed at the warmest e of of the Cattleys loose, and be carefully applied with water wall the floorers open, expelled with variety wall the floorers open, moved to coaler causalism granten should be moved to coaler causalism granten should gradually exposed to merce it and surface. C. Lucdelmanniana, or C. specciosisma rat is known by season, may be reported after the plants have floorered, and are seen to be the plants have floorered, and are seen to be the day was until the roots enter a recongtive most choose and describe.

Laclias. A great many Laclias succeed precisely under the same conditions as Cattleyas, but there are exceptions, namely, the Mexican Leelins which are sun-loving plants and should only be shaded sufficiently to prevent scurching. Now that the plants of L. anceps are becoming active more water may be applied at the roots. L. albida. L. Gouldiana, L. autumnalis, and its variety the roof of a house wiscre a cool intermediate temperature is maintained. These Mexican and, therefore, should not be turned out of their recentacles unless they have become overgrown or require new compost. Those requiring re-potting may be done, using a compost as for L. anceps. If the house in which these plants are grown is kept light and well ventilated once, firm usendo-bulbs will be formed capable of producing strong flower spikes.

Leelia barpophylia. This is a plant one does not see so much as it deserves, on account of its colour. As a rule it is not a strong growing species, but, nevertheless a strong growing species, but, nevertheless beauthy plants will grow freely. This plant requires a long rest after flowering, the young growths then come newsy more evenly, and

the balls shower more regularly. The plans are best grown in post fixed two children's make he grown in post fixed two children's best ball with problem's for crimings, above this with compost as for 1, unexps. Care should be taken to fix the plans furnily, and they should be slightly decorated above the rim of the pot, but they must not be protect too family. They desight a named atmosphere, and require giving of water at the rosts when in that greater the forms tass questly through the compost, or much some will access. A shall position in the coal mercuncture boundaries proceedings to make the coal mercuncture to make the coal mercuncture to t

Miltonia vexilleria. As the sammer flowering seriolis of this most useful Ordisal bas passed the Sowering stage, the plants should be induced to trike a short period of real; they should, however, not be allowed to suffer or the want of water, only sefficient lexing green to develop the growths. After the flower spikes are removed the plant do not take up the same quantity of lexived processing the dependence and the plant do not take up the same quantity of green with gather them.

Masdevallias of the Caimara sertion, which have been growing in the cool intermodiate house, should at usee be removed to a shaded position in the cool house. These plants require a plentful sapply of water during hot, dry weather, and they should be spraced every day with clean tend rain-water to prevent attacks of red spider.

Calsudies. These plants should now be making headway, and may, have more water applied; those that hove not sorted freely flrough the compest should still be kept on the dry side. Care should always be taken that the water used for this class of plant is of the temperature as the atmosphere of the house in which they are grown. Many cases of spot are attributable to this over-

# ROYAL HORTICULTURAL SOCIETY.

April 30th 1912.

MENDERS of the Orchid Committee present:
J. Gurney Fowler, Esq. (in the chair); and
Messrs. Jos. O'Brien (hon. sec.), Harry J.

Veitch, de B. Cerwshay, Gurney Wilson, W. Thompson, Stwart Lew, R. G. Thwaites, J. S. Moss, F. J. Hanbury, F. M. Ogilvie, T. Armstrong, A. McBean, W. Cobb, J. Cypher, J. Charlesworth, W. H. Hatcher, J. Wilson Potter, W. P. Bound, J. E. Shill, W. Bolton, and R. Brooman White,

ham, received a Silver Flora Medal for a large and effective group of various Orchads. Messrs, Stuart Low and Co., Bush Hill

Park, received a Silver Banksian Medal for a good group containing interesting Den-

Messrs, Sander and Sons, St. Albans, were

Messrs. Charlesworth and Co., Haywards

Messrs, J. and A. McBean, Cooksbridge, a selection of Cattleyas and other excellent

Messrs, J. Cypher and Sons, Cheltenham, secured a Bronze Banksian Medal for an attractive group containing many good

Messes, Hassall and Co., Southeate, were awarded a Bronze Banksian Medal for various Orchids, all in excellent form. I. Gurney Fowler, Esq., Glebelands, South

Woodford, exhibited Odontioda Royal Gem, the distinct Cattleya Schröderæ "Glebelands var.," and the rare Cymbidium tigrinum. Sir Trever Lawrence, Bart., K.C.V.O.,

Burford, exhibited Brassocathelia Trime and a very fine variety of Ociontoglossum

Mrs. Gratrix, West Point, Whalley Range, Manchester, sent Odontoglossum crispum Mary Gratrix, a fine white form.

W. R. Lee, Esq., Plumpton Hall, Heywood, exhibited Odontioda Lecana, a fine flower

F. M. Ogilvic, Esq., The Shrubbery, Oxford, sent Odontorlossam Lambeauianum Vallerie, and the elegant Cypripedium Marv

G. P. Walker, Esu., Heatherwood, Putney Heath, exhibited Odontorlossum Reval Purple, a fine violet-purple flower.

Francis Wellesley, Esq., Westfield, sent

Cattleya Mendelii Chief Justice, a white flower with a violet-purple lip: C. Mossiae Lady Northchife: and the elevant Ladio-

Cattleva Mrs. Henriques.

Sir Jeremiah Colman, Bart, V.M.H., Gatton Park, Respate, exhibited Dendrobium acuminatum Colmana carrying a large spike

Odontorlossum Uro-Skinneri "Burford variety," from Sir Trever Lawrence, Bart., K,C.V.O., Barford. - A magnificent variety with a broad labellum nearly two inches

Cattleva Schröderæ "Glebelands variety." from I. Gurney Fowler, Esq., Glebelands, having the labellum extremely well coloured with rich orange-vellow.

I. Gurney Fowler, Esq. (in the chair), Messrs. (as, O'Brien (hon, sec.), Harry I. Veitch, ton, de Barri Crawshav, W. H. White, A. Dye, I. Cypher, W. Cobb. A. McBean, T. Armstrong, R. G. Thwaites, F. J. Hanbury, C. J. Lucas, J. Wilson Potter, C. Cookson, and Sir Fred, Moore,

Mr. H. A. Tracy, Orchid Nursery, Twicken ham, received a Silver Flora Medal for a large group of Orchids shown in excellent form.

H. T. Pitt, Esq., Rosslyn, Stamford Hill, effective group, the varieties of Miltonia vexillaria being specially good. de Barri Crawshay, Esq., Rosefield, Seven-

oaks, was awarded a Silver Banksian Medal for a very interesting exhibit of Odontiodas, the most distinct being O. Carmon (O. Nuzdiana × O. nebulosum) Odontoglossum Valeria, O. Volutella (elegans × Vuylstekei). and O. Honolulii (Hunnewellsanum x har-

a Silve: Banksian Medal for a good group

containing many excellent hybrids. R. G. Thwaites, Esq. Chessington, Streatham Hill, was awarded a Silver Bank-

sian Medal for a good exhibit of Odontogiossums and distinct hybrids,

Messrs. J. and A. McBean, Cooksbridge, Sussex, were awarded a Silver Banksian Medal for an exhibit of specially fine varieties of Odontorlossum crispum. Several

Mrs. Norman Coekson, Oakwood, Wylam. staged Odontoglossum Solon var. Roland, and a good blotched form of crispum.

Cymbidium Woodhamsianum Fowler's variety (eburneo-Lowianum × Lowianum),

## MANCHESTER ORCHID SOCIETY

May 2nd, 1912. MEMBERS of the Committee present: Rev. J. Crombleholme (in the chair), Messrs, C. Parker, H. Thorp, A. Warburton, Z. A. A. L. Keeling, D. McLeod, and H. Arthur

Z. A. Ward, Esu., Northenden, was awarded a Silver-gilt Medal for an excellent group of Odontoglossums, etc.

Col. | Rutherford, M.P., Blackburn, received a Silver Medal for a nice group of Odontoolossums and others,

I. McCartney, Esq., Bolton, was awarded a Silver Medal for a group consisting princinally of Cattlevas.

Medal for a group of Orchids,

O. O. Wrigley, Esq., Bury, exhibited many excellent specimens. I. J. Holden, Esq., Southport, staged

Brasso-Cattlevas and Cyprinediums. A. Warburton, Esq., Haslingden, staged

Rev. J. Crombleholme, Clayton-le-Moors, exhibited Cypripediums.

from J. Gurney Fowler, Esq., Glebelands, South Woodford, A very beautiful and distinct hybrid with apricot-vellow flowers. The labellum is white at the base, with red spots on the side lobes; the front lobe has

### AWARD OF MEDIC

Lælio-Cattleva Apollo (C. Schröderæ × L.-C. Warnhamensis), from C. J. Lucas, Esq., Warnham Court, Horsham.-A pretty flower of delicate salmon-pink colour, the labellum veined with rose.

## CULTURAL COMMENDATION to Mr. W. H. White, Orchid grower to Sir

Trever Lawrence, Bart, for a well flowered plant of Dendronium Loddigesii.

Mesers, Cypher and Sons, Cheltenham: Mesara Charlesworth and Co. Haywards Heath; Messrs. Keeling and Sons, Bradford; Mr. W. Shackleton, Great Horton; and Mr. D. McLeod. Charlton-cum-Hardy, also staged

## Odontoglossum crispum Perfect Gem. a

large flower of excellent shape, with blotches on the sepals and petals. A Silver Medal was also awarded to this plant.-From A. Warburton, Esq.

Brasso-Cattleya Marise var. Maggie, a very fine form, almost white, from [. ]. Holden, Esq.

Odontoglossum St. Peter var. Hilda and Od. amabile, from Z. A. Ward, Esq.

Odopteolossum eximium Rutherfordianum. from Col. J. Rutherford.

Cypripedium Greyi claytonense, from the Rev. J. Crombleholme.



VANILIA AROMATICA.—Between three and feur limited flowers have recently been borne upon a specimen plant of this species in the establishment of Messes. Julius Rechts Co., Ratherford, New Jersey. This collection new occupies seventeen large houses.

DENDOBLIN DITTHURNIL—SIT Exerate in Thurn has moremed the Kire Balletin that this plant was found near the Englor Lugoon, Efaste Island, New Hebrales, and Total and Total Saland in error, in the Sciomon Islands. The species is albeit to D. autentami, but is more robust in every respective.

SPHAGKUM MOSS. Many interesting species and varieties were included it the 33 pains of growing mostes which Ar. Has pains of growing mostes which Ar. Has pains of growing mostes which Ar. Has pained as the second interesting the second most paint of the second most paint of the western counties of overall growing, which three so leaves and to see the second state of the second state, it are in Hestfechtire, and imputed specimens show their aversion to our stand, it are in Hestfechtire, and imputed specimens show their aversion to the climate, for try which way the could, Mr. Danton was unable to make it grow in a satisfactory manner.

OUNTOGLOSSIES GRADE.—This is the largest of the many species of Odouteglossus and, with the possible exception of Od, crispun, the most beautiful of the whole genus. A batch of well-flowered plants is a sight worth seeing. The individual flowers

measure from 5 to 7 inches acress the petals, and are of a rich golden yellow with chestorbrown markings on the based half of the sepals and petals; the lip is creamy-white marked more criess with brown. The thick yellow cest of the hp looks like a tiny wax dell from which the plant has derived the pepalar name of "Baby Orchid." Horticaltor, U.S.A. 30 20 20 20

were never more popular than they are at present: this is due, state Messrs, Laurer and Hurrell of New Jersey to the fact that they strangest, and the most lasting flowers in all the vegetable kinedom. Most private collections have some representative of this queenly vinced of the fact that, to keep page with the times, they must grow Orchids, the demand for which is daily increasing. The climate of the United States is more favourable for some species of Orchids than that of Europe, as a whole notably for Orchids found in as Triana, Mendelii, chocoensis, and Percivaliana will finish their growth and start another, sometimes two all of which will be fully developed and ready for the flowering scason. European prowers would look astonished at such culture: here it is necessary and profitable. Messrs. Lager and well illustrated Orchid catalogue,

L-ELIO-CATTLEYA LUCIA. - This useful spring-flowering hybrid is eminently suitable for decorative work, the strong and creet flower stems holding the blooms well above the plant. The parents are L. cinnaharina and C. Mendelii, and, as may be expected, the seedlings have inherited much of the Lælia habit of growth. Mons, Henri Vacherot. Boissy-Saint-Léger, France, has raised a large number of these hybrids, the range in colour being remarkable. Those with yellow lowers produce many on a stem, while those having violet-purple lahellums generally bear two and three on a spike. The majority are intermediate, being of a reddish-numle colour. with segments somewhat larger than the Laclia parent. At the recent International Horticultural Show a number of excellent Mons. Vacherot, who was awarded a Large Silver Cup for his exhibit.

OPERVS MUSCIFERA. This very abundant English Orchid, which produces its fly-resembling flowers during the months of Tune and July, is the subject of the following interesting note by Ias, Bateman in his "Orchidaceae of Mexico and Guatemala," "A remarkable circumstance connected with Ophrys muscifera has twice occurred in the garden of the Rev. T. Butt. of Trentham, whose devotion to the Orchidacea: of Europe and North America is fully equal to that of some of his contemporaries for those of the torrid zone. known a striking resemblance to a certain (and that an uncommon) species of fly, and some years since one of this description was observed by Mr. Butt to settle for days together on a blossom of the unconscious plant, no doubt under the impression that it was enjoying the society of one of its own kind. For several summers afterwards, although the Orchids continued to flower, the fly was nowhere to be seen: last year, howit remained, as before, for several days in DENDORIUM PLABRATION. Peteros Magazine of Roberty for 18th contains the following: Our London subscribers will following: Our London subscribers will perhaps feel decisions of profiting by Messrs. Loddiges' well-known liberality to visit their collection at this period, in order to see and admire a magnificent specimes of Dendro-making friends of the period of the

### NEW HYBRIDS

I. FELO-CATTLEYA CINNABAL (CINNA-LAKINA × G. S. BALL). —The flower is an improved Levia cionadorina, lage and more opon in the flip, but four of the pollen masses were large and four not quite so large, thus differing from both Ledia and Cartleya. Raised and flowered by E. F. Clark, Esq., Fevendot, Dorset

LAGLIO-CATTLEYA BEDDUIN.—A grand specimen of this new hybrid between 1 purpurata and L.-C. Hyeana was exhibited by Lieut-Col. Sir George Holford at the International Show. The plant carried 23

LALIO-CATTIEFA HERMETTE.—A new hybrid realiting from the crossing of L.-C. Henry Greenwood with C. Lueddemanniams. The large flowers are of a dark rosy-purple colour; the lip having a broad from tolor of dark purple. Exhibited by Messrs. Maron and Sons at the International Show

BRASSO-CATTLEYA LEONARDI.—One of Messrs. Maron's hybrids obtained by crossing B.-I., Helen with C. Mossie: A large pinkish rose flower, the labellum light rosy-purple, the threat overwish selfow.

La.Lio-Cattleya Marion.— By crossing La-C. Martinetti with La-C. Clive Mesors. Atmistrong and Brown have obtained a good flower of rich rosy-carmine colone with a reddish-purple labellum. The plant was exhibited at the International Snow, and will grow into a still finer result.

BRASSO-CATTLEVA SCHILLE—A large flowering hybrid obtained by crossing R-C.

Digbyano Mossiæ with C. Mossiæ. The additional influence of the Cattheya species has greatly breathend the petals, and given extra colour to the flower. Exhibited by Messrs. Armstrong and Brown at the recent International Show.

15 63 65

Occasiona ROFFE. This new primary hybrid between C. vulcania and O. Hunnewestern has been raised in the Chessington the Coulomb of the Chessington of the Chessington Colour of the Cochlinds parent is almost holden by additions blockes on the sepals and petals. The reflexed labellum is very breat shouldered; constricted in the middle, and of a light rose colour with a few brown markings. Creat and column almost white.

## DENDROBIUM SUPERBIENS.

THE following interesting letter has been received from Mr. W. Michelitz while Orchid collecting for Messrs. Sander and Sons in the Torces Strait Islands. "I arrived at Thursday Island with a good number of Dendrobium superincus, mostly fine plants. I have also some D. bigibbum most floriferous thing and well worth culti-There are very few plants of D. superbiens found on the other islands, and the plants have become far too expensive, I coause locat, men, and their feeding cost so much that the few plants one finds would cost far more than their value. Besides, with half a gale blowing, and a great deal of rain, near the small islands. I have labelled the

\*\*D. superbises seeds very soldom. I have not seen more then half a doors aced peds, but, curiously enough, nature has given them another means to propagate. One very rarely finds a plant which does not have a number of adventitions bulbs on the top of the regular halfs, which frequently in their turn again produce adventitions bulbs, so that ore sowerimes finds them three and four

growths long. The result is that one generally finds, especially among rocks, a whole nest of the plants.

\*D. higi-blum also does not fertilise freely, though far more so than superhieus, but here also we have the tendency to produce adventitions bulls, though much less than in D. superbiens. We observe the same tring in the Burnese D. Brymerianam which seeds very, very rarely, but freely produces adventitions bulls.

"I am sorry I have not got more, but all the collecting had to be done by my own men. Only Badu, in Mulgrave, and Molu, in Banks are inhabited, the other islands are mostly without water.

"D, superbient is very serrice indeed. Scane time ago a party were here who took a let of Orchids, but they were all D, bigithum. There are no natives living on the islands, and the few Midsys and other coloured people on Thursday Island carn money far marce easily than by hanting fer Orcheds, to do which a good size host is required; this litty do not generally possess.

"I visited these islands, and they did not produce more than 30 or 60 paarts. The plant grows mostly on rocks in the jumple, and also on trees. It is an awful job to collect it, the jumple is so dense and full of creepers; these, in addition to the rock-covered ground, make it todsome and warry

"I have found a few D. Goldei among the D. superbiens. D. bigibbum is plentiful, a fine type, and plants very large. It is a lovely things.

"Here, I is no pirme; the south-east waid is howling through the rigging, the dingly in which one lands is a more mu-shell, and at ebb tide one has a quarter of a mile or more of coral peef to waid and clamber over. The beach is mostly strewn with rocks and huge houlders. But worst of all is the continual tessing and rolling of the craft when at author.

"D, superbiens occurs more or less on most of the islands, also on the maniland, but to every 500 D, highbour one finds only two or three plants of D, superbiens."

# ODONTOGLOSSUM LAMBARDEANUM.



This complex parentage is, after very careful consideration, what I feel almost certain to be the "modus" by which the present invitrial has been

From a photograph, however well reproduced, it is sometimes quite impossible to determine the ancestry of a flower, but from the living bloom, the mass of data y I fortunately have accumulated, and a somewhat intimate knowledge of Mons Ch.

there is not much doubt that we downtoglosum have here the history of this extremely beautiful hybrid.

There is not much need to describe its

There is not much need to describe its torus, as this is well shown by the figure. The colour is magnificent; the whole flower, hack and from, being uniformly of the richest blaish charekpurple, except the lip where a somewhat greater residuant of aroun is left from the influence of the "borwar and yellow" progenitors. The sepath and petals are margined by a very narrow edge of white the

latter's upices being deeply stained white as the overlay of co'nur does not reach the



Odontoglosum Lambardeanum.

In the lap the margin becomes a border of stained white of stained white lawing at the extreme edge at the extreme edge at the extreme edge at the smaller marginal fine of they spots rescribing a spot of the nerve or channel by which the edge of the spots where the edge of the extreme end to the edge of t

In these very complex higheds I have adopted the icolowing plan instead of the mail one heretonic followed in descriptions, and no heretonic followed in descriptions, and so not exceeding querier Vay betteen, and so not exceeding querier Vay betteen, and so not exceeding the property of the imported spacers. By with, namely, to the imported spacers, By this made we can find the number of parts, thus, 2 crispum, 2 abolie, 1 htes. 2 triamplants, and 1 Harrysaum, 24 no all.



ODONTOGLOSSUM HARWOODII.

(O. maculatum auriferum × O. Wiganiawum)
F.C.C. R.H.S. January 31st, 1911.

