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THE

ORCHID HYBRIDS.

HANSEN.

THE ORCHID HYBRIDS.

ENUMERATION AND CLASSIFICATION

OF

ALL HYBRIDS OF ORCHIDS

PUBLISHED UP TO OCTOBER 15, 1895.

BY

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DEDICATION.

MAXWELL T. MASTERS, M. D.; F. R. S.; F. L. S.;

EALING, London.

My Dear Sir,

Just ten years have passed since the day that you laid your hand upon my shoulder and lead the way to the room where the Scientific Committee of the Royal Horticultural Society in South Kensington met. Just ten years. It is Sunday to-day. I look from my desk over the snowcapped peaks of the Sierras in the direction of the land where you reside. Quietness reigns around me. There is not a soul near but my dear wife underneath the window, busy trimming dying branches out of her flower bushes. The sun is setting beyond over the Pacific Ocean hundreds of miles away, but still to be recognized from my lofty Alp.—I come to you. I hear the bells ring as of yore, when I first caught sight of your fair land. I was coming up the Thames on that Sunday morn after I bid farwell to my native land. Dear Sir, lay again your hand upon my shoulder and press my right with the other as you did when first we met. I breathed the air of this grandest of all churches with its high, azure dome, and still fresh with this air, still reverend with the impression of my mountain home, I come to you with a gift, praying for its acceptance.

See here this book: A list of Orchid Hybrids, complete and classified. Do not use the few moments of our meeting with its perusal, but let me say a few words with my gift. My book has two qualities: copiousness

and system. And two reasons exist for my gift: respect and friendship. Accept out of respect the labor part, the gathering of so much material. You are a worker, and your hidden hand as an editor has done more service to our gardening-world than the thousands of readers of your journal have a full conception of. There is but one "Gardeners' Chronicle" and you are its molder. I do not want to rank my humble work with your achievements; far from it. But I believe it honest enough to be dedicated to you, as a sign of respect and acknowledgement out of the wide circle of those who appreciate your service to our profession. The other reason is one of personal character: accept, out of friendship, the dedication of the systematical, the genial part of my work. Its idea, its classification is my own. Whatever its success in the way of reception by outsiders may prove to be, will you take it from me as a sign, an humble proof of my gratefulness for kindnesses extended upon me? Please, do not waive the idea. I have experienced more than once what it is to be cast upon a rugged shore and receive succor from an unlooked for direction. One word of encouragement spoken at the proper time, goes further than riches towards satisfaction in this struggle for existence. Ten years have passed over the land; and vivid like my love for orchids was the remembrance of your kindness.

Dear Sir, I thank you for your friendly reply. I do not hear any longer the pealing of your Abbey's bells. There is but one up-train on Sunday and I cannot afford to miss it. I live a lonely life, lonely because I have no occasion to discuss with fellow-thinkers the changes of this life and world. But I live with you and for you, and as a proof of my existence see here this little tribute of leisure hours. Time has wrought its changes

with you since we met last. Take from me the wish that fate may be gentle with you and give you still many years in enjoyment of your favored pursuits.—I? O never mind about me. We human beings have all our share of burdensome times. I have been side-tracked for years; and if my mind has been forced to abandon its flight for a period, let me tell you the glorious truth: I live a happy home life. I had occasion to show my wife a few orchids, and tell her about the rest. She is a soul like the character that dwells in our spectabile ladyslipper. I promised her to take her to your land and show her your treasured orchids. I trust that day will come, and may fate grant that we find you well and hearty. Farewell!—

Our sun here has set. There is no noise to be heard but the crickets in the grass and the ringing of my cow's bell from the pasture below. My dear wife has left her pansy-bed, and I hear the solemn strains of Chopin's Funeral March, a favored tune of mine. I have to leave my desk and pass the rest of this Sunday in my wife's company. Farewell again

from sincerely yours

GEO. HANSEN.

Jackson, Cal., May 20, 1894.

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I.

REVIEW OF THE ACCOMPLISHED AND INFERENCES FOR FUTURE WORK.

"AFTER ALL"—REASON FOR WRITING THIS BOOK—HOW SHOULD WE CLASSIFY ORCHID HYBRIDS?—WHAT I DID IN CLASSIFYING—WHAT KIND OF NAMES SHOULD WE APPLY TO ORCHID HYBRIDS?—A WORD TO THE ORCHID COMMITTEE OF THE ROYAL HORTICULTURAL SOCIETY OF LONDON—A WORD TO THE RAISERS OF ORCHID HYBRIDS—A WORD TO THE PATRONS OF ORCHID CULTURE—A WORD TO THOSE I AM UNDER OBLIGATION TO.

After All.

"After all," are the words of the orchid cultivator, when reading the announcement of my list. It has been embarrassing for him to read, hear and be talked to about this, that and the other orchid hybrid, and not as much as an enumeration, not to say classification, was to be had in print of any nation's tongue.*

"After all," so sighs the raiser of hybrids, the man who recognizes the value of an artificially raised orchid. He did not know for certain which crosses had been perfected, and without a guide like my list, he could work in the dark only, and even then despair of light coming to him after years of hard and trying work.

"After all," so exclaims the man acquainted with my intention of compiling this list, for already so long

* E. Bonhof, *Dictionnaire des Orchidées Hybrides*,—appeared since.

a time that he gave up ever hearing about the realization of my plan, though he had given me in good faith and with pleasure the use of his "record" in the hybrid raising community of orchid growers.

"After all." Let me too vociferate thus, and breathe a sigh of relief. I was nothing more or less than one of those hundreds of young enthusiasts, to be found where orchids have a home in the glass-structures of the plant-loving nations. But it was only a short while until I perceived the necessity of keeping track of those "mules" springing up all around us ever since Dominy and Seden achieved their first successes. The nucleus of my collection of notes on orchid hybrids was formed in the year 1884; just ten years ago this month.—Did you not read about the stick of tropic-grown wood washed upon the shores of your Isle of Wight? So with me. I was reared and grew up thousands of miles away from where I landed in this my resting place. Like the stick that you picked up and tried to trace the origin of, so have I been tossed about by the gulf-stream of fate, and grew rugged and rough, dancing and floating in the whirlpools of this life's waters. But hidden under the smooth, indiscernible outside of water-worn bark, I had concealed the marrow of my strength, the value of my life. The sheltering spinal column grew crooked, and the capability of erection is very much impeded, but in this dwarfed state of brain and life I still retain the character of my kind. You can still tell by the grain of your stick where the soil should be found that gave nourishment to its roots. —It is but a trifling addition to our knowledge, this my hybrid list. But it is the best I am able to produce under the circumstances. You who knew about my plan, do not call little the effort made by me. I have guarded and nourished carefully and lovingly the nu-

cleus of my list through a succession of ten years. I have added and revised; I have stopped and entirely suspended the work begun then, saying to myself over and over again: ere you place this list before the public ten others will be ready likewise. None of them made their appearance. And again I stuck to my plan. A year ago last Xmas, that was the time when you should have had my list on your table of gifts. But the funds to cover the expense of printing (I learned long before this that I had to be my own publisher) they have been taken from me after being for years before my very eyes. Did you, my reader, ever perform work and did not receive the duly earned remuneration? I can sing a goodly song of such experience, the refrain of which sounds something like: Such are the ways of the predatory well-to-do. Still, time heals all sores, and once more approached the day when the messenger from my recluse should go forth. But in all of us is yet fresh the remembrance of what the papers love to term "hard times." This course of civilization, this gradually brought about accumulation of conditions and circumstances to rearrange the social positions of millions, to please the trifling fancies of the "upper four-hundred," it approached me while my hand clutched the glittering metal saved, saved and saved again to pay for my pet's outfit: and my grip loosened when it came to the question of holding above water the head of the only other one born by those whom I call father and mother. This song has the well-known refrain: Such are the ways of the generous hand-to-mouth.

(P. S.—April 27, 1895. One more year has passed, and it is just one span of twelve months since I, driven by desperation, stood before a son of Sem and asked him to loan me the required funds to carry on the print-

ing of what now, after it seems a decade, will shortly appear before you.—A son of Sem.—I never knew personally of a generous, unselfish trait of that race to a son of Ham or Japhet. But I had heard from a man whose every word I would endorse and spread as gospel, that *this* man, a glittering member of the *jeunesse dorée*, was the only representative of all his society companions who could be looked up to as a man of higher principles. To him I went. Not humble; I was not begging. Not proud; I was petitioning. Petitioning for what? For a paltry loan of a few hundred dollars, on interest which would admit breathing under. He knew of me; he knew my salary; he knew what position I held. And I knew that he had the disposal of not hundreds of thousands, nay, millions.—I went to him, and went from him. Not angry with him; I knew better. Angry at me for having gone against my conviction, my positive opinion of judging of his kind with the right measure. Twelve months have passed. The *Gardeners' Chronicle* has brought a list of hybrid Cypripediums. Mr. Measures has felt induced to publish a second edition of his list, and now comes the *Orchid Review* with its first installment of Selenipedia. Twelve months of waiting, of saving, of fearing. Twelve more, and my manuscript would remain where it is. If any of my readers know what it is to have once lived in affluence, and to be reduced to need, if he knows that, conditions a hundred times worse than to have been poor at all times: he better join with me into the most damning curse which ever has been pronounced over riches. The French Revolution of crime and murder may have been nasty to those subjected to the blind folly of an embittered mob. But, poor creatures, with all your terrible deeds, you can never equal in ten such periods the see-

ing, the calculated, the premeditated cruelty of the rich reigning over and corrupting amongst us.—It is glorious satisfaction to know that a day of reckoning is bound to come ere night settles around us.)

Do not mind the spoiling of so much paper through relating of personal grievances. But I have worked with hundreds of my acquaintances in rank and file, and to them I owe an explanation how the quiet scientist of their knowledge has developed into a politician after disappearing for so long a time, as if swallowed by an abyss. If I still cling to the plan of this my orchid hybrid list through all these trials, forgive me if I maintain that my effort was not a small one.

Reason for Writing this Book.

That the interest in orchids is general and on the increase was already manifest ten years ago, and it is more than ever so this very day. I do not like to call this state a sport, a fashion. No, I see in the increase of the interest taken in orchids a higher standard of taste and judgment of the plant-loving world. There are a large number of species of plants from all regions of the globe in cultivation which have quite as peculiar a way of growing as our orchids, though perhaps for them as a genus we claim a more general interest in their oddity, but I have found the most just solution for this problem in the character of the orchid flower. My ideas upon that subject were put into words ten years ago, and as I was then more direct under the influence of observing these plants and their flowers, I do not like to rewrite my words from those days but give at another place in translation what belongs more correctly here.

The advance-guard of the army of orchid hybrids which has been arriving with us in the early sixties, has been followed by a steady increase of their number until now we almost despair of ever getting order into the leadership-lost legions. The Cypripedia-crosses, which have been recorded by me, pass the thousand mark. If I should be told that I come too late with my effort to restore order in this vastness of accumulated material, I feel satisfied such voice must come from a man who has been baffled in the attempt to sift the multitude of varieties for himself. I agree with him that it is a great pity that a weeding out of this bed of plant-names has not taken place before this, but what is this wilderness grown up in the past thirty years to what it will be only three years hence? We can not take up a journal without finding reference made to the hundreds, nay, thousands of seedlings growing up in every collection where orchids find a home. Like the cat in Scheffel's Trumpeter from Saekkingen, remarks:

Seinen Hausbedarf an Liedern
Reimt ein jeder selbst sich heute

so does everybody who devotes a few square yards of glass to orchid culture try to raise his homeconsume of hybrids. It is, therefore, good time yet to come forward with my list, before the period sets in in which we will attribute more praise to the products of home cultivation than to the importing of ever new varieties.

If you read in one number of our principal horticultural journal that the old, old cross of Cypripedium vernixium has been reraised with no material difference than the use of another variety of the original species, and that its progeny receives the two distinct names of Murillo and Dibdin; and the next week's edition of this very same journal tells us of two more places where this

same hybrid sprung up, and while the seedlings from the one place are recorded as merely vernixium, the other is given the name of Daviesianum; if you notice this, and are interested in such culture: does it not dawn upon you that it is very high time that some definite plan was devised upon which to depend for naming and classifying the nurselings of our care? It must. And should not every one rejoice and gladly consent if somebody proposes such classification, provided his list is a presentable and acceptable one? I myself do not believe in authority any more than the next, and openly confess to the knowledge of the detriment worked unto science when blindly following the arrangements of an autocrat. But now when the trouble has assumed such threatening proportions, and everybody interested is clamoring "Where are we going?" would it not be best to adhere to some plain system and be ruled by it in future? Do not mind that it is an obscure and unheard-of person who proposes a reorganization. The gambling fraternity of the race-course has its stud-book, and swears by its record. Let us—dealing with scientific objects—unite and stay by a standard of organization, not minding the hurting of the feelings of this or the other just because his seedling's name is not the legitimate one.

My list should establish order in the chaos, and the purchaser of it can depend that with every year I will put before him, at a nominal figure, the supplement record of the past season.

How should we Classify Orchid Hybrids?

Let us contemplate the possibilities of a single instance to illustrate how we should be guided. Let us take Cypripedium barbatum and insigne, for instance. Do not pay so much attention to the scrupulously scented out varieties of those willing to pay for the naming of such unica only. There is but one variety of barbatum which claims sufficient distinction to exert a determining influence in hybridizing, viz.: Crossii (more righteously named Crossianum). Of Cpd. insigne nothing but the three varieties, Chantinii, Maulei and Sanderæ, will dominate sufficiently in hybridizing to admit of tracing in their progeny. It will never do for us to allow more than the mere citing of any of those varieties recorded by legion, but recognized only by those who have a personal interest in any of them. We therefore have the following possibilities:

barbatum ♀ ..... ×	insigne.....	—Ashburtoniæ.	
" ..... ×	insigne ♀	— "	var.
" ..... ×	" Chantinii, Maulei or Sanderæ.	— "	3 var.
" Crossii.. ×	insigne or any of its 3 var..	— "	4 var.

Such are the possibilities. But then, how many of them will stand the critical examination of an unbiased judge and pass as sufficiently distinct to deserve varietal rank? Very often the reverse of the original cross will turn out to be identical, and while the possibilities of the above hybrid could be increased *ad infinitum* by allowing the establishment of varieties according to whichever sexes of the kinds were employed in the progeny, I do not enumerate such chances, as it must

be left to the committee before which such crosses may be put for a certificate of existence to determine whether or not sufficient character has been obliterated to refer the progeny to varieties already catalogued.

The offsprings of an identical cross should not receive different names unless a variety has been used which gave additional and prominent features to the seedling.

To apply different names to seedlings originating from the same seed-capsule is an insult to intelligence. Such cases have happened, but should be objected to in the most outspoken manner. I am aware though of the possibility of suppressed characters, of missing links occasionally appearing, in which case their existence should be put before scientists to be properly taken notice of. Such plants should be bought up by botanic gardens to be preserved becoming their kind. [I speak of one case, Cypripedium medea monstrosa—Ceres later on]. What I am alluding to in general is such dubbing of bastards as Cpd. Laforcadei and Barteti, the Jolibois annex to nomenclature, the whole rigmarole of Reichenbach about the set of Warner's hybrids herded under the rubric of Cpd. calophyllum, or Sander's salvation-army-lot of daily-fresh-to-order bastards.

If reverse crosses are displaying features entitling them to recognition, accord it to them, but only as varieties of the antecedent.

If you meet with obscure crosses, be it that the exhibitor was not concerned in their origin, or be it that a stray seedling reaches the flowering stage, or be it that the person growing the plant was not of the caring kind: refuse them recognition from the very outset. Compare their description with anything already recorded, and if any ways admissible, order them under such lines. It may happen though that the plant is remarkable for

one point or other, so glaring as to deserve attention: then admit it, christen it, and watch for every plant which may be recorded later on displaying a character similar to the one given thus recognition. In such case, do not grant the newcomer specific rank, but subdue its claim for originality under the title of the one given a previous certificate, the clamor of the originator of the bastard notwithstanding.

If a cross has been given the name formed by combining the terms of his parents—no matter whether it has been done rightly or wrongly according to botanic usage—uphold the name. If Cpd. Javanico-Spicerianum is established, do not try and rechristen it lutescens (what for all I know may have been done unconsciously). Remember that it is the rule of botanists when joining such names, to place the pollen parent first. But though it is more than desirable to adhere to such usage, it is not of such piercing effect as to warrant a rechristening of the material already known as interfering with such rule. Sometimes the reverse is perfectly identical. It can be suggested that we deal with natural hybrids also and—unless proven by repetition in actual experiment—their parentage, though admittedly the one given in joined name, leaves still room for speculation as to which was the seed-bearing parent.

Bigeneric hybrids claim a place of their own. If we recognize Laelia and Cattleya, and join either with any orchid, we must uphold the difference of their progeny and create a new class for each group. Do not admit distinctness in generic rank to the reverse cross, but make his seedlings subservient to the class already established. This rule should stand even if such characters as the difference in the pollen-masses of Laelia and Cattleya should be entirely obliterated; it should be up-

held, if for no other reason, for the convenience with which their kind may be picked out and classified.

The clearness of our system will be materially interfered with as soon as we engage secondary crosses for our operation. How our speculations on the possibilities illustrated in the case of Cpd. insigne × barbatum can become fallible, that is obvious to all those in daily contact with the products of cross-fertilization. Such cases are not rare now, and will become more troublesome frequent the more complete the ranks of our army of hybrids get to be.

As soon as secondary hybrids are employed, their offsprings will lose so many of the original characteristics that they never should be allowed to go forward as christened individuals, but should be sunk in names already established, though the fact of their creation and the reasons for their subordination should be chronicled. We have not yet entered the time when we will be bothered with tertiary and quartery hybrids. But when we are, it is then that an orchid committee will be of service, a *conditio sine qua non*. The most glaring instances, so far as I know, are the crosses of Selenipedium caudatum × longifolium. The first cross of that kind received the name Spd. grande, the variety Roezlii of longifolium having served as one parent. We are made acquainted later on with the Spd. macrochilum, the result of crossing caudatum Lindenii with longifolium. Of course, we are forced to reduce this cross to varietal rank, the two species having been employed previously. Now comes Mr. Holmes, the cultivator of the orchid treasures of the late Mr. Geo. Hardy, and introduces to us his Selenipedium Hardyanum. Spd. caudatum and Ainsworthii × were the producers of his plant. The report of the orchid committee of

the Royal Horticultural Society of London (Oct. 18, '92.) states its "great resemblance to macrochilum." The article dealing with the exhibits of the Royal Botanical Show at Manchester, says right out "synonym with Spd. macrochilum" (Gard. Chron., May 27, '93). And, looking at a paragraph (Gard. Chron., Dec. 31, '92), we learn "positively the same as that raised by Messrs. Veitch, of Chelsea." And in the meeting of the R. H. S. of Jan. 17, '93, we have before us Spd. Penelaus raised from crossing caudatum Lindenii with (Ainsworthii) calurum ×. What is that but a variety of Hardyanum, and this same Hardyanum is "positively the same as macrochilum."

Cases like the foregoing are matters to be decided by an authority, as all the committees called together "on orchid nomenclature" have been flat failures. I am not in a position to decide those questions, being too far removed from the center of orchid cultivation to have a clear insight for final opinion. Those of you who are in such a quandary, apply to Mr. Rolfe, of the *Orchid Review*, and submit your case. Remember that it is not well possible for your orchid committee to combine all the knowledge required for such specialties in your ranks to guarantee correctness and uniformity for the subjects under question.

Taking secondary hybrids in general, do not allow any of those which contain *more* than three quarters of the blood of one species to figure as named hybrids. Cast them into the lots where their seven-eighths blood belongs, knowing how immensely variable each and every species is, if you only take the trouble to find it out. If you cross Spd. longifolium with cardinale × you come about as near to Sedenii as need be to shear them over one comb. To name the cross of Calanthe (Sedenii ×

× Veitchii×), Florence is absurd, and many more cases like this can be cited. Such should not happen any more in future, and should be suppressed if forced upon the orchid growers.

What I did in Classifying.

My arrangement of the list is so plain that no explanation is called for. I have followed the rules laid down above, and handled the material on hand without creating any new names. I let the established ones pass review and list them according to their qualifications.

If a hybrid was mentioned as having been raised, and nothing but the parentage was given, it is entered as found, and thus indexed.

If the seed-bearing plant was mentioned as such, I have marked it in every case. If the cross in question was repeated at some other place, and is arranged by me in the proper line, I have again noted which of the parents was the seed-bearing plant, provided such came to my knowledge. If I say "also raised by so-and-so," it means that the same parentage was used at that time, whatever it was in the first case. If no sex was marked in the first instance, it is to be understood that I am not acquainted either with the sexes used for the duplicated cross, provided I have not stated otherwise.

As I have recorded all crosses coming to my knowledge, even if they did not reach the flowering stage at the time of registering, my list contains already material with which we may meet again on future occasions. It must be remembered, though, that such crosses are not indexed so as not to interfere with the crosses known under the joint-names. I considered it wise to take cognizance of those hybrids nearing the time of their

coming of age, to partly offset any efforts of renaming them.

The only times that I have altered names attributed to hybrids were those of which their record stood in direct opposition to their name and would lead to misapprehensions. As long as no plan has been agreed upon to have secondary hybrids, which revert back to either pollen or seed-bearing plant, arranged in a different manner, I did not feel justified in casting thus hybrids with seven-eights blood of one kind to the controlling parent. Still I believe this to be the best plan, and by looking over the number of hybrids related to Spd. Sedenii, it becomes obvious that ere long we will be forced to proceed upon such rule. But I, with the first attempt to classify the hybrids of orchids, keep on *terra firma*, if for no other reason for that of avoiding attacks upon my work. Whatever criticism may be called forth by this proposition, I will gladly rearrange in the supplement of next year's record what may be deemed most acceptable. Hoping that this my discussion will call for further and wider debate, I put together the cases which I changed. If the authors of the following hybrids attempted to make an arrangement on such lines, they should have stated it at the time of issuing the certificates of birth in writing the descriptions. They have not done so, and to do away with those perplexing cases I cut their names in two which, luckily, in no case interferes with previous nomenclature. They are

Cypripedium (Crossianum) Castle Hill.
" (callosum) sublaeve, syn. Siamense.
Selenipedium (macrochilum) giganteum—not to be taken for Cypripedium giganteum.
Thunia (Veitchiana) superba.

Seven more such *contradictiones in adjectum* happen to be synonyms of previously established hybrids and should be engrossed by them. They are the Cypripedia marmorophyllum superbum syn. Parksianum, villosum violaceum syn. Germinianum, Haynaldianum Mdlle. Clotilde syn. Clotilde Moëns, Harrisianum robustum syn. Loochristianum, Dauthieri violaceum purpureum syn. Marguerite Mantin, Dauthieri latifolium syn. Alfred Bleu, and Ddr. splendidissimum illustre syn. Rubens.

Cpd. modestum (Harrisianum × × tonsum) raised by Grey, claims priority to Sander's cross of that name from (purpuratum × Io ×), and to signify in its name the origin, and to also brand it as the only one intermeddling in any way whatever in my list I call it Cpd. molestum.

What kind of Names should we apply to Orchid Hybrids?

A name is an expression put up for convenience in usage, or rather is supposed to be such. That one nation has its people's tongues moulded in a different way from another is a fact not to be denied nor to be quarreled over. Pronounce it to suit yourself, even if you cause your neighbor's lips to ache with the words of ridicule pressing upon them. We gardeners are cosmopolites more than any other artisans, and being educated besides we adapt ourselves to a good many terms. But let us be spared such mouthful of Greek like we have inherited from Reichenbach filius. Knowing him as well as I do, I feel satisfied he tried to force his unapproached education upon us. There have to be some Solons amongst us; we can not all be fools. But the

links between the two are wonderfully easy to trace. And then again such ladles full of molasses of personal flattery as are dished up to us from such striders as Sander & Co., they turn the stomach of any man with an every day constitution. An orchid hybrid is a bastard after all, and most of them so far retain the odor of illegitimacy as long as they show a flower to look at. Since the days of Dr. Lindley it is against good taste to attach a deserving collector's name to a decent orchid; that would make a plant unsalable; there would be "nothing in it." Please, those who are performing the acts of christening these foundlings, do not consider the name of a gallant collector the proper noun to attach to a characterless hybrid. To feed them with the swill of obsolete bastards is adding insult to the injury done to most of them every day of their life. Such idiocities as to attach names as Calantha vestita Cornelius Vanderbilt to a hybrid which at best is no vestita, and then, such common rubbish as now these days every fourth-class gardener can raise by the box full," to be bespoken", that looks to me like jeering at the man whose name has been used, and as an effort to perpetuate the contempt which has been put into such act by the savant. Such footprints in the trail of science lead to the very same road which "The Professor" used to pace, and end in the orchid junk-shop of the "Xenia," the garlic odor of which refutes their xenia character and verifies the expected, when in one number only "three of the four species described must take the ranks of synonyms." Of course personalities of "Sanderianum" and "Wendlandianum" have to pop up from their mixed ranks and remind us of the fact that when people can not gain glory from unlooked-for quarters, they pick the dried up laurels from their spice-chests and decorate each other.

Messrs. Veitch have set a shining example when naming their select lot of seedlings after objects of fiction and mythology. Latin has been the language of science and is to remain such. Those hybrids which received names after the fashion of scientists, well and good, they have to stand. But let us avoid such expressions further on.

When acknowledging established varieties, be guided to some extent by certain authorities, say Veitch's Manual, though I myself have preferred to disagree with several of them as I mention further on. Do not attach immense importance to such trifling distinctions as some of your long-way's-down species exhibit. You name them by the big noses and drawn-out-of-shape faces which they please to exhibit, and because they are different in such ugly characters, do not persuade yourself to believe that they are pretty and worth preserving.

About joined names, I have had occasion to speak before.

Do not reuse names already established as synonyms. Once synonym, always synonym, is a rule accepted by so many that it is rejectable to invite its application. Still, do not try and rename those you encounter. Life is short at best, and our fraction of gray matter too much employed already now to call for further engagement. Avoid cases like Cpd. Simonii and Siemonii.

But, above all, do not forget your × sign to mark the plant in question as hybrid. The *Orchid Review* has applied it before the species name throughout. Much as I like to follow that journal's example, I set it after the word. Reichenbach, deceased, I understand, proposed two and three, to mark secondary, etc. Lucky for him to depart life ere he would be obliged to employ as many as twenty. By the time our mule-breeders got

that far, he would have had a fair sized cemetery along every one of those little curiosities. The modern art of naming lets us earthlings escape with a single cross, but not without that. If anybody should be tempted to remark that I have not followed the rule throughout this book, I neglect it only then when it is plain from the sentence that I speak about a hybrid. Remember, too, that I am one of those dancers that have to pay the piper, and I have had to pay enough for extra type, without laying in an unnecessary stock of crosses. I do not see any reason whatever, though, for burdening bigeneric hydrids with a cross. Ever since Dr. Masters established his Philageria, everybody concerned knows that a hybrid is spoken about as soon as you pronounce a plant to be a Catlælia, a Zygolax, etc. To affix to them a × is nothing but an uncalled for display of wisdom, and burdensome at that.

We have grown into the habit of adopting the most cumbersome conglomerates of names for bigenerics, without uttering a word of objection. It may be the rule of scientists to express in their combination-name as fully as possible how the plants in question originate; but I want to enter a very urgent claim for convenience's sake. We have to learn every name, good or bad, difficult or easy to adopt. Hundreds of roads lead to the seat of St. Peter, and if we are obliged to make our way towards it, why not take a ticket for the most direct route, the most convenient? If I recollect right, it was Mr. H. N. Ridley, then of the Museum of Natural History, South Kensington, who proposed at the Orchid Conference (sic!) at Manchester, the name of Catlælia for hybrids between Cattleya and Lælia. That is as good and convenient, as euphonious and significant as Dr. Masters' classic Philageria. The scientists use these

names but once, where we will have to deal with them a hundred times. They owe us the consideration of convenience, and if they deny us such blessing, let us revolt and rule ourselves. I, therefore, propose the following, besides Mr. Ridley's Catlælia for (Cattleya × Lælia). Have Cattleya and Lælia been crossed with Epidendrum, Epileya and Epilælia resp.; with Sophronites, Sophroleya and Sophrolælia resp.; with Brassavola, Brassaleya and Brassalælia resp.; with Sobralia, Sobraleya and Sobralælia resp. The cross of Phaius and Calanthe name Phalanthe; of Zygopetalum and Colax, Zygolax; of Cypripedium and Selenipedium, Cysepedium, etc.

The assault upon nomenclature by the French *savant* who committed the horrible Miltoniopsis (do not let us mention his name) shows at once how little understanding and discernment that man possessed for the object in question.

Looking at the legion of names applied to such common hybrids as nitens, Measuresianum, Harrisianum, œnanthum, Ashburtoniæ, and what else their lot amounts to, I do not feel like blaming those who christened their children. Every crow is entitled to the belief that her squabs display the deepest black of any. But as soon as they try to burden us with the products of their fertility, we object to their rabble. Those hybrids were in reach of possibility of all those who did not possess any other plants to parent with. And poorly as the raisers of those hybrids were placed, the next degree of richness in collections were but somewhat better. They all had an excuse so far for dubbing their flock, but from this date they should be refused recognition. Simplify the nomenclature, and a great step of advance will have been made.

A Word to the Orchid Committee of the Royal Hort. Soc. of London.

It is to that body of men that we have to look for enforcement of rules which may be adopted and endorsed by the orchid-growing fraternity. If you can agree upon a line of proceeding, subject to it every hybrid which may come before you for judgment. It must be hard for a grower, after having raised a hybrid Cattleya in years of care and watchfulness, and glorying over it at the time of flowering by attaching his illustrious initials to it, to be told then in cold language, that such plums have been picked long before he got to the top. But law is law, even if applied to such nonentity as the boldest of the gorgeous orchid hybrids. It also should be remembered that when a name has been attached to a plant once, it has claim to existence, if it be only under the obscuring cover of synonymy. If you cannot relieve us from the Oregon boot we drag about already now, at least avoid adding to its burden.

A Word to the Raisers of Orchid Hybrids.

The first orchid hybrids were raised in the early sixties, and they were but scattered pioneers of the army which has been following their appearance in endless number ever since. The hybrids of Cypripedia only, that is to say the actual crosses perfected (not to count the aggregate numbers of seedlings raised), has reached the embarrassing number of one thousand. If it was nothing but the idea of perfecting a cross between orchids which induced the patrons of those nestors among the multitude to raise that advance-guard, the appearance of Selenipedium Sedenii taught us at once

that we might be moved by other reasons when crossing our orchids. We learned that the health of our cross, the vigor of its system was more fit to endure the treatment we offered it than the sickly species used in their parentage—exceptions as there may occur. I admit that we have made wonderful progress in the culture of our orchids, collected from so entirely different surroundings, and brought into the narrow frames which we make their new home. But need I recall the fact that we are far from managing a Cattleya citrina? that the whole section of the Cyrtochila Oncidia are this very day as much of strangers to us as they were a dozen years ago? Let that suffice to intimate that we ought to pick out every poor grower amongst our pets, and cross-fertilize him. Another point at which we aim in cross-fertilization is the improvement in color and shape of flower. Do not be deceived by the great efforts made by those firms which have brought to us the original plants from the tropics. Their glory may be dazzling and seem worth the trouble and the dangers endured by those poor collectors who went out in search of our treasures. But those regions have a limit, and while the last group of islands in the Australias is about to be ransacked by the greed of the importers: the steady gain of the home cultivator has invaded their ranks, and the time will come when we appreciate higher the products of home-industry.

I mention that the aggregate number of distinct crosses raised up to date is nearing two thousand. I need not state that all the work done so far has been to a very great extent of a speculative kind. Think that so paltry a cross as Cypripedium Harrisonianum could receive almost twenty different names, œnanthum twenty-five! Every one of their raisers thought his

cross momentous enough to be christened as the lord of a manor. I think it is time that we consider a hybrid among orchids as so common an appearance that we pass it over without special ado, unless it be a great improvement on what we already have on hand. What do our results amount to at best? Cypripedium, the genus most easily raised from seed, has been prostituted with such a multitude of rabbling bastards that it takes the eye and taste of a high mind to keep above them. Remember that your most noble genus of Odontoglossum is so far in the back ranks of your hybrids, that a few lines will mention all you have perfected so far. Impress upon your mind that your success in hybridizing has been so entirely one-sided, so minute in regard to the difficulties awaiting you in future work, that it will never do to rest satisfied with the little accomplished. My list may be late in making its appearance, but it is early yet if we pause a second to contemplate what wonders are within the scope of our zeal. Consider only that stock of hybrids which you boast of! Cpd. Morganiæ, the pride of your collections, how often has it been repeated? Why was it that not dozens and dozens of you attempted the very same as soon as the world of orchid growers was on tip-toe about that wonder of wonders? How many Spd. Schrœderæ do you call your own? Why not have your Crœsus a whole stock of self fertilized Cpd. Stonei platytænium coming on? Where is the man who crossed Philippinense and hirsutissimum?—My list can be a guide, to tell at a glance what has been accomplished, and what combinations might be entered into. Of course we should not forget that every grower of orchids is dependent from the extent of species in his possession. But you can mail pollen to assist each other. And is there a large collection which

does not engage its care-taker in hybridizing? He should contract for hybrids grander than those we add at present by the legion to those already in existence. Pursue your task with thought, and aim at raising the best, and that often. Thus you have an opportunity to attach a reputation to your name which everybody will be ready to attribute to you if deserving of it!

Remember also that the scientists are interested in your work. Our knowledge is but fractional in many points, and if you hear about a puzzling problem arising, lend your assistance and solve such problems.

If you have on hand seedlings which you think deserve weeding out from among the bed of idolized pets, do not murder the unfortunate foundlings. Remember that hybridizing is the greatest step towards acclimatizing those strangers in our greenhouses, and that every grower in the cut-flower trade will—if he pays attention to what is to his best—be only to glad to purchase your bastard. They are easier to grow. They have but rudimentary wants as compared with the perfected species, and like the long-eared mule of our mountains lives on the bark of the tree we chop down for him when pitching tent; so will your every-day-face bastard live on the scrapings of the barnyard and grow like stocks and jelly-flowers.

Futhermore let me entreat you to keep track of your work. Take notes and be truthfully strict about what you observe. You have but a faint idea how many are interested in your work, and it is impossible for you to anticipate what the result of your effort may turn out to be. The law of atavismus may play the queerest pranks with your plantlets, and confront you with results that overshadow the astonishment of a cuckoo's mother. Let us learn how long a time was required to land your

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seedlings at the flowering stage, and teach us about the irregularities which may puzzle you on the way. You gardeners are the right hands of the botanists, whether the latter own up to it or not.

A Word to the Patrons of Orchid Culture.

With you, gentlemen, rests the problem of placing our orchid culture on a high or a low standard. You guard the coin to pay for the work performed, and you supply the trading grower with the sinews to carry on his experiments. Often as you have been taken in with plants which were not by any means what they were represented to be, you have now, in regard to hybrids, the means on hand to watch the silver-tongued, glib-mouthed trader when he paints unto the bastard of his propagating beds your honorable name. With all respect due to those whose names have been employed, refuse the use of your letters if they are to be handled indecently. By the time we receive hybrids bedecked without interruption with Ashworthii, E. Ashworth, Ashworthiæ, Ashworthianum, the man who employs your attention thus thinks very little of you. Wells, Wellsiæ, Wellsiana, Owenii, Oweniæ, Owenianum: that sounds like the reciting of the first lesson in Latin by a little shaver who got mixed up at the sight of the threatening switch. If blue blood is dragged forth to be made the laughing-stock of scheming traders, ah well, who looks for anything different! If we were raised like that imbred caste to live on the lying flattery of hollow-boned menials, we would be vain-glorious like they. We could not tell any more whether the thousand Odontoglossum crispum we bought for one guinea apiece were exchanged behind our backs for the quick repotted smaller size than the

seller of Blenheim pictures was able to find out. But if you are a man of that class which earns money to own it, that class which reverts trade and figures to the channels of deserving merit: you then can be a judge of your purchases and the spirit they are proffered in. It should not happen to you when the governor closes the door of your brougham that he runs back to the office like a kid and burst out: "By god, isn't she a cow?" Such the repute of the Red Duchess of Haymarket-offensiveness. People raised for the purpose of exhibition are pompous in appearance, like the fancy poultry at fairs; but good for nothing else than to fatten on the wheat watered with our brow's sweating. They flourish on being fed stories of the thickest webbing of lies, like the bosh of Eulophiella discoveries in Madagascar. Cypripidium Io has been raised only once, but if you acquire the gall of putting a couple of dozen grande, splendidum, gracillimum, humbugianum at the tail end of it, you find Johns and Jacks to put up for it.

Another kind petition to those generous patrons of orchid culture. In the noble employ which you pursue by devoting your time to orchid culture, you like to be, and you are, discerned from the rest of those which can spend leisure in sportive pursuit. Does it occur to you that the man caring for your mind's pleasure is likewise a discernible character? There is not a profession within reach of our sun's brightening rays which enjoys less eminence, and which at same time can depend on less mutual organization and protection, than the multitude of gardeners. It is likewise true that there is no more noble occupation to mind or body than gardening. None requires the qualities of a high-thinking, deep-feeling mind more than gardening. And again, there is none that is shunned more than this very profession,

which is the protector, the elevating motor of your nation's sincerity. Laugh at me if you like; there is nothing in this world that can wound this my heart to death. Call your doctor, your medicus a more noble aiming man. I do not gainsay it, though he does not control his subjects like we do ours. But there is no more religious training a human being can be subjected to than the care of plants, of those beings closest to a person's affection. Why do you celebrate your infant's birthday by decorating with flowers? Why do you select a bud to lay to the bosom of your beloved? Why do you value higher than gold and myrrh the wreath picked by that picture of innocence, the child of your mountains? Why do you put a myrtle sprig into your bride's locks? Why do you make the heart of your husband bright with hope when he finds a spray of only the most homely of flowers on his desk? Why do you place before the window of your invalid friend a pot with violet or snowdrop to cheer his wretched days? And why? oh! why do you press a bunch of tear-wetted flowers into the hand of the one whose features you are about to look at for the last time?—Are not we gardeners the caretakers, the nurses, the doctors of those objects, those subjects? Do not we enable you to enjoy their cheering presence every day of your life? Is it not we who take up, improve and perfect those plants and flowers? Where is the home that can do without the products of our work, our skill, our art? Take a man from the depth of wretchedness; a woman, the dirtiest hoodlum woman, from whom you buy a buttonhole when forcing your way through the crowd on Threadneedle Street: you can touch them with the emblem of life, a flower. I have worked in your houses. I have studied in your colleges. Rich I was; poor I became.

From the gentle-bred child of a luxurious home, down to the filth of your twenty-five pfennigs meal cellars of out-of-the-way Hamburg. I know the song. I know the shriek of my profession. I know the contempt you hold us in, intentionally or unintentionally. I condemn you alike, you who are so depraved as to lower a man lower than your god in heaven or your devil in hell will ever forgive you for. Don't you make me eat in the company of the coachman, a man bred low and looking low? Do you not cast me into a bunch with the bootblack and barber? Me, us, followers of an art, the adherents of an edifying profession? If you intend to crown your head with a stovepipe to-morrow, Sunday, and listen to your parson: turn on your heel, you feigner, and listen to a sermon of your conscience, the conscience feeding on plant-worship. Sit on your back-porch amongst your trailing climbers, and be not-at-home to anybody but yourself for a couple of hours. If you are asked to contribute to the bible-society, for the lying farce of foreign mission, contemplate, dear fellow-man, that there is no greater vice belying this crust of miffy civilization than the criminal ways of missionary work. Mission at home, that is the carefully avoided topic. Let the heathens die in their native happiness; you only render them unfit to enjoy their existence. But look to the cleansing of you own household. I address every employer of a gardener, most of any the general run of nurserymen, when I ask him to devote one fraction of an hour for every day in one week only to the condition his employee is in. And, returning to you, patrons of orchid culture, you have engaged in your service the cream of the cultivating branch of our profession. Every plant of yours needs special judgment, every pot different treatment, every house different

adaptation to contrary conditions. Do you pay your man anyways near what he ought to receive? If you value your plants by ciphers of three, four places, how much is the caring of them worth in comparison? Do not answer me that you can get dozens of men for the part of one that you employ. You know with me that there is something entirely wrong in the parceling out of this world's gifts, and if it is perhaps in my interest to look for a change, it may be in yours to be anxious about a continuation. If you decide thus, you give the rope around our necks another twist, and more narrow than before will be the crack admitting healthful air into our systems.

Out on the porch before my office door lies my dog; Prince is his name, and princely are his ways. To enumerate his traits would be imposing upon my readers' time. Let it suffice with the statement that he is as intelligent as he is brave, as noble as he is useful. Yet this very dog was raised (by the man who left him with me when he emigrated to a worse country) with nothing but bran and scraps falling off the table of a batchelor prospector and pioneer. Not that Prince was not worth any better food; no, it was all his master was able to afford for the companion of his lonely life. What the dog is amongst animals, that is the gardener amongst men: his most faithful companion, his most sincere servant. You can raise either of them on the bran of your wheat or on the scraps of your table; they are grateful and thrive under such conditions. But, fellow-men of flesh and bone, would you face your *dog* if you fed him thus? Do not try to inform me about numerous curs, such news has grown stale already with the linnets on my roof. In the town which I overlook from my window they drop occasionally scraps

of meat with an addition of *nux vomica* for the canine curs. But while the human curs are locked up by decrees of "civilization" and fed at the expense of the commonwealth, hundreds and thousands of worthy dogs, shepherd dogs of intelligence, have to subsist on bran and soiled scraps. Your gardeners, nine out of ten, are amongst them. Like my Prince, they do not growl, and do not leave either to hunt up more humane masters, more respected occupations. They stay, and swear by their lords, and become degraded, until they are unable to recognize the lowness of their position. But there is a number of bulldogs and bloodhounds distributed in the race of dogs. They do not only set an example by their acts of freedom; no, they intermix in breeding, too. Dog as they may be, dog as they may remain, be not surprised if on the day of reckoning (which "civilization" forces upon humanity) the very serf dog at your door assumes the traits which up to then you have been applying to him. If your gardener is low enough to accept from the nurseryman the tendered check for the blackmailing percentage of your orchid purchase, do not blame him if he feels like kissing the hand that drops that crisp note. Blame yourself; nay, despise yourself for having helped in the slow process of debauching your fellow-man's manhood.—The hand that forks the manure of your stable, did you ever touch it? not to speak about pressing it? If not, try the experiment, and do not get paralized if it dawns upon you in the most glaring of all sunrises what revolution one electrifying touch can produce.

A word to those I am under obligation to.

We have been subjected to the most contemptible treatment from the "Autocrat from Hamburg" for such a number of years, that we had to rub our eyes and ask whether all this was true, after the hero was deprived of the sheltering robe of life. I hate to have the name of kicking dead donkeys. But while I may be called guilty of dealing in poundmasters' traits, I have witnesses for having attempted to disrobe rascals in science and profession ere this while they were still wielding the murdering cleaver to chop whatever did not stand in humble disgrace the administering of their insults. Let us look back for a moment and contemplate what this H. G. Reichenbach fil. has done for our orchids. Did he not die and leave not as little as the most wretched handbook to guide us through the mess which he stirred up? Has he done anything but name species, plain and simple, the recognition of which would have been easy prey for any student who could have examined the material usurped by him? As soon as it came to puzzling objects, Reichenbach had a stunning ability in applying the trick of breaking Gordian knots. Do not challenge me for proofs, they are common property, and aside from them I have a whole store of bunged-up private ones, the odor of which would render abashed the effects of a smashed jug of bi-sulphide of carbon. A man who has to take refuge to registered letters only to send his numbered missives, and then even looks about for a third person to address them to, his soul must have a hovel in the black of depravity. But he did not know that pottingshed-boys were roasting their bloaters with his pages; he feared, but never knew—it would have killed him—that his leaves of criminal docu-

ments were scattered along railroad tracks, the amusement of those who studied them at "fresh air leisure," or the prey of fanning winds which tried to scatter the shame to hide it behind hedges and roadsides. The whole accumulation of Reichenbach's writing was not worth the articles on Catlælia elegans and Schilleriana, which the author of the *Orchid Review* spread before us. His mixed up stuff of Bletia, Barkeria, Epidendrum, Lælia, Schomburgkia, Cattleya, was such Irish stew that he did not have the courage to swallow it himself. His contributions to the orchid conference were simply absurd. He may have worked wonders in ordering the nomenclature of Bulbophyllum, Eria, and the like genera, wonders to some, but perhaps but trifling matters to those versed in such pages of our botanic literature. But to us, who are confronted every day with flowers attractive and large, we come across his blunders often enough to place their author where he belongs. The drawings which he has forced upon our orchid bibliography are a disgrace to the century. And his conceit uttered with every expression he used—"*Qu' on nous traite de même?*" Has it ever occurred to you, the subscriber of the "*Reichenbachia*," what offensive trick of the boldest baseness it was for him to undertake such publication? As a rule people want to be dead before they like to have anybody mention their epitaph. But "*post equitem sedet atra cura*," thus he dreaded, and fearing to fall in the gutter of oblivion to benefit solely through decay, he gathered in all the self-made glory he could muster and caused the Reichenbachia to be created large enough to cover a cadaver of almost any size. Thus he reckoned, but looked out at same time for the ringing sound of Bank of England metal, to delight and satisfy the greedy black soul. *That*

he could arrange, he could contract for, but the dread of those ghouls—as he termed them—hovering over his herbarium, that drove the sweet blessing of peace from his eye-lids. What was it, this act of his to solder up the treasures committed to his care? Call it criminal, call it foolish, call it small or call it dirty: it stands there monumentalizing the most contemptible act of any scientist that ever could be committed. Let us be merciful with him, let us call it childish, and let us condemn those who accepted the undignified, sordid duty of carrying out his wish. He feared his scientific brethren might turn out to be above such trickery; and well guarded against such rejection was the iron-clad will. They should have refused and refused again, that conclave of adherents of international science, until the lot reverted where it belonged, to the island whence the bulk of material came under his care. It hurt me at the time to be forced to believe that magnanimity amongst scientists was not as great by far as it might, as it should be. He hoped we could not get along without it, and would clamor over the loss he afflicted us with.

" But I tell thee, grinning spirit of the deep, the day
" those boxes will be unsoldered will not be disturbed
" by any more eclat than would be excited by the re-
" moval of the corpse of some long-forgotten, medieval
" highway robber from an inconvenient vault to the
" eternal resting-place along the castle's wall. Investi-
" gating scientists may look for relics of past times in
" his coffin. So will they rake through your leaves to
" settle some minor question. But to him, as to the
" contents of your baking-tins, will not be paid the re-
" spect they would readily concede the almshouse
" inmate when he is boxed up at the county's expense.

"They know from the knight and from you alike: you "lived on the fat of the land, not inherited, not pre- "sented with it, not conquered on just principals: no, "sir, entrusted with, and usurped; appropriated against "the unwritten laws of decency; maintained and aug- "mented through sheer force and low theft. Like the "uncovered treasure of iron and bronze coin of that "knight of the road, thus will your treasure have out- "lived the date of circulation and usefulness."

It laid with him entirely to bless us with a book to set right all the disputes warming up the multitude of expecting hearers. He fought not to accomplish it, but his contempt has never penetrated further than to those admitted to the bar of inquisition and torture. Who was it that strangled the reputations of every one of those collectors which were swarming over tropical lands and ruining their constitutions for the sake of science, as they thought—for the sake of the devil, as they had to sadly experience? If they gainsay what I preach and maintain, poor fellows! they do not know the strings that played the manikins. What have you, what has the world heard about a Riemann, about a Fœrstermann, about a Bartholomaeus, about an Arnold, about a Kerbach, about a Micholitz, about a Schroeder, about a Roebelen, about a Hennings, who have been sacrificed to fill the coffers of squandering extravagance? to pay the whims of idiotic trickery and tricky idiotcy? If your bones bleach in the sun, and not a stone has been rolled over the shallow graves of some of you martyrs, I, for one, will turn the glare of a torch, the brightest torch aflame, the torch of truth upon your white bones. Fools you were, gardeners of course, picked to suit the scheming ways of your master. If you suffered, nobody will be any the wiser for it. You have been for-

bidden the use of a pen to write up your experience under the ban of digrace at the time that you were ruined for anything but the lingering of a collector's death. I have not sniffed where I had no business to, though I do not claim to be listed a colonel for the legion of the goody good. But if things are dumped before your eyes, if facts are thrust under your nose, where is the man that does not notice them? And aside from that, a personal grievance served to sharpen the scent to detect the direction whence a stab towards my back was aimed from.

Enough, *de mortuis nihil nisi verum* and for that matter about the living likewise. It is a good thing that we are not to be forgotten altogether. The consecrator of the baptism of Dendrobium Guilelmi secundi is inheriting some of the traits of scientific smartness impaired through the death of past celebrities, and if we remember how a Reichenbach had to stand attack and criticism ere he found recognition, we will (some of these dark days) rank equally the spooking pranks of the orchid-sage of Heidelberg whose tomfooleries exuberate with the bouquet of Heidelberg's Big Barrel. To disseminate his teachings, would be an insult to the intelligence of our age. Unmentioned be their names. Of all of them I write like H. G. Rchb. fil., "t. m. t." "s. b. m."—to my taste, send better material.

It is a pleasure to turn from these types to whom I am under obligation for having shown me how *not* to proceed when devoting myself to the study of orchids, to the epoch beginning with the publication of the *Orchid Review*. I felt sorry at the time of its issue to deem that there should have been a disagreement between the standard publication of horticulture, the *Gardeners'*

Chronicle, and the leader of the new organ of the orchid cultivating world. But as long as our *Review* has turned out as a perfect paper, let us congratulate ourselves upon its appearance. It is a very difficult matter to establish and uphold a noble positiveness in journalism. Germany is swamped with worthless organs of every part, or branch of horticulture, and taking the best of all of them, it would require the import of a manager to give them the heading of editorials. It is to the *Orchid Review* that we look for advice and guidance, and to Mr. Rolfe belongs the credit of having supplied us with the much-needed leadership.

I have enjoyed the assistance of Dr. M. T. Masters when addressing many of those people to whom I have been applying for assistance in getting my material completed and corrected. Though quite a number of those addressed have not considered it worth their while to answer, I am under obligation to a great many correspondents. I take these means of again expressing my sincere thanks to them, and while I cannot enumerate individually the information given, I have to single out some, on account of their readiness in extending the much-sought information. Mr. Drewett O. Drewett, Mr. F. M. Burton, Sir William Marriott, and Mr. Reginald Young, exhausted their notes in answering me. Of the nurserymen engaged in orchid growing, Messrs. James Veitch & Sons were the very model of a firm, a reputation attributed to them wherever mention of their name is made. Messrs. Low, Williams and Bull were equally ready to tell what was wanted. Messrs. W. L. Lewis & Co. displayed a great amount of kindness, as winsome as it was acceptable. Mr. John S. Treseder, of Messrs. Heath & Son, captivated through his vivid interest in my work, and to him and Mr. Wm. Murray,

N. C. Cookson's head gardener, I owe the most thorough supplies of information received from any source. Many thanks also to Mr. R. H. Measures, for his list, and to Mr. W. B. Latham, for telling me so exhaustively about the queer Cypripedium medea monstrosa ×. Mr. W. H. White, Sir Trevor Lawrence's man, dealt extensively with all the questions put; also W. Stevens, for Mr. Thompson, Stone. On this side of the water, Mr. Robert M. Grey and Wm. Grey deserve special gratitude; also many thanks again to Mr. William Robinson, of Mr. Ames' collection, Mr. H. T. Clinkaberry, with Mr. Roebling, Trenton, and Mr. R. Gardner, at Newport. Messrs. Pitcher & Manda showed a spirit of favor and debonnairness, which in my experience stamps them the Veitch firm on our side.

