THE MYSTERIOUS ORCHID: BY ALICE LOUNSBERRY

"MYSTERIOUS as an orchid, incomprehensible as its ways!" Perhaps it is this mystery in the haunts and growth of the orchid that have made her seem the Cleopatra among flowers, for more than any other growing thing she has cost men their peace of mind, their strength, even their very lives. In her natural haunts she is protected not by fire as Brunhilde in the woods of Valhalla, but by miasma, by seclusion, by the fury of wild beasts, by her inaccessibility and sometimes by the poisonous life which blooms about her, to which she clings, giving grace and destroying personality, for the orchid is not only a rare, proud, mysterious beauty but also a parasite. In the great kingdom of flowers she is among the few who seldom will work for her living, who will not stoop to gather strength from the earth. Wherever she rests, that tree, shrub or wasted trunk becomes a thing of joy, but in return
its individual life must be sacrificed to the alluring, white-winged, open-mouthed beauty who has selected it for support. The orchid indeed is a flower of the air, an ethereal, marvelous, living poem whose waywardness and strangeness, whose remoteness and exotic loveliness are the despair as well as delight of the gardener. “The rose looks fair, but fairer we deem it for that sweet odor which doth in it lie.” And yet the rose with all her variety, delicacy of plumage, her heart of memories, her fragrance that lives in the thought of man through a life time, has never so completely captivated the imagination of the flower grower as the heartless, scentless, unresponsive orchid.

Because of her infinite beauty the orchid has become among flowers a symbol of luxury and inaccessibility, and has brought in individual instances the highest price of any flower. Whole greenhouses have been given up to her cultivation, special exhibitions have been reserved to show her priceless wonder; all this has brought about in the mind of the public the impression that only very rich people could undertake indoor orchid growth, and many who have marveled at her romance, loved her beauty, dreamed of her possession have felt her quite out of reach except through heroic sacrifice, following her into her own mysterious realm through swamps and clinging underbrush, by sleeping animals, deep in poisonous gloom.

It is a matter of fact that rare orchids imported from the tropics or produced through hybridization have so excited competition among dealers and amateur growers that their price has been run up to figures far out of the reach of the flower-lover possessing possibly only a single glass house or a sunroom of small area. But the prices brought for these reigning beauties have no more relation to the general schedule of orchid values than the cost of the peachblow vase to the few shillings paid for lovely potteries made by simple folks.

Even in this country there are now established several great plant emporia, besides nurseries, exclusively for orchids. Among all tradesmen competition is keen, and it is not too much to say that many beautiful orchids may be cultivated as cheaply as, for example, carnations. Certain kinds of orchids have, moreover, through the knowledge of seed-production, attained to immense numbers and can no longer be classed among the rare varieties.

A point more important in orchid growing and one which must unflinchingly be solved is that of their accommodation. Yet even this formerly formidable obstacle is being overcome. A leaf in this connection may be taken from England’s book of experience, since there the cultivation of orchids has progressed steadily for more than a century and a half. Even England has been criticised because she
The strong upright orchid in the photograph below thrives in the warm conservatory or "intermediate house," where it should be potted in equal proportions of loam, peat and sphagnum moss. From its growth, one might almost think it a relative of the daffodil.

The orchid shown above is literally a flower of the air, for it belongs to the class known as epiphytes: it is an evergreen, with flowers that combine strength with wonderful delicacy of coloring: Dendrobium chrysotoxum is its botanical title.

Orchids are divided into two classes: the terrestrials, which grow in the soil, and the epiphytes, which grow on blocks or rafts and draw sustenance from the air.
One of the most beautiful members of this exotic flower family is the Leila Superbiens, a spray of which is seen at the left; this plant requires the same treatment as that given to its sisters, the Cattleyas, and like them can be successfully cultivated by the amateur gardener—a fact unknown to many, who have been under the impression that orchids, like rare and precious stones, are accessible only to the privileged few.

A Madagascar species is shown on the right—a white, star-like orchid of striking loveliness, thought by many to be the most notable of the genus: with such flowers wonders for the reward, one can hardly be surprised that enthusiasts have braved the tangled and gloomy depths of many a strange country in search of new members of this wayward and alluring tribe.
ONE POETIC FLOWER-LOVER HAS LIKENED THE ORCHID ABOVE TO A "HUNGRY NIGHT MOTH". UNLIKE SOME OF ITS RELATIVES IT IS EASY TO CULTIVATE; IT IS PROLIFIC IN GROWTH AND BRILLIANT IN COLORING; DENDROBIUM FINDLAYANUM.