This plant forms one of the gene of Mr. C. J. Philippe Gelection at "The Glebe," Sevenols, where a short time hence will be found many more genes. Mr. Pallipp is collecting in a very systematic manner, acquiring fine varieties from which to ruse finer ones, the commencement of which latter ones, the commencement of which latter functioning pursuits has taken place and, with all other factors and time added, the result is pretty certain to reward hun.

It now remains to explain the dedicatory name. Mr. Phillips has made a collection, probably second to none, of countly listory, and Kent forms the centrepiece in his library. He intends to couple his two hobbies in "pair horse harness" and drive them together. Therefore, he adopts the Kent authors' names are his plant's dedications. This vestem will

identify his plants to Orchidologists (if they he up in Kentish lore), and enable him to connect his plants grown and raised in Kent with time honoured names of "Meno. Kent."

of the country in 1576, and his history is known to bibliophiles the world over.

It is a rar ery from Lamourice in 1370 to Od. Lambardeanum in 1912, but Mr. Phillips has made a happy connecting link in thus making the great county historian known to another large section of the workers of present and future times.

It is a pleasure to me, after 31 years Orchid rowing here, to find I have at last a keen companion in arms," and to publish his first ew Orchids.

le B. Crasoshay, June 7th, 1013

## ODONTOGLOSSUM HARWOODII.

## (See Coloured Plate).

notale Harryanum crispon triumphis

Rolfese harvongterve

ARWOODH

This might be shortly described as a very glorified magniful with a most remarkably altered and negatively marked line.

affected and peculiary matricest gap.

Herizog looked door the previous of the Herizog looked door the previous of the Herizog looked door the previous properties of the Herizog looked door the Herizog looked looked door the Herizog large looked l

Analogous to this central line of colour in the lip is that of Od. Eleanor (cirrhosum × Uro-Skinneri), and the same result has been produced by the spotted lip of Uro-Skinneri, which is a near relative of maculatum.

It may be a property of spotted lipped Central American Orlontoglossums which is exercised upon their Colombian relatives, and it is worth noting, and doubtless will be

There are only two garden hybrids that have bleomed from macalatum, and both are remarkable. The other is maculatissimum (archetissimum x maculatum) shown at Glicut, April, 1908, by Mons, Vuylsteke.

Mr. Charlesworth raised Harwoodii with a fine variety of maculatum, and feon that day to this maculatum has been in demand instead of being a despised thing at 1s. 6d. a plant.

Hybrids from all Central American Odontogleseums seem far harder to raise than those of Colombia, and, therefore, more attention should be paid to them so that we can get a series of "new breaks," for at present the average hybrid Odontoglossums are "very much of a muchness," and a great many could be almost produced by one pair of parents.

Odontoglossum Harwoodii is now in the

rich collection of F. Menteith Ogilvic, Esq., by whom it was exhibited at the Royal International Horticultural Exhibition, 1912. Many Orchidists will wonder what the dedicatory name has to do with Orchids. They will not be astonished at the connection when they know it bears one of the christian names of Mr. H. H. Smith of the firm who raised is

te B. Crawsha,

# ODONTOGLOSSUM KILBURNEANUM.



.....

Here again, by a lengthy process of deduction, we have a very mixed up ancestry containing all the factors of Lambardeanum but coupled in different manner, and, therefore, producing a dif-

ferent result. In this we have almost a similar arrangement of colour in the sepals and petals, but in the former there are distinct traces of the fluence, there being indistinct marblings and very small breaks in colour which is of a more lustrous bluish hue though much of the same class, and almost impossible to

The lip stands out quite clearly and is different to our former subject, being pure

white with a shiring crimson-brown blotch.
This shiring of the brown is always traceable
in descent from Vuylsteker through illustre as
the remains of triumphans. The column is here
also crimson-brown.

also crimson-brown.

The component is pecies in this are: 7 crispum, 2 mobile, 2 lattee, 2 friumphams, and 1 Harryanum, making 14 in all.

This is but a smell.

for the first time, and when grown into a large one will be a remarkably fine thing. It is named after Kilburne, a noted Kentish historian, who

Kilburne, a noted Kentish historian, who published his "History" in 1650, and forms a bright spot in Mr. Phillips' collection

de B. Crawhay, June 7th, 1912.



Odontoglassum Kilburneanum. 101 Mr. Mr. and is at The Gleice, Sevenuales





Odontoglossum illustrissimum. F.C.C., M.O.S., September 8th, 1910.

PLUMPTON Hall, the residence of Win. R. Lee, Esq., is well known to all Oschid annatures. The rich collection of Oschids contained in its garden is the third which has been formed by Mr. Lee, the original one having heen commenced some thirty-two years ago. The Odontoglosomus which have lately been

acquired are among the finest in the country, many of the Cypripediums are extremely rare, and the collection of Cattleyas embraces some remarkable varieties.

The Orchid houses are well supplied with hot-water piping, over which are fixed iron troughs containing water. The staging is so constructed that an undershelf contains a large quantity of decaying leaves, which give oil certain beneficial gosses, and also assist in maintaining a most atmosphere. Extensive tanks are provided for the storage of rainwater, and there is every convenience for damping down the houses. The large area of open space beneath the stegling allows a flowering Orchids. Many of the plants are large specimens, with eithers consist of propagated pieces in smaller ports. The foliage is clean and of a healthy green colour, and the zoots grow with vigour. The varieties include Antioons, part of the Westoubint plant which obtained a First Gent



Odontinda Schröderi var. Lexana (Odontinaa Brudshawiw × Od. erispum).

very broyant atmosphere to be produced. There is no doubt that the correct condition of the atmosphere at all times maintained in the various houses is mainly responsible for the healthy state of every plant.

The Cypripedium house contains a most interesting collection of the various hybrids now so much esteemed by lovers of autumnCertificate at the Royal Horticultural Society, Dec. 22nd, 1998; Moonbeam, F.C.C., R.H.S., Dec. 318, 1907; Shogun, F.C.C., R.H.S., Sept. 27th, 1910; Actess Durbar, a very beautiful form; Prism, probably the largest flowering

variety; and the Plumpton Hall variety of Iris. Cypripedium Holdenii, the pure white Boltonii, Faire-Mande (F.C.C., M.O.S.), Cary Batten, and Rossettii var. W. R. Lee, are noted plants in this house. There are also good specimens of Doru Gruwshaw, Venus, Queen of Italy, and last, but not least. Cyprinedium W. R. Lee, a stybrid produced vigorous growth, and has recently carried two flower spikes. The collection also contains good plants of Thalia Mrs. Francis Wellealey, beliatulum album, and niveum Grange variety, a pure white flower with a golden-yelkow



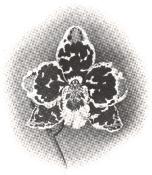
Odontoglossum Ajax. F.C.C., M.O.S., December 15th, 1910,

by crossing Rothschildianum with superbiens; if obtained an Award of Merit when exhibited by Mr. Lee at the Royal Hortiguitural Society, August 14th, 1864.

Cypripedium Parishii, by many considered a difficult subject to cultivate, maintains a year. II. spot in the centre of the throat; it obtained a F.C.C., M.O.S., July 12th, 1966

The Cattleya house contains a most representative collection of South American and other species. Amongst the most noted are Cattleya arrea alba, Lueddemanniana Stanleyi, and a pure white variety of the same known as Empress, gigas Frau Melanie Beyrodt, a large plant with four new growths, and gigas Low's variety, a very dark form of great beauty. Cattleya Schrödenz W. R. Lee petals and a slight blush tint on the labellum, alba regina purissima, and alba McBean's variety, the latter being of great beauty.

The varieties of Cattleya Triana include Britannia. The Premier, Edwar Knight, and



Odontoglossum Thais. F.C.C., R.H.S., November 21st, 1911.

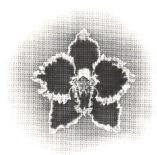
and C.S. plumptonensis are two remarkable varieties of this spring flowering species. C. labiata Gimeurise, C.l. leucochila, a great ranty, and C.l. W. R. Lee, with white sepals and petals, are three valuable plants. The varieties of Cattleya Mendelii include Queen Mary, a grand form with white sepals and

Perfection, the latter represented by a large specimen. Cattleya Mossie Wagneri nobilor is of extra good shape, and there are several plants of Mossie Remeckiana. The pretty Gaskelliana alba, purpurata alba, and Gouldiana must also be mentioned.

Hybrids grow with considerable vigour at

Plampten Hall. It is interesting to mote that Mr. Lee was the first to exhibit Ladio-Cattleya Aphrotite alba. It obtained the First Prize, a to guinea Cup, for the best hybrid Orchid at the Manchester Orchid Society, May 11st, 1895. L. C. Clive superba, and the Plumoton Hall variety of the same the scarce Ladia Bella (purpurata × majalis), L. pumila alba, and L. præstans var. Snow Oncen are all worthy of special notice.

The Mitonias include all the noted varieties, strong growing plants being seen in Queen Alexanera, vexillaria Plumpton Glory, and Leopoldii. Coelogyue cristata



Odontoglossum Charmian. F.C.C., M.O.S., June 15th, 1911.

are fine plants. L.-C. cellisteglosca The Sultan, L.-C. Bella alba, and L.-C. Haroldiana, a very dark variety, are all worthy of notice. Cattleya Iris Cæsar, C.I. Isina, and C.I. Coriauda, are three remarkshlo forms of this popular hybrid. Cattleya Thurgoodiana, many besultin't varieties of C. Fabia, one called Imperator being of excellent colour.

Lemoniana and the alba variety produce an abundance of flower in the spring time.

The Denderobium house is one of the attractions at Plumpton Hall. It faces due south and thus obtains a large amount of sunshine during the middle part of the day, the temperature frequently using to 120 features. The plants are grown in small pols

and receive only a slight shade between the hours of twelve and thece. Frequent syringing of the plants and the staging mantuins a very most atmosphere, and greatly assists the plants in making their new bulls. Many specimens have made bulls twice the save of those formed in the preceding year.

A very mique collection of Dendrobium Phalamopsis is grown in this house. Mr. Lee being a great admirer of their graceful flowers. be made of two albino forms, one having a pink tinge in the throat, and the other having a greenish throat Dendrobium Sanderæ finds a comfortable growing place in this house, and the rare D. Ashworthise seems equally at home. Besides D. Wardianum album there are many good plants of this ordinary type from a recent importation. D. nobile Hardyana is a large specimen. The toncuse and Dalhousieanum Intenno D flowers of a rich purple colour. The Gold awarded to Mr. Lee, March 15th, 1892, for a

very high standard, Mr. Lee having lately added several unique specimens. elegant Oil. Ceres magnificum was the subject of a coloured illustration in the Orcino-WORLD, February, 1911. The Plumpton Hall variety of the same is equally distinct and beautiful. Od. illustrissimum, a hybrid is of a very bright colour; it obtained a Firstclass Certificate at the Mauchester Orchid Society, Sept. 8th, 1910. Od. Rouge Dragon. obtained by crossing Phoche with ardentissimum, is a large flower which has inherited the long-tailed petals of cirrlesum. Od. Thais it obtained the high honour of a First class Certificate at the Royal Herticultural Society, Nov. 21st, 1911. Od. Chione, equally good. received a similar award on the same day. Od. Ajax, probably the largest flower yet 15th, 1910. One of the finest varieties is to

be sem in Od Charmian, the rich reddsippauls hi toches being of excellent form. O.J. crispin White Star is a very beautiful white flower of thick sinistance and Batting qualities. The above are only a few of the choice spycids in the Odontogosomi boxes at Flumpion Hall. The others, two numerous to resulted, have been greatly admired whenever, cachinized at the principal horticaltural Societies.

Odontiolas, now so popular on account of their stardar-ord flowers, as well represented. In Odontiola Schröder, obtained by crossing Radaciassis with crispun, we have one of the Rost recent advances in the production of a large sarelle Odontoglessum. It doctained a F.C.C. MOS, March 21st, 1012. Odontiolal Queen Mary, a remarkably time hybrid which obtained a First class Certificate when calibrated by Messes. Charlesworth and Co., at the Royal International Horticulum Excititives, in a since been added to the

Sephronitis hybrids include two plants of a swey beight coloured S-C. Mrs. F. Wellesley, and most of the well-known varieties. Sophroque and the seedings although difficult to case frequently produce more than one new growth from the same bulb, and propagation is octen practised by dividing the plant. Many of the plants in other collections are propagated precess from some scarce original seculiur.

Of the many trophics won by Mr. Lee for the excellence of his Orchids, mention must be made of the too gumes "Robson" Cup, won for the second time, and now his property; the superb "Charlesworth" Cup, figured in the ORLHD WORLD, July, 1911: Mr. Ashworth's Silver Trophy, and many Gold and Silver-cill Metalds.

Mr. Lee is also a lover of horticulture in many of its branches. Besides the Orchid houses, so capatily managed by Mr. Branch, there is an extensive garden and a range of glass houses, devoted to the culture of plants and fruit, the whole forming a most interesting and pleasurable parsait. Mr. Lee was one of the Orchid Jurors at the Royal International Hericalment Euclidean.

G. W.



Odontioda Queen Mary.

A remarkably fine hybrid, exhibited by Moner, Charlestarth and Co., Haywards Henth, and awarded a First-class Certificate at the Royal International Horotecultural Exhibition. The plant has since passed into the model "Plantapsis Hall" callection.



Dendrobium nobile, Berkeley's variety. A specimen plant exhibited by Lieut.-Col. Sit George Holford at the recent great International Show.

# DENDROBIUM NOBILE, finds purchased by cient to break the figurest of the sun's rays.

F the first dozen Orchide purchased by an amateur one is rurarably a Demdorbium, and the species, on most occasions, is nobile. Early in summer, from the base of the last made bulb, a new growth becomes visible, this rapidly enlarges and ultimately secones the bulb from which the flowers are produced during the later part of the following winter and early spring.

This Indian and Chinese species requires a fairly high summer temperature and a plentiful supply of water at the roots and in the atmosphere during the growing season. Comparatively little shade is required, only suffiduring the brightest part of the day. It was formely custakeed necessary to maintain a day temperature of at least 80 degrees, but recent experience has shown that equal, if not better, results are obtained by a minimum of 63 degrees during the growing season, with a considerable end during bright sumbine. The night temperature must be about 5 degrees less, it being unatural for the two to be ound.

Dendrobium nobile, as well as some other species of the genus, is one of the few Orchids whose flowering season may be retarded by keeping the plants in a cool and dry condition. The flowering season may be extended from January to June if a number of plants are brought into heat successionally.

plants are brought into heat successionally. For the production of many flowers the bullsy must be well ripened by exposure to air and sunshine during late summer and autumn months. A continual shady and most frestment will cause the nodes to produce young plants instead of flowers, and, unless a special desire exists to mercase the stock of the plant, this often gives considerable disanonament to the autumn who has patiently waited through the long winter months for floriferous results.

This species is not very particular as to tax compast, a mixture of peat, comunds, and sphagmun giving excellent results. By syringing the plants on ravourable occasions a check will be given to they and other moset, pests. The subject of our illustration is. Dendrobium nobile, Berbeley's variety, named in honour of Mojto-Georael E. S. Berkeley, an enthusiast of the genus, who died in December, 18/8.



The extensive group of Orchids exhibited by Messrs, Manuell & Hatcher, Ltd., at the International Show, 1912. Awarded the Special Large Silver Cup presented by Mr. W. Duncan Tucker.

# CALENDAR OF OPERATIONS FOR JULY.

By J. T. BARKER, The West Hill Gardens, Hessle, E. Yorks.

THE general treatment as recommended for last ments should stall be continued. There must, of course, by instances where a slight departure from the general rule is advisable, but this should be left to the cultivation, who also must judge of its desirability. No practice is perfect, and in the cultivation of all plants there is, undoubtedly, still some progress to be made, and the person who thinks for whise off with make greater strides in the profession than the contract of the contract with the contract of the contract with the contract of the cont

year by year. Even the most successful have many failures to record before they reach the height of their ambition, and failures are often most efficient instructors.

Plants at this season of the year must have a sufficient supply of water both at the roots and in the atmosphere, and every inducement must be given them to make clean, strong growths. Shading must have caveful attention, for the sun's power will soon seads the plants if they are left upprotected.

Cattleyas, Laclio-Cattleyas, and others of

this family as they pass out of flower should be kept on the dry side. By this I do not mean that drastic treatment one often sees put into practice of shrivelling the plant, and thereby undermining the constitution, which more often than not ends in the loss of the subject so treated. As soon as the plants are seen to be pushing forth new roots they may have fresh rooting material should they require it. This family has become so extensive that, at this season of the year, there are always some that require attention, and should the compost show signs of decay it is The different species and hybrids of this growth, some in flower, some in sheath, and some just commencing to grow, therefore discretion must be used, and the different plants, or rather species, should be treated individually.

Cattleya Warscewiczii (gigas) will flower flowers are over the plants should be placed in cocler and more siry quarters until they commence to make new roots, when they should be repotted if necessary. The plants if kept on the dry side and only given sufficient water to keep them plump get nicely established before the waiter months, and the following season. The general routine of treatment is adaptable to the whole of this family, with the single exception that some require a warmer position than others, which the cultivator will soon observe for himself. Should any plant not succeed as you would wish, try it in fresh positions until it does. Difficulty in growing plants is all summed up in the words -want of knowledge,

Cypripediums of the following species (E. Resheshidhiam), C. Cartisii, S. Stonei, S. Stonei, S. Stonei, S. Stonei, S. Stonei, S. Stonei, S. Talloum, C. Lawrencomm, and their varieties and highred, will note finished flowering for the season. It is now advisable to coxamine each plant to ascertain if adhitismal rooting space is needed, remembering that they must not be allowed to remain in a post-bound and half-starved condition. They should be netted in the same way as reconfining the control of the same way as reconfining the properties of the same way as reconfining the same properties.

mended for the winter-flowering section, using the same compost, with the exception that the loam is discarded in the tessellated leaved section. Plants of the C. niveum section having passed out of flower may also roccive any necessary repotting. Care must be taken in turning the plants ont of the nots it is advisable to break the pots they are growing in, and pick each piece away carefully, removing the crocks in the same way. All decayed and loose compost should be carefully removed before the plant is placed in its new pot, which should be well drained and large enough to hold it comfortably. These plants succeed in a compost of the following nature: one half best fibrous loam from which all the fine particles have been taken, the other half made up of equal parts peat, osmunda fibre, and sphagnum moss. watered with care until they get re-estab as they pass out of flower, may also have attention, using the same compost as for the green-leaved Cypripediums. The whole of this section succeed in the intermediate exposed to the direct rays of the sun.

Laclia aneeps. In the Cattleya or Mexican varietics, and hybrids, are now growing and rooting freely, and towards the end of the month many L. anceps will be developing flower-spikes with the new growths. Now is the time to afford these plants copious supplies of water at the root and in the atmosphere. Remove the roof shadings early in the afternoon, damp well between the nots and under the staging, and spray the plants a warm, moist atmosphere during the evening, and the last thing at night open the bottom ventilators. If the weather permits the top ventilators may also be slightly opened. Early in the morning the vertilators should be closed, and the house thoroughly damped down. As the temperature rises air should be admitted by the top and bottom

ventilators. The treatment of this plant is best described in the words: warm days and cool nights, with air at almost all times.