There are two reasons, though, for which a person might be under obligation: one for positive, the other for negative assistance. The latter may not be generally practised, but either of the two is valuable; the latter specially, if its proffered "xenia" might be as the wooden horse of the foes of Troja. Messrs. F. Sander & Co.'s bastards in the orchid line are so impertinent and rude in insisting to obtrude our ways, that their clamor for recognition forced me to address their sanctum for condescending information. Alas, we all are aware how notoriously irregular and insecure the mail service is. My missive, therefore, never reached its destination, and I thus was deprived of the crowning lot of knowledge to link with truth the faulty lines possessed. To be serious, I have given their crosses the places which they claim, according to the information going with them at the time of exhibition. How much is that? I, who knows, think: the less the better. If we cannot cross a Cattleya Trianæ without calling it Leeana, an

Io without making it grande, or any other one without elevating it to princeps, grandiosum, superbissimum, I would fear the effects of stilting on ice with donkey's hoofs. I have it upon authority of an informant, that the description of Cypripedium Youngianum has superbiens and Philippinense as seed-bearing parent all in the same breath. Sic Reichenbachia! Catlælia Wellsiana, bragged about as (Ctl. superba × Ctl. elegans)—[in which case it would be only a re-editon of Ctl. Sedenii]—on your Temple show in '93, pops up once more at your R. H. S. meeting, June 12, '94, as (Ctl. Trianæ Leeana × Ll. purpurata). If reported wrong, it is not followed by any protest. Then exhibits itself Wellsiæ as (Ctl. labiata × Ll. purpurata), as a newborn Lourdes-image of the old bella. If that is not enough for whosoever has eyes to see, take Cattleya Mrs. M. Wells (Prince of Wales × Warneri), exhibited R. H. S. meeting Aug. 14, '94. The firm which can raise this cross when its Prince of Wales saw the light only at the Temple show on the May 29, '91, must yet have a "Co." with the master of necromancy, whose soldered relics are the only memorials for us common lot to gaze upon. But if it does not take enough interest in the children of its raising as to supply them with the required legitimacy, one such stray bastard brands every one of them with the notoriety of unreliability.

I have to take leave of my readers. You never had a classification of your orchid hybrids spread before you. A list appeared some time back in the French language. But as the author's reputation had already to balance quality of paper and print, the repetition of accumulated descriptions was useless, though without afflicting

any chronic harm. I promise to continue my work with every information which reaches me. Will you help me ? yourself? Consider that every knowledge you may be good enough to place at my disposal is so much gained towards perfecting our efforts at clearness and progress! Let me learn, if you please, what you have raised. If my data are wrong, inform me, and we all, who are interested in this work, will thank you. Do not mind telling about any cross you may have raised, even if perfected three, four and ten times before you. It is interesting to know how often a hybrid has been grown, and entertaining to find out how many of those seedlings have been sent out, from how many sources our stock has gone forth. Every New Year shall bring you a new installment of my work. Have your book bound so as to enfold a narrow strip of paper between every page of the list, and my annual supplements will be arranged to admit cutting into strips and pasting to these leaflets. The print of them will be on one side of the paper only, and thus provided for your book will not bulge in its binding.*

I do not want to beg; but if you are ready to receive a plea for assistance, for recognition of honest services rendered, look at the concluding of this reading matter back to the page where I introduced my book with the sigh "After All." There is no more condemnable course resting upon this our fair world as alms. If we, all of us, were practicing justice, and employing what fate placed in our trust for the short span of our lives, we all would have a chance to live and walk upright. I live, but I do not walk upright. I think upright, I preach upright, and bitterness of experience is the salt of my sermon. You who rest their eyes upon orchids,

* Supplement from April 1, 1895, to July 1, 1895, at end of book.

the pets of their ideas, think of me who has not seen an orchid for years. Since I left your salubrious island, I have felt the pangs of pity for a few orchids tortured in cruelty at the misty conservatory of the badly governed Golden Gate Park in San Francisco. I wish I had never known about them. Do you know what it is not to have at times the means of paying as little as a subscription to "*Gardeners' Chronicle?*" The material for my list was gathered on leaves formed by the insides of the envelopes from letters addressed to me. Is my book good? If yes, buy it; and more, get your friend to purchase another one. I can not advertise. Do this for me, it is all I ask of you if you think me deserving of such favors.

I sit by the light of my lamp, housed with the only human being near me for half a mile, my wife. A little stove can hardly warm the room exposed to the storm blowing with terrific force from the snowcapped Sierras. It is grand up here, elevating for the mind, healthful to the body. I have a pair of lungs in my chest which could over-sound that raging gale outside, and call to me the neighbor far as he resides. But they can not reach you, who looks kindly upon my writing. Take it instead as a greeting from a man who unites with you in a heartfelt interest for our orchids.

GEO. HANSEN.

Jackson, Amador County, Cal., December 7, 1894.

II.

ABOUT THE CHARACTER OF THE FLOWERS OF ORCHIDS—LIST OF PEOPLE CONCERNED IN THE RAISING OF ORCHID HYBRIDS—REFERENCES AND ABBREVIATIONS MADE USE OF—ORCHIDS RAISED FROM SEED OF THEIR OWN KIND.

About the Character of the Flowers of Orchids.

The parts of an orchid flower and their functions are fairly well known to all those engaged and interested in orchid hybridization, and as the floral diagram is to be had in most of the books about orchids, I can dispense with further explanation. But even if we know that their structure in its origin conforms to lilies, if we do understand how and for what purpose all those parts have been transformed, does that explain the attraction they exert over us? Does that lead us to the realization of the very reasons for their fascination, so efficacious and unresisting? Let us try to penetrate the ethical expression of our orchid flowers, given to us in the ensemble of their members, their outline and their coloring: their ideal character.

What is it, this sudden, this potent difference which in the judgment of the philosopher ranks higher even the most humble, the most insignificant orchid than the Eucharis, the lily? The element, the base, the constituent idea of an orchid is an entirely different one. It is that of a life, of organization, of a being, of a face with all its parts, its lines and expressions. What is a

Eucharis but an ornament? which, fine and beautiful as it may be, is and remains nothing but an embellishment, a rosette. Turn it whichever way you please, it appears the same from any side, and does not enable you to tell which is top or bottom respecting its position on the stalk, if once severed from the ovary. How different an orchid! Present it in any position you choose, it can be told without hesitation: this way she was attached to the spike, this is the way she looks at you, and there is no margin for doubt about it. They look at us, indeed they have faces, and so many thousands and hundred thousands of orchids with which I have been face to face, I never yet tired to again and again study the character of their kind. They have faces. And whoever has tried to penetrate the inwardness of their character, he will conceive with me the fact that with the application of orchids in our floral decorations, we are to reach the hight of that art at present possible.

I have read a great deal of what the botanists wrote about orchids, and when meditating about their writings I put the question to myself: Have they understood in their innermost the life of the orchid flower? Were they conscious of what is revealed to us in every single orchid bloom? But little is told us about that, and sometimes when we do come across attempts to initiate us into the secrets of those beings, we get the unpleasant impression that we are confronted with *cliché* of others' writings. I never have been troubling myself with the obliterated limits of intricate systematic botany, nor have I been favored with leisure to devote myself to the depth of the world unbosomed through the microscope. But I have been fortunate enough to keep myself possessed of the nature of a gardener, who has an inward persuasion of what his eyes behold, whose mind

shares the company of thoughts about what his senses have been impressed with. I have strolled through green-houses and have observed many a time how gardeners have afflicted the orchids with intense distress by tying their spikes in the most unnatural positions. Spikes produced in proper direction were tied to stakes in the most horrible fashions, forcing the unfortunate flowers to twist their necks against inclination and possibility. What would your Eucharis have done? What any other flower? She would—as the trivial saying has it—have turned to the light. So our orchid. But while the others choose the shortest way, our orchid has but one certain way or none at all. She twists her ovary just so much and not any further, until her flowerface has assumed the position becoming a face. Let it be understood, though, that such motions can be gone through by the spike and ovaries only so long as the power of growing, the capacity of adaptation is potent in our plant.

When I first came into possession of Darwin's book on orchids—(and understood heartily little of its contents)—I was attracted by one sentence more than the others, viz.: the ovary of the orchid flower is subjected to a turning which takes place to put the lip into a proper position to allow the visiting insect a landing place—(exceptions and contradictions as there are by the legion). I felt obliged to lay aside a book for the study of which I did not have at that time the necessary primary knowledge. But my head was possessed of that and other sentences further on. Every orchid which I came across had to pass review: is your ovary turned or not? I even went so far as to establish a list, registering all species known to me according to the position of their ovary. How vividly there again appear before

me the little flowers of Nephelaphyllum pulchrum! (see Neubert's Gartenmagazin, 1882). How I have meditated about their organization! How often did I change my notes about it! How many sketches did I outline of their ways! And how happy the fellow (of then) was when he, without advice, without elementary knowledge on the subject, reasoned why in this case the labellum was placed upward, and how the other parts conformed to its position!

Let me refer to a few instances to illustrate our ways and the orchid's inclinations:

Collector K., of much travel and much renown, was looking over my shoulder while I was trying to reproduce the sweet blossom of Odontoglossum Cervantesii. "Why, man, they are all standing on their heads!"—'Do you think so?'—"Well, of course, those flowers grow the other way." He talked to me, I listened; he assured me, I denied; he placed himself upon experience of ten years of travel in their homes, and ten thousandfold observations during their culture. I regretted not to be able to concur in his ideas. But when I at last came out flatfooted and denied that such pretty faces could have their eyes where the dimples were placed by nature, K.'s patience was at an end. "I'll fetch you some plants and prove that I am right." K. went, but no plants made their appearance. I came across him in the nursery later on, and quizzed him a little, only to get for an answer: "Yes, with these plants you are right, but they are different in their home."

I remember a large photograph of Vanda coerulea, much packed about at one time for show and advertisement. At first look I felt satisfied that those flowers never grew the way they were represented. Upon inquiry, I learned that the flowers had wilted, and were fastened to such positions through wires.

Well known and accessible to many is the illustration of Aëranthus Leonis (Gard. Chron., July 18, '85). When I opened it first I said to myself: what similarity with the fatal Angræcum eburneum, which with its upright lip mesmerized my fingers when visiting the Berlin Botanic Gardens. But when I saw Leonis in flower, I knew then that business persuasion must have tricked a publisher into illustrating from alcohol specimens, and that by an artist who did not know it all.—See also the topsy-turvy illustration of Oncidium insculptum, G. Ch., March 9, '95.

Very interesting and illustrative for our point is the flowering of Laelia anceps. A very tenacious secretion prevents a free separation of the ovary and buds from the bracts, and we perceive at once that this was the cause of the very irregular position of the flowers of that species. But I never once found one which after strenuous exertion had not succeeded in perfecting sufficient turn to occupy a favorable position for a landing insect.

Let us suffice with these instances to prove that in orchids we deal with an exceptional family, with much altered conditions conducive to the cross-fertilizing insects' agencies. Through it is easily understood, though not explained in its causes, the wonderful centralizing effect of the coloring, all calculated to attract and lead to just such direction and no other. All these circumstances, as constant as they are inferring, they prove to me the character of these flowers, the presence of a face.

I imagine I hear the objection: "Well, that is not so wonderful after all; do not dozens of flowers known to everybody show a face?" I admit, dear friend, there are plenty of them; let us see. A rose, like any Rosae-

floræ is an ornament, which you may call the Lilies of the Dicotyledones. An Azalia, a Rhododendron is higher developed; they show coloring on their corolla, and bear marks which remind us of the lip of an orchid flower. Pelargonium liken them and show us a clear-cut face. And the Pansy is a flower which Dick and Tom term "face" any day. Plainer yet, and still higher organized, are to me the Labiatæ, and I would like to see a system claim highest rank for them as they undoubtedly show higher breed than the proletariat of Composites. The Papilionaceæ are most rightly placed at the head of the natural system. But are they indeed the highest development of our present flora? I feel satisfied that they carry the material for the highest development, though their position is far from perfection. But much as all these instances illustrate, much as they prove and more as they offer for debate, who is more praiseworthy, he who accomplishes much with much or he who perfects more with less? The latter, most assuredly; and let us conclude therefore: in the present state of flora's realm no family equals in organization the development of the orchid. All those cases cited of Pansy, Pelargonium, and Azalia, they one and all belong to the Dicotyledones, plants built up after the five system. But the orchids are composed of organs associated in threes. And what have not they accomplished! Their structure, their irregularity in denied symmetry, their coloring in centralizing effect, all these are facts the worth of which we can not estimate too highly. Where is the orchid flower which betrays its humble origin? which lets you guess at its relationship to grasses and sedges? In vain you trace for the traitor. There is the cause why we should esteem them more highly than all the faceshowing flowers of the Dicotyledones, in the

fact that they select one of their leaves of the six-company, transform it by sacrificing additional organs, and mark it with the loveliest of color for the most noble of purposes. In this grand commonwealth of such household, in the organization of their parts to serve one purpose, giving the outward appearance as if they were members of the thousand-year younger tribe of five-membered plants; there is given unto us a hint of what was placed beyond the common reach of the Monocotyledones, what only in the Dicotyledones can be accomplished, in future perfected. "*Les extrêmes se touchent.*"

The way in which a nation makes at home art and science at her hearth, is the way we judge its place in civilization. The way in which a gardener chooses his culture, he proves his taste, his character.

It is with deep reverence that I again go through those lines of thought dotted down eight years ago this month. They formed the leading idea for a book on orchids written in the days of enthusiasm, finished almost and contracted for and, then——. I again hear the sound of the ocean at my ear, I lose my thoughts on the unending stretch of that enormous water. Let this passage be the only one to give witness of days when youth and enthusiasm were at their height, when everything was within reach of a loving heart, nothing crippled with an idea of impossibility of perfection. These sentences were put down when the soul was in full enjoyment of work, friendship and success. They were read to a circle of like-minded fellows, all enthusiastic and willing to burden themselves with their shares of adversity, to occupy the foremost rank, if it should be as a lost picket. A pity the foreign tongue hampers the expression, brightened up by the old ardor under the recollection of increased happiness and divided sorrow.

List of People Concerned in the Raising of Orchid Hybrids.

The body of my list of hybrids was becoming so lengthy that I could not well allow every raiser mention of his full name and place of residence. If their person has been thus referred to as shortly as possible, I ask of them not to look at my proceeding as a slight, an insult to them. I would have wished to be able to give in every instance the name of the gardener with the result of his work, for the carrying on of which their employer, the patrons of orchid culture, provide the funds. It is done, as far as I knew, at the end of the address of their employer.

Ainsworth, Dr., Manchester—Mitchell.
Allen, David, Boston.
Ames, F. L., Longwater Gardens, North Easton, Mass., —Wm. Robinson.
Armstrong, Mrs., Brighton—E. Meachen.
Ashburton, Lady, Harefield Hall, Winslow, Cheshire, —H. Holbrook.
Ball, G. S., Earlescliffe, Bowdon, Cheshire—Hay.
Barber, J. T., Spondon, Derby.
Bauer, Muette, Paris.
Berkeley, Major-General E. S., Southampton.
Bleu, A., Paris.
Bowring, J. C., Windsor Forest—Paul.
Bradshaw, J., The Grange, Southgate, London—Whiffen.
Brymer, W. E., Dorchester—J. Powell.
Buchan, H. J., Southampton—T. Osborne.
Burton, F. M., Highfield, Gainsborough.
Bull, W., Chelsea.
Cahuzac, Martin, Chateau de Sibyrol, Bordeaux.
Chamberlain, Joseph, Highbury, Moorgreen, Birmingham—H. A. Burberry.

Charlesworth, —., Bradford—Eichel.
Clarke, W. C., Orleans House, Sefton Park, Liverpool —T. Jones.
Clay Col., Birkenhead.
Cobbs, Walter, Dulcote, Tunbridge Wells—J. Howe.
Cooke, Malcolm C., Kingston Hall—Cullimore.
Cookson, N. C., Oakwood, Wylam-on-Tyne—W. Murray.
Corning, Erastus, Albany, N. Y.—Wm. Grey.
Cowper, Earl, Panshanger, Herts.—Fitt.
Crawshay, De Barry, Rosefield, Sevenoaks—Cooke.
Dale, J., Cathcart.
Dardley, Paul, Corbeil, France—Maron.
Doux, G. R. Le, East Moulsey—B. Bowyer.
Drewett, D. O., Riding-Mill-on-Tyne—A. J. Keeling.
Ellis, Welborne S., Dorking—Masterson.
Eyerman, J., Easton, Mass.
Finet, M. F., Argenteuil.
Finken, C. W., Hoyland Hall, Barnsley—J. Millman.
Fitt, J. H., Welwyn.
Fournier, —., Neuilly-sur-Seine—Terrier.
Fowler, J. Gurney, Glebelands, South Woodford, Essex —J. Davies.
Fraser, Derncleugh, Aberdeen.
Gaskell, Howard, Liverpool.
Gosse, P. H., Sandhurst, Torquay.
Graves, H., Orange, N. J.—Robert M. Grey.
Hall, W., Camberwell.
Hardy, Geo., Timperley, Cheshire—Wm. Holmes.
Hardy, F., Tyntesfield, Ashton-on-Mersey—T. Stafford.
Harris, Dr., Lamberhurst.
Harvey, E., Aighburth, Liverpool.
Heath & Son (John S. Treseder), Cheltenham.
Hincks, Capt. S. C., Terrace House, Richmond, Yorks. —Rushton.

Hodgkinson, Dr. Alex, The Grange, Wilmslow, Cheshire.
Hollington, A. J., Forty Hill, Enfield—Ayling.
Horsman, Fred., Colchester.
Houtte, L. Van, Ghent.
Hye-Leysen, Jules, Coupure, Ghent.
Imshoot, A. Van, Mont St. Amand, Ghent.
Ingram, C. L. N., Elstead House, Godalming
—T. W. Bond.
Kimball, Wm. S., Rochester, N. Y.—George Savage.
Joicey, Major, Sunningdale Park.
Larking, John, Watford.
Latham, W. B., Edgbaston, Birmingham.
Lawrence, Sir Trevor, Burford Lodge, Dorking
—W. H. White.
Lee, W. R., Audenshaw, Manchester—J. Billington.
Leech, W., Manchester—W. Swan.
Lemoinier, Raymond, Lille, France.
Leon, Mrs., Bletchley Park, Bucks.
Lewis, W. L. & Co., Chase Side, Southgate, London.
Linden, Hort. Interntl., Brussels.
Little, H., The Barons, Twickenham.
Llangattock, Lord, The Hendre, Monmouth
—T. Coomber.
Low, Hugh, & Co., Clapton, London.
Lucas, J. C., Warnham Court, Horsham—Duncan.
Lutwyche, S. G., Eden Park, Berkham, Kent—Paterson.
MacArthur, P., Maida Vale, London.
Madoux, —., Auderghem, Brussels.
Maesereel, —., Belgium.
Mantin, George, Chateau de Bel Air, Olivet, France.
Marriott, Sir W., The Down House, Blandford.
Marshall, Wm., Enfield.
Marwood, Major, Whitbey—H. Horner.
Massange de Louvraix, Baillonville, Marche, Belgium
—Wilcke.

Measures, R. H., The Woodlands, Streatham—Abraham
Measures, R. J., Cambridge Lodge, Camberwell
—H. Chapman.
Moens, M. J., Lede, Ghent.
Owen, G. D., Selwood, Rotherham, Yorks.—M. Watts.
Page, —., Bougival, Paris.
Palmer, G. L., Trowbridge—Chas. Rickman.
Parr, J. C., Grappenhall—Warrington.
Peeters, A. A., St. Giles, Brussels.
Philbrick, P. A., Brickley.
Pitcher & Manda, Short Hills, N. J.
Pollett, H. M., Fernside, Bickley, Kent.
Pourbaix, Eugen, Mons, Belgium
Rafael, G. C., Castle Hill, Englefield Green—Adams.
Regnier, —., Fontenay-sous-Bois.
Riley, John, Bromley—Wm. Lambert.
Roebling, C. G., Trenton, N. J.—H. A. Clinkaberry.
Ross, H. J., Poggio Gherardo, Florence.
Rothschild, Lord, Tring—E. Hill.
Rothschild, Baron Nath., Hohe Warte, Vienna
—Fred. Horn.
Rucker, Siegmund, Wandsworth.
Sander & Co., St. Albans.
Schneider, Oscar, Manchester—Wm. Holmes.
Schroeder, Baron, The Dell, Egham—H. Ballantine.
Seeger & Tropp, East Dulwich.
Shaw, H., Manchester—J. Cliffe.
Shuttleworth, Carder & Co., Clapham.
Silva Braga, Brussels.
Smee, A. H., The Grange, Wallington—G. W. Cummings
Smythe, W., Basing Park, Alton.
Statter, Thomas, Stand Hall, Whitefield, Manchester
—R. Johnson.
Strickland, Sir Charles, Malton.

Sutherland, Duke of, Trentham—Blair.
Swinburne, T. W., Comdean Hall, Winchcombe, Cheltenham.
Tate, H., Liverpool—J. Edwards.
Tautz, F. G., Dibdin House, Hanger Hill, Ealing —J. C. Cowley.
Temple, J. W., Leyswood, Groombridge, Tunbridge Wells—Brinstow.
Thompson, W., Clovenfords.
Thompson, W., Walton Grange, Stone, Staffds. —W. Stevens.
Thornton, T. W., Weedon.
Tracy, H. A., Twickenham.
Umlauft, —., Schœnbrunn, Vienna.
Vanderbilt, Cornl., The Breakers, Newport—R. Gardner
Veitch, James, & Sons, Chelsea—Dominy, Seden, Canham.
Vervaet, Edm. & Co., Mont St. Amand, Ghent.
Vipan, Capt., Wandsford.
Vuylsteke, Chas., Loochristy, Ghent.
Warner, R., Broomfield.
Weathers, P., Silverhall Nurseries, Isleworth.
Wells, M., Broomfield House, Sale, Manchester—Hinds.
Wheatley, F., Ringmore, Teignmouth.
Wigan, Sir F., Clare Lawn, East Sheen—W. H. Young.
Williams, B. S. & Son, Upper Holloway, London.
Wilson, F. G., Heatherbank, Weybridge Heath.
Winn, Chas., The Uplands, Selly Hill, Birmingham —F. Oliver.
Witt-Smith, De —., Lee, Mass.
Wrigley, O. O., Bridge Hall, Bury, Lancsh.
Young, Reginald, Sefton Park, Liverpool—T. J .Poyntz.

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References and Abbreviations Made Use of.

I mention specially that of all citations, I have given the greatest importance to the date on which the hybrid in question was shown for the first time, be this with the description or with only the simple record of its parentage. I have not attempted to give a record of all those places where a description was published, and add *besides and after the date of publication* (be it in show or journal) *those places only where figures of the plant appear.*

While descriptions of hybrids are essential to science, the different plants raised from the seed of one pod show so great a variation, that to us their record of parentage is the only determining fact in the ranking of hybrids. My citations vary in so far from the rules of botanists, that I have substituted the date in place of volume and page, except those references which I had to copy from citations. I know this will lead to criticism and objection. But there surely is nothing wrong about my way. And is not for us gardeners the date more plausible than volume and number? Priority has to be recognized most vigorously, and its right applied strictly throughout, if for once we shall establish a base to work upon for the future, and at the same time do justice to past results and efforts.

Another point. As far back as 1864 (see Gard. Chron. July 16th), we find our attention drawn to the coming revolution in orchid nomenclature. It was Reichenbach who gave us a sample of his tumultuous, autocratic spirit, and while he yet was below the horizon of recognition, people did not mind criticising his doings and urgings. Lindley's death made him the laureate, metamorphosing into a bullfrog soon after. Coward he proved himself a dozen times, if once, when refusing to apply his twists and crooks in nomenclature to his

very writings. Should I, writing for gardeners, who seek but reliable information, and do not want and should not be hampered by scientists' obligations any more than necessary, be forced to entangle myself and them by citing in every instance who first applied the term of Selenipedium to this or that species? Selenipedia they are, and separated with equal right as Lælia and Cattleya. I admit them as such, and still retain Rchb. f. or Rolfe or anybody else, for that matter, if they happen to be the authority of any cross in question. Beware of obligations the carrying out of which is not improving our cause, and the omission of which is not establishing any precedent nor creating any wrong or harm. Should my most unfortunate initials be attached to Phalanthe, to Zygolax, Mr. Ridley's to Catlælia? If I am the first innocent one to group those hybrids under new heads, new for usefulness, new for reasons and new for progress; let us adhere to them for convenience sake, and not wrangle over the comparative worth of the three hundred and odd nails from the cross of Christ.

Do not blame me either for giving room to hundreds of records obscure, obliterated, indistinct and unpublished. Have not all of us sinned in the past for going as long as we did without recognizing any standard? If Cypripedium what-its-name and the-other-kind have been crossed by the unknown man, and I heard of it, learned its name, found out a little more: he is entitled to recognition, entitled as long as the land has not been surveyed and parceled out according to law, and previous possessory right. If others accomplished like crosses, they are subjected to the oldest name, if known but to local fame. It is hazardous to be just to all while living in amongst you orchid raisers, affected and subjected to

side-influences. Like Reichenbach, independent, and still under latent regimes, you cannot survey all you own. It sometimes is a question of pounds, nay, guineas, to reject Lord Tom gardener's product, while Uriah Johns should be enthroned with his bastard.

I further have to apologize for reducing citations and abbreviations. *Gardeners' Chronicle* is known where gardeners stoke a furnace. If you abbreviate it "Gard. Chron." every child could guess what is meant, unknown as such journal may be to it. But, from beginning to end, I address myself only to those at home amongst orchids, acquainted with our standard publications. My citations of Reichenbachia plates are incomplete throughout in so far as I had to copy whatever pictures I found recorded in other publications. Even they, favored with inspection of such plates, cannot possibly keep track of Sander's tricks and traces. I am satisfied he forgot himself at what volume he arrived, and worries whether it would pay to sandwich Queen Lil with his next number. I have consulted books which my poor purse could purchase; do not blame me for having accomplished but what was possible; my, our poorness is others' fault. Look at my writing in a friendly spirit, and you will readily understand what "G. Ch." "O. R." "RHS." means. If not, if a different spirit rules your mind, think that a day may come for you or your children when you have to raise chickens for eggs, peddle flowers in the street, haul manure for a living, and with all that, not only think about publishing books like mine, but accomplish it too, when bordering on the satanic proposition: tails, no gain; heads, no go.

Bot. Mag. Hooker, Botanical Magazine.
Bot. Reg. Lindley, Botanical Register.
Fl. Ex. Florists' Exchange.
Fl. & P. Florist and Pomologist.
Fl. Srs. Van Houtte, Flore des Serres etc.
G. Ch. Gardeners' Chronicle.
Gdn. The Garden.
Gf. Gartenflora.
G. & F. Garden and Forest.
Ght. Mtg. Ghent Meeting of the Soc. Hort. de Belge.
Grd. Mag. Gardeners' Magazine.
Ill. Hrt. Illustration Horticole.
Jrl. Hrt. Journal of Horticulture.
Jrl. Orch. Journal des Orchidées.
JSNH. Journal de la Société Nationale d'Horticulture de France.
Ldn. Lindenia.
L'O. Buysson, L'Orchidophile.
M. L. Measures' List.
Mon. Hrt. Moniteur Horticulture.
Neub. Gztg. Neubert's Gartenzeitung.
O. A. Williams, Orchid Album.
OdS. Bergman, Les Orchidées de Semis.
O. R. Rolfe, Orchid Review.
Orchdnn. Meetings of the Orchidéenne.
Rchbch. Reichenbachia.
RHS. Royal Horticultural Society (Reports in Gardeners' Chronicle).
Rv. Hrt. Revue Horticole.
Sc. Tosc. Bulletin de la Soc. Hrt. Toscana.
Sl. Orch. Warner's Select Orchidaceous Plants.
V. M. Veitch's Orch. Manual.
Wnr. Ztg. Wiener Ill. Gartenzeitung.
Xn. Orch. Reichenbach, Xenia Orchidacea.

Cpd. Cypripedium.	Oc. Oncidium.
Cspd. Cysepedium.	Od. Odontoglossum.
Cl. Cattleya.	Phs. Phaius.
Cnt. Calanthe.	Phl. Phalanthe.
Ctl. Catlælia.	Plp. Phalænopsis.
Ddr. Dendrobium.	Spd. Selenipedium.
Ll. Lælia.	Zgp. Zygopetalum.

Orchids Raised from Seed of Their Own Kind.

While I have taken occasion to enumerate hybrids raised through crossing of their own kind at places where their original cross is recorded, I repeat them here, together with seedlings raised from other sources:

Aëranthus Leonis. Loury, foreman in Jardin des Plantes, Paris, raised two plants from seed obtained from imported pods.—Rv. Hrt. (mentioned G. Ch., May 15, '86).

Cpd. Harrisianum ×. Self-fertilized by Grey, for Corning, Albany, 1876. Also raised by Wm. Grey; who also raised Cpd. Harrisianum superbum × from self-fertilization. "A perpetual bloomer."

Cpd. insigne Chantinii. Grey, for Corning, Albany, 1894.

Cpd. spectabile. Raised from seed sown unto the bed of the mother plants, by F. C. LeMoyne, Chicago. G. & F., Jan. 7, '91.

Cpd. Spicerianum. Raised by Grey, for Corning, Albany, 1894.

Cpd. Stonei platytænium. Fertilized with its own pollen. Lawrence, Dorking. G. Ch., Jan. 14, '82.

Cpd. vexillarium ×. Raised by Grey, for Corning, Albany, 1894.

Disa grandiflora. Raised true from seed. G. Ch.,

1872, p. 603. Also by T. Myles, Lamberhurst. G. Ch., March 25, '82. Sown Oct. 31, '81; made the first leaf four weeks later.

Ddr. Devonianum. Raised from seed by J. Etherton, Harringay Park, London. Brought three flowers 23 months from sowing. G. Ch., March 22, '90.

Od. Uro-Skinneri. Six plants raised from seed by Osborn, for Buchan, Southampton. G. Ch., July 30, '87. Gdn., March 3, '88.

Zygp. crinitum cœrulescens. Crossed Jan., '75; flowered 1879. "Run back to a pale Mackayi." Grey, for Corning, Albany; in litt. Jan., '95.

See also *Calanthe vestita* crosses.

III.

REMARKS RESPECTING THE GENERA AND SPECIES EMPLOYED IN RAISING HYBRIDS.

Cattleya, Laelia, Catlaelia.

The grouping of numerous Cattleyas as varieties of labiata has been ignored by me when classifying the hybrids. After all every species is more or less closely related to others, and to fight over the degree of relationship appears to me rather trivial. The gardening community recognizes an unlimited amount of varieties, and to allow easy recognition, I have mentioned every Cattleya, as we gardeners have been wont to do for years. Ct. labiata vera is labiata plain and simple. Eldorado and Mossiae and all the rest stand on their own merit.

Ct. Harrisoniana Batem., is given by Veitch's Manual as variety of Loddigesii and I retained it as such, though the Orchid Review recognizes a distinct species in it. We look at them in the light of value in hybridizing, and are satisfied that the influence of Harrisoniana is not bold enough to insist upon recognition. But as the variety is mentioned in every instance in which it was employed, no harm has been done.

Cypripedium.

The Cypripedia having been employed most of any orchids in hybridizing furnish many cases of embarrassment, which it was not pleasant to compromise. I have been in doubt whether to let Cpd. Boxalli occupy the rank of a species or of a variety of villosum only.

I am prepared for all the objection which can be raised on account of my having decided to subdue in my list this Cypripedium as a species. But who of you calls Cpd. Sanderæ anything but a variety of insigne? As long as I have ranked the crosses raised with Boxalli as varieties of the class which was formed previously with villosum, or vice versa, I feel satisfied that justice has been done to all those placing more importance in that lady-slipper. Cpd. villosum aureum will impress its progeny with characters as conspicuous as the blackest Boxalli atratum could cause; and does not any good orchid collection furnish an assortment of varieties linking these two extremes so gradually that you could not draw the line where one begins and the other left off?

Cpd. Elliottianum is nothing but a variety of Rothschildianum.

The controversy over Cpd. excellens I have cut short by retaining this name for the hybrid exhibited originally as excelsior. It amused me having decided in just this way ere the number of the Orchid Review reached me in which that journal proposed the very same. But why go back and re-establish excelsior? That is a synonym of Buchanianum, and to prevent any attempt of christening another hybrid by that name, let us adhere to excellens.

The name of Cpd. Memoria Moensii × has been refused recognition on account of its oddity; Moens and Moensii have been suggested instead. We are so lucky to be able to dispose of both Moens and his Memoria, as the bastard is nothing but a duplicated Tityus of Messrs. Veitch.

Cpd. Lucienianum × is one of those unfortunate hybrids that does not remember who its father was, and

in its anxiety to gain respectability bothered me considerable in straightening out the records. Let such cases be a warning to us not to recognize foundlings, or at least depreciate them so much in dollars and cents that the firm sending out such things will take more trouble next time to keep track of their lots.

At the sale of the Fernside collection, April 7, 1891, plants of Elliottianum with seed of that species crossed with Lathamianum × and euryandrum × resp., sown unto the pots, were sold. What has become of them?

I am one of those unfortunate orchid enthusiasts to whom never was granted acquaintanceship with the king of Cypripedia, Stonei platytænium. Do not blame me, therefore, if I make a blunder in suggesting that it be a natural hybrid between Stonei and Lowii. Such cross artificially raised has not flowered yet, and though there is every possibility of a seedling of such parentage growing in some collection at the present time, do not mind trying it over and over again. You know how much hybrids vary, and if you do not flower a Stonei platytænium, may be it will be a platytænium nevertheless.

Several names have been used twice in christening hybrids. Three of those, viz., Adonis, Macfarlanei and Horneri stand as good hybrids, their namesakes requiring subduction as synonyms. But all the rest are eliminated entirely from the rank of distinct hybrids as they had been raised at other places previously. They are Denisianum, Sirius, gloriosum, Roberti, Hebe, Hera, Cecilia, and the commonplace hybridum.

All those hybrids of Cypripedia which, as far as I could learn, are identical with the reverse of the original cross, deserve special enumeration:

Arthurianum,	calophyllum,	Lathamianum,
Leeanum,	nitens,	Measuresianum,
Morganiæ,	œnanthum,	Savageanum.
selligerum,	Tautzianum.	

The only ones of which I found mention to the contrary are the crosses of niveum and Lawrenceanum: Antigone and Aphrodite. But how fallacious a conclusion *a priori* can turn out is taught to us by Cpd. Lawrebel of which "the first flower resembled the pollen parent (bellatulum), but another plant showed just opposite characteristic." Observations like these confirm the decision I made from the very outset of my classification, that the progeny of two species belong under one name only, and if found to vary sufficient to admit special distinction, allow them varietal rank.

Though I believe it possible to say at the time of crossing two species what the result will be in shape, color and plant, we will be safer in our supposition if we predict: *one* of the numbers is apt to display the characters we attribute to the seedling. Look at the number of Io in circulation, and be surprised how nearly they revert to one species or other. At the RHS. meeting, November 14, 1893, Mr. Fitt, of Panshanger, Hertford, showed Cpd. Leeanum (insigne × Spicerianum) "and also a plant from the same seed-capsule which had reverted very near to Spicerianum." Still fresh in everybody's mind is the remarkable case reported by Mr. Wm. Grey, grower of Mr. Erastus Corning's orchids, at Albany, N. Y. [O. R., Aug., '94]. He fertilized Godefroyæ with niveum and reports that he "produced concolor, niveum, Godefroyæ, leucochilum, leucochilum pure white, bellatulum, and nearly fifty distinct forms." Taken *cum grano salis*, I do not see anything so remarkable in this case. Let us remember that niveum and Godefroyæ

are not very far separated as species, and that with bellatulum and Regnieri we have nearly the full set of what we term the niveum-group. Look around in your own or your neighbor's relationship, and do not be surprised at the analogy you will discover. Does your boy raise pigeons? or your wife chickens? Why is it that your boy possesses pigeons which display color and spots never traceable to the parents in question? Why is it your little flock of pullets has quite a number that carry double combs, whereas you know for a fact that rooster and hen both have a single lop-comb? Keep your eyes open, and the records of your hybridizing strict and truthful, and you will lend a strong and generous helping hand to the botanist who tries to father you. Let us speak fully about the remarkable Cpd. medea monstrosa raised as (Spicerianum ♀ × hirsutissimum) by Mr. W. B. Latham, the curator of the Birmingham Botanic Garden, at Edgbaston. He had sent it to Mr. R. A. Rolfe, who named it provisionally as above and added: "Veitch's hybrid is normal in character, yours may or may not become so hereafter. Others from the same cross may come all right if you have them. The lip is not really absent, but abnormal in shape, more like a sepal. Its greatest curiosity to my mind is that the two stamens are changed into perfect staminodes. I should keep it, if only as a curiosity, it is a very instructive plant. If proof were wanted that the staminode is only a modified stamen, surely here it is." Let me, as a far-off observer, add that the plant should be grown on, divided and distributed to centers of learning where botanical objects of scientific value are supposed to be taken care of. But one plant was raised, and though it would have been interesting to have a dozen more seedlings from the same capsule, it is just as likely that not one other

might have displayed such character. It has now flowered for four years and proves its character to be constant. "W. D.," in Gard. Chron., Dec. 10, '92, reports on this medea monstrosa and tells us that it has been impregnated again with a view to restore the pouch. If "W. D." should not have quite understood the character of the abnormal, though constant flower, we are neverthelesss very much interested with what he may produce, and thank him for further information.

Next time when you have a trilabella flower of an orchid in your collection, use its pollen and also fertilize its stigma; though, of course, a trilabella being a monstrosity, or rather an abnormal flower, you have to make the best of whatever of the sexual organs you find in healthy condition. If your first attempt at fixing such abnormal state fails, try again, and again. If you do not produce gorgeousness or beauty, you perhaps succeed in arriving at flowers the product of which should be paid highly for by botanic institutions.

It might also be cited at this place the instance of the dimidiate Cpd. Harrisianum Dauthieri × fig. in G. Ch., March 16, '95, showing a separated marking of barbatum and villosum. We learn that it is a "sport," an unperfect blending of the characters of the resp. parents. But the report fails to inform us whether this sport is constant or only temporal.

The contents of a very interesting letter from William Grey, Kenwood Gate, Albany, N. Y., have been embodied in the list of hybrids wherever the crosses perfected required their place, but aside from expressing my obligation for such liberal information as furnished by him, I have to mention specially a cross performed with Cypripedia. He writes: "In 1892, feeling Pickwickian, I fertilized barbatum pulcherrimum with one

anther of niveum, one of Spicerianum, one of Chantinii (which would have given resp. Tautzianum, Eyermanianum, Ashburtoniæ). The three anthers were placed on the stigma in a few seconds. I have nine nice plants, two very strong growers with leaves mottled like Aylingii (which is from ciliolare × niveum), but longer and twice the width. The others look all Spicerianum stock. This trial was made with the idea of saving flowers and having finer plants to take up room; my space for seedlings is very limited." I have given the names these crosses would require, and look for hybrids direct in the line of those already resulted at other places. As I have not found mention of other experiments to equal this—though many may have been tried—I like to give it special distinction. It is highly interesting to know that different pollen will fertilize at the same time the ovules in an ovary, though, of course, exceptions will be to this rule, as there are to every other.

Other interesting notes, across which I came while writing up my subjects, have been related in connection with the hybrids in the list.

Seedlings, one parent of which was Cpd. Stonei, are stated to require longer time to arrive at the flowering state than others. D. O. Drewett in Gard. Chron., March 3, '93.

While Cypripedium seedlings have flowered already in the second year, other seedlings from the very same seedpod have required double that time. H. Horner, Gard. Chron., July 8, '93.

Dendrobium.

Of interesting notes not included in the enumeration, I have to mention the following: Ddr. Dalhousianum is reported as hard to cross (J. Douglas, Gard. Chron.,

July 8, '93). Wm. Murray, Mr. Cookson's clever man, mentions that he took "considerable over a thousand Dendrobes from one seed vessel" (Gard. Chron., Feb. 24, '94). O. R., July,'93, states that the cross of (Ainsworthii × and Findlayanum), chrysodiscus, is "remarkably different" from the reverse cross, melanodiscus.

Odontoglossum.

It is only with the appearance of the *Orchid Review* that order began to reign amongst the multitude of Odontoglossum hybrids. Reichenbach suprised us once when attempting to classify the relatives of Od. Ruckerianum and Andersonianum under the name of lanceans. But of what little weight such effort was is obvious, when we learn how he himself deprived his attempt of all importance when stating "for my correspondents I use the older names." To dub Odontoglossum hybrids with all kinds of names has become such mania that it seems incredible to many that people could be found to allow the use of their names for such tramps amongst the noble class of species belonging to the Odontoglossa. I have mentioned in another place that I have not beheld an orchid for now almost eight years. Of all the impressions received from subjects in garden and nature, none have remained as vivid and bright as the faces of all my orchid friends. But I trust that my adapting of Mr. Rolfe's classification will not be ascribed to me as theft. My intentions to restore order in this class have been honest and persevering, as hundreds of drawings and paintings on this very subject will bear me out. I have exhibited them at the meetings of the scientific committee of the Royal Hort. Soc., at South Kensington, and of all the scientific work once undertaken by me and rudely interrupted through fate's

ruling, the abandoning of my Odontoglossum study was a cruel blow. Like this very day, when I rove through the forest here or ride through the cañons of our Sierras, I tell at a glance which oak is of hybrid nature, and figure on the percentage of strange "blood" assimilated in a specimen before me: so with my Odontoglossa. But years have passed over the lands; and as the work which I may leave to-day at this place perhaps has already found a fresh enthusiast in a home with our antipodes ere the sheltering cover of hair has left that forehead under which the battle between thought and fact was fought: so little difference does it make who solves these trifling problems of our universe. The ant fills a place, and its work is weighty with its people. While one man is engaged to prove the extent of this mundane sphere, another, his neighbor, is planting the potatoes which serve as his food; and both are filling a high vocation.

It would have been a pleasure for me to adopt Mr. Rolfe's classification in the very form he offers it, if I could have made it agree with the rules laid down for my system. If Od. Andersonianum and Ruckeriamum are both hybrids from the crossing of gloriosum and crispum, they should be ranged under the name claiming priority, and, if need be, a variety established for the later discovered cross. To class all the bastards of the two species mentioned under the combination name of Od. glorioso-crispum is conforming to rules of botanists, and a good solution when dozens of established names claim equality in rank with the first discovered natural hybrid. But we can not adopt such course in one instance, if in every other we simply refer every additional hybrid to the name established long since. That stands, and is understood to be the result of the parents given

as record. As the followers of this cross have reached so large a number and are so inveterately established with us, it was a lucky idea of Reichenbach to propose a new name and thus lop off the heads of all the bastards clamoring for recognition: he founded his lanceans. I adopt it, partly because it has been established and has to be dealt with, partly while laboring under the conviction that it will be almost impossible to do away with such names as Ruckerianum, Andersonianum, Pollettianum and the fifty others. Call all of them lanceans and make as many varieties of it as you may feel inclined. It might be said that for the rest of the Odontoglossa groups I should also recognize a collective. None have been established, and none should be created. No other class is as numerous, so that we can more easily adapt ourselves to the use of the ones in vogue. The collective names are terms peculiar to botanists, and not welcome as a substitute for the first established names.

The crosses of luteopurpureum and crispum are best known as Wilckeanum. Denisoniæ claims priority, and while I know that the gardening world will be slow to accept such substitution, it nevertheless has to take first rank.

I give separately all those hybrids across the records of which I came, and which have not yet been spoken of by Mr. Rolfe. Future supplements will bring whatever corrections might have been made to that list.

Selenipedium.

In spite of the ruling tendency amongst gardeners to range this genus under Cypripedium, it cannot be upheld as long as we recognize at all any botanical distinction. Lælia and Cattleya are more nearly related than these two genera.

The nomenclature of this genus, if taken to Cypripedium, would interfere in a few cases, viz.: giganteum, Venus and robustum (robustius and robusticus, lingua hortulanorum!).

Regarding the varieties of Spd. longifolium, I have preferred to follow the division of Rolfe (Gard. Chron. Dec. 20, '90.) in Hincksianum, the Isthmus of Darien form, Roezlii, from New Granada, and Hartwegii, the Ecuador variety.

Spd. longifolium is so variable a species that it cannot be wondered at that all those crosses in which it took part display a wonderfully great relationship; so much so, in fact, that sooner or later some rearrangement will have to be made defining those seedlings which display a character rendering their certificate of birth liable to forfeiture. I will mention those cases which came under my notice. Spd. Albanense (Schlimii × Sedenii ×) Veitch's Manual, page 105, states "differs in no essential character from the original Sedenii." It is doubtful whether Sedenii took any part in this cross, but if it did not, I would not have referred it to that cross.—Further, Spd. porphyreum (longifolium ♀ × Schlimii), Mr. Drewett O. Drewett writes in his letter of March 3, '93: "The seedlings varied greatly. I have as good a variety of Sedenii candidulum as there is from this same batch. The above is a very dark, if properly grown."—Again: (cardinale × longifolium) could "almost pass as a light form of Sedenii." O. R., Oct., '93.—Further, Mr. W. Vanner, Camden Wood, Chislehurst, in O. R., June, '93, Spd. pulchellum (grande × ♀ × Sedenii candidulum ×). He states "they are remarkably like Spd. leucorrhodum ×, notwithstanding the different parentage. The influence of caudatum is almost lost. Of the six plants raised, none were quite alike." Remembering that

grande was raised from Roezlii and caudatum, and Sedenii from longifolium and Schlimii albiflorum, and that leucorrhodum is the seedling of Roezlii crossed with Schlimii albiflorum; the case is very natural indeed. The Garden of May 26, '88, states, under W.'s signature, the following: "I recently saw in Mr. Buchan's garden at Southampton, a very good seedling of Spd. Roezlii, which had been obtained from the same pod of seed which produced Spd. Sedenii candidulum, evidently proving that all the seeds were not crossed." Though the latter part of that sentence is absurd, the statement given in good faith is interesting enough. It would have been desirable if a center of learning and teaching like Kew had taken up a case like this and investigated its record. About Spd. macrochilum × and Hardyanum × I have spoken before.

Spd. cardinale offers debate for which I never looked when confronted with it. Mr. D. O. Drewett wrote: "Please, note that the proper name is cardinal*is*, not cardinal*e*. Reichenbach wrote on this point a very bitter letter. Cardinal*is* means of the Cardinal or cardinal colored, cadinal*e* means hinged. The mistake has arisen from making the specific name agree in gender with the generic, whereas it is an adjective descriptive." Nobody can be more ready than I to accept corrections in nomenclature. But my old George's Dictionary went to the store with the Perugian emblem when I left school and thought I had done with Latin for good; and my copy of the original description in Gard. Chron., Oct. 14, '82, states cardinal*e* in two places. As it bore H. G. Rchb. f. at the tail of it, I do not mind the mesmerizing of the gone spirit. True as this statement of Mr. Drewett's is, and correct as the reasoning undoubtedly would prove, I must have lost trace of the correction in

the next number of Gard. Chron., as Rchb. f. never failed to speak out the venom of his feelings. If he failed that time at that place, the contemporaneous correspondence only would chronicle the opposite, and manuscript assertion cannot be regarded superior to non-protested publication.

Special interest has been aroused by all those crosses in which Spd. caudatum Lindenii participated; and well it might. If the progeny of this abnormal peloria shows pouches exceeding in size by far what human calculation would predict, we are confronted with a problem worthy the engagement of any scientist's study. I enumerate all those cases belonging here. Of Spd. grande var. macrochilum (longifolium ♀ × caudatum Lindenii) it is said that its lip is "twice as large as of longifolium."—Spd. Hardyanum var. Penelaus (caudatum Lindenii × Ainsworthii calurum ×).—Spd. giganteum (caudatum Lindenii × grande ×), of an "unusually large form."—Spd. nitidissimum Clonius (conchiferum × ♀ × caudatum Lindenii), "with a large chaste lip." All of which cases go to show that the variety Lindenii fails to impart its abnormal state to any of the seedlings raised; indeed, it is hard to say with certainty whether this peloriate variety had taken part in any of those productions of the gardener's skill.

About other genera, I have to mention generally only that my arrangement with *Phalaenopsis leucorrhoda* is made according to records published with those supposed hybrids which I now group under that name. The mass of *Calanthe vestita* hybrids has become so mixed that we might just as well give up the hope of restoring order in their ranks. But that much is certain, that if we cross a variety of vestita with another one of the same

species, our hybrid can be but a vestita and nothing else. But little importance should be attached to seedlings of Calanthe vestita as regards scientific individuality. Their kind is too closely related as that we could look for distinctness in their progeny. As illustration may serve the statement of Swan, at Oakley, Fallowfield, who writes in G. Ch. Dec. 9, '82: "Some seedlings, the result of crossing Cnt. Veitchii × with the pollen of vestita have turned out true Cnt. vestita, both the red and the white eyed varieties, without a trace of Veitchii in either form or color." Such peculiarity, of course, has nothing whatever to do with the exceedingly great value of Calanthe hybrids for the uses of the gardener.

Of *Masdevallia*, I find mentioned that Lutwyche, of Beckenham, pollenized coccinea Harryana successfully with bella, and coccinea Lindeni with Houtteana, raising good capsules in either case, though he never succeeded vice versa. (See O. R., Jan., '94.)

Of horticultural oddities in the line of hybridizing I have to mention:

Horner crossed Zgp. Mackayi with Epd. ciliare, as well as Oc. tigrinum, and had seedlings of both. Gdn., Nov. 2, '89.

Chapman, for Measures, Camberwell, effected a cross between Msdvl. leontoglossa and Pleurothallis Roezlii. O. R., April, '94.

Roezl narrates in L'O. (report G. Ch., July 7, '86) that in Rothschild's gardens at Vienna, Schomburgkia tibicinis had been crossed with Ll. purpurata, and Sobralia macrantha with Ct. Mossiae.

It is not known to me what became of the crosses.

Veitch reports having crossed Zgp. Mackayi with several Odontoglossa, but the result proved to be Zgp. Mackayi in every instance.

IV.

SYNONYMY, KEY AND LIST OF HYBRIDS.

AËRIDES.

Dominianum (Fieldingii × affine.) Not in existence according to Veitch, Chelsea. In litt. Feb. 24, '93.

hybridum (affine ♀ × Fieldingii). Dominy for Veitch "Lost sight of."

illustre Rchb. f. Sup. nat. hyb. Imp. with A. crispum by Low, Clapton. G. Ch., July 15, '82.

J'Ansoni Rolfe. Sup. nat. hyb. (odoratum × expansum). G. Ch., July 19, '90. Imp. by Low, Clapton.

ANGRAECUM.

primulinum Rolfe (citratum × hyaloides). G. Ch., March 29, '90. Low, Clapton.

ANGULOA.

dubia Rchb. f. nat. hyb. (uniflora × Clowesii). G. Ch., June 10, '82.

media Rchb. f. (Clowesii × Ruckeri). Raised by Bowring, Windsor. Plant died a few years later. G. Ch., July 9, '81.

syn. *intermedia* Rolfe (Clowesii ♀). Seden, for Veitch, Chelsea. RHS., June 30, '88. 10 years growing.

Also imported as natural hybrid. Measures, Streatham.

Madouxiana. Ldn., t. 434.

ANŒCTOCHILUS.

Though these plants were raised from crosses effected amongst plants of different families, I nevertheless enumerate them here, remembering that all of them are lost to cultivation, and are not likely to reappear. A renewed raising would hardly be worth the trouble as present aims of horticulture are directed towards different ends.

A. Dominii. (A. xanthophyllus ♀ × Hæmaria discolor.) Dominy for Veitch. May, '65.

Goodyera Dominii. (Hæmaria discolor × Dossinia marmorata [A. Lowii]) RHS., June, '61. Dominy for Veitch, Exeter.

G. Veitchii. (Hæmaria discolor ♀ × Macodes Petola.) Dominy for Veitch, Exeter. July, '62. Still in cultivation in 1888.

BARKERIA.

Vanneriana Rchb. f. Sup. nat. hyb. Near Lindleyana. G. Ch., Nov. 28, '85.

BRASSOLEYA.

(Brassavola × Cattleya.)

Lindleyana. (Brsvl. tuberculata × Ct. intermedia.) Nat. hyb. from Santa Catharina. Descrb. by Rchb. f. as Ct. Lindleyana, 1857, in Bot. Grtnztg., p. 118.—fg. Bot. Mgz., t. 5449. Xn. Orch., ii, t, 135.

CALANTHE.

Dominii Lindl. (Masuca ♀ × furcata.) Dominy, for Veitch, Exeter. G. Ch., 1858, i, p. 4. fg. Bot. Mg., t. 5042. Seed obtained 1854, flowered 1856.

Florence. (Sedenii bella × ♀ × Veitchii ×.) Fitt, Welwyn. RHS., Jan. 16, '94.

Laucheana. (vestita Sanderiana × veratrifolia.) "Said to be." Sander, St. Albans. RHS., Aug. 14, '94.

lentiginosa Rchb. f. (labrosa ♀ × Veitchii ×.) Seden, for Veitch, Chelsea. G. Ch., Jan. 13, '83.

Masuco-tricarinata. (tricarinata ♀.) Veitch, Chelsea. RHS., Feb. 12, '95.

orphanum—?—Williams, Upper Holloway. RHS., Oct. 4, '92.

porphyrea Rchb. f. (labrosa ♀ × vestita rubro-oculata.) Lawrence, Dorking. G. Ch., Jan, '84.

