House Plants
AND
Their care.

Compliments of

Hugo Mulertt

See Page 54.
THE JOHN CHURCH CO.

GENERAL FACTORS.

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Honest Piano at Honest Price.
HOUSE PLANTS

AND

THEIR CARE;

ALSO,

HINTS FOR THE CARE

OF

GOLDFISH AND CANARY BIRDS.

A MANUAL FOR EVERY HOME OF TASTE.

BY

HUGO MULERTT,


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CINCINNATI, OHIO.

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Plants and flowers for decoration will harmonize completely with any architecture or furniture of the parlor. Indeed, was there ever any of them out of place in a beautiful room? For the sick-chamber nothing is more beneficial.

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General Management of House Plants.

The great secret of success in house gardening consists in overcoming, as much as possible, the disadvantages under which the plants labor, and rendering their position and treatment as much as possible like those growing in the open air.

Plants want plenty of light during the day and darkness at night; they want fresh air, and whenever there is a mild day the upper sash should be opened for them a little, for the air should not strike the plants directly, as this would chill them, nor should plants ever be permitted to stand in a draught, either in summer or winter. Also avoid a location where you would touch the leaves of the plant frequently with your dress. Dusty air is fatal to plants.

Get good, healthy plants to begin with, keep not more than you can comfortably, and select plants according to the facilities, regarding light and temperature, you have for them. For instance, a plant that requires shade will not flourish in a sunny window, and vice versa.

TEMPERATURE FOR HOUSE PLANTS.

The greatest success will be found to come from a uniform temperature of 45° or 50° F. at night, and 60° to 75° in
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WEDDINGS AND FUNERALS
Always on hand.
the day-time; 80° is too hot except for only some plants of semi-tropical character. Under no circumstances should the temperature go below 35°.

PRECAUTION AGAINST DUST.

Dust and dryness of the atmosphere are the two greatest troubles of indoor flower-growing. The first is avoided by covering the plants with a light cloth while the room is being swept, and when it has accumulated it is removed by placing the pots in a sink or washtub, and showering the foliage with tepid water from a pot provided with a fine rose. The second is overcome to a certain extent by keeping water on the furnace or stove that heats the room, if it be warmed by artificial heat. Open fires give but little trouble, while hot-air heaters are as unhealthy for plants as for man. Another plan recommended is to place the pots on clean sand kept constantly moist. The sand may be spread to the depth of about two inches in a shallow zinc box, of the size of the window-sill upon which the plants usually stand.

WHEN AND HOW TO WATER.

"When shall I water my plants?" is a vexed question, asked perhaps more frequently than any other by the beginner. This depends entirely upon the nature of the plant,
Lee's Filtering Joint.
Something New for the Trade.

Indispensable to every Householder who uses Cistern Water.
The Cheapest and Best Filter ever introduced.
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SAMUEL HANNAFORD, Architect and Superintendent,
CINCINNATI.

MR. THOMAS LEE, City:

Dear Sir—This summer I have had a good opportunity to observe the workings of the filter joints that you put in the fall pipes at my residence at Winton Place, and I take this method of thanking you for putting them on, and for calling my attention to their usefulness. I consider them a very good thing, and in the future shall specify them for all houses that take the roof water to cisterns. I was surprised by the amount of dirt that they caught and held from getting into the cisterns, and I congratulate you upon your very useful invention.

Very respectfully,

SAMUEL HANNAFORD.
for some need more water than others, and yet a soil thoroughly wet is totally unfit for plant-growing. The real idea each cultivator should aim for is to supply the plants with water which may drain rapidly through the pots, yet sufficient be retained to give a good moist soil for the plant to live in. If the water passes away rapidly it will need replacing frequently. It is generally a sign of health when

the soil is well drained and the plant uses up the supply of water quickly.

The purposes of watering should be better understood. 1st, water supplies to the roots fertilizing matter, contained in itself, and 2d, it converts the nourishment of the soil into a liquid form more readily fit for absorption by the roots. The roots can obtain it only when the soil is dampened.
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Never give water when the soil is moist to the touch, but wait until it is dry.

The healthiest plants require water the most frequently; and yet it may appear a contradiction to say that the plants which contain the most watery tissues, the Cacti, grow in the dryest places.

Water cold from the well or pump is not suitable for plants, unless of a temperature of 60 degrees. Rain-water is best, for this is supposed to contain some little ammonia from the sky.

The best rule in all cases is to use water warm to the hands. Some florists advise water no colder than the atmosphere. We believe it generally best to use it warmer. In cool mornings it should be lukewarm, say not under 55 degrees. Over 150 degrees is neither necessary nor safe.