Cool growing Lezleas, such as L. parmila, Leprestaria, and L. Dayana, are now developing new growths. If a light position can be found for them in the cool houses they may they are best removed to the intermediate louse. These glustis may be afforded fresh rooting ratternal whenever they begin to make roots. Hely are best calivated in shallow pans that can be suspended clear, the root glass. The Cartilya composit will

Laelia purpurata. Plants of this species that have recently passed their flowering stage should, until growth recommences, be in a position where they can obtain plenty of fresh air. Sufficient water only should be bulbs from shrivelling, for plants which comproduce flower sheaths. They should be the prowth will then break away much stronger than it would if allowed to rush into growth straight away. The young growths of this species when a few inches long send out a number of large fleshy roots that will readily enter and appreciate new rooting material. Use a compost as for the preceding, and take each plant as it reaches the desired state, for the roots, if allowed to during the operation. The same remarks are also applicable to plants of L. grandis and its variety tenebrosa after they have finished

Many Leife-Cattleyas, Brasso-Cattleyas, sud Beaso-Ladia hybrids which have recently finished flowering should be placed in z similar position to enjoy as long a period of rest as possible. Reporting may be done with the same material as advised for Cattlewas

Thunias having ccased to flower should be given a position in a well-ventilated house where they can be exposed to full sumbline, and he syringed trace or three daily. After Horenga, and the leaves fail, Times and the leaves fail the leaves of the leaves fail to trade to produce fan healthy growthe it is great matalite to holow the plants to exhaust main factor in the production of abundance following the leaves of the leavest produced to the leaves of the leaves for the leaves for the leaves health of the leaves legis to decay in autumn the amount mast be gradually reduced until the follow has a leaves of the leaves leaves to decay in autumn the neavest in a leaves of the leaves leaves to decay in autumn the neavest in a leaves of the leaves leaves to decay in autumn the neavest in the gradually reduced until the follows have been decayed to the leaves the leavest leaves the leaves of the leaves

Oncidiums. The members of this extensive genus are all evergreen plants with flowers of ereat beauty. They vary from large growing and gross feeders to small. The majority possess pseudo-bulbs, but in their place being taken by large thick leaves varying so much in habit the mode of culture naturally varies. In the case of species not possessing pseudo-bulbs, as represented by O. landam, O. Lanccanum, and others, all of which flower during the late spring and autumn months, the plants should be placed in the warmest house in a position where they may enjoy plenty of light without actual sunshine. They may be grown either in pots or pans placed on the staging.

Plusty of decisage material should be allowed for solutions, for when a nil algoreth they require copious supplies of water, and overdead with the plusts may be algebilly released to the first final fixed into the compost, although they went out to the two for the rote, and should be firmly fixed into the compost, although they was on the precision issues for this genus may be weel. This section of One-disons, on account of having no promoted balls, is not the excisient to manage when at seet the range when at the state of the plants should severe keep allowed months. The plants should severe keep allowed months. The plants should severe keep allowed to the plants of the plants and the plants are the plants are the plants and the plants are the plants and the plants are the plants and the plants are the plants are the plants are the plants and the plants are the p

to suffer from drought, only sufficient water should be given to keep their leaves plump.

Oxidiatis amplitatis majes, mother fine species which produces its flowers in spring, should be neconsorbited in the warmer bears at delight in a light temperature necessary of the production of the contract root. It is best grown in shallow test baseless supersalled from the root. Only a time layer of compost is required, but, plenty of good duringer network about the production of if the plants are treated liberally during the first plants are treated liberally during the good persolvability with foliage of a thick and leathery testire; and handsome spites of goldensystem from the production of the production of policharylated flowers.

Odontoglossum palchellum. In the rather cucler temperature of the intermediate house plants of this pretty, white species are commercing to grow. In exputing afford plenty of drainage material, using a compost as previously advised for Chemopherson.

Lycasde Skinneri and its varieties, also Li-Ballies, Li costata, and, in fact, the whole genus are cool, mostaturo-loving plants. Every care should be taken not to overwater them at this season. Do not allow water to lodge in the centre of the partially developed growth so they will be likely to decay.

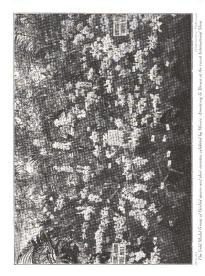
Dendrobiums. In this large genus of plants there are many which succeed in the cool house, and the following species are examples: D. Kingianum, D. delicatum, D. speciosum, D. Hillis, D. teretifolium, D. glomeratum, D. japonicum, D. Victoria Regina, and several others. Any of these plants now starting to grow may have fresh rooting material afforded them, the compost as advised in previous calendars for Dendrobiums will answer their requirements. All of them are best grown in a strong light, suspended close up to the reof class. D. teretifolium is best group on a teak raft, with a little compost packed closely netween the burs, and under the base of the plant, the raft. should be suspended in such a manner that the foliage hangs down naturally. Victoria Regina prefers a shady and more wood baskets with a compost in which

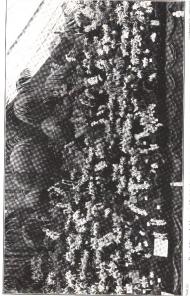
sphagnum moss preponderates. These cool growing Dendrobiums should be well supplied with water at the roots when established and growing freely, but they require to be kept on the dry side after their growth is completed.

The young growths of the decideous and sensi decideous Dendrobums, are now deve oping fast, and as the plants get rosted in the new compart the amount of water at the cooks must be increased. As the growths advance in loopin, they should be tied or and air can citatist forely amongst them. If this is not attended to wany of the strongest and lost growther any get before or dainaged.

Chyes bractescens is a noish. Orrhid when is flowers are produced in Jarge trusses. This only occurs when the penulo-bulbs are large, and the plants are well-established. It is an easy species to succeed with when newly imported, but it will deterriene if not, goven treatment anotting its requirements in a reassnable degree. It should be grown with the De-drobinus when making its growth and rector in the same amorer. It is beer accommodated in superpoled pans, and befighes in a bland supply of motions when

small matters of detail which lead to success. such as cleauliness of the plants and their surroundings. Push on with the potting of all plants as they reach the desired condition, and be content to let every plant take its natural course. Do not try to force any unduly into growth, for if any liberties are taken with plant life nature will retaliate in more ways than one. This month like the year, and plenty of work will be found with the potting and the cleaning of the plants. Cleansing the plants not only improves their faster than dirty ones; every effort should be made to keep them in a flourishing condition. Orchid growing, like many other things, is only a question of attention to detail, given at the right time, and in the right way.





non by Lieut.-Col. Sir George Holford, K.C.V.O., at the Inter-

# ROYAL HORTICULTURAL SOCIETY.

June 4th, 1012.

MEMBERS of the Orchid Committee present: Sir Harry L. Veitch (in the chair): and F. Sander, Fred, I. Hanbury, A. McBean, Walter Cobb, J. Cypher, W. H. Hatcher, I. E. Shill, H. G. Alexander, A. Dve, W. H. White, J. Wilson Potter, W. Bolton, de Barri Crawshay, and C. J. Lucas.

Licut-Col. Sir George Holford, K.C.V.O., Westonbirt (gr. Mr. H. G. Alexander), was awarded a Gold Medal for an extremely fine exhibit of specimen Orchids. The Ludio-Cattleyas included Aphrodite, Martinettii The Prince (a magnificent variety bearing 15 flowers, and the elegant luminosa "Canary." Of the specimen Dendrobiums which occupied the back rows, mention must be made of Euterpe, chrysotoxum, and the yellow flowering capillipes. A feature of the group was the collection of specimen varieties of Miltonia vexillaria which were placed along the front row. These included two plants having respectively 51 and 67 flowers, M. v. Snowflake (a large plant with 23 flowers). and M. v. Empress Augusta Victoria, of which cight specimens were shown. The Cattlevas included special varieties of Mendelii. Warscewiczii with five spikes carving 20 flowers, and Mossiæ Wagneri "Westonbirt

(gr. Mr. G. Dav), was awarded a Silver-oilt Flora Medal for a well-arranged group containing many mentorious specimens. In the centre was Orlontoglossum Goodsonii with a spike of 12 flowers, and the distinct O. crispum Lady Jane. Other good Odontoglossums were eximium Leopoldii, Lambeauianum St. David, and blotched crispuns. large flowering Brassocatlælia Veitchii, and Cattleya Mendelii H. A. Tracy were shown in excellent form.

Messes, Sander and Sons, St. Albans, obtained a Silver Flora Medal for a large group. In the centre was Cattleya Mendelii

alba, a magnificent form with pure white flowers, the throat being chrome-vellow veined with white. Along the back row were good plants of Thunia Veitchii superba, Oncidium macranthum and Dendrobium superbicus. Cochlioda hybrids were well represented. Maxillaria Sanderiana and Ornithocephalus grandiflorus, with its greenish-white flowers, were well shown, and a strong plant of Dendrobium Goldci received an Award of Merit.

Messrs. Charlesworth and Co., Havwards Heath, were awarded a Silver Flora Medal for an excellent exhibit of Laclio-Cattleyas, including Aphrodite, Fascinator, and Canhamiana, and numerous Odontoelossum hybrids. The rare and interesting Bulbophyllum virescens, Sobralia Cliftonii with its delicate flowers and the elegant Trichonilia Backhouseana were also shown in good form. The centre of the group was composed of many excellent plants of Phalamonsis Rimestadiana and numerous Cochlioda

Messrs, J. and A. McBean, Cooksbridge, received a Silver Banksian Medal for a group containing fine plants of Miltonia vexillaria, a distinct form of M. Blenaua, and the scarce M. Phalænopsis. A very beautiful hybrid between M. Bleuana and M. Hyeana was also The group contained excellent species.

Messrs, Hassall and Co., Southgate, received a Silver Banksian Medal for an Cattleya Mossiæ, one named Reineckiana vestalis being very beautiful.

Messrs. Stuart Low and Co., Bush Hill Park, Enfield, were awarded a Bronze Banksian Medal for a good group. Included in excellent varieties of Miltonia vexillaria and the pretty Cyprinedium Maudia-

Mr. S. Flory, Tracy's Nursery, Amyand Park Road, Twickenham, was awarded a Bronze Banksian Medal for a good group containing the interesting Liparis Urandas,

The spike

Cattleya Mendelii with white sepals and petals, Disa luna, and many useful species of Dendrobium.

The Liverpool Orchid Co. obtained a Broaze Banksian Medal for an excellent group of hybrid Orchids. Included in it were distinct varieties of Ledio-Cartleya Cowanii (cimuabrosa × Mossiac), and L.-C. Oberon (Mendelli x Jonecheana).

Mr. A. W. Jensen, Lindfield, Haywards Heath, was awarded a Bronze Banksian Medal for a good group of Cattleya Mendelii

and Odontoglossum crispum. de Barri Crawshay, Rosefield, Sevenouks

(gr. Mr. Stables), exhibited Odontioda Carmen (C. Neeslana × O. nebulosum). O. Decuesiana with a spike of richly coloured flowers, Od. rosefieldiensis with two spikes having a total of 34 flowers, and Co. Lecanidas, a good liybrid with golden-yellow flowers matted with exhibit beason.

W. Waters Butler, Esq., Southfield, Norfolk Road, Edghaston, exhibited Cartleya Mossie The Queen, a good plant with seven pure white Howers having a slight rose tint on the labellum, and Ledic-Cattleya Martinetti, of ambreyellow colour with a purple veined lip.

Walter Cobb, Esq., Normanhurst, Rusper (gr. Mr. Salter), exhibited Odontoglossum Leonard Cobb, a good hybrid of the eximium section, with a spike of eleven flowers handsomely blotched with claret-purple.

E. D. Quincey Quincey, Esq., Oakwood, Chislehurst (gr. Mr. G. B. Lees), exhibited

### AWARDS

### AWARD

Miltonia vevillaria Snowflake, from Lient-Col. Sir George Holford, K.C.V.O., Westonbirt (gr. Mr. H. G. Alexander). A very beautiful variety with large, white flowers of excellent shape. The specimen carried 13 solkes with a total of 2x flowers.

### AWARDS OF MERIT

Odontoglossum Lambeauianum Princess Mary, from H. S. Goodson, Esq., West Hill, Putney (gr. Mr. G. Day).—A distinct variety, with pure white sepals and petals, the labellum marked with socials

labellum marked with purple.

Odontoglossum Thais Glebe var., from
C. J. Phillips, Esq., The Glebe, Sevenouks,
(gr. Mr. R. J. Bucknell).—An excellent
laybrid, with good shaped flowers handsomely

marked with reddish-purple.

Lacio-Cattleya Aphrochite Cowan's variety, from the Liverpool Orchid Co. An excellent hybrid, with erect petals of good substance, the labellum having the front lobe heavily

the labellum having the front lobe heavily blotched with purple, Dendrobium Goidei, from Mesars, Sander and Sons, St. Albans,—A very elegant

Australian species, with terminal spikes of dark claret-purple flowers,

# CULTURAL COMMENDATIONS

To Mr. H. G. Alexander, Orchid Grower to Lieut-Col. Sie George Holford, for a grand specimen of Miltonia vexillaria Snowflake. To Messra Arastrong and Brown, Tun-

bridge Wells, for a remarkable plant of Coologyne pandarata with a spike of 16 Bowers.

### June 18th, 1912.

J. Gurney Fowler, Esq. (in the clair), and Mesus. Jus. O'Brien (ton. sec.), R. A. Rolfe, Gurney Wilson, F. Sander, J. Wilson Posters, F. J. Hanbury, T. Armstrong, A. McBean, W. Cabb, J. Charlesworth, J. E. Shill, H. G. Alexander, W. P. Bound, A. Dye, W. H. White, C. Cookson, W. Bolton, S. Lowe, C. H. Curtis, de B. Crawshay, J. S. Moss and C. J.

Messrs Sander and Sons, St. Albuns, received a Silvergilt Flora Medial for an extensive group containing many excellent varieties of Cattleya gigas, the scarce Cattleya Hrs. Myra Peccter, Anguloa Ruckeri, Dendrobium Goldei, and Millonia vexillarias. A good example of Lyvaste perusiana and Corlegyate asperata allas were also shown.

R. G. Thwaites, Esq., Chessington, Streatham Hill (gr. Mr. J. M. Black), was awarded a Silver Flora Medal for an interesting group of hybrid Orchids, the best being Cattleya Mossia Wagneri and Odontioda Thwaitesii.

E. H. Davidson, Esq., Borlases, Twyford,

received a Silver Flora Medal for an effective good variety of Odontoglossum hibernicum, O. Aircworth, and O. eximium were well

Mesers, Stuart Low and Co., Bush Hill Park, were awarded a Silver Flora Medal for a group containing a very fine variety of Lælio Cattleya Martinettii, a well-grown plant of Odontoglossum Williamsiamem, Miltonia vexillaria virginalis, and the pretty Oucidium

Heath, received a Silver Banksian Medal for a select group of various Orchids. Included in it were Odontowloseum citrostoum roscum, Cattleya Mossiae Wasmeri, and Vanda

The Liverpool Orchid Co, were awarded a Lacho Cattleyas and other hybrids,

Mr. E. V. Low, Valle Bridge Haywards Queen," the rare Cattleya Harrisoniana alba, and the interesting Coelogyne burfordiense. II. S. Goodson, Esq., Fairlawn, Putney (gr.

Mr. G. E. Dav', exhibited Odoutoolossma Edghaston, sent Ladio-Cattleva Martinettii

"Southfields var.," a distinct variety with lemon yellow sepals and petals, Mr. W. A. Manda, St. Albans, staged

Cattleya Warscewiczii Mandaiara, a distinct

F. Evelyn-Jones, Esq., Whyteleaf Grange, Warlingham, sent a good variety of Laclio-

# AWARDS.

Larlio-Cattleva Baroness Emma (L.-C. eximia × C. Hardyana), from Baron Bruno Schröder, The Dell, Engleheld Green (gr. Mr. I. E. Shill: A well-grown plant carrying a snike of large flowers of excellent shape and celour. The broad front lobe of the lin is a Odontioda Cookseniæ "Fowler's variety"

(O. ardentissimum x C. Ncezliana), from Mesers, Charlesworth and Co.-A remarkable hybrid with broad segments of a rich blood red colour. The white labellum is blotched with crimson at the base; the crest being

### AWARDS OF MERIT.

Miltonia Blemana Rising Sun from Baron Bruno Schröder (gr. Mr. J. E. Shi.l). A large clear white flower with brownish-orange markings at the base of the lip. Odontonia St. Alban (Miltonia Warsecwiezii

x Odontozlossum Pescatorei), from Messes, Sander and Sons, St. Albans,-A new hybrid. with a branching spike of white flowers prettily marked with checolate red. Laclio-Cattleva Ganymede "Southfields

var." (L. Latona × C. Schröderæ), from W. Waters Butler, Esq. Southfields, Edobaston, A bright orange-yellow flower with a slight cinnalsur tint on the sepals and petals. The

# MANCHESTER ORCHID SOCIETY.

May 16th, 1012. MEMBERS of the Committee present: Rev. 1. Crombleholme (in the chair), Messrs. R. Ashworth, J. Bamber, C. Parker, H. Thorp, Z. A. Ward, I. C. Cowan, I. Evans, W. Holmes, A. I. Keeling, D. McLeod, and H. Arthur (Socretary),

A. Warburton, Esq., Haslingden, was awarded a Silver-gilt Medal for a choice group

awarded a Silver Medal for a good group of Cattlevas and hybrids.

Z. A. Word, Esq., Northenden, received a

Silver Medal for a meritorious group of

J. McCartney, Esq., Bulton, was awarded

a Silver Medal for a nice exhibit of Cattleyes. H. Thorp, Esq., Rhodes, received a Silver Medai for a group of Odontoglossame,

J. J. Holden, Esq. Southport, exhibited Cartleya Dusseldorfei Undinc, Brasso-Catt-

leya Marie, and others, W. R. Lee, Esq., Plempton Hall, starred Odontoglossum Wilckeanum plumptonense

Rev. J. Crembleholme, Clayton-le-Moors,

F. A. Hindley, Esq., Bradford, staged

Messrs Hassall and Co., Southgate, were awarded a Silver Medal for a choice group of Odontoglossums and Cattleva livbrids. Mesers, Keeling and Sons, Bradford,

exhibited Oncidians and three good forms

Mr. J. Birchenhall, Alderley Edge, and

# AWARDS

Brasso-Cattleya Digbyano-Mossie var. well balanced, from Col. I. Rutherford, M.P. AWARDS OF MERIT.

Roebling x B. Digbyana), from Col. J.

Odontoglossen: Wileleanum plumptonense and Cypripedium Annie Measures var.

Diabolus, from W. R. Lee, Esq. Cypripedium hortonensis (Victor × Beeckmanii), from F. A. Hindley, Esq.

# BIRMINGHAM BOTANICAL & HORTICULTURAL SHOW.

June reth, 1912. W. Waters Butler, Esq., Scuthfields, extensive and beautiful exhibit of Oschids the Miltonias and Laclio-Cattleyas being

Mr. E. V. Low, Vale Bridge, Haywards Heath, obtained a Silver Medal for an excel-

ient exhibit of various Orcaids. Messes, J. and A. McBean, Cooksbridge, Sussex, obtained a Silver-gilt Medal for a AWARDS, First-class Certificate to Larlio-Cattleya Martinettii "Southfields var.," from W. Waters Butler, Esq. A very distinct form

with iemon-yellow sepals and petals. Awards of Merit to Miltonia radiola and M. Hypatia, from Mcssrs, J. and A. Mellean;

and to Cypripedium Goweri magnificum "Scholield's var.," from Mr. E. V. Low.

# YORKSHIRE GALA.

June 19th, 1912.

Mesers. J. Cypher and Sons obtained the Messrs, Hassall and Co. secured the Third

In the class for to distinct Orchids in bloom, Messes. Cypher and Sons obtained the First Prize; W. P. Burkinshaw, Esq. (gr. Mr. Messrs, Hassall and Co. obtained Third Prize.

Keen competition was experienced in the

class for six distinct Orchids, the First Prize going to W. P. Burkinshaw, Esq.; the Second, Mesers, James Cypher and Sons; and the

The best specimen Orchid, Miltonia Bleuana Hersie var., was shown by W. P. Burkinshaw, Esq.; and the second best,

For three Orchids in bloom, Messrs, Cypher obtained prizes for the hest exhibits in the classes for three Orchids, and also for six.



ODOMOGLISSKIM BLACK PRINCE VAR.
MARIETTA. DESPERYING PART
MARIETTA DESP

3 8

MILTONIA VIRILIARIA ATAS.—Mr. El. Ellifo of Lycofo Genless, Musclind, Nortola, bas recently flowered an altique form of this last recently flowered an altique form of this inspected last season, consequently the blooms are not developed to their full excluse. The flowers and policels are pure white the base of the labellina and is creek bring light yellow, with radiating lines of almost a greenish yellow tinger.

8 W W

VAMA CORPULSICES LOWANA—SIFER FOR W. Woore, Royal Botanie Gardens, Giastens, kindly sends an inflorescence of this rare and very perity species. It was originally described by H. G. Reichenbach in the Gandenie Chemath, 1875. Give a Varida cornièrecus Bosalis in unicityst little anothysis of the capable, and you have this niety deficiated to Mr. Low, who was so holely to introduce it.