Rollissonii. (veratrifolia × Masuca.) Rollisson, Tooting. Ods.: "nous ne savons si cette variété vit toujours."

Sedenii Rchb. f. (Veitchii × ♀ × vestita rubro-oculata). G. Ch., '78, p. 168. Seden for Veitch, Chelsea.

syn. *sanguinaria* Rchb. f. White, for Lawrence, Dorking. G. Ch., March 13, '86. Record lost but believed to be as given; White in litt. March, '93.

syn. *Burfordiense.* fg. Rchbch., vol. ii, pt. iv, '93. White in litt. March, '93: "same as sanguinaria."

var. **Alexanderi.** (vestita rubro-oculata ♀). Murray, for Cookson, Oakwood. Crossed Nov. 16, '82, sown April 4, '83.

syn. *Eyermanii* . G. & F. fg., Jan. 14, '91.—Gardner, Pierre Lorillard, Jobstown, N. J.

syn. *Cornelius Vanderbilt.* (vestita Cor. Van. Krnzl.) G. Ch., March 18, '93. Gardner, for Vanderbilt, Newport.

var. **Cooksonii** (Veitchii × ♀ × vestita luteo-oculata). Murray, for Cookson, Oakwood. Crossed Nov. 21, '81, sown March 28, '82.

syn. *Hallii* (vestita luteo-oculata ♀). Hall, Camberwell. RHS., Nov. 12, '87.

Also raised by Gardner, for Vanderbilt, Newport. in litt. Jan., '94.

var. **bella** Rchb. f. (Veitchii × × vestita Turneri ♀). Seden, for Veitch. G. Ch., Feb. 19, '81. fg. Rchbch., vol. ii, prt. iv.

syn. *Mylesii* (Veitchii × × vestita Turneri nivalis). G. Ch., May 10, '90. fg. O. A., t. 402.

var. (name?). (Veitchii superba × × vestita Regnieri ♀). Winn, Birmingham. G. Ch., Jan. 18, '90. Sown May, '86. Three different forms out of the same seedpod.

syn. *Oweniana* (Veitchii × × vestita.) Williams, Upper Holloway. fg. O. A., t. 464. RHS., Dec. 13, '92. Named after Owen, Rotherham.

Veitchii Lindl. ([Limatodes] rosea ♀ × vestita.) Dominy, for Veitch, Exeter. G. Ch., Dec. 17, '59. fg. Bot. Mg., t. 5375. Gf., '73, t. 751. O. A., t. 31. Jenn. Orch., t. 48. Gdn., 1887. Ldn., t. 217.

Also imp. as natural hybrid; found by Boxall, for Low in Burmah. Flowered with Low, Jan., '93.

var. *alba* Rolfe. G. Ch., Feb. 1, '90. Strickland, Malton.

var. **Sandhurstiana** Gosse (rosea ♀ × vestita rubro oculata). Gosse, Sandhurst, Torquay. G. Ch., March 26, '81.

var. *amabilis* Hort. Low.

var. **aurora** Rolfe (rosea × vestita Regnieri ♀). G. Ch., Jan. 18, '90. Winn, Birmingham.

vestita crosses:

Barberiana Rchb. f. (vestita Turneri nivalis ♀ × vestita). Barber, Spondon. G. Ch., '81, p. 136.

syn. *Exquisite* (vestita Turneri × vestita luteo-oculata). Fitt, for Cowper, Panshanger. RHS., Nov. 27, '94.

Darbleyana (vestita Regnieri × vestita gigantea). Maron, for Darbley, Corbeil. L'O., July, '89.

syn. *Baron Schrœder* (vestita Regnieri × oculata gigantea ♀) and also vice versa. Ballantine, for Schrœder, Egham. RHS., Feb. 13, '94. O. R., March, '94. fg. Jrl. Hrt., March 1, '94.

syn. *gigas* (vestita Regnieri Sanderiana gigantea × vestita oculata gigantea ♀). Veitch, Chelsea. RHS., Jan. 17, '93. fg. Jrl. Hrt., Feb. 16, '93. Gdn., Sept. 9,'93.

syn. *excellens* (vestita Regnieri × vestita). G. Ch., Jan. 17, '91.

syn. *William Murray* (vestita Regnieri Williamsii × vestita rubra ♀). Murray, for Cookson, Oakwood. RHS. (Jan. 12, '92), Jan. 16, '94.

syn. *Bryan.* Same parentage as William Murray. Cookson. RHS., Jan. 16, '94.

casta (vestita nivalis × vestita) V. M., '90. Lawrence, Dorking.

The hybrids: *Oakwood Seedling, Phoebe* and *Bryan* raised by Murray for Cookson, Oakwood, could not be identified by me from the notes published with them.

Cnt. rosea, r. concolor, r. pallida, casta, nivea, Veitchii lactea, Veitchii alba, and *versicolor,* all raised with Lawrence, Dorking, are names attached to seedlings about which no record was kept.—White in litt., March, '93.

CATASETUM.

splendens Cogn. nat. hyb. (Bungerothii × macrocarpa). L'Orch., Nov., '94.

var. viride, regale, aurantiacum, Luciani, maculatum (syn. Lindeni),O'Brienianum, Lindeni[(syn. macrocarpum Lindeni. J. O'B., G. Ch., Sept. 15, '94). Jrl. Orch., v. fg., 76. Ldn., t. 442.] flavescens, imperiale [(O. R., Jan.,'95), fg. G.Ch., March 16, '95. Jrl. Hrt., Jan. 10, '95.]

CATLÆLIA.

(Cattleya × Lælia.)

Synonyms.

Arnoldiana—bella.
Aylingii—Canhamiana.
Blenheimensis—elegans.
Blesensis—Aurora.
Bluntii—elegans.
Broomeana—elegans.
Broomfieldensis—Ingramii
Brysiana—elegans.
caloglossa—exoniensis.
Canhamiæ—Canhamiana.
Cassandra—Zenobia.
Cauwenberghiana—elegans.
Clive—Ingramii.
Cooksoni—elegans.
Danielsii—Schilleriana.
Dayana—elegans.
Devonia—Devoniensis.
Dulcotensis—elegans.
elegans alba—Schilleriana.
elegans Warneri—Schilleriana.
Elsteadiana—Canhamiana
euspatha—Schilleriana.
Gaskelliana—Schilleriana.
gigantea—elegans.
Harrisii—Miss Harris.
Houtteana—elegans.
incantans—elegans.
irrorata—Schilleriana.
leucotata—Schilleriana.
Littleana—elegans.
lobata—elegans.
Measuresiana—elegans.
" —Schilleriana.
Morreniana—elegans.
Mylamiana—Devoniensis.
Nylephtha—elegans.
pachystele—elegans.
picta—elegans.
Phœbe—Hippolyta.
platychila—elegans.
prasiata—elegans.
Ridolfiana—Canhamiana.
Rothschildiana—amanda.
Sayana—elegans.
Scottiana—Schilleriana.
Stchegoleffiana—Albanensis.
Stella—felix.
Stelzneriana—Schilleriana
Tautziana—elegans.
Turneri—elegans.
Valvassorii—eximia.
Varjenevskyana—Albanensis.
Vedasti—Aurora.
Veitchiana—exoniensis.
Wellsiana—Sedenii.
Wolstenholmiæ—Schilleriana.

Cattleya species used in crossing:

Ct. Aclandiæ Lindl.

Ctl. elegans—Philbrickiana

Ct. bicolor Lindl.

Ll. pumila—Dormaniana.

Ct. Bowringiana Veitch.

Ll. pumila—Parysatis.

Ct. Dowiana Batmn.

Ll. crispa—Pallas.
" lobata—Dominiana.
" Perrinii—Decia.
" pumila—Ingrami.
" purpurata—
" xanthina—

Ct. Eldorado Lind.

Ll. crispa—Pisandra.

Ct. Gaskelliana Sndr.

Ll. purpurata—C. G. Rœbling.
" xanthina—Mrs. Astor.

Ct. guttata Lindl.

Ll. cinnabarina—
" crispa—Devoniensis.
" grandis—Pittiana.
" purpurata—elegans.

Ct. granulosa Lindl.

Ll. crispa—Sidneana.
Ctl. elegans—Macfarlanei.

Ct. intermedia Graham.

Ll. lobata—amanda.
" purpurata—Schilleriana

Ct. labiata Lindl.

Ll. crispa—Veitchiana.
" Perrinii—Statteriana.
" pumila—Cornelia.
" purpurata—bella.
" tenebrosa—Hyeana.

Ct. Lawrenceana Rchb. f.

Ll. cinnabarina—
Ctl. exoniensis—

Ct. Loddigesii Lindl.

Ll. crispa—Tresederiana.
" Perrinii—amœna.
" pumila—Aurora.
Ctl. elegans—Zenobia.
" exoniensis—fausta.
" fausta—leucoglossa.
" Schilleriana—Behrensiana.

Ct. Lueddemanniana Rchb. f.

Ll. pumila—timora.
Ctl. elegans—Mardelli.

Ct. luteola Lindl.

Ctl. Dormaniana—Arthuriana.

Ct. maxima Lindl.

Ll. crispa—Amesiana.

Ct. Mendelii Hort. Backh.

Ll. purpurata—Aphrodite.

Ct. Mossiæ Hook.

Ll. cinnabarina—Hippolyta
" crispa—exoniensis.
" Digbyana—Digbyano-Mossiæ.
" purpurata — Canhamiana.
Ctl. elegans—Krænzlinii.
" Schilleriana–Miss Harris.

Ct. Skinneri Lindl.

Ll. flava—Marriottiana.

Ct. superba Schomb.

Ctl. elegans—Sedenii.
" exoniensis—triophthalma.

Ct. Trianæ Ducharter.

Ll. anceps—Frederick Boyle.
" cinnabarina—
Ll. flava—Myra.
" harpophylla—Doris.
" Jongheana—Baroness Schrœder.
" majalis—Eumæa.
" pumila—Tydea.
" xanthina—Ascania.

Ct. velutina Rchb. f.

Ll. pumila—Proserpina.

Ct. Walkeriana Gardn.

Ll. pumila—Maynardii.

Ct. Warscewiczii Rchb. f.

Ll. crispa—Nysa.
" pumila—Epicasta.
" purpurata — callistoglossa.
" tenebrosa—
Ctl. amanda—Brymeriana.
" elegans—Clonia.

Ct. Warneri Moore.

Ll. crispa—Mauve Queen.
" grandis—Albanensis.
" purpurata—eximia.
" tenebrosa—Gottoiana.
Ctl. Schilleriana—Whitei.

Cattleya hybrids used in crossing:

Ct. Hardyana ×.

(Warscewiczii × Dowiana.)

Ll. Digbyana—

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Lælia species used in crossing:

Ll. anceps Lindl.

Ct. Trianæ—Frederick Boyle.

Ll. cinnabarina Lindl.

Ct. guttata—
" Mossiæ—Hippolyta.
" Lawrenceana—
" Trianæ—

Ll. crispa Rchb. f.

Ct. Dowiana—Pallas.
" Eldorado—Pisandra.
" guttata—Devoniensis.
" granulosa—Sidneana.
" labiata—Veitchiana.
" Loddigesii—Tresederiana.
" maxima—Amesiana.
" Mossiæ—exoniensis.
" Warneri—MauveQueen
" Warscewiczii—Nysa.
Ctl. Dominiana—Victoria.
" Schilleriana—felix.

Ll. Digbyana B & H.

Ct. Mossiæ—Digbyano-Mossiæ.
" Hardyana ×—

Ll. flava Lindl.

Ct. Trianæ—Myra.
" Skinneri--Marriottiana

Ll. grandis Lindl.

Ct. guttata—Pittiana.
" Warneri—Albanensis.

Ll. harpophylla Rchb. f.

Ct. Trianæ—Doris.

Ll. Jongheana Rchb. f.

Ct. Trianæ—Baroness Schrœder.

Ll. lobata V. M.

Ct. Dowiana—Dominiana.
" intermedia—amanda.

Ll. majalis Lindl.

Ct. Trianæ—Eumæa.

Ll. Perrinii Lindl.

Ct. Dowiana—Decia.
" labiata—Statteriana.
" Loddigesii—amœna.

Ll. pumila Rchb. f.

Ct. bicolor—Dormaniana.
" Bowringiana–Parysatis
" Dowiana—Ingramii.
" labiata—Cornelia.
" Loddigesii—Aurora.
" Lueddemanniana—timora.
" Trianæ—Tydea.
" velutina—Proserpina.
" Walkeriana--Maynardii
" Warscewiczii--Epicasta
Ctl. Dormaniana—porphyrites.
" elegans—Novelty.
" exoniensis—Cassiope.

Ll. purpurata Lindl.

Ct. Dowiana—
" Gaskelliana—C. G. Rœbling.
" guttata—elegans.
" intermedia — Schilleriana.
" labiata—bella.
" Mendelii—Aphrodite.
" Mossiæ—Canhamiana.
" Warneri—eximia.
" Warscewiczii—callistoglossa.
Ctl. elegans—Horniana.

Ll. tenebrosa.

Ct. labiata—Hyeana.
" Warneri—Gottoiana.
" Warscewiczii—

Ll. xanthina Lindl.

Ct. Dowiana—
" Gaskelliana–Mrs. Astor
Ct. Mendelii—Zephyra.
" Trianæ—Ascania.
Ctl. Dormaniana—Sanderæ

Catlœlia hybrids used in crossing:

Ctl. amanda.

(Ct. intermedia × Ll. lobata.)
Ct. Warscewiczii—Brymeriana.

Ctl. Dominiana.

(Ct. Dowiana × Ll. lobata.)
Ll. crispa—Victoria.

Ctl. Dormaniana.

(Ct. bicolor × Ll. pumila.)
Ct. luteola—Arthuriana.
Ll. xanthina—Sanderæ.
Ctl. elegans—Claptonense.

Ctl. elegans.

(Ct. guttata × Ll. purpurata.)
Ct. Aclandiæ — Philbrickiana.
Ct. granulosa—Macfarlanei
" Loddigesii—Zenobia.
" Lueddemanniana–Mardelli.
" Mossiæ—Krænzlinii.
" superba—Sedenii.
" Warscewiczii—Clonia.
Ll. pumila—Novelty.
" purpurata — Horniana.
Ctl. Dormaniana—Claptonensis.
" Nysa—

Ctl. exoniensis.

(Ct. Mossiæ × Ll. crispa.)
Ct. Lawrenceana—
" Loddigesii—fausta.
" superba—triophthalma
Ll. pumila—Cassandra.

Ctl. fausta.

(Ct. Loddigesii × Ctl. exoniensis.)

Ct. Loddigesii–leucoglossa.

Ctl. Nysa.

(Ll. crispa × Ct. Warscewiczii.)

Ctl. elegans—

Ctl. Schilleriana.

(Ct. intermedia × Ll. purpurata.)

Ct. Loddigesii—Behrensiana.

" Mossiæ—Miss Harris.

" Trianæ—

" Warneri—Whitii.

Ll. crispa—felix.

CATLÆLIA.

Albanensis, R.A.R. nat. hyb. (Ct. Warneri × Ll. grandis). O. R., Nov., '93. G. Ch., Nov. 11, '93. Sander from Bahia.

syn. *Stchegoleffiana.* Linden, Brussels. Jrl. Orch., '93, p. 297. Nat. hyb.

syn. *Varjenevskyana* (Ll. grandis ♀). Linden, Brussels. Ldn. t. 466.

amanda nat. hyb. (Ct. intermedia × Ll. lobata). G. Ch., Dec. 16, '82. (Ll. amanda Rchb. f.). Imp. Bull, Chelsea. fg. Ill. Hrt., t. 135.

syn. *Ct. Rothschildiana* Hort.

Amesiana (Ll. crispa ♀ × Ct. maxima). G. Ch., Jan. 26,'84. (Ll. Amesiana Rchb. f.). Seden, for Veitch. fg. O. A., t. 253. Named after Ames, North Easton.

amœna. (Ct. Loddigesii ♀ × Ll. Perrinii). Jrl. Orch., '92, p. 281. fg. Ldn., t. 367. Bleu, Paris.

Aphrodite. (Ct. Mendelii × Ll. purpurata). Billington, for Lee, Manchester. RHS., June 11, '95.

Arthuriana. (Ctl. Dormaniana ♀ × Ct. luteola). G. Ch., Jan. 27, '94. (O. R., Jan., '93). White, when with Dorman of Sydenham, after whose son Arthur the plant is named.

Ascania. (Ct. Trianae ♀ × Ll. xanthina). RHS., April 25, '93. fg. Jrl. Hort., May 4, '93. Veitch.

Aurora, Rolfe. (Ll. pumila Dayana ♀ × Ct. Loddigesii). G. Ch., Oct. 5, '89. Seden, for Veitch. Sown 1882. Also raised by "J. O." with Ll. pumila marginata. Gdn., Oct. 8, '92.

syn. *Blesensis.* Maron. L'O., Dec., '90. Sown Feb., '87, first flower Oct. 15, '90. fg. Rv. Hrt., Sept., '93.

var. **Vedasti.** (Ll. pumila ♀). Perrenoud. fg. L'O., Feb., '91.

Baroness Schrœder. (Ct. Trianae × Ll. Jongheana). RHS., Aug. 23, '92. Ballantine, for Schrœder, Egham.

Behrensiana. (Ctl. Schilleriana ♀ × Ct. Loddigesii). RHS., Aug. 29, '91. Sander. fg. Rchbch. ii, t. 62.

bella. (Ll. purpurata ♀ × Ct. labiata). G. Ch., Feb. 9, '84. (Ll. bella Rchb. f.).

syn. *Arnoldiana* RHS., May 9, '91. Sander. fg. Ldn., t. 299. Rchbch., ii. t. 48. O. R., Nov., '93, states Ct. Warscewiczii instead of labiata, in which case it is syn. callistoglossa.

var. **Wellsiæ.** (Ct. labiata ♀), with Wells, Broomfield, Sale. RHS., Sept. 24, '94.

Brymeriana. (Ctl. amanda × ♀ × Ct. Warscewiczii). Powell, for Brymer, Dorchester. O. R., Jan., '93. fg. Ldn., t. 343.

callistoglossa. (Ll. purpurata ♀ × Ct. Warscewiczii). G. Ch., Jan. 21, '82. Seden, for Veitch. fg. O. A., t. 235. Grd. Wrld., April 7, '94. See also Ctl. bella Arnoldiana.

Canhamiana. (Ll. purpurata ♀ × Ct. Mossiæ). G. Ch., '85, ii, p. 6. Seden, for Veitch. Canham, foreman with Veitch. Raised also with Ct. Mossiæ ♀. Veitch, 1885. (Ctl. *Canhamiæ*).

Also raised by amateur, Protheroe & Morris' sale, Nov. 28, '91. Also with Heath, Cheltenham, Temple show, May 25, '93.

var. *alba*. fg. Jrl. Hrt., July 5, '94. Gd. Mag., Aug. 25, '94.

syn. *Elsteadiana*. RHS., June 10, '90. Bond for Ingram, Elstead House, Godalming.

syn. *Marriotii*. RHS., June 10, '90. Marriot, Blandford. Raised 15 plants in about 10 years.

syn. *Ridolfiana*. fg. Bull. Soc. Tosc. di Ort., '93, t. 3.

Cassiope Rolfe. (Ll. pumila ♀ × Ctl. exoniensis). G. Ch., Nov. 30, '89. Seden, for Veitch. Sown 1881.

C. G. Rœbling. (Le purpurata alba × Ct. Gaskelliana). Sander, St. Albans. RHS., June 25, '95.

—?— (Ll. cinnabarina × Ct. guttata Princii [amethystoglossa]). Sdlg. with Charlesworth, Bradford. O. R., July, '94.

—?— (Ll. cinnabarina × Ct. Lawrenceana). Sdlg., Burberry for Chamberlain, Highbury. O. R., April, '93.

—?— (Ll. cinnabarina × Ct. Trianæ). Sdlg. Duncan, for Lucas, Horsham. G. Ch., April 13, '95.

Claptonensis. (Ctl. elegans ♀ × Ctl. Dormaniana). RHS., Nov. 1, '92. Low Clapton.

Clonia. (Ct. Warscewiczii ♀ × Ctl. elegans Turneri). Veitch. RHS., Oct. 23, '94.

Cornelia. (Ll. pumila ♀ × Ct. labiata.) RHS., Nov. 28, '93. Veitch.

Decia. (Ll. Perrinii ♀ × Ct. Dowiana aurea.) Veitch, Chelsea. RHS., Nov. 27, '94. G. Ch., Dec. 6, '94. Jrl. Hrt., Feb. 14, '95.

Dellense. ?(Ll. purpurata × Ctl. elegans.) Temple Show, May 30, '89. Schrœder, Egham.

Devoniensis. (Ll. crispa ♀ × Ct. guttata.) RHS., Sept. 22, '63. Dominy, for Veitch.
syn. *Devonia.* Hort.
var. **Mylamiana.** (Ct. guttata ♀ .) G. Ch., '76, ii, p. 740, fg. 138. (Ll. Mylamiana Rchb. f.). Mylam, for Rollisson, Tooting. 13 years raising.

Digbyano-Mossiæ Rolfe. (Ct. Mossiæ ♀ × Ll. [Brassavola] Digbyana.) G. Ch., June 15, '89. fg. *id.*, May 25, '89. O. A., t. 449. Seden, for Veitch.

Dominiana. ?(Ct. Dowiana × Ll. lobata.) G. Ch., Oct., '78, p. 332. fg. O. A., t. 12. Fl. Mg., n. s. t. 325. Dominy, for Veitch. (Ct. Dominiana Rchb. f.)

Doris. (Ll. harpophylla ♀ × Ct. Trianæ.) O. R., Feb., '94. Murray, for Cookson, Oakwood.

Dormaniana nat. hyb. ?(Ct. bicolor × Ll. pumila.) Coll. Blunt. G. Ch., '80, i, p. 168. (Ct. Dormaniana Rchb. f.)

elegans nat. hyb. (Ll. purpurata × Ct. guttata [Leopoldii]). G. Ch., '53, p. 582. (Ct. elegans Lindl.) Coll. De Vos for Verschaffelt, Ghent, 1847. fg. Ann. de Gand, iv, p. 93, t. 185. Bot. Mg., t. 4700. Ill. Hrt. xi, t. 402. Puydt, Les Orch., p. 281, t. 21. Rchbch. ser. 2, i, p. 43. Pesctr., t. 23. Ldn., t. 347.
var. *Blenheimensis* fg. Rchbch., ser. 2, i, t. 20. O. A., t. 413.
var. *Bluntii* Rchb. f. Bot. Ztg., xxii, p. 298. 1864.
var. *Broomeana* Rolfe. Ldn., t. 347. O. A., t. 413.
var. *Brysiana* Lem. Ill. Hrt., iv, t. 134.
var. *Cauwenberghiana* Lind. RHS., Nov. 14, '93. Ldn., t. 428. Cauwenbergh, foreman with Linden.
var. *Cooksoni* Rolfe. G. Ch., Nov. 23, '89.
var. *Dayana* Rchb. f. 1864.

var. *Dulcotensis.* RHS., Aug. 14, '94. Cobb, Dulcote, Tunbridge, Wells.
var. *gigantea* Williams. Sl. Orch., t. 6. 1870.
var. *Houtteana* Rchb. f. Hamb. Grtztg., xvi, p. 281. 1860. Ldn., t. 71.
var. *incantans* Rchb. f. G. Ch., '87, ii, p. 333.
var. *Lindeni.* Ldn., t. 447.
var. *Littleana* Hogg. Gard. Year Book, '86, p. 65.
var. *lobata* Rchb. f. G. Ch., '69, p. 1158.
var. *Measuresiana* Rchb. f. G. Ch., '87, i, p. 209.
var. *Morreniana* Rchb. f. O. A., t. 331.
var. *Nyleptha* J. O'B. G. Ch., Feb. 11, '88, fg.
var. *pachystele* Rchb. f. G. Ch., Nov. 24, '88.
var. *picta* Rchb. f. G. Ch., '84, i, p. 140.
var. *platychila* Rchb. f. G. Ch., '85, ii, p. 134.
var. *prasiata* Rchb. f. Bot. Ztg., '63, p. 298. O. A., iii, p. 97.
var. *prasiata indica* Rchb. f. G. Ch., '83, i, p. 11.
var. *Sayana.* Mentioned G. Ch., Sept. 22, '94. Ldn., t. 463.
var. *Tautziana* Rchb. f. G. Ch., '88, i, p. 330.
var. *Turneri.* Sel. Orch., i, t. 12.

—?—(Ctl. elegans ♀ × Ctl. Nysa). sdlg. O. R., Oct., '94. Statter, Manchester.

Epicasta (Ll. pumila ♀ × Ct. Warscewiczii). RHS., Aug. 29, '93. Veitch.

Eumæa (Ct. Trianæ ♀ × Ll. majalis). RHS., Oct. 24, '93. Veitch.

eximia (Ct. Warneri ♀ × Ll. purpurata). RHS., June 24, '90. Ldn., t. 386. Veitch.
syn. *Valvassorii.* Linden, Brussels. RHS., June 12, '94.
Also raised by Murray, for Cookson, Oakwood. Temple Show, May, '95.

exoniensis (Ct. Mossiæ × Ll. crispa). G. Ch., Sept. 12, '63. Dominy, for Veitch. fg. Jenn. Orch., t. 1. Sel. Orch., t. 36. O. A., t. 443. Fl. Mg., '66, t. 269. (Ll. exn. Rchb. f.).

syn. *caloglossa*. (Ll. c. Rchb. f.) G. Ch., '77, i, p. 202. Dominy, for Veitch. Sown 1858, flowered 1877; longest period known.

fausta (Ct. f. Rchb. f.) (Ct. Loddigesii ♀ × Ctl. exoniensis). G. Ch., '73, p. 289. fg. Fl. Mg., n. s. t. 189.

felix (Ct. f. Rchb. f.) ?(Ll. crispa × Ctl. Schilleriana). G. Ch., '76, ii, p. 68.) Dominy, for Veitch.

syn. *Stella* Rolfe. (Ll. crispa ♀ × Ctl. [Schilleriana] elegans Wolstenholmiæ.) G. Ch., Sept. 21, '89. Seden, for Veitch. Sown '81, flowered July, '89.

Frederick Boyle (Ct. Trianæ ♀ × Ll. anceps). Temple Show, May 23, '94. Sander. fg. G. Ch., June 30, '94. Gd. Mgz., May, '94.

Gottoiana nat. hyb. (Ct. Warneri × Ll. tenebrosa). RHS., June 23, '91. from Bahia. Gotto, Hampstead Heath.

—?—(Ct. Hardyana ♀ × Ll. Digbiana). Sdlg. Hardy, Aston-on-Mersy. O. R., Aug., '94.

Hippolyta (Ll. cinnabarina ♀ × Ct Mossiæ). RHS., March 29, '90. Veitch.

var. **Phœbe** (Ct. Mossiæ ♀). RHS., May 3, '92. Murray, for Cookson, Oakwood. fg. G. Ch., June 18, '92.

Horniana (Ll. H. Rchb. f.) (Ll. purpurata ♀ × Ctl. elegans). G. Ch., June 23, '88. Horner, for Rothschild, Vienna.

Hyeana nat. hyb. ?(Ll. tenebrosa × Ct. labiata) Soc. Bot. Ghent., Nov. 11, '94. Hye, Leyssen.

Ingramii (Ll. pumila Dayana ♀ × Ct. Dowiana aurea). RHS., Aug. 13, '92. Bond, for Ingram, Godalming.
Also raised by Statter, Manchester. 2 years old. O. R., Oct., '94.
var. **Clive** (Ct. Dowiana ♀ × Ll. pumila præstans). RHS., Aug. 29, '93. Murray, for Cookson, Oakwood.
syn. *Broomfieldensis.* (Ct. Dowiana chrysotoxa). RHS., Aug. 14, '94. Hinds, for Wells, Broomfield. fg. G. Ch., Aug. 25, '94. Gd. Mag., Sept. 1, '94. Jrl. Hrt., Aug. 23, '94.

Krænzlinii (Mossiæ Wageneri ♀ × Ctl. elegans prasiata. Sander. RHS., Sept. 26, '93.

Lebruana —?— L'Orch., Oct., '94.

leucoglossa (Ct. Loddigesii ♀ × Ctl. fausta). RHS., Nov. 1, '92. Veitch.
var. *bella.* O. R., Feb., '94.

Macfarlanei nat. hyb. ?(Ct. granulosa × Ctl. elegans). Mentioned Gdn., Aug. 1, '91. With Measures, Streatham.

Mardelli (Ct. Lueddemanniana ♀ × Ctl. elegans). G. Ch., '79, i, p. 234. *id.* June 19, '80). Seden, for Veitch. fg. Fl. Mg., '81, t. 437. O. A., t. 287. Mardell, uncle of Seden.

Marriottianna (Ll. flava ♀ × Ct. Skinneri). RHS., April 12, '92. Marriott, Blandford. 3 plants, 10 years raising.

Mauve Queen (Ct. Warneri ♀ × Ll. crispa). Fitt for Cowper, Panshanger. RHS., Nov. 13, '94.

Maynardii (Ll. pumila Dayana ♀ × Ct. Walkeriana dolosa). RHS., Feb. 14, '93. fg. G. Ch., June 17, '93. Maynard, for Sander.

Miss Harris (Ct. M. H. N.E.Br.) (Ct. Mossiæ ♀ × Ctl. Schilleriana). G. Ch., Oct. 22, '87. Harris, Lamberhurst.
syn. *Harrisii.* Hort.

Mrs. Astor (Ct. Gaskelliana ♀ × Ll. xanthina). RHS., Feb. 13, '94. Sander. fg. G. Ch., Feb. 24, '94. Gd. Mg., Feb. 24, '94. Jrl. Hrt., Feb. 22, '94.

Myra (Ct. Trianæ ♀ × Ll. flava). Veitch, Chelsea. RHS., March 12, '95.

Novelty (Ll. N. N.E.Br.) (Ll. pumila ♀ × Ctl. elegans). G. Ch., Oct. 22, '87. fg. Gd. Mg., Aug. 26, '93. Harris, Lamberhurst. Also raised by Seden for Veitch; sown 1881. G. Ch., Sept. 27, '90.

var. **Trentonense** (Ctl. elegans Turneri). Am. Gardng., Oct. 27,'94. Raised by Pitcher & Manda, Shorthills; flowered by Rœbling, Trenton. Sown Oct., '91; flowered Oct., '94.

Nysa (Ll. crispa ♀ × Ct. Warscewiczii). RHS., Aug. 25, '91. fg. Jrl. Hrt., Jan. 10, '94. Veitch.

Also sdlg. with Treseder, for Heath, Cheltenham. in litt., March, '93.

Owenii nat. hyb. ?(Ctl. elegans × Ll. Perrinii). Linden, Brussels. Mentioned G. Ch., Feb. 25, '93, p. 233.

Pallas (Ll. crispa ♀ × Ct. Dowiana). RHS., Dec. 10, '89. Veitch.

var. (unflowered). (Ct. Dowiana aurea). Treseder, for Heath, Cheltenham. in litt., March, '93.

Parysatis (Ct. Bowringiana ♀ × Ll. pumila). Seden for Veitch. O. R., Oct., '94. Sown '88, flowered '93.

Philbrickiana (Ll. Ph. Rchb. f.) (Ct. Aclandiæ ♀ × Ctl. elegans). G. Ch., '79, ii. p. 102. O. A., t. 5. Philbrick, Brickley.

Pisandra (Ll. crispa ♀ × Ct. Eldorado). RHS., Oct. 24, '93. fg. Jrl. Hrt., Nov. 2, '93. Veitch.

Pittiana nat. hyb. ?(Ct. ametystoglossa [guttata Princii] × Ll. grandis). fg. G. Ch., March 3, '94. Pitt, Stock Newington.

porphyritis (Ll. p: Rchb. f.) nat. hyb. ?(Ll. pumila × Ctl. Dormaniana). G. Ch., Jan. 16, '86. Day from Brazil, 1884.

Proserpina Rolfe (Ll. pumila Dayana ♀ × Ct. velutina ×). G. Ch., Sept. 27, '90. Veitch. Sown 1883.

—?—(Ll. purpurata × Ct. Dowiana aurea). Sdlg. Charlesworth, Bradford. O. R., July, '94.

Also sdlg. (Ct. Dowiana aurea ♀). Statter, Manchester. O. R., Oct., '94.

Sanderæ (Ll. xanthina ♀ × Ctl. Dormaniana), RHS., Sept. 26, '93. Sander.

Schilleriana (Ll. purpurata × Ct. intermedia). (Ll. Sch. Rchb. f.). Allg. Grtztg., '55, p. 322. fg. V. M. (Ll. elegans), '87.

var. *alba* (Ll. elegans). Burbidge, Gdn., t. 218. O. A., t. 30.

var. *Danielsii* Linden, Brussels. Temple Show, May 23, '94.

var. *euspatha* (Ll. e. Rchb. f.) fg. Rchbch., t. 8.

var. *irrorata* (Ll. i. Rchb. f.) Hamb. Ztg., 1864, p. 57. var. *Gaskelliana*. G. Ch., '87, ii, p. 520. var. *Scottiana*. G. Ch., Feb. 3, '83.

var. *leucotata*. Ldn., t. 413.

var. *Measuresiana*. fg. O. A., t. 207.

var. *Stelzneriana* (Ll. St. Rchb. f.) Hamb. Grtztg., 1864, p. 282. Fl. de Serres, t. 1494.

var. *Warneri*. fg. Sel. Orch., t. 1.

var. *Wolstenholmiae* (Ll. e. W. Rchb. f.) G. Ch., '65, p. 698. O. A., t. 285. Sel. Orch., t. 29.

Sedeni (Ll. S. Rchb. f.) (Ct. superba ♀ × Ctl. elegans). G. Ch., '77, p. 424. Seden, for Veitch. One plant only. O. R., March, '93, states Ctl. Devoniensis in place of Ctl. elegans.

syn. *Wellsiana*. Sander. Temple Show, May 25, '93.

Sidneana (Ll. crispa ♀ × Ct. granulosa). Veitch. Fide OdS.

Statteriana (Ll. Perrinii ♀ × Ct. labiata). Veitch. G. Ch., Nov. 14, '93.

—?— (Ll. tenebrosa ♀ × Ct. Warscewiczii). Sdlg. with Statter, Manchester. O. R., Oct., '94.

Timora (Ll. T. N.E.Br.) (Ll. pumila Dayana ♀ × Ct. Lueddemanniana). Seden, for Veitch. G. Ch., Oct. 8, '87.

Tresederiana (Ll. T. Rchb. f.) (Ct. Loddigesii ♀ × Ll. crispa superba). G. Ch., Feb. 4, '88. Treseder, for Heath, Cheltenham. Sown Jan., '81, germinated in 4 months; 7 years raising. Seventeen plants, weeded down to 4.

triophthalma (Ct. t. Rchb. f.) (Ct. superba ♀ × Ctl. exoniensis). G. Ch., Oct. 27, '83. Seden, for Veitch. Sown 1875, flowered 1883. Two plants.

Tydea (Ll. pumila ♀ × Ct. Trianae). RHS., Feb. 13, '94. Veitch. fg. Jrl. Hrt., March 8, '94.

Veitchiana (Ct. labiata ♀ × Ll. crispa). G. Ch., '74, p. 566. fg. G. Ch., Aug. 4, '83. Dominy, for Veitch. Sown '58, flowered March, '74.

Victoria (Ll. crispa ♀ × Ctl. Dominyana). RHS., Nov. 13, '88. Seden, Veitch.

Whitei (Ll.W. Rchb. f.) nat. hyb. ?(Ct. labiata × Ctl. Schilleriana). G. Ch., Nov. 4, '82. fg. O. A., t. 115. White coll. for Low, Clapton.

Zenobia Rolfe (Ct. Loddigesii ♀ × Ctl. elegans Turneri). G. Ch., Nov. 5, '87. Seden, for Veitch. Seven years raising.

syn. *Cassandra* Rolfe. G. Ch., Nov. 24, '88. Seden, for Veitch. Sown 1877.

syn. *Behrensiana* Sander. RHS., Aug. 29, '91. fg. Rchbch., vol ii, part iv.

Zephyra (Ct. Mendelii ♀ × Ll. xanthina). RHS., July 24, '94. Veitch.

CATLÆNITIS.

(Cattleya, Lælia, Sophronitis.)

Veitchiana (Sphr. grandiflora ♀ × Ctl. Schilleriana). Veitch, Chelsea. RHS., Sept. 6, '92.

CATTLEYA.

Synonyms:

Aclandi-Loddigesii—Brabantiæ.
Alberti—porphyrophlebia.
Ashtoniana—Minucia.
Atalanta—Atlanta.
citrino-intermedia—Lamberhurst Hybrid.
Countess of Derby—Hardyana.
Dukeana—Wilsoni.
fimbriata—calummata.
flaveola—picturata.
Gardeniana—Hardyana.
intermedio-citrina—Lamberhurst Hybrid.
Johnsoniana—Minucia.
Krameriana—Isabella.
Laversinensis—Hardyana.
Lowryana—Isabella.
marmorata—Hardyana.
Massaiana—Hardyana.
Patrocinii—hybrida.
Pheidona—Dominiana.
Prince of Wales—Parthenia.
Schroederæ—Baroness Schrœder.
Statteriana—Hardyana.

Species used in crossing:

Aclandiæ Lindl.

calummata ×—Parthenia.
Forbesii—quinquecolor.
guttata—Schilleriana.
intermedia—calummata.
labiata—
Loddigesii—Brabantiæ.
Mendelii—

bicolor Lindl.

guttata—Wilsoniana.
intermedia—Batalini.

Bowringiana Veitch.

Dowiana—Mantinii.
labiata—
Loddigesii—Browniæ.
maxima—Chloris.

Warscewiczii—Wendlandiana.

citrina Lindl.

intermedia—Lamberhurst Hybrid.

Dowiana Batmn.

Bowringiana—Mantinii.
Gaskelliana—Lord Rothschild.
guttata—Chamberlainiana
labiata—Fabia.
Lueddemanniana—Kienastiana.
Mossiæ—Empress Frederick.
Schilleriana—
Warscewiczii—Hardyana.

Eldorado Hort. Lind.

superba—Brymeriana.

Forbesii Lindl.

Aclandiæ—quinquecolor.
guttata—Lucieniana.
intermedia—Isabella.
Loddigesii—venosa.

Gaskelliana Hrt. Sander.

Dowiana—Lord Rothschild
Loddigesii—Miss Williams.
Warscewiczii—Harold.

granulosa Lindl.

Schilleriana—resplendens.

guttata Lindl.

Aclandiæ—Schilleriana.
bicolor—Wilsoniana.
Dowiana—Chamberlainiana.
Forbesii—Lucieniana.
intermedia—picturata.
labiata—Victoria Regina.
Loddigesii—hybrida.
Mendelli—Harrisii.
Schilleriana—resplendens.
Trianæ—Mitchelii.
Walkeriana—Sororia.
Warscewiczii—Atlanta.

intermedia Graham.

Aclandiæ—calummata.
bicolor—Batelini.
citrina—Lamberhurst Hybrid.
Forbesii—Isabella.
guttata—picturata.
maxima—Dominiana.
Mendelii—suavior.
superba—porphyrophlebia

intricata Rchb. f.

superba—Burberryana.

iricolor Rchb. f.

Mossiæ—Philo.

Lawrenceana Rchb. f.

Mendelii—William Murray
Mossiæ—

labiata Lindl.

Aclandiæ—
Bowringiana—
Dowiana—Fabia.
guttata—Victoria Regina.
Loddigesii—Marstersoniæ.

Loddigesii Lindl.

Aclandiæ—Brabantiæ.
Bowringiana—Browniæ.
Forbesii—venosa.
Gaskelliana—Miss Williams
guttata—hybrida.
Hardyana ×—
labiata—Marstersoniæ.
Lueddemanniana—Manglesii.
Walkeriana—O'Brieniana.
Warscewiczii—Minucia.

Lueddemanniana Rchb. f.

Dowiana—Kienastiana.
Loddigesii—Manglesii.

maxima Lindl.

Bowringiana—Chloris.
intermedia—Dominiana.

Mendelii Hrt. Backh.

Aclandiæ—
guttata—Harrisii.
intermedia—suavior.
Lawrenceana—William Murray.

Mossiæ Hook.

calummata ×—Parthenia.
Dowiana—Empress Frederick.
iricolor—Philo.
Lawrenceana—
Percivaliana—
Schilleriana—Miss Harris.
Warscewiczii—

Percivaliana Rchb. f.

Mossiæ—

Rex J. O'B.

Warscewiczii—

superba Schomb.

Eldorado—Brymeriana.
intermedia—porphyrophlebia.
intricata—Burberryana.

Trianæ Lind. & Rchb. f.

guttata—Mitchelii.
Walkeriana—Baroness Schrœder.
Warscewiczii—Ballantiniana.

Walkeriana Gardn.

guttata—Sororia.
Loddigesii—O'Brieniana.
Trianæ—Baroness Schrœder.

Warneri Moore.
Parthenia×—Mrs.M.Wells.

Warscewiczii Rchb. f.
Bowringiana—Wendlandiana.
Dowiana—Hardyana.
Gaskelliana—Harold.
guttata—Atlanta.
Loddigesii—Minucia.
Mossiæ—
Rex—
Trianæ—Ballantiniana.

Hybrids used in crossing:

calummata.

(intermedia × Aclandiæ.)

Mossiæ—Parthenia.

Hardyana.

(Warscewiczii × Dowiana.)

Loddigesii—

Parthenia.

(calummata × × Mossiæ.)

Warneri—Mrs. M. Wells.

Schilleriana Rchb. f.

(Aclandiæ × guttata.)

Dowiana—
guttata—resplendens.

Atlanta (guttata Leopoldii ♀ × Warscewiczii). Veitch, Chelsea. RHS., Aug. 14, '94.
syn. *Atalanta* Hort.

Ballantiniana Rolfe (Trianæ ♀ × Warscewiczii). G. Ch., March 2, '89. Sander. Named after Ballantine, gr. to Schrœder, Egham.
Also raised by Treyeran; L'O., Jan. '94.

Baroness Schrœder (Trianæ × dolosa). RHS., Aug. 23, '92 Ballantine for Schrœder, Egham.
syn. *Schrœderæ*.

Batalini nat. hyb. ?(intermedia × bicolor). Sander. .RHS., July 25, '93.

—?— (Bowringiana ♀ × labiata). Sdlg. Winn, Birmingham. O. R., Sept., '94.

Brabantiæ (Loddigesii ♀ × Aclandiæ). Dominy, for Veitch. 1864. fg. Fl. Mg., '67, t. 360. Named after Duchess of Brabant.

syn. *Aclandi-Loddigesii* Lindl.

Browniæ (Loddigesii Harrisoniana × Bowringiana). Sander, St. Albans. RHS., Oct. 9, '94. Named after Brown, St. Louis.

Brymeriana Rchb. f. nat. hyb. (superba × Eldorado). Coll. White for Low, Clapton. G. Ch., Oct. 20, '83. fg. Ldn., t. 343. O. A., t. 184. Named after Brymer, Dorchester.

Burberryana (intricata ♀ × superba). RHS., April 12, '92. Sander, St. Albans. Named after Burberry, gr. to Chamberlain, Birmingham.

calummata André (intermedia ♀ × Aclandiæ). Bleu, Paris. Rv. Hrt., Dec., '83, p. 564. fg. O. A., t. 166. G. Ch., Oct. 23, '86. Sown 1870, flowered 1878. 3 plants.

syn. Ct. *Bleui* Hort.

var. *c. fimbriata* from same seedpod and only named different on account of resembling intermedia, whereas calummata likens Aclandiæ.

Chamberlainiana Rchb. f. (guttata Leopoldii ♀ × Dowiana). G. Ch., October 1, '81. Seden for Veitch. Named after Chamberlain, Birmingham.

Chloris (Bowringiana ♀ × maxima). RHS., Oct. 10, '93. Veitch. fg. G. Ch., Oct. 28, '93.

Clæsiana—?—Statter, Manchester. RHS., May 14, '95.

Dominiana Lindl. (maxima ♀ × intermedia). G. Ch., Nov. 26, '59. fg. Fl. Mg., '67, t. 367.

var. **Pheidona** (intermedia ♀). RHS., Sept. 26, '93. Sander.

Empress Frederick (Mossiæ ♀ × Dowiana). RHS., June 21, '92. Veitch.

Fabia (labiata ♀ × Dowiana). Veitch, Chelsea. RHS., Nov. 13, '94.

Hardyana Williams nat. hyb. (Warscewiczii × Dowiana.) Named after Hardy, Timperley. fg. O. A., t. 231. Rchbch., t. 55. syn. *Laversinensis*. fg. Ldn., t. 305. *Massaiana*, fg. O. A., t. 362. *marmorata*. RHS., Oct. 6, '91. *Gardeniana*, fg. Ldn., t. 353. *Statteriana* Rolfe. fg. Ldn., t. 373. O. A., t. 468. var. *Countess of Derby* Rolfe. O. R., Oct., '94. Statter, Manchester. var. *Tate's* Lee, Manchester. Gdn., July 29, '93. fg. Jrl. Orch. '93, page 169. *Lindeni* Ldn., t. 468.

(Dowiana aurea ♀ × Warscewiczii). Sdlg. Winn, Birmingham. O. R., Sept., '94.

Harold (Gaskelliana ♀ × Warscewiczii). RHS., May 9, '93. Murray, for Cookson, Oakwood.

Harrisii Rchb. f. (guttata Leopoldii ♀ × Mendelii). G. Ch., Jan. 22, '87. Harris, Lamberhurst.

hybrida (Loddigesii ♀ × guttata). Dominy, for Veitch, 1856. (G. Ch., '63, p. 602). Lost to cultivation.

syn. *Patrocinii* St. Leger. Mentioned G. Ch. Aug. 9, '90. (Citade de Rio, May 28, '90.) Nat. hyb. described by Viscomte de St. Leger.

Also with Jænish, Flottbeck, Hamburg.

Raised with Peeters, Brussels. O. R., Nov., '93. (Loddigesii ♀ × guttata Leopoldii). Raised by Treseder, for Heath, Cheltenham. In litt. March,'93.

Isabella Rchb. f. nat. hyb. (Forbesii × intermedia). Koch & Fintelmann, Wochenschrift, '59, p. 336.

syn. *Krameriana* Rchb. f. G. Ch., 82, ii., p. 323. (Nov. 22, '88.) Named after Kramer with Jænish, Flottbeck.

syn. *Lowryana.* Sander. Temple Show, May, '91.

Kienastiana (Lueddemanniana ♀ × Dowiana aurea). Sander. RHS., Aug. 28, '94.

Lamberhurst Hybrid (intermedia ♀ × citrina). G. Ch., Jan. 21, '88. Harris, Lamberhurst. Crossed May 10, '80, seedpod ripe Feb. 19, '81, first sdlg. June 20, '81. syn. *intermedio-citrino.*

—?— (Loddigesii Harrisoniana × Hardyana ×). Sdlg. Sander, St. Albans. G. Ch., Nov. 10, '94.

Lord Rothschild (Gaskelliana ♀ × Dowiana aurea). RHS., Oct. 24, '93. Sander. fg. Jrl. Hrt., Nov. 9, '93. Wienr. ill. Ztg., June, '94.

Lucieniana Rchb. f. (Forbesii × guttata or granulosa). G. Ch., Oct. 10, '85. Named after L. Linden, Ghent.

Manglesii Rchb. f. (Lueddemanniana ♀ × Loddigesii). G. Ch., '80, p. 556. Dominy, for Veitch. Flowered Aug. '66.

Mantini (Bowringiana ♀ × Dowiana aurea). O. R., Dec. '94. Mantin, Olivet. Crossed '89, sown '90, first flower Oct., '94. fg. Rv. Hrt., March 16, '95.

Marstersoniæ Rchb. f. (Loddigesii ♀ × labiata). G. Ch., '78, p. 556. Seden, for Veitch. Named after Mrs. Seden, née Marsterson.

Measuresii Rchb. f. nat. hyb. ?(Aclandiæ × Walkeriana. G. Ch., Oct. 23, '86. Named after Measures, Streatham.

—?— (Mendelii × Aclandiæ). Sdlg. Charlesworth, Bradford. O. R., July '94.

Minucia (Loddigesii ♀ × Warsewiczii). RHS., Sept. 20, '92. Veitch, Chelsea.

var. **Ashtoniana** (Loddigesii Harrisoniana). RHS., Sept. 26, '93. Lewis, Southgate. Ct. *Johnsoniana*, from same seedpod.

Also raised by Hollington, Enfield. RHS., Oct. 10, '93.

Miss Williams (Loddigesii Harrisoniana ♀ × Gaskelliana). Bristow, for Temple, Groombridge. RHS., Nov. 13, '94.

Mitchelii Rchb. f. (guttata Leopoldii ♀ × Trianæ). G. Ch., '76, p. 386. fg. Fl. Mg., '79, p. 337. 13 years raising. Mitchell, for Ainsworth, Manchester.

—?— (Mossiæ × Lawrenceana). Amateur raised. Proth. & Mors. sale. Nov. 28, '90.

—?— (Mossiæ-Percivaliana). Linden, Brussels. L'Orchdn. mtg., Jan., '94.

Also Bowyer, for LeDoux, East Moulsey. RHS., June 21, '92.

Mrs. M. Wells (Parthenia [Prince of Wales] ♀ × Warneri). Sander. RHS., Aug. 14, '94.

O'Brieniana (Walkeriana [dolosa] × Loddigesii). Nat. hyb. RHS., Dec., 1890. O. R., Jan., '95.

Parthenia (calummata × ♀ × Mossiæ.) Bleu, Paris. Jrl. Hrt. Soc. Franc., May, '89. Crossed '78, flowered '89. fg. Ldn., t. 276. Rchbch., ii, t. 67.

syn. *Prince of Wales* (Mossiæ Wageneri). Sander. Temple Show, May 29, '91.

Philo (Mossiæ ♀ × iricolor). RHS., April 12, '92. Veitch.

picturata Rchb. f. (guttata ♀ × intermedia). G. Ch., '77, p. 584. Dominy, for Veitch. By him also *hybrida picta* Rchb. f. fg. Fl. Mg., '81, t. 473.

syn. *flaveola* Rchb. f. G. Ch., Oct. 27, '88. Backhouse, York.

syn. *intricata* Rchb. f. G. Ch., July 5, '84. Nat. hyb.

syn. *scita* Rchb. f. G. Ch., Oct. 17, '85. Nat. hyb. with Williams, Holloway.

porphyrophlebia Rchb. f. (intermedia ♀ × superba). G. Ch., Oct. 31, '85. Sown 1881. Seden, for Veitch. syn. *Alberti* Perrenoud. OdS.

quinquecolor (Aclandiæ × Forbesii). Dominy, for Veitch. G. Ch., June, '65. fg. Fl. Mg., t. 511.

resplendens Rchb. f. nat. hyb. (granulosa × —?—). G. Ch., May 30, '85. Low, Clapton.

Schilleriana Rchb. f. nat. hyb. ?(Aclandiæ × guttata). Koch Grtztg., '57, p. 335.

—?— (Schilleriana × × Dowiana aurea). O. R., July, '94. Sdlg. Charlesworth, Bradford.

Sororia Rchb f. nat. hyb. ?(Walkeriana × guttata). G. Ch., Jan. 8, '87. Williams, Holloway.

suavior Rchb. f. (intermedia ♀ × Mendelii). V. M., '87, p. 92. Seden, Veitch.

velutina Rchb. f. nat. hyb. ?(bicolor × guttata). G. Ch., '70, p. 140. fg. O. A., t. 26. According to V. M. not of hybrid origin.

venosa Rolfe. nat. hyb. (Loddigesii Harrisoniana × Forbesi). O. R., May, '94. Linden from Rio de Janeiro.

Victoria Regina J. O'B. Nat. hyb. (guttata Leopoldii × labiata). G. Ch., Jan., '92, p. 586, fg. 115. Jrl. Orch., Jan., '92, fg. 60. O. R., Jan., '95. Rchbch., '94, t. 85.

—?— (Warscewiczii ♀ × Rex). Also vice versa. Sdlgs. O. R., Oct., '94. Statter, Manchester.

Wendlandiana (Bowringiana ♀ × Warscewiczii). O. R., May, '94. Flowered first time fall '90. Veitch. Named after Wendland, Hanover.

William Murray (Mendelii ♀ × Lawrenceana). Temple Show, May 25, '93. Murray, for Cookson, Oakwood.

Wilsoniana Rchb. f. nat. hyb. ?(bicolor × guttata) G. Ch., '77, p. 72. Named after Wilson, Liverpool.

syn. *Dukeana* Rchb. f. nat. hyb. G. Ch., April 30, '87. Named after Duke, Lewisham.