Nearly all plants desire more when in flower than at any other time. The supply of water must be regulated according to the demand of the plants. Calla Lilies will absorb water two or three times as quickly as any other plant. If rain-water can not be easily obtained and hard water is the only source on hand, add a little soda to it and let it stand for a while; use a small piece, say a small nugget of the size of a pea, to every gallon; on that pour about a pint of boiling water and then fill it up with cold water. It will be quite warm, and a thorough drenching overhead and in the pots will vastly improve their color and health. A drop or two of hartshorn will also correct hard water somewhat. In watering, never wet merely the surface, but moisten the whole ball of earth in the pot. If the ball should yet be very dry, set the whole pot in a pail of warm water till it is soaked through. The morning is the best time of the day for water-
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ing during the cold season, while the evening is best in summer. A common hand-brush, made of broomcorn, dipped into warm water and shaken over the plants will imitate a summer shower. Care should be taken that the pots have good drainage, for then all surplus water will run into the saucer, which may be emptied as fast as filled. In warm, mild weather, when plants absorb a great deal of moisture, it will do no harm to leave a little in the saucer. Among other details to be observed in watering, the following items of caution are to be observed: Some plants should never be wetted on the leaves. Take the Begonia Rex, whose foliage, so large and grand, has an exquisite coloring; if its leaves were to be sponged with cold water, and the plant left out on the balcony or in open air, it would probably die very soon; but a Camelia can be treated the same way and not be injured in the slightest. The reasons for it are good. The

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last plant has a hard, shiny leaf, which can resist rough treatment; but the other has a succulent, tender leaf, easily affected. The novice, then, may generally find it true that the plants with soft, porous and hairy leaves should be very cautiously wetted overhead, but plants with hard, varnished leaves may be watered frequently. Tepid water should be invariably used even down to the height of summer. If plants get infested with vermin, a sponging with soap, as sold by the florists, and water made into a lather, will clear them. Then follow with clear water to remove the soap. It is also a good rule to observe that the colder the weather the less water must be given; and when plants are at rest, done growing, they need very little indeed.

Plants in cases may be watered once a week, for evaporation there is confined, but in open rooms once a day is sufficient. Some plants which delight in very moist situations, need it twice a day. Never water when the sun is hot.

TREATMENT OF FROZEN PLANTS.

During the cold spells our plants are liable to get "snapped" by "Jack Frost." In spite of our precaution in their behalf, some may be found frozen stiff in the morning.

If this happens, don't get discouraged. Take the frozen plants tenderly and dip them into cold water, as the cistern or hydrant furnishes it (or if the plant is too large for that sprinkle it for a minute or two), then place them in complete darkness, and in three days at the most you will find them as fresh as ever.

If the pots are set back at night from the windows on a piano, mantel or table, they will often escape freezing.
R. Schaefer,
Florist,

North Fairmount, Cincinnati, O.

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Vases and Floral Designs

In Every Size and Description.

Large assortment of Palms and other House Plants.

Roses a Specialty.
Fastening a blanket or several thicknesses of paper against the windows outside will also tend to protect them.

**REPOTTING PLANTS AND SOIL.**

When repotting plants see that the soil you use is in proper condition, neither too wet nor too dry. If too wet, it will clump together and the roots cannot penetrate it.

![Dracaena terminalis](image)

A good compost, suitable for nearly all kinds of house plants, is wood mold and sandy loam, equal parts, mixed with one-third its bulk of rotten cow manure. This is worked over until it is reduced to a fine, evenly-grained compost.

But other precautions are necessary, besides having a suitable compost, to be successful in raising and keeping house plants. When they are first potted (taken in from the garden) it is important that they gradually become ac-
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customed to their changed mode of life. They should be taken up from the ground while there is yet growing weather, carefully pressed into the pot, pruned to diminish the evaporating surface, and shaded a few days till they recover. When the plants are taken indoors, it is best to keep them in a room without a fire, and where they can have plenty of air on mild days. October is a good month for potting most flowers for the winter.

THE POTS FOR PLANTS.

Let the pots be new if possible; if you use old ones have them well washed inside and outside, and dried again before use.

All pots in which plants are to be grown must have at least one hole in the bottom, so the surplus water may run off; if this remains, the plants will soon die. Pots should be also of porous material; such as the common flower-pots are made of is best. Never paint your pots therefore! Ornamental china pots are intended merely as a cover of a common pot.

Regarding the size of pots, it may here be stated that, as a rule, amateurs use too large pots for their plants. Always bear in mind that not the quantity but the proper quality of the soil is what grows the plant, if otherwise properly cared for, to perfection.
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:. A longer list will be sent on application.
FERTILIZERS FOR POT PLANTS.