THE ACTIVINS ORGHIN STORY. The Moyal Instructural Society loss arranged to Sold on Automa Show of Orshids on November With and Old, 1972, at Vincent Sparre, Westminster, Mr. E. H. Davidson, Borlaser, Veryford, Perks, backonly promoted a Silver Cop. For competition at the above, and the whole of the Cop. For competition of the above, and the whole sizes to all for priors for this worst. A copy of the Schedule will be found in the advertisement perges of this issue.

NA 23 63

CATTLEAN Wignesserem Maximus, we general disease for long laugh three-sections of fine speeces in the United States. From up personal observation I am positive that their is a more speece, and that there is no proposed observation in the conduction of the section of the flower. The only wind distinction is the colour of the flower, which will be studied in the colour of the flower, which we can be studied in the colour of the flower, which we can be supported by the colour of the colour



Miltonia Phalanopsis alba.

siderable attention is now being devoted to utility. A recent and interesting acquisition is M. Phakenopsis alba which flowered with the first time in Marca, 1912; the plant was rather small and only produced two flowers. this colour has been entirely climinated. are ourc white. This is probably the first species.

MINICRY IN ORCHID FLOWERS-When I picture of the devil in a book, entitled "A History of His Satanic Majesty." The

appearance of the devil's face as therein represented has never been quite effaced from my memory. He was represented by a mouth, and four horns. You can imagine my surprise the other morning upon finding in my house an Orchid in bloom, Stenia film represented in the book referred to. Many been highly amused with the supposed likeness to the "Old Gentleman"-ALEX.

CATTLEYA MOSSLE ALBINOS.-Reichenbach, in 1856, described in "Bonobudia" a form of Cattleya Mossive baying pure white sepals and petals and an amethyst-purple labelium, this be named Remeckiana, in honour of Remecke, gardener to Herr Decker, Orchidacea" a pure white variety, entirely devoid of purple pigment, under the name Wagneri, which was discovered by Herr Wagner, in Caracas, May, 1851. To this day albinism, and although this creates a somewhat lengthy form of nomenclature the Leemann, Esq., West Bank House, Heaton Mersey, comes Cattleya Mosser Reincekiana Sheila, without doubt the finest form of this albino. The broad pure white sepals and octals are thick textured and hold themselves in creet style. The labellum is mottled and veined with unusually bright amethystpurple; the orange colour in the throat is also very bright. C. M. R. Hardy's variety does not possess quite such broad segments, and the purple colour on the labellum is inferior to that of the previous variety. A good form of Cartleya Mossia: Wagneri is also sent from the same collection, the only colour being the orange yellow in the upper part of the throat.

# ORCHIDS IN 1855.

of part of the Hurticultural Society's collection of Orchids in 1855 reached a sum of £351. A copy of the sale catalogue, with prices obtained for each lot, is still in existence, and allows one to form an alexa of the value of certain Orchids at that period.

In the first parties, consisting of 450 lots, the following prices are interesting:—Augmenta virsceins, £7 15s; Trichopflat coccine and Saccolonius gustamus, £19; Larla scenamata, £3 15s; Aerides Rossili, the Caylon war, £5; Aerides Rossili, the Caylon war, £5; Aerides Rossili, the Caylon war, £5; Aerides and £10 lots, £10 lots, £20 lots, £3 [25] lots, £4 [25]

Lot 150 was the most interesting, being the magnificent specimen of Phalænousis Aphrodite which Mr. Fortune, when sent out plants, procured in the island of Luzon. Mr. of January, 1845, and in giving an account of his travels said: "After some trouble I discovered the locality of the beautiful Phalenopsis, and procured a large supply of the plants for the Society. As my visit here to spare, and therefore took every means in my power to make the most of my time. I was in the habit of making an Indian's hut in the wood my headquarters for a certain time, where I held a sort of market for the nurchase of Orchidaceous plants. ground in front of the hut was generally stream with these plants in the state in which they had been out from the trees and often covered with flowers. The Phalænopsis, in particular, were very beautiful at this time. I was most anxious to get large specimens of this plant, and offered a dollar, which was a specimen which should be brought to me. The lover of this beautiful tribe of plants will easily imagine the delight I felt when I

saw two Indians approaching with a plant of extraordinary size, having ten or teerlor branching flower-scalles upon it, and upwards of a hundred flowers on it in full bloom. "There's said they, in evident tramph, is not that wort in ability?" "Von have gained the dollar," said I, as I paid them the meney and took possession of my print. This fine specimen realized the high price of £68 §s, the purchaser being Mr. Edmoods, gardener to

The second portion included Epidendrum myrianthum, most rare and magnificent, £4 158; Masdevallia occcinea, most rare and beautiful, £6; Cattleya Skinneri, £6; Lycaste Skinneri, £8 u.s.; Crelogyne cris-

described as "the farest specimen in Europe of a living Orciad. It has 220 pseudo-bullot and is 17 feet in circumference. It is shall attached to the block of wood on which it was found growing in the feets of Guatemala." The plant was purchased by Mr.

Other purchasers were the Bishop of Winchester, Messys. Bennett, Smith, Rucker, Forsyth, and Sir Joseph Paxton, who purchased the plant of Coelegone cristata. Some of the lots were disposed of at computatively low prices, Jones three tumanned Standappeas, were purchased by Mr. Fairrie for six shillings.

## PHALÆNOPSIS AMABILIS.

FOR more than 160 years Pholocopies annabils has been known to Orchid Smandish has been known to Collectors, and during recent years a fine xariety of the species, known as Runcisdations, has been received from Java. The Indian Butterly-January is most atmosphere on the constantly, maintained. Aftirings the placts more winers or wrong the strong the great without possible balls to support them through a period of frought, the thick, fields are without possible balls to support them through a period of frought, the thick, fields most of mostly and the production of the production of the production and multive modernial.



Phalacopsis umabilis, a specimen plant grown by Mr. H. G. Alexander, and exhibited by Sir George Halford at the record International Show.

Successful inporters have ablanced the inetractive by semi-establishing the plotts on until bleris, of word before polanty factor in until bleris, of word before polanty factor in Europe. Whose is which they travel to Europe. Whose is the first few words in an occasional datasets, with a manufactor of the internal datasets, and the consistent of the polanty for the plants from recognition. Inhelp root, and the plants from recognition of automac plomp, beadily appearance. When the roots show sizes of activity the plant has the root of the root of the plant of saliles pass, with the root-word backs to saliles pass, with the root-word polanty.

The roots of Plainwapes skight in having something to which they may alted them selves. A good caltural most alted them selves. A good caltural most be to place the pan or hasket may a large large sementines used, an unglabed denium become to be a selvential to the selvest may be moved without four of the placed in an upplicate pathon. In this way, the plant may be moved without four of administration of the placed in the place of the place when the pan or izoket in placed directly on the staging.

The growing season excessly from springe or her automat during which time every attention should be given the plant to ensible it to tend to the control of the formation of the formation of its handsome spike of many pure white flowers. An excess of where, especially of staggard, causes the leaves to become proposed from the formation of the fo

Phalamopes do not often succeed well in preciously to large, soundaturing fournity processing to the processing to large soundaturing to the processing to the designer soundature desained and fournity and the designer of the grant considerable amount of fog and, come-quently deficient light during the winter meable. It does not however, fallow flast contact large size of the processing the same transport of the processing the procesion that the processing the processing the processing the process



LÆLIO-CATTLEYA SYLVIA (L.-C. Hippolyta × L.-C. Ascania) F.C.C., R.H.S., July 4th, 1911.

HIPPOLYTA.

canyas or tiffany blinds. Where lath-roller blinds are in use it will also be found advisable to whitewash the glass during the brightest of the summer weather.

During the resting season, which may roughly be stated to extend from October to February, the temperature of the house may be lowered to 6s or 70 degrees. On frosty nights 60 degrees will be safe if the atmosphere is proportionally drier: a high temperature with a dry atmosphere is always. conducive to the welfare of thrips, and these, as cultivators know only too well, do considerable damage to the foliage of Orchids.

### NEW HYBRIDS.

CATTLEYA FELICITY (MISS HARRIS × AUREAL-The former parent of this hybrid is the result of crossing Cattleva Schilleriana with Cattleya Mossize, an example receiving a First-class Certificate at the Royal Horticultural Society, September 17th, 1889. It is often confused with Cattleya Vulcan, a hybrid between C. Gaskelliana and C. intermedia, and first shown in 1905. In the new C. Felicity recently exhibited by Messrs, Mansell and Hatcher, the flower has inherited much of the rich crimson-purple of C. Schilleriana, the labellum showing the broad lip of this species and also the rich colour derived from C. aurea. The flower is of thick texture and likely to prove of long-lasting properties. It is an improvement on the wellknown Cattleya F. W. Wigan. BRASSO-CATTLEYA FAITH (B. PERRINII ×

C. LEOPOLDII). A very useful small-flowershown. The narrow greenish sexuls and petals are spotted with red, the roundish labellum of a soft-rose colour with lineal markings of purple spots. This fragrant primary hybrid has been raised in the collection of F. J. Hanbury, Esq., Brockhurst, East Grinstead, where it finds a companion in B.-C. Joan (B. Perrinii x C. Warscewiczii) first flowered by Mr. Hanbury, August, 1909. B.-C. belærensis (B. Perrinii x C. guttata) is a very similar hybrid to B. C. Faith.

### LÆLIO-CATTLEYA SYLVIA.

### (See Coloured Plate.)

Triance xanthina

ÆLIO - CATTLEYA

the seed-bearing parent of this brightcoloured hybrid, has been a popular plant for the last twenty or more years. The reverse cross, Mossiae × cinnabarina, originally named Lælio-Cattleya Phoebe, has been known for almost as many years, but as all hybrids resulting from the crossing, in whichever way, of the same two species must bear but one name, and that the earliest, the name

Phoebe is suppressed in favour of Hippolyta.

Lælio-Cattleya Ascania, the result of crossing Cattleya Triange with Lælia xanthina. first appeared in 1804. C. Triange in its typical form has senals and netals of a very light rose purple tint, and L. xanthina has vellow, or greenish-vellow flowers. Several of the hybrids between these two species have produced yellow-coloured flowers, and it was from one of these that Lacho-Cattleya Sylvia

As four species are included in the parentage various varieties of L.-C. Sylvia arc certain to occur, the form and colour will rarely be exactly alike in any two flowers. The one of which we give a coloured illustration was raised by Messrs. Charlesworth and Co., and received a First-class Certificate when exhibited by them at the Royal Horticultural Society, July 4th, 1911. Yellowflowered Orchids are particularly scarce, and anyone who carefully examines a large group of flowers for this colour will prove the truth of this statement.

This rare hybrid is now in the important collection of F. M. Ogilvic, Esq., The Shrubbery, Oxford, where it grows happily in company with many other Orchid gems.



HE comparatively short time in which the numerous specimens have been obtained, the excellent high standard of the varieties, and the recently erected extensive glass-

future notoriety collection of C. I. Phillips, Esq. will oaks possesses a most suitable atmosphere, and the elevated position houses are placed proves an ideal spot for Orchid A stracious con-

several specimen plants of Cymand its variety concolor: these are of great value for decorative purposes, one plant having carried a

spike of flowers which remained fresh for more than four months. This same spike now carries two seed pods, one the result of using the pollen from Phains flavors

The Odontoglossum house is constructed with every device for maintaining the cool of these ever popular species, the hybrids of which are now so numerous. The centre of this house contains a large rain-water tank of sufficient size to provide a constant supply. This is very essential, for in many districts the water from

company's road supply is unculture. Above this tank is a pine-wood staging of sufficient height well up to the light. Staging is the side of the neath are numerous ventilators for the admission of fresh air. All the fitted with electric

glossum lasper, of good shape and Skiaucri, with a

Odontoglossum eximium var. Princess Mary. broad shouldered labellum; the charming

ardentissimum album; the large flowering Williamsianum; Oncidium Kramerianum, with its attractive butterfly-like flowers: and several plants of Epideudrum vitellinum with their creet spikes of orange-red blossoms, Odontoglossum Eleanor, a scarce hybrid between Uro-Skinneri and circhosum, produces a flower with its lip minutely spotted and having a vertical line of purple-brown in the centre. Od. illustrissimum, with broad petals handsomely blotched with purple, and the anex of its lip pure white, is also a

Mr. Phillips is always searching for rosy varieties of Od. Rossii for the production of Odontonia Lairessee (M. Warscewiczii x O. erispum), and a very dark form of Odontonia Louise, a new hybrid between M. Warscewiczii und O. Ossulstomi.

The Odontiodas include many of the best of these scarlet and red-flowering hybrids; O. Thwaitesii, with its deep rose flowers being a notable exception of celour. Phains



Odontoglossum Aglann (eximium × Vuylstekee).

good hybrids, but they are very scarce and difficult to presente. Od. Aurora, a hybrid hetween Rossii rubescens and Lamheaulanum, is particularly attractive and will be node use of for hybridising purposes. The Rosslyn variety of Odonteglossum citrcomum is amperior to all others, its pendulous spike being always interesting and pactry. This house also contains a distinct variety of Norman grows with evident pleasure, and a large plant of Cymbidium insigne Sanderi has no less than 13 leads. Maxillara Sandernan is represented by a large specimen; it is strange that this elegant species is not more often accur, for its cultivation is by no means difficult. Oncidium incurvum album, with its tall spikes, must also be mentioned.

Many small pieces of the noted varieties of

Odontoglossum crispum have been procured; they are quickly growing into flowering size. Maxillaria nigrescens, a distinct Golombian species with port-wine coloured zepals and petals and a blackish-parple labellum, is now producing 21 flowers.

A very useful house, formerly used for melon growing, now contains a large number of small pots filled with minute seculings, mostly Cattleyas and Ludio-Cattleyas: the violet-blue labellum, and a strong plant of Z. Mackayi will prove useful for hybridising purposes. Chondrorhyucha Chestertomi and C. fimbriata are two elegant species which should be seen in collections more frequently.

The Cypripedium house contains a most requestive collection of these autumn-flowering plants, and there are large numbers of the various Cattleya species and their various hybrids.

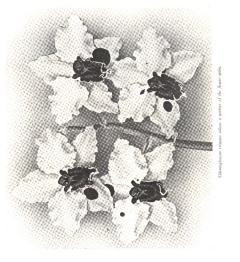


Odontoglossum Her Majesty, on elegant hybrid in the Glebe Collection. Received F.C.C. of the Regal International Horticultural Exhibition, May, 1912.

Odontoglossums have only lately been taken. Odontoglossums have only lately been taken.

in hand, it is, therefore, premature to expect many at this early date. An interesting cross is Cymbidium Tracyanum × Cymbidium Pawwelsii, and Lycaste Skinneri carries a x-order potential of the proposition of Cymbidium Wiganianum.

Zygopetalum Brewii, a new hybrid between Z. Perrenoudii and Z. rostratum, has a Odontoglossum crispum solum stands alone, as its varietal name denotes, no other variety of crispum equallang it in point of distinctiveness. Tas illustration shows part of the spike as it flowered tocently in the Glebe collection. The curious adventitious large bloth of colour appears on a different sepal in each flower, while that on the hij and column almost covers their cuttie surface.



Odentoglossum Agkaon is the result of crossing eximium with Vuylstekee; the handsome symmetrical markings being of a rich purple colour. It will receive a place of horsour in the new Odentoglossum house which is a received as the colour of the new Odentoglossum house

Obunteglessum Her Majesty, one of the latest and best additions to the collection, received a First class Certificate at the Royal International Hercicultural Exhibition when exhibited by Messes Casheswerth and Co. The large flowers are deep red jumple on a pale rose ground, the lip being particularly well developed and almost entirely covered

Such rich gems as the above will surely

produce progeny of a most interesting Sund, and, almost needless to remark, many of the finest quality. Mr. Phillips keeps complete records, by means of the card index system, of all his special plants, and the various ways in which they have been hybridised, fudures and successes being both recorded. It is by this means, and it alone, that the best results

The collection is fast assuring an important place in the history of Orchidology, and we may expert with a considerable amount of certainty that it will reap its due share of awards whenever specimens are exhibited at the great horicultural meetings.

Q. 11

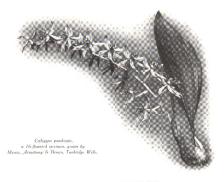
## DWARF-GROWING DENDROBIUMS.

Den NORGHI M. PYGALEIIM. The species must of the Denholes suggested to desurt-growing balat. The production of production of the productio

D. purplywedinium also grows on the Sistem halls you at an elevation of from Societies Cyssus feet. The Lini bulbs are only societies when the sistem is regular during from the three many control of the control of the other control of the control of the control of at the apex. The solitary modeling rancousbear from set to ten flowers larging palgreen speaks and petals venired with real, and a dubl brownish-purple his redges with pale green. The column is white with purple during Auril and May. Daggregatum, with its angled balls rarely common in the same in height grows in quantity along the tone of the Sikkin-dependent of the Sikkin-dependent of the same in the sam

not exceeding an inch and a half in height, and its dark green leaves usually less than an inch long, bears small, white or yellowflushed flowers. It is common in Singapore, Chittagong, Pegu, and Tenasserian.

salleys in Sikkiin, where it flowers during September and Octuber. The slender flattened stems are from four to six inches in beight, and the floshly leavers rarely exceed three-quarters of an intri in length and one master of an intri in length and one pank. The ly has a thickened yellow line paid. The ly has a thickened yellow line paid, the ly has a thickened yellow line from the latter of the latter of the latter of the four the latter of the latter of the latter of the four the latter of the latter of the latter of the latter of four the latter of the latter of the latter of the latter of the four the latter of the latter of the latter of the latter of the four the latter of the latter of



## CŒLOGYNE PANDURATA.

IT is not often that a plant producing green flowers may be considerable green, by the control of the producing green flowers may be considered as a fixed a large product at the colour is of such a bright yellowingspern as to be at once attractive and interesting. This period takes it make positionate—fiddle shaped—from the curious resemblance which high has to that muscled interment. Most off the Confegure upon the control of the control o

Sir Hugh Low, when exploring in the Bornean province of Sarawak during the year 1852, discovered the suecies growing on the trunks of trees in the swampy lowlands adjacent to the coast and river banks. The rainfall at certain seasons of the year is so excessive that the utmost difficulty is experienced in collecting the plants.

Cologone pandienta is not a difficult plant to cultivate, and when its requirements are fully understood small pieces quickly attain subscient size to produce an arching raceme of several flowers. This, and other species requiring similar treatment, grows well where a hot, most atmosphere can be constantly maintained. A suitable louse should have thick brick walls, a substantial staging with

plenty of moisture-holding material, and a requisite amount of hot-water piping. The greater the amount of internal brickwork the better for the plant, for it is this material which retains the heat and moisture and effectually prevents a too rapid fluctuation of either. A house of this description is most likely to suit those Octobic which grow the properties of the properties of the properties of the likely to suit those Octobic which grow naturally in a tropical moisture-laden astrosphere, and Ceelogyne pandurata is a good example. The excellent specimen, of which we give an illustration, was grown by Messrs. Armstrong and Brown, Tambridge Wells, and when exhibited at the Royal Horticultural Society, June 4th, 1912, it was descreedly awarded a Cultural Commendation.



Odontoglossum crispum flowering in the establishment of Messes. J. & A. McBean, Cooksbridge, Sussex.

ODOXTOGLOSSEM CRISPEM.—This species has long been a speciality in the establishment of Messrs, I. and A. McBean, Cooksgrown. The above illustration depicts one The photograph, taken May, 1012, gives but a poor idea of the grand sight which may be seen every spring time; the two other houses produce an equally abundant supply of its own against any other for giving a large quantity of flower, the long sprays being very useful for cut-flower decorative purposes. The principal groups at the Temple and other important shows always contain many specimen plants, and where large numbers are grown, as at Cookshridge a supply of bloom may be obtained during

every week of the year. Sussex atmosphere, it has often been stated, is mainly responsible for the vigour of the plants and the evtra quality of the flowers, but whether this be true or otherwise very much depends on the arthal method of cultivation. Messex, McBean lave certainly mastered the essential principles of potting, watering, heating, and ventilation.