CHYSIS.

Chelsoni Rchb. f. (bractescens ♀ × lævis). G. Ch., '74, i, p. 535. Seden, for Veitch, Chelsea. O. R., Feb., '93, states: (Limminghei ♀ × bractescens).

Sedeni Rchb. f. (Limminghei ♀ × bractescens). G. Ch., '80, p. 616. Seden, for Veitch.

CYMBIDIUM.

eburneo-Lowianum (Lowianum ♀). RHS., March 12, '89. 9 years from cross to flower. Veitch, Chelsea.

—?— (giganteum × elegans). Sdlg. Lewis, Southgate. Orch. sale July 19, '95.

—?— (giganteum ♀ × Mastersianum). Sdlg. with Winn, Birmingham. O. R., Sept. '94.

Tracyanum nat. hyb. (grandiflorum × giganteum). fg. G. Ch., Jan. 31, '91.

Winnianum (giganteum ♀ × eburneum). RHS., Nov. 1, '92. fg. Rchbch., vl. 2, t. 75. Oliver, for Winn, Birmingham.

CYPRIPEDIUM.

Synonyms:

Acis—Eucharis.
Adonis (Williams)—Savageanum.
Æolus—Priapus.
Æsculapius—gigas.
Albertianum—Leeanum.
Albert Truffaut—Savageanum.
Alector—Eyermanianum.
Alice Gayot—œnanthum.
almos—nitens.
amabile (Page)—Williamsianum.

amandum—Crossianum.
Amesianum—Measuresianum.
amethystinum—marmorophyllum.
Amphion—gigas.
Antigone—Aphrodite.
Anton Joly—Claudii.
apiculatum—Harrisianum
Ariadne—Lynchianum.
Artemis—Northumbrian.
Ashburtonioides—Savageanum.
Ashworthianum—Malyanum.
Ashworthii—E. Ashworth.
atropurpureum—marmorophyllum.
Augusta—aureum.
aurantiacum—Crossianum.
auricularum—vernixium.
barbato-superbiens—superciliare.
barbato-Veitchianum—superciliare.
Barteti—Ashburtoniæ.
Basileum—Cybele.
Beatrice—lucidum.
Beechense—Cymatodes.
Bel-Air-d'Olivet—Harrisianum.
Bel-Air-d'Olivet—Measuresianum.
Bellona—Lathamianum.
Berggrenianum—œnanthum.
Bookeri—Variety.
Bosscherianum—Eyermanianum.
Bradshawianum—radiosum.
Bragaianum—Germinianum.
Burfordiense—Bryani.
Burtonii—suffusum.
Cahuzac—Carnusianum.
Californicum—caligare.
calospilum—Ashburtoniæ.
calloso-lævigatum—Millmani.
callosum sublæve—Siamense.
Calypso—Lathamianum.
Cambridgeanum—Harrisianum.
Canhamii—Canham.
Cassiope—Atys.
Cecilia (misprint)—Celia.
Cecilia—Maynardii.
Celeus—nitens.
Charles Canham—Canham
Charles Gondoin—œnanthum.
Charles Reffold—Tityus.
Charles Richmond—Charles Rickman.
Chantino-ciliolare—Alfred Bleu.

Chelseense—calanthum.
chloroneurum—calophyllum.
Claptonense—Williamsianum.
Clarence—Tityus.
Clément Loury—œnanthum.
Clio—Alcides.
Clovenfords—Youngianum
Cobbianum—decorum.
conspicuum—Harrisianum.
Cooksonianum—almum.
Corningianum—Youngianum.
Crossianum Castle Hill var.—Castle Hill.
Curtisii (Bleu)—Lachmee.
Cydippe—Pageanum.
Cyris—vernixium.
Dallemagni—De Witt Smith.
Dauthieri—Harrisianum.
Dauthieri latifolium—Alfred Bleu.
Dauthieri violaceum purpureum—Marguerite Mantin.
Daviesianum—vernixium.
Davisanum—vernixium.
delicatulum—Swanianum.
Denisianum—Lathamianum.
Denisianum (Linden)—Elinor.
Desboisianum—Measuresianum.
Diana—Eyermanianum.
Dibdin—vernixium.
dilectum—Germinyanum.
discolor—calophyllum.
doliare—plunerum.
dubium—Measuresianum.
Edgar Jolibois—Ashburtoniæ.
Eismannianum—Williamsianum.
Electra—œnanthum.
elegans—Harrisianum.
Engelhardtæ—Leeanum.
Erycina—Savageanum.
Etéocle—aureum.
Etienne Jolibois—Alcides.
Euryades—Adrastus.
Euphrosyne—Lynchianum
Eurychilos—?Eurylochus.
Eurydice (Vuylsteke)—Zampa.
Excelsior (Statter)—excellens.
Excelsior—Buchanianum.
expansum—Ashburtoniæ.
Fascinator—Ceres.
Felix Faure—Mons. Finet.
Felix Jolibois—œnanthum
Figaro—Tityus.
Finetianum—selligerum.

LIBRARY OF THE UNIVERSITY OF CALIFORNIA.

Fitchianum—marmorophyllum.
Fiveanum—Savageanum.
Flamingo—Lathamianum.
Flora—Lathamianum.
Fournierianum—Eucharis.
Fowlerianum—Southgatense.
Fraseri—porphyrochlamys
Galatea—œnanthum.
Gallicei—nitens.
Gandavense—Olivet.
Ganesa—decorum.
Gaskelliana—Niobe.
Gertrude Hamilton—Olenus.
Gibezianum — Measuresianum.
gloriosum (Hye)—gigas.
gloriosum—Tryanowskianum.
Godseffianum —Germinyanum.
G. S. Ball—radiosum.
Halaighi (misprint)—Aylingii.
Harrisianum robustum—Loochristyanum.
Hayetti—Ledouxiæ.
Haynaldianum Mdlle. Clotilde—Clotilde Moens.
Haywoodianum—T. B. Haywood.
Hebe (Grey)—Alice.
Hebe (Hye)—aureum.
Hebe (Measures)—Enfieldense.
Hephæstus—almum.
Hera (Rolfe)—Lathamianum.
Hera (Veitch)—Adrastus.
Hermione—aureum.
Hermione—Eyermannianum.
Hermode—aureum.
Hero—villosum.
hirsuto-villosum—Germinyanum.
Hodgsoni—Hobsoni.
Hookeræ-Veitchii—Pageanum.
Horneri—Savageanum.
Horneri (Marwood)—vernixium.
Huybrechtianum—Ceres.
hybridum — carnusianum, euryandrum—Harrisianum.
Ianthe—plunerum.
Inspirator—Celia.
intermedium—euryandrum.
Ionodes—Behrensianum.
Io-Spicerianum—Lœwegrenianum.
Ivonnæ—Leeanum.

Ixion—aureum.
James Hamilton—Leeanum
James H. Veitch—Constance.
J. Bartels—Indra.
Janus—Statterianum.
Johnsonianum —decorum.
J.H. Berry—Watsonianum
Julien Coffiznez (Coffinet) —Measuresianum.
Jupiter—Germinyanum.
Kaloe—turpe.
Kirchhoffianum—Savageanum.
Krouseanum —Malyanum.
Lady Hutt—The Gem.
Laforcadei —Ashburtoniæ.
Langleyense—Morganiæ.
La Nymph—Creon.
Laucheanum—Ashburtoniæ.
Lauræ—Mrs. G. D. Owen.
Lawre-conco—conco-Lawre
Lawrenceo-Curtisii —Gowerianum.
Lawre-venustum — auroreum.
Leander—Adrastus.
Leda—plunerum.
Leo—Lathamianum.
Leonæ—Imschootianum.
Leopoldi—Simonii.
lepidum—Tautzianum.
lineolare—plunerum.
Littleanum—Swanianum.
Leysenianum—Charles Rickman.
Lobengula —Williamsianum.
Loury—œnanthum.
Lourianum—Lowrianum.
Lowii-superbiens—macropterum.
Lucienianum—nitens(?).
lutescens—Javanico-superbiens.
Mabelianum—W. R. Lee.
Macfarlanei (Lewis)—Patersonii.
Madame Barbery—Madame Barbey.
Madame Charles Gondoin —œnanthum.
Madame Coffinet—œnanthum.
Madame de Curte—nitens.
Madame E. Cappe—Savageanum.
Madame Emilie Gayot — œnanthum.
Madame Gibez—Measuresianum.
Madame Gibez—Lathamianum.
Madame Harry Veitch — Aphrodite.

Madame Jules Hye—Celia.
Madame Léonie Doin—regale.
Madame Marguerite Hye—aureum.
Madame Roch Jolibois—œnanthum.
Madeline Gayot — Swanianum.
Mæsereelianum—Leeanum
marmorophyllum superbum—Parksianum.
Magdalena—Adrastus.
Marshianum—Creon.
Masonianum—Williamsianum.
Masonii—Alice.
Mauriceanum — Savageanum.
Mdlle. Alice Gayot—œnanthum.
Mdlle. Clotilde — Clotilde Moens.
Mdlle. Germaine Scellier de Gisors — Savageanum.
Mdlle. Louise Scellier de Gisors—œnanthum.
Mdlle. Nancy Descombes—Gravesiæ.
Medea—Ceres.
meirax—calophyllum.
melanophthalmum — calophyllum.
Memoria Moensii—Tityus.
Merops—Greyanum.
Météore—Charles Rickman
Minerva—plunerum.
miniatum—Niobe.
minosa—Minos.
modestum (Sander) — molestum.
Moens, Moensii—Tityus.
Mons. de Curte—nitens.
Mons. Paul Descombes—gigas.
Mrs. Canham—Canham.
Mrs. Fred. Hardy—Measuresiæ.
Mrs. Tautz—nitens.
Mrs. Warren Hook—Creon.
multicolor—Hornianum.
Murillo—vernixium.
niveo-ciliolare—Aylingii.
Nymphe—Creon.
obscurum — Measuresianum.
obscurum—Ashburtoniæ.
Œdipe—aureum.
Œnone—Pageanum.
œno-superbiens—Tityus.
Olivetense—barbatum.
Olympia—aureum.
Orestes—œnanthum.
ornatum—Williamsianum.
Osbornei—Savageanum.
Othello—Germinyanum.
patens—marmorophyllum.

pavoninum—Measuresianum.
Peetersianum—selligerum.
pellucidum—Mdlle. Madeleine Gayot.
Pheres—Alcides.
Pitcherianum — Savageanum.
politum—calophyllum.
Polynice—aureum.
porphyrospilum—pycnopterum.
Préfet Bœgner — Ridolfianum.
Prewettii—Williamsianum
Prœtus—Augustum.
pseudo-Curtisii—Lachmee.
psittacinum—Crossianum.
refulgens—Adonis.
René Jolibois—œnanthum.
Rex—Lathamianum.
Reinaldianum—Reginaldianum.
Reynaldi—villosum.
Ribezianum — Measuresianum.
Richardsonii—Enfieldense
Roberti (Statter)—Alcides.
Roberti—Germinyanum.
Robertsianum—Imschootianum.
Robinsonianum—Euryale.
Rodigasianum—Maynardii
Rowallianum — Measuresianum.
rubescens—Kramerianum.
rubrum—Atys.
Ruth Ayling—Gravesiæ.
Sallieri—nitens.
Sappho—calanthum.
Schlesingerianum —nitens
Seda (misprint)—Leda.
Seegerianum — Savageanum.
selligero - Harrisianum—Paulii.
sementa—Javanico-superbiens.
Senateur Montefiore — Parksianum.
Sibyrolense—nitens.
Siebertianum — Mdlle. Madeleine Gayot.
Siemonii—Euryale.
Sirius (Sander)—Ceres.
Sirius—J. Gurney Fowler.
Sivanianum (misprint) — Swanianum.
Smeeanum—vernixium.
Smithii—Lucie.
Smithii pretiosa—De Witt Smith.
Souv. de Madame Jules Dupré—Savageanum.
Sphinx—vernixium.
Spicero - Lowianum — De Witt Smith.
Spicero-Harrisii—Savageanum.
Spicero-niveum—Isabellæ.

Spicero-villosum—Lathamianum.
Spico-tonsum—Celia.
sublæve—Siamense.
Surprise—aureum.
Sylvia—Gowerianum.
Telemachus—Aphrodite.
tenebrosum — Williamsianum.
Thayerianum—luridum.
The Duke—euryandrum.
The Hendre—gigas.
The Pard—Georgianum.
Themis—œnanthum.
Thetis—Measuresianum.
Thibautianum—œnanthum
Titanes—Ledouxiæ.
Uehleinianum — Allanianum.
Umlauftianum—Eucharis.
Vallerandi—Leeanum.
Vandewielianum—Lathamianum.
VanHoutteanum—Madame Van Houtte.
Van Molianum—Ceres.
variopictum—radiosum.
Veitchii-Dauthieri — Tryonianum.
Venus—Muriel Hollington
Vertumne—aureum.
Vervætianum—Euryale.
Vesta—E. Ashworth.
villoso-Harrisianum—Williamsianum.
villosum violaceum — Germinyanum.
Wallertianum—Williamsianum.
Warnero-superbiens — superciliare.
Warnhamense—Clinkaberryanum.
Warocqueanum—vexillarium.
Weathersianum—Zampa.
W. W. Lunt—nitens.
Yvonnæ—Leeanum.
Zeno—Romulus.
Zephyra—aureum.

Species used in crossing:

Argus Rchb. f.

barbatum—turpe.
bellatulum—Evenor.
callosum—calloso-Argus.
Curtisii—Hurrellianum.
Dayanum—Pandora.
insigne—Swinburnei.
Lawrenceanum—Io.
niveum—Gravesiæ.
œnanthum ×—Mdlle. Josée Descombes.
Philippinense—Bryani.
purpuratum—Batalini.
Spicerianum—Crethus.
vexillarium × —
villosum—vernixium.

barbatum Lindl.

Argus—turpe.
barbatum—barbatum.
bellatulum—Charles Rickman.
calophyllum × —festum.
ciliolare—Mons. Elysée Descombes.
concolor—tesselatum.
Crossianum ×—Marguerite Mantin.
Curtisii—Kerchovianum.
Dayanum—Swanianum.
Druryi—orphanum.
Fairieanum—vexillarium.
Godefroyæ—J. Gurney Fowler.
Harrisianum ×—Ensign.
hirsutissimum—porphyrochlamys.
Hookeræ—marmorophyllum.
insigne—Ashburtoniæ.
Javanicum—pleistochlorum.
Lawrenceanum—almum.
Lowii—calanthum.
niveum—Tautzianum.
Philippinense—selligerum.
purpuratum—barbato-purpuratum.
selligerum × —
Spicerianum —Eyermannianum.
Stonei—euryandrum.
superbiens—superciliare.
superciliare × —Ministre A. Viger.
Swanianum × —Olivet.
venustum—calophyllum.
villosum—Harrisianum.

bellatulum Rchb. f.

Argus—Evenor.
barbatum—Charles Rickman.
callosum—
concolor—
ciliolare—Olenus.
Crossianum × —Jacobianum.
Dayanum—Annie Measures.
Harrisianum × —Southgatense
insigne—bellatulum-insigne.
niveum—Psyche.
Lawrenceanum—Lawrebel.
Parishii—
Philippinense—Phœbe.
Rothschildianum—
Sanderianum—

Stonei—Paris.
superbiens—Measuresiæ.
superciliare ×—Arnoldiæ.
Swanianum ×—William Lloyd.
venustum—bellatulo-venustum.
villosum—

Boxalli Rchb. f.

See villosum.

Bullenianum Rchb. f.

callosum—Siamense.
insigne—Corbeillense.

callosum Rchb. f.

Argus—calloso-Argus.
bellatulum—
Bullenianum—Siamense.
calophyllum—Pallas.
ciliolare—Zeus.
concolor—conco-callosum.
Curtisii—Goultenianum.
Fairieanum—Juno.
Godefroyæ—Mons. Finet.
Harrisianum×—Ledouxiæ
hirsutissimum—Doncasterianum.
insigne—Imschootianum.
niveum—Winifred Hollington.
Philippinense—Millmani.
Stonei—Fordianum.
superciliare × —Moreauanum.
Tautzianum × —Nandi.
venustum—Orpheus.
villosum—Indra.

Chamberlainianum J. O'B.

Leeanum—
Stonei—
superbiens—

ciliolare Rchb. f.

barbatum—Mons. Elysée Descombes.
bellatulum—Olenus.
callosum—Zeus.
Druryi—Greyanum.
hirsutissimum—Eurylochus.
insigne—Alfred Bleu.
Javanico-superbiens × —Iris.
Lawrenceanum—Lucie.
niveum—Aylingii.
Spicerianum—Variety.
Stonei—Mad. Georges Truffaut.
superbiens—Lachmee.
villosum—Pygmalion.

concolor Parish.

almum × —Hollidayanum.
barbatum—tesselatum.
bellatulum—
callosum—conco-callosum.
Curtisii—
Dayanum—Burbidgeanum
Harrisianum×—Watsonianum.
insigne—Orion.
Lawrenceanum—conco-Lawre.
Spicerianum—Arête.
Stonei—
superbiens—Arnoldianum.
venustum—Marshallianum.

Curtisii Rchb. f.

Argus—Hurrellianum.
barbatum—Kerchovianum.
callosum—Goultenianum.
concolor—
hirsutissimum—Adonis.
Lawrenceanum—Goweria-num.
Lowii—Souv. de Roch Jolibois.
niveum—Cowleyanum.
Philippinense—Clinkaberryanum.
Rothschildianum—A. de Lairesse.
selligerum × —Vanneræ.
Spicerianum—Allanianum
Spicero-niveum—Isabellæ.
Stonei—Constance.
superbiens—Cymatodes.
villosum—St. Hilda.

Dayanum Rchb. f.

Argus—Pandora.
barbatum—Swanianum.
bellatulum—Annie Measures.
concolor—Burbidgeanum.
superciliare × —Mons. Coffinet.
Fairieanum—Constableanum.
Harrisianum × —
insigne—Mdlle. Madeleine Gayot.
Javanicum—Wendlandianum.
œnanthum ×—Tennyson.
Rothschildianum—Kimballianum.
Spicerianum—pallens.
superbiens—George Kittel.
venustum—caligare.
villosum—Scylla.

Druryi Bedd.

barbatum—orphanum.
ciliolare—Greyanum.
hirsutissimum—
insigne—Æson.
Javanico-superbiens × —Josephianum.
Lawrenceanum—Cybele.
niveum—microchilum.
Spicerianum—Buchananum.
superbiens—T.B.Haywood
villosum—Winnianum.

Fairieanum Lindl.

barbatum—vexillarium.
callosum—Juno.
Dayanum—Constableanum
insigne—Arthurianum.
Lawrenceanum—Fairieano-Lawrenceanum.
purpuratum—H. Ballantine.
Spicerianum—Niobe.
superbiens—Edwardi.
tonsum—Mrs. F. L. Ames.

Godefroyæ L'Orchd.

barbatum—J.Gurney Fowler.
callosum—Mons. Finet.
Harrisianum × —Harrisifroyæ.
niveum—

Haynaldianum Rchb. f.

insigne—Pelias.
Lathamianum × —nobilior
Leeanum × —Clotilde Moens.
Spicerianum—Carnusianum.
villosum—Augustum.

hirsutissimum Lindl.

barbatum—porphryrochlamys.
callosum—Doncasterianum
ciliolare—Eurylochus.
Curtisii—Adonis.
Druryi—
insigne—Alcides.
Lawrenceanum—mulus.
Leeanum × —Zampa.
nitens × —Erato.
Spicerianum—Ceres.
superbiens—Castleanum.
Swanianum×—T.W.Bond.
villosum—Germinyanum.

Hookeræ Rchb. f.

barbatum—marmorophyllum.
Harrisianum × —Loochristyanum.
insigne—Echo.
Javanico-superbiens × —amabile.
Lawrenceanum—Enfieldense.
Lowii—suffusum.
marmorophyllum × —fulgens.
Mastersianum—xanthophyllum.
œnanthum × —Cleopatra.
purpuratum—gemmiferum
Rothschildianum—Y'mir.
Spicerianum—Eurydice.
Stonei—melanthum.
superbiens—Pageanum.
venustum—Atys.

insigne Wallich.

Argus—Swinburnei.
Ashburtoniæ × —Annærti.
auroreum ×—Ephialtes.
barbatum—Ashburtoniæ.
bellatulum—
Bullenianum—Corbeillense.
callosum —Imschootianum
calophyllum × —Northumbrian.
ciliolare—Alfred Bleu.
concolor—Orion.
Crossianum×—Castle Hill.
Dayanum—Mdlle. Madeleine Gayot.
Druryi—Æson.
Fairieanum—Arthurianum
Harrisianum × —œnanthum.
Haynaldianum—Pelias.
hirsutissimum—Alcides.
Hookeræ—Echo.
Io × —Tryanowskyanum.
Javanicum—Vibilia.
Lawrenceanum—Eucharis.
Leeanum × —Simonii.
marmorophyllum × —The Gem.
nitens × —Romulus.
niveum—Muriel Hollington.
œnanthum × —Milo.
purpuratum—regale.
Siamense—Reginaldianum
Spicerianum—Léeanum.
superbiens—Thortoni.
Swanianum ×—Comus.
tonsum—Krishna.
venustum—Crossianum.
villosum—nitens.
Williamsianum × —Ridolfianum.

Javanicum Rwdt.

barbatum—pleistochlorum.
Dayanum—Wendlandianum.
Harrisianum × —Colemanni.
insigne—Vibilia.
Spicerianum—Javanico-Spicerianum.
superbiens—Javanico-superbiens.
villosum—vernixioides.

Lawrenceanum Rchb. f.

Argus—Io.
barbatum—almum.
bellatulum—Lawrebel.
ciliolare—Lucie.
concolor—conco-Lawre.
Curtisii—Gowerianum.
Druryi—Cybele.
Fairieanum—Fairieano-Lawrenceanum.
Harrisianum × —gigas.
hirsutissimum—mulus.
insigne—Eucharis.
Lowii—Patersonii.
Marshallianum × —Henry Graves.
nitens × —decorum.
niveum—Aphrodite.
œnanthum × —Bijou.
Parishii—Elizabethæ.
Philippinense—Hobsonii.
Rothschildianum—
Spicerianum—radiosum.
Stonei—Numa.
superbiens—Euryale.
tonsum—Madame Barby.
venustum—auroreum.
vernixium × —Madame Elysée Descombes.
villosum—luridum.

Lowii Lindl.

barbatum—calanthum.
Curtisii—Souv. de Roch Jolibois.
Hookeræ—suffusum.
Lawrenceanum—Patersonii.
niveum—niveo-Lowi.
œnanthum × —Daisyæ.
Parishii—Robinianum.
Philippinense—Berenice.
Spicerianum—De Witt Smith.
Stonei—Stonei platytænium (?)
superbiens—macropterum.
venustum—pycnopterum.
villosum—lucidum.

Mastersianum Rchb. f.

Hookeræ—xanthophyllum.

niveum Rchb. f.

Argus—Gravesiæ.
barbatum—Tautzianum.
bellatulum—Psyche.
callosum—Winifred Hollington.
ciliolare—Aylingii.
Curtisii—Cowleyanum.
Druryi—microchilum.
Godefroyæ—
Harrisianum ×—Mawoodii
insigne—MurielHollington
Lawrenceanum—Aphrodite.
Lowii—niveo-Lowii.
nitens × —La France
œnanthum × —
Philippinense—Vipani.
Rothschildianum—
Spicerianum—Isabellæ.
superbiens—Georgianum.
superciliare × —Mad. Octave Opoix.
venustum—Madame Van Houtte.
vexillarium × —

Parishii Rchb. f.

bellatulum—
Lowii—Robinianum.
Lawrenceanum—Elizabethæ.

Philippinense Rchb. f.

Argus—Bryani.
barbatum—selligerum.
bellatulum—Phœbe.
callosum—Millmani.
Curtisii—Clinkaberryanum.
Lawrenceanum—Hobsoni.
Lowii—Berenice.
niveum—Vipani.
Spicerianum—Astrea.
superbiens—Youngianum.
venustum—Alfred.
villosum—Priapus.

purpuratum Lindl.

Argus—Batalini.
barbatum—barbato-purpuratum.
Fairieanum—H. Ballantine
Hookeræ—gemmiferum.
insigne—regale.
Io × —molestum.
Spicerianum—Maynardii.
Stonei—Edith Winn.
villosum—concinnum.

Rothschildianum Rchb. f. var. **Elliottianum.**

bellatulum—
Curtisii—A. de Lairesse.
Dayanum—Kimballianum
Harrisianum ×—excellens.
Hookeræ—Y'mir.
Lawrenceanum—
niveum—
Spicerianum—
superbiens—W. R. Lee.
superciliare × —Massaianum.

Sanderianum Rchb. f.

bellatulum—
Harrisianum × —
selligerum × —
superbiens—Sanderiano-superbiens.

Spicerianum Rchb. f.

Argus—Crethus.
Arthurianum × —Minos.
Ashburtoniæ × —Joseph Donat.
barbatum—Eyermanianum
calophyllum ×—Macfarlanei.
ciliolare—Variety.
concolor—Arête.
Crossianum×—Malyanum.
Curtisii—Allanianum.
Dayanum—pallens.
Druryi—Buchanianum.
Fairieanum—Niobe.
Harrisianum × —Savageanum.
Haynaldianum—Carnusianum.
hirsutissimum—Ceres.
Hookeræ—Eurydice.
insigne—Leeanum.
Io × —Loewegrenianum.
Javanicum—Javanico-Spicerianum.
Lawrenceanum—radiosum
Lowii—De Witt Smith.
marmorophyllum×—Parksianum.
Measuresianum×—E. Ashworth.
Niobe × —Norma.
nitens ×—aureum.
niveum—Isabellæ.
œnanthum × —Tityus.
Philippinense—Astrea.
purpuratum—Cythera.
Rothschildianum—
selligerum ×—Lynchianum
Siamense—
Stonei—Alice.
superbiens—Hornianum.
Swanianum ×—picturatum

tonsum—Celia.
venustum—polystigmaticum.
vernixium × —Claudii.
vexillarium × —Statterianum.
villosum—Lathamianum.

Stonei Hort. Low.

barbatum—euryandrum.
bellatulum—Paris.
Chamberlainianum—
ciliolare—Mad. Georges Truffaut.
callosum—Fordianum.
concolor—
Curtisii—Constance.
Hookeræ—melanthum.
Lawrenceanum—Numa.
Leeanum—Harveyanum.
Lowei—Stonei platytænium (?)
purpuratum—Edith Winn.
Spicerianum—Alice.
superbiens—Morganiæ.
venustum—Doris.
vexillarium × —Apollo.

superbiens Rchb. f.

barbatum—superciliare.
bellatulum—Measuresiæ.
Chamberlainianum—
ciliolare—Lachmee.
concolor—Arnoldianum.
Curtisii—Cymatodes.
Dayanum—George Kittel.
Druryi—T. B. Haywood.
Fairieanum—Edwardii.
Harrisianum×—Tryonianum.
hirsutissimum—Castleanum.
Hookeræ—Pageanum.
insigne—Thortoni.
Javanicum—Javanico-superbiens.
Lawrenceanum — Euryale.
Lowii—macropterum.
niveum—Georgianum.
œnanthum×—œno-superbiens.
Philippinense—Youngianum.
Rothschildianum—W. R. Lee.
Sanderianum—Sanderiano-superbiens.
selligerum × —Elinor.
Stonei—Morganiæ.
Spicerianum—Hornianum.
venustum—Carrierei.
villosum—Canham.

tonsum Rchb. f.

Fairieanum—Mrs. F. L. Ames.
Harrisianum×—modestum
insigne—Krishna.
Lawrenceanum—Madame Barby.
Leeanum × —maculatum.
Measuresianum ×—Tacita.
selligerum×—Aspasia.
Spicerianum—Celia.
venustum—Polyphemus.
villosum—Théodore Bullier.

venustum Wallich.

bellatulum—bellatulo-venustum.
barbatum—calophyllum.
callosum—Orpheus.
concolor —Marshallianum.
Crossianum × —venusto-Crossianum.
Dayanum—caligare.
Harrisianum × —Minerva.
Hookeræ—Atys.
insigne—Crossianum.
Lawrenceanum—auroreum
Leeanum×—Beatrice Ashworth.
Lowii—pycnopterum.
niveum—Madame Van Houtte.
œnanthum ×—Wendlandianum.
Philippinense—Alfred.
Spicerianum —polystigmaticum.
Stonei—Doris.
superbiens—Carrierei.
tonsum—Polyphemus.
villosum—Measuresianum.

villosum Lindl. var. **Boxalli** Veitch.

Argus—vernixium.
barbatum—Harrisianum.
bellatulum—
Canham × —Capt. Lendy.
callosum—Indra.
calophyllum × —Pluto.
ciliolare—Pygmalion.
Curtisii—St. Hilda.
Dayanum—Scylla.
Druryi—Winnianum.
gemmiferum×—Héloise Mantin.
Harrisianum × —Williamsianum.
Haynaldianum—Augustum.
hirsutissimum—Germinyanum.

insigne—nitens.
Io × —Behrensianum.
Javanicum—vernixioides.
Lawrenceanum—luridum.
Leeanum × —Adrastus.
Lowii—lucidum.
Morganiæ×—Friderico Nobile.
nitens ×—J. Howe.
œnanthum × —Krameria-num.
Philippinense—Priapus.
plunerum × —Burberrya-num.
purpuratum —concinnum.
Spicerianum—Lathamia-num.
superbiens—Canham.
tonsum—Théodore Bullier.
venustum—Measuresia-num.
villosum Boxalli—villosum

Hybrids used in crossing:

almum.

(Lawrenceanum × barbatum.)
concolor—Hollidayanum.

Arthurianum.

(insigne × Fairieanum.)
Leeanum×—Mary Lee.
Spicerianum—Minos.

Ashburtoniæ.

(barbatum × insigne.)
calophyllum × —Imperatrix.
Harrisianum × —Wiganianum.
insigne—Annærti.
Leeanum × —Louisæ.
Numa × —Annamense.
Spicerianum—Joseph Donat.
vernixium × —Lowryanum

auroreum.

(Lawrenceanum × venustum.)
insigne—Ephialtes.

calophyllum.

(venustum × barbatum.)
Ashburtoniæ × —Imperatrix.
barbatum—festum.
Harrisianum × —Fausianum.
villosum—Pluto.

Canham.

(villosum × superbiens.)
villosum—Capt. Lendy.

Crossianum.

(insigne × venustum.)
barbatum — Marguerite Mantin.

bellatulum — Jacobianum.
Harrisianum × — Boyleanum.
insigne—Castle Hill.
Spicerianum —Malyanum.
venustum —venusto-Crossianum.

gemmiferum.

(Hookeræ × purpuratum.)
villosum—Héloïse Mantin.

Harrisianum.

(villosum × barbatum.)
Ashburtoniæ — Wiganianum.
barbatum—Ensign.
bellatulum—Southgatense.
callosum—Ledouxiæ.
calophyllum×—Fausianum
concolor—Watsonianum.
Crossianum×—Boyleanum
Dayanum—
Godefroyæ —Harrisifroyæ.
Hookeræ—Loochristyanum.
insigne—œnanthum.
Javanicum—Colemanni.
Lathamianum ×—Pryorianum.
Lawrenceanum—gigas.
Leeanum × — Harri-Leeanum.
nitens × —giganteum.
niveum—Mawoodi.
œnanthum × —Creon.
Rothschildianum — excellens.
Sanderianum—
selligerum × —Paulii.
Spicerianum—Savageanum
superbiens —Tryonianum.
Swanianum×—Janet Ross.
tonsum—modestum.
venustum—plunerum.
vernixium ×—bellinum.
villosum—Williamsianum.

Io.

(Lawrenceanum × Argus.)
insigne—Tryanowskyanum
purpuratum—molestum.
Spicerianum—Lœwegrenianum.
vexillarium ×—vexill-Io.
villosum—Behrensianum.

Javanico-superbiens.

(Javanicum × superbiens.)
ciliolare—Iris.
Druryi—Josephianum.
Hookeræ—amabile.

Lathamianum.

(Spicerianum × villosum.)
Harrisianum × — Pryorianum.
Haynaldianum — nobilior.

Leeanum.

(insigne × Spicerianum.)
Arthurianum×—Mary Lee.
Ashburtoniæ ×—Louisæ.
Chamberlainianum—
Harrisianum × — Harri-Leeanum.
Haynaldianum —Clothilde Moens.
hirsutissimum—Zampa.
insigne—Simonii.
Morganiæ × — Leeanum-Morganiæ.
nitens ×—Charlesianum.
œnanthum ×—Brunianum
selligerum×—Ashworthiæ.
Stonei—Harveyanum.
tonsum—maculatum.
venustum — Beatrice Ashworth.
villosum—Adrastus.

marmorophyllum.

(Hookeræ × barbatum.)
Hookeræ—fulgens.
insigne—The Gem.
Spicerianum—Parksianum

Marshallianum.

(venustum—concolor.)
Lawrenceanum — Henry Graves.

Measuresianum.

(villosum × venustum.)
tonsum—Tacita.

Morganiæ.

(superbiens — Stonei.)
Leeanum × — Leeanum-Morganiæ.
villosum—Frederico Nobile

Niobe.

(Spicerianum × Fairieanum.)
Spicerianum—Norma.

nitens.

(villosum—insigne.)
Harrisianum×—giganteum
hirsutissimum—Erato.
insigne—Romulus.
Leeanum×—Charlesianum
Lawrenceanum—decorum.
niveum—La France.
œnanthum ×—triumphans
Spicerianum—aureum.
villosum—J. Howe.

Numa.

(Lawrenceanum × Stonei.)
Ashburtoniæ × — Annamense.

œnanthum.

(Harrisianum × × insigne.)
Argus—Mdlle. Josée Descombes.
calophyllum × — Pollettianum.
Dayanum—Tennyson.
Harrisianum ×—Creon.

Hookeræ—Cleopatra.
insigne—Milo.
Lawrenceanum—Bijou.
Leeanum ×—Brunianum.
Lowii—Daisyæ.
nitens ×—triumphans.
niveum—
Spicerianum—Tityus.
superbiens — œno-superbiens.
venustum — Wendlandianum.
villosum—Kramerianum.

plunerum.

(Harrisianum × × venustum.)
Spicerianum—E. Ashworth
villosum —Burberryanum.

selligerum.

(barbatum × Philippinense.)
barbatum—
Curtisii—Vanneræ.
Harrisianum×—Paulii.
Leeanum × —Ashworthiæ.
Sanderianum—
superbiens—Elinor.
tonsum—Aspasia.

Siamense Rolfe.

(Bullenianum × callosum.)
insigne—Reginaldianum.
Spicerianum—
Spicerianum–Lynchianum

superciliare.

(barbatum × superbiens.)
barbatum—Ministre A. Viger.
bellatulum—Arnoldiæ.
callosum—Moreauanum.
Dyanum—Mons. Coffinet.
niveum — Mad. Octave Opoix.
Rothschildianum—Massaianum.
Swanianum ×—Hecla.
villosum—Mrs. G. D. Owen.

Swanianum.

(Dayanum × barbatum.)
barbatum—Olivet.
bellatulum—William Lloyd
Harrisianum×—JanetRoss
hirsutissimum—T. W. Bond
insigne—Comus.
Spicerianum—picturatum.
superciliare ×—Hecla.

Tautzianum.

(niveum × barbatum.)
callosum—Nandy.

vernixium.

(Argus × villosum.)
Ashburtoniæ×—Lowryanum.
Harrisianum ×—bellinum.
Lawrenceanum — Madame Elysée Descombes.
Spicerianum—Claudii.

vexillarium.
(barbatum × Fairieanum.)
Argus—
Io × —vexill-Io.
niveum—
Spicerianum-Statterianum
Stonei—Apollo.

Williamsianum.
(villosum × Harrisianum ×)
insigne—Ridolfianum.

A. de Lairesse (Curtisii ♀ × Rothschidianum). Sander, St. Albans. RHS., June 11, '95.

Adonis (hirsutissimum ♀ × Curtisii). Bond, for Ingram, Godalming. RHS., Aug. 29, '93.

syn. *refulgens*. Bond, for Ingram. RHS., March 12, '95.

Also with Burton, Gainsborough. RHS., Febr. 12, '95.

Adrastus (Leeanum × ♀ × villosum Boxalli). RHS., Feb. 9, '92. Seden, for Veitch, Chelsea. Only one plant raised; previously named *Hera*. fg. Jrl. Hrt., Feb. 8, '94. Gd. Mg., April 18, '94.

syn. *Euryades*. Veitch, Chelsea. RHS., Nov. 14, '93.

syn. *Magdalena*. Parentage doubtful, but supposed to be the same, or œnanthum × in place of Leeanum ×. Madoux, Brussels. M. L., 2d ed.

var. **Leander** (Leeanum × × villosum). Measures. M. L.

Æson (insigne ♀ × Druryi). Veitch. RHS., Dec. 13, '92.

Alcides Rolfe (insigne ♀ × hirsutissimum). Murray, for Cookson, Oakwood. G. Ch., Jan. 10, '91. Crossed March 18, '83, sown Nov. 25, '83; 2 plants.

syn. *A. Tretonense*, Pitcher & Manda, Shorthills. This is also given as (Argus Mœnsii ♀ × Curtisii), which would make it syn. Hurrellianum.

syn. *Etienne Jolibois*. Jolibois. Sown 1885. Exh. 1889. JSNH., Jan. '91.

syn. *Pheres*. Veitch. RHS., Dec. 13, '92.

var. **Clio** (insigne Chantini ♀). Grey, for Graves, Orange. in litt., Jan. '94.

var. **Roberti** (insigne Wallacei × hirsutissimum ♀). Johnson, for Statter, Manchester. RHS., Nov. 13, '94.

A. superbum. Sander, said to be with (insigne albo-marginatum ♀). RHS., Dec. 13, '92.

Alfred N.E.Br. (venustum ♀ × Philippinense). G. Ch., Sept. 13, '90. Keeling, for Drewett, Riding.

Also raised by Statter, Manchester. O. R., Oct., '94.

Alfred Bleu (ciliolare ♀ × insigne Chatini). Bleu., Paris. Jrl. Orch., '91, p. 343. fg. Rv. Hrt., Feb. 16, '93.

List of "French Hybrids of Cypripedium," reprint from Le Jardin, in G. Ch., March 23, '95, states wrongly (Crossianum×× villosum).

syn. *Chantino-ciliolare;* OdS.

syn. *Dauthieri latifolium*. Jolibois. Sown 1884. Exh. 1890. JSNH., Feb. '90.

Alice N.E.Br. (Stonei ♀ × Spicerianum). G. Ch., Sept. 13, '90. Keeling, for Drewett, Riding.

Also raised by Pynært. Blg. Hrt. Soc., July 6, '94.

syn. *Masonii*. Low, Clapton. RHS., June 25, '95.

var. **Hebe** (Spicerianum ♀). Grey, for Graves, Orange. G. & F., March 1, '93.

Allanianum (Spicerianum ♀ × Curtisii). O. R., Jan., '94. Pitcher & Manda, Shorthills. Named after Allen, Boston.

syn. *Uehleinianum*. Sander, St. Albans. M. L., 2d ed.

almum Rchb. f. (Lawrenceanum ♀ × barbatum). G. Ch., April 16, '84. Cookson.

a. atropurpureum. Pitcher & Manda. Am. Gardg., March 23, 95.

syn. *Cooksonianum* Hort. Crossed Jan. 16, '81, sown Dec. 11, '81; 90 plants.

syn. *Hephæstus* AHK. Parentage doubtful. Measures, Streatham. G. Ch., April 7, '88.

amabile Bleu (Javanico-superbiens × ♀ × Hookeræ). Bleu, Paris. fg. Rv. Hrt., Nov. 1, '91. Sown 1886.

amœna (barbatum × —?—). OdS.

Annærti (insigne × Ashburtoniæ ×). Moens, Ghent Mtg., Oct. 15, '92. M. L., 2d ed.

Annamense (Ashburtoniæ expansum × × Numa ×). Johnson, for Statter, Manchester. RHS., April 9, '95.

Annie Measures (bellatulum ♀ × Dayanum). Sander, St. Albans. RHS., April 24, '94. fg. Jrl. Hrt., May 3, '94. Gd. Mg., May 19, '94. G. Ch., June 26, '94.

Aphrodite (niveum ♀ × Lawrenceanum). Veitch, Chelsea. V. M., '89. fg. Gd. Mg., Feb. 10, '94.

Also under raising by Statter, Manchester. In bud. O. R., Oct., '94.

syn. *Telemachus* Veitch. RHS., June 21, '92.

syn. *Madam Harry Veitch.* OdS.

var. **Antigone** (Lawrenceanum ♀). RHS., Dec. 20, '90. Only one plant.

var. (yet unnamed) (Lawrenceanum Hyeanum ♀). Grey, for Graves, Orange. O. R., June, '94.

Apollo (vexillarium × × Stonei). RHS., April 22, '90. Simpkins, for Measures, Camberwell.

Arête (concolor ♀ × Spicerianum). Veitch. RHS., Dec. 13, '92.

Arnoldiæ (bellatulum ♀ × superciliare ×). RHS., Sept. 24, '94. Sander.

Arnoldianum (superbiens ♀ × concolor). Pitcher & Manda, Shorthills. G. Ch., Nov. 29, '90. 2 years raising. Named after Hicks Arnold, New York. fg. G. Ch., Nov. 29, '90.

Arthurianum Rchb. f. (insigne ♀ × Fairieanum). Veitch, Chelsea. G. Ch., '74, p. 676. Only one plant raised. fg. V. M., '89. O. R., Oct. '93.

A. pallidum with Hye, Ghent; from same parentage. Ldn., t. 121.

var. **pulchellum** (insigne Chantini × Fairieanum ♀). Veitch. RHS., Nov. 1, '92. fg. Jrl. Hrt., Feb., '92. fg. 66.

syn. *A. punctatum* (insigne Chantini ♀). Grey, for Graves, Orange. in litt., Jan., '94.

Also raised by Grey, for Corning, Albany. Sown '92, flowered Jan. '95. in litt., Jan., '95.

Ashburtoniæ Rchb. f. (barbatum ♀ × insigne). G. Ch., '71, p. 1647. Cross, for Ashburton, Romsey. fig. Gf., t. 976; Ill. Hrt., '88, t. 61.

Also by Murray, for Cookson, Oakwood. Crossed Dec. 3, '81, sown Sept. 19, '81, 30 plants.

Also by Grey, for Corning, Albany.

Also by Lytwyche, Beckenham. RHS., Oct. 23,'94.

Also by Wrigley, Bury. O. R., May, '94.

Also by Gardner, for Vanderbilt, Newport. Sown 1888, flowered 1894.

syn. *A. expansum* Rchb. f., from original cross. G. Ch., 1884, p. 552.

syn. *Laforcadei* Bauer, Paris. L'O., April, '84.

syn. *Barteti* (Bartet, ingénieur en chef de Paris) from same seedpod as Laforcadei.

syn. *calospilum* Fraser, Aberdeen. V. M., '89.

syn. *obscurum* Rchb. f. Veitch, Chelsea. G. Ch., Jan. 1, '87. See Measuresianum.

var. **majus** (barbatum Crossii ♀ × insigne). Dr. Harris, Lamberhurst.

syn. *Barteti angustum* G. & F., Dec. 28,'92. Pitcher & Manda.

syn. *Laucheanum*, Sander, St. Albans. Rchbch., ii., t. 38.

var. (unnamed) (barbatum nigrum × insigne Chantini ♀). Treseder, for Heath & Son, Cheltenham; 50 plants.

var. **Edgard Jolibois** (insigne Maulei × barbatum superbum). Jolibois. Sown 1885. JSNH., Nov., '89.

Ashworthiæ (Leeanum superbum × ♀ × selligerum majus×). RHS., Nov. 14, '93. E. Ashworth, Wilmslow. fg. Jrl. Hrt., March 15, '94. O. R., April, '94, says "apparently identical with Leeanum."

Aspasia (selligerum majus × × tonsum). Sander, St. Albans. O. R., Jan., '95.

Astrea (Spicerianum × Philippinense). Veitch, Chelsea. RHS., Aug. 9, '92.

Atys Rolfe (Hookeræ ♀ × venustum). Dr. Harris, Lamberhurst. G. Ch., July 7, '88.

syn. *rubrum*. G. Ch., Dec. 16, '93. Burton, Gainsborough (in litt., Feb. '93). Raised in 4 years; 20 plants.

var. **Cassiope** Rolfe (venustum ♀ × Hookeræ). Page, Bougival. Sown 1886.

Augustum (Haynaldianum × villosum). Pitcher & Manda, Shorthills.

var. **Prœtus** (villosum Boxalli). Grey, for Graves, Orange. Am. Gardg., March 23, '95.

aureum ([nitens] Sallieri Hyeanum × × Spicerianum). Jules Hye, Ghent mtg., Feb. '94.

syn. *Hebe*. Hye, Ghent Mtg., Dec. '94.

syn. *Mad. Marguerite Hye.* Hye, Ghent. RHS., Nov. 27, '94.

syn. *Augusta.* Moens. L'Orchdnn. Dec. 9, '94.

Seedlings of (Spicerianum × nitens Salleri Hyeanum) were exhibited by Hye, Leysen, at Ghent Mtg., Feb. 3, '95, under the names of: *Etéocle, Hermione, Hermode, Ixion, Œdipe, Olympia, Polynice, Surprise, Vertumne, Zephyre.*

auroreum Rchb. f. (Lawrenceanum ♀ × venustum). G. Ch., Feb. 5, '87. Murray, for Cookson, Oakwood. Crossed Feb. 5, '81, sown Dec. 10, '82; 20 plants.

syn. *Lawre-venustum.* Cappe. Sown 1890, exh. 1894.

Aylingii Castle (niveum ♀ × ciliolare). Jrl. Hrt., June 12, '90. Ayling, for Hollington, Enfield. fg. G. Ch., June 28, '90; 6 years.

Also raised by Johnson, for Statter, Manchester. G. Ch., Feb., 17, '94.

Halaighii. Misprint in G. Ch., Feb. 17, '94.

syn. *niveo-ciliolare.* Measures, Streatham. M. L., 2d ed.

barbato-purpuratum (barbatum Crossii × purpuratum). Pitcher & Manda, Shorthills. 1894.

barbatum Olivetense (barbatum × barbatum Warnerianum). Mantin. Sown 1888. L'Orch., 1891.

Batalini (purpuratum ♀ × Argus). RHS., Sept. 24,'94. Sander, St. Albans.

Beatrice Ashworth (Leeanum × × venustum). Ashworth. M. L.

Behrensianum (villosum Boxalli ♀ × Io grande ×). O. R., April, '94. Sander.

syn. *Ionodes.* Sander. M. L.

bellatulo-venustum. Bennett, Burton-on-Trent. RHS., March 26, '95.

—?—(bellatulum ♀ × insigne maximum). Grey, for Graves, Orange. O. R., June, '94. Not flowered yet. Neither has the following, at same place:

—?—(bellatulum ♀ × villosum).

—?—(bellatulum ♀ × Rothschildianum). Sdlg. Statter, Manchester. O. R., Oct., '94.

bellinum (vernixium × ♀ × Harrisianum ×). O. R., Feb., '94. Sander. See Wendlandianum.

Berenice Rolfe (Philippinense ♀ × Lowii). G. Ch., Jan. 31, '93. Vipan, Wandsford.

Bijou (œnanthum × ♀ × Lawrenceanum). RHS., July 26, '92. Ingram, Godalming.

Bonnyanum (villosum×—?—). OdS. Bonny, maker of orchid-baskets.

Boyleanum (Crossianum × × Harrisianum ×). Sander, St. Albans, 1893.

Brunianum (Leeanum × × œnanthum superbum ×). RHS. Oct. 4, '92.

Bryani (Philippinense ♀ × Argus). Murray, Cookson. RHS., July 26, '92.

syn. *Burfordiense* Rchb. f. Parentage doubtful. Lawrence, Burford Lodge. G. Ch., Dec. 22, '82.

Buchanianum (Druryi ♀ × Spicerianum). G. Ch., Jan. 18, '90. Osborn, for Buchan, Southampton. Flowered first time Dec., '87. G. Ch., Jan. 18, '90.

syn. *excelsior*. Jules Hye, Ghent mtg., Feb., '94.

syn. *B. magnificum* (Spicerianum ♀). Measures, Streatham. O. R., Feb., '95. fg. *id.*, March, '95.

Burberryanum (villosum Boxalli × plunerum ×). Sander. RHS., March 28, '93.

Burbidgeanum × (Dayanum × concolor). OdS.

calanthum (barbatum Crossii ♀ × Lowii). G. Ch., '80, p. 652. Seden, for Veitch, Chelsea. Flowered first time Sept., '78.

Also raised by Grey, for Corning, Albany.

syn. *Sappho* (barbatum × Lowii). Veitch, Chelsea. M. L.

var. **Chelseense** Rchb. f. (barbatum purpureum × Lowii ♀). G. Ch., Oct. 13, '88. W. Bull, Chelsea.

(**calceolus** × **macranthos**) Barbey. Nat. hyb. West Siberia. G. Ch., March 26, '92. Jrl. Orch., '92, p. 38.

caligare Rchb. f. (venustum ♀ × Dayanum). Drewett, Riding. G. Ch., March 3, '88.

syn. *Californicum* OdS.

calloso-Argus (callosum × Argus ♀). Grey, for Graves, Orange. O. R., April, '94.

Also raised by Cappe; sown 1890, exh. 1895.

calophyllum Rchb. f. (barbatum ♀ × venustum). Veitch. G. Ch., '81, p. 169.

syn. *discolor*, G. Ch., '82, p. 218. *chloroneurum* (O. A., t. 37). *meirax* (O. A., t. '95). *melanophthalmum* (O. A., t. 109). *politum* (O. A., t. 36); all of which were described by Rchb. f. G. Ch., '80, p. 524, and all raised with Warner, Broomfield. Their parentage has not been recorded, but all are believed to have originated from the same seedpod of a cross identical with calophyllum.

Also raised by Williams, Holloway.

var. (unnamed) (barbatum × venustum ♀). RHS., Aug. 11, '91. Burton, Gainsborough. 4 years. About 100 plants.

Canham (villosum × superbiens). Canham, foreman at Veitch's.

var. **Charles Canham;** villosum seed bearer. G. Ch., Oct. 22, '87.

Also raised by Pitcher & Manda, Shorthills. 1894.

var. **Mrs. Canham;** superbiens seed bearer. G. Ch., Dec. 17, '87.

Capt. Lendy (villosum Boxalli ♀ × Charles Canham×). RHS., Feb. 13, '94. Bond, for Ingram, Godalming.

Carnusianum (Haynaldianum × Spicerianum). See O. R., Nov., '93, p. 328. Dr. Carnus, Paris.

Also raised by Parr, Warrington. RHS., Dec. 27, '90.

Also with (Haynaldianum ♀) by Veitch, Chelsea. RHS., July 23, '95.

syn. *hybridum* Hort. syn. *Cahuzac* OdS.

Carrierei (superbiens ♀ × venustum). Mon. Hrt. March 10, '87. JSNH., 1887. Sown 1882. Bauer, Paris. Carrière, editor of Rv. Hrt.

Castleanum Rolfe (hirsutissimum ♀ × superbiens). G. Ch., Jan. 10, '91. Sander, St. Albans. Castle with Jrl. Hrt. fg. Rchbch, ii, t. 45.

Castle Hill (Crossianum × ♀ × insigne Chantini). G. Ch., Nov. 25, '94. (*Crossianum Castle Hill var.* J. O'B.) Rafael of Castle Hill.

Celia Rolfe (tonsum ♀ × Spicerianum). G. Ch., Jan. 24, '91. Flowered Oct., '90. Savage, for Kimball, Rochester. Celia, daughter of Kimball.

Also raised by Bond, for Ingram. RHS., Dec. 8, '91.

Also by Grey, for Corning, Albany. Flowered Nov., '94. (in litt., Jan., '95.)

Cecilia Misprint O. R., '94, p. 350.

var. **Madam Jules Hye** (Spicerianum ♀ × tonsum). J. O'B. G. Ch., Jan. 17, '94. fg. *id.*, Jan. 26, '95.

syn. *Inspirator*. Rv. Hrt., Feb., '94.

syn. *Spico-tonsum*. Pitcher & Manda, Shorthills. 1894.