Pot plants will be greatly benefited if a stimulant of some kind is given them now and then. Especially during their growing season they should at least once a week be watered with liquid manure. Preparations of various kinds of so-called "plant food," in liquid and powdered forms, can now be had at a small cost at the florists'.
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SATISFACTION GUARANTEED.

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CINCINNATI, O.
SHAPE OF PLANTS.

Once or twice a week will be sufficient for turning pots around. If this little item is not attended to you cannot grow finely-formed plants, and more than half their beauty depends upon their shape.

PLANTS INFESTED WITH VERMIN OR SICK.

Plants require cleanliness to remain healthy; sponge them whenever a mild day permits, and sprinkle the leaves above and below their surface. If a plant fails through over-watering or other neglect, it may often be saved by repotting it. The soil should be entirely washed off of the roots with warm water in such a case; trim the roots, also the top rather close, then pot it in a clean, dry pot and well-prepared compost.

Insects may be destroyed by aid of the various insectisites sold.

OVERWINTERING PLANTS.

Oleanders, Crape Myrtles, Pomegranates, Hydrangias and others which are wintered over in frost-proof cellars should not be allowed to suffer from draught or become entirely dry. They should at least be once watered while thus resting.
Joseph Feldmann,

FLORIST,

Cut Flowers, Straw Baskets, Etc., Etc.,

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Floral designs of every description made to order.
THE PALMS.

The palms are natives of tropical countries, where some varieties grow to be very high trees. They are cultivated in this country only for the beauty of their foliage, which makes them a very desirable parlor ornament. Most of them are grown from seeds; only plants intended for large conservatories are imported from their native countries.

Nearly all of the family are excellent house plants, and will live with little care for years.

The most desirable, because of easy culture and showy, are: Areca lutescens, A. rubra, Chamaerops exelsa, Corypha australis, Cocos Wedelliana, Seaforthia elegans, Raphis flabeliformis, Phoenix, all varieties, Cycas revoluta and last, but not least, Latania borbonica.

Palms should never be allowed to get dry; in fact, during the summer they should stand in a saucer of water, from where the roots will take up their supply as they want it. Keep the foliage free from dust, and wash them once in a while with a sponge and tepid water. They do not want any sun, but plenty of light; they are sure to die in parlors where all the blinds are closed.

(25)
G. N. MERRYWEATHER,
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GENUINE TEAS,

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FERNS.

Before speaking of their cultivation, let us take a glance at the nature, habits and habitats of the plants themselves. What is a fern? Leaving out all botanical terms and niceties, a fern may be described, in a popular way, as a plant which bears leaves only, and no flowers, distinguished from other plants not in flower by bearing its seed (called spores) upon the under surface or along the margins of its leaves. These spores are seen as brown dust-like patches—round, oval, or in lines. They are arranged with great regularity, and upon their arrangement, form and covering botanists base their division and classification into the different genera and species. The development of a fern leaf also differs from that of most other plants: in the bud it is usually
THE KNIFE OF THE AGE!

Handle and Blade one solid piece of Rogers' Best Steel, triple plated the entire length with pure silver. No rivets, no joints, no rust. It is as nearly imperishable as it is possible to construct a knife. Medium size, $4 per dozen. Forks to match at the same price. Dessert or Tea Size, $3.50 per dozen.

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rolled up from the point to the base. To this rule, however, there are some exceptions. There are two hundred genera and two thousand species of ferns described by botanists. They are distributed over the whole surface of the earth, from the equator to the cold regions of the north and south, and always flourish best, whether in temperate or tropical zones, in moist, shady places.

The stems of this plant are usually creeping, but sometimes, as in the case of the tree ferns of the tropics, they are erect.

![Plant Case](image)

The creeping stems are under ground and the leaves or fronds are the only part of the plant which shows above the surface. In height they vary from two inches, and even less, to a few feet; but the tree ferns of the tropics often attain an altitude of fifty feet and even much more. Indeed, they are said to rival the majestic palms.

It is with the evergreen ferns that we have most to do, as they will serve to cheer us in the winter when all of the de-
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ciduous ones are asleep out of sight. You can get young plants from the florist, or, if you choose to take the time and trouble, you may grow them from the spores. This is the natural way in which ferns are propagated, just as flowering plants are grown from seed.