EXQUISITELY COLORED ARE THE FAIRYLIKE BLOSSOMS OF THE ORCHID IN THE PICTURE ABOVE, WHICH BURST FORTH FROM THE BARE STEMS LIKE LITTLE BUTTERFLIES: LIKE ALL THE "DENDROBES" THIS FLOWER IS NOT DIFFICULT TO GROW, AND SHOULD UNQUESTIONABLY BE CHOSEN BY BEGINNERS: IT IS CALLED THE DENDROBIUM MACROPHYLLUM ALBUM.

THE WAXEN WHITE BLOSSOMS OF THE ORCHID AT THE LEFT DRAW THEIR NOURISHMENT FROM THE AIR — A CURIOUS CHARACTERISTIC WHICH HAS HELPED TO GIVE THIS MYSTERIOUS PARASITE ITS ROMANTIC REPUTATION: CHYSIS BRACTEESCENS IS THE NAME OF THIS PARTICULAR PLANT.
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has sacrificed the lives of innumerable courageous men in order that these rare plants might be collected and added to her possessions and her brilliancy of display.

The British specialists divide their orchids into four classes for which are provided four types of houses. The first of these is called the “cool house;” its winter temperature ranging from forty-five to fifty degrees during the night and some ten degrees higher in the day. This house approximates the ordinary greenhouse of the general grower of plants and in it certain Cypripediums and Odontoglossums have been found to live happily. The second house is called the “intermediate,” its temperature kept at five degrees higher than that of the cool house; the third is the “Cattleya house” with a temperature ten degrees higher than that of the cool house and the fourth is the “East India house” with an average temperature of fifteen degrees higher than the cool house. An equipment of houses that seems somewhat luxurious to the mere amateur who has probably no desire to specialize in orchids, preferring to leave such an occupation to the clever nurserymen of the country.

Happily to one who feels the lure of this flower coquette, it is also possible to woo her in a single house of moderate size, provided it is divided into compartments, one of which is kept more moist and warm than the other. By following this simple plan suitable accommodation can be given to a variety of the most important genera. In fact to concentrate on the four great and important genera is the only sensible scheme for the amateur. These may be cited as Cattleya, Dendrobiums, Cypripediums and Odontoglossums. Naturally other worthy genera may be included provided discrimination is used in their selection and the fact established that their comfort will be absolute in one or the other of the provided compartments. As much consideration as this is given to plants of far less mysterious charm than orchids.

The orchid tribe is divided into two great classes: those which grow in soil like conventional plants and which are called terrestrials; and those which grow on blocks or rafts, drawing their sustenance from the air. These latter are designated as “epiphytes.”

AMONG the wild woodland plants of North America the terrestrial species have a generous representation. The pink lady’s slipper, or moccasin flower is an orchid of history and romance. It follows the haunts of the whippoorwill, rests shyly hidden in deep, moist woods and sends forth in May, in the vicinity of New York city, its flower of mystery and grace. Both the large and the small yellow lady’s slippers are native Cypripediums well known to the
flower gatherers of spring. The species reginæ, a rare find now among American wild flowers, is, however, the veritable beauty of the family. It is shy, yet coquettish in personality and radiantly colored. The Habenarias, entirely different in appearance from the Cypripediums, were also known to the North American Indians, who regarded certain varieties as an antidote to rattlesnake poison, and from the roots of the plants brewed a draft which they gave to their little papooses. A small spring orchid, Orchis spectabilis, is picked in the woods by many a country child who has no knowledge that he holds in his hand one of the most human of plants. On many chalky uplands of Great Britain the bee-orchid, the spider- and the fly-orchid are found, and the student of wild flowers who loves best these terrestrial species, recalls that they are so named because of their resemblance to these respective insects. Makers of gardens of special interest and sentiment are also pleased to introduce these plants among their treasures.

The real orchid enthusiast, however, goes in for the cultivation of exotic species and finds overwhelming delight when in aerial, fantastic fashion the whimsical plants respond to his will. The greater number of exotic orchids are epiphytes, those most incomprehensible. Among them the leader of the four most conspicuous types is Cattleyas, which, owing to their large size, their luxurious coloring and distinctive personalities, are known to every lover of flowers. They may be used to exemplify the method of potting in favor for this type of orchid.