Ceres N.E.Br. (Spicerianum ♀ × hirsutissimum). G. Ch., March 21, '91. Keeling, for Drewett, Riding. fg. Jrl. Orch., '91, p. 37.

syn. *Van Molianum.* Linden, Brussels. RHS., April 12, '92.

syn. *Fascinator.* Ghent mtg., Dec., '93. fg. Rv. Hrt., Feb., '94.

syn. *Medea.* Latham, Birmingham. G. Ch., Dec. 10, '92.

syn. *Medea monstrosa* Rolfe. Latham, Birmingham. See page 70.

syn. *M. superba.* Pitcher & Manda. Am. Gardg., March 23, '95.

syn. *Sirius.* Parentage doubtful. Sander, St. Albans. M. L.

var. **Huybrechtianum** (Spicerianum × hirsutissimum ♀). Vervæt, Ghent. Hrt. Blg., April 3, '92.

—?— (Chamberlainianum ♀ × Leeanum ×). Winn, Birmingham. O. R., Sept., '94. The seedbearing plant was flowering yet of the same spike when the seed of the cross was germinating. Sdlg.

—?—(Chamberlainianum × Stonei). Winn, Birmingham. O. R., Sept., '94. Sdlg.

—?— (Chamberlainianum × superbiens). Sdlg. Winn, Birmingham. O. R., Sept., '94.

Charlesianum (nitens (Sallieri aureum) × × Leeanum superbum ×). Named after Charles, son of Madoux, Brussels. Orchdn, March 11, '94.

Charles Rickman (barbatum ♀ × bellatulum). Rickman, for Palmer, Springfield. RHS., May 9, '93. fg. Jrl. Hrt., June 29, '93. Gd. Mg., Sept. 15, '94.

syn. *Charles Richmond.* Richmond. M. L.

syn. *Météore.* Hye, Ghent. RHS., Sept. 11, '94. fg. Jrl. Hrt., Dec. 20, '94.

var. **Leysenianum** (barbatum Crossii ♀). Hye, Leysen, Ghent. RHS., June 24, '94. fg. Rv. Hrt., Aug., '94.

cilio-villosum. Lewis, Southgate. RHS., March 26, '95.

Claudii Lind. (Spicerianum ♀ × vernixium ×). Jrl. Orch., '92, p. 382. Moens, Brussels. Ldn., t. 397.

var. **Anton-Joly** Krzl. (Spicerianum × vernixium × ♀). G. Ch., Feb. 17, '94. Joly, for Rothschild, Vienna.

Cleopatra J. O'B. (Hookeræ ♀ × œnanthum superbum ×). G. Ch., April 9, '92. Winn, Birmingham.

Clinkaberryanum J. O'B. (Philippinense × Curtisii). fg. G. Ch., July 22, '93. Clinkaberry, for Rœbling, Trenton; 1 plant only. Raised by Pitcher & Manda.

syn. *Warnhamense* (Curtisii ♀). RHS., Dec. 12, '93. Duncan, for Lucas, Warnham Court.

Clotilde Moens (Leeanum superbum × ♀ × Haynaldianum). Ght. Mtg., Aug., '93. Moens, Brussels. fg. Grd. Mg., Jan. 20, '94.

syn. *Haynaldianum Mdlle. Clotilde.* M. L.

Colemanni (Javanicum × Harrisianum ×). OdS.

Comus (insigne maximum × Swanianum ×). Graves. Am. Gardg., March 23, '95.

concinnum (villosum × purpuratum). V. M.,'89. Bowring, Windsor Forest. Ods. says Harrisianum ×, instead of villosum.

c. pallens. Pitcher & Manda. Am. Gardg., March 23, '95.

conco-callosum (concolor ♀). Measures, Streatham. O. R., Jan. '95.

conco-Lawre (concolor ♀ × Lawrenceanum). RHS., Feb. 14, '93. fg. O. R., Nov. '94. White, for Lawrence, Dorking. fg. Jrl. Hrt., March 9, '93; Ldn., t. 408.

var. (unnamed). (Lawrenceanum ♀). Sander, St. Albans. 1893.

—?— (concolor × bellatulum). Strickland, Malton. 3 plants. RHS., May 14, '95.

—?—(concolor × Curtisii). Sdlg. Charlesworth, Bradford. O. R., July, '94.

Constableanum (Fairieanum ♀ × Dayanum). Gdn., Jan. 28, '93. Pitcher & Manda, Shorthills. Constable, New York.

Constance N.E.Br. (Stonei ♀ × Curtisii). RHS., Aug. 26, '90., Keeling, for Drewett, Riding.

var. **James H. Veitch** (Stonei playtytænium × Curtisii ♀). RHS., Aug. 28, '94. fg. G. Ch., Sept. 8, '94. Jrl. Hrt., Sept. 6, '94.

Corbeillense Maron (Bullenianum × insigne). Rv. Hrt., June 1, '93. Paul Darbley. Crossed Dec., '86; sown Nov., '87, flowered Oct., '92. JSNH., 1892, p. 611.

Cowleyanum J. O'B. (Curtisii ♀ × niveum). G. Ch., Jan. 16, '92. Cowley, for Tautz, Ealing. fg. Jrl. Orch., '91, p. 357.

Creon (Harrisianum superbum × ♀ × œnanthum superbum). RHS., Feb. 10, '91. Veitch, Chelsea. fg. Jrl. Orch., '91, p. 6.

Also raised by Vanner, Chislehurst. O. R., July, '95.

syn. *Marshianum*. Sander, St. Albans. RHS., Aug. 29, '93.

syn. *Brennus*. Measures. M. L.

var. **Nymphe** (Harrisianum Dauthieri × × œnanthum ♀). RHS., Feb. 9, '92. Bond, for Ingram, Godalming.

syn. *Mrs. Warren Hook*. O. R., April, '93. Pitcher & Manda.

Crethus (Spicerianum ♀ × Argus). RHS., Nov. 15, '92. Veitch, Chelsea.

Also raised by Low, Clapton. RHS., Dec. 11, '94.

Crossianum Rchb. f. (insigne ♀ × venustum). G. Ch., '73, p. 877. Cross, for Ashburton, Romsey. fg. Ill. Hrt., '88, t. '72.

Also raised by Murray, for Cookson, Oakwood. Crossed Nov. 28, '81, sown Aug. 4, '82; 95 plants.

Also by Grey, for Corning, Albany.

syn. *amandum* Rchb. f. Bowring, Windsor. G. Ch., Feb. 5,'89. Misstatement of O. R., Nov. '93. (barbatum × Lawrenceanum).

syn. *aurantiacum* (insigne aureum). Sander, St. Albans. M. L.

var. **psittacinum** Rchb. f. (insigne Maulei × venustum spectabile). G. Ch., Jan. 5, '89. Sander, St. Albans.

Cybele (Lawrenceanum × Druryi). G. & F., Nov. 23, '92. Pitcher & Manda.

syn. *Basileum*. Measures. M. L.

Cymatodes (superbiens × Curtisii). Cowley, for Tautz, Ealing. G. Ch., Dec. 2, '93.

Also by Young, Liverpool. RHS., June 11, '95.

syn. *Beechense* (superbiens Demidoff var.). RHS., June 12, '94. Billington, for Lee, Beech Lawn, Manchester.

Cyperius (?×?). Sander, St. Albans. M. L.

Cythera Rolfe (Spicerianum ♀ × purpuratum). G. Ch., Jan. 18, '90. Measures, Streatham.

Also raised by Williams, Holloway. RHS., Feb. 14, '93.

Daisyæ (Lowii ♀ × œnanthum superbum ×). G. Ch., Sept. 10, '92. Grey, for Graves, Orange. Miss Daisy Graves. fg. G. & F., Nov. 28, '92. Jrl. Orch., '92, p. 249.

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De Cockianum (?×?). OdS.

decorum (nitens Sallieri Hyeanum × × Lawrenceanum). Hrt. Blg., Dec. 6, '91. Hye, Ghent.

syn. *Ganesa* (nitens Sallieri × ♀ × Lawrenceanum Hyeanum). RHS., Sept. 12, '93. Chapman, for Measures, Camberwell.

syn. *Johnsonianum*. Sander, St. Albans. RHS., Dec. 13, '92. fg. Jrl. Hrt., March 2, '93.

var. **Cobbianum** (nitens Sallieri × × Lawrenceanum ♀). RHS., Nov. 28, '93. Howes, for Cobb, Tunbridge Wells.

De Witt Smith Rolfe (Lowii ♀ × Spicerianum). G. Ch., July 6, '89. Low, Clapton. De Witt Smith, Lee, Mass.

syn. *Spicero-Lowianum*. Linden, Brussels. RHS., Sept. 26, '93.

syn. *Smithii pretiosa*. Corning. Am. Gardg., March 23, '95.

var. **Dallemagnei** (Spicerianum ♀). Dallemagne. M. L. Ldn., t. 411.

Donatium (? × ?).

Doncasterianum (hirsutissimum ♀ × callosum). Sander. RHS., Nov. 27, '94.

Doris Rolfe (venustum ♀ × Stonei). G. Ch., Dec. 20, '90. Murray, for Cookson, Oakwood. Crossed Jan. 21, '84; sown Feb. 19, '85.

E. Ashworth (plunerum × ♀ × Spicerianum). RHS., Nov. 15, '92. Sander.

syn. *Vesta*. (Spicerianum × plunerum × ?). Sander, St. Albans. M. L.

Echo (Hookeræ × insigne Chantini). O. R., April, '94. Grey, for Graves.

Edith Winn (Stonei ♀ × purpuratum). RHS., July 26, '92. Winn, Birmingham.

Edwardi (superbiens ♀ × Fairieanum). fg. O. R., Jan., '93. Grey, for Graves, Orange. Edward, son of Graves.

Also raised by Statter, Manchester, 1893.

Elinor N.E.Br. (selligerum majus × ♀ × superbiens). G. Ch., July 12, '90. Keeling, for Drewett, Riding.

syn. *Denisianum.* G. Ch., Aug. 4, '94. Named after a son of Madoux, Auderghem. Ldn., t. 437.

Elizabethæ (Lawrenceanum × Parishii). Chapman, for Measures. Streatham. O. R., April '94.

Ephialtes (insigne Chantini × auroreum ×). G. & F., Nov. 23, '92. Pitcher & Manda.

Enfieldense (Lawrenceanum ♀ × Hookeræ). G. Ch., Nov. 7, '91. Ayling, for Hollington, Enfield. Jrl. Orch., '91, p. 294.

var. **Hebe** (Hookeræ Measuresianum ♀). RHS., Sept. 12, '93. Measures, Camberwell.

syn. *Richardsoni.* M. L.

Ensign J. O'B. (Harrisianum× ♀ × barbatum Crossii). G. Ch., Jan. 16, '92. Winn, Birmingham. Jrl. Orchd., '91, p. 358.

Erato Desbois (nitens Sallieri × × hirsutissimum). Vuylsteke, Ghent, 1893.

Eucharis Desbois (insigne Chantini ♀ × Lawrenceanum). Vuylsteke, Ghent. 1893.

Also with E. de Cook. Ghent Mtg., Aug., '94.

syn. *Umlauftianum.* Sander, St. Albans. RHS., July 11, '93. Umlauft, gardener in Schœnbrunn, Vienna.

var. **Acis** (insigne Maulei × Lawrenceanum). Veitch, Chelsea. M. L.

syn. *Fournierianum.* Sander, St. Albans. M. L.

Euryale (Lawrenceanum ♀ × superbiens). Seden, for Veitch, Chelsea. Distributed 12 months before Vervætianum. V. M., '89.

syn. *Vervœtianum* Rchb. f. Sex not given. Vervæt, Ghent. G. Ch., June 9, '88.

Also raised by J. Chapman. Gdn., Sept. 17, '92.

syn. *Siemonii* Pucci. OdS.

syn. *Robinsonianum*. Sander, St. Albans. M. L.

euryandrum (barbatum ♀ × Stonei). G. Ch., '75, p. 772. Seden, Veitch. fg. O. A., t. 301. Fl. Srs. xxii, t. 2278. Fl. Mg. n. s., t. 187.

syn. *intermedium* Pitcher & Manda. syn. *hybridum*. Hort.

var. **The Duke** (Stonei ♀). RHS., Feb. 14, '93. Winn, Birmingham.

Eurydice (Spicerianum ♀ × Hookeræ). Grey, for Graves, Orange. in litt., Jan., '94.

Eurylochus (ciliolare ♀ × hirsutissimum). RHS., May 17, '92. Veitch.

Eurychilos. Pitcher. M. L. misprint.

Evenor (Argus ♀ × bellatulum). RHS., May 17, '92. Veitch, Chelsea.

excellens (Rothschildianum ♀ × Harrisanum×). RHS., Aug. 14, '94. Statter, Manchester. Originally exhibited as *excelsior*.

Eyermanianum Rolfe (barbatum grandiflorum ♀ × Spicerianum). G. Ch., Dec. 27, '90. Sander, St. Albans. fg. Rchbch., t. 38. Eyerman, Easton, Mass.

syn. *Bosscherianum* (barbatum superbum). Soc. Belg. Hrt., Dec. 6, '91. Named after Bosschère, Lierre. Vuylsteke, Ghent. Jrnl. Orch., '91, p. 357.

syn. *Diana* R.A.R. O. R., Oct., '93. Measures, Camberwell.

Also raised by Drewett, Riding, from barbatum Crossii as well as barbatum biflorum. RHS., Sept. 8, '91.

var. **Hermione** J. O'B. (Spicerianum ♀ × barbatum Warneri). G. Ch., Dec. 2, '92. Young, Liverpool.
syn. *Alector* (barbatum Crossii ♀). Veitch, Chelsea, M. L., 2d ed.

Fairieano-Lawrenceanum R.A.R. (Lawrenceanum ♀). O. R., Oct., '93. Measures, Camberwell. fg. Grd. Mg., Dec. 2, '93. Jrl. Hrt., Jan. 10, '94.
Also raised by Statter, Manchester. RHS., Nov. 28, '93.

festum (calophyllum [chloroneurum] × × barbatum Crossii). Gdn., Jan. 9, '92. Seeger & Tropp, Dulwich.

Fausianum (Harrisianum [Dauthieri] × ♀ × calophyllum ×). RHS., July 26, '93. Sander, St. Albans.

Fordianum (Stonei ♀ × callosum). Sander. RHS., Feb. 12,'95.

Frau Ida Brandt (Io Grande × ♀ × Youngianum ×) Sander, St. Albans. RHS., June 11, '95.

Frederico Nobile (villosum Boxalli × Morganiæ ×). Gdn., April 11, '91. Seeger & Tropp, Dulwich.

fulgens (marmorophyllum × × Hookeræ). Sander, St. Albans. M. L.

Georgianum (superbiens ♀ × niveum). Gray, for Graves, Orange. Named after George Graves. O. R., June, '94.
syn. *The Pard.* Lawrence, Dorking. RHS., Aug. 28, '94. Mentioned already, Gdn., Feb. 11, '93.
Also under raising with Wigan, East Sheen. O. R., March, '93.

Georg Kittel (Dayanum ♀ × superbiens). Kittel. OdS.

gemmiferum (Hookeræ ♀ × purpuratum). G. Ch., June 25, '81. Bowring, Windsor Forest.

Germinyanum Rchb. f. (villosum ♀ × hirsutissimum). G. Ch., Feb. 13, '86. Veitch, Chelsea. fg. Jrl. Hrt., Jan. 26, '93. Germiny, Rouen.

Also raised by Driger, for Passy Frères.

Also by Pitcher & Manda, Shorthills. 1893.

syn. *G. aureum* (villosum aureum). Graves. Am. Gardg., March 23, '95.

syn. *G. superbum*. Cappe. Sown 1888. JSNH., Jan. 18, '91.

syn. *hirsuto-villosum*. Cappe, Vesinet. Sown 1887. JSNH., 1890.

syn. *Roberti*. RHS., Feb. 13,'94. Fitt, Panshanger.

syn. *villosum violaceum*. Desbois. Vuylsteke, Ghent.

var. **Godseffianum** (villosum Boxalli ♀ × hirsutissimum). G. Ch., March 10, '88. Murray, for Cookson, Oakwood. Crossed April 11, '82; sown April 29, '83; 60 plants. fg. Rv. Hrt., April, '92. Jrl. Hrt., March 14, '95.

Also raised by Ross, Florence. O. R., Jan. '95.

syn. *Jupiter*. Desbois. (Boxalli atratum ♀). Vuylsteke, Ghent. 1893.

syn. *Othello*. Veitch, Chelsea. RHS., Feb. 11,'90.

var. **Bragaianum** (villosum Boxalli × hirsutissimum cœrulescens ♀). Linden, Brussels. RHS., March 24, '91. J. T. da Silva Braga. fg. Ldn., t. 279. Jrl. Orch., '91, p. 55.

dilectum Rchb. f. G. Ch., March 17, '88. L'O., '88, p. 353. According to letter from H. Low & Co., Clapham, "imported with Boxalli, closely allied to and probably a var. of Boxalli."

giganteum (nitens [Sallieri Hyeanum] × ♀ × Harrisianum ×). Ght. Mt., Sept.,'93. Hye, Ghent.

gigas J. O'B. (Lawrenceanum ♀ × Harrisianum nigrum ×). G. Ch., Jan. 30, '92. Bond, for Ingram, Godalming.

syn. *Amphion* (Harrisianum × × Lawrenceanum). Measures. M. L.

syn. *gloriosum*. Hye, Ghent. M. L.

syn. *M. Paul Descombes* (Harrisianum Dauthierix). Opoix. 1888. JSNH., June, '94.

syn. *The Hendre* (Lawrenceanum ♀). RHS., July 24, '94. Coomber, for Llangattock, The Hendre, Monmouth.

syn. *Æsculapius*. Measures, Camberwell. M. L., 2d ed.

—?— (Godefroyæ ♀ × niveum). Grey, for Corning, Albany. O. R., Aug., '94. "Produced concolor, niveum, Godefroyæ, leucochilum, leucochilum white, bellatulum, and nearly fifty different forms." About sixty flowered in '88 and '89, one in '93.

Goultenianum (Curtisii ♀ × callosum). RHS., Jan. 16, '94. Goulten, Camley Park Road.

var. **elegans** (callosum ♀). Winn, Birmingham. O. R., May, '95.

Gowerianum (Lawrenceanum ♀ × Curtisii).

var. **Sylvia** J. O'B. (Curtisii ♀). G. Ch., June 10, '93. Winn, Birmingham.

Also raised by Pynært, Ghent. Ghent Mtg., May, '94.

Under raising with Statter, Manchester. O. R., Oct., '94.

Also raised by Stafford, for Hardy, Ashton-on-Mersey. RHS., Jan. 15, '95.

syn. *Lawrenceo-Curtisii*. Bleu, Paris. Sown 1886. JSNH., July, '94.

syn. *G. magnificum*. Stafford, for Hardy, Ashton-on-Mersey. RHS., April 23, '95.

Gravesiæ (Argus × niveum). Grey, for Graves, Orange. fg. G. Ch., March 10, '94. O. R., March, '94.

syn. *Mdlle. Nancy Descombes*. Opoix. Sown 1887. JSNH., March, '94.

syn. *Ruth Ayling* (niveum ♀). Ayling, for Hollington, Enfield. RHS., March 12, '95.

Greyanum (Druryi ♀ × ciliolare). Fl. Ex., May 21, '92. Pitcher & Manda, Shorthills. Grey, gr. to Graves, Orange. O. R., May, '93, states ciliolare ♀.

var. **Merops** (ciliolare ♀). Veitch, Chelsea. RHS., April 20, '94.

Hallii (Spicerianum × ?). Hall. M. L.

Harryanum. —?—. M. L.

Harri-Leeanum (Harrisianum superbum × ♀ × Leeanum superbum). RHS., Nov. 14, '93. Clark, Liverpool.

Harrisi-froyæ (Harrisianum × × Godefroyæ). RHS., Aug. 8, '93. White, for Lawrence, Dorking.

Harrisianum Rchb. f. (villosum ♀ × barbatum). G. Ch., 1869. Dominy, for Veitch, Exeter. Harris, Exeter. Raised 1864. fg. Ldn., t. 166. (*polychromum*). Fl. Sr., t. 2289. Fl. Pm., '71, p. 56.

Also raised by H. Barnet. 5 years. Gdn., Aug. 15, '91. (barbatum ♀).

Also by A. Cross. Gdn., Dec. 5, '91.

syn. *H. elegans*. OdS. syn. *hybridum*. Hort.

syn. *H. conspicuum*. Measures, Streatham, 1888.

syn. *H. conspicuum pictum*. Swan.

syn. *Cambridgeanum*. Low, Clapton, 1888.

syn. *Lobengula*. Bond, for Ingram, Godalming. RHS., March 13, '94.

syn. *Dauthieri*. Lind., 1885. G. Ch., April 30, '87. (*marmoratum*). Bull. Sc. Tsc., '91, t. 11.

var. *Rossianum* Rchb. f. var. *Poggio Gherardi* Hort. var. *Albino*.

syn. *H. de Bel-Air-d'Olivet*. Mantin. Sown 1889. Exh. at Orleans, May, '94.

syn. *H. delicatum* (barbatum ♀ × villosum aureum). Pitcher & Manda, Shorthills, 1894.

syn. *Vervœtianum.* Vervæt. Ght. Mt., Nov. '93.

syn. *H. virescens.* Little. Twickenham. O. R., Aug., '94.

var. **apiculatum** Rchb. f. (villosum Boxalli × barbatum ♀). G. Ch., May 15, '86. Keeling, for Drewett, Riding. O. R., May, '93, makes sex doubtful.

syn. *Harrisianum lineatum.* Pitcher & Manda. Am. Gardg., March 23, '95.

Also (villosum Boxalli atratum ♀ × barbatum nigrum). By Treseder, for Heath, Cheltenham. in litt., March, '93.

syn. *a. atratum* (barbatum biflorum × villosum Boxalli atratum). Graves. Am. Gardg., March 23, '95.

syn. *a. splendens* (barbatum cœrulescens). Graves. Am. Gardg., March 23, '95.

var. **roseum** J. O'B. (villosum × barbatum Crossii). G. Ch., Jan. 30, '92 Tracy, Twickenham.

Also (villosum ♀). Robinson for Ames, North Easton. in litt., Feb., '94. 4 years.

Harrisianum self-fertilized. Grey, for Corning, Albany, 1872; flowered 1876. In litt., Jan., '95.

Also raised by Grey, Jr., for Graves, Orange. All seedlings proved different. O. R., Aug., '94. He also self-fertilized *Harrisianum superbum* with like results. O. R., Aug., '94.

—?— (Harrisianum× × Dayanum). Lewis, Southgate. G. Ch., Dec. 16, '93.

—?— (Harrisianum superbum × ♀ × Sanderianum). Winn, Birmingham. Sdlg. G. Ch., Nov. 5, '92. O. R., Sept., '94.

Harveyanum (Stonei × Leeanum ×). Backhouse, York. M. L.

Also by Jones, for Clarke, Liverpool. G. Ch., March 2, '95.

H. Ballantine Rolfe (purpuratum ♀ × Fairieanum). G. Ch., Oct. 11, '90. Veitch.

Also raised by Robinson, for Ames, North Easton. G. Ch., Feb. 18, '93. 5 years.

Hecla (superbiens ♀ × Swanianum ×). RHS., July 6, '92. Bond, for Ingram, Godalming. O. R., Jan., '93, states superciliare × in place of superbiens.

Héloïse Mantin (gemmiferum× × villosum Boxalli nigrescens). Mantin. Sown 1889. JSNH., Oct., '94.

Henry Graves (Marshallianum × ♀ × Lawrenceanum). Grey, for Graves, Orange. O. R., June, '94. RHS., Jan. 15, '95, report in G. Ch., states Lawrenceanum ♀, also does O. R., Feb., '95.

Hisa (?×?). Measures, Camberwell. V. M., '94, p. 149.

Hobsoni (Lawrenceanum ♀ × Philippinense). Ayling, for Hollington, Enfield. RHS., July 24, '94.

Hodgsoni, misprint, G. Ch., Aug. 18, '94, page 194.

Also raised by Cliffe, for Shaw, Manchester. RHS., Nov. 1, '92.

Hollidayanum (concolor ♀ × almum ×). Sander, St. Albans. RHS., Dec. 11, '94.

Hornianum Rchb. f. (superbiens × Spicerianum). G. Ch., Oct. 8, '87. Horn, for Rothschild, Vienna.

syn. *multicolor*. RHS., Dec. 13, '92. Sander, St. Albans.

Hurrellianum (Argus ♀ × Curtisii). Hurrell, for Pitcher & Manda, Shorthills. O. R., Nov., '94.

Parentage of Alcides Trentonense is sometimes given wrongly as identical with Hurrellianum.

Imperatrix (Ashburtoniæ expansum× ♀ × calophyllum ×). Sander. M. L.

Imschootianum (insigne Chantini × callosum). Ght. Mt., Oct. 15, '92.

syn. *Leonæ* Ldn. Jl. Orch., '92, p. 346. fg. Ldn., t. 360. Flowered first time Oct., '92. Mrs. Leon, Bletchly Park, Bucks.

var. **Robertsianum** (insigne Wallacei ♀). Lewis, Southgate. RHS., Nov. 13, '94.

Also raised (insigne Maulei ♀) by Treseder, for Heath, Cheltenham. 6 plants. in litt., March, '93.

Indra (callosum ♀ × villosum). RHS., Nov. 14, '93. Chapman, for Measures, Camberwell.

var. **J. Bartels** (callosum × villosum Boxalli ♀). Sander. RHS., Nov. 27, '94.

Ino (Haynaldianum ♀ × Mrs. Canham ×). Raised by Grey. Am. Gardg., March 23, '95.

(**insigne Chantini** × insigne Chantini). Grey, for Corning, Albany. O. R., Aug., '94. Produced thirty different varieties.

Io Rchb. f. (Lawrenceanum ♀ × Argus). G. Ch., April 17, '86. (Argus ♀ is wrong). Murray, for Cookson, Oakwood. Crossed May 2, '81, sown Dec. 26, '81; 160 plants. fg. O. R., Feb., '94. Rchbch., t. 23.

Also raised by Pitcher & Manda, Shorthills. 1893.

Iris (Javanico-superbiens × ciliolare). RHS., Nov. 1, '92. Williams, Holloway.

Also raised by Bleu, Paris. Sown 1888, exh. 1894. Le Jardin, 1894, p. 44.

Isabellae (Spicerianum × niveum) Williams. Am. Gardg., March 23, '95.

syn. *Spicero-niveum*. Sander. M. L.

Jacobianum (Crossianum × × bellatulum). Leroy. 1894.

Janet Ross (Swanianum × ♀ × Harrisianum ×). Ross, Florence. O. R., Oct., '94.

Javanico-Spicerianum. Page, Baugival. 1890. Sown 1887.

syn. *lutescens* (Spicerianum ♀). G. & F., Dec. 14, '92. Pitcher & Manda.

Javanico-superbiens (Javanicum ♀). Rv. Hrt., '85, p. 476. Bleu, Paris. Sown 1880, exh. 1887.

syn. *Sementa*. OdS.

J. Gurney Fowler (Godefroyæ ♀ × barbatum). RHS., March 27, '94. Low, Clapton. fg. O. R., Dec. '94. Named after Fowler, Glebelands.

var. **Sirius** (barbatum Crossii ♀). Veitch, Chelsea. RHS., Dec. 11, '94.

J. Howe (nitens Sallieri × × villosum aureum). Howe, for Cobb, Tunbridge Wells. RHS., Dec. 11, '94.

Joseph Donat (Ashburtoniæ × ♀ × Spicerianum). RHS., Nov. 14, '93. Sander.

Josephianum (Druryi ♀ × Javanico-superbiens). Fl. Ex., Oct. 17, '91. Pitcher & Manda.

Juno N.E.Br. (callosum ♀ × Fairieanum). G. Ch., March 21, '91. Keeling, for Drewett, Riding. Crossed Oct. 19, '87; sown Aug. 12, '88; germinated April 14, '89; flowered March 1, '91; shortest time on record, 2 years 8 months; 3 plants. Jl. Orch., '91, p. 38.

Also by Johnson, for Statter, Manchester. RHS., Aug. 14, '94, who also has sdlgs. with (Fairieanum ♀). O. R., Oct., '94.

Kerchovianum (Curtisii × barbatum). G. Ch., Feb. 4, '93. Brussels Bot. Garden. Crossed 1887, flowered Dec. '92. Kerchove de Denterghem, P. H. S., Ghent.

Kimballianum, exh. as (Rothschildianum × Dayanum) by Sander, at RHS. mtg. June 25, '95, and fg. G. Ch., June 29, '95. Syn. Cpd. præstans Rchb. f., fide O. R. Aug. '95.

Kramerianum (œnanthum × × villosum). Sander, St. Albans. RHS., Jan. 13, '91.

Also raised by Johnson, for Statter, Manchester. RHS., Dec. 12, '93.

var. **rubescens** (œnanthum superbum × ♀ × villosum Boxalli). RHS., Nov. 14, '93. Johnson, for Statter, Manchester.

var. *rubescens atratum* (œnanthum × × villosum Boxalli atratum ♀). Grey, for Graves, Orange. in litt., Jan. '94.

Krishna (insigne × tonsum). Graves. Am. Gardg., March 23, '95.

Lachmee (ciliolare × superbiens). Measures, Camberwell. M. L., 2d ed.

syn. *Pseudo-Curtisii* (ciliolare ♀). Bleu, Paris. Le Jardin, Aug. 5, '94.

La France (niveum × nitens ×). Seeger & Tropp, Dulwich. Gdn., Jan. 16, '92.

Lathamianum Rchb. f. (Spicerianum ♀ × villosum). G. Ch., March 24, '88. Latham, Birmingham, Ldn., t. 397. Gf., '89, t. 528. L'O., July '92.

Also raised by Veitch, Chelsea.

syn. *Spicero-villosum*. Bleu, Paris. JSNH., April '91.

syn. *Rex*. Hye, Ghent. RHS., March 13, '94.

syn. *Hera* Rolfe. G. Ch., Jan. 25, '90. Measures, Streatham.

syn. *L. inversum* (villosum ♀). Linden, Brussels. Jrl. Orch., '93, p. 24.

Also raised by Veitch, Chelsea. And by Ingram, Godalming. fg. Rchbch., ii, t. 10.

Madame Gibez is also mentioned as from same parentage as Lathamianum, though oftener under parentage of Measuresianum.

var. **Bellona** (villosum ♀). Chapman, for Measures, Camberwell. RHS., Nov. 14, '93.

var. **Calypso** (Spicerianum × villosum Boxalli ♀). Veitch. RHS., Feb. 15, '90. fg. Rchbch. '94, t. 77. O. R., Nov., '93, states Spicerianum ♀.

Also raised by Winn, Birmingham. O. R., Sept.,'94.

Also by Pitcher & Manda, 1893.

syn. *C. splendens* (Spicerianum roseum). Graves. Am. Gardg., March 23, '95.

syn. *Denisianum*. Vervæt, Ghent. March, '93.

syn. *Flamingo*. Hye, Leysen, Ghent. Chamb. Syn., Feb. 3, '95.

syn. *Flora*. M. L.

syn. *Leo*. Lee, Manchester. RHS., Jan. 16, '94.

syn. *Oakwood var*. Murray, for Cookson, Oakwood. RHS., Jan. 12, '92.

syn. *Vandewielianum*. Vervæt, Ghent. March,'93.

var. **Cypher's** (Spicerianum ♀ × villosum Boxalli). Cypher, Cheltenham. G. Ch., Feb. 4, '93.

Lawrebel (Lawrenceanum ♀ × bellatulum). RHS., April 12, '92. fg. Ldn., t. 407. White, for Lawrence, Dorking. fg. G. Ch., April 30, '92. Jrl. Orch., '92, p. 54. O. A., t. 498.

syn. *L. Hyeanum*. Hye, Ghent. Quing., April, '93.

Also raised by Wrigley, Bury. O. R., April, '94. Sown Nov. 14, '93, germinated April, '94.

Lebaudianum (Philippinense ♀ × Haynaldianum). Page, for Lebaudy, Bougival. Jrl. Soc. Hort. Nat. de France, July, '95.

Ledouxiæ (callosum ♀ × Harrisianum ×). RHS., March 14, '93. Bowyer, for Ledoux, East Moulsay.

Also raised by Roberts, Arddarroch. O. R., March, '94.

Also by Wambeke. L'Orchdnn., Dec. 9, '94.

syn. *Hayetti*. Shuttleworth. M. L.

syn. *Titanes*. Measures. M. L., '94.

Leeanum Rchb. f. (insigne ♀ × Spicerianum). G. Ch., Feb. 6, '86. O. A., t. 223. Spyers, for Lawrence, Dorking. Named after Lee, Leatherhead. Ldn., t.125.

See also *Ashworthiæ*.

Also raised by Fitt, for Cowper, Panshanger. RHS., Nov. 14, '93. He also grew pure *Spicerianum* from same seedpod.

Also raised by Page, Bougival. var. *macranthum, miniatum, imperiale*. Le Jardin, 1895, p. 36.

syn. *Claptonense*. G. Ch., Dec. 8, '91. Bought by Low, Clapton. Raiser unknown.

syn. *Ivonnæ* (*Yvonnæ*. O. R., March '95). Linden, Brussels. L'Orchdnn, Dec. 9, '94. fg. Ill. Hrt., Jan. 26, '95.

syn. *Leeanum giganteum* Rolfe (Spicerianum ♀). G. Ch., Dec. 20, '90. Heath, Cheltenham. fg. Rchbch., vl. 2, pt. 3.

syn. *Leeanum incurvum*. Pitcher & Manda, Short-hills.

syn. *Leeanum princeps*. Sander, St. Albans.

syn. *Vallerandi* (insigne Nilsoni). Vallerand. Sown 1887, exh. 1889.

syn. *Young's var*. G. Ch., Nov. 25, '93. Young, Liverpool.

var. **superbum** Rchb. f. (insigne Maulei ♀ × Spicerianum). G. Ch., '85, p. 277. Seden, for Veitch, Chelsea.

Also raised by Murray, for Cookson, Oakwood. Crossed Oct. 29,'82; sown Oct. 25, '83; 200 plants. in litt., March, '93.

Also by Little, Twickenham (insigne punctatum violaceum ♀). RHS., Feb. 14, '93.

syn. *Engelhardtœ*. Linden, Brussels. Ldn., t. 285.

syn. *Albertianum* (insigne Wallacei × Spicerianum ♀). fg. Rv. Hrt., Dec. '92. Jrl. Hrt. '92, p. 346.

var. **Mæsereelianum** Desbois (insigne Chantini ♀ × Spicerianum). Vervæt, Ghent, 1889. fg. Ill. Hrt., t. 77.

syn. *biflorum* N.E.Br. (Spicerianum ♀). G. Ch., Feb. 8, '90. Keeling, for Drewett, Riding.

syn. *pulchellum* (insigne Nilsoni ♀). G. & F., Dec. 14, '92. Pitcher & Manda, Shorthills.

syn. *L. roseum* (Spicerianum roseum ♀ × insigne Chantini). Grey, for Corning, Albany. Sown March 7, '92; flowered Dec. 27, '94. He also raised (Spicerianum ♀ × insigne Nilsoni). Sown Feb., '90, flowered Dec. '94; in litt., Jan. '95.

syn. *Trentonense*. Pitcher & Manda, Shorthills, '94. (Spicerianum magnificum).

Insigne Chantini and insigne Sylhetense fertilized with Spicerianum in Jan., '84, flowered in 1887 and 1888, and proved identical with Leeanum resp. L. superbum. Grey, for Corning, Albany. In litt., Jan. '95.

Leeanum-Morganiæ. Measures, Camberwell. M. I., 2d. ed.

Leechi (?×?). OdS.

Lœwegrenianum (Io × × Spicerianum). Sander, St. Albans, 1893.

syn. *Io-Spicerianum* (Spicerianum ♀). RHS., Dec. 12, '93. Robbins, for Vanner, Chislehurst.

Lombærdianum. —?—Exh. Lombærd, L'Orchdn., Dec. 9, '94.

Loochristianum (Harrisianum × ♀ × Hookeræ). Vuylsteke, Loochristy. G. Ch.,, Jan. 26, '95. O. R., March, '95, states Hookeræ ♀.

syn. *Harrisianum robustum*, 1892. Vervæt, Ghent.

Louisæ (Leeanum × × Ashburtoniæ ×). Le Doux, East Moulsey. O. R., Feb., '95.

Also with Vanner, Chislehurst. O. R., Feb., '95.

Lowryanum (Ashburtoniæ × × vernixium ×). Sander. Temple Show, May 29, '91.

lucidum (Lowii ♀ × villosum). Seden, for Veitch, Chelsea, 1877.

Also with Statter, Manchester. O. R., Oct., '94.

Also Raggioneri, for Venosa, Rome. RHS., April 23, '95.

var. **Beatrice** N.E.Br. (villosum Boxalli ♀). G. Ch., Sept. 7, '89. Keeling, for Drewett, Riding.

syn. *B. nana*. Graves. Am. Gardg., March 23,'95.

Lucie (Lawrenceanum ♀ × ciliolare). Moreau. L'O., Jan., '92.

syn. *Smithii*. RHS., Dec. 12, '93. Low, Clapton.

luridum (Lawrenceanum ♀ × villosum). Fl. Ex., Jan. 9, '92. Pitcher & Manda.

var. **Thayerianum** (villosum Boxalli). Sander. RHS., Aug. 8, '93.

Also under raising with Wrigley, Bury (villosum Boxalli atratum). O. R., April, '94. Sown Nov. 4, '93; germinated April, '94.

Lynchianum (Spicerianum ♀ × selligerum ×). Sander. RHS., Dec. 13, '92.

syn. *Ariadne*. Johnson, for Statter, Manchester. RHS., Nov. 14, '93.

syn. *Euphrosyne*. Johnson, for Statter, Manchester. RHS., Jan. 15, '95.

Macfarlanei Krzl. (calophyllum × ♀ × Spicerianum). G. Ch., Sept. 12, '91. Sander, St. Albans. Named after artist Macfarlane. See also Patersonii.

macropterum Rchb. f. (Lowii ♀ × superbiens). G. Ch., Oct. 28, '82. Seden, Veitch.

syn. *Lowii–superbiens* Rolfe. Lawrence, Dorking. M. L.

maculatum (tonsum ♀ × Leeanum). RHS., Dec. 13, '92. Sander, St. Albans.

Madame Barby (Lawrenceanum superbum × tonsum). Jolibois, Paris. Sown 1884. JSNH., Feb.,'91. O. R., Nov., '93, pg. 328, says wrongly (Spicerianum × tonsum), which would make it syn. Celia.

Madame Elysée Descombes (vernixium ×× Lawrenceanum). Jolibois. Sown 1883. JSNH., Feb., '92.

Madame Georges Truffaut (ciliolare ♀ × Stonei). Sander. RHS., Jan. 15, '95.

Madame Octave Opoix (superciliare× × niveum). Opoix. Sown 1886. JSNH., Aug., '93. The reprint of "French Hybrid Cypripediums, Le Jardin, 1895, p. 53," in G. Ch., March 23, '95, states "semis naturel de superciliare × niveum"; undoubtedly, une déclaration d'une raison artificielle. fg. Ldn., t. 462.

Madame Van Houtte ?(niveum × venustum). Van Houtte, Ghent. V. M., '89.

Malyanum (Spicerianum ♀ × Crossianum ×). RHS., Nov. 10, '91. Sander, St. Albans.

syn. *Ashworthianum.* Sander, St. Albans. M. L.

syn. *Krouseanum.* Pitcher. M. L.

Marguerite Mantin (Crossianum × ×barbatum Warnerianum). Mantin. Sown 1889. Exh. at Orleans, May, '94.

syn. *Dauthieri violaceum purpureum.* Opoix. Sown 1888. JSNH., Feb., '94.

marmorophyllum Rchb. f. (Hookeræ ♀ × barbatum). G. Ch., '76, p. 130. Veitch.

syn. *patens* Rchb. f. Seden, for Veitch. G. Ch., '77, ii, p. 456.

syn. *Fitchianum* O. A., t. 350. Williams, Holloway. See *Williamsianum.*

syn. *amethystinum* (barbatum nigrum). Bleu, Paris. Sown 1889. JSNH., Feb., '94.

syn. *atropurpureum* (barbatum nigrum). Bleu, 1894. JSNH., Feb., '94.

Marshallianum (venustum pardinum ♀ × concolor). G. Ch., '75, p. 804. Seden, for Veitch. O. A., t. 418. G. Ch., April 16, '87. Sold for 150 gs. Nov. 3, '88.

syn. *M. latum*. Graves. Am. Gardg., March 23, 95.

syn. *M. Gravesiæ*. Grey, for Graves, Orange. In litt., Jan., '94.

Also raised with (venustum ♀) by Winn, Birmingham. "Of a batch of seedlings, every plant proved to be a poor form of Cpd. venustum." O. R., Aug., '95.

Marwoodi (niveum ♀ × Harrisianum ×). RHS., Aug. 26, '90. Horner, for Marwood, Whitby. Not *Mawoodi*, as given. G. Ch., Aug. 30, '90.

Mary Lee (Leeanum × ♀ × Arthurianum ×). Lee, Manchester. RHS., Nov. 28, '93.

Massaianum (superciliare × ♀ × Rothschildianum). Sander. RHS., July 11, '93. fg. G. Ch., Sept. 2, '93. G. Ch., March 23, '95, p. 367, states wrongly ciliolare for superciliare.

Maynardii (purpuratum ♀ × Spicerianum). RHS., Dec. 9, '90. Rchbch., t. 43.

Also raised by Burton, Gainsborough. RHS., Aug. 9, '92; 20 plants; 4 years.

syn. *Cecilia* (purpuratum Kimballianum). Sander. M. L.

syn. *Rodigasianum*. Capart. M. L., 2d ed.

Mdlle. Josée Descombes (œnanthum ×× Argus). Opoix. Sown 1888. JSNH., March, '94.

Mdlle. Madeleine Gayot (Dayanum × insigne Chantini). Jolibois. Sown 1885. JSNH., Jan., '91.

Under raising (Dayanum ♀) with Wrigley, Bury. O. R., April, '94. Sown Oct. 13, '93; germinated April, '94.

var. **Siebertianum** (Dayanum ♀ × insigne). Seeger & Tropp sale, May 11, '91.

syn. *pellucidum* (insigne Maulei ♀). Pitcher & Manda, Shorthills. Fl. Ex., Jan. 9, '92.

Measuresiæ (bellatulum × superbiens ♀). Sander, St. Albans, 1893.

Also raised by Prewitt, Hammersmith. G. Ch., May 26, '94.

syn. *Mrs. Fred. Hardy.* Sander. RHS., Jan. 15, '95. fg. G. Ch., Jan. 26, '95. Grd. Mag., Jan. 19, '95.

Measuresianum (villosum × venustum). G. Ch., Nov. 26, '87. O. A., t. 304. Fraser, for Measures, Streatham.

syn. *Julien Coffignez* (*Coffinet?*) Opoix. Sown 1889. JSNH., June, '94.

syn. *Madame Gibez.* L'Orch., March, '93. See also Lathamianum.

syn. *obscurum.* Veitch, 1887. O. R., July, '93, makes it syn. of Ashburtoniæ.

syn. *Thetis.* Low, Clapton, 1891.

syn. *M. de Bel-Air-d'Olivet.* Mantin. Sown 1889. JSNH., 1893.

syn. *Amesianum* (villosum ♀). Williams, Holloway. O. A., t. 340.

Also raised by Pitcher & Manda, Shorthills, 1893.

And by J. Dale, Cathcart. O. R., March, '94.

Also S. Johnson. Gdn., Jan. 23, '92.

syn. *Rowallianum.* Fraser. RHS., April 14, '91.

syn. *Gibezianum* (misprint *Ribezianum*). (venustum ♀). Ldn., t. 425.

var. **pavoninum** Rchb. f. (villosum Boxalli ♀ × venustum). G. Ch., March 3, '88. Drewett, Riding.
syn. *dubium*. M. L., 2d ed.
var. *Desboisianum* (venustum ♀). Vervæt, Ghent. Hrt. Blg., Dec. 3, '90. Ldn., t. 277.
syn. *pavoninum inversum*. Gdn., June 18, '92. Pitcher & Manda.

melanthum (Hookeræ ♀ × Stonei) O. R., May '93. Seden, for Veitch.

microchilum Rchb. f. (niveum ♀ × Druryi). G. Ch., Jan. 21, '82. Ldn., t. 50. Veitch.
Also raised by Horner, for Marwood, Whitby. G. Ch., July 8, '93. Sown Sept., 92; germinated June, '93.

Millmani (callosum ♀ × Philippinense). Ayling, for Hollington, Enfield. RHS., July 24, '94.
syn. *calloso-laevigatum*.

Milo (insigne Chantini ♀ × œnanthum superbum ×). Veitch, Chelsea. RHS., Nov. 27, '94.

Ministre A. Viger (barbatum purpureum × superciliare majus ×). Mantin. Sown 1889; exh. 1892.
syn. *Vigerianum*. G. Ch., July 27, '95.

Minos (Spicerianum ♀ × Arthurianum ×). RHS., Nov. 28, '93. Veitch, Chelsea. Misprint "*minosa*." RHS. (report G. Ch.), Dec. 11, '94. O. R., Jan., '95, p. 32, says var. of Niobe.

Mitleinianum (? × ?). Sander. Proth. & Mors., sale Dec. 21, '94.

modestum (Harrisianum × ♀ × tonsum). Grey, for Graves, Orange. In litt., Jan., '94.
var. **modestum inversum**. Graves. Am. Gardg., March 23, '95.

molestum (purpuratum ♀ × Io ×). Sander, St. Albans. RHS., July 24, '94. Originally named *modestum*.

Mons. Coffinet (superciliare × ♀ × Dayanum). Opoix. Sown 1890. JSNH., June, '94.

Mons. Elysée Descombes (barbatum × ciliolare). Opoix. Sown 1883. JSNH., Oct., '94.

Mons. Finet (callosum superbum × Godefroyæ). Regnier. L'O., '91. fg., p. 321.

var. **Felix Faure.** Dallemagne, Rambouillet. Reverse of Mons. Finet. G. Ch., Feb. 23, '95. fg. Ldn., t. 469.

Moreauanum (superciliare × ♀ × callosum). Regnier, Fontenay-sous-Bois. May, '92.

Morganiæ Rchb. f. (superbiens ♀ × Stonei). G. Ch., '80, p. 134. Seden. Veitch, Chelsea. Named after Mrs. Morgan, New York. fg. Jrl. Hrt., '87, f. 42. O. R., Feb., '93. G. Ch., Aug. 21, '86. *id.*, '90, fg., '85. O. A., t. 313. Rchbch. 2d ser., t. 1. Gdn., '83, t. 372. Ill. Hrt., '87, t. 5.

Raised also by Osborn, formerly with Buchan, Southampton. Gdn., Feb. 4, '93.

And by Murray, for Cookson, Oakwood. (Stonei ♀). In litt., March, '93. Crossed July 11, '84; sown March 4, '84, 200 plants.

Same by Statter, Manchester. O. R., Oct., '94.

syn. *M. Burfordensis* (superbiens Demidoff var. ♀). Spyers, for Lawrence, Burford Lodge, Dorking, 1889.

var. **M. Langleyense** (Stonei platytænium). RHS., Jan. 16, '94. Veitch.

Mrs. F. L. Ames (tonsum × Fairieanum). Ames. Am. Gardg., March 23, 95.

Mrs. G. D. Owen (superciliare × ♀ × villosum). RHS., Sept. 6, '92. Sander.

var. **Lauræ** (villosum ♀). Le Doux, Liverpool. Named after his wife. O. R., March, '94.

Mulus (hirsutissimum ♀ × Lawrenceanum). RHS., June 20, '93. Sander.

var. (unnamed), (Lawrenceanum Hyeanum). Vuylsteke, Ghent. Ght. Mtg., Sept. 11, '92.

Muriel Hollington Rolfe (niveum ♀ × insigne?). G. Ch., Jan. 3, '91. Ayling, for Hollington, Enfield.

var. **Venus** (insigne Sanderæ). M. L.

Nandi (callosum ♀ × Tautzianum ×). Chapman, for Measures, Camberwell. RHS., Sept. 11, '94. fg. Grd. Mg., July 6, '95.

Nicias (?×?) Hye, Ghent. Mtg. Dec., '94.

Niobe Rolfe (Spicerianum ♀ × Fairieanum). G. Ch., Jan. 4, '90. Seden, for Veitch, Chelsea. Sown 1884, flowered Dec., '89. fg. Gdn., May 23, '91. O. A., t. 438. O. R., Jan. '93. Wnr. Ztg., '90, fg. '69.

Also raised by Murray, for Cookson, Oakwood. In litt., March, '93. Crossed Nov. 10, '87; sown Jan. 11, '89.

syn. *Gaskelliana* Gower. Gdn., Feb., '90, p. 150. Gaskell, Liverpool.

syn. *Shorthills' var.* Pitcher & Manda, Shorthills, 1892. Also 1894.

syn. *miniatum*. Jules Hye, Brussels. Exhbt. Nov. 12, '93.

syn. *oliganthum* and *purpureum*. Grey, for Graves, Orange. In litt., Jan., '94.

syn. *luteum* (Spicerianum aureum). Also by Grey.

nitens Rchb. f. (villosum ♀ × insigne Maulei). G. Ch., '78, p. 398. Seden, for Veitch, Chelsea. fg. Ldn., t. 223.

syn. *Lucienianum*?. Ldn., t. 362. Jrl. Orch. '92, p. 314. Parentage doubtful. Perhaps near Kramerianum.

syn. *Mrs. Tautz* J. O'B. Record lost. G. Ch., Dec. 30, '94.

var. **Sallieri** Godefroy, supposed nat. hyb. (insigne × villosum). Rv. Hrt., Oct. '85. fg. Ldn., t. 84. Sallier, grd. to Mdm. Fould, St. Germain.
Also raised by Pitcher & Manda, Shorthills, 1893.
syn. *St. Albans var.* Sander, St. Albans. RHS., Jan. 12, '92.
syn. *Gallicei.* OdS.
syn. *S. obscurum* (villosum ♀). Grey, for Graves, Orange, also
syn. *S. immaculatum* (insigne Amesianum ♀). In litt., Jan. '94.
syn. *S. Rœblingianum*(insigne Amesianum). Pitcher & Manda. Am. Gardg., March 23, '95.
syn. *Bowring's* (villosum ♀), 1887. Bowring, Windsor Forest.
syn. *Measures'*. RHS., Feb. 9, '92. Measures, Camberwell.
syn. *almos* (villosum aureum). Ebner. M. L.

var. **Schlesingerianum** (villosum Boxalli ♀ × insigne). Gdn. Jan. 24, '91. Seeger & Tröpp, Dulwich.
Also raised by Robinson, for Ames, North Easton. In litt., Feb., '94; 3 years 9 months.
syn. *S. inversum* (insigne ♀). Grey, for Graves, Orange. In litt., Jan. '94.
syn. *S. superbum* (v. Boxalli roseo-marginatum). Graves. Am. Gardg., March 23, '95.
syn. *Sibyrolense.* Martin Cahuzac, Chateau de Sibyrol, Bordeaux. Flowered Feb., '93. fg. Ill. Hrt., July 20, '93. Jrl. Orch., '92, p. 383.
syn. *W. W. Lunt* (v. Boxalli atratum ♀). Pitcher & Manda, Shorthills, 1894.

var. **Mons. de Curte** (villosum Boxalli × insigne Chantini). Vervæt, Ghent. Quing., April, '93. *Mdm. de Curte,* from same seedpod.

Also raised with Hardy, Ashton-on-Mersey. O. R., March '95.

Also with Miteau. Orchdnn., March '95.

syn. *Celeus* (insigne Chantini ♀). Chapman, for Measures, Camberwell. RHS., Nov. 14, '93.

niveo-Lowii. Drewett, Riding. M. L., 2d ed.

Also with Lewis, Southgate. Mentioned G. Ch., April 9, '92.

—?— (niveum ♀ × œnanthum superbum ×). Winn, Birmingham. O. R., Sept., '94; 14 plants.

—?— (niveum ♀ × Rothschildianum Elliottianum). Grey, for Graves, Orange. O. R., June '94.

nobile. —?— OdS.

nobilior (Haynaldianum × Lathamianum ×). Sander's Proth. & Mors. sale. Oct. 12, '94.

Norma (Spicerianum ♀ × Niobe ×). Veitch, Chelsea. RHS., Jan. 15, '95.

Northumbrian N.E.Br. (calophyllum × ♀ × insigne Maulei). G. Ch., Feb. 8, '90. Drewett, Riding.

syn. *Artemis.* Veitch, Chelsea. M. L.

Numa Rolfe (Lawrenceanum ♀ × Stonei). G. Ch., May 17, '90. Veitch, Chelsea.

œnanthum Rchb. f. (Harrisianum × ♀ × insigne). G. Ch., '76, p. 297. O. A., t. 379. Seden, for Veitch, Chelsea.

Also raised by Swinburne, Winchcombe. RHS., March 13, '94.