Now place the pots in a position where they will have an abundance of light but no direct sunshine, and keep them in a uniform state of moisture. But how can this be done, you ask. If you set them on a table and water them, no matter how thoroughly evaporation goes on, not only from the surface of the soil, but also from the sides of the porous pots, in a few hours the little ball of earth will dry out, and shrink from the sides of the pot, leaving a space through which the water will run out the next time you give a supply,
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CINCINNATI, OHIO.
and the fern will droop and soon perish from drought. Nor will it do to set them in saucers of water, for that will sour the earth, rot the roots and kill the plants just as surely as drought. Ferns are very impatient of standing water. Set the pots on a moderately thick layer of sand or moss, which can be kept wet to compensate for the waste caused by evaporation from the sides of the pots, and also to supply moisture to the air of the apartment. A dry atmosphere is just as detrimental to the growth of ferns as a dry soil. A very pretty and efficient way is to procure a wooden box as wide and long as your table, and deep enough to hide the pots. The ends and sides may be painted or otherwise ornamented to suit your taste. In this box fit a zinc pan about an inch deep, and fill it with sand; upon the sand place a layer of moss thick enough to raise the bottoms of the pots above the rim of the pan. When the pots are placed upon this moss, if you happen to give too much water it can not drown the plants, because it will run over the pan and can be drained into a vessel beneath, to protect your carpet. If the evaporation from the moss and sand does not furnish sufficient moisture to the air of the room, to keep the plants in a fresh and vigorous state, some means must be adopted to increase it. If you have a stove, keep a vessel of water on it; if a furnace or open grate, a shallow dish of wet moss or sponges placed under the fern-stand will answer the purpose. This is the winter treatment. When the warm weather comes, your plants want more of the outside air, the windows must be opened, more or less, and later some of the more robust ones will do well altogether out of doors in the shade. But if you put any of the more delicate ones out, let it be in a position where they will be protected from
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W. H. McKinney,
Manager,

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winds and beating rains. I think it best to keep them in a room where the windows can be closed in case of storms, for the wind breaks the delicate fronds, the rain beats them down, and night-prowling cats are very destructive. Be-
L. F. WEHRMANN & SON

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sides, in the house it is much easier to guard them against the ravages of grasshoppers, caterpillars, bugs and other enemies. Do not sprinkle the fronds every time you give the plants water, but only often enough to keep them clean and free from dust. It would also be a good plan to have a post at each corner of your fern-stand, or some other arrangement by which the plants could be covered with a light sheet while sweeping and dusting the room, or they might be grown in a glass case together with other tender plants.

Now, having given a sketch of the general culture of ferns in the house, we will give a list of the varieties that recommend themselves to our care.

Adiantum capillus veneris (Maiden Hair Fern), Asplenium viviparum, Scolopendrium uredulatum (Hart’s Tongue Fern), Nephrolepis exaltata (Sword Fern), Pteris tremula, P. argyrea (Silver Fern), Lomaria gibba, Blechnum brazili-ence, Dicksonia antarctica, Alsophila australis—these last four are tree ferns; Platycerium alcicorne (the Elk’s Horn Fern), and the beautiful climbing fern—Lygodium scandens.

THE FOLIAGE PLANTS.

This class of plants is cultivated for the graceful form or beautiful color of its foliage. The following is a list of the most desirable ones for parlor decoration, being of easy culture and suitable for our climate:

Musa ensete, Musa zebrina, Musa Cavendishii, Maranatha zebrina, Dracaena terminalis, Pandanus utilis, P. javanensis, Philodendron pertusum, Curculica recurvata, Aspidistra lurida, A variegata. For their care, follow the general rules.
Vine Street Marble and Granite Works.

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Manufacturer of and Dealer in
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All Work Neatly and Promptly Executed. Take Vine Street Cable Cars.
THE RUBBER PLANT.

The Rubber plant (Ficus elastica) is of easy culture, but sensitive to cold; and in severe, cold weather it should be the first, therefore, to be looked after.

THE BEGONIA.

Some of these are cultivated for the beauty of their foliage, others for their flowers. If the former is the case, the pots should not be turned around, so the foliage may all face in one direction. Begonias may be grown, also, in plant cases to advantage, together with Ferns and the beautiful Anthuriums.

THE GERANIUM.

These plants require plenty of sun, air, water, a rich loamy soil, with weekly watering of liquid manure, and a season of rest. Geraniums can be wintered over in a damp cellar successfully by hanging them up by the roots. If the plants are in pots, they can be hung with the pot in the same manner.

THE PRIMROSE.

The Primula chinensis is the gem of the collection of window plants. None surpass it in beauty; and for con-
The CHRISTIAN MOERLEIN
Brewing Company, CINCINNATI, OHIO,
—Brewers and Bottlers of the Renowned—

"NATIONAL" EXPORT LAGER

A Genuine Old Lager Beer admirably suited for Table Use, and recommended by Physicians for the Weak and Convalescent.