Cattleyas are imported to this country. They arrive in a so-
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called dry state and between their roots and leaves there are to be seen greenish-gray, swollen growths which pass among the initiated for pseudo-bulbs. Cattleyas should be set in pots; but they do not require to sink their roots into a mixture composed of leaf mould, sand, manure and loam, or such as is commonly associated with plant nourishment. They should be placed uprightly in good-sized pots and surrounded with crocks, that is, pieces of broken flower pots. These should be cleansed before using and kept fairly moist. In the pots the Cattleyas must be held firmly by means of stakes, otherwise the plants will move about and their rooting be retarded. But when placed, after proper potting, in a suitable temperature rich in moisture the plants take hold quickly. As soon as it is observed that they are well started, both at top and bottom, the pots should be filled in the following manner. Two-thirds of the pot is already supplied with crocks, on top of which is now placed a layer of sphagnum, then a mixture of two-thirds fibrous peat and one-third sphagnum should be stirred in and packed firmly with the fingers until the pot is filled and rounded over its top. And not until this has been carefully done can the plants be regarded as potted. Then as long as their pseudo-bulbs keep robust and unshrivelled they may be looked upon as in good condition.

Such, briefly, is the general method of potting these uninteresting looking leaves and pseudo-bulbs which are Nature's accompaniment to flowers renowned among men for translucent loveliness.

These pseudo-bulbs of orchids act in many cases as a sort of thermometer, registering their welfare. While they continue fresh and round-looking, the danger signal is at rest; but when they begin to shrivel and dry, the skilful grower scents trouble and bestirs himself to locate the reason for their derangement. His hope is to keep them from shrivelling throughout the winter, an undertaking which, when accomplished, indicates that the plants are all right. Some orchids are without these wea-

THE BLOSSOMS OF THIS ORCHID, THE BRASSAVOLA, ARE SUGGESTIVE SOMewhat OF LILIES.
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WHITE FRAGRANT FLOWERS WITH LONG GREEN SPURS BELONG TO THIS ORCHID, ANGERECUM SCOTTIANUM.

imported in large quantities and can at times be bought very cheaply. It blooms in late spring and summer. Citrina, small, fragrant and yellow throws out its bloom in spring. Labiata vera in rose or purple with yellow, reserves its flowers until the autumn. Of these and other species there are now many varieties, and owing to this very wide range in the time of their bloom amateurs frequently specialize in Cattleyas as giving them the most extended delight.

DENDROBIUMS are likewise epiphytal orchids and among the most beautiful. In growth they are free and prolific and in coloring exquisitely brilliant. The blooms are not as large as those of Cattleyas, but they grow in drooping spikes heavy with numbers of elfinlike flowers. Wardianum, which blooms late in the winter, is one of the best varieties; Nobile has a number of fascinating forms; Superbum shows purple blooms in spring, and there are also a great many others since specialists have been very successful in their hybridization.

The Dendrobis are not difficult to grow and should unquestionably be chosen by the beginner. The imported pieces should be treated much like Cattleyas. When they cease to throw out fresh leaves it may be taken as a signal that their resting period is at hand. Like other orchids, at this time they should be placed in cool places and given less water.

Odontoglossums are essentially cool house plants, also those which with judicious treatment are among the most readily grown. Odontoglossum crispum in disporting its spray of bloom is one of the
fairest sights, a fantasy of the forest. The flowers come forth as if on the wings of the air since their foliage gives no hint of the beauty that will one day spring from the same base. Their pseudo-bulbs, as is true of those of other orchids, should be kept above the level of the rim of the pot in which they are grown. This genus is especially impatient of dry air and insufficient ventilation.

Cyripediiums, another of the great orchid families which should appeal to amateurs, require for the most part a warm house, in fact a night temperature which in winter does not fall below fifty-five degrees. There are a few which grow under very little heat. Insigne, the best known member, is one of the few orchids that amateurs need not hesitate to introduce among a general collection of hothouse plants.

Cyripediiums are terrestrial orchids and it is their strange forms which attract attention rather than any brilliancy of coloring, green, bronze, purple and silver being among their leading tones. They are easy to grow and while they do not immediately catch and dazzle the eye they hold the interest through their apartness from one's usual conception of flowers.