Also by Grey, for Corning, Albany.

syn. *œ. giganteum* (insigne negro-maculatum ♀). Grey, for Graves, Orange. In litt., Jan., '94.

syn. *œ. varium* (insigne maximum). Graves. Am. Gardg., March 23, '95.

syn. *Mdlle. Alice Gayot.* Jolibois. Sown 1889. JSNH., Jan., '91.

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syn. *pulcherrimum*. Drewett, Riding. M. L.

syn. *Berggrenianum* Rchb. f. (Harrisianum Dauthieri). Sander. G. Ch., June 30, '88. Named after collector Berggren.

var. **superbum** (Harrisianum × ♀ × insigne Maulei). Seden, Veitch, 1885. fg. Ldn., t. 33. Rchbch., t. 38.

Also raised by Murray, for Cookson, Oakwood. In litt., March, '93. Crossed Dec. 6, '81; sown Oct. 12, '82.

syn. *Thibautianum* Rchb. f. G. Ch., Jan. 23, '86. Thibaut, Sceaux.

syn. *Galatea* Rolfe. Veitch. G. Ch., Feb. 11, '88. Gd. Mg., March 4, '93.

syn. *Electra* Rolfe. Veitch. G. Ch., March 10, '88.

syn. *Orestes*. Veitch. V. M., '89.

syn. *Themis*. Veitch, Chelsea. M. L.

syn. *œ. punctatum* Rolfe (Harrisianum nigrum × ♀ × insigne punctatum violaceum). Little, Twickenham. O. R., Nov., '94.

var. **Joséphine Jolibois** Rchb. f. (Harrisianum × ♀ × insigne Chantini). G. Ch., Nov. 3, '88. Jolibois, Paris. fg. L'Orch., Nov., '92. JSNH., April, '88.

Also raised by Measures, Streatham.

Also by Bond, for Ingram, Godalming. RHS., Dec. 8, '91.

syn. *Clément Loury*. Jolibois. Sown 1883. JSNH., April, '89.

syn. *Charles Gondoin*. Jolibois. Sown 1884. JSNH., May, '89.

syn. *Felix Jolibois*. Jolibois. Sown 1883. JSNH., Jan., '89.

syn. *Madame Charles Gondoin*. Jolibois. Sown 1884. JSNH., June, '89.

syn. *Madame Coffinet.* Opoix. Sown 1889. JSNH., Oct., '93.

syn. *Madame Émilie Gayot.* Jolibois. Sown 1884. JSNH., June, '89.

syn. *Madame Roch Jolibois.* Jolibois. Sown 1885. JSNH., Feb., '92.

syn. *Mdlle. Germaine Scellier de Gisors.* Opoix. Sown 1889. JSNH., Oct., '93.

syn. *œnanthum amabile* (insigne Chantini ♀). Grey, for Graves, Orange. In litt., Jan., '94.

syn. *René Jolibois.* Sown 1885. JSNH., Dec. '94.

œno-superbiens (œnanthum × × superbiens). RHS., Aug. 8, '93. White, for Lawrence, Dorking.

Olenus (bellatulum ♀ × ciliolare). Chapman, for Measures, Camberwell. RHS., March 26, '95. fg. G. Ch., May 18, '95.

var. **Gertrude Hamilton** (ciliolare ♀). Ayling, for Hollington, Enfield. RHS., May 14, '95. fg. G. Ch., May 25, '95.

Olivet (barbatum gracile × Swanianum atropurpureum ×). Mantin. Sown 1889. Exh. at Orleans, May, '94.

syn. *Gandavense* (barbatum ♀). M. L., 2d ed.

orbum Ods. syn. of Cpd. barbatum Crossii.

Orion (insigne ♀ × concolor). Veitch. RHS., Jan. 17, '93.

orphanum Rchb. f. (barbatum × Druryi). Seden, for Veitch, Chelsea. G. Ch., Aug. 7, '86. fg. Ldn., t. 206. O. A., t. 455.

Also raised (at present time unflowered) by Wrigley, Bury. O. R., April, '94. Sown Nov. 25, '93; germinated April, '94.

Orpheus Rolfe (venustum ♀ × callosum). Sander. G. Ch., Jan. 10, '91.

Also with Wrigley, Bury. At present unflowered. O. R., April, '94. Sown Oct. 13, '93; germinated April, '94. (callosum ♀).

Osiris —?— RHS., Ghent. Mtg., March 3, '95.

Pageanum Rchb. f. (superbiens × Hookeræ). G. Ch., Sept. 8, '88. L'O., '88, p. 257. Page, Bougival, Paris. Sown 1885.

syn. *Cydippe*. Veitch. M. L.

var. **Œnone** Rolfe (Hookeræ ♀). Murray, for Cookson, Oakwood. G. Ch., March 1, '90.

syn. *Hookeræ–Veitchii*. Bleu, Paris. Jrl. Orch.,'92, p. 281.

Pallas N.E.Br. (calophyllum × ♀ × callosum). Keeling, for Drewett, Riding. G. Ch., March 21, '91. Jrl. Orch., '91, p. 38.

pallens (Spicerianum ♀ × Dayanum). Fl. Ex., Jan. 9, '92. Pitcher & Manda.

Pandora Krzl. (Argus × Dayanum). Joly, for Rothschild, Vienna. G. Ch., Feb. 24, '94.

Paris (Stonei ? ♀ × bellatulum). Hall. G. Ch., April 15, '93. O. R., March, '93, fg.

—?—(Parishii × bellatulum). Johnson, for Statter, Manchester. G. Ch., Feb. 17, '94.

Parksianum (Spicerianum × marmorophyllum ×). RHS., Jan. 16, '92.

syn. *Sénateur Montéfiore*. Peeters, Brussels. (G. Ch., Feb. 13, '92.

syn. *marmorophyllum superbum*. RHS., Dec. 13, '93. Bond, for Ingram.

Patersonii (Lowii ♀ × Lawrenceanum). RHS., July 12, '92. Lewis, Southgate. Originally named *Macfarlanei*.

Paulii (selligerum majus × ♀ × Harrisianum ×). Paul, for Bowring, Windsor Forest. O. R., May, '93.

Also raised by Miteau. L'O., Feb., '94. Sown June, '90.

syn. *selligero–Harrisianum*. Imschoot, Brussels. Orchdn., Dec. 10, '93.

Pelias (Haynaldianum ♀ × insigne). O. R., May, '94. Flowered Feb., '94. Pitcher & Manda, Shorthills.

Phœbe (Philippinense × bellatulum). Johnson, for Statter, Manchester. RHS., March 12, '95.

picturatum (Swanianum × ♀ × Spicerianum). White, for Lawrence, Dorking. Temple Show, May 29, '91. O. R., Oct., '93, states wrongly (superbiens ♀ × Spicerianum).

pleistochlorum Rchb. f. (barbatum ♀ × Javanicum virens). G. Ch., Nov. 5, '87. Drewett, Riding.

plunerum Rchb. f. (Harrisianum × ♀ × venustum). G. Ch., Jan. 8, '87; 50 plants.

syn. *doliare* Rchb. f. G. Ch., April 2, '87; 2 plants. *diolare*, misprint in M. L.

syn. *lineolare* Rchb. f. G. Ch., April 2, '87; 1 plant. Above three were raised by Murray, for Cookson, Oakwood. Crossed Feb. 4, '81. Sown Dec. 11, '81.

syn. *Leda*. (*Seda* misprint, OdS.) Bowring, Windsor Forest. G. Ch., Feb. 13, '92. Jrl. Orch., '92, p. 6.

syn *Ianthe*. Veitch. RHS., March 8, '92.

var. **Minerva** Rolfe (venustum ♀). Abraham, for Measures, Streatham. G. Ch., Oct. 26, '89.

Pluto (villosum Boxalli ♀ × calophyllum ×). RHS., Nov. 28, '93. Low, Clapton.

var. (unnamed) (calophyllum politum × ♀). Young, Liverpool. O. R., March, '94. Pod ripe Jan., '92, sdlg first noticed June, '92; potted off about 50 plants; fresh sdlgs appearing as late as Dec., '92.

Pollettianum (calophyllum × ♀ × œnanthum superbum ×). Sander. RHS., Dec. 9, '90. Rchbch., t. 43.

Polyphemus (venustum ♀ × tonsum). Grey, for Graves, Orange. In litt., Jan. '94.

syn. *tonso-venustum.* Pitcher & Manda. Am. Gardg., March 23, '95.

polystigmaticum Rchb. f. (venustum ♀ × Spicerianum). G. Ch., Oct. 13, '88. Measures, Streatham.

Also raised by Vanner, Chislehurst. O. R., Feb.,'93.

syn. *venusto-Spicerianum* J.O'B. (venustum ♀). G. Ch., March 30, '89. Keeling for Drewett, Riding.

Pomone. Resembling Spicerianum. Hye, Leysen. Ghent. Mtg., Feb. 3, '95.

porphyrochlamys Rchb. f. (barbatum Crossii ♀ × hirsutissimum). Seden, for Veitch, Chelsea. G. Ch., April 12, '84. fg. O. R., April, '93. Gdn., t. 426.

var. **Fraseri** Rchb f. (hirsutissimum ♀). Fraser, Aberdeen. In litt., to Veitch, 1889. One plant. Ldn., t. 253.

Priapus (Philippinense ♀ × villosum). Veitch, Chelsea. RHS., April 22, 90.

Æolus. Veitch. M. L.

Pryorianum (Lathamianum × ♀ × Harrisianum ×). Sander. RHS., Nov. 28, '93.

Psyche (bellatulum × niveum). Winn, Birmingham. RHS., June 20, '93.

pycnopterum Rchb. f. (venustum pardinum ♀ × Lowii). G. Ch., '76, p. 622. Seden, for Veitch, Chelsea. *porphyrospilum* Rchb. f. 1879; from same seedpod.

Pygmalion (villosum × ciliolare). Graves. Am. Gardg., March 23, '95.

syn. *cilio-villosum.* Lewis, Southgate. RHS., March 26, '95.

radiosum Rchb. f. (Lawrenceanum superbum ♀ × Spicerianum). G. Ch., Oct. 3, '85. Seden, for Veitch.

syn. *variopictum.* Measures, Streatham, 1888. (O. R., Aug. '93).

syn. *Shorthillense*. Pitcher & Manda, Shorthills.

syn. *Bradshawianum*. Lewis, Southgate. RHS., July 11, '93.

var. **G. S. Ball** (Spicerianum ♀). Sander, St. Albans. RHS., Nov. 15, '92.

regale ?(insigne Maulei × purpuratum ♀). Bowring, Windsor. OdS.

syn. *Madame Léonie Doin*. Jolibois. Sown 1884. JSNH., Feb. '92.

Reginæ (spectabile × —?—). M. L.

Reginaldianum (insigne × Siamense ×). Moseley, London. RHS., Nov. 14, '93.

Also raised by Heath, Cheltenham. RHS., Oct. 24, '93.

Reinaldianum misprint.

Remus (purpuratum ♀ × Bullenianum). Grey. Am. Gardg., March 23, '95. Renamed Remus, as its original name, *Romulus*, had been applied already to another cross.

Ridolfianum (Williamsianum [Wallertianum] × × insigne Chantini). Sander, St. Albans. RHS., Dec. 12, '93.

syn. *Préfet Boegner*. Mantin. Sown 1890, exh. at Orleans, May, '94.

Robinianum (Parishii ♀ × Lowii). Linden, Brussels. L'O., Dec. 10, '93. Named after son of Measures, Streatham.

Romulus (insigne Chantini × nitens Sallieri ×). Hye, Ghent. Ghent Mtg. (March, '94.), Dec., '94.

syn. *Zeno* (nitens ♀). Veitch, Chelsea. RHS., Dec. 11, '94.

—?— (Rothschildianum ♀ × niveum). Sdlg. Winn, Birmingham. O. R., Sept. '94.

var. —?— (Rothschildianum Elliottianum × niveum ♀). "Ready to bloom." Grey, for Graves. Orange. O. R., June, '94.

—?— (Rothschildianum ♀ × Lawrenceanum). Sdlg. Statter, Manchester. O. R., Oct. '94.

Also with Lawrence, Dorking. Sdlg. O. R., Jan., '93.

var. —?— (Lawrenceanum ♀). Treseder, for Heath, Cheltenham. 7 plants. in litt., March, '93.

var. —?— (Rothschildianum Elliottianum ♀ × Lawrenceanum ♀). Sdlg. Treseder, for Heath, Cheltenham. In litt., March, '93. 20 plants.

—?— (Rothschildianum Elliottianum ♀ × Spicerianum). Sdlg. Statter, Manchester. O. R., Oct., '94.

Sanderiano-superbiens (Sanderianum ♀). Vipan, Wandsford crossed it; Cookson, Oakwood, raised it. RHS., Aug. 29, '93. fg. Ill. Hrt., Sept. 7, '93.

Savageanum (Harrisianum × ♀ × Spicerianum). G. Ch., Oct. 13, '88. Savage, for Kimball, Rochester.

Parentage given in list of "French Hybrid Cypripediums," reprint in G. Ch., March 23, '95, from Le Jardin, viz. (œnanthum superbiens [sic] × Spicerianum) is wrong.

syn. *Erycina.* OdS.

syn. *Fiveanum.* Moens. Orchdnn, Dec. 9, '94.

syn. *Kirchhoffianum.*

syn. *Mauriceanum.* Madam Block, Paris. Fide O. R., April, '93.

syn. *Pitcherianum. Williams var.* Williams, Holloway. O. A., t. 453.

syn. *Spicero-Harrisii.* Maron. JSNH., 1892, p. 611.

syn. *Seegerianum* (Spicerianum ♀). G. Ch., Oct. 27, '88. Page, 1885.

syn. *Adonis.* Williams, Holloway. RHS., Nov. 10, '91.

syn. *Ashburtonioides* Krnzl. Thompson. M. L.

syn. *Albert Truffaut* (H. vivicans ♀). Sander. RHS. Dec. 11, '94.

syn. *Osbornei*. Osborn, for Buchan, Southampton. RHS., Dec. 9, '90.

syn. *Horneri*. Horner, for Marwood, Whitby. G. Ch., July 8, '93. O. R., April, '94, says: (Argus ♀ × villosum) which would belong to vernixium.

syn. *Madame E. Cappe* (Harrisianum Dauthieri). Cappe. Sown 1885. Le Jardin, 1889, p. 265.

syn. *Mdlle. Louise Scellier de Gisors*. Opoix. Sown 1889. JSNH., Oct., '93.

syn. *Pitcherianum* Rchb. f. fg. G. Ch., Jan. 19,'89. Pitcher, Shorthills.

syn. *Souv. de Madame Jules Dupré*. Opoix. Sown 1886. JSNH., Oct., '94.

Also raised with Vuylsteke, Ghent. Orchdnn., Feb. 12, '93.

Scylla (Dayanum × villosum Boxalli). Graves. Am. Gardg., March 23, '95.

selligerum Rchb. f. (barbatum ♀ × Philippinense). Seden. Veitch's catlg., '78. Not G. Ch., '80. i. fg. 135 (vexillarium). Ldn., t. 22. O. A., t. 255 and 438. Also raised by Grey, for Corning, Albany.

syn. *Finetianum*. OdS.

syn. *Peetersianum*. Peeters, Brussels. G. Ch., March 17, '88.

selligero-barbatum (barbatum ♀). Thorne, for Joicy, Sunningdale. RHS., Aug. 29, '93.

Sanderi-selligerum (selligerum majus × ♀). White, for Lawrence, Dorking. RHS., July 9, '95. (RHS., Aug. 13, '95).

Shawianum (Lawrenceanum ×—?—). Lewis. M. L.

Siamense nat. hyb. (callosum × Bullenianum). Rolfe, O. R., Jan., '95.

Described as good species. G. Ch., '89, p. 192.
syn. *collosum sublaeve* Rch. f. G. Ch.,'88, i., p. 331.

—?—(Siamense × ♀ × Spicerianum). Under raising. Treseder, for Heath, Cheltenham; 100 plants. In litt., March, '93.

Simonii (Leeanum × ♀ × insigne Chantini). Terrier, for Fournier, Neuilly-sur-Seine. OdS.
var. **Leopoldianum** (insigne Wallacei). Ghent Mtg., March 3, '95.

Southgatense (bellatulum ♀ × Harrisianum ×). Temple Show, May 25, '92. Lewis, Southgate.
Also by Johnson, for Statter, Manchester. RHS., Nov. 14, '93.
syn. *Fowlerianum*. Sander. RHS., March 12, '95.

Souv. de Roch Jolibois (Lowii × Curtisii). Opoix. Sown 1889. JSNH., Oct., '93.

(**Spicerianum** × Spicerianum). Grey, for Corning, Albany. O. R., Aug., '94; 23 plants, all different from each other. Crossed 1880, flowered 1884 and 1885.

Spicero-niveum Sander, St. Albans. M. L.

—?—(Spicerianum × vernixium ×). Ght. Mtg., Feb. 5, '93. (fide G. Ch., Feb. 25, '93).

Statterianum (Spicerianum magnificum ♀ × vexillarium superbum ×). RHS., Oct. 24, '93. fg. Jrl. Hrt., Nov. 9, '93. Johnson, for Statter, Manchester.
syn. *Janus*. M. L.

St. Hilda (villosum Boxalli ♀ × Curtisii). Horner, for Marwood, Whitby. O. R., May, '95.

Stonei platytænium Rchb. f. Nat. hyb.? (Stonei × Lowii). G. Ch., '67, p. 1118. fg. Xn. Orch., ii, t. 161. V. M., '89. Fl. Mg., n. s. t. 414. Sel. Orch., iii, t. 14.

suffusum (Lowii ♀ × Hookeræ). RHS., Nov. 14, '93. Burton, Gainsborough.

syn. *Burtonii* Gower. O. A. sub. t. 481.
Exhb. as *nat. hyb.*? RHS., Oct. 27, '91. Tracy, Twickenham.

superciliare Rchb. f. (barbatum ♀ × superbiens). G. Ch., '76, p. 795. Veitch.
syn. *barbato-Veitchianum*. Bleu, Paris. L'O., '89, p. 10. Ldn., t. 228. Sown 1882.
syn. *Warnero-superbiens*. fg. G. & F., Oct. 26,'92. Jl. Orch., '92, p. 249.
syn. *barbato-superbiens*. (superbiens ♀). Temple Show, May, '91.
Also raised by Grey, for Corning, Albany.

Svend Brunn (—?—). Sander, St. Albans. G. Ch., June 11, '95.

Swanianum Rchb. f. (Dayanum ♀ × barbatum). G. Ch., '76, p. 36. Swan, for Leach, Manchester.
Sivanianum; misprint OdS.
syn. *delicatulum* Rchb. f. Drewett, Riding. G. Ch., Nov. 5, '87. (Rchb. states Dayanum ♀; V. M. gives barbatum Crossii ♀).
syn. *Madeline Gayot*. Lebœf. M. L.

Swinburnei J. O'B. (insigne Maulei ♀ × Argus Moensii). G. Ch., Jan. 30, '92. Heath, Cheltenham. Named after Swinburne, Gloucestershire. Crossed 1887, first sdlg., June, '88; first flower, '92; raised about 200 plants, destroying all but 30 good var.
Also raised by Johnson, for Statter, Manchester. RHS., Nov. 14, '93.

Tacita (Measuresianum × ♀ × tonsum). Grey, for Graves, Orange. G. & F., March 1, '93.

Tautzianum Rchb. f. (niveum ♀ × barbatum). G. Ch., Nov. 27, '86. Seden, for Veitch, Chelsea. Named after Tautz, Hammersmith. Parentage given as (barbatum ♀) in Gard. Mag., July 6, '95, is wrong.

var. **lepidum** Rchb. f. (barbatum Crossii ♀). G. Ch., Dec. 20, '88. Bull, Chelsea.

Also raised by Gardner, for Vanderbilt, Newport. In litt., Jan., '94. Sown Feb., '93.

Young, of Liverpool, reports in O. R., July, '95, that he crossed (barbatum var. ♀ × niveum) in May, '91; sowed the seed Jan., '92; noted first appearance of seedlings May, '92, and that "in the first flower I see no trace of niveum, nor do I find it in the plants."

T. B. Haywood Rolfe. (Druryi ♀ × superbiens). G. Ch., April 6, '89. Seden, for Veitch. Named after Haywood, Reygate. (O. R., Sept., '93, states superbiens ♀).

Also raised by John Larking, Watford. RHS., Sept. 6, '92.

Tennyson J. O'B. (œnanthum superbum × ♀ × Dayanum). G. Ch., Oct. 21, '93. McArthur, Maida Vale.

tesselatum porphyreum Rchb. f. (concolor ♀ × barbatum). G. Ch., Jan. 8, '81. Seden, for Veitch. Ldn., t. 18.

Also raised by Treseder, for Heath, Cheltenham. In litt., March, '93.

The Gem (marmorophyllum × ♀ × insigne Chantini). RHS., July 26, '92. Ingram, Godalming.

syn. *Lady Hutt* (marmorophyllum [Fitchianum] × ♀ × insigne). Swinburne, Winchcomb. RHS., March 26, '95.

Théodore Bullier (tonsum × villosum). Opoix. Sown 1890. JSNH., March, '94.

syn. *tonso-villosum*. Pitcher & Manda, Shorthills. Am. Gardg., March 23, '95.

Thortoni (superbiens ♀ × insigne). Thorton, Weedon. (G. Ch., Oct. 1, '87.) OdS.

var. **G. H. Rogers** (insigne violaceo-punctatum ♀). Williams, Upper Holloway. RHS., Aug. 13, '95.

Tityus (Spicerianum ♀ × œnanthum superbum ×). RHS., Nov. 15, '92. Veitch, Chelsea.

syn. *Figaro* J. O'B. G. Ch., Dec. 28, '89. Seeger & Tropp, Dulwich.

syn. *Chas. Reffold.* Ingram. M. L.

syn. *Clarence.* Parentage doubtful. Young, for Wigan, East Sheen. RHS., Nov. 13, '94.

syn. *Memoria Moensii* (syn. *Moens, Moensii*). Parentage doubtful. fg. Ldn., t. 361. Named after Moens, Lede, Ghent.

syn. *œno-superbiens.* Lawrence, Dorking. M. L., 2d ed.

triumphans (nitens [Sallieri Hyeanum] × ♀ × œnanthum superbum ×). Hye, Ght. Mtg., Sept., '93.

Tryanowskyanum (insigne Chantini ♀ × Io grande×). O. R., Feb., '94. Sander.

syn. *gloriosum.* Johnson, for Statter, Manchester, RHS., Oct. 9, '94.

Tryonianum (Harrisianum × ♀ × superbiens Demidoff var.) Edwards, for Tate, Liverpool. RHS., July 26, '93. Admiral Tryon.

syn. *Veitchii-Dauthieri.* Opoix. Sown 1891. JSNH., Oct., '94.

turpe (barbatum Crossii ♀ × Argus). Lebœf, Paris, '88.

syn. *Ballœrense.* Jrl. Orch., '92, p. 343.

var. **Kalœ** (Argus ♀). Chapman, for Measures, Camberwell. RHS., Feb. 13, '94.

T. W. Bond (Swanianum× ♀ × hirsutissimum). Bond, for Ingram, Godalming. RHS., March 28, '93.

Van Houttei. Perhaps syn. of *Madam van Houtte.* L'Orchd., '89, p. 111. fg. Ldn., t. 130.

Vanneræ (Curtisii ♀ × selligerum majus×) Robbins, for Vanner, Chislehurst. RHS., March 26, '95.

Variety (Spicerianum ♀ × ciliolare). G. Ch., July 8, '93. Horner, for Marwood, Whitby.

var. **Bookeri.** (ciliolare ♀). Ayling, for Hollington, Enfield. RHS., Oct. 9, '94. Booker, traveler for Lewis, Southgate.

venusto-Crossianum (venustum ♀). Drieger. OdS.

vernixioides (villosum Boxalli × Javanicum) Graves. Am. Gardg., March 23, '95.

vernixium Rchb. f. (Argus ♀ × villosum). G. Ch., '79, p. 389. Seden, Veitch.

Also by Clark, Liverpool (villosum aureum ♀). RHS., Feb. 14, '93.

auricularum. M. L.

Smeeanum — ? —. Perhaps (Argus × Lathamianum×). RHS., Nov. 27, '94. Cummings, for Smee, Wallington.

var. **Murillo** Desbois (Argus × villosum Boxalli atratum ♀) Flowered first Feb. '92. Vuylsteke, Ghent. G. Ch. Feb. 4 and 11, '93.

syn. *Cyris.* Murray, for Cookson, Oakwood. RHS., Nov. 13, '94.

syn. *Daviesianum* (Argus Moensii). Statter, Manchester. RHS., Feb. 14, '93.

syn. *Davisanum.* Sander, St. Albans. M. L.

syn. *Dibdin* J. O'B. Cowley, for Tautz, Dibdin House, Ealing. G. Ch., Feb. 11, '93.

syn. *Sphinx.* Vuylsteke, Ghent. M. L.

syn. *vernixium atratum.* Pitcher & Manda, Shorthills, 1893.

See also Savageanum Horneri.

vexillarium Rchb. f. (barbatum ♀ × Fairieanum) G. Ch., '70, p. 1373. Dominy, for Veitch. fg. O. R., Oct. '93. G. Ch., '80, i., fg. 135, ("selligerum"). *Id.* Jan., '87, fg. V. M., '89. Ldn., t. 309. O. A., t. 447.

var. **Warocqueanum** (barbatum Warneri). Linden. M. L., 2d ed.

Also *vexillarium self-fertilized.* Grey, for Corning, Albany, 1891. O. R., Aug., '94. "No two seedlings alike, but all inferior to parent plant," (in litt., Jan., '95.)

vexill-Io. Murray, for Cookson, Oakwood. RHS., June 20, '93.

Vibilia (insigne × Javanico-superbiens ×). Graves, Am. Gard., Aug. 23, '95.

Victoria Maria. (—?—). Day, for Cator, King's Langley. RHS., Nov. 13, '94.

villosum (villosum × villosum Boxalli). Heath, Cheltenham. RHS., Feb. 13, '94.

syn. *Hero* and *Reynaldi.* M. L., 2d ed.

Vipani Rolfe (Philippinense ♀ × niveum). Vipan, Wandsford. G. Ch., June 28, '90.

var. **roseum** Rolfe (niveum ♀). Bond, for Ingram, Godalming. O. R., Aug., '93.

Watsonianum (Harrisianum nigrum × ♀ × concolor). Sander. O. R., Aug.,'93. Named after Watson, Kew.

syn. *J. H. Berry.* Sander, St. Albans. RHS., Jan. 15, '95.

Wendlandianum (œnanthum × ♀ × venustum). Sander. OdS. M. L., 2d. ed., gives (vernixium × × Harrisianum×) as parentage what would make it syn. bellinum.

Wiganianum ?(Harrisianum × × Ashburtoniæ×). Origin unknown, bought at orchid sale, London. Named after Wigan, East Sheen. RHS., Dec. 12, '93.

William Lloyd (bellatulum ♀ × Swanianum×). Raised by Ayling, for Hollington, Enfield. Exhbt. by Weathers, Isleworth. RHS., Dec. 11, '94. fg. G. Ch., Dec. 22, '94. O. R., June, '95. One plant resembling the seed, the other the pollen parent.

var. **Cycnides** (Swanianum × ♀). Measures, Streatham. O. R., Oct., '95. Said to resemble Annie Measures. Already mentioned, though without name. O. R., June, '95.

Williamsianum Rchb. f. (villosum ♀ × Harrisianum ×). G. Ch., '82, p. 218. Williams, for Warner, Broomfield. fg. O. A., t. 365.

Raised also by Pourbaix. L'O., Dec. 10, '93.

syn. *amabile* Page (Dauthieri×). Page. Sown 1890. Le Jardin, 1895.

syn. *Masonianum*. Sander, 1893.

syn. *ornatum*. Jules Hye, Ghent, 1892.

syn. *Prewettii*. Hollington. M. L.

syn. *Claptonense* Rchb. f. G. Ch., Feb. 9, '89. Low Clapton.

syn. *Wallœrtianum*. Pitcher & Manda, Shorthills. RHS., Aug. 23, '92. (Harrisianum× ♀.)

(Harrisianum × ♀ × villosum aureum). Charlesworth, Shuttleworth & Co., Bradford. RHS., Oct. 9, '94.

Fitchianum. According to O. R., Sep., '93, is placed here. Williams, Holloway, places it under marmorophyllum (Hookeræ ♀ × barbatum).

var. **Eismannianum** (villosum Boxalli × Harrisianum ×). Gdn., Dec. 27, '90. Seeger & Tropp, Dulwich.

syn. *Lobengula* (Harrisianum nigrum × ♀ × v. Boxalli). Tate, Liverpool. RHS., Feb. 13, '94. Wrongly placed under Harrisianum. Parentage as given is from O. R., April, '94.

syn. *tenebrosum* (Harrisianum × ♀ × v. Boxalli atratum). Bond, for Ingram, Godalming. RHS., March 13, '94.

Winckianum —?—

Winifred Hollington (niveum × callosum). Ayling, for Hollington, Enfield. RHS., April 10, '94. fg. G. Ch., April 21, '94. Jrl. Hrt., April 19, '94. Gd. Mg:, April 21, '94.

Winnianum Rchb. f. (villosum ♀ × Druryi). G. Ch., March 20, '86. Seden, for Veitch, Chelsea. fg. Jrl. Hrt., July 27, '93. Named after Winn, Birmingham.

Woodlandense (Dayanum × Javanicum virens). Sander, St. Albans. M. L.

W. R. Lee (superbiens ♀ × Rothschildianum Elliottianum). Billington, for Lee, Manchester. RHS., Aug. 14, '94.

syn. *Mabeliæ*. Jones, for Clarke, Liverpool. RHS., Aug. 14, '94. First exhibited as *Mabelianum*. Renamed, after daughter of Mr. Clarke, in O. R., Oct., '95. Bought as unflowered seedling from Sander, St. Albans (G. Ch., Sept. 7, '95, p. 271).

Record for *Massaianum superbum*, exhb. RHS., Aug. 13, '95 (report in G. Ch.), is wrongly given as identical with that of *W. R. Lee*.

var. **Andronicus** (Rothschildianum ♀). Measures, Streatham. Gdn., July 20, '95.

syn. *Lord Derby*. RHS., Aug. 13, '95. Statter, Manchester. fg. G. Ch., Sept. 28, '95.

xanthophyllum ?(Hookeræ × Mastersianum). M. L.

Y'mir (Hookeræ × Rothschildianum). Measures, Camberwell. M. L., Feb. 16, '95.

Youngianum (superbiens ♀ × Philippinense). Sander, G. Ch., Aug. 16, '90. fg. Rchbch, t. 31.

syn. *Corningianum*. Veitch, Chelsea. RHS., Aug. 11, '91.

syn. *Clovenfords'*. Thompson, Clovenfords. RHS., April 12, '92.

syn. *superbum*. Murray, for Cookson, Oakwood. In litt., March, '93. Crossed July 11, '84, sown April 30, '85.

Also raised by Page, Bougival. Sown 1889. JSNH., 1894.

Zahni —?— M. L.

Zampa Desbois (Leeanum superbum × ♀ × hirsutissimum). Vuylsteke, Ghent. G. Ch., Feb. 4, '93.

syn. *Eurydice*. Vuylsteke, Ghent. Fide O.R., Feb. '94.

syn. *Weathersianum*. L. Lind. fg. Ldn., t. 397. Jrl. Orch., '92, p. 383.

Zeus (callosum ♀ × ciliolare). Chapman, for Measures, Streatham. RHS., Nov. 27, '94.

P. S.—August 30, 1895.

Cpd. Boxalli Rchb. f.

In the foregoing classification of Cypripedia hybrids this ladyslipper has been regarded by me as a variety of Cpd. villosum only. My views on this subject are set forth on page 66, and looking over my notes, drawings and water-colors, and taking in consideration so weighty a dictum as *Veitch's Manual*, I refuse, in the face of the Orchid Review's firm stand, to change my position. But have not all of us, near and far, experienced that the *Orchid Review* proves about as unbiased as it is possible to become? And do not all of us look to "R. A. R." as the supreme voice which renders the decision in any case of dispute? Can it be wondered at, therefore, if I feel forced to give the key and list of synonyms for the hybrids of Cpd. Boxalli, and to note in which respect the key to those of Cpd. villosum will be effected? I do this as a tribute of recognition to a journal whose every

statement is valuable, and the more so the older its voice becomes. As noted before, every cross brought about through the agency of Cpd. Boxalli has been given varietal rank, and in those few instances where the arrangement interferes with the alphabetical grouping as hybrids of villosum, the page is noted on which the hybrid has been classified.

Synonyms of crosses effected with **Cpd. Boxalli:**

Bragaianum—Godseffianum.
Celeus—Schlesingerianum
Cyris—Murillo.
Daviesianum—Murillo.
Davisanum—Murillo.
Denisianum—Calypso.
Desboisianum—pavoninum.
Dibdin—Murillo.
dilectum—Godseffianum.
Euryades—Adrastus.
Flamingo—Calypso.
Flora—Calypso.
Harrisianum lineatum, H. roseum—apiculatum.
Ionodes—Behrensianum.
Jupiter—Godseffianum.
Leo—Calypso.
Lobengula—Eismannianum.
Madame de Curte—Schlesingerianum.
Magdalena—Adrastus.
Mons. de Curte—Schlesingerianum.
Othello—Godseffianum.
Reynaldi—Hero.
Sibyrolense—Schlesingerianum.
Sphinx—Murillo.
tenebrosum—Eismannianum.
Vandewielianum—Calypso
vernixium atratum—Murillo.
W. W. Lunt—Schlesingerianum.

Key to the species:

Cpd. villosum Lindl.

Argus—vernixium.
barbatum—Harrisianum.
bellatulum—
Boxalli—Hero, page 181.

Cpd. Boxalli Rchb. f.

Argus—Murillo, page 180.
barbatum—apiculatum, page 151.
Canham ×—Capt. Lendy.

Cpd. villosum—Continued.

callosum—Indra.
ciliolare—Pygmalion.
Druryi—Winnianum.
Harrisianum× —Williamsianum.
Haynaldianum—Augustum
hirsutissimum—Germinyanum.
insigne—nitens.
Lawrenceanum—luridum.
Leeanum ×—Leander, page 131.
Lowii—lucidum.
nites—J. Howe.
œnanthum × —Krameria-num.
Philippinense—Priapus.
purpuratum—concinnum.
Spicerianum—Lathamianum.
superbiens—Canham.
tonsum—Théodore Bullier.
venustum—Measuresianum.

Cpd. Boxalli—Continued.

callosum—J. Bartels, page 153.
calophyllum—Pluto.
Curtisii—St. Hilda.
Dayanum—Scylla.
gemmiferum ×—Héloise Mantin.
Harrisianum × —Eismannianum, page 182.
Haynaldianum—Prœtus, page 135.
hirsutissimum—Godseffianum.
insigne—Schlesingerianum, page 166.
Io ×—Behrensianum.
Javanicum—vernixioides.
Lawrenceanum—Thayerianum, page 159.
Leeanum ×—Adrastus.
Lowii—Beatrice, page 159.
Morganiæ ×—Frederico Nobile.
œnanthum ×—rubescens, page 155.
Philippinense—Metis, see first supplement.
plunerum ×—Burberryanum.
Spicerianum—Calypso, page 156.
venustum—pavoninum, page 163.
villosum—Hero.

CYSEPEDIUM.

(Cypripedium × Selenipedium.)

If I propose to order under this combination-name all those attempts at cross-fertilization of species of the genera Cypripedium and Selenipedium, I do not see why the fact that not one of all those attempts has ever produced a flowering plant should interfere with my proposal. Have we not in cultivation at many establishments already plants now raised in this way? Are we not all interested and debating about this class of orchid hybrids? More than that, do we not firmly believe that we are on the eve of the red-letter day on which the first of these unica bursts into flower? And if we should be disappointed, it is convenience that names objects, and if my name hits the head of the nail, and drives it home, too, let it remain and take root.

(**Cpd. callosum** ♀ × **Spd. caudatum**). "Sdlgs. making sturdy growth." Lutwyche, Beckenham. O. R., Jan., '94.

(**Spd. caudatum** × **Cpd. barbatum**). Raised by Veitch, and exhibited at RHS. Orchid Conference, May 12, '85. O. R., June, '94, states that these plants "do not yet show any sign of flowering."

(**Cpd. Curtisii** ♀ × **Spd. longifolium Roezlii**). "No. 5 seedling." "Not flowered yet." Horner, for Marwood, Whitby. G. Ch., July 8, '93.

(**Cpd. Lawrenceanum** ♀ × **Spd. Sedenii** ×). "Over half a dozen plants, which he hopes to flower soon." Swinburne, Cheltenham. O. R., March, '94.

(**Cpd. Parishii** ♀ × **Spd. caricinum**). Swan, while working for Thompson, Clovenfords, "raised young plants, grew them for several years, and at the end of that time they were only in thumb pots"—"if living now they are 14 years old." O. R., June, '94.

(**Spd. Sedenii** × ♀ × **Cpd. Stonei**). Johnson, for Statter, Manchester. O. R., June, '94. "Just showing for flower; at present it looks much like a plant of Stonei."

(**Cpd. Spicerianum magnificum** ♀ × **Spd. Schlimii**). "Would not ripen the seedpod, when the *vice versa* ripened the seedpod seven months ago, and now shows strong sdlgs." Swinburne, Cheltenham. O. R., Sept., '94.

(**Cpd. Spicerianum** ♀ × **Spd. Sedenii** ×). Treseder, for Heath, Cheltenham. 2 plants. In litt., Jan., '93.

Chapman (for Measures, Camberwell), states in O. R., April, '94, of his efforts, "while numerous capsules have been obtained, no seed has ever been induced to germinate."

R. M. Grey states, in litt., Jan., '94, that he "succeeded in but two instances with raising seedlings, though they did not flower." "Sowed over a hundred pods of seed."

These are the only cases across which I have come in all my researches, and I took care not to overlook any. I trust my notes will be encouraging to all those who care to leave the well-worn tracks of everybody's vehicles. But, gentlemen, do not let us be fed with such meager notes, when we are troubled with ravenous appetite for information, and the worse so the nearer we think we are getting to the day on which you will appease our greed. Keep track of what you perform, give time employed, and all circumstances developing, and when the hybrid flowers, I trust that the godfathers of the plant of your care will have the moral courage to attach to it the name of its raiser, the successful gardener.

P. S.—Aug. 31, 1895.

Two Cysepedia have flowered since my list went to the printer. Both prove disappointments from a florist's

standpoint, and puzzles when considered by the scientist. They swell the number of those crosses (enumerated in the supplement) which refuse to combine the characters of the parents employed, and instead take wholly after one parent only. They are:

Cspd. Corndeanii, "supposed to have originated from (Cpd. Lawrenceanum ♀ × Spd. Sedenii ×), though only the influence of the former is apparent" (O. R., June, '95). "It was bought at a sale of Proth. & Morris, and cannot be vouched for in its record. Sown April, '90; sdlgs. July, '90. Exhbt. at RHS., May 14, '95, for Swinburne, Corndean Hall, Cheltenham, by Rendel.

Cspd. Cunea (Spd. longifolium Hartwegii ♀ × Cpd. Stonei). Raised by Robert M. Grey, for Graves, Orange, Mass. Its record is not clouded through uncertainty. It was crossed March 4, '92; sown May 8, '92, germinated July 8, '92, and flowered Aug. 23, '94. "The pollen was removed from the seed-bearing plant before the flower was fully expanded. The plant resembles the seed-bearing parent very closely; scape pubescent; flowers colored much as in Hartwegii, but broader at apex of lip." He remarks: "I had very many hybrids between the two genera up when I left Mr. Graves' employ." In litt., July 27, '95.

DENDROBIUM.

Synonyms.

Alcippe—micans.
Apollo—Rubens.
Armstrongi—Ainsworthii.
Aspasia-Wardiano-aureum
Burfordiense—dulce.
crassinode-Wardianum—melanophthalmum.
Dellense—Rubens.
Dido—chrysodiscum.
Edithæ—Ainsworthii.
Emerici—rhodopterygium.
euosmum roseum—Dominianum.
Euryalus—Rubens.
Euryclea—micans.
Hebe—chrysodiscum.
Juno—chlorostele.
Leeanum—Ainsworthii.
Leechianum—Ainsworthii
leucopterum—euosmum.
Luna—chrysodiscum.
melanodiscum—chrysodiscum.
Owenianum—chlorostele.
polyphlebium—rhodopterygium.
Rolfeæ—Pitcherianum.
Sanderæ—Ainsworthii.
splendidissimum Rchb.f.—Ainsworthii.
splendidissimum illustre—Rubens.
Statius—striatum.
Waltoni—melanophthalmum.
Wardiano-Japonicum—Wardiano-moniliforme.
xanthocentrum—chlorostele or Schneiderianum.

Species used in crossing:

albo-sanguineum Lindl.
nobile—Murrayi.

Aphrodite Rchb. f.
gratiosissimum—Findlayanum.

aureum Lindl.
euosmum ×—Cordelia.
Falconeri—Benita.
Findlayanum—Schneiderianum.
Linawianum—dulce.
luteolum—Cheltenhamense.
moniliforme—endocharis.
nobile—Ainsworthii.
suberbum—Gemma.
Wardianum—Aspasia.

barbatulum Lindl.
chlorops—barbatulo-chlorops.

Bensoniæ Rchb. f.
crystallinum — Statterianum.
moniliforme—Virginia.

bigibbum Lindl.
Linawianum—Sibyl.

chlorops Lindl.
barbatulum — barbatulochlorops.

chrysotoxum Lindl.
pulchellum—illustre.

crassinode Rchb. f.
crystallinum—Boxalli.
luteolum—Astræa.
Wardianum — melanophthalmum.

crystallinum Rchb. f.
Bensoniæ—Statterianum.
crassinode—Boxalli.
moniliforme—Æneas.

Falconeri Hook.
aureum—Benita.
moniliforme—Vannerianum.
nobile—Venus.

Farmeri Paxt.
thyrsiflorum—

Findlayanum Rchb. f. (nat. hyb.?)
Ainsworthii ×—chrysodiscum.
aureum—Schneiderianum.
nobile—Cybele.

flexuosum Rchb. f.
infundibulum—Wattii.

formosum Roxb.
infundibulum—Donnesiæ.
Lowii—

gratiosissimum Rchb. f.
Aphrodite—Findlayanum.
crassinode—Boxalli.

infundibulum Lindl.
flexuosum—Wattii.
formosum—Donnesiæ.

Huttonii Rchb. f.
pulchellum—porphyrogastrum.
sanguinolentum — rhodostoma.

Kingianum Lindl.
speciosum—

Linawianum Rchb. f.
aureum—dulce.
bigibbum—Sibyl.
nobile—Dominianum.
Wardianum—chlorostele.

lituiflorum Lindl.

nobile—Corningianum.
Wardianum—micans.

Lowii Lindl.

formosum—

luteolum Batmn.

aureum—Cheltenhamense.
crassinode—Astræa.
Wardianum—Bryan.

moniliforme Sw.*

(syn. Japonicum Lindl.)
Ainsworthii ×—Doris.
aureum—endocharis.
Bensoniæ—Virginia.
crystallinum—Æneas.
pulchellum—striatum.
Falconeri—Vannerianum.
nobile—Cassiope.
Wardianum—Wardiano-moniliforme.

nobile Lindl.

Ainsworthii ×—Rubens.
albo-sanguineum—Murrayi.
aureum—Ainsworthii.
endocharis ×—euosmum.
Falconeri—Venus.
Findlayanum—Cybele.
Linawianum — Dominianum.
lituiflorum—Corningianum
moniliforme—Cassiope.
nobile Cooksonianum—nobile Oakwood var.
primulinum — Pitcherianum.
Ruckeri—Rœblingianum.
tortile—Niobe.
Wardianum — murrhiniacum.

Parishii Rchb. f.

Pierardi—rhodopterygium
superbum—Nestor.

Pierardi Roxb.

Parishii—rhodopterygium
superbum—Adrasta.

Phalænopsis Fitzg.

Ainsworthii×—

primulinum Lindl.

nobile—Pitcherianum.
superbum—Mentor.

pulchellum Roxb.

(syn. Dalhousieanum Paxt)
chrysotoxum—illustre.
Huttonii — porphyrogastrum.
moniliforme—striatum.

* Ddr. Japonicum Lindl. is a syn. of Ddr. moniliforme Sw., and Ddr. moniliforme Lindl. a syn. of Ddr. Linawianum. Rchb. f. (Fide O. R., Sept., '94, page 288.)

sanguinolentum Lindl.
Huttonii—rhodostoma.

Ruckeri Lindl.
nobile—Rœblingianum.

speciosum Smith.
Kingianum—

superbum Rchb. f.
aureum—Gemma.
Parishii—Nestor.
Pierardi—Adrasta.
primulinum—Mentor.

thyrsiflorum Ill. Hrt., 1875.
Farmeri—

tortile Lindl.
nobile—Niobe.

Wardianum Warner.
Ainsworthii × —Lutwychianum.
aureum-Wardiano-aureum
crassinode—melanophthalmum.
Linawianum —chlorostele.
lituiflorum—micans.
luteolum—Bryan.
moniliforme—Wardianomoniliforme.
nobile—murrhiniacum.

Hybrids used in crossing:

Ainsworthii
(nobile × aureum.)
Findlayanum — chrysodiscum.
moniliforme—Doris.
nobile—Rubens.
Phalænopsis—
Wardianum — Lutwychianum.

endocharis
(moniliforme × aureum.)
nobile—euosmum.

euosmum
(endocharis × —nobile.)
aureum—Cordelia.

Adrasta (Pierardi ♀ × superbum). RHS., April 12, '92. Veitch, Chelsea.

Æneas (moniliforme [Japonicum] ♀ × crystallinum). RHS., March 14, '93. Veitch, Chelsea.

Ainsworthii (aureum ♀ × nobile). G. Ch., '74, p. 443. fg. Mitchell, for Ainsworth, Manchester. Raised 1867, flowered 1874. fg. O. A., t. 20. Ldn., t. 297.

Fl. Mg., n. s. t. 196. Neub. G. Z., Oct., '93. V. M., '88.

Also raised by West, Manchester, 1874. V. M., '88. O. R., Feb., '93.

Ai. intertextum. (nobile ♀ × aureum Lee's var.) Veitch. O. R., April, '95.

Treseder's (good var. of nobile). Heath, Cheltenham, 6 plants. '93.

Cypher's J. O'B. (nobile elegans). Cypher, Cheltenham. G. Ch., March 17, '94.

Marriott's (nobile Rucker's var.) Marriott, Blandford. RHS., Feb. 10, '91.

Armstrongi (nobile cœrulesens). Meechan, for Armstrong, Brighton. RHS., Feb. 13, '94.

Sanderæ (nobile albiflorum). Sander. RHS., Feb. 14, '93.

splendidissimum Rchb. f. Seden, for Veitch, Chelsea. G. Ch., March 8, '79.

sp. var. grandiflorum. Separate cross. V. M., '94, p. 146.

sp. var. Leeanum (aureum Philippinense × nobile pendulinum). RHS., Feb. 9, '92. Billington, for Lee, Manchester.

Leechianum Rchb. f. (nobile ♀). G. Ch., Feb. 25, '82. fg. Swan, for Leech, Manchester. (O. R., April, '93, says aureum ♀).

Edithæ (nobile nobilius ♀). RHS., March 13, '94. Billington, for Lee, Manchester.

—?— (Ainsworthii [Leechianum splendidissimum] × ♀ × Phalænopsis). Under raising with Wrigley, Bury. Sown March 6, '95, germinated April 1, '95. O. R., June, '95.

Astræa (luteolum ♀ × crassinode). Murray, for Cookson, Oakwood. O. R., June, '95.

barbatulo-chlorops Rolfe nat. hyb. Berkeley, Southampton. G. Ch., March 5, '92.

Benita J. O'B. (aureum ♀ × Falconeri). G. Ch., March 25, '93. Powell, for Brymer, Dorchester.

Also raised by Masterson, for Ellis, Dorking. RHS., March 13, '94.

Boxalli Rchb. f. nat. hyb. ?(gratiosissimum × crassinode). G. Ch., '74, i, p. 315. fg. Xn. Orch., ii, t. 194. Jenn. Orch., t. 19. Fl. Mg., '74, t. 114.

Bryan (luteolum ♀ × Wardianum). Murray, for Cookson, Oakwood. RHS., March 28, '93. Named after Cookson's son.

Cassiope Rolfe. (nobile albiflorum ♀ × moniliforme [Japonicum]). G. Ch., Nov. 29, '90. Murray, for Cookson, Oakwood. fg. L'O., April, '93. Rchb., t. 50. Crossed April 19, '86; sown Jan. 14, '87; 250 plants. G. Ch., loc. cit. states wrongly Japonicum ♀ (fide Murray, in litt. March, 93).

Also raised (moniliforme [Japonicum] ♀ × nobile albiflorum) by Cypher, Cheltenham. O. R., May, '95.

Cheltenhamense Gower. (aureum ♀ × luteolum). Gdn., March 13, '93.

chlorostele Rchb. f. (Linawianum ♀ × Wardianum). G. Ch., April 9, '87. Bickerstaff, for Lawrence, Dorking. *ch. xanthocentrum* Rchb. f. G. Ch., April 20, '89; and *Juno*, RHS., Jan. 14, '90, varieties from cross of same parents.

Also raised by Farnham, Loughborough, Proth. & Morris' orchid sale, April 10, '93.

var. **Owenianum** J. O'B. (Wardianum giganteum). Murray, for Cookson, Oakwood. G. Ch., Feb. 25, '93. Named after Owen, Rotherham.

chrysodiscum Rchb. f. (Ainsworthii × ♀ × Findlayanum). G. Ch., March 26, '87. Bickerstaff, for Lawrence, Dorking. Flowered first 1877, 5 years old.
Also raised by Vipan, Wandsford.

var. **melanodiscum** Rchb. f. (Findlayanum ♀). G. Ch., March 26, '87. Bickerstaff, for Lawrence, Dorking.

syn. *Hebe*. White, for Lawrence, Dorking. RHS., Jan. 16, '94.

syn. *Luna*. RHS., Jan. 14, '90.

syn. *Dido*. Lawrence, Dorking. RHS., Jan. 16, '94.

(O. R., July, '93, gives parents of chrysodiscum [Findlayanum ♀ × Ainsworthii ×], and melanodiscum inverted).

Cordelia (aureum ♀ × euosmum leucopterum ×). Seden, Veitch. V. M., '94, p. 146.

Corningianum (nobile ♀ × lituiflorum). Flowered 1876. Corning's Cat., 1877. Grey, for Corning, Albany.

var. —?— (lituiflorum ♀). Treseder, for Heath, Cheltenham. In litt., Feb., '93.

Cybele Rolfe. (Findlayanum ♀ × nobile). G. Ch., '87, ii, p. 778. Seden, for Veitch, Chelsea. Sown April, '81.

var. *nobilius* (nobile nobilius). Veitch, Chelsea. RHS., March 12, '95.

Dominianum Rchb. f. (nobile ♀ × Linawianum). Dominy, for Veitch. G. Ch., '78, p. 202. In cultivation many years previous to publication.

euosmum roseum believed to be stray seedling from Dominianum (fide O. R., April, '94).

Donnesiæ nat. hyb. ?(formosum × infundibulum). Bradshaw, Southgate. RHS., March 26, '95.

Doris (Ainsworthii [Leechianum] × ♀ × moniliforme [Japonicum]). Murray, for Cookson, Oakwood. O. R., May, '94.

dulce (aureum ♀ × Linawianum). Veitch. RHS., Feb. 9, '92.

var. **Burfordiense** (Linawianum ♀). Lawrence, Dorking. RHS., Dec. 13, '92.

endocharis Rchb. f. (moniliforme [Japonicum] ♀ × aureum). G. Ch., '76, p. 298. Veitch.

erythropogon Rchb. f. nat. hyb. ? (Lowii × —?—). G. Ch., Aug. 15, '85. According to opinion of O. R. editor (in litt., April '94) no hybrid.

euosmum Rchb. f. (endocharis × ♀ × nobile). G. Ch., Feb. 7, '85. Veitch.

var. *leucopterum*. G. Ch., Feb. 7, '85; *id.* April 17, '86.

var. *euosmum virginale* (nobile intermedium). Veitch. RHS., March 12, '95.

euosmum roseum. See Dominianum.

Farmeri - thyrsiflorum. Sander, St. Albans. RHS., March 8, '92.

Findlayanum Parish and Rchb. f., nat. hyb. ? (Aphrodite × gratiosissimum). Trans. Linn. Soc., 1873. fg. Bt. Mg., t. 6438.