#### AN ELEGANT BOUOUET.

The Bouquet of Orchids grown at Rosefield, Sevenealts, Kent, and presented to Her Majesty the Queen by Mr. de Barri Crawshay on the occasion of Their Majesties the King and Queen visiting Hirwain, June 27th, 1912, is illustrated on usace 25t. August 1971 1



# EULOPHIELLA HAMELINII, OR PEETERSIANA. By Dr. P. FERKO, Milan, Italy.

EULOPHIELLA TIAMELINII was introduced into cultivation during the years 1823 to 1896, and flowered for the first time in Europe, at Paris, in 1893, During four years I have been greatly interested in the study and importing of this mobile Occide, but it was only during the last two years that really good plants were desparched to England. I, however, kept one specimen and cultivated it in my Orchid house at Malen, where it grew very well, and last year produced two fine flower spales, one with 20 duced two fine flower spales, one with 20

Eulophiella Hamelinii very often produces feet in length. My plant made a flowering growth, and produced, some two months later. a spike with 23 flowers. Some three weeks afterwards, when the first flower spike began to fade, a second one with 18 flowers was produced. This plant, very curiously, did not make any leaves or flower spike during the following November: I certainly thought it would do so during the winter months. But, this spring, a new flower spike was produced in perfect condition, and the plant, as it appears in the illustration, was purchased by Messrs. Charlesworth and Co., and was included in their exhibit at the Royal International Show at Chelsea. The plant is a very robust grower and is already making a in all three flower spikes. It is of interest to note that when the specimen was recently reported two nice little seedling Eulophiellas and fibre.

This species of Endophills grows exclassively on the common of the Pandangs, usually at a height of 'no 25 feet to the ground, the long thomass of the Ordeid at 25 feet, and winding themselves cound its comsistence of the Pandangs, or common secrepine, frequently have about 26 crowns, and on soil specimens of the Pandangs or conform find two or three plants of E. Hamelini, each plant consisting of from cight to ten bulls, the mistake general members is from the cight inches. The upper portion of the bulbs is furnished with ribbed leaves of a leathery texture, about three feet in length, and of a clear green colour. The old bulbs are always entirely without leaves.

The large 'excess of the Eulophichla together with the Pandams crowers make such a deeper with the Candams crowers make such a decision of the considerable difficulty is experienced in finding the actual Orichi. Generally the plants can only be discovered when in flower, for it is then that the tall flower spike, about three feet, in height, shows itself above the traveled mass of foliases.

On one specimen which I imported last year there were no less than 36 flower bads on a spike, and the plant travelled so well that on arrival in Europe all these bads developed into mod flowers.

In Madagascar, its native home, E. Hamelinii terminates its season of growth during June and July, and as soon as the bulb is completed the flower-suike commences to grow, this usually measuring about four feet in the month of September. The spike, at first, does not grow very fast, but when it reaches the height of two feet rapid growth takes place and the flowers open during the month of Scotember. This Orchid, in its native habitat, is exposed to the full tropical it is found growing near the sea coast, but one usually discovers it growing some three days' journey in the interior, between Tamatave and Vohemar, where there are immense numbers of Pandanus trees growing in the swamps. The moisture. At night time much of this atmospheric moisture condenses on the plants in the form of a heavy dew, this being very beneficial to them. The bulbs are seven to cight inches in height and require a large amount of sunshine and nutritive material

from which to draw their food supply.

In Madagascar it rains for nine months out
of the twelve, and Eulophiellas, as well as
Angracums, Grammstophylluns, Cymbidiums,



Eulophiella Hamelinii, a specimen plant in fluxer.

and Phains are, therefore, exposed to a considerable quantity of moisture. It is of interest to note that the four last-mentioned Orchids are found growing on various kinds of trees and places, but that Eulophiella Hamelinii grows exclusively on the Pandanus.



The Fiower-spike of Eulophiella Hamelinii.

The cup-like receptacles formed at the base of the Paralams leaves are usually fall of water, into which the upper branching rosts of the Eulophiella find their way, and thus obtain their supply of moisture, the lower rosts freely enter the large mass of fibrous material surrounding the Paralams stem. There is, therefore, much truth in the statement that this Ording drows with is feet in

the water and its locad in the sun. It is worthy a foot that he Ravenala, Musa, and Pandams all form these water-belding recept-acles, yet it is on the latter tree, and that ulone, that the Talophiellas are found growing.

The plants which I most successfully imported were those seat home while still firmly attached to the clomps of the trees on

home. They were afterwards placed in large baskets with a compost of sphagmum, polypodium and keaves, the whole being kept constantly damp. When the new growths produced fresh roots from their under-side some fresh sphagmum moss was placed over them, and this was kept damp by frequent applications of warm rain-water.

The normal temperature in Madagascar is 75-88 degrees F., never less. In my house the plants have always had this temperature, with the exception of a few cold days in winter, when the thermometer went down to 60 degrees F.

The flower buds are at first green, then yellowish, afterwards assuming a rose colour, which becomes darker when the plant receives extra sunlight. At mid-day the flowers have a slight perfune resembling that of the flowers of the field.

Eulophiciba Hamelini is very difficult to import. The only pessable way of obtaining success is to bring the plants hone whele still attached to the Parabausy: fadure has always occurred when importers have omitted this precaution. Considerable danger is attached to gathering the plants for numerous scorpions hide themselves amonest the Parabaus leaves.

The plants must also travel as quickly as possible, a prosecoling by no means easy through such an uncultivated country, and owing to the very bad ground and the dangerous swamps progress is extremely slow. Very large packing cases are required for the plants, the total weight often being over three hundred nounds.

### SOME NOTES ON MADAGASCAR.

OMPARATIVELY little is known of the Orchids from the vast interior of Madagascar. Mr. Baker, in a paper which he read at the meeting of the British Association at Vork, in 1881, showed that there is a close affinity between the flora of Madayascar and that of Tropical Africa, on the one hand, and the flora of the central elevated parts of the island with those of the Cape and the mountains of Central Africa, on the other. The Rev. Richard Baron, in a paper read before the Linnean Society, November, 1888, stated that there is probably a closer alliance between the flora of Tropical Africa and that of the Western region of Madagascar than with the floras of the central and eastern regions. Mr. as a whole, was struck by the immense antiquity of the island. About three-fourths of the species and a sixth of its genera of plants are endemic. This, he remarks, is as it should be: the genera have for the most part survived the untold ages that have elapsed since their first appearance, while the species have been subjected to enormous modifications. Such a very large amount of specific differentiation seems to point in the clearest manner to long isolation.

and the nature couply's estimated that Macland the nature couply's estimated that Macgogac contains and of purco square maleof forest-covered country. From this forestpine, with strong platts of Eulopickila species imply attached have recently been imported. There is also a species of Pandama braving leaves about four feet to beingth and cight inches in width, and these, on account of ther arm protecting qualities, are frequently used carried to and from the interior of the island. Of all the forms of vegetable life in Madi-

goscar none is more rémarkable than the 'traveller's trey, 'Ravenala modagoscrierois, The 5 to 30 large leaves are arranged on the trop of the strain in the form of a gegatale fair. The strain of the strain of the strain of the strain leaves that the strain of the strain of the strain leaves that the strain of t

### LÆLIA ALBIDA.

It would be difficult to find a more useful winter flowering species of Orchid than Lucha albida; in fact, history states that it was the first white-flowering Luchia to be discovered. The plant is comparatively assuming rowing, the roundals packab-bulls are smooth when in the young stage, but become ribided as age ererge upon them, and they bear one, or a pair of narrow green leaves of a believe texture.

The scope is produced from the top of the ball, as in all other species of Lesis, and bears from four to eight leng-listing flowers which are delicately forgrant with the ofour of princrees. The scapals and petals are awarehite, the latter slightly recurred at the tips, the lip is of a soft rowy lune, streaked with yellow around the three launcille or crests, whilst the inside of the latteral lobes is often velocity of the contraction.

It is regretable that this elegant Mexican Ordeld is so little seen in present day collections: possibly the difficulty experienced to its cultivation had much to do with its decime in popularity. This difficulty was due to insufficient handvelege of the Chamatic conditions of its natural Jonne. The plants, on a rarrival in this country, were generally placed or in a hot moestime haden atmosphere, more in a hot moestime haden atmosphere, more in the plants of the plants of the plants of the was allowed to reach the plants; no wonder that failure so often occurred.

The vary remarkable specimen, of which see The vary remarkable specimen, of which see an illustration, was grown by Mr. J. Santh, when Ordrid grower to the Right Hon Joseph Chamberkain, at Vigibury, Biramip, Joseph Chamberkain, at Vigibury, Biramip, Joseph Chamberkain, at Vigibury, Biramip, Joseph Lander, Joseph Lander,

The plant was grown in a rather low spanreofed house with its sides facing north and south, and containing a central path with staging on each side. No stading, cititer by means of blinds or whitewash on the glass, was used, but during the summer mouths sheets of tissue paper were placed for a short time during the middle part of the day over those plants most expused to the sun.

The staging and floor were (respensible) symptoms and disapped down, and the stroots are was made of the hip and borton versibles, both leight greatherd to sain the throat the stroots of the stage of the stroots of t

flowers, and the spikes are somewhat stronger. The sepals and petals are creamy white, tipped with rosy-like, and the lip is yellow, with a broad band of magenta around the middle lobe, and an orange-yellow throat.

L. albsda Marianae is a pretty sariety, in

which the sepals and petals are flesh-coloured, changing to salmen; the lip is mauve with buff-coloured stripes, L. albida Stobartiana has the tips of the

scepals and petals blotched with purple. It is an old variety, and was named in honour of Mr. W. C. Stobart, of Darlington,

L. albida sulphurea is distinguished by laving sulphur-coloured sepals and petals, and an orange-tinted crest.

In former days the cultivation of this species was frequently attempted by fastening the plants on a block of wood in imitation of their native habit. Success was never achieved, the chief reason being the lack of moisture in the dead wood.



## CALENDAR OF OPERATIONS FOR AUGUST.

By J. T. BARKER, The West Hill Gardens, Hessle, E. Yorks.

THE recent dull, sunless weather, a great contract to that which we experienced last year at this season, has not been ideal for licut loving Orchids. The cool section has benefited, undoubtedly, by the moisture laten atmosphere and the abundant supplies of fresh air that it has been possible to view the plants.

Everything must be done to encourage the plants that are in full growth to develop as speedily as possible. It is always advisable during a period of sunless weather to admit more air and to maintain the temperatures in the warmer houses by a little fire heat; this causes a nice buoyant atmosphere in which all plants appear to revel. In the cool house this is not a necessity, the object being to maintain as low a temperature as possible, No plant must be allowed to suffer for the want of water at this season; it is astonishing how much well established plants will absorb. Spraying and syringing may be done if the weather remains favourable, but do not allow water to stand in the centre of the new

Cathenya, Lesio Cathenya, and others of this large family, should albe taken in hard as soon as they require new rooting material. The best time is when new roots commence to preh forth, for it is then that the plant is least likely to receive the slightness relevel. The contract of th

Cypripediums of the winter flowering section, which were potted as advised early in the year, will now have filled their pots with roots, and may be copoundy supplied with water, but an excressive supply must be earefully guarded against. Towards the end of the month usury will be pushing up their flower spikes; these as soon as they are long enough, should be carefully and neatly tied up to stakes of suitable length, for if allowed to hang over the sides of the pots many will become crooked, and it is a difficult matter to again get them upright.

Decidious Calambes of the vestita and

Verknin sections are now growing sigorously and well established plants require an abundance of water at the roots. Care must still be taken in the application of water to those of the Reguleria and later flowering section, for these have not as yet filled their ports with mosts. Well established plants may now have frequent waterings with weak liquid unsaner. Dendrobiums, essercially those of the nobile

section, will have completed their growths towards the call of the mouth. It will be notecoming to frequently examine them in one that those which have ceased growing may be removed to a coaler and drier attacks and the second of the second of the second section of the second of the second of the exposed to full sumbine in onler to the cought, as signores and healthy constitution the plants should only as allowed to make one set of growthe early way. The plants will be quite should early as allowed to make one set of growthe early way. The plants will be quite said for some inteller time in a place where the night temperature does not full health of the angle temperature does not the plants of the angle temperature does not full health of the angle temperature does not full health of the angle temperature does not full health of the angle temperature does not see that the angle temperature does not have the angle temperature does not seen the second of the

Mitonia vesiliara. Towards the red of this month the culties flowering plants of this species will connecte to give actively. Any mecessary reporting may be done when the plants of connected to puts first new roots produced to the product of the plants o

notted too firmly, and until they become established in the new compost water must be

given with extreme carc. Miltonia Bleuana and M. Hyena may, from a cultural standpoint, he treated in the same manner; they are, however, more irregular in their flowering season, sometimes producing two distinct batches of flowers, remarks are also applicable to M. Roezlii and variety alba. These plants are best repotted every season, therefore over notting must be will maintain a house gay with flowers during the creater part of the summer months.

have fresh compost, if accessary. When growing, this plant succeeds best in a warm intermediate house, and when at rest, a slightly lower and drier atmosphere is beneficial. The condition under which Vanda cogulea thrives will answer its requirements. This plant, now so easily obtainable, is worthy of extended cultivation on account of its

Bulbophyllums and Cirrhopetalums, out of flower and are making new growths may have attention if repotting is necessary. The compost recommended for Miltonias will answer their requirements, and they are best from the roof. They need plenty of light, but should be shaded from strong sunlight. In their season of active growth a warm moist atmosphere should be maintained, but when at rest the plants should be removed to the intermediate house; on no account should they be subjected to a low temperature or a

continuous drought. Stanhopeas succeed best when grown in shallow teak wood baskets suspended from the roof at the warmest end of the Cattleya house. Although the flowers of this genus are very showy, and many of them have a wonderful perfume, they do not find much favour with the majority of Orchid growers. The plants are easily cultivated and are very free blooming, but unfortunately the flowers are of short duration. Although a clear light is beneficial, bright sunshinc injures the foliage, and the syringe must be used daily in order to keep down the attacks of red spider and other nests. When growth is finished the plants should be allowed a rather long period of rest in a lower temperature, and only sufficient water should be given to prevent the

Plants of the dwarf Odontoglossums. habited members of this senus, such as Rossii. Cervantesii, Oerstedii, and their hybrids which have growths sufficiently advanced to allow of repotting may now be done. The plants grow best when suspended from the roof in

The Cochlioda genus does not contain many species, but the hybrids which have been raised from them comprise some of the most beautiful and useful Orchids in existence. They all thrive in a cool, airy, and moist atmosphere, and for cultivation may be treated in the same way as Odontoglossums.

## ROYAL HORTICULTURAL SOCIETY.

luly 2nd, 1012.

MEMBERS of the Orchid Committee present: Sir Harry I. Veitch (in the chair), and Sir Icremiah Colman, Bart., Messrs, Jas. O'Brien (hon. sec.), W. Waters Butler, A. McBean, C. Cookson, W. Thompson, G. F. Moore, H. G. Alexander, E. Ashworth, R. G. Thwaites, W. Cobb, R. A. Rolfe, I. Wilson Potter, Gurney Wilson, W. H. Hatcher, W. Bolton, and H. J.

Sir Jeremiah Colman, Bart., Gatton Park, was awarded a Gold Medal for a most interesting and well arranged group of Orchids. Included in it were select Odontiodas wellgrown Cattleva hybrids, many rare botanical specimens, and a large number of elegant J. Gurney Fowler, Esq., Glebelands, South Woodford, received a Gold Medal for an excellent exhibit of Selaguellas and Orchids. The latter included Odontoglossum ardentissimum with a branched spike of 50 flowers, the brightly coloured Anguloa Cliftonii, and albine Cattlewan.

E. H. Davidson, Esq., Borlases, Twyford, Beerks, was awarded a Large Silver Cup for a very effective group containing several fine Odontoglossum hybrids, Cattleya Mossie Wagneri, a beautiful form of Laelo-Cattleya Aphrodite and L. C. Rubens var. The Kaiser, a grand hybrid which obtained an Award of Merit.

Lieut-Col. Sir George Holford, K.C.V.O. (gr. Mr. II. G. Alexander). Tetbury. Glos, received a Silver Flora Medal for a magnificurt specimen of Cattleya Warscewiczii Low's variety, with six spikes bearing together 22 flowers. C. Warscewiczii Othello, a grand form and C. Artenius Gira, Gadelelliwa) parts

also shown in excellent style.

Messys Charleworth and Co., Haywarth Iterath, recovered a Gold Medal for the linest trade eshabit. In the centre were namerous specimen plants of Phalenpops Rimestadiana, their graceful spikes of white flowers showing periodic plants of the properties of the prope

ing Peristeria elata, and Sobralia macrantha

Massess Manuell and Hatcher, Rawdon, Vec verre awarded a Süver Gap for a well-variance of Orchies, the Lakis-Cattleys being the Control Succession and Blumo with two larest leously. Successions Blumo with two larest leously blumously before the Blumo with two larest leously blumously before the Control Succession and Garden and Succession and Control Control Succession and Control Succession and

Messrs. Stuart Low and Co., Bush Hill Park, Enfield, received a Silver-gilt Flora Medal for an extensive and very effective exhibit of various Orchids. It contained the rare Laclia tenchrosa Walton Grange var, a well-flowered Chysis bractescens, several very dark varieties of Cattleya gigas, the white Cattleya Mrs. Myra Peeters, and the scarce Broughtonia sanguinea.

Messrs, Jas Veitch and Sons, Chelsca, Inadnany Orchids in their superb group of foliage plants which was awarded the "Coronation" Challenge Cup. The varieties included Brasso-Cattleya Monsie Wagneri, Disa Jona, and the elegant Laelio-Cattleya Canhamiana alba.

Messes, Sander and Sons, St. Albans, exhibited the curious Catasetum tenebrosom. Lacho Cattleya Martínettii Vesavius, of excellent colour, the blue flowering Bollea Lalindei, and Miltonia vexillaria Lambeaniana with numerous flowers.

Mr. E. V. Low, Vale Bridge, Haywards Heath, staged some well grown Orchids, all Excellent varieties. Cypripedium callosum Sanderæ, C. l'Ansonii, a good Cattleya Mossas Wagneri, and the elegant Crelogyne Landurata were much admired

Mr. H. A. Tracy, Orchid Nursery, Twickenham, received a Silver Flora Medal for a good group containing the pretty Odontoglossum Eleanor, Cypripedium niveum, several excellent varieties of Cattleya Mendelii, and various hotanical Orchids

Mr. Harry Dixon, Spenoer Park Nursery, Wandsworth Common, was awarded a Silver Flora Medal for a well arranged exhibit consisting of good varieties of Cattleya gugae; Odonitoda Flory, Cattleya Mossar Wagneri with several good flowers, and various Odonitoda Sound hybrids.

Messrs. Armstrong and Brown, Tunbridge Wells, exhibited a well-flowered plant of Promenca citrina, the pretty Cypripedium Vipanii, and a hybrid between C. Youngianum and Fairricanum.

Messrs, J. and A. McBean, Cooksbridge, showed Miltonia vesillaria Rotundia, a very elegant variety, and Cattleya Warscewiczii Gladiator, a very large flower of good colour.

F. M. Ogilvie, Esq., The Shrubbery, Oxford, exhibited Odontoglossum percultum King George, a large flower handsomely marked with like-purple; Odontioda Lambeauianum, of a solid red colour; Odontonia Lairessee, with a branching spike of many flowers; and Odontoglossum crispum Queen Empress with a 13 flowered spike.

J. S. Moss, F.sq., Bishop's Waltham, showed a pretty hybrid between Odontoglossum

crispum and O. Othello.

Mr. W. J. Biggs, North Enfield, exhibited Cattleya Mossic alba Biggs' variety, one of the largest and finest forms of this pure white flower.

AWARDS.

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#### THE PERSON CERTIFICATES.

Lieut. Col. Sir George Holford, K.C.V.O. (gr. Mr. H. G. Alexauder).—A beautiful and very distinct flower of salmon-pink colour, the front of the lip ruby crimson, the throat having a large yellow disc.