FIRST PREMIUM,

Cin'ti Industrial Expositions 1881-82-83-84.
tinuous bloom, certainly none can be found more desirable. It is one of the best of all plants for the decoration of the drawing-room or dining-table, and always at home in the conservatory or greenhouse. For nine months out of twelve they may be made to yield flowers, though most profusely from November to May; and with their colors of red, white, crimson, purple and pink, they form objects of curious ornaments. They are objects of easy care, requiring attention only in watering. We do not advise manure water; plain warm water is the best.

One great advantage which the Primrose possesses over most winter flowering plants, is that it is rarely ever infested with greenfly or other troublesome pests.

**THE AZALEA.**

This plant is a native of India and China. The successful culture of Azaleas is somewhat difficult outside of a greenhouse; they require too much moisture for their leaves. It is, therefore, the best plan to buy blooming plants of the florist, and, when done blooming, to exchange them for others.
Mrs. D. ZEHNDER,

Manufacturer and Dealer in all kinds of

Hair Jewelry and Fancy Goods,

409 Vine Street, near Twelfth,

CINCINNATI, O.

Constantly on hand, German Canvas, Zephyr Worsted, Knitting Yarns, all kinds of Beads, German Crochet Cotton, Materials for Wax Flowers, Artificial Leaves and Silver Wire.

STAMPING A SPECIALTY.
THE FUCHSIA.

Fuchsias do not require a high temperature, but they need light and air—not so much the direct rays of the sun as Roses or Geraniums, but if kept in too dark a situation they will lose their leaves and drop their buds.
THE

Western Jewelry Tray & Sample Case Factory

JULIUS ZESTERMANN, Proprietor,

108 Canal Street, bet. Vine and Race, and 378 Race Street,

CINCINNATI, O.

Sample and Liquor Cases, Jewelry and Trunk Trays, Telephone Boxes and Annunciators.

Fancy Leather and Satin Work a Specialty.

Repairing Neatly Done at Short Notice.

MRS. SELMA ZESTERMANN,

Chiroprodist,

NO. 378 RACE STREET,

(Between Court and Canal Sts.),

Office Hours:
9 A.M. to 3, and 6 to 8 P.M.

CINCINNATI, OHIO.
PANSIES.

No plant is better adapted to house culture, as they can bear changes of atmosphere and a good deal of water, while their bright faces are very attractive in the gloomy winter days.

They are most easily raised from seed, and it is well to purchase the most expensive varieties, so as to be certain of the finest flowers. If they are planted in window boxes, there are few plants more desirable.

THE CAMELIA.

The Camelia japonica does not like a warm room; a temperature of from 40° to 50° F. is best suited for it. It wants plenty of light, but the direct rays of the sun are injurious. It delights to be near a window with a northern or north-eastern exposure. When the flower-buds have formed, the plant should not be turned round any more, for it causes the buds to drop off, as they are borne without stems directly on the branches; otherwise treat it according to general rules. During the summer they should be kept outdoors in the shade.
THE LARGEST
STEAM
Dyeing & Scouring Establishment
IN THE WEST.

Office: 96 Thirteenth St., bet. Vine and Race.

The public is informed that this establishment, managed by experienced workmen, will give particular attention to the

DYEING, CLEANING and REFINISHING,

In a very superior manner, of all kinds of goods, such as:

Ladies’ and Gentlemen’s Dresses and Garments, Silks, Satins, Velvets, Merinos, Flannels, Empress Cloth, Delaines, Bareges, Crapes, Poplins, Shawls, Curtains, Piano and Table Covers, Fringes, Lace, Ribbons, Buttons and Trimmings of all kinds.

Also, CLOTHS, CASSIMERES, CHINCHILLAS, Etc.

We guarantee to give perfect satisfaction in all our work. Our prices are lower and work superior to any other house in the city.

PITTON BROTHERS,

Dye Works: Nos. 131 to 147 Calhoun St., Corryville, CINCINNATI, OHIO.
THE CALLA.

The Calla æthiopica, or Lily of the Nile, is a very attractive plant; there is no better plant for the center of a group of flowers. It requires a great deal of water, especially when budding. The leaves should be frequently sponged and the plant turned round as the leaves turn toward the light.
THE FLORAL EXCHANGE,

No. 195 WEST FOURTH STREET,

TELEPHONE 369.

—Special Attention Given to—

Decorations for Weddings, Receptions and Dinner Parties.

A LARGE SELECTION OF

FUNERAL DESIGNS ALWAYS on HAND

CHOICE ROSES OUR SPECIALTY.
After it is done blooming in the spring, the pot containing it should be laid on the side, to dry it off and let it rest for several weeks at least.