Fitchianum —?—

—?— (formosum giganteum × Lowii). Burberry, for Chamberlain, Birmingham. G. Ch., Dec. 16, '93. "As yet unflowered."

Gemma (aureum ♀ × superbum Houttonii). Winn, Birmingham. O. R., March '95.

illustre (chrysotoxum ♀ × pulchellum [Dalhousieanum]). Veitch, Chelsea. RHS., June 25, '95. fg. G. Ch., July 6, '95. Jrl. Hrt., June 27, '95. Gard. Mag., June 29, '95.

Kingianum-speciosum (Kingianum ♀). White, for Lawrence, Dorking. RHS., March 22, '93.

Lutwychianum (Wardianum Lowii ♀ × Ainsworthii [splendissimum grandiflorum]). Lutwyche, Beckenham. O. R., July '94.

melanophthalmum Rchb. f. nat. hyb. (Wardianum × crassinode). G. Ch., April 3,'86. Jrl. Hrt., 1887, fg. 58. O. R., June, '94.

Also with Veitch, Chelsea. RHS., April 12, '92.

syn. *crassinode-Wardianum*. V. M., '88, p. 32.

syn. *Waltoni* nat. hyb. Gdn., '85, i, p. 119.

Mentor (primulinum ♀ × superbum). RHS., May 9, '93. Veitch, Chelsea.

micans Rchb. f. (Wardianum [Assam var.] ♀ × lituiflorum). G. Ch., Nov., '79, p. 332. Seden, for Veitch. Five years raising.

Also raised by using (Wardianum Burmese var. ♀). V. M., '88.

var. **Euryclea** (lituiflorum ♀). RHS., April 12, '92. Veitch, Chelsea.

Also raised by Bond, for Ingram, Godalming. RHS., April 12, '92.

syn. *Alcippe* (lituiflorum Freemani ♀). RHS., March 28, '93. Veitch.

Murrayi (nobile ♀ × albo-sanguineum). Murray, for Cookson, Oakwood. O. R., June, '95.

murrhiniacum Rchb. f. (Wardianum ♀ × nobile). G. Ch., May 5, '88. Measures, Streatham.

Nestor J. O'B. (Parishii ♀ × superbum anosmum [Dayanum]). G. Ch., June 4, '92. Winn, Birmingham. fg. O. R., Sept., '94.

Niobe (tortile ♀ × nobile). RHS., April 11,'93. Seden, for Veitch.

nobile Oakwood var. (nobile Cooksonianum × nobile). Murray, for Cookson, Oakwood. RHS., March 28, '93.

Also under raising (nobile Cooksonianum ♀ × nobile nobilius). Sown Febr. 12, 95; germinated April 1; first leaf April 24, '95. Wrigley, Bury. O. R., June, 95.

The reverse raised by F. H. Moore, Liverpool. He received "from the same seedpod some good forms of each parent, and a series of varieties grading down to the ordinary Ddr. nobile." O. R., June, 95.

Pitcherianum Rchb. f. nat. hyb. (primulinum × nobile). G. Ch., March 31, '88.

Also with Thompson, Stone, Staffordshire. L'O., March 11, '94.

syn. *Rolfeæ* (primulinum ♀ × nobile). Sander. G. Ch., April 23, '92. Named after Mrs. Rolfe.

Rolfeæ roseum nat. hyb., with Berkeley, Southampton. O. R., April '94.

porphyrogastrum Rchb. f. (Huttonii ♀ × pulchellum [Dalhousieanum]). RHS., May 22, '88.

rhodopterygium Rchb. f. nat. hyb. (Pierardi × Parishii). Boxall, for Low, in Moulmein, 1874. G. Ch., '75, i, page 684.

syn. *polyphlebium* Rchb. f. G. Ch., May 28, '87.

var. *p. Emericii* Rchb. f. G. Ch., Aug. 27, '95.

rhodostoma Rchb. f. (Huttonii ♀ × sanguinolentum). G. Ch., May, '76, p. 795. Seden, for Veitch.

Rœblingianum (Ruckeri ♀ × nobile). O. R., July, '93. Pitcher & Manda, Shorthills. Named after Rœbling, Trenton.

Rubens (Ainsworthii [Leechianum] × ♀ × nobile nobilius). G. Ch., Feb. 25, '93. Cypher, Cheltenham.

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Also raised by Winn, Birmingham. (nobile nobilius ♀ × Ainsworthii splendidissimum grandiflorum ×). O. R., April, '95.

syn. *Apollo grandiflorum* J. O'B. (nobile pulcherrimum ♀ × Ainsworthii splendidissimum grandiflorum×). Cypher, Cheltenham. RHS., March 12, '95. fg. Jrl. Hrt., March 21, '95. Gard. Mag., March 30, '95.

syn. *splendidissimum illustre* (Ainsworthii Leechianum × × nobile nobilius). Billington, for Lee, Manchester. RHS., March 26, '95.

syn. *Dellense* (nobile Schrœderianum ♀ × Ainsworthii [splendidissimum]×). RHS., May 8, '94. fg. Jrl. Hrt., May 17, '94. Gd. Mag., June 9, '94. Ballantine, for Schrœder, Egham.

Also (Ainsworthii [splendidissimum grandiflorum] × × nobile nobilius). By Stephens, for Thompson, Stone. In litt., March, '93.

var. **Euryalus** (Ainsworthii × ♀ × nobile). RHS., March 14, '93. fg. Jrl. Hrt., April 26, '94. Veitch, Chelsea.

Also raised by Robinson, for Ames, North Easton. In litt., Feb., '93; 5 years raising.

The reverse raised by Murray, for Cookson, Oakwood. O. R., June, '95.

Schneiderianum Rchb. f. (Findlayanum ♀ × aureum). Holmes, for Schneider, Manchester. G. Ch., Feb. 12, '87.

Also raised by Seden, for Veitch. V. M., '94, p. 146.

syn. *xanthocentrum*. RHS., Jan. 14, '90. Lawrence, Dorking.

Sibyl (Linawianum ♀ × bigibbum). RHS., March 28, '93. Murray, for Cookson. O. R., June, '95, gives (bigibbum ♀) and adds, "no perceptible trace of Ddr. bigibbum about the flower."

splendidissimum (aureum × Huttonii). See Corning's Cat., 1881. No other record about this said hybrid found by me anywhere.

Statterianum nat. hyb. ?(Bensoniæ × chrystallinum). RHS., Aug. 11, '91.

striatum (moniliforme [Japonicum] ♀ × pulchellum [Dalhousieanum]). RHS., Nov. 1, '92. Veitch.

syn. *Statius*. Veitch, 1893.

Vannerianum Rchb. f. (moniliforme [Japonicum] ♀ × Falconeri). G. Ch., Jan. 15, '87. Vanner, Chislehurst.

syn. *V. Oakwood var.* "presumably from the same parentage." Murray, for Cookson, Oakwood. O. R., June, '95.

Venus Rolfe. (Falconeri ♀ × nobile). G. Ch., May 17, '90. Murray, for Cookson, Oakwood. Crossed May 15, '84; sown July 18, '85; 100 plants. fg. Rchbch., t. 50.

vexabile Rchb. f. Nat. hyb., imp. with luteolum. (Could not trace record).

Virginia (moniliforme [Japonicum] ♀ × Bensoniæ). RHS., March 13, '94. Veitch.

Wardiano-aureum Rolfe. (aureum ♀). RHS., April 9, '89. Veitch, Chelsea.

Also raised by Winn, Birmingham, 1890. fg. O. R., May, '93.

syn. *Aspasia* (Wardianum ♀). Veitch. RHS., March 10, '90.

Wardiano-moniliforme (moniliforme [Japonicum] ♀). Veitch. RHS., Feb 11, '90. "Not exhibiting the improvement which the cross would suggest." (G. Ch., Jan. 10, '91.

syn. *Wardiano-Japonicum*.

Wattii Rchb. f. Nat. hyb. ?(infundibulum × flexuosum). G. Ch., '89, i, p. 74; *id.*, '88, ii, p. 725.

DISA.

Diores (Veitchii × ♀ × grandiflora). Veitch, Chelsea. RHS., July 10, '94.

Kewensis Watson. (grandiflora ♀ × tripetaloides). Raised at Kew. G. Ch., May 27, '93. Sown Nov., '91; flowered 18 months old. fg. G. Ch., Sept. 7,'95.

Langleyensis (racemosa ♀ × tripetaloides). Veitch, Chelsea. RHS., May 8, '94. fg. G. Ch., June 14, '94. "So free growing is it that more plants were raised than could be grown on" (O. R., July, '94). The reverse cross was also raised, and proved identical.

Also raised at Kew.

Premier (tripetaloides ♀ × Veitchii ×). Raised at Kew. RHS., Oct. 10, '93. fg. Gd. Mg., Nov. 4, '93.

Veitchii (racemosa ♀ × grandiflora). Seden, for Veitch, Chelsea. RHS., June 9, '91. fg. Gdn., Nov. 5, '92. Jl. Orch., '91, p. 134; 21 months old. G. Ch., July 28, '94.

Also raised by Backhouse, York. RHS., June 20, '93.

EPIDENDRUM.

Dellense J. O'B. (xanthinum ♀ × radicans). G. Ch., May 9, '91. Jrl. Orch., '91, p. 101. Ballantine, for Schrœder, The Dell, Egham.

Endresio-Wallisi (Wallisi ♀). RHS., Jan. 12, '92. Veitch, Chelsea.

O'Brienianum Rolfe (evectum ♀ × radicans). G. Ch., June 23, '88, fg. Veitch.

Also raised by Veitch, Chelsea, "from uncrossed seed, and, while retaining the characteristic shape, had almost reverted in color to Epd. evectum." RHS., May 14, '95.

Wallisio-ciliare (ciliare ♀). Seden, for Veitch. RHS., Dec. 11, '94.

EPIDROBIUM.

(Epidendrum × Dendrobium.)

"Myriads of young seedlings germinating" of (Epd. O'Brienianum × ♀ × Ddr. crystatellum Statterianum). Johnson, for Statter, Manchester. O. R., Oct. '94.

EPILÆLIA.

(Epidendrum × Lælia.)

Hardyana (Epd. ciliare ♀ × Ll. anceps). Cross perfected by Joly, for Rothschild, Vienna. RHS., Nov. 13, '94. fg. G. Ch., Nov. 24, '94.

—?— (Ll. anceps × Epd. O'Brienianum ×). Murray, for Cookson, Oakwood. G. Ch., May 20, '93.

EPILEYA.

(Epidendrum × Cattleya.)

Guatemalensis (Epd. aurantiacum × Ct. Skinneri). Nat. hyb. fg. Fl. Mag., 1861, t. 61. Sent by Skinner to Veitch. Disappeared in cultivation till again shown by Chamberlain, Birmingham. RHS., April 11, '93.

syn. *Ct. Guatemalensis.* T. Moore.

EPIPHRONITIS.

(Epidendrum × Sophronitis.)

Veitchii (Epd. radicans ♀ × Sphr. grandiflora). Veitch. RHS., June 24, '90. O. R., Jan. '93, and other places state Sphr. grandiflora ♀. O. R., Oct., '93, states: "Almost no trace of Sophronitis."

GYMNADENIA.

(**conopea** × **odoratissima**) nat. hyb. Germany.

Schweinfurthii Hegelmaier (conopea × albida). Nat. hyb. Germany.

HABENARI-ORCHIS.

viridi-maculata Rolfe (Orchis maculata × Habenaria viridis). Annals of Botany, vi (1893), p. 325, t. 18. Perceval, Longwitton Hall, Morpeth.

LÆLIA.

Synonyms:

autumnalis xanthotropis—venusta.
autumnalis venusta—venusta.
Crawshayana leucoptera—leucoptera.
lilacina—Pilcheriana.
Marriottiana — Eyermaniana.

Species used in crossing:

albida Lindl.
anceps—Finckeniana.
autumnalis—Crawshayana
furfuracea—leucoptera.
grandiflora—Eyermaniana

anceps Lindl.
autumnalis—Gouldiana.
pumila—amœna.

autumnalis Lindl.
albida—Crawshayana.
anceps—Gouldiana.

cinnabarina Lindl.
majalis—
Pilcheriana—flammea.
purpurata—Latona.

crispa Rchb. f.
Perrinii—Pilcheriana.
pumila—Euterpe.

furfuracea Lindl.
albida—leucoptera.
grandiflora—venusta.

grandiflora Lindl. (syn. majalis Lindl.)
albida—Eyermaniana.
cinnabarina—
furfuracea—venusta.

harpophylla Rchb. f.
—?— —vitellina.

Perrinii Lindl.
crispa—Pilcherina.
? — Oweniæ.
pumila—juvenilis.

pumila Rchb. f.
crispa—Euterpe.
Perrinii—juvenilis.
xanthina—Oweniana.

purpurata Lindl. **xanthina** Lindl.
cinnabarina—Latona. pumila—Oweniana.

Hybrids used in crossing:

Pilcheriana.

(crispa × Perrinii.)

cinnabarina—flammea.

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amœna (pumila ♀ × anceps). Bond, for Ingram, Godalming. RHS., Oct. 9, '94.

Crawshayana Rchb. f. nat. hyb. (albida × autumnalis). G. Ch., Feb. 3, '83. Named after Crawshay, Sevenoaks.

Euterpe R.A.R. (pumila Dayana ♀ × crispa). G. Ch., Nov. 10, '88. Seden, Veitch.

Also with Statter, Manchester. RHS., Oct. 24, '93.

var. (not flowered so far). (crispa ♀). Treseder, for Heath, Cheltenham. In litt, March '93.

Eyermaniana Rchb. f. nat. hyb. ?(grandiflora [majalis] × albida). G. Ch., July 28, '88. Named after Eyerman, North Easton. O. R., Jan.'94, states that there is no reason to suppose the plant to be of hybrid nature. syn. *Marriottiana* (fide O. R., Jan. '94).

Finckeniana J. O'B. nat. hyb. (albida × anceps alba). G. Ch., Feb. 18, '93. fg. O. R., Jan. '94; G. Ch., Dec. 30, '93. Jrl. Hrt., Dec. 21, '93. Grd. Mg., March 31, '94. Named after Fincken, Barnsley.

flammea Rchb. f. (cinnabarina ♀ × Pilcheriana ×). G. Ch., May 9, '74. fg. O. A., t. 217. Seden, for Veitch.

Gouldiana Rchb. f. nat. hyb. (autumnalis × anceps). G. Ch., Jan. 24, '88. O. A., t. 371. Rchbch. I, ser. ii, t. 59. O. R., Jan., '94, (fg.) states "probably only a local, but distinct species."

—?— (grandiflora [majalis] × cinnabarina). Sdlg. Hodgkinson, Wilmslow. O. R., July '94.

juvenilis (Perrinii ♀ × pumila). Bleu, Paris. L'O., '90, p. 240. Ldn., t. 415.

Latona (cinnabarina ♀ × purpurata). RHS., May 3, '92. Veitch, Chelsea.

Leeana Rchb. f. nat. hyb. (marginata × —?—). G. Ch., April 15, '82. Named after Lee, Leatherhead.

leucoptera Rolfe nat. hyb. (furfuracea × albida). With Peeters, Brussels, 1884.

syn. *Ll. Crawshayana leucoptera* Rchb. f.

Oweniæ nat. hyb. (Perrinii × —?—). Linden, Brussels. fg. Ldn., t. 374. Named after Owen, Selwood.

Oweniana J.O'B. (pumila Dayana ♀ × xanthina). RHS., Aug. 9, '92. Sander.

Pilcheriana Rchb. f. (crispa ♀ × Perrinii). Dominy, for Veitch, 1853. RHS., May, '64. fg. Fl. Mag., tt. 340, 867. Named after Pilcher, gr. to Ruecker, Wandsworth.

var. **lilacina** Rchb. f. G. Ch., May 15, '86.

striata. Sup. nat. hyb. Exhbt. by Bond, for Ingram, Godalming. RHS., Aug. 13, '95.

venusta nat. hyb. (furfuracea × grandiflora [majalis]). Rolfe. O. R., Feb. '95.

syn. *autumnalis venusta* Rchb. f.

syn. *autumnalis xanthotropis* Rchb. f. fg. Rchbch, 1886, t. 10.

vitellina (harpophylla × —?—). RHS., March 14, '93. fg. G. Ch., March 25, '93. Ballantine, for Schrœder, Egham.

Wyattiana Rchb. f. G. Ch., Oct. 6, '83. By Reichenbach believed to be a nat. hyb. But Rolfe, G. Ch., Dec. 6, '90, suspects it to be a var. of Ll. purpurata.

LYCASTE.

Imschootiana nat. hyb. ?(Skinneri × cruenta). fg. G. Ch., Dec. 23, '93. Jrl. Hrt., Dec. 21,'93. Jrl. Orch., Jan. 15, '94. Gd. Mg., March 17, '94. Ldn., t. 410.

Luciani. Nat. hyb. near lasioglossa. Linden, Brussels. RHS., Dec. 12, '93.

Schœnbrunnensis (Skinneri × Schilleriana [gigantea ?]). fg. Wien. Ztg., Sept. '93. G. Ch., Aug. 4, '94.

Smeeana Rchb. f. nat. hyb. ?(Deppei × Skinneri). Smee, Hackbridge. G. Ch., Aug. 18, '83.

syn. *hybrida.* G. Ch., Oct., '78, p. 535. Marshall, Bexley.

sulphurea Rchb. f. Nat. hyb. ?(Deppei × cruenta). G. Ch., '82, p. 218.

MASDEVALLIA.

Synonyms:

caudato–Estradæ — Geleniana.
Ellisiana—Fraseri.
McVitæ—Amesiana.
Mundyana—Heathii.
Parksii—Fraseri.
Parlatoreana—splendida.
Pourbaixii—Kimballiana.
Vanneriana—Chimæra Vanneriana.

Species used in crossing:

amabilis Rchb. f.

ignea—Rebecca.
tovarensis—Measuresiana.
Veitchiana—Chelsoni.

Arminii Rchb. f.

Estradæ—Leda.

Barlæana Rchb. f.

infracta—glaphyrantha.
Veitchiana—splendida.

bella Rchb. f.

tovarensis—

caudata Lindl.

coccinea—Shuttryana.
Estradæ—Geleniana.
ignea—Henrietta.
rosea—Courtauldiana.
Veitchiana—Kimballiana.

Chimæra Rchb. f.

Ch. Wallisii × Ch. Roezlii —Ch. Vanneriana.
tovarensis—

coccinea Lindn.

caudata—Shuttryana.
Estradæ—Stella.
ignea—Fraseri.
triangularis—Cassiope.
Veitchiana—falcata.

Davisii Rchb. f.

tovarensis—Jessie Winn.
Veitchiana—Gairiana.

Estradæ Rchb. f.

Arminii—Leda.
caudata—Geleniana.
coccinea—Stella.
Veitchiana—Veitchiano-Estradæ.

ignea Rchb. f.

amabilis—Rebecca.
caudata—Henrietta.
Chelsoni × —ignea-Chelsoni.
coccinea—Fraseri.
Gairiana × —Mary Ames.
racemosa—Rushtonii.
tovarensis—Hincksiana.
Veitchiana—Heathii.

infracta Lindl.

Barlæana—glaphyrantha.

racemosa Lindl.

ignea—Rushtonii.
triangularis—Doris.

Reichenbachiana Endres.

Chelsoni × —Asmodia.

rosea Lindl.

caudata—Courtauldiana.

tovarensis Rchb. f.

amabilis—Measuresiana.
bella—
Chimæra—
Davisii—Jessie Winn.
ignea—Hincksiana.
Veitchiana—Amesiana.

triangularis Lindl.

coccinea—Cassiope.
racemosa—Doris.

Veitchiana Rchb. f.

amabilis—Chelsoni.
Barlæana—splendida.
caudata—Kimballiana.
coccinea—falcata.
Davisii—Gairiana.
Estradæ — Veitchiano-Estradæ.
ignea—Heathii.
tovarensis—Amesiana.

Hybrids used in crossing:

Chelsoni.	Gairiana.
(amabilis × Veitchiana.)	(Veitchiana × Davisii.)
ignea—ignea–Chelsoni.	ignea—Mary Ames.
Reichenbachiana — Asmodia.	

Amesiana (Veitchiana ♀ × tovarensis). RHS., Aug. 12, '90. Sander.

var. **McVitæ** (tovarensis ♀). Stevens, for Thompson, Stone. RHS., Dec. 13, '92. (O. R., Dec., '92, suggests coccinea instead of Veitchiana). 12 years old before flowering. Named after daughter of Thompson. Stevens in litt., March, '93, gives parentage as marked.

Asmodia (Chelsoni × ♀ × Reichenbachiana) RHS., June 12, '94. Veitch.

Cassiope J. O'B. (triangularis ♀ × coccinea Harryana). G. Ch., June 11, '92. Hincks, Brekenridge.

Chelsoni Rchb. f. (amabilis ♀ × Veitchiana). G. Ch., '80, ii, p. 222. Veitch.

var. **splendens** (Veitchiana ♀). G. Ch., May 18, '89. Seden, for Veitch.

Chimæra Vanneriana R.A.R. (Chimæra Wallisii ♀ × Ch. Rœzlii). O. R., July, '93. Robbins, for Vanner, Chislehurst.

(**Chimæra** × **tovarensis**). Plants grew fast, seed sown March, '87, and had ten leaves Aug., '88. Murray, for Cookson, Oakwood. G. Ch., Sept. 8, '88.

Courtauldiana Rchb. f. (rosea ♀ × caudata Shuttleworthii). G. Ch., Feb. 16, '89. Cookson, Oakwood. fg. Rchbch., ii, t. 76. Named after Sidney Courtauld. (O. R., March '94, says caudata ♀).

Doris (triangularis ♀ × racemosa Crossii). O. R., Jan., '94. Hincks, Richmond. Sown Aug., '90.

falcata J. O'B. (coccinea ♀ × Veitchiana). Keeling, for Drewett, Riding. G. Ch., May 2, '91.

Fraseri Rchb. f. (ignea ♀ × coccinea [Lindeni]). G. Ch., Feb. 4, '82. Fraser, Aberdeen.

syn. *Parksii*. Heath, Cheltenham. Manchester Show, May 27, '93.

var. **Ellisiana** R. A. R. (coccinea Harryana ♀). RHS., June 25, '89. Veitch. Ellis, family name of Lady Howard de Walden, Maidstone. Sown '85.

Also raised by Robinson, for Ames, North Easton. In litt., Feb. '94. Used ignea rubescens.

Also with Lawrence, Dorking. RHS., March 12,'95.

Gairiana Rchb. f. (Veitchiana ♀ × Davisii). G. Ch., July 12, '84. Veitch. Named after Gair, Falkirk.

Geleniana Rchb. f. (caudata Shuttleworthii ♀ × Estradæ xanthina). G. Ch., Nov. 27, '87. Sander, St. Albans. Named after Hruby von Gelenye, Peckau. fg. Ill. Hrt., Aug. 10, '93. Rchbch., ii, t. '76.

var. **caudato-Estradæ** R.A.R. (Estradæ ♀). G. Ch., June 8, '89. Veitch. Sown '85; bore 11 flowers '89.

glaphyrantha Rchb. f. (infracta ♀ × Barlæana). G. Ch., Sept. 20, '86. Veitch.

Heathii (ignea rubescens ♀ × Veitchiana). RHS., March 12, '89. Heath, Cheltenham.

Also raised in 4 years by Robinson, for Ames, North Easton. In litt., Feb., '94.

syn. *Mundyana* (ignea aurantiaca). Sander. Temple Show, May 29, '91.

Henrietta Krzl. (ignea erubescens ♀ × caudata Shuttleworthii). G. Ch., June 24, '93. Robinson, for Ames, North Easton. Four years raising, 3 plants. Named after Prof. Sargent's daughter.

Also raised by Hincks, Breckenborough (ignea Richardii). O. R., July, '94.

Hincksiana Rchb. f. (tovarensis ♀ × ignea). G. Ch., Aug. 20, '87. Hincks, Breckenborough.

ignea-Chelsoni (ignea ♀). Robinson, for Ames, North Easton. In litt., Feb., '94. Four years raising.

Jessie Winn (tovarensis ♀ × Davisii). Winn, Birmingham. O. R., Dec., '94.

Kimballiana (Veitchiana ♀ × caudata Shuttleworthii). RHS., March 10, '91. Sander, St. Albans.

syn. *Pourbaixii*. Ldn., t. 387. Pourbaix, Mons. Crossed spring '88, sown March, '89, flowered March, '93.

Leda (Estradæ ♀ × Arminii). Hincks, Richmond. Sown Oct., '90. O. R., July, '95.

Mary Ames (ignea ♀ × Gairiana ×). Robinson, for Ames, North Easton. In litt., Feb., '94. Three years raising.

Measuresiana Rolfe (tovarensis ♀ × amabilis). G. Ch., Oct. 4, '90. Sander. Named after Measures, Camberwell. fg. Rchbch., ii, t. 76.

Rebecca Krzl. (ignea erubescens ♀ × amabilis). G. Ch., June 24, '93. Robinson, for Ames, North Easton. Four years raising. Named after Mrs. Rebecca Ames.

Rushtonii (ignea Eckhardii ♀ × racemosa Crossii). O. R., July, '93. Rushton, for Hincks, Richmond.

Shuttryana (caudata Shuttleworthii ♀ × coccinea Harryana). White, for Lawrence, Dorking. RHS., June 7, '92. fg. Grd. Mag., June 8, '95.

splendida Rchb. f. nat. hyb. (Veitchiana × Barlæana). G. Ch., '78, p. 493.

syn. *Parlatoreana* Rchb. f. G. Ch., '79, ii, p. 172. Coll. Walter Davis, for Veitch.

Raised also by Seden, for Veitch (Veitchiana ♀). G. Ch., June 1, '89.

Stella Rolfe (Estradæ ♀ × coccinea Harryana). G. Ch., Sept. 20, '90. Hincks, Richmond.

—?— (tovarensis ♀ × bella). Six years old. Winn, Birmingham. O. R., Sept., '94.

Veitchiano-Estradæ Rolfe (Estradæ ♀). O. R., July,'93. Rushton, for Hincks, Richmond.

MILTONIA.

Bleuana (vexillaria ♀ × Rœzlii). Bleu, Paris. Crossed June, '83, sown April, '84, flowered Jan., '89. fg. Ldn., t. 176. Gdn., Aug. 4, '94. O. R., Dec., '94. Grd. Mag., Oct. 27, '94. O. A., t. 412. Rchbch., s. 2, t. 32. G. & F., April 27, '92. Named Miltoniopsis Bleui, by Godefroy, L'O.

Also raised by Veitch, Chelsea. Sown Jan. 1, '85, flowered April, '91.

var. **nobilior** J. O'B. G. Ch., March 24, '94. fg. O. R., Dec., '94.

var. **virginalis**. fg. Grd. Mag., May 25, '95; Jrl. Hrt., May 30, '95. Wrongly placed under Mlt. vexillaria by Watson, in G. & F., June, '95.

Bluntii Rchb. f. nat. hyb. (Clowesii × spectabilis). G. Ch., Dec., '79, p. 489. Blunt, to Bullen, Lewisham.

var. *Lubbersiana* Rchb. f. G. Ch., '87, ii, p. 649.

syn. *Peetersiana* Rchb. f. nat hyb. ?(spectabilis Moreliana × Clowesii. G. Ch., Sept. 11, '86. Peeters, Brussels.

Cobbiana sup. nat. hyb. (candida × cuneata). Cobb, Tunbridge Wells. RHS., Oct. 15, '95.

Also with Cowan, Garston, Liverpool. G. Ch., Sept. 7, '95, page 265.

festiva Rchb. f. nat. hyb. ?(spectabilis × flavescens), G. Ch., '68, p. 572.

Joiceyana J. O'B. nat. hyb. ?(Clowesii × candida). Joicey, Sunningdale Park. G. Ch., Aug. 19, 93.

Lamarcheana Rchb. f. Nat. hyb. ? G. Ch., April 23, '81. Described as *M. Clowesii Lamarcheana* Morren. fg. Bel. Hrt., 1876, p. 174, pl. xiii. Flowered Aug. '74. With Lamarche de Roscius, Liege.

ODONTOGLOSSUM.

Synonyms:

Albert Edward—excellens.
albens—Denisoniæ.
albidulum—Coradinei.
Alexandræ Bickleyense — Denisoniæ.
Andersonianum—lanceans
angustatum—lanceans.
aspersum—lanceans.
aspersum—aspersum.
atropurpureum—Denisoniæ
baphicanthum — lanceans.
bellum—mulus.
Bergmani—Denisoniæ.
Bickleyense—Denisoniæ.
Bleichrœderianum — lanceans.
Bockett's—mulus.
brachypterum—Horsmani.
Brandtii—excellens.
Brassia—lanceans.
chrysomelanum—excellens
cinctum—Murrellianum.
Clæsianum—Denisoniæ.
crispum Andersonianum—lanceans.
crispum aureum — Denisoniæ.
crispum excelsior — Denisoniæ.
crispum flaveolum — Denisoniæ.
crispum Jenningsianum—lanceans.
crispum limbatum—lanceans.
crispum mirabile—Coradinei.
crispum President Zhaldua —Denisoniæ.
crispum Rothschildianum —Denisoniæ.
crispum Ruckerianum — lanceans.
cuspidatum—mulus.
cuspidatum platyglossum—var. of luteopurpureum
Dellense—excellens.
deltoglossum—lanceans.
Dobbelæræ—Denisoniæ.
Edithiæ—lanceans.
elegans Rolfe—Denisoniæ.
elegantius—stauroides.
euastrum—lanceans.
eugenes—excellens.

excelsior—Denisoniæ.
ferrugineum—Horsmani.
Fitchianum—lanceans.
glorioso-crispum—lanceans
glorioso-luteopurpureum—mulus.
Godefroyæ—Denisoniæ.
Godseffianum — dicranophorum.
grandiflorum—Coradinei.
Gravesianum —stauroides.
guttulatum—lanceans.
Hardyanum—lanceans.
Harvengtense—excellens.
Hazelbourne var. — lanceans.
hebraicum—lanceans.
hemileurum—lanceans.
histrionicum—mulus.
Holfordianum—Coradinei.
Holfordianum—mulus.
hystrix—var. of luteopurpureum.
immaculatum—lanceans.
imperiale—lanceans.
Imschootianum — Staurastrum.
insigne—lanceans.
Jacombianum—lanceans.
Jenningsianum —lanceans
Josephinæ—lanceans.
Kalbreyeri—Horsmani.
Kinlesideianum — Coradinei.
Leeanum—lanceans.
Leeanum—mulus.
Lehmanni—var. of crispum
lepidum — acuminatissimum.
Leroyanum—Denisoniæ.
leucopterum—lanceans.
ligulare—Coradinei.
limbatum—lanceans.
Lindleyano-crispum — Coradinei.
Lindleyano-nobile — stauroides.
Lindleyano - Pescatorei—stauroides.
Lindleyanum Coradinei — Coradinei.
Lindleyanum ligulare — Coradinei.
lineoligerum—lanceans.
lobatum—lanceans.
luteopurpureo-crispum — Denisoniæ.
luteopurpureo - nobile — Horsmani.
luteopurpureo-Pescatorei—Horsmani.
luteopurpureum cuspidatum—mulus.
luteopurpureum mulus—mulus.
lyroglossum Rchb. f.—Horsmani.

lyroglossum J. O'B.—Denisoniæ.
macrospilum —Denisoniæ.
maculatum—excellens.
majesticum—Horsmani.
Marriottianum (?) —Denisoniæ.
Marshallii—lanceans.
Measuresianum—lanceans.
mirabile—Coradinei.
nobile Prince of Orange—excellens.
nobile-triumphans —excellens.
nobilior—Denisoniæ.
odoratum baphicanthum—lanceans.
odoratum deltoglossum —lanceans.
odoratum hebraicum—lanceans.
odoratum Leeanum — lanceans.
Ortgiesianum—lanceans.
pallens—Denisoniæ.
pallens—mulus.
parciguttatum—lanceans.
Pescatorei - triumphans — excellens.
Pescatorei Prince of Orange —excellens.
Pollettianum—lanceans.
Poyntzianum—lanceans.
President Zhaldua—Denisoniæ.
Prince of Orange — excellens.
prionopetalum—Denisoniæ
pulvereum—lanceans.
Rothschildianum — Denisoniæ.
Ruckerianum—lanceans.
sceptrum album — Horsmani.
Schlesingerianum —lanceans.
Schrœderianum — Denisoniæ.
Scottii—Denisoniæ.
Selwoodensis—elegans.
Shuttleworthii—Denisoniæ
Smeeanum—Denisoniæ.
spiloglossum—aspersum.
splendens—lanceanum.
Statterianum—Denisoniæ.
stellimicans—excellens.
Stevensii—lanceans.
sulphureum—Denisoniæ.
superbum—lanceans.
tentaculatum—mulus.
tenue—lanceans.
Tresederiana—excellens.
varians—Denisoniæ.
violaceum—lanceans.
violaceum—aspersum.
virginale—lanceans.
Vuylstekeanum maculatum —excellens.
Warnbeckeanum—lanceans
Warocqueanum —lanceans

Wilckeanum—Denisoniæ.
xanthoglossum—mulus.
Young's—lanceans.
Zhaldua—Denisoniæ.

Species used in crossing:

apterum Llav.
(syn. nebulosum Lindl.)
Rossii(?)—Warnerianum.

blandum Rchb. f.
triumphans—Cookeanum.

cordatum Lindl.
Rossii—Humeanum.

crispum Lindl.
gloriosum—lanceans.
Hallii—
Harryanum—
Insleayi—
Lindleyanum—Coradinei.
luteopurpureum—Denisoniæ.

gloriosum Rchb. f.
crispum—lanceans.
luteopurpureum—mulus.
nobile—Murrellianum.

Halli Lindl.
crispum—

Harryanum Rchb. f.
crispum—

Insleayi Barker.
crispum—

Lindleyanum Rchb. f.
crispum—Coradinei.
luteopurpureum—acuminatissimum.
nobile—stauroides.
triumphans—dicranophorum.
tripudians—Staurastrum.

luteopurpureum Lindl.
crispum—Denisoniæ.
gloriosum—mulus.
Lindleyanum—acuminatissimum.
nobile—Horsmani.

maculatum Lex. Orch. Opusc.
Rossii—aspersum.

nobile Rcb. f.
gloriosum—Murrellianum.
Lindleyanum—stauroides.
luteopurpureum—Horsmani.
triumphans—excellens.

Rossii Lindl.
apterum (?)—Warnerianum.
cordatum—Humeanum.
maculatum—aspersum.

tripudians Rchb. f.
Lindleyanum — Staurastrum.

triumphans Rchb. f.
blandum—Cookeanum.
Lindleyanum—dicranophorum.
nobile—excellens.

Hybrids bespoken in Orchid Review:

acuminatissimum Rchb. f. (Lindleyanum × luteopurpureum). G. Ch., Feb. 25, '82. With Wallace, Colchester.

var. *lepidum* Rchb. f. G. Ch., Oct. 27, '83. With Shuttleworth & Carder, Clapham.

Cookeanum Rolfe. ?(blandum × triumphans). G. Ch., Dec. 12, '91. With Cooke, Kingston Hill.

Coradinei Rchb. f. (Lindleyanum × crispum). G. Ch., '72, p. 1068. fg. 251. *Id.*, '85, ii, p. 200, fg. 40. *Id.*, '86, p. 286, fg. 51. Xn. Orch., ii, t. 129. O. A., t. 90. L'O., '85, fg. 5. Rchbch., ser. 2, i, t. 21. Coradine, coll. for Veitch.

var. *albidulum* Rchb. f. G. Ch., June 20, '85. Smith, Stirling Park.

var. *grandiflorum* Rchb. f. Ldn., t. 93. "The plant figured does perhaps not belong here"; fide Rolfe, O. R.

var. *hemileurum* Rchb. f. G. Ch., June 2, '83. With Bull, Chelsea.

var. *Kinlesideianum* Rchb. f. G. Ch., June 20, '85, Kinleside, Tunbridge Wells.

var. *mirabile* Rolfe. O. R., June, '94. syn. *Od. crispum mirabile.* Schrœder, Egham. fg. G. Ch., Sept. 1, '94.

Od. *Holfordianum* fg. L'O., '85, p. 132. Is probably a var. of *Coradinei*.

ligulare Rchb. f. G. Ch., April 29, '82. With Rothschild, Tring Park.

Denisoniæ Denning. (luteopurpureum × crispum). Fl. Mg., n. s., 1872, t. 26. Imp. Backhouse, York. RHS., Jan. 17, '72.

Bergmanii Lind. fg. Ldn., t. 286. Named after Bergman, Ferrières-en-Brie, Paris.

Clœsianum Lind. fg. Ldn., t. 271.

macrospilum Rchb. f. G. Ch., July 18, '85. L'O., '85, fg. 9. With Williams, Upper Holloway.

prionopetalum J. O'B. G. Ch., '85, ii, p. 620. With Lawrence, Dorking.

Scottii Hort. G. Ch., March, '83. With Wilson, Weybridge.

Shuttleworthii Hort. G. Ch., '84, i, p. 490. With Shuttleworth, Carder & Co., Clapham.

var. **Wilckeanum** Rchb. f. G. Ch., '80, i, p. 298. Imp. Low, Clapton. Named after Wilcke, with Massange de Louvraix, Baillonville. fg. G. Ch.,'85, ii, fg. 43. *Id.*, '84, i, fg. 122. *Id.*, '86, i, fg. 14. V. M., '87. Sel. Orch., ser. 3, t. 23. Figured as "Alexandræ" in Pollett Ferns. Cat. '93, t. 5. Also as *Alexandræ Bickleyense* in Ferns. Cat.

var. *albens* Rchb. f. L'O., '85, p. 132, fg. 2. Ldn., t. 35.

var. *atropurpureum* Hort. G. Ch., '91, i, p. 563.

syn. *President Zhaldua* (crispum). Rodigas. Ill. Hrt., xxxvi, p. 31, t. 79. With Vuylsteke, Ghent.

var. *Dobbelœræ*. O. R., Jan., '95.

var. *elegans* Rolfe. O. R., May, '93.

syn. *crispum flaveolum*. Fernside Catl., '91, t. 1.

var. *excelsior* (syn. *crispum excelsior* Hort.) fg. O. R., Aug., '94.

var. *Godefroyæ* J. O'B. G. Ch., '86, i, p. 76.

DENISONIÆ—Continued.

var. *Leroyanum* Rolfe. See artificially raised hybrids of Odontoglossum.

var. *lyroglossum* J. O'B. G. Ch., '86, i, fg. 15. *Id.*, '82, i, fg. 97.

var. *nobilior* Hort. G. Ch., '92, i, p. 698. With Charlesworth, Bradford.

var. *pallens* Rchb. f. O. A., t. 201.

var. *Rothschildianum (crispum Rothschildianum* Hort.) G. Ch., '90, i, p. 684. Rchbch., ser. 2, i, t. 22.

var. *Schrœderianum* Rchb. f. G. Ch., May 27, '82.

var. *Smeeanum* Rolfe. *(Od. Smeeanum* Hort.) Grd. Wrld., '90, p. 652.

syn. *Marriottianum* (?) Smee. Grd. Wrld., '89, p. 677, fg.

var. *Statterianum*. RHS., June 12, '94. Statter, Manchester.

var. *sulphureum* Rchb. f. G. Ch., '84, i, p. 306. fg. as *Alexandræ*, Fernsd. Catl., '93, t. 2.

var. *varians* Rchb. f. G. Ch., March 12, '81. With Lee, Leatherhead.

dicranophorum Rchb. f. (Lindleyanum × triumphans). G. Ch., March 17, '88.

syn. *Godseffianum* Rolfe. G. Ch., Dec. 19, '91.

excellens Rchb. f. (nobile × triumphans). G. Ch., Oct. 1, '81. With Low, Clapton. fg. G. Ch., '85, fg. 51. Gdn., t. 330. Rchbch., ser. 2, i, t. 19. See also under artificially raised hybrids, *excellens Tresederianum*.

Albert Edward —?—

Brandtii Krzl. Gf., '89, t. 1308. Brandt, Berlin.

chrysomelanum Rchb. f. G. Ch., April 28, '88.

Dellense Rolfe. Ldn., t. 335. G. Ch., April 25, '91.

eugenes Rchb. f. V. M., '87, p. 73. Hort. Veitch. 1883. G. Ch., April 28, '88. O. A., t. 355.

Harvengtense Rolfe. L'O., Feb. 11, '94. O. R., April, '94. fg. Ldn., t. 478.

maculatum Rchb. f. G. Ch., April 28, '88. syn. *Vuylstekeanum maculatum* Rchb. f. G. Ch., '84, ii, p. 584.

Prince of Orange Lind. Ldn., t. 439. RHS., June 12, '94.

stellimicans Rchb. f. G. Ch., Nov. 29, '84.

hystrix Batm. G. Ch., Dec. 17, '64. Is not a hybrid, but var. of luteopurpureum.

Horsmani Rchb. f. (luteopurpureum × nobile). G.Ch., '80, i, p. 41. Coll. by Fred. Horsman, for New Bulb and Plant Co., Colchester. fg. O. R., Oct. '94.

brachypterum Rchb. f. G. Ch., Oct. 28, '82. Veitch, Chelsea.

syn. *Kalbreyeri*. No description, fide O. R., May, '94.

ferrugineum Rchb. f. G. Ch., April 30, '83.

lyroglossum Rchb. f. Flora, '82, p. 534. fg. Rchbch. ser. i, vol. i, p. 65.

majesticum. G. Ch., '91, i, p. 790. Vuylsteke, Ghent.

sceptrum album. RHS., April 22, '90. Pollett, Fernside.

lanceans Rchb. f. (gloriosum × crispum). Rchbch. ser. 1, i, '81.

Andersonianum Rchb. f. Coll. Blunt, for Low, Clapton. G. Ch., 1868, p. 599. Named after Anderson, gr. to Dawson, Glasgow. fg. Gf., t. 1326 (*crispum Andersonianum*). Rchbch. ser. 1, i, p. '82. G. Ch., '84, ii, fg. 11. *id.*, '85, ii, fg. 150. Fl. Mg. n. s., '72, t. 45. O. A., t. '35. L'O., '85, fg. 7. V. M., '87, p. 25.

var. *angustatum* Rchb. f. L'O., '89, p. 277, fg.

LANCEANS—Continued.

var. *Hardyanum*. RHS., March 12, '95.

var. *Hazelbourne var*. Rolfe. fg. O. R., Oct., '94. Ellis, Hazelbourne, Dorking.

var. *imperiale* Rolfe. G. Ch., March 14, '91.

var. *lobatum* Rchb. f. G. Ch., '79, i, p. 74. *Id.*, '85, ii, p. 151. *Id.*, '84, ii, fg. 12.

var. *Marshallii*. RHS., April 23, '95. (O. R., June, '95), Marshall, Grimsby.

var. *pulvereum*. O. R., Feb., '95.

var. *splendens* Williams. O. A., t. 292.

var. *superbum* Rolfe. fg. O. R., Oct., '94.

var. *tenue* Rchb. f. G. Ch., '78, i, p. 492.

var. *tenue guttulatum* Rchb. f. G. Ch., July 22, '82.

var. *virginale*. O. R., Aug., '95.

var. *Young's var*. Rolfe. O. R., Oct., '94. Young, Sevenoaks.

Josephinæ Williams. O. A., sub. t. 174 and 188.

Schlesingerianum L. Lind. fg. Ldn., t. 240.

baphicanthum Rchb. f. G. Ch.,'76, ii, p. 260. Veitch, Chelsea.

syn. *odoratum baphicanthum*. Lnd., t. 128. V. M., '87, p. 55.

syn. *Edithiæ*. Wrn. Sel. Orch., ser. 3, t. 25.

var. *immaculatum* Rolfe. O. R., July, '93.

Brassia Rchb. f. G. Ch., April 18, '85. Sander, St. Albans.

syn. *odoratum deltoglossum*. V. M., '87.

var. *euastrum* Rchb. f. G. Ch., July 16, '87.

deltoglossum Rchb. f. G. Ch., Feb. 12, '81. Veitch, Chelsea.

syn. *odoratum deltoglossum*. V. M., '87.

syn. *leucopterum*.

var. *Stevensii* Rolfe. O. R., April, '94. Stevens, gr. to Thompson, Stone.

LANCEANS—Continued.

hebraicum Rchb. f. G. Ch., '79, i, p. 462. *Id.*, '81, ii, fg. 36. O. A., t. 194. Rchbch., ser. 1, t. 37. Gdn., June 3, '82. Bull, Chelsea.

syn. *odoratum hebraicum*. V. M., '87.

var. *aspersum* Rchb. f. Rchbch., ser. 1, ii, t. '79.

var. *lineoligerum* Rchb. f. G. Ch., Jan. 13, '83. O. A., t. '85.

var. *Poyntzianum*. Manchester Show, May 31, '95.

Jenningsianum Rchb. f. G. Ch., '78, i, p. 366. Veitch, Chelsea.

syn. *crispum Jenningsianum*. V. M., '87.

var. *limbatum* Rchb. f. G. Ch., Dec. 23, '82.

var. *parciguttatum* Rchb. f. G. Ch., Jan. 27, '83.

Leeanum Rchb. f. G. Ch., April 22, '82. O. A., t. 101. With Lee, Leatherhead.

syn. *odoratum Leeanum*. V. M., '87.

limbatum Rchb. f. G. Ch., '70, p. 417. Xn. Orch., ii, t. 183.

syn. *crispum limbatum*. V. M., '87.

var. *violaceum* Rchb. f. G. Ch., '78, i, p. 725.

Ruckerianum Rchb. f. Rchbch., ser. 1, i, p. 82. Named after Rucker, Wandsworth. G. Ch., '73, fg. 18. *Id.*, '85, ii, fg. 42. Ldn., t. 41. V. M., p. 27. (*crispum Ruckerianum*.)

var. *insigne* J. O'B. G. Ch., '85, ii, fg. 167.

var. *splendens* Rchb. f. G. Ch., July 7, '83. Jrl. Hrt., April 6, '93.

var. *superbiens*. fg. Jrl. Hrt., May 23, '95.

Bleichrœderianum L. Lind. Ldn., t. 177.

Fitchianum. Wrn. Sel. Orch., ser. 3, t. 34.

Jacombianum. G. Ch., May 21, '87. Jacomb, Stamford Hill.

Measuresianum J. O'B. G. Ch., '85, ii, p. 619.

Ortgiesianum. Gf., Dec. 1, '91, t. 1360.

LANCEANS—Continued.

Pollettianum J. O'B. G. Ch., '85, ii, fg. 152. O. A., t. 280.

Warnbeckeanum —?—

Warocqueanum L. Lind. t. 180.

mulus Rchb. f. (gloriosum × luteopurpureum). Xn. Orch., ii, t. 160. G. Ch., '73, p. 432. *Id.*, '83, i, p. 469, fg. 70. *Id.*, '86, i, p. 12, fg. 4. Sl. Orch., ser. 3, t. 28. With Low, Clapton.

syn. *luteopurpureum mulus.* V. M., '87.

var. *Bockett's.* Cat. Fernside Coll., i, p. 4, n. 20, t. 8. *Id.*, ii, p. 8, n. 120, t. 7, fg. 102. Bockett, Muswell Hill.

var. *Holfordianum* Rchb. f. G. Ch., '82, ii, p. 616. O. A., t. 108. Holford, Tetbury. "Ill. in L'O., '85, p. 132, fg. 4, is more likely to represent Od. Coradinei;" fide O. R., Nov. '93.

var. *pallens* Rchb. f. G. Ch., Feb. 11, '82. syn. *histrionicum Leeanum* F. W. B.

cuspidatum Rchb. f. Xn. Orch., ii, p. 199, t. 184, fg. 1. Linnæa, xli, p. 27. Ldn., t. 99. Coll. by Rœzl.

syn. *luteopurpureum cuspidatum.* V. M., '87.

var. *xanthoglossum* Rchb. f. G. Ch., '81, i, p. 428. O. A., t. 390. Williams. (*platyglossum* Rchb. f. G. Ch., '88, ii, p. '91, is a var. of luteopurpureum only. Fide O. R., Nov. '93.)

histrionicum Rchb. f. G. Ch., Feb. 11, '82. With Bull, Chelsea.

var. *bellum* Rchb. f. G. Ch., Sept. 30, '83. With Heath & Co., Cheltenham.

var. *Leeanum* F. W. B. G. Ch., Oct. 21, '82. With Shuttleworth, Carder & Co. Same as redescribed *mulus var. pallens* Rchb. f. G. Ch., Feb. 11, '82.

tentaculatum Rchb. f. G. Ch., June 30, '83, i, p. 814. Cat. Fernside Col., ii, p. 7, t. 7, fg. 124.

LIBRARY OF THE UNIVERSITY

Murrellianum Rchb. f. (nobile × gloriosum [?]). G. Ch., '75, i, p. 653. Murrell, gr. to Hume, Norfolk.
var. *cinctum*. fg. Gf., t. 1101.

Staurastrum Rchb. f. (Lindleyanum × tripudians). G. Ch., March 5, '87.
syn. *Imschootianum* Rolfe. G. Ch., Dec. 26, '91. Imschoot, Ghent.

stauroides Rchb. f. (Lindleyanum × nobile). G. Ch., '87, i, p. 200.
var. *Gravesianum* Rchb. f. G. Ch., Aug. 6, '87.
elegantius Rchb. f. G. Ch., Feb. 18, '88.

Hybrids not yet bespoken in "Orchid Review."

aspersum Rchb. f. ?(maculatum × Rossii). G. Ch., Jan., '79. Veitch, Chelsea. fg. O. A., t. 245. V. M., '87, makes it var. of Rossii.
var. *spiloglossum* Rchb. f. G. Ch., April 10, '86.
var. *violaceum* Rchb. f. G. Ch., April 2, '81.

Cavallianum Hye, Leysen. Antwerp Show, May 13,'94.

chætostroma Rchb. f. Near Hallii. G. Ch., May 5,'83.

—?—(cordatum × maculatum). Sup. nat. hyb. exhbtd. by Horsman, Colchester. RHS., May 14, '95.

cristatellum Rchb. f. ?(cristallinum × triumphans). G. Ch., June, '75 (?). [V. M., '87, states G. Ch., '78, p. 716]. fg. O. A., t. 66.
syn. Od. *Lehmanni* Lehm. in litt., fide Rchb. f. in G. Ch., '82, p. 143.

elegans Rchb. f. ?(cirrhosum × Hallii). G. Ch., '79, p. 462. fg. O. A., t. 111. Gdn., t. 459.
var. *Pollett's* Rchb. f. G. Ch., June 9, '83, fg.
Sander's. fg. G. Ch., April 7, '94.
Selwoodensis. RHS., April 11, '93.

facetum Rchb. f. ?(Hallii × luteopurpureum). G. Ch., April 30, '81. V. M., '87, makes it var. of luteopurpureum and syn. of prænitens.

Galeotttianum A. Rich. ?(apterum × Cervantesii). G. Ch., '70, p. 39. Rolfe in O. R., July, '93, waives such relationship. A. Rich, in Ann. Sc. Nat., ser. 3, iii, p. 27, 1845. Lindl., Fol. Orch., p. 9. G. Ch., 1870, p. 39. *Id.*, 1874, p. 97. Rolfe in G. Ch., 1890, ii, p. 11. "Not allied at all to apterum (nebulosum)" O. R., Aug., '95.

hinnus Rchb. f. ?(Hallii × cirrhosum). Xn. Orch., p. 153, t. 160 (1861). Rchb. f. G. Ch., May 7, '87. V. M., '87, makes it var. of luteopurpureum.

Hennisii Rolfe. G. Ch., 1891, ii, p. 158.

Humeanum Rchb. f. ?(cordatum × Rossii). G. Ch., 1876, p. 170. Appeared with Hume, Winterton. V. M., '87, makes it var. of Rossii.

Impératrice de Russie Lind. Jrl. des Orch., iv, p. 360.

Insleayi splendens Rchb. f. Introduced by Low, Clapton. G. Ch., 1868. fg. Gdn., Feb. 24, '84. Rchbch., ser. 1, t. 8. I always looked upon this plant as showing evidence of the blood of grande and Insleayi.

Lehmanni Rchb. f. Though mentioned at times as a nat. hyb., it is but a var. of crispum, so far as known to me.

Lowrianum ?(triumphans × luteopurpureum). Sander, Temple Show, May 25, '92.

Lucianianum Rchb. f. ?(nævium × odoratum). G. Ch., Dec. 4, '86.

Marriottianum Rchb. f. Imported with cirrhosum. Different from Od. Denisoniæ var. Marriottianum. G. Ch., Jan. 5, '81.

Mæsereelianum Rchb. f. G. Ch., May 19, '88.