Miltonia İİyeana Le Conquerant, from Mons, Jules Hye de Crom, Ghent.—A line large vanety with a purple blotch on the lin, Cartleya Dupceana The Dell variety (Warraci × Warceswiezi, From Baron Bruno Schröder, The Dell, Englelield Green (gr. Mr. J. E. Shill).—A very large flower of good substance. The sepals and petals of deep rose

## colour, the hip having a bright yellow disc, AWARDS OF MERIT.

Ladio-Cattleya Rubens "The Kaiser," from E. H. Davidson, Esq., Twyford, —A very richly coloured by orid, the large flowers being deep rose, the labellum intense crimsonparole.

Odontoglossum percultum King George, from F. M. Ogilvie, Esq., Oxford.—A large flower handsomely marked with lilae-purple blotches.

Brasso-Cattleya Marion, from Messrs, James Veitch and Sons.—A very large flower of lilac tints, the labellum lined with purple.

Cattleya Thurgoodiana Apollo, from Messrs. Stuart Low and Co.—A very distinct flower of excellent colour, sepals and petals rose-red,

#### CERTIFICATE OF APPRECIATION.

Odoutonia Edna (M. Warscewiczii x O. Wilckeanum), from Messrs. Charlesworth and Co. A pretty hybrid with a branching spike of flowers blotched with yellowish-brown.

July 16th, 1G12. MEMBERS of the Orchid Committee present:

J. Gurney Fowler, Esq. (in the chair); and Messre Jas. O'Brien (non. sec.), W. Bolton, J. Wilson Potter, C. H. Curris, A. Dye, H. G. Alexander, J. F. Shill, W. H. Hatcher, J. Charlesworth, T. Armstroug, F. Sander, W. Thompson, Gurney Wilson, W. H. White, Stuart Low, and F. I. Hanbury.

Messes Stuart Low and Co., Bush Hill Park, were awarded a Silver Flora Medal for a well-arranged group containing good varieties of Cattleya Mendeli, the scarlet Disas grandfora. the interesting Ballophyllum Ericsonii, Ceologyne asperata, and the cleann Stanhouse tireya.

R. G. Thwaites, Esq., Chessington, Streatham (gr. Mr. J. M. Black), received a Silver Banksian Medal for an interesting group of Odoutiodas, the richly coloured Laclio-Cattleya Rubens, Odoutoglossum Rolfeae, and good Mildunias.

Meass, Charlesworth and Co., Haywards Heath, exhibited several choice specimens, including the elegant Habenaria Susanna; Dendrobium amethystoglossum with four spikes, and the pretty Eulophia gumeenss.

Sir Trevor Lawrence, Bart, K.C.V.O., Burford, exhibited Eria rhyncostyloides with taree spikes of flowers, and Lacho-Cattleya Adolph-Harrisoniae having creamy-white flowers spotted with violet-purple.

Baron Bruno Schröder (gr. Mr. J. E. Shill) showed Cattleya Hardyana The Dell var, a remarkably good form with bright purple colour on the lip.

F. J. Hanbury, Esq., Brockhurst, East Grinstead, exhibited Brasso-Cattleya Faith, a new hybrid between B. Perrinii and C. Leopoldii.

Messrs. Sander and Sons, St. Albans,

staged Odontoglossum crispam Formidable, a very grand variety with a spike of 13 large flowers slightly spotted with rose-purple. Messrs. Hassall and Co. staged Lacho-

Cattleya Rubens, of very dark colour, a distinct variety of Cattleya Thurgoodiana, and a good variety of C. Harrisonia.

and a good variety of C. Harrisoniæ, Mons. Mertens, Mont St. Amand, Ghent, exhibited Miltonia, Queen Alexandra, and two blotched Odontoglosum hybrids.

### AWARDS.

FIRST-CLASS CERTIFICATE AND GOLI MEDAL.

Cattleya Warscewiczii alba var. Firmin Lambeau, Irom Mons. Firmin Lambeau, Brussels.—A most lovely pure white flower of large size and good substance. The plant carried a spike of three blooms.

#### AWARDS OF MERCE.

Zygopetalum Brewii (Perrenoudii v rostratum), from Messrs. Charlesworth and Co., Flaywards. Heath.—An interesting hybrid with greenish sepals and petals tinged with purple; hp rosy-carmine with white margin, crest nale blue.

Odontoglossum Epicaste (Clytic x crispum), from Messex Charlesworth and Co.— A good advance in the Edwardti section of hybrids. The rose coloured flower almost covered with large blackish-chocolate

## MANCHESTER ORCHID SOCIETY.

Tune 6th, 1012.

MEMBERS of the Committee present:—Rev. J. Croubleholme (in the chair), Messrs. R. Ashworth, J. Bamber, J. C. Cowan, J. Cypher, J. Evans, W. Holmes, A. J. Kecling, D. McLead, C. Parker, F. K. Sander, Z. A. Ward, A. Warburton, and H. Arthur (Secretary). Silver-gib Medals were awarded to Col. J. Rutherford, M.P., A. Warburton, Esq., and

Messrs. Charlesworth and Co. Silver Medals were awarded to Mrs. Wood, Z. A. Ward, Esq., J. McCartiey, Esq. Messrs. Hassall and Co., and the Liverpool Orchid Co. Votes of Thanks to O. O. Wrigley, Esq. W. R. Lee, Esq. R. le Doux, Esq. and Mr. I.

### FIRST CLASS CERTIFICATE

Odontioda Queen Mary (Vuylstekeze  $\times$  eximium), from W. R. Lee, Esq.

# AWARDS OF MERIT. Odontoglossum crispum White Star, and

O. c. White Queen, both from W. R. Lee, Esq. Aerides Houlleriana magnifica, from Mrs. Wood.

Larlio-Cattleya Mortinetti var. John Lupton, from Col. J. Rutherford. Cattleya Cowanii magmifica, and Odornoglassum Mrs, Carlisle, from R. le Doax, Esq. At the Annaul Meeting the Balance Sheet was adopted. The Rev. J. Cromblehelme was re-appointed Chairman, with Z. A. Ward, Esq. Visc-chairman; R. Ashworth, Esq. Hon. Treasurer; H. Thorp, Esq. Hon. Auditor; and H. Arthun, Esq. Screetary.

Esq.; W. R. Lee's Gold Medal to J. McCartney, Esq.; Cypher's Gold Medal to J. A. Ward, Esq.; Sauder Prizes to Mr. Lupton, Mr. Weatherby, and Mr. Holmess; E. V. Low's Silver Vase to J. J. Holden, Esq.; Stuart Low Prizes to J. McCartney, Esq.

The Society's Gold Medal (Amateurs) to G. H. Peace, Esq.; Silver-gill Medal to A. Warburton, Esq.; Gold Medal (Amateurs without a gardener) to W. Hargreaves, Esq.; Silver-gill Medal to F. A. Hindley, Esq.; and Silver Medal to H. Arthur, Esq.

A Gold Medal, given by a Member of the Society, was presented to the Rev. J. Crombleholme, for his meritorious exhibits during the session.



OBBRYSAPPERA.—Throughout the summer season a continuous evolution of Sussess wild flowers is held at the Beighton Museum, specimens being received from all parts of the county. It is of interest to note that the county. It is of interest to note that the varieties of Ophyrs aprilers from the sand-stone of the Forest Ridge are larger flowering than those usually found on the child. The somewhat searce Herminium monorehis has also been exhibitor.

0 U

Borristi Osciulus—A recent issue of the Nature Photographic the official organ of the Nature Photographic Society, contains some uses by Mr. E. J. Redfield on British Wild Orchids. The aurinor has been engaged for several past exacts in obtaining a separation of paths in their natural position, the collision of the plants in their natural position, the collision on me including thirty-one spectes. Last year the nare Oscile interaction of the photograph, taken June 22nd, 1911, appears in the alove subhisation.

15 45

LYCASTE BARRINGTONIA: — The genus Lycaste contains about forty species, all satives of tropical America from the West Indies and Mexico to Peru. The island of Jamaico possesses but one species, and that L. Barringtonias, a flower of which has been sent by Mr. J. Harris, Orchid grower to Col. Henty, Avisford, Arundel, Sussex: The drooping olive-green flowers are about two inclesin length; the lip light buff is ordon, with a fringed margin, and a denyl frame recovery and applied of the lip of the lip of the lip of smally flowers from April to Jine. A spike of Epishenhum anceps with its light greenish invom flowers crowded about into a lised also comes from the same collection. This species is very widely distributed, but the actual specimen in the Avisford collection was obtained from Jamasia.

A REAL BIRD'S-NEST ORCHID.—The roots of Neottia Nidus-axis are so crossed and entangled as to resemble, in miniature, a crow's nest, hence its popular name, the Bird's-nest Orchid. But reality is better than fancy. During the present summer some wrens obtained access to the Orchid house of Mrs. Player, Alexandra Park, Nottingham, and built a cosy nest in a large specimen Ada aurantiaca. Six eggs were hatched, and the young birds successfully reared and taken away by their parents, thus making a most interesting and unique occurrence. In the same collection is an exceptionally strong plant of Stanhopea tigrina; it fills a 16-inch hasket and has recently carried 14 spikes, each one having two large flowers. Another excellent example of good culture is a large specimen Coelogyne Davana which carried no less than 32 long pendulous spikes, each having from 20 to 22 well developed flowers. Committee Dexembles. This sammers haveing species is not eiten some in present day collections. A plant in the possession of the Rev. J. C. B. Erecher, Mundham Vicarage, Chechester, has recordly producer, a softe with ne less than as well developed showers. The whole hovering Audies weren soften when the soften developed thouses are the other Corthide in this collection that have produced floriferous results demay the bart few weeks!

CYMITTERION FRANCHETTE A record some of Herizandrias cochoin as photographic common as photographic framework of the production of the common and the common

THE FERTHERATION OF ODERHIES IN TORSICE. M. Feld Plates a complet binned, to M. Feld Plates a complet binned, to M. Feld Plates a complet binned, and the plates a strength of the complete binned by the down more and the complete binned by the down to the experience which the communicated to the Rospit Association of the effective binned by the down to the form of the experience binned by the control of the experience binned by the down to the same way on the human eye. The complete binned by the complete binned by the down the same way on the human eye. The complete binned by the same with the same way to the same way to the human eye. The complete binned by the same with the same way to the same with the s

seem to have any influence wistlever on inserts; they visit the inflorescences which are not mutalized, but which are hidden by green leaves. So that musets do not seek flowers for the form and coloration our eyes appreciate, but appear to be guided towards them by some other sense than that of seeing.

OPHRYS ARANUERA.—'This species possesses a broad lip marked with various shades of brown, from which a fanced resemblance to a spider is obtained. The flower has been nade emblematical of administers or skillulmess, in allation to the insert it resembles.

"The spider's touch, how exquisitely fine! Feels at each thread, and lives along the

This species is very summer to O, species, and offers in not having the surface book and offers in not having the surface Cook of April and May, shereas O, spifern usually produces its flower steam in July. Calvers tion is by no means difficult, the plants of the produce of t

Oncumazous PAAASS—In these layout the striking ustons of their habits, which are not much engeled, it is be extraordinary one, bectures, savingsion of lane, suding conference, succession of lane, suding conference, succession of lane, suding conference to the suding succession of lane, suding conference conference and the endless multiplicity of all those is sufficient to the sum-species, the surface and the surface succession of lane and the surface succession. Succession of lane succession of the succession of lane succession of the succession of the succession of a large deviction of the globa, but inviting to the succession of the

## ARACHNANTHE ANNAMENSIS.

The genus Arachnaothe is not a large one, but nearly all the species are curious and interesting, as well as Sir Frederick Moore, of the Royal Botanic Gardens, Glasnevin, when looking through an importation of Orchids seat to Mesar's Sander and Sons from number of distichous-leaved It flowered the plants. following year, June, 1905. annumensis, a very remarkable species. The plant, times since, is not a very vigorous grower; in fact, several of these Annam plants seem rather fastidious as to the right temperature in

The leaves are narrow and rather short, but the inflorescence is stout and creet, well elevated above the head of the plant, and the flowers are large and shows. The segments are and the two lateral netals are bent in a falcate manner. giving a weird appearance to the inflorescence of eight to ten flowers. The single flowers are over five inches, by three to three and a half broad. The red ground colour, on which are transverse hars of vellow produces a very bright and attractive

addition to the Orchid house. Our illustration is reproduced from a photograph of the plant as it flowered with Sir Frederick



Arochnanthe annomensis

Moore, at the Royal Botanic Gardens, Glasnevin. The white aerial roots with their bright green tips are plainly visible.

September, 1912-

### NEW HYBRIDS.

BRASSO-LELIA MAD. G. PUTZVS.—At the horticultural meeting held at Brussels, July 10th, 1912, this new hybrid was exhibited by M. G. Putzys. The parentage is Brussavola Digbysna × Læhin priestans. OKCHOLDA GINADARINA.—This interest-

ing hybrid between Oncidium monachicum metallicum and Cochlioda Niezliana has been recently flowered by Mesers, Charlesworth and Co. The tail, somewhat creet, spike carries many reddish-brown flowers.

ODOSTODA MARKLINE—A becunified lephral, the result of errossing Odosticola Charlessorthii with Odostoclosums crispum. Flowers of good size and salapa and of a deep rest colour sligidity intest with a gooden lust emission and showered by Messes. Charlesworth and Co. The specimen esthikited by them at Royal Horichten Soriety, July volt. 1012, luss since passed into Mr. E. II. Davidson's celection, Berdaues, Tsylving, Berkas.

CATTLEYA SOURCE O'OR.—This, the result of the control of the source of the control of the control of the control of the control of the control of the white an orange-yellow doe. The Forbeits parent largely predominates. Shown by Mr. H. T. Pitt, Royal Herticultural Society, July goth, 1012.

E.RHO-CATTLEYA MAURETANIA. Messes-Sender and Sons have raised this new hybrid by crossing L.-C. Martinetti with L.-C. Canlamiana. The large flower is of a rosy purple colour, the broad petals are formed in a nuch more creet style than often seen me Canhamiana, and the labellum is well

Blassoo-CATTENA THETE Blassowish Flighyma and Cattley A Challed are the two parents of this ture hybrid recently flowers by Messer. Jas. Veich and Sos. Chelsea The result is a fairly large greenish-yellow flower will a broad fringed blatellum tinged with rose on the folds blot. The purple spotting of C. Adandas has been almost claiminated, a net uncommon occurrence with hybrids of this species. CATILIZA XOMIAS—The road of crossing Cattleys granulous with Cattleys Warrent less produced a large floor; the distinctive features being throads are granulated of colour which produced the produced produced to the colour which would developed hardman for the purple or colour, and the islimus is much clougated. Raised by Mesers, Sander and Sons, St. Albans, and calcitated by them at the Royal Hernelmural Section, August 19th, 1973.

LETIOCACTERYA ARGUS.—This, the resist of crossing Cuttleys articina with Lenino-Cattleya lingramit, has been raised in the Readyn collection by, Mr. Thurgood. The flowers, as may be expected from such a mixed parentage, vary much in form and collent, no two bring ablue. The potential species include C. intermedia, C. aures, C. Leopoldit, and L. Dayana.

### ODONTOGLOSSUM ETHELREDA. (Edwardii × triumphans.)

This, like all Ecowardi primary bybrids, has the usual circuracteristics of deep purple segments tripped by a lighter shade of almost like; the septis and petals being almost equal. The lip is somewast effective to others in its class, showing a certain amount of recarring at the soles and a somewhat "varnished" appearance in the brownship of the company of the co

I first showed it at the Royal Horticultural Society, July 30th, 1912, this being the first appearance of the hybrid at a Show, and duly recorded before the Orchal Committee.

August, which did not appear till after Oci. Ethelreda had "made her bow to the pubble," Mr. Harrison speaks of Od. Harrisoni et this parentage, and in correspondence states he bloomed the plant last winter but never mublished it.

His name being only in private personal knowledge to himself, therefore, does not rank as the prior ene, and perforce is subsequent owing to an inadvertence on his part to publish it at once.

de B. Crawinay, August 19th, 1912.

## ANŒCTOCHILI AND THEIR CULTURE.

HE genus Anoctochilus was founded by Bliame in 18-25, the principal characteristics of the flowers being the spreading aprex of the hip, from which the generic name is derived. The genus Zeuxene is very closely allied, but differs in not basing the long toothed or comb-like mesochile of the long.

Tas flowers, although very interesting or as their contraction in concernad, do not equal in leastly or florid circle (those of side Cerbitis. The side of their circle (their circle) and their circle (their circle) and tacery of which rival the glowing colours and tacery of which rival the glowing colours of authors when Well may the post have writen, "Who can para like Nature." Some contractions of the colour, or of papels when and covered with a network of gold. In others, the darf is with network of gold. In others, the darf is with varied that which seems to most the number of the papels of the colours of papels. The colours of the papels which well reason, which is done have varied that which seems to most the number of the papels of the papel

Why do we not see more of these little resaures? Surely there are a few annatus who could reserve a place for their care. Of late years all attention has been paid to our showy flowering Orchids, while those with ornamental foliage have been quite forgotten, and to many are even still unknown.

Many of the best Amertochili are found in Eastern India, consequently a wann temperature is required for their cultivation, from 70-75 degrees F, in summer and from 60-65 degrees F, in winter. They should never be exposed to the san's rays, but must be kept rather heavily shaded. The atmosphere must be well supplied with moisture, and reasonable ventilation should be given whenever circomstances admit.

Formerly the custom was to place the plants under hell-glasses, with but little ventilation; this method frequently made the plants too tender, and the slightest sudden change of atmosphere often gave them a check and resulted in their death. A better method is to place the oots in a small frame, surrounding

them with living sphagaum moss, and cover them with loose panes of glass which may be more or less arranged to allow of sufficient ventilation being given.

About the cul of February, or as won as weather conditions wil allow, propagation weather conditions will allow propagation should be cut about 'allowy through,' such allow a superior of the condition of the analysis of the condition of the condition of the analysis of the careful process of the conputation of the careful process of the plant may then be carefully several and plant may then be carefully several composed of fitness peat, sharp saw, and composed of fitness peat, sharp saw, and the control of the careful process of the best may be a superior of the control of the best may be a superior of the control of the con-

Moisture, although very essential to the welfare of the plant, should not be allowed to settle on the leaves in the form of drops, more especially is damage likely to occur when water remains for any length of time on the young, unfolded leaves. In order to obtain specimen plants the flower spikes should not be allowed to remain on the plant for more than a few days: some growers advise their removal when in the carly stage of formation. while others are of opinion that the plant should be allowed to take its natural course. But whichever way is considered correct, the fact remains that the chief point of attraction is the beautiful foliage, and not the flowers. however interesting they may be to the

The cultivation of Ausertochili is certainly inclificalt. The plants may grew lacusimity inclificalt. The plants may grew lacusimity in-A successful call state may find, reach to his dismay, that what he could grow in one part of the country he is quite unable to inanother. All these difficulties, great or small, only encourage many of us to go on and persevery, for success when gained too scalp can never be regarded as truly pariseworthy.

### SACCOLABIUMS.

THE Saccolabium genus contains between 50 and 60 species, all natives of Eastern Asia, where they are found growing on the branches of trees. The flower spikes, some creet, others pendulous, frequently produce many elegant and highly interesting blooms of various colours. They enjoy considerable heat and moisture when growing, but a decided rest is necessary to produce the finest flowering results. The majority are best accommodated in baskets suspended in a good light position, or in note which are clevated fairly close to the glass. Sphagnum moss and plenty of crocks will be found sufficient for their culture, although several growers have obtained excellent results by including a small quantity of good fibrous peat or osnumda in the compost - this latter method is more likely to prove the better of the two, for it produces a mixture of longer lasting property.

The temperature from March to the end of Coroleri should be you to y degrees during the day, allowing it to rate to 80 or een 85; adversers in sump weather. During the suiter deprecia in sump weather. During the suiter department of the suiter should be minimisted. On all bright days the ballow be minimisted. On all bright days the labout be minimisted, and the foliage may be frequently seyed with visit market of the same resolution; and the foliage may be frequently seyed with visit market of the same change to the same product to the place for any excess is likely to take place, for any excess is likely no produce the merch forcaded disease known as produce the merch forcaded disease known as

spot. Propagation of the species is comparatively slow, and very seldom undertaken, it being much better to purchase strong plants which will give good flowering results every year. However, there are instances when the daplicacy of a rive specimen is desirable, and carry of a reason of the propagation of the propag

After a few weeks young growths will appear from one or more of the eyes on the stems, which were previously dormant, and, unless the old stem is executingly strong, it will be advisable to only allow one young plant to be produced. As soon as new roots are produced this may be placed in a small pot or basket and given a growing place along with other members of the genus.