THE ROSE.

There are over one thousand varieties of Roses under cultivation, but only a few of these answer as "house plants." They like a stiff, rich soil, plenty of moisture and a sunny location. They are subject to mildew; this is manifested by a whitish-looking mold or dust on the plants. If plants are growing out of doors, stir the soil frequently; if plants are growing indoors, sprinkle a fine dusting of flour of sulphur over the whole plant. In general, sulphur will prove a good antidote to mildew.

TRAILING PLANTS.

For sunny, warm locations, Cobea scandens, Hoya carnosa, Pasi flora, and the lovely, fragrant Stephanotis floribunda, are suitable; while for a shady, cool place, the Sternbergia,
RARE CACTI
FROM BRAZIL AND MEXICO.

These rare plants are now as popular as Orchids, but unlike them, they require absolutely no care, and will grow for months in a parlor or sitting-room without watering. Their large flowers, of exquisite beauty and fragrance, are perfectly dazzling, and when not in bloom their strange and grotesque forms always attract attention. We have over 500 distinct varieties, from 10 cents up to $50, and will send free, by mail, 10 FINE PLANTS, all named, no two alike, all large and free bloomers, for $1.00, or 4 for 50 cents, or 2 for 25 cents. A 64-page fully illustrated book on Cacti, free with each order. Catalogue for stamp. These plants are as fresh and green in winter as in summer, and will do splendidly in parlor or sitting-room, as but little water and no heat is required.

A. BLANC & CO.,
314 North Eleventh St., PHILADELPHIA, PA.

Large decorative specimens for parlor or conservatory at special prices.
Ficus repens, and, of course, the English Ivy, are to be most recommended.

CACTI.

All the species are natives of America. They are chiefly found in the tropics, and principally on hot, dry rocks or plains where the common forms of vegetation could not exist; and may be considered one of the means which Nature has provided for the support of man, in regions
SEE IT.
TRY IT.
BUY IT.

THE LIGHT RUNNING

NEW HOME SEWING MACHINE,

S. E. Cor. Eighth and Race Streets,

CINCINNATI, O.
where neither food nor water can be obtained. Their stems are filled with an abundant fluid, and their fruit is succulent. In the fevers of their native countries, some are freely administered as a cooling drink; being bruised, they are esteemed a valuable means of curing ulcers.

We take the following from A. Blanc & Co.'s "Hints on Cacti": "Cacti have much to recommend them to lovers of the curious and beautiful. The majority possess a very valuable character, i.e., they are easily grown—so easily, in fact, that any one who can only devote a small space to them in his window may grow them successfully. In the dry and heated atmosphere of a room, which is so trying to most plants, they are perfectly at home; and their demands upon the attention of their host are so slight, that they may be left for weeks, aye, months, without the smallest supply of water. It is generally believed that for these plants a special and elaborate compost is absolutely indispensable; yet they can all be satisfactorily grown in ordinary loam and sand, mixed to render the whole porous. Charcoal, finely crushed, may be used to great advantage for mixing with the soil, for it increases the brilliancy of the flowers and spines. When growth is proceeding rapidly, the plants may be watered twice or three times a week; the stronger, freely-flowering species may be assisted with a little weak liquid manure, both when growing and approaching the flowering stage. The soil must never be allowed to get into a stagnant, saturated condition, or the strongest plant will soon die. They want all the sun you can give them, and during the summer they should be kept in the open air."

We omit a selection, as they are all desirable.
HUGO MULERTT,
M. C. Imperial Russian Society of Acclimation of Animals and Plants

FLORIST & AQUARIST,
No. 64 Calhoun Street,
Opposite Ohio Avenue, CINCINNATI, OHIO.

ESTABLISHED 1874.

Special attention is called to my select stock of the following imported

FLOWER BULBS,
Hyacinths, Tulips, Narcissus, Japanese Lilies,
CHINESE NARCISSUS or ORIENTAL LILIES.

Bulbs guaranteed true to name. Prices the lowest. Send for price list. Large assortment of

PALMS AND OTHER HOUSE PLANTS.

Choice Cut Flowers and Floral Ornaments for any occasion

My assortment of Aquarium Plants is the largest in the country. Common and Fancy Goldfish and all aquarium supplies in best quality.

Many first premiums at Cincinnati Industrial Expositions, and quite recently the Great Silver Medal of Russia, were awarded to me.
AQUATIC PLANTS.

Where it is not practicable to have pot plants, aquatic plants may often take their place. An ordinary, swinging fish-globe, a candy-jar, or a glass dish or tureen, may be utilized to grow them; besides this, they are indispensable in an aquarium.