Mooreanum Lind., near polystigmaticum and tripudians. RHS., Oct. 24, '93.

prænitens Rchb. f. Belonging to the triumphans group. V. M., '87, states that most plants in cultivation under that name are luteopurpureum facetum.

pulcherrimum. Exh. Ghent Mtg., Feb. 20, '92.

rhynchantum Rchb. f. ?(purum × Lindleyanum). G. Ch., March 19, '87.

Rœbelenianum. RHS., April 25, '93. Sander.

Sanderianum Rchb. f. Described from insufficient material, furnished by collector Arnold. G. Ch., Oct. 22, '87.

Sutherlandii. Exh. by Blair, Stoke-on-Trent. RHS., April 9, '89.

vexativum Rchb. f. ?(apterum × maculatum).

Vuylstekeanum Rchb. f. G. Ch., July 5, '84.

Warnerianum Rchb. f. ?(Rossii × apterum). G. Ch., '65, p. 579. V. M., '87, makes it var. of Rossii. Batm. Mong. Od., t. 13. Warn. Sel. Orch., ii, t. 20. Named after Warner, Broomfield.

Wattianum Rolfe. ?(Harryanum × sceptrum). Gdn., May 3, '90. Watt, Chislehurst.

Wendlandianum Rolfe. ?(crispum Lehmannii × cirrhosum). G. Ch., July 6, '89.

Williamsianum Rchb. f. ?(grande × Schlieperianum). G. Ch., July 30, '81. O. R., July, '95, doubts its hybrid origin.

Artificially raised hybrids:

I repeat, for the sake of reference, those few crosses perfected so far.

Od. Denisoniæ Leroyanum (crispum ♀ × luteopurpureum). Raised by Jacob, head-gardener at Armainvillers, near Paris; named after Leroy, gardener to Rothschild, Paris. fg. L'Orch., June, '91. Rchbch., t. 37. 5 years 6 months growing were needed to raise this first Odontoglossum hybrid. We are told that during the first 18 months the seedlings resembled Zygopetalum more than Odontoglossum.

Od. Leroyanum Castle, in G. Ch., '90, i, p. 704.

Od. excellens (nobile ♀ × triumphans). Seden, for Veitch, Chelsea. Temple Show, May 29, '91.

Od. excellens Tresederianum (nobile Veitchianum ♀ × triumphans). Treseder, for Heath, Cheltenham. He writes about it, Feb., '93: "11 plants were raised in 1887; ten died in first and second year; one plant is now flowering, with a strong spike of 22 flowers."

Od. (crispum × Hallii). "Nice plants." Yet unflowered. Murray, for Cookson, Oakwood. G. Ch., May 11, '95.

Od. (crispum ♀ × Harryanum). One plant, unflowered, with Vuylsteke, Ghent. O. R., June, '95.

Od. (Insleayi ♀ × crispum). 20 plants, unflowered, with Vuylsteke, Ghent. O. R., June, '95.

Od. (luteopurpureum × Harryanum). Sdlgs. with Imschoot, Ghent. Germinated after 3–4 months. Mentioned G. Ch., April 6, '95.

Od. (Rossii × Cervantesii). Sdlgs. Leroy, Paris. G. Ch., Dec. 21, '89.

I further have to cite that De Barry Crawshay, Sevenoaks, had good capsules of (Rossii ♀ × Denisoniæ Wilckeanum), as well as of (crispum ♀ × gloriosum).

Murray raised for Cookson, Oakwood, sdlgs. of Od. crispum with gloriosum as well as Uro-Skinneri, but all died. Gdn., Feb. 10, '83.

"We have seedling Odontoglossum 12 months old." Stevens, for Thompson, Stone, in litt., March, '93.

ODOPETALUM.

(Odontoglossum × Zygopetalum).

Odontopetalum or Zygoglossum are inadmissible on account of previous establishment.

Seedlings raised by Veitch, of Chelsea, between Zgp. Mackayi and several Odontoglossa have turned out to be simple Zgp. Mackayi. Report RHS., Orchid Conference, '86, p. 35.

ONCIDIUM.

(**cucullatum**×**Phalænopsis**). Nat. hyb. of such supposed parentage exh. by Linden at Orchdnn., Dec. 13,'91.

curtum Lindl. Bot. Reg., 1847, t. 68. Supposed nat. hyb.

(**fuscatum**×**serratum**). Nat. hyb. of such supposed parentage exhbt. by Imschoot. Orchdnn., April 28, '95.

Enderianum nat. hyb. ?(crispum × curtum). Sander. RHS., July 12, '92.

Gardneri Lindl. nat. hyb. (Forbesii × dasytyle). (See O. R., Oct., '93). 1843. fg. Fl. Mg., n. s. 1880, t. 401. G. Ch., 1881, ii, p. 86. fg. "Gardnerianum". O. A., t. 12. V. M., '92.

syn. *Forbesio-dasytyle* Rolfe. O. R., Oct., '93.

syn. *flabelliferum* Pinel. With Rollisson, Tooting, 1846. Paxton's Bot. Mg., xvi, p. 65, fg.

syn. *prætextum* E. Morr. Belg. Hort., xxvii, p. 357, t. 20, 21. 1877, with Massange, Baillonville.

syn. *elegantissimum* Rchb. f. With Veitch, 1876. G. Ch., 1877, i, p. 13.

syn. *præstans* Rchb. f. G. Ch., 1880, ii, p. 296. With Veitch.

syn. *Pollettianum* Rchb. f. G. Ch., Sept. 11, '86.

var. *flavescens*. O. R., Sept., '95.

hæmatochilum nat. hyb. (luridum × Lanceanum). Recognized as such by Potter, St. Ann's, Trinidad. O. R., June, '95. He also raised one sdlg. from such cross. fg. Pxt. Fl. Grd., '50, i, t. 6. O. A., t. 32.

syn. *luridum atratum* Lindl. Jrl. Hrt. Soc,, vi, p. 54, fg.

syn. *luridum purpuratum*. Catlg. Loddiges, 1847.

A nat. hyb. exhbt. by Low, Clapton, at RHS., Nov. 27, '94, belongs undoubtedly here.

(**hæmatochilum** ♀ × **Lanceanum**). Also the reverse. O. R., Aug., '95. Under raising by Potter, St. Ann's, Trinidad.

litum Rchb. f. Sup. nat. hyb. near Forbesii. G. Ch., Sept. 15, '83. With Bull, Chelsea.

papilioniforme. Sup. hyb. ?(Papilio × Krameri). Gf. t. 1017.

pectorale Lindl. nat. hyb. (Marshallianum × Forbesii). See O. R., Oct., '93. Imp. with Forbesii, April, 1840, from Rio de Janeiro. James Wentworth Buller, Exeter. Lindl. Sert. Orch., t. 39.

syn. *Marshalliano-Forbesii* Rolfe. O. R., Oct., '93.

syn. *caloglossum* Rchb. f. With Bull, Chelsea, 1885. G. Ch., '85, ii, p. 166.

syn. *Mantinii* Godefroy. fg. L'O., Feb., '88.

syn. *Larkinianum* Gower. Gdn., xxxvii, p. 325. RHS., March 11, '90.

Wheatleyanum Gower. nat. hyb. ?(crispum × Forbesii). Gdn., '93, ii, p. 227. RHS., Nov. 13, '94. O. R., Jan., '95.

ORCHIS.

Natural Hybrids of rare occurrence:

Jacquini Godr. (fusca × militaris). Germany.

syn. *fusca var. stenoloba* Coss. & Germ.

syn. *hybrida* Bœnningh.

(**latifolio × maculata**). From Hampshire and Plymouth.

(**Morio × mascula**). Germany.

(**purpurea × Rivini**). Germany.

(**ustulata × tridentata**). Germany. syn. *Dietrichiana* Bog. *Austriaca* Kerner. *ustulato-variegata* Bog.

PHAIUS.

amabilis (grandifolius ♀ × tuberculosus). Veitch, Chelsea. RHS., Feb. 14, '93. fg. G. Ch., Feb. 25, '93. Jrl. Orch., '93, p. 25. Rchbch., ser. 2, ii, t. 90.

var. *Marthæ* (grandifolius Blumei ♀). Sander. RHS., March 13, '94. fg. Rchbch., ser. 2, ii, t. 89.

Cooksoniæ (grandifolius ♀ × Humblotii). Murray, for Cookson, Oakwood. RHS., June 11, '95. fg. Jrl. Hrt., June 13, '95. G. Ch., June 15, '95.

Cooksonii Rolfe. (Wallichii ♀ × tuberculosus). Murray, for Cookson, Oakwood. G. Ch., March 29, '90. fg. O. A., t. 478. Crossed March 26, '87; sown Dec. 16, '87; strong grower.

hybridus J. O'B. (grandifolius ♀ × Wallichii). Keeling, for Drewett, Riding. 1892. (O. R., Jan., '93).

var. *Gravesii* (Wallichii ♀). Grey, for Graves, Orange. G. Ch., March 25, '93. fg. O. R., Aug. '93. Sown July 6, '89, germinated Dec. 1, '90; flowered Feb. 12, '93.

maculato-grandifolius (grandifolius ♀). Veitch, Chelsea. RHS., Nov. 10, '91.

Owenianus (bicolor Oweniæ ♀ × Humblotii). Temple Show, May 23, '94. Sander, St. Albans. fg. G. Ch., June 23, '94. Jrl. Hrt., June 7, '94.

PHALÆNOPSIS.

Synonyms:

casta, Cynthia, Leda, Sanderiana, Schilleriano-gloriosa, Youngiana—leucorrhoda.

Lobbii, Vesta—intermedia

Species used in crossing:

amabilis Blume.
(syn. grandiflora Lindl.)
intermedia ×—F. L. Ames.
Lueddemanniana—John Seden.
rosea—Artemis.
Schilleriana—Rothschildiana.
violacea—Harriettæ.

Aphrodite Rchb. f.
(syn. amabilis Lindl.)
rosea—intermedia.
Schilleriana—leucorrhoda.

cornu-cervi Blume&Rchb.f.
violacea—Valentini.?

Lueddemanniana Rchb. f.
amabilis—John Seden.
tetraspis—speciosa.
violacea—Luedde-violacea

rosea Lindl.
amabilis—Artemis.
Aphrodite—intermedia.
intermedia × —delicata.
Schilleriana—Veitchiana.

Schilleriana Rchb. f.
amabilis—Rothschildiana.
Aphrodite—leucorrhoda.
rosea—Veitchiana.

Stuartiana Rchb. f.
leucorrhoda×—Amphitrite

tetraspis Rchb. f.
Lueddemanniana–speciosa

violacea Teijsm. & Binn.
amabilis—Harriettæ.
cornu-cervi—Valentini.?
Lueddemanniana—Luedde-violacea.

Hybrids used in crossing:

intermedia.
(Aphrodite × rosea.)
amabilis—F. L. Ames.
rosea—delicata.

leucorrhoda.
(Aphrodite × Schilleriana)
Stuartiana—Amphitrite.

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alcicornis Rchb. f. "Near Schilleriana and amabilis." G. Ch., June 18, '87. Low, Clapton.

Amphitrite Krzl. (Stuartiana ♀ × leucorrhoda Sanderiana ×). G. Ch., May 14, '92.

Artemis (amabilis ♀ × rosea). RHS., July 12, '92. Veitch.

delicata Rchb. f. nat. hyb. ?(intermedia × × rosea). G. Ch., May 27, '82.

F. L. Ames Rolfe. (amabilis ♀ × intermedia ×). G. Ch., Feb. 18, '88, fg. fg. G. & F., Jan. 15, '90. Seden, for Veitch. Sown Sept., '82. Named after Ames, North Easton.

Harriettæ Rolfe. (amabilis ♀ × violacea). G. Ch., July 2, '87. Seden, for Veitch. Sown Jan., '82; flowered May, '87. fg. G. Ch., '88, p. 8. Gdn., t. 766. Named after daughter of Corning, Albany.

intermedia Lindl., nat. hyb. (Aphrodite × rosea). Lobb, for Veitch. Pxtn. Fl. Gdn., '53, fg. 310.

Also raised artificially by Seden, for Veitch. (rosea ♀). Sown '82; flowered spring '86. G. Ch., April 3, '86.

syn. *Vesta* (rosea leucaspis ♀). RHS., Jan. 17, '93. Seden, for Veitch.

syn. *Lobbii* Hort.

var. *Portei* Rchb. f. Porte, 1861. G. Ch., March 12, '64. Bot. Ztg., '63, p. 168. fg. Sel. Orch., t. 2. Fl. Mg., n. s. t. 162. Gdn., t. 370. Rchbch. ii, t. '68. Grd. Mag., Feb. 23, '95. Jrl. Hrt., Feb. 28, '95.

var. *Brymeriana* Rchb. f. With Low, Clapton. G. Ch., '76, p. 366. fg. Fl. Mg., n. s. t. 263. Named after Brymer, Dorchester.

John Seden Rolfe. (amabilis ♀ × Lueddemanniana). G. Ch., March 17, '88. Seden, for Veitch. Sown Nov., '81.

leucorrhoda Rchb. f. nat. hyb. (Aphrodite × Schilleriana). G. Ch., '75, p. 301. fg. Fl. Mg., n. s. t. 166. fg. O. R., July, '94. With Low, Clapton, 1875.

syn. *casta* Rchb. f. G. Ch., '75, p. 590. fg. O. A., t. 229. Rchbh., t. 87.

syn. *Sanderiana* Rchb. f. G. Ch., May 26, '83. fg. Rchbch., ser. 2, t. 68.

syn. *Cynthia* Rolfe. G. Ch., Feb. 1, '90. With Wigan, East Sheen. fg. O. R., July '94.

syn. *Youngiana.* RHS., Feb. 13, '94. G. Young, St. Albans. fg. Jrl. Hrt., March 7, '95. Gd. Mag., Feb. 16, '95.

syn. *Schilleriano-gloriosa.* RHS., March 25, '90.

syn. *Leda.* Stray seedling. Veitch. G. Ch., April 14, '88.

Luedde-violacea (violacea ♀). Veitch, Chelsea. RHS., July 23, '95. fg. Jrl. Hrt., July 25, '95. O. R., Sept. '95. gives parentage as above on p. 285, and *vice versa* on p. 259.

Rothschildiana Rchb. f. (Schilleriana ♀ × amabilis Blume [not amabilis Lindl., as Rchb. f. states]). G. Ch., May 7, '87. Veitch, Chelsea.

speciosa Rchb. f. nat. hyb. (Lueddemanniana × tetraspis) G. Ch., April 30, '81. var. *Imperatrix.* fg. Rchbch., t. 51. var. *Christiana* —?—

Valentini Rchb. f. nat. hyb. ?(cornu-cervi × violacea). G. Ch., Sept. 1, '83. Named after collector Valentine, with Low, Clapton.

Veitchiana nat. hyb. ?(Schilleriana × rosea). G. Ch., '72, p. 935.

PHALANTHE.

(Phaius × Calanthe.)

inquilina (Phaius i. Rchb. f.) (Phs. —?— × Clt. vestita). Dominy, for Veitch. G. Ch., 1867, p. 544. "A mythic plant."

inspirata (Phs. grandifolius × Clt. Masuca). V. M.,'94, pp. 93 and 146. But one plant raised.

irrorata (Phaius i. Rchb. f.) (Phs. grandifolius ♀ × Clt. vestita Turneri nivalis). Dominy, for Veitch. G. Ch., '67, p. 264. fg. Fl. Mg., t. 426.

var. *albiflora;* from same parents. RHS., Jan. 17, '93.

var. *Arnoldiæ* (Clt. vestita Regnieri ♀). RHS., Jan. 16, '94. Sander.

var. *rosea.* fg. Jrl. Hrt., April 18, '95.

var. *purpureus* (Clt. vestita rubro-oculata). Seden, for Veitch.

Sedeniana (Phs. S. Rchb. f.) (Phs. grandifolius ♀ × Clt. Veitchii ×). Seden, for Veitch, Chelsea. G. Ch., Feb. 5, '87. fg. Jrl. Hrt., Dec. 6, '94.

Also raised by Smythe, Alton. G. Ch., March 16, '89.

var. *rosea* Rolfe. (Clt. Veitchii × ♀). Lambert, for Riley, Bromley. O. R., March, '93.

SACCOLABIUM.

bellino-bigibbum. Nat. hyb. With Moore, Glasnevin. O. R., Feb., '95.

SATYRIUM.

Guthriei Bolus. nat. hyb. (bicallosum × candidum). Found by Guthrie near Cape Town. Bolus Ic. Orch., Aust.-Afr., i, t. 21. 1893.

SCHOMBLETIA.

(Schomburgkia × Bletia.)

Sdlgs. of (Bletia verecunda ♀ × Schomburgkia tibicinis) raised by Mead, Oviedo, Fl. O. R., Sept., '95.

SELENIPEDIUM.

Synonyms:

Albanense—Sedenii.
album—cardinale.
Browni—Ainsworthii.
calurum—Ainsworthii.
chlorops—conchiferun.
chrysocomes—nitidissimum.
Clonius—nitidissimum.
Clymene—Dominii.
delicatum—Ainsworthii.
Edithæ—Baconis.
Emily M. Rœbling—Sedenii.
Hanishianum—Brysa.
Helen—Schrœderæ.
hybridum—nitidissimum.
John Ashworth—Brysa.
Lemoinierianum—Sedenii
leucorrhodum—Sedenii.
macrochilum—grande.
macrochilum giganteum—giganteum.
Mrs. W. A. Rœbling—Schrœderæ.
Penelaus—Hardyanum.
Phædra—Perseus.

porphyreum—Sedenii.
reticulato-Albanense—Brysa.
robusticum—Ainsworthii.
robustius—Ainsworthii.
Rougieri—Ainsworthii.
rubicundum—cardinale.
tenellum—Sedenii.
Thersites—Perseus.
Venus—Brysa.
Weidlichianum—Sedenii.

Species used in crossing:

Boisserianum Rchb. f. (syn. *reticulatum* Rchb. f.)
Schlimii—Cleola.
Sedenii ×—Brysa.

caricinum Lindl.
caudatum—Dominii.
longifolium—conchiferum
Schlimii—stenophyllum.

caudatum Lindl.
Ainsworthii × —Hardyanum.
cardinale × —Finetianum.
conchiferum × —nitidissimum.
caricinum—Dominii.
grande × —giganteum.
longifolium—grande.
Schlimii—Saundersianum
Sedenii ×—Schrœderæ.

Lindleyanum Schomb.
longifolium—longifolio-Lindleyanum.
Schlimii—L'Unique.
Sedenii ×—Perseus.

longifolium Rchb. f. & Warsc.
cardinale × —longifolio-cardinale.
caricinum—conchiferum.
caudatum—grande.
Lindleyanum—longifolio-Lindleyanum.
Schlimii—Sedenii.
Sedenii ×—Ainsworthii.

Schlimii Batm.
Boisserianum—Cleola.
caudatum—Saundersianum
caricinum—stenophyllum.
conchiferum ×—Edithæ.
Dominii ×—albo-purpureum.
Lindleyanum—L'Unique.
longifolium—Sedenii.
Sedenii ×—cardinale.
vittatum—Stella.

vittatum Vellozo.
Schlimii—Stella.

Hybrids used in crossing:

Ainsworthii.

(longifolium × Sedenii×.)
caudatum—Hardyanum.
Sedenii ×—compactum.

cardinale.

(Sedenii × × Schlimii.)
caudatum—Finetianum.
longifolium—longifolio-cardinale.
Sedenii ×—Rosy Gem.

conchiferum.

(caricinum × longifolium.)
caudatum—nitidissimum.
grande ×—Elsteadianum.
Schlimii—Edithæ.
Sedenii ×—Coppinianum.

Dominii.

(caricinum × caudatum.)
Schlimii—albo-purpureum

grande.

(longifolium × caudatum.)
caudatum—giganteum.
conchiferum ×—Elsteadianum.
Sedenii ×—pulchellum.

Sedenii.

(longifolium × Schlimii.)
Ainsworthii×—compactum
Boisserianum—Brysa.
cardinale—Rosy Gem.
caudatum—Schrœderæ.
conchiferum ×—Coppinianum.
grande ×—pulchellum.
Lindleyanum—Perseus.
longifolium—Ainsworthii.
Schlimii—cardinale.

Ainsworthii (longifolium Rœzlii ♀ × Sedenii ×). Mitchell, for Ainsworth, Manchester. G. Ch., '79, p. 748.

syn. *calurum* Rchb. f. Seden, for Veitch. G. Ch., Jan. 8, '81. fg. Ldn., t. 304. Fl. and Pm., t. 619. L'O., June, '92 (var. *Rougieri*). O. A., t. 136.

Also raised by Bond, for Ingram, Godalming. RHS., Sept. 24, '94.

syn. *Brownii* (longifolium magniflorum ♀ × Sedenii leucorrhodum ×). Pitcher & Manda, Shorthills. RHS., July 7, '91. Named after Brown, St. Louis.

var. *robustius* Rchb. f. (Sedenii × ♀). G. Ch., March 30, '89. Horn, for Rothschild, Vienna.
robusticum Hort.

var. **delicatum** Rolfe (longifolium Hincksianum ♀ × Sedenii candidulum ×). Hincks, Richmond. O. R., Aug., '93.

albo-purpureum Rchb. f. (Schlimii ♀ × Dominii ×). Dominy, for Veitch. G. Ch., July, '77. Gdn., xxi, p. 332.

Baconis Krzl. (conchiferum [chlorops] × ♀ × Schlimii). G. Ch., Feb. 6, '92. Sander, St. Albans. Named in memory of Francis Bacon. Sown Nov. 4, '88, seedlings March, '89, flowers Jan. '92.

syn. *Editha* Krzl. (conchiferum × ♀ × Schlimii albiflorum). G. Ch., Oct. 15, '92. Sander, St. Albans. Dedicated to Mrs. Editha Boyle.

Brysa (Sedenii candidulum × ♀ × Boisserianum). RHS., March 8, '92. Veitch.

syn. *Venus* (Sedenii Albanense × ♀). RHS., July 25, '93. Sander, St. Albans.

syn. *Hanishianum*. From same seedpod. Sander, St. Albans. 1893.

syn. *John Ashworth* (Sedeni candidulum × × Boisserianum reticulatum). Ashworth, Winslow. RHS., Nov. 13, '94.

cardinale Rchb. f. (Sedenii × ♀ × Schlimii albiflorum). G. Ch., Oct. 14, '82. Seden, for Veitch. fg. V. M., '89. Gdn., t. 495. O. R., March, '93. O. A., t. 370.

Also raised by Murray, for Cookson, Oakwood. In litt., March, '93. 20 plants. Crossed Oct. 28,'84.

And with (Schlimii), by Vanner, Chislehurst. RHS., Feb. 11, '90.

Also by Drewett, Riding, 1886. The latter used Sedenii × ♀ as well as Schlimii ♀. He writes that

Rchb. f. insists upon having given the name of cardinal*is*.

syn. *album* (Sedenii leucorrhodum × ♀ × Schlimii). Bond, for Ingram, Godalming. RHS., Aug. 13, '95.

syn. *rubicundum* (Schlimii × Sedenii ×). Measures, Camberwell. M. L., 2d. ed.

Cleola (Schlimii albiflorum ♀ × Boisserianum). RHS., Nov. 11, '90. Veitch.

compactum (Sedenii candidulum × ♀ × Ainsworthii calurum ×). Bond, for Ingram, Godalming. RHS., April 1, '93.

conchiferum Rchb. f. (caricinum ♀ × longifolium Rœzlii). Bowring, Windsor Forest. G. Ch., March 12, '81.

syn. *chlorops* Rchb. f. Parentage doubtful. Horn, for Rothschild, Vienna. G. Ch., May 12, '88.

Coppinianum (Sedenii × ♀ × conchiferum ×). RHS., April 14, '91. Sander.

Dalleanum André. — ?— Dallé, Paris. Rev. Hrt., April 1, '95.

Dominii Rchb. f. (caricinum ♀ × caudatum). Dominy, for Veitch. G. Ch., '70, p. 1181. fg. Fl. Mg., t. 499. Gdn., May 2, '91.

var. **Clymene** (caudatum Wallisii). Veitch. RHS., April 11, '93.

syn. *Dominii albicans*. Veitch. RHS., July 9, '95.

Elsteadianum (conchiferum × ♀ × grande ×). RHS., Aug. 13, '92. Ingram, Elstead House, Godalming.

Finetianum (cardinale × ♀ × caudatum). Finet, Argenteuil. O. R., April, '94.

giganteum (caudatum Lindenii ♀ × grande ×). Veitch, Chelsea. RHS., May 8, '94. fg. Grd. Mag., May 12, '94. Ill. Hrt., May 17, '94. Of an "unusually large form," Originally named *macrochilum giganteum*.

grande Rchb. f. (longifolium Rœzlii ♀ × caudatum). G. Ch., April 9, '81. Seden, for Veitch. Fertilized 1875. fg. Ldn., t. 242.

syn. *Hardyanum*. Holmes, for Hardy, Timperley. G. Ch., May 27, '93.

var. **macrochilum** (longifolium ♀ × caudatum Lindenii). RHS., Aug. 11, '91. Seden, for Veitch. fg. G. Ch., Sept. 19, '91. Lip double as large as longifolium.

Hardyanum (caudatum ♀ × Ainsworthii ×). RHS., Oct. 18, '92, Holmes, for Hardy, Timperley.

var. **Penelaus** (caudatum Lindenii × Ainsworthii calurum × ♀). Veitch, Chelsea. RHS., Jan. 17, '93. fg. Jrl. Hrt, March 16, '93.

longifolio-cardinale (cardinale ♀). Measures, Camberwell. RHS., Aug. 29, '93.

—?— (longifolium Rœzlii × Lindleyanum). Grey, for Graves, Orange. In litt., Jan., '94. Seed germinated in 3 months, but more kept coming up for "over one year."

L'Unique (Lindleyanum ♀ × Schlimii albiflorum). RHS., Aug. 29, 93. Bond, for Ingram, Godalming.

nitidissimum Rchb. f. (caudatum Warscewiczii ♀ × conchiferum ×). G. Ch., July 7, '88. Murray, for Cookson, Oakwood. Crossed July 7, '84, sown Nov. 22, '85, 140 plants. fg. Rchbch., t. 27.

syn. *chrysocomes* Rolfe. G. Ch., June 18, '92. Measures, Streatham.

syn. *hybridum*. Sander. RHS., April 14, '91.

var. **Clonius** (conchiferum × ♀ × caudatum Lindenii). RHS., Oct. 24, '93. Veitch. fg. Jrl. Hrt., Nov. 2, '93. Grd. Mag., Sept. 8, '94. "With a large chaste lip."

Perseus (Sedenii porphyreum × ♀ × Lindleyanum). RHS., Nov. 15, '92. Veitch.

syn. *Phædra* (Sedenii candidulum × ♀). RHS., Jan. 17, '93. Veitch.

syn. *Thersites* (Sedenii × ♀). RHS., Dec. 12, '93. Veitch.

syn. (unnamed) (Sedenii leucorrhodum × ♀). Grey, for Graves, Orange. In litt, Jan. '94. Quickest record of germinating, 2 months.

pulchellum Rolfe (grande × ♀ × Sedenii candidulum ×). O. R., June, '93. Vanner, Chislehurst. "Remarkably like leucorrhodum."

Also raised by Lumsden, Aberdeen. G. Ch., April 20, '95. (O. R., May, '95.) "One flower was normal, resembling leucorrhodum; one other flower on the same plant bore strong likeness to macrochilum (grande× ♀ ×Schlimii albiflorum)."

Rosy Gem (cardinale × × Sedenii ×). M. L., 2d. ed. Raised by Ingram.

Saundersianum (caudatum Warscewiczii ♀ × Schlimii). G. Ch., '86, p. 654. Marshall, Enfield. Dedicated to Saunders, Tres. RHS. Brought 300 gs. at sale of Lee, Leatherhead.

Schrœderæ Rchb. f. (caudatum ♀ × Sedendii ×). G. Ch., April 7, '83. Seden, for Veitch. Dedicated to Baroness Schrœder, Egham. fg. O. A., t. 196. Ldn., t. 69.

syn. *Mrs. W. A. Rœbling.* (Sedenii candidulum × ♀ × caudatum.) Pitcher & Manda, 1893.

var. **Helen** (caudatum Wallisii ♀ × Sedenii leucorrhodum ×). Robinson, for Ames, North Easton. In litt., Feb., '94. Dedicated to granddaughter of Ames.

Sedenii Rchb. f. (longifolium × Schlimii). (Either was used as seed-bearing parent.) G. Ch., '73, p. 1431. fg. Fl. Mg., t. 206 and 302. Seden, for Veitch.

syn S. *rubicundum*. Measures, Camberwell. Gdn., Aug. 16, '90.

Also raised (Schlimii ♀) by Murray, for Cookson, Oakwood. In litt., March, '93. Crossed Dec. 18, '86, sown March 23, '87, 12 plants.

Albanense (Schlimii ♀). V. M., 1887.

var. **porphyreum** Rchb. f. (longifolium Rœzlii ♀ × Schlimii) Seden, for Veitch. G. Ch., '78, p. 366.

Also raised by Drewett, Riding (1886), who states in litt., March, '93: "I have as good a var. of Sedenii candidulum as there is from this same batch."

var. **Weidlichianum** (longifolium Hartwegii × Schlimii). RHS., Dec. 9, '90. Murray, for Cookson, Oakwood. Crossed Aug. 12, '85, sown June 20, '86, 220 plants. fg. Rchbch., 2d. ser., t. 51.

var. **candidulum** Rchb. f. (longifolium ♀ × Schlimii albiflorum). G. Ch., Oct. 18, '84. fg. Ldn., t. 245. O. A., t. 481. Seden, for Veitch.

syn. *Lemoinierianum* Rchb. f. Lemoinier, Lille. Ghent Quinq. Exhb. April 15, '88. (G. Ch., June 9, '88.) V. M., 1889, classes it wrongly under Spd. Ainsworthii calurum.

syn. *tenellum*. (Schlimii albiflorum ♀ × longifolium magniflorum). Pitcher & Manda, 1893.

var. **leucorrhodum** Rchb. f. (longifolium Rœzlii ♀ × Schlimii albiflorum). G. Ch., Feb. 28, '85. fg. O. R., June, '93. Only one plant.

Also raised by Osborn, for Buchan, Southampton. Gdn., March 3, '88.

stenophyllum Rchb. f. (Schlimii ♀ × caricinum). Bowring, Windsor Forest. G. Ch., '76, p. 461.

Stella (Schlimii ♀ × vittatum). Sander. O. R., April, '94.

SOBRALEYA.

(Sobralia × Cattleya.)

—?—unflowered sdlgs. of (Sbr. macrantha × Ct. Warscewiczii). 12 plants. Burberry, for Chamberlain, Birmingham. O. R., Dec., '93.

SOBRALIA.

Amesiana (xantholeuca ♀ × Wilsoni). Sander, St. Albans. Manchester Show, May 31, '95.

Veitchii (macrantha ♀ × xantholeuca). Veitch, Chelsea. RHS., July 24, '94. fg. Jrl. Hrt., Aug. 2, '94.

Also raised by Robinson, for Ames, North Easton. (macrantha nana); in litt., Feb., '94.

SOPHROLÆLIA.

(Sophronitis × Lælia.)

læta (Ll. pumila Dayana ♀ × Sphr. grandiflora). Veitch, Chelsea. RHS., Oct. 9, '94. fg. G. Ch., Oct. 20, '94.

SOPHROLEYA.

(Sophronitis × Cattleya.)

Batemaniana (Sphr. grandiflora ♀ × Ct. intermedia). syn. *Ll. Batemaniana* Hort., Veitch. Seden, for Veitch. Named after James Bateman. G. Ch., Aug. 28, '86. fg. V. M., 1887; sown June, '81, flowered Aug., '86.

Calypso (Sphr. grandiflora ♀ × Ct. Loddigesii Harrisoniana). Seden, for Veitch. G. Ch., Nov. 22, '90. Raised in about 15 years' time.

Also sdlgs. of same parentage under raising by Burberry, for Chamberlain, Birmingham. G. Ch., Dec. 16, '93.

eximia (Ct. Bowringiana ♀ × Sphr. grandiflora). Veitch. RHS., Sept. 24, '94. fg. Jrl. Hrt., Oct. 4, '94. Gd. Mg., Feb. 9, '95.

—?—(Sphr. grandiflora × Ct. guttata Leopoldi). Sdlgs. with Charlesworth, Bradford. O. R., July, '94.

—?—(Sphr. grandiflora × Ct. labiata). Sdlgs. with Charlesworth, Bradford. O. R., July, '94.

—?—(Sphr. grandiflora × Ct. Trianæ). With Schrœder, Egham. Mentioned G. Ch., Nov. 24, '88.

SOPHROVOLA.

(Sophronitis × Brassavola.)

—?—(Sphr. grandiflora × Brsvl. glauca). Raised by Osborne, for Buchan, Southampton (sold afterwards to Sander, St. Albans). Gdn., Sept. 6, '90.

STANHOPEA.

Bellærensis (insigne × oculata). Mantin, Olivet, Orleans. Crossed April, '80; sown April, '89; flowered first June, '91. Soc. Natl. Hort. de France. July, '95.

Spindleriana Krzl. (oculata × tigrina). Weber, for Spindler, Berlin. Gf., Dec., '90. Rv. Hrt., '91, p. 39.

THUNIA.

Brymeriana. Sander. Mentioned G. Ch., July 2, '92.

magnifica (Brymeriana ♀ × Bensoniæ). Sander, St. Albans. RHS., June 11, '95. Exhbtd. as *Veitchiana magnifica*.

superba (Veitchiana × × Bensoniæ). Veitch, Chelsea. RHS., July 10, '94.

syn. *Veitchiana superba.*

Veitchiana Rchb. f. (Marshalliana ♀ × Bensoniæ). Seden, for Veitch. G. Ch., June 27, '85. fg. O. A., t. 326.

Raised at same time and exhibited at same date also as *T. Wrigleyana*, by Geo. Toll, Manchester. This plant was raised by Gordon, for Wrigley, Broad Oaks, Burry.

Also raised by Winn, Birmingham. O. R., Sept., '94. (O. R., July, '95, prints Marshalliæ.)

VANDA.

Miss Joaquim Ridley (Hookeræ × teres). G. Ch., June 24, '93. Miss Joaquim, Singapore.

Charlesworthii nat. hyb. (cœrulea × Bensoni). Exhibited at Manchester Show, May 11, '94. O. R., Nov., '94. Charlesworth, Bradford.

ZYGOCIDIUM.

(Zygopetalum × Oncidium.)

(Zygopetalum Mackayi × Oncidium tigrinum.) Sdlgs. raised by F. D. Horner. Gdn., Nov. 2, '89.

ZYGODENDRUM.

(Zygopetalum × Epidendrum.)

(Zygopetalum Mackayi × Epidendrum ciliare.) Sdlgs. raised by F. D. Horner. Gdn., Nov. 2, '89.

ZYGOLAX.

(Zygopetalum × Colax.)

leopardinus Rchb. f. (Zgp. maxillare ♀ × Colax jugosus). Seden, for Veitch. G. Ch., '86, i, p. 199.

Veitchii Rchb. f. (Zgp. crinitum ♀ × Colax jugosus). Veitch. G. Ch., March 26, '87. fg. Jrl. Linn. Soc., xxiv, p. 170. Jrl. Hrt., Feb. 2, '93. V. M., '93. Sown Sept., '82; flowered March, '87.

ZYGOPETALUM.

Clayi Rchb. f. (crinitum ♀ × maxillare). Clay, Birkenhead. G. Ch., '77, ii, p. 684. fg. O. A., t. 50.

var. *crinito-maxillare*. (maxillare ♀). Hill, for Rothschild, Tring. RHS., July 10, '90.

A nat. hyb. said to be from same origin exhibited by Eley, Hatcham, at RHS., March 26, '89.

leucochilum. O. R., Dec., '93, states (Mackayi ♀ × Burkei). Veitch in litt., Feb. 24, '93, writes syn. Burkei.

Murrayanum Gardner. Said to be a nat. hyb. Sent by Gardner from Brazil. Appeared 1839. fg. Bot. Mag., t. 3674.

Sedenii Rchb. f. (maxillare ♀ × Mackayi). Seden, for Veitch. G. Ch., 1874, p. 290. fg. V. M., '93. Jrl. Hrt., May 11, '93.

var. *pentachromum* Rchb. f. (Mackayi ♀). Seden, for Veitch. G. Ch., April 25, '85. Sown 1876; flowered first 1885.

FIRST SUPPLEMENT;

RECORDING ADDITIONS TO LIST OF HYBRIDS PUBLISHED UP TO OCTOBER 15, 1895.

While the printing of this book was proceeding, everything new and appertaining was inserted in proper place, as far as such course could be pursued. The remaining additions are offered in this first supplement. I note again that the pages listing the new and corrected hybrids might be cut into pieces and attached to strips, which have to be provided for by the binder when arranging pages 80 to 245. As need makes itself felt, I will publish further supplements.

Hybrids which display characters of but one of their parents in more or less prominence, have been attracting attention and causing discussions for quite a time past. We have analogies in our home-life, and are thus prepared to look upon them with interest only, not with astonishment. I resume:

Cypripedium Ashworthiæ, "apparently identical with Leeanum."—(*Godefroyæ* × *niveum*) gave a multitude of seedlings resembling related species.—*Leeanum* "reverting to Spicerianum."—*Marshallianum* "seedlings gave poor venustums."—*Tautzianum* "with no trace of niveum."

LIBRARY OF THE UNIVERSITY OF CALIFORNIA.

Cysepedium-crosses evidently refuse to combine the characters of their parents.

Dendrobium (nobile Cooksonianum × nobile nobilius) "producing ordinary forms of nobile."—*Sibyl* "with no trace of bigibbum."

Epidendrum O'Brienianum "reverting to Epd. evectum."

Epiphronitis Veitchii with "no trace of Sophronitis."

Odopetalum, raised so far, turned out to be forms of Zgp. Mackayi.

Selenipedium pulchellum "resembling leucorrhodum."—*Porphyreum* and *albidulum* from the same cross. —*Sedenii*, resembling longifolium Rœzlii (see page 77.) See also remarks on page 19.

Who is the first to introduce the blood of the wild decideous Cypripedia into our race of hybrids? Would not Cpd. spectabile with its vigorous nature, its stately habit and its lovely bloom reward the bybridizer beyond expectation? An entirely new race of Lady-slippers should be raised with these species, neglected so far.

Corrections in nomenclature were called for in two more instances. Cypripedium Romulus had been established previous to the naming of Grey's hybrid of that name. I substitute "Remus."Thunia Veitchiana magnifica, as exhibited of Sander-origin, has nothing to do with Veitchiana, and is registered as magnifica.

Put Cpd. insigne Chantini instead of Chantinii on pp. 16 and 64.

CATLÆLIA.

syn.: Fortuna—Miss Harris.
Hardyana—callistoglossa.
Parisiana—Miss Harris.

key: **Ct. bicolor** × Ctl. elegans—Andreana.
× Ll. xanthina—Elstead Gem.
Ct. Gaskelliana × Ll. pumila—Eunomia.
Ct. maxima × Ctl. elegans—Charles Darwin.
Ct. Trianæ × Ctl. Schilleriana—D. S. Brown.

add: **Ct. Mastersoniæ** × (Loddigesii × labiata).
× Ll. pumila—Isis.
Ll. pumila × Ct. Gaskelliana—Eunomia.
× Ct. Mastersoniæ × —Isis.
Ll. xanthina × Ct. bicolor—Elstead Gem.
Ctl. elegans × Ct. bicolor—Andreana.
× Ct. maxima—Charles Darwin.
× Ct. superba—Sedenii.
Ctl. Schilleriana × Ct. Trianæ—D. S. Brown.

Andreana (Ct. bicolor × Ctl. elegans). Maron, for Fournier, Marseilles. Rev. Hrt., Sept. 1, '95. Sown 1890 (fide G. Ch., Sept. 14, '95, page 292). Sown 1880 (fide O. R., Oct., '95).

Aphrodite (Ct. Mendelii ♀ × Ll. purpurata).

Arthuriana. Only two plants in existance. Catlg. of sale at The Firs, Lawrie Park, Sydenham, Oct. 16,'95.

callistoglossa var. **Hardyana** (Ct. Warscewiczii ♀). Stafford, for Hardy, Aston-on-Mersey. RHS., Aug. 27, '95.

Canhamiana syn. Marriottii. Marriott, Blandford.

C. G. Rœbling (L*l.* purpurata alba ♀ × Ct. Gaskelliana). fg. Gard. Mag., Aug. 10, '95.

Charles Darwin (Ctl. elegans Turneri Elsteadiana × Ct. maxima). Bond, for Ingram, Godalming. RHS., Aug. 27, '95. fg. Jrl. Hrt., Aug. 29, '95.

Clonia. fg. Gard. Mag., Sept. 21, '95. G. Ch., Oct. 12, '95.

Digbyano-Mossiæ. fg., G. Ch., Aug. 10, '95.

D. S. Brown (Ct. Trianæ ♀ × Ctl. Schilleriana). Sander, St. Albans. RHS., July 9, '95.

Also under raising with Lawrence, Dorking. O. R., Jan., '93.

elegans var. *Owenicæ*. Fide O. R., Oct., '95. With Statter, Manchester.

syn. *Ll. Owenicæ* L. Lind. Described and figured in Ldn. t. 374, as sup. nat. hyb. (Ll. Perrinii × Ctl. elegans).

var. *Wolstenholmicæ*. See Ctl. Schilleriana.

Elstead Gem. (Ct. bicolor ♀ × Ll. xanthina). Bond, for Ingram, Godalming. RHS., Aug. 13, '95.

Epicasta fg. Jrl. Hrt., April 25, '95. Grd. Mag., May 4, '95.

Eunomia (Ll. pumila Dayana ♀ × Ct. Gaskelliana). Veitch, Chelsea. RHS., Sept. 10, '95.

eximia syn. *Parisiana* (Ct. Warneri magnifica) From Hye, Ghent, with Statter, Manchester. RHS., Oct. 15, '95.

Gottoiana. RHS. mtg. Oct. 15, '95, report in G. Ch., substitutes wrongly Ct. labiata for Warneri.

—?— (Ct. Hardyana × ♀ × Ll. Digbyana).

Hippolyta var. **Phœbe** fg. Rchbch., pt. 12, t. 93.

Isis (Ll. pumila ♀ × Ct. Mastersoniæ ×). Veitch, Chelsea, RHS., Oct. 15, '95.

Marriottiana

Miss Harris syn. *Fortuna* (Ctl. Schilleriana [syn. Ctl. elegans alba Hort.]). RHS., Oct. 15, '95. Veitch, Chelsea.

Owenii. See elegans var. Oweniæ. First Supplement.

Schilleriana var. *delicata.* With Measures, Streatham. O. R., Aug., '95.

CATTLEYA.

key: **bicolor** × Bowringiana—
× intermedia—Batalini (*eliminate*).

Bowringiana × bicolor—

Dowiana × Skinneri—Rosita.

Forbesii × velutina—Juno.

guttata × Hardyana × —Fowleri.

intermedia × bicolor—Batalini (*eliminate*).

Lueddemanniana × velutina—Miss Measures.

Mossiæ × Walkeriana—Eros.

add: **Skinneri** Lindl. × Dowiana—Rosita.

Walkeriana × Mossiæ—Eros.

add: **velutina** Rchb. f. × Forbesii—Juno.
× Lueddemanniana—Miss Measures.

Hardyana × × guttata—Fowleri.

Schilleriana × × Warscewiczii—

Batalini. Not of hybrid origin. Fide O. R., Aug., '95.

—?— (Bowringiana × bicolor). Under raising with Mead, Oviedo, Fla. O. R., Sept., '95.

Eros. (Mossiæ ♀ × Walkeriana). Veitch, Chelsea. RHS., Aug. 13, '95.

Fowleri (guttata Leopoldi ♀ × Hardyana ×). Sander, St. Albans. RHS., Aug. 13, '95. fg. G. Ch., Aug. 31, '95.

Hardyana fg. Grd. Wrld. May 11, '95.

var. *Leopold II.* fg. Ldn., t. 479. (In G. Ch., Sept. 21, '95, wrongly given as a var. of Warscewiczii.)

Juno (Forbesii × velutina). Clinkaberry, for Rœbling, Trenton. G. Ch., Aug. 3, '95. In flower June, '95.

Macænas —?—. With Statter, Manchester. G. Ch., Oct. 19, '95.

Mantini (Dowiana ♀). Veitch, Chelsea. RHS., Oct. 15, '95.

Minucia var. **Ashtoniana** (Loddigesii Harrisoniana ♀).

Miss Measures (Lueddemanniana ♀ × velutina). Sander, St. Albans. RHS., July 9, '95.

Rosita sup. nat. hyb. (Dowiana × Skinneri). 2 plants at Proth. & Morris' sale, July 19, '95.

velutina. O. R., Aug., '95, rejects the supposition of its hybrid origin.

—?— (Warscewiczii × Schilleriana ×). Under raising with Mead, Oviedo, Fla. O. R., Sept., '95.

CYPRIPEDIUM.

Synonyms:

Andronicus—W. R. Lee.
Aubigine. Misprint for Antigone?
Bolerlærianum—Harrisianum.
Bragaianum—Germinyanum.
cilio-villosum—Pygmalion
Cycnides—William Lloyd.
G. H. Rogers—Thortoni.
hybridum—Carnusianum, euryandrum, Harrisianum.
Krausianum—Malyanum.
Littleanum—Swanianum (*eliminate*).
Lord Derby—W. R. Lee.
Metis—Priapus.
pendulum—Bryani.
robustum—Loochristyanum.
Romulus *Grey*—Remus.
Tautzianum—Crossianum.
tonso-venustum—Polyphemus.
tonso-villosum—Théodore Bullier.
Vigerianum—Ministre A. Viger.
Wallœrtianum—Williamsianum.

Species used in crossing:

Boxalli Rchb. f. See also page 184.
Bullenianum × purpuratum—Remus.
ciliolare × Philippinense—Alfred Hollington.
Dayanum × Lawrenceanum—Littleanum.
× superciliare ×—Mons. Coffinet.
Haynaldianum × Canham ×—Ino.
× Philippinense—Lebaudyanum.
hirsutissimum × barbatum—porph*yr*ochlamys.
insigne × Javanicum—Javanico-insigne (not Vibilia).
× Javanico-superbiens ×—Vibilia.
× Siamense ×—Reginaldianum.
Javanicum × insigne—Javanico-insigne (not Vibilia).
Lawrenceanum × Dayanum—Littleanum.
Lowii × niveum—niveo-Lowi*i*.
niveum × Harrisianum ×—M*a*rwood*i*.
Philippinense × Haynaldianum—Lebaudyanum.
purpuratum × Ashburtoniæ × —Atropos.
× Bullenianum—Remus.
Sanderianum × selligerum ×—Sanderi-selligerum.
Spicerianum × Siamense ×—
superbiens (superciliare ?) × Swanianum ×—Hecla.
villosum × Morganiæ × —Frederico Nobile.
Ashburtoniæ × × purpuratum—Atropos.
Canham × × Haynaldianum—Ino.
Harrisianum × × niveum—M*a*rwoodi.
Io × × Youngianum ×—Frau Ida Brandt.
Javanico-superbiens × × insigne—Vibilia.
selligerum × × Sanderianum—Sanderi-selligerum.
× Spicerianum—Lynchianum.
Siamense × × Spicerianum—Lynchianum (*eliminate*).
superciliare × × D*a*yanum—Mons. Coffinet.
superciliare × (superbiens ?) × Swanianum ×—Hecla.
Swanianum × × superciliare × (superbiens ?)—Hecla.
add: **Youngianum** (superbiens × Philippinense) × Io ×—Frau Ida Brandt.

A. de Lairesse (Curtisii ♀ × Rothschildianum).

Alfred Bleu (ciliolare ♀ × insigne Chantini).

Alfred Hollington (ciliolare × Philippinense). RHS., Oct. 15, '95. Ayling, for Hollington, Enfield.

Allanianum. Named after Allan, Boston.

Aubigene (—?—) Lee's sale (Manchester), Sept. 24, '95. (G. Ch., Sept. 28, '95, page 365.) Perhaps misprint for Antigone.

Annie Measures. See William Lloyd var. Cycnides.

Ashburtoniæ. Also raised by Poyntz, for Young, Liverpool. O. R., Oct., '95.

Atropos (Ashburtoniæ expansum × ♀ × purpuratum). Poyntz, for Young, Liverpool. O. R., Oct., '95. Sown Dec., '91; sdlgs. appeared April, '93; first flower Oct. '95.

aureum. Sdlgs. of (Spicerianum × nitens Sallieri Hyeanum).

Brunianum. Exhbt. by Williams, Upper Holloway.

Bryani var. *pendulum* (Argus Mœnsii ♀). Heath, Cheltenham. RHS., Aug. 13, '95.

calophyllum, *meirax* (O. A., t. 95).

Carnusianum. Also with (Haynaldianum ♀) by Veitch, Chelsea. RHS., July 23, '95. Report in G. Ch. of RHS. mtg. Sept. 10, '95, states wrongly (Spicerianum ♀).

Charles Rickman. fg. Rev. Hrt., May, '95.

conco–Lawre. fg. O. A., t. 506.

Crossianum var. *Tautzianum* Rchb. f. G. Ch., Jan. 12, '89.

excellens (Rothschildianum ♀ × Harrisianum ×).

Germinyanum syn. *Roberti*. Reverse of Germinyanum.

Harrisianum. syn. *Lobengula.* Belongs not here, but to Williamsianum. Fide O. R., April, '94.

A *yellow form* sold at Proth. & Morris' sale Aug. 9, '95.

syn. *Bolerlœrianum* (Harrisianum Dauthieri × × Harrisianum ×). Flor Pauwels, Deurne. Antwerp Show Sept. 22, '95.

var. **apiculatum.** *Springfield var.* Palmer, Springfield. RHS., Aug. 25, '91.

Javanico-insigne (Javanicum ♀). Pitcher & Manda, Shorthills, 1893.

Josephianum (Druryi ♀ × Javanico-superbiens ×).

Kimballianum. Statement with fig. in G. Ch., June 29, '95, is correct, though at that place is *not* mentioned that it is a nat. hyb. Statement of O. R., Aug. '95, that it be syn. Cpd. præstans, retracted in O. R., Sept. '95.

Lathamianum. Also raised by Veitch, Chelsea. RHS., Feb. 11, '90.

Lebaud*y*anum.

Littleanum Rolfe nat. hyb. ? (Lawrenceanum × Dayanum). Little, Twickenham. O. R., July, '95, fg.

Such nat. hyb. was in cultivation at Sander & Co., St. Albans, in 1887, a water coloring of which I took at the time.

Loochrist*y*anum.

luridum var. **Thayerianum.** syn. *Whitelyanum* (v. Boxalli atratum ♀). Cliffe, for Shaw, Aston-under-Lyne. RHS., Sept. 10, '95.

Note in G. & F., Nov. 23, '92: "*luridum grandiflorum*, largest of the Harrisianum section, and one of Pitcher & Manda's crosses between that species and auroreum ×," is based upon wrong supposition.

Malyanum. syn. *Krausianum.* Am. Grdg., March 23, '95.

Massaianum. See also W. R. Lee.

Morganiæ. syn. M. Burfordiense.

Non Plus Ultra (—?—). At W. R. Lee's sale, Manchester, Sept. 24, '95.

picturatum. Reported wrongly as (superbiens × Spicerianum) at G. Ch., Sept. 21, '95, p. 326, which would make it syn. Hornianum.

Priapus var. **Metis** (villosum Boxalli ♀ × Philippinense). Veitch, Chelsea. RHS., Sept. 10, '95.

Ridolfianum (Williamsianum Wallœrtianum).

DENDROBIUM **Desdemona.** Hybrid? Lee's sale, Manchester, Sept. 24, '95.

Ddr. Gemma (aureum ♀ × superbum Huttonii).

Ddr. Statterianum. With Statter, Manchester.

DISA **Kewensis.** G. Ch., Sept. 7, '95, gives wrongly D. uniflora instead of D. grandiflora as seed bearing parent.

EPILÆLIA —?— (Ll. flava × Epd. fragrans). Sdlgs. under raising with Mead, Oviedo, Fla. O. R., Sept., '95.

EPILEYA —?— (Epd. fragrans × Ct. Skinneri). Sdlgs. under raising with Mead, Oviedo, Fla. O. R., Sept., '95.

Epl. —?— (Epd. nocturnum × Ct. Bowringiana). Sdlgs. under raising with Mead, Oviedo, Fla. O. R., Sept., '95.

LÆLIA. Key of species employed, *eliminate:*
Perrinii Lindl. × —?—. —Oweniæ.

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