Old specimens, which have become too tall, or have lost their bottom leaves, should have the lower portion of the stem removed and be reported in fresh compost, the new roots produced from the upper portion of the stem duced from the upper portion of the stem of the upper portion of the stem of the stem increased vigour will be the result.

S. ampullaceum is very floriferous, so much so that the splices should not be left on too long for fear of the plant exhausting itself. Howevs are coloured various shades of magenta-pink, the sepals and peals somewhat equal in shape, the hp with a spur longer than the sepals. The leaves are invariably mottled with brown. This Indian plant is found growing wild at Sylbet and Sikkiim.

S. bellinum produces long-lasting flowers which open during the mouths of February and March. The oblong scales and petals are straw-coloured, blotched with large patches of dark brown; the succate lip is fleshy, white with many-purple spots, having on each side a number of filliform processes. One of the best Orbidis.

S. currifolium has a short exect stem from six inches to one foot in height, with narrow deflexed leaves, and an erect spike of crowded cinnaba-red flowers. A free flowering species from the East Indies. The variety luteum has clear yellow flowers, and is extremely tare.

S. Hendersonianum, a small compact growing species from Borneo, produces spikes with numerous small bright rose-coloured flowers, the lip and spur almost white. It does not appear to have any certain flowering season.

appear to have any certain flowering season. S. dasypogon has bright yellow sepals and petals spotted with brownish purple, the lip white except a patch of yellow with minute Incom upodo neur the apex and a purple lime round the edges of the sac; the colomn is pink. In its native country it flowers during the months of November and December. This which for many years it has been controlled. Which for many years it has been controlled. "Chrishes of the Sakkins-Humbaya," although much allike, nor not really difficult of separation. In the first place they live at bifferest texture and those and the second of the execution and flower of different seconds. S. fert, and flowers during March and April; while S. Ashypogonic is found at or below reco feet and is in Bower during November and December. The Idease of S. dostpopping are broader, and the apreal notifie is low deep than in the case in the lower of S. raidwaler, and coleration of the flower of S. raidwaler, and coleration of the flower of S. raidwaler is constant; but in the cf dostpoppen the point may be pale or deep yetlow, and either with may be pale or deep yetlow, and either with only does not minerous space. Finally, use in smaller; the apreal lade is prepilloclar, deeply lacronate edges and its upper surface is perfectly smooth.

## THE CHÂTEAU DE ST. CROIX COLLECTION.

W. I-HIN a short distance of Buggers, Belgians, one may see many inter-costleration (Costale growing in the costleration (Costale growing in the costleration (Costale Heav' Natura the Indicated parts coveral in the centre of a thirdly sounded parts coveral which also acts as a show home for those being consected by a wide certifier which also acts as a show home for those to the prosent of the property of the p

The but house continues a remarkable violetion of rare and curious flowering species, almost all growing in small pears, species, almost all growing in small pears, or the continue of the co

Several plants of Vanda Sanderiana and a varied selection of Angracums are growing with evident pleasure, and the same may be said of Houlettia Sanderæ and the tropical American Isochillus linearis. Angulea Ruckeri and Trichosma suavis must also be mentioned.

another losses, he come to the second

species, and nunerous seed pads have been preclared by untiling the species of the different sections of the genes. Quie a fusion number of Mashevallia hyirids have already well in small pans. Of late years little tierters this bect taken in these plants; it is, therefore, especially plausing to see a large part of one house deveated to their culture, and it is to be begret that the interesting work of years to come. The current of the property of the current of the years to come.

### LÆLIA ANCEPS SANDERIANA.

I ÆLIA ANCEPS was imported from Mexico by Messrs, Loddiges, and first flowered in their collection in December, 1834, when a drawing of it was made for the Botanical Register. A few years later a plant flowered in the collection of James Bateman; it was the subject of a coloured plate in Paxion's Magazine of Botany, 1838, with the remark. "It is impossible to convey a faithful idea of the exquisite richness of the flowers of this valuable plant, for the extreme delicacy of the texture of the sepals and the lip defy description; and we do not hesitate to say that they are equal, if not superior, to any thing known among the Orchideous

Dr. Lindley, the eminent Orchidologist, has remarked. "When we say that this plant is equal in beauty to any of the Cattleyas; that it has a far more graceful mode of growth, in consequence of the length of its slender scaly spring; and that it diffuses an agreeable fragrance, we shall have said that it is one of the most interesting of the tribe that has yet

During the winter of 1867-8 Mr. Dawson, of Meadowhank, Glassow, flowered a nure white variety with the lin blotched and lined with purple; it still bears the name Lælia anceps Dawsonii. This variety was really discovered by Mr. Tucker when collecting for Mr. Low, of Clapton. When, after a few years, new localities were discovered in which Lælia anceps was growing it was hoped that other forms equal to Dawsonii would be found. Such, however, was not the case, the nearest variety, in point of colour and beauty,

Benedict Ræzl, a keen observing collector. was sent out by Messrs. Sander and Sons to a district in Mexico on the Pacific Coast which had hitherto been unexplored. Amongst the wonderful treasures of the Mexican forests he discovered Lælia anceps Sanderiana, at the present time one of the most popular and

Lælia anceps is found growing on trees on the outskirts of virgin forests, but occasionally on rocks, fully exposed to sun and air. The plants cling to the rocks by means of their roots, and these are nourished by decayed moss and detritus. Wherever the plants grow fully exposed their bulbs and leaves assume a raddy tinge, while those in partial shade are green, and do not flower so abundantly. The rainy season extends from May to October, during which period the plants are dreuched with rain for several hours daily, and remain saturated throughout the night. Early in the the plants, which are afterwards fully exposed to the ficroc sun until the storm dreuches In November, after the rainy season has

ceased, and when the newly made bulbs are firm and ripened, the flowers are produced, During the next few months the plants are at rest, owing to the dryness of the atmosphere. About the end of February the new bulbs send out fresh roots, and these are encouraged by the fine mist and slight showers which prevail at this season, but which in no way equal the amount of moisture that occurs during the

The remarkable specimen of Lælia anceps Sanderiana illustrated in the present issue was grown by Mr. J. Smith when Orchid grower to the Right Hon. Joseph Chamberlain, Highbury, Birmingham. In the year 1899 this plant produced 27 spikes bearing an appreciate of 108 flowers, and the following scason 11 spikes with, strange to state, exactly the same number of flowers. Lælia. collection, the various varieties producing no less than 722 blooms. This large quantity of flower in no way appeared to weaken the conthey produced the increased number of 205 blooms. The varieties included Barkeriana, blanda, callistoglossa, Percivaliana, Sanderiana, and Chamberlainiana, the latter still being the finest form of Lælia anceps.

Mr. I. Smith grew this superb specimen in



a rather low span needed floores with staging on both sides. No shading cither by means of blinds as whitewash on the glass was used, but during the few floores in the model of the stay, when the sun's rays were very firere, where of fisse paper were placed over those plants mest exposed. Frequent syringing of the floor, training, and between the parts was carried out on all metable eccessions. Each addression the vertilations were closed for an hour or more in eader to accumulate the best of the sun, bet at all other times a tree circulation of the air was renintained. During the winter time only sufficient water was given to prevent shrivelling of the bulbs. The excellent cultural result obtained by Mr. Smith not only prove wint really choice and magnificent plants Ortolish are, but gives servy encouragement to others to follow in his floatistips.



Lalio-Cattleya Aphrodite, a specimen in the Westonbirt Collection.

## LÆLIO-CATTLEYA APHRODITE.

heaves and if it may be. The two parents aprecise, Lesis purposate and Cartilyo, Mendeli, are known throughout the hori-cultural world, and for beouty and usefulness is sould be defined to first their epsil. It is, therefore, not surprising flat LeC acceptance of the control

Hybrids pessess in amount of vigour far

ecocoling that contained in any spacies, and on this aeroust have very much taken their assistion. With ordinary error they mesone to compare the contract of the contract of the tension of the contract of the contract of the tension of the contract of the contract of the tension of the contract of the contract of the property of the contract of the contract of the property of the contract of the contract of the property of the contract of the contract of the property of the contract of the contract of the property of the contract of the contract of the property of the contract of the contract of the property of the contract of the contract of the property of the contract of the

The specimen L. C. Aphrodite illustrated above was grown by Mr. H. G. Alexander, Orefaid grower to Lieut-Col, Sir George Holford, Westonbirt, and carried no less than 34 flowers, all of good substance and quality. Apart from being a very fine variety, this plant forms an excellent example of the possibilities of a Ladio-Cattleya, the flowers all being open at the same time, creating an object of great beauty. This plant made its flowering baths when grown in a 12-in, pot which it completely filled with roots.

## MESSRS. SANDER & SONS' ESTABLISHMENT AT BRUGES.

BRUGES has long been celebrated for its horticultural increase; so long ago as 1651 a society held establishment with some degree of regularity. To-shap Bruges is known the world over for the extensive establishment of Mesars, Sander and Sons, and the celebrity of its bay trees.

It is, however, the Orbidis in which we are interested at the present time. The sardet flowering Resamiliera Involvationa is repesented by theseands, one large bostic wing completely (filed with well-level) when the VE Betterman is no occupy considerable squee, and the new not are Houlkin Sandern is represented by several good specimens. Lacha Gouldiana, until recently extremely access, grows happing to basiless suspended

technities I lowly, effect of the two-registre call nationally Ochida, may be seen in a call national Ochida, and be seen in a fally cultivated for over go years. A smaller plant, calabiled at the flarges I loricalized Slow, carried three long spikes of flowers, a very annual occurrence for sach a componitively small piece. This was a propagated plant having a semestral toroutly and constricted base to fix stem, which may secount a stricted base to fix stem, which may secount

filled with specimens of Phalamopsis Schileriana; the plants are grown in baskets suspended from the roof, and their elegant sikery mottled leaves create a fine effect. P. Rimestadiana is also largely grown. Augmeeum Sanderianum and Vanda Sanderiana are two beautiful Orchids that bear the vance of their enterprising discoverer.

Dendrobiase Sanderæ, a recent introduction

produces very strong growths, the compost mainly consisting of the bank of Fir trees, for it is on these trees abone that the plants are found growing in their native country. D. Dearct, a closely affect spacies, is cleo well represented. A large house is entirely deveted to the cultivation of D. superbens. An article on this species appeared on page any of the necessit volume.

The Cattleya houses are moneuse, several being 250 feet in length, and peoportionally broad. They contain lange quantities of C. Mossie, Reedelii, Pervenaima, Isbiata and Gaskelliana, the latter species being a type with an unusual amount of purple colour on the Isbellian.

Seedlings are being raised by tens of thousands, and even these will not be too nuncouns, for the difficulty of obtaining a really finitelass variety is necessary greater every year. A very promising batch of layfurks, which has just reached the flowering stage, is Cattleya Mrs. Pat x. Cartleya Loddigesi, the colour of the flowers being particularly rich.

orne nage span neotro notice is omitterely filed with Odontogicosum hyurids, and another, of equal size, contains numerous specimen plants of the true Packs type of Odontogleosum crispum, now so selform seen. Cymiodiam insigne Sandere, a very superior ariety to the original type, grows executingly well at Bruges, the pactty, grass-like foliage lenig in itself of decorative value.

It is impossible to describe the multitude interesting Orchids in this vast establishment, but anyone wishing to study the various species and their culture will be amply rewarded by paying a visit to Messus. Sander and Sons at Bruges.

## THE ORCHID AS A RESERVE FUND.

From the "Financial News."

The Possibilities of Huge Profits in the Raising of Rare Specimens.

TYERYONE knows that diamonds, if excellent investment; but, so far, been quite overlooked. The magnificent flower show in the gardens of the Temple particularly choice examples of Cypripediums for a single specimen in a 3-inch pot may make the uninitiated gasp; but such prices with his treasure under 1,000 guineas if he is

many that Orchid-growing has become a understand the business pool-pools the ideawere paid for talips a single bulb of a black auction Laco-and large prices have been paid for single specimens of plants of other families. The day of the tulio is, however, Not long ago continental florists issued lists wherein scores of bul's-talips, byscinths, and daffodils chiefly-were priced at upwards of 10 guineas apiece. Roses and single bad of a choice rose, for example, the value of his property is gone absolutely. The and will then be put on the market by every If there were only one bush of Marechal Niel and no ingenuity could more see the stock, the price of that bush would run into several very little for beauty of form or intrinsic

THE SPECIMEN REMAINS SOLITARY. The great value of an Orchid with a unique bloom lies in the fact that the chances are a in cross-fertilisation; but of the several thousand species known, a mere handful have yielded to the hybridiser's art. Many families honeless. This question of the fertilisation

Orchid is always spoken of and regarded as "the millionaire's flower"; and to some very likely find himself in Carey Street one miscrable of creatures was the man with a taste for Burgundy and an income of £500 a

and difficult which confronts the botanist devoted auch attention to the subject, and it

and anything under £5,000 per awaum will at least find it difficult to achieve happiness in this world. Some amateurs' collections have been valued at £30,000 or £40,000 outright; and the taplexep of houses, gardners, etc., in many instances runs into Bousson's per acrous. Perlaps he most fromes is Mr. Chamberdan's collection at Highery is considered to the constraint of the collection of the following person of the Chamber of the Chamber taplex perlaps, in America and in Helgens, considered the constraint of the Chamber of the perlaps which is the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the work for the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the constraint of the tateronst ends of the work for the specialism; and the expense of maintaining are specialism; and the expense of maintaining the constraint of the constraint of the constraint of the specialism; and the expense of maintaining the following the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the specialism; and the expense of maintaining the specialism of the constraints of the constraints of the specialism of the constraints of the constraints of the specialism of the constraints of the constraints of the constraints of the specialism of the constraints of the constraints of the specialism of the constraints of the constraints of the constraints of the specialism of the constraints of the constraints of the constraints of the specialism of the constraints of the constraints of the constraints of the specialism of the constraints of the constraints of the constraints of the specialism of the constraints of the constraints of the constraints of the specialism of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constraints of the constra

A FIELD FOR SPECULATION. The comparatively speaking poor man is not, however, altogether out of the ranning. London is the centre of the world for the Orchid trade, and here come for sale plants collected in Burma, Brazil, Mexico, and many other countries, As many of these are unflowered at the time and it is quite within the bounds of possibility that in a batch of half a dozen dry roots picked up for a few shillings in an auction-room may be one worth naming dreds of pounds. This has actually occurred time and again, and it is said that one of the gems of Mr. Chamberlain's collection-a Cypripedium-was originally bought for half a crown in Cheanside. But it is altogether a matter of luck. No matter how expert the eye may be, it is impossible to say what a plant will do until it has actually flowered. The picture-hunter or the curio-collector relies on his judgment; but the Orchid-buyer only adds to the excitement, and gives a pambling element to the pursuit. It is certainly stimulating to think that for half a crown you may get something worth £500. Even the best of South African shares will never yield so heavily as that. It is also worth remembering that some of the most

valuable specimens are "cool-house" species, which call for no great expense or skall in culture. It is quite a mestake to think that all Orchids need great heat. Many Odonneglossums, Dendrobisms, and Cymbidiums the former family certainly the mest beautiful of all are grown excellently in houses out of

which the frost is only just kept in the winter. YET TO BE EXPLOITED .- As a field for investment the Orchid has not yet, perhaps. already been pointed out, are commonly bought as a "lock-up" of capital; in China many rich men systematically put their money into Jurs. Now that the market for Orchids has become so wide, and the cult is established in many countries, rich men might do worse than consider the possibilities of investing in Orchids. If they bought judiciously and nursed their "stock" assiduously, they would no doubt find the investment an excellent one. The day might even come when the capitalist in want of a few thousands in "ready" could stroll into his hank and ask for an overdraft against his collection of Odontoglossums! At present we are afraid the average bank manager and that the fall in the temperature of his office as a result of his coolness would put the plant in imminent danger of its existence.

The North of England Horicaltural Society held a show at Harrogate, August 8th and 9th. Messrs Mansell and Hatcher, Räwdon, were awarded the cup presented by Mr. H. Webster, Chairman of the Harrogate Local Management Committee, for the best exhibit from Yorkshire, and a Gold Media from the Orehat Committee.

A Tirst-class Certificate was granted to Cattleya Gaskelliana alba maguifica, and a Second-class Certificate to Ledia-Cattleya Ivernia Muriel Wilson, both shows by W. P. Burkinshaw, Esq. (gr. Mr. J. T. Barker).

Messrs. Carlesworth and Co., Haywards Heath, received a Silver Medal for a very

## CALENDAR OF OPERATIONS FOR SEPTEMBER.

By J. T. BARKER, The West Hill Gardens, Hessle. E. Yorks.

THE temperatures must be maintained in all the warm houses, and every inducement must be given the plants to make up their growths as questly as possible. In order to withstand the vicasitudes of the winter second the new balls must be attained to the plants of the plants of the attained on the plants of the plants of the secondary, but the plants must, nevertheless, be gradually intered to the ewe conditions.

As the days shorten ventilation will require more attention, and no favourable opportunity should be lost to admit air in all departments. Fresh air is indispensable in the cultivation of all plants grown in glass structures. The amount of atmospheres moisture must be geadually relaced in all the bourses; owing to the amount of workstore in the outside atmosphere exploration inside the

Watering of the plants from now onwards will recuire much more judgment and attention than when the plants were in active growth. The wants of the various species

must be taken into consideration and the treatment varied accordingly. To successfully

treat them individually

The climatic conditions this session have been all that could be desired for the innates of the cool house. The growing season is forten advancing and tice winter quarters for the plants must be prepared. All the houses sixual the thoroughly desired, white and eat, and the plants should be carefully examined to insert and other perss. Plants that are partial to any position should be allowed by the pressure of the pressure of the pressure of the pressure of the pressure of the pressure of the pressure of the pressure of the pressure of the removed the results and of the removed the results in the first removed the results and pressure of the pres

The late autumn and winter flowering Cypripediums are now pushing up their flower spikes with great freedom; these should be carefully tied up to neat stakes. The plants order that they may recoive all the light possible during the duil thay of winter. Continue to give liberal supplies of water to the roots, whenever required. Plants that are root bound may even have scensinal applications of weak liquid namore until the flowers though the control of the c

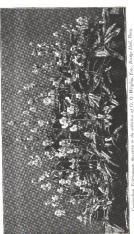
Describbings must be examined at intersels and traces which have completed their growth placed in four quarters. Those in full growth must not be allowed to suffer for the want of syster, either in the atmosphere or at the root. D. formsome and D. Pinkenopeisthat crie in flower should be placed in a warm and thy prostion, where they will take at considerable time in geretten. These plants of the properties of the properties of the properties of the properties of the properties.

The porting of Larias, Cattleyas, and their hybrids should be done whenever the opportunity occurs, and the plants are in the requisite condition.

Miltonias. Plants of either M. vexilaria, or B. Blenana, and hybrids of these most useful plants, that were not ready for reputting last month should be done as non-as possible.

month should be done is your as possible.