Like other plants, they require light and a temperature of not less than 45° F. Use clear water to grow them in; muddy water is as injurious to them as dust is to other plants. For soil, use a mixture of peat and river sand; for strong
THE ORIGINAL 95c. STORE,

130 West Fifth Street.

EMPORIUM FOR

DOLLS,

FANCY GOODS AND TOYS.

Repairing Dolls a Specialty.

F. A. FAHLBUSCH,

130 West Fifth Street, - Second door from Race.
varieties, such as the Nymphaeas, add also some rich loam.

There are aquatics that grow below the surface, others that float, and some grow in the bottom with their leaves extended above the water. Of the first class, the most desirable for the winter are: Anacharis can., Cabomba rosea-folia, Naja purpurea, Ludwigia palustris, Fondinalis, Sagittaria natans, and any of the Myriophyllums. For floaters, we are confined to Hydrocharis cordifolia and Villarsia nymph.; but the Nymphaea flava, Limnocharis Humboldti and the beautiful Cape Aponogeton, which all have floating leaves fill that vacancy. Cyperus alternifolia (umbrella plant) and C. distans may be grown in the center of a collection. The tropical and sub-tropical varieties are the most desirable for house culture.

THE DUTCH HYACINTH.

Its beauty, fragrance, easy culture and wonderful adaptation have justly merited for it the appellation of Domestic Flower. It is alike a favorite with the denizens of the city and the dwellers in the country, and is adapted for cultivation in pots and glasses, in the house or in beds, patches, edgings or ribbons in the open air. It grows freely in almost any medium capable of retaining moisture, and will generally produce as fine spikes of bloom when grown in sand, moss or water, as when planted in the richest compost. We therefore recommend its use in the following:

Ancient relics and ornaments, such as vases, bowls, dishes, cornucopias, etc., of whatever size, shape or form, from the small ornament that will hold a Crocus to that old and once familiar relic, the large family punch-bowl capable of growing a dozen Hyacinths, etc.; these filled with moss or sand
Single Hyacinths.
and planted with various bulbs, while they cherish a sweet remembrance of the past, their occupants full of fresh life and beauty enliven the dull days of winter, and with successional plantings may be made so many connecting links between the glorious autumn and the lovely spring.

Zinc, which can readily be formed into any device, may be made to occupy the whole front of a sitting-room window, and if filled with moss or sand according to taste or convenience, and planted with Hyacinths, Crocuses, Snowdrops, Tulips, Polyanthus, Narcissus and Dwarf Scillas, would in itself form a complete miniature winter flower garden.

In whatever manner the Hyacinth may be grown, it unquestionably deserves everything that may be said in its favor.

**CULTURE OF THE HYACINTH IN MOSS.**

If the ornament used be without means of drainage, cleanse the moss from impurities and place it loosely in the vessel, on which plant the Hyacinths and other bulbs, covering them with the greenest of the moss, then moisten the whole—which must be repeated at least two or three times a week, according to the temperature of the room. If a flower-pot be used (and here the most refined tastes can be gratified both by style and elaboration, either in china, porcelain, stoneware, glass or terra cotta), place at the bottom a piece of potsherd and treat as above, except that the moss need not be cleansed, and water may be given more freely. For the sake of appearance, occasionally change the moss which covers the bulbs.
FINE YARNS.

We carry the largest and most complete lines of strictly first quality Yarns in the city. We carry the full assortment of colors the year round, and can match colors at all times.

M. WÜST & SON,

413 Main Street, Opp. Court House.
CULTURE OF THE HYACINTH IN SAND.

Take a china bowl, glass, dish, vase or, in fact, anything of an ornamental character capable of containing moisture, and fill it with silver sand in the shape of a pyramid. In the center plant a Hyacinth, and at equal distances around the sides three or more, according to the size of the vessel, filling up the spaces between with Crocus, Snowdrops, Dwarf Tulips, Jonquils, Dwarf Scillas or a mixture of all. In planting, the bulbs should be carefully pushed into the sand, allowing the top alone to be seen. The vessel should then be immersed in a bucket of water for about five minutes, in order to fix the bulbs in their position. The bath must be repeated once a week, or oftener if required, for on no account should the sand be allowed to get dry. Place it in the dark for a fortnight, and afterward in any cool, well-lighted, airy room.

CULTURE OF THE HYACINTH IN GLASSES.