In England a few years ago, a craze sprang up over the Cyripediiums. Extraordinary prices were paid for certain species and there are still growers who cultivate them to the exclusion of all other genera. Cyripediiums have in fact been more crossed and recrossed than any other orchids, and their varieties are endless. The common name of Lady's Slipper clings to them because of the shape of the lip, more like a sabot however than the modern slipper.

Using these four genera, Cattleyas, Dendrobiums, Odontoglossums and Cyripediiums as a basis for a collection, the amateur will find range of color and form enough to satisfy his desire and to give him a legitimate, if not an over arduous, experience in orchid cultivation. He will avoid the flagging interest of
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those who begin on too elaborate a scale, enter too many unsuitable genera, and who find themselves doomed to watch with discouragement plants failing to present the same quality of bloom that has turned the eye toward the florist’s window.

Orchids are really among the most responsive of plants. Certain conditions they demand, it is true; good ventilation, warmth and moisture and to be potted according to their peculiar taste. Mainly they grow during the summer, rest in winter and flower in spring. When growing they need much water; when resting they require very little. These requirements however have been so closely studied and such hard and fast rules concerning them have been established that uncertainty concerning their treatment no longer exists. A visit to one of the orchid nurseries of the country will greatly assist the amateur grower, the systematized knowledge to be had on orchid culture then being enlarged by individual, practical experience. The things that through observation and care one finds out about these exotics render them especially interesting and precious.

No “glass house” is more attractive than the one filled with orchids. Herein the plants are seen in various stages of growth, in pots, or hanging in baskets from the rafters. For several months of the year a world of peculiar texture and coloring is here represented, one in which the thoughts may wander to distant and romantic fields. In truth, no other flower has a like power to carry the mind into strange and far countries.

Scientists have argued long over the curious, often distorted orchid shapes. It is now generally believed that these flowers, which are dependent on insects for cross-fertilization, have achieved the shapes of certain large moths, flies, bees and other insects in order to attract unto themselves these agents of creation. Aiming at self-preservation, others take the forms of creatures that destroy them, frogs, lizards and snakes, since by assuming the appearance of their enemies they secure immunity from attacks. The native Cypripedium reginae and a larger, related South African species have the form of a great spider, the habit of which was to catch small birds and to sting them to death with its bite. It also was thought that humming birds observing this resemblance of the orchid to the dreaded spider passed it by and that thus its nectar was preserved from their pilfering.

It requires no stretch of the imagination to connect a spray of Dendrobiums, Odontoglossums with a flight of butterflies; and a large Cattleya might readily seem a tropical night moth on the wing seeking its prey. Indeed with these hints freely given by orchids themselves florists have learned to play the bee or fertilizing agent so success-
fully that orchids have been crossed and recrossed and a vast number of hitherto unknown types placed on the market. Tropical orchids have been raised from seed both in England and in this country with as much facility as the newer types of gladioli. The operator acquaints himself first with the individual structure of each flower and then imitates closely the ways of the insect world. The pollen taken from one flower is placed on the stigmatic surface of another chosen to be the seed-bearing parent. The bloom selected for cross-fertilization should have its own pollen removed; it need not be destroyed, however, but used to cross another plant. The golden dust of the orchid world must indeed be valuable. Sustained care and delicacy of touch are needed in the successful fertilization of orchids. The work is not difficult. But to the amateur who tries it for the first time the excitement is great when the bloom that he has fertilized fades to be replaced by a capsule containing seed. Patience then must not forsake him for the seed must still be sown and its offspring tended carefully before the flower that he has helped to create is unfolded for his delight. Will it fulfil the high hopes of the operator, adding one more to the already long list of orchid marvels; will it line his pockets with gold; give his name to posterity? Such are the questions he asks himself while pondering perhaps on the mystery of an orchid capsule, a South African species containing over a million and a half of tiny seeds.

A STATELY HOUSE

They built a stately house and dwelt therein and men said, “All their tastes are gratified, how happy they must be.” And they came and went and were not satisfied, for they felt that they had no abiding place. And they bought more things for the house. Not until there came a birth did they begin to feel the sheltering walls. But once came Death, who took the best beloved, and as he went he set the great seal upon the house where they had lived and made it Home.

Gertrude Russell Lewis.