Oblintagle-man, When these plants are rang sporters and hybrids are included, there will always be some that require statusion of all seasons or the your. The early autumn is all seasons or the your. The early autumn is all seasons or the your. The early autumn is not remove the coaspost of any that require A orienteercement hand he made with the comparison of th



The usual precautions as regards affording water to newly-notted plants must be strictly adhered to, for it is at this stage that very many plants are seriously injured by the application of water in too large a quantity. Masdevallies. The species of this most interesting genus are not so popular or so extensively grown as they once were, yet they include many beautiful and curious plants. Few Orchids produce flowers of such brilliant colours as M. Veitchiana, M. Harryana, M. ignea, and others of singularity and quaintness of their flowers include M. elephanticeps, M. Mooreana. M. Chestertonii, and M. macrara. majority of these plants are of easy cultivation, essential points being an open, sweet compost, protection from strong light, and that they do not suffer from drought at any season. The present is a good time to overhaul any that have passed out of flower, and where a house is devoted to their culture it should be thorougaly cleansed before the plants are replaced in their winter quarters. The compost they best succeed in is a mixture of one part each of commuda, peat, polypodium, and sphagnum moss. The strong growers may have a small quantity of fibrous loam, from which all the earthy particles have been taken, mixed with the compost. The ing the base of the plant on a level with the in pots that are too large. Plants that are broken up and placed in smaller pots, and when re-established may be made up again and placed in one receptacle. The critical time with Masdevallias is during the first three months after disturbing them at the root. M. tovariensis, M. Davisii, and those that flower in the winter months are best left until February, when they will be making new roots. The plants should be kept on the dry side during the winter months, but in no case should they suffer for the want of water. having no pseudo-bulbs to sustain them. They are all best accommodated at the warm end of the cool house, and delight in a supply of fresh air at all seasons. The M. Chimete, section should not be disturbed at this season, but held over until the early spring.

Oncidions. Amongst the many beautiful and free biocrating species in the grous test can supress. On amongst of more stress of the second of th

Corysta. Every measurement of finish their growth as quickly as possible by placing them at the warm can of the Cattleya house. The plants require plenty of water until the leaves begin to change colour. When the bufles are well matured the plants should be placed in the resting house with the Denderdoismus, and only sufficient water should be given to prevent thrivelling.

prevent: surveiting.

General research.

Perparations must now
the tables to place every plan, in its winter
quarters; each enshable ber placed bort it,
receives the maximum into winter
the state of the placed bort it,
should be acquiring the capturing the
tablest of the carefully
and leady points made good, and
coverpting placed in readiness for the corning
winter. It is also wise to thosoughly examine
the roofs of the lossess for creaded squares,
for these are often the cause of harmfal drip
their harms of the corning of the corning
the corner of the corning of the co

### CATTLEYA WARSCEWICZII.

HIS omerally known in name Cattleya gigas, handsome during the months of July and August. rapid growth during the early summer, and on completion usually bear from one to four large flowers. On the bulbs are particularly strong and well spikes are produced. The adjoining illustration is from a photograph of an eight-flowered spike cu a plant growing in the well-known collection of Clement sack. New Jersey, U.S.A. The bright

light of the United States is specially favourable for species that are accustomed to much sansaine, and Cattleya gigas and the numerous hybrids of Brassavola. Digbyana may be given as two important examples.

### 0 0

MAXILLARIA SANDERIANA.—This species is one of the finest discoveries of Erlward Klabech, who was sent out to Peru by Messes. Sander and Sons to search for new Orchids. He found it growing or the mountains at elevations of about 4,000 feet, from which we may judge that the cool house treatment is most fikely to suit its requirement. The last



Catilego Warscewiczii, an eight-flowerod spike.

theoremy of this elegant Orabel in European was not be consisted of the Orabel Storage and Conference, held by the Boyal Herciedural Conference, held by the Boyal Herciedural Society at Soath Kermaglion, May, Orabel Conference and Conference and Conference and received as First-class Certificate, being reguled as the most important receively in the exhibition. The finels sepale are removed with per conference and the conference and the conference per conference and the conference and the conference per conference and the conference and the conference state of the conference and the conference and the graph of the conference and the conference and the graph of the conference and the conference and the graph of the conference and the conference and the graph of the conference and the conference and the graph of the conference and the conference and the graph of the conference and the conference and the graph of the conference and the conference and the conference of the conference and the conference and the conference and the performance and the conference and the conference and the conference of the conference and the

## BRUGES INTERNATIONAL EXHIBITION.

THE historic city of Bruges looked its horticultural exhibition. The market-Europe, was secured for the occasion, the large open courtvard of the believ buildings being also used, while the numerous halls were completely filled with Occhids and other tender plants. The members of the lury were received in the Hall of the Provincial Governthe evening a grand banquet was given in the Hotel du Commerce. During the opening bell in the famous belfry was rung, and a concert on the wonderful peal of 48 bells was given. The members of the Orchid Jury were: Mons. Firmin Lambeau, J. Crombleholme, Ch. Dietrich, M. Verdonck, Gurney Wilson, C. H. Curtis, Jules Hye and C. Vuyland the awards made by the Jury was ready before the opening of the exhibition, and the enterprise of the citizens may be judged by the fact that large photographs and picture postcards were ou sale at most of the shops during the first day of the show.

secretary conduction in case that for declarasers of the control of the control of the control of the group shown by Moss. Firmin Landbean, who recoved a Large Gold Medal. The specineous maked Cateloys Boson Debleke, a briefly solomet by bool between C Dittains and the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the work of the control of the contr

Mons. Ch. Dietrich, Auderghem, Brusscls, received a Gold Medal Diploma for an excellent group containing Cattleya Comet, a beautiful hybrid between Warneri and aurea; Miltonia Bleuana; Cattleya locida, a graud flower of intense purple colour, and several excellent examples of the blue flowering Vanda cocrulea.

Messes Sender and Som received the First Prires (World of Art and a Large Gold Meda), for the finest trade eighth. Infantled in atsuperiorm. Larlie Cattleys: Theoretical superiorm. Larlie Cattleys: Theoretical point delevene Cattleys are and LeC. Henry Greenword: Cattleys Gardelbusen Slameri and arounder, with out from Bowers, and a Lycaste specially, a hybrid better Slameri and arounder, with out from Bowers, tawing a yellow centred high a wonderful preserves many applications, very showy plant; and Mangliae Schume.

Messar, Charlesworth and Co., Haywards Heath, were awarded a Gold Medal for a good group of various Orchids; those of special merit being Odontoglossum crispans Golden Gem, a beautiful yellow spatted variety: Cyprijectium Daisy Barday; Cattleya F. W. Wigan; Cattleya Rhoda, of excellent colour; and good examples of Cattleya F. W.

Mons, Jules Hyu, Ghent, received a Gold-Medal Diphona for a large group of Miltonias, melating Hyeana var. Argus a good shaped white howev with row flashing on the base white howev with row flashing on the base relating lines on the labellune. Also a layined between M Hyeana and M. Phalenopsia, with dark rose flushed petids and distinct mask to the high. A long specimen Cattleya gigus Tram Melanie Beyrork was also shown, and with Melal.

Mons. Ch. Vuylsteke, Loochristy, received a Gold Medal Diploma for an extensive group of Miltonia vexillarias, the plants being years well flowered.

Mons. Vincke-Dujardin, Bruges, received a Gold Medal Diploma for a large and varied group of hybrids, many derived from Cattleya granulosa. Miltonia Moreliana and numerous hybrids of Lælio-Cattleya callistoglossa were also shown.

Mesers. Sander and Sons also received a Gold Merial for the finest group of Cattleyas, Lælias, and their hybrids; a Gold Medal for the best group of Cypripediums; a Silver-gilt Medal for the best Cypripedium specimen (Lord Derby); a Silver-gilt Medal for the fluest Phalænopsis (P. violacea); and a similar award for the most noteworthy Cypripedium seedling raised by the exhibitor.

## ROYAL HORTICULTURAL SOCIETY.

MEMBERS of the Orchid Committee present: J. Gurney Fowler, Esq. (in the clast), and Jas. O'Brien (hun, sec.) Sir Harry J. Veitch, Sir Jeremiah Cohnan, Messrs J. Charlesworth, W. H. Hatcher, J. E. Shill, A. Dye, W. H. While, Gurney Wilson, de B. Crawshay, F. J. Hanbury, R. G. Thwartes, F. Sander, T. Amstrong, and C. J. Lucass.

H. T. Pitt, Esq., Rosslyn. Stamford Hill, received a Silver Flora Medal for an effective group of excellent Cattleyas and Cypripediums. Angracum Scottianum and several butanical specimens were also shown.

Messra Stuart Low and Co., Bush Hill Park, were awarded a Silver Flora Medal for an extensive group of various Orchids, noticeable plants being Odontoglosum Uro-Skinneri album and Disa grandiflora.

Meisers, Charlesworth and Co., Haywards, Heath, were awarded a Silver Banksian Medal for some interesting plants, the best being Odontioda Madeline. A fine specimen of Grammangis Ellisii was also exhibited.

E. H. Davidson, Esq., Borlases, Twyford, Berks, was awarded a Silver Banicsian Medal for a goosp of excellent Orchids, the most noteworthy being Vanda Sanderiana "Borlases" variety, and several Odontoglossum hybrids.

de Barri Crawshay, Esq., Rosefield, Sevenouks, exhibited Odontoglossum Ethelreda (Edwardii × triumphans) with brownish-red flowers, and an excellent variety of Od. Jasper with broad rose-coloured sepals and petals.

Messrs, J. and A. McBean, Cooksbridge, received a Silver Banksian Medal for a very good group of choice Orchids. A good Cattleya Gaskelliana alba, Odontioda Diana,

and O. Charlesworthii were shown in fine form.

Messrs, Jas. Veitch and Sons, Royal Exotic Nursery, Chelsea, showed Brasso-Cattleya Thetis, a new hybrid between B. Digbyana and C. Aclandise.

Mcsers. Sander and Sons, St. Albans, staged Lælio-Cattleya Mauretania. See "New Hybrids."

Mr. Sidney Flory, Tracy's Nursery, Twickenham, showed some interesting specimens, including Bulloophyllum cocoranum with three spikes, and Anguloa eburnea Tracy's variety.

#### COLITERAL COSIMENDATION

to Mr. W. H. White, Orchid grower to Sir Trevor Lawrence, Barts, K.C.V.O., for a grand specimen of Cypripedium W. R. Lee (Rothschildianum × superbiens) with 5 spikes and 13 flowers.

August 13th, 1912MEMBERS of the Committee present: J.
Gurney Fowler, Esq. (in the chair), and JasO'Brica (Jion, sec.); Sir Harry J. Ventch,
Messrs, Gurney Wilson, W. Bolton, W. H.
White, A. Dye, H. G. Alexander, J. E. Shall,
W. P., Bound, W. H. Hatcher, W. Cobb,
T. Armstrong, A. McBean, and W. Thompson

Sir Trevor Lawrence, Bart, K.C.V.O. Burford, exhibited several interesting species, including Theodorea gomezoides with ten spiless of greenish flowers, a large plant of Lælia monophylla, Denforbium glomeratum with 65 rose flowers, and Brasso-Cattleya

F. H. Davidson, Esq. Borlases, Twyford, received a Silver Banksian Medal for a good group containing the elegant Lælio-Cattleya Feronia; Odontioda Thwaitesii, a very lenge forn; Lælio-Cattleya Venus var. Golden Queen, a good form with very bright yellow sepals and petals; a very dark variety of Odontioda Schröderi, and other hybrids.

Messrs Charlesworth and Co., Haywards Heath, exhibited Vanda Sanderiana, the race Stanhopea convoluta, Cypripedium Rosettii, and the pretty golden flowered Platyclinis filiformis.

Mr. Sidney Flory, Tracy's Nursery, Twickculam, staged Cattleya Gaskelliana alba, Dendrobium regium, and a distinct variety of Brasso-Ledia Helen.

#### AWARDS

## FIRST-CLASS CERTIFICATES

Leljo-Cattleya Glaucus (L. purpurnta × L.-C. Ruisene), from Licut-Col. Sir George Holford, K.C.V.O., Westonbirt (gr. Mr. H. G. Alexander). A very bright and elegant hybrid of dark rosy-manuv colour, the lip ruby-crimson. The finest variety of this

ruby-crimson. The linest variety of this hybrid.

Ledio-Cattleya Godmanii (C. Iris × L.C. callistoglossa), from F. du Came Godman. Esq. Soath Lodge, Horsham.—A very large and richly coloured hybrid. Sepals and petal dark parplish-rose, hir ruby-crimson, with well

### AWARDS OF MERIC.

Lælio-Cattleya laminosa var Mandarin (L. tenebrosa Walton Grange variety x C. Dowinna aurea), from Lieut-Col. Sir Goorge Holford, Westonbirt. A very distinct flower with bright chrome-yellow sepals and petals, the lin claret-purple.

Brisso-Catrleya Henc (C. Dowiana x B-C. Mcline, Chas, Maren), from Messers, Jax-Veich and Sons, Chisca, "Ab heatifal flower with broad erect scuals and petals of a clear rose colour. The wide fringed lip light rose will yellow centre.

Odontoglossum Empress Eugenie (parentage unrecorded), from E. H. Davidson, Esq. Borlases, Twyford. A good large flower of excellent form and substance. Sepals and petals light rose with a few purple spots.

Odoutoglossum Fletcherianum nigrescens (Edwardii x cirrhosum) from Messrs. Jasand A. McBean, Cooksbridge. The darkest Odoutoglossum hybrid yet obtained. Sepals and petals velvety black, lip bronzy-chocolate with white tip and very bright yellow crest.

# to Mr. H. G. Alexander, Orchid grower to

Lieut.-Col. Sir George Holford, for a magnificent plant of Cattleya Tacitus (bicolor Grossii × Germaniz superba) with a tall spike of nine flowers.

MEMBERS of the Orchid Consmittee present:

J. Gurney Fowler, Esq. (in the chair), and
Messrs. Jas. O'Brien (hon. sec.), Sir Jerenish
Colman, Bart. Sir Harry J. Vedeh, de Barri
Crawshay, W. Bolton, Gurney Wilsen, A. Dye,
H. G. Alexander, J. E. Shill, W. H. Hatcher,
W. Coldy, A. McBean, T. Armstrong, F. J.
Hanbury, Suntt Low, and R. A. Rolfe.

F. H. Davidson, Esq. Borhaes, Twyford, Berlas, was awarded a Silvergilt Flora Medal for an extensive group of excellent Orchids. Included in it were strong plants of Cattleya colmanisms, a very beautiful vairty with distinct dark-purple veining, and several Miltonias. Odordoplessum Rolfeco Od. Ceres, with Beautifully tinted flowers, and Cyptirechim Liesalhi were also noticed.

H. T. Pitt, Esq., Stamford Hill, N., was awarded a Silver Banksian Medal for a very effective group containing Cypripedium Wootonii, C. Charles Rickman, C. Felicity, and C. Baron Schröder ardicas. Interesting species were represented by Catasetum finishmum and Beresta Buechtata. The elegant Houlletia Brockleburstaina and several new hybrids were in prominent positions.

Messrs, Sander and Sons, St. Albans, received a Silver Flora Medal for a large group of rare species and other Orchids. The



rare Bulbophyllum galbinum, B. virescens, B. congocusis, and Dendrobiam Dartosianum were in good form. Laelio-Cattleya Fabius, a very dark variety, Cattleya suxvior aiba, and

a very dark variety, Cattleya suavisor alisa, and C. luteola var. Ruzhi were also shown. Mesers. Charlesworth and Co., Haywards

Heath, secured a Silver Baraksan Meddl for a very select group of species, including the scarce Mildous Schridderian, the elegant Houlletia Wallisia and Angraecam sponneum. A kage speciene Aerides Sandernaum with three well developed spikes, Calambe violaces, the interesting Polycycris muscifera, and a good variety of Cattleya Gaskelliana alba saver also noticed.

Messas, Stuart Low and Co., Bush IIII Paris, Enfield, secured a Silver Banksian Medal for an effective group, in the centre of which was a grand specimen Leha crispa with no leas than 45 flowers and bushs. The handsome Anguloa Ruckeri, Bifrenaria tetragona, and Sobralia xentholecute were also shown,

Messers J. and A. Mellean, Coolsbridge, Sussex, staged a number of excellent Orelinds, those of special merit including Cattleya Dowama, a large specimen Maxiliaria grandifora, and a beautiful plant of Vanica Scaicieriana with two good spikes of large flowers, J. J. Neal, Esq. Lymwood, Park Road,

Penarth, exhibited Epideredrum laterale, with two spikes of light greenish-yellow flowers. The specimen was obtained from Central America.

Messrs, Mansell and Hatcher, Ltd., Rawdon, Yorks, staged Trichopilia laxo, the elegant Acineta densa, and Brassia candata. 1. S. Bergheim, Esq., Belsize Court, Hamp-

J. S. Detguena, 1995, Decitive Conference Stead, exhibited the interesting Balloephyllam audiscapum and Angracum O'Brienianum. Messre. A. J. Keeling and Sous, Westgate, Bradford, staged Vanda cerulea, the pretty Eria rhyrcostyloides, Cypripedium Penelone and Cattleya Harrisonies violacca, a very dark

J. Gurney Fowler, Esq., Glebelands, South Woodford, showed Cyprinedium Daisy Barclay, a very elegant hybrid which has already reprined a First-class Certificate.

Messrs, Armstrong and Brown, Tunbridge Wells, exhibited Cypripedium Clara Arm-

strong (Germaine Opoix × Prewettii), a very good hybrid, the dorsal sepal being well developed.

#### .....

### AWARDS OF MERIT.

Oriontieda Euterpe, Davidson's variety, from E. H. Davidson, Esq., Burlases, Twyford, Berks. A great improvement on the original plant. Flowers of good size, rich scarter-red, the birellum prettily marked with light rose. Latio-Cattleya amabilis, Horlases variety.

from E. H. Davidson, Esq.—A large, wellformed flower with very bread petals, of light rose colour, lahellum dark purple with bright yellow side lobes.

Odontoglossum Helène, from E. H. Davidson, F.sq. -A handsome hybrid. Flowers of very good shape, handsomely blotched with wine-purple; apex of lip broad and pure white.

Laclio-Cattleya Golden Flerce (L.-C. Golden Gem x Dowiana aurea), from Licat. Col. Sir George Holford, K.C.V.O., Westonbirt (gr. Mr. H. G. Alexander). A very bright goldenyellow flower, the labellum marked in the throat with crimson.

Augraecum O'Brienianum, from J. S. Bergheim, Esq., Belsize Court, Hampstead. An elegant example of the genus. The plant earried five spikes of medium sized white flowers.

### CULTURAL COMMENDATION

to Mr. H. G. Alexander, Orchid grower to Lieut-Col. Sir George Holford, for a magnificent plant of Cartlleya Euphrasia with a spike of ten well developed flowers.

BRUSSELS EXHIBITION.—An exhibition of Floral Art and Hortschlural Preduce will be held at Brussels, October 20th, 27th, and 28%, 1918. Division I, of the Schedule contains three classes for decreated tables of cut Orchal flowers, and Division III, includes nine classes for various Orchad species and hybrids.

## MANCHESTER ORCHID SOCIETY.

MEMBERS of the Committee present: Rev. J. Crombleholme (in the clair). Messis. R. Asiaweth, H. Thorp, J. C. Cowan, D. McLeod, J. Bamber, C. Parker, Z. A. Ward, A. J. Keeking, W. Holmes, A. Warbarton, and H. Arthur (Secretary).

Annu Generary,
R. Ashworth, Eug., Newchurch, was
awarded a Large Silver Medal; Col. J.
Rottlerford, Blacchurn, received a Silver
Medal; J. McCartney, Esq., Bollon, was
awarded a Silver Medal; Rev. J. Crombiebolme, Clayton-ie-Moors, received a Brouze
Medal; R. b. Doux, Esq., West Derby,
Messrs. Charlesworth and Co., and Messrs.
Stant Low and Co., staged interesting groups.

### AWADING

#### FIRST CLASS CERTIFICATE.

Luclio Cattleya callistoglossa Marifield variety, from R. le Doux, Esq.

#### AWARDS OF MERIT.

Odontoglossum Miss Arline King (parentage unrecorded), and Lælio-Cattleya Purple Oneen (L.-C. Jona × C. gramilosa).

both from R le Doux, Esq.
Cattleya Gaskelhana delicata, from J.

McCartney, Esq. Sophro-Lælia Leda, from Messrs Stwart

## ow and Co.

The President's Cup (S. Gratrix, Esq.), and a Prize to the gardener, for groups and

individual plants.
O. O. Wrigley's Gold Medal and a Silvergilt Medal to the gardener, for Cypripediums.
Z. A. Ward's Gold Medal and a Prize to the

gardener, for Ladias, Cattleyas, and their hybrids. Cypher's Gold Medal, for general excellence, and Sander Prizes, for groups.

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