The Hyacinth is one of the most suitable for this elegant, though somewhat unnatural, system of culture; and here we would just remark that failures may be more generally traced to mistaken kindness than neglect. Its roots, like those of other plants, shun the light with instinctive care; therefore, dark-colored glass should be selected. Place the bulbs in the glasses and fill with rain-water or drip water of the ice-box, so that it barely touches the bottom of the bulbs, and set them in a dark, cool, dry cellar or closet. When the bulb rests in the water at once, there is slight danger of moldiness ensuing. Examine them occasionally, and remove gently any scales that may be decaying, but be very careful not to injure the young roots. When the glasses
SHIRTS MADE TO ORDER

A SPECIALTY.

H. LEISER,
CUSTOM
SHIRT
MAKER

DEALER IN MEN'S
FURNISHING GOODS,

NO. 465 VINE STREET,
CINCINNATI, O.

465 VINE STREET,
Above Thirteenth Street,

LAUNDRY OFFICE.
are moderately filled with roots, which will be the case in three or four weeks, remove them to where they will receive a moderate light; and as soon as the plants assume a healthy green color, to the lightest possible situation, and where they can have abundance of fresh air. A close, heated atmosphere is very unfavorable to the development of handsome spikes of bloom. When in actual growth sprinkle them freely, keep them as near the window as convenient, and turn them occasionally to prevent long, weakly, ill-shaped stems; the water should be changed at least every three weeks, using pure rain-water of about the same temperature as the bulbs may be growing in. The flowers will receive a check if you do not attend to this. A small piece of charcoal will keep the water sweet longer.

When the roots have nearly reached the bottom of the glass, there sometimes collects at the extremity of each a pellicle or covering of mucous matter. This soon stops up the mouths of the roots, by which the food of the plant is conveyed to the leaves. To prevent this the roots should be drawn carefully out of the glasses, and a wide vessel should be placed handy, filled with clean water. In this immerse
JOHN SPRINGMEIER,

—DEALER IN—

Trunks, Valises, Trunks,
Traveling Satchels,
Bags, Etc.

ALL KINDS OF TRAVELERS' SUPPLIES.

164 Walnut St., bet. Fourth and Fifth Sts.,

CINCINNATI, O.

REPAIRING DONE AT SHORT NOTICE,
the roots of the bulb, and draw the mass carefully through the hand, pressing them gently. Do this two or three times, until the roots are white and clean. Whilst one person is doing this, let another be washing out the glass and wiping it quite clean and dry. Then gradually work the clean washed roots into the glass before putting in any water. To get them in when numerous it will be found necessary to twist them around until they reach their old quarters, and the bulb rests upon the neck of the glass; then fill with clear rain or soft water, and replace it in the window. A "double" Hyacinth glass, lately introduced, is very handy in this respect. One washing will generally be sufficient. After this no more care will be necessary, except occasionally changing the water. The single Hyacinth is best adapted for water culture.

For giving vigor to the plants and color to the flowers, we know of no better means than to dissolve into a quart of rain-water an ounce of guano, and to pour one teaspoonful of that into each glass once a fortnight after the flowers begin to appear.

**TULIPS**

May be grown in moss or sand like the Hyacinth.
IMPORTED WINTER AND SPRING FLOWERING

BULBS,
Lilies, Hyacinths, Tulips, Narcissus, Etc.

Choicest quality at lowest prices. Full line of flower pots, plain and fancy. Flower seeds for fall planting. Would call special attention to our Chinese Narcissus or Oriental Lily, the most successful bulb for forcing ever offered, profuse bloomer and requires no extra attention. The flowers are often double and single from the same bulb. Extra Large Bulbs, 25 cents each. Send for Catalogue.

J. M. McCULLOUGH'S SONS,
SEEDSMEN,
134 and 136 Walnut Street, CINCINNATI, OHIO.
CHINESE NARCISSUS OR ORIENTAL LILY.

This beautiful and fragrant flower, of recent introduction, may be grown in soil, sand, moss or water. Especially if grown in the latter, it forms a highly interesting and beautiful parlor decoration.

Take any kind of a dish or bowl, cover its bottom with clean pebbles or small stones about one inch high, and on this place one, three, or five bulbs. Now arrange some more
C. Doerr & Sons
Confectioners, Caterers
and Bakers
of Fine Cakes
No. 385 Vine St.
Cincinnati, O.
pretty pebbles around them to steady them, and fill the bowl with sufficient clear water to submerge a part of each bulb; and set the whole in a light, cool place. They will start to grow at once, and begin to bloom six weeks after. Keep the bowl well supplied with water; also sprinkle the leaves frequently.

The flowers are white with a yellow center, also light yellow. Both double and single flowers are sometimes borne from the same bulb. If they are planted in intervals of about two weeks, this exquisite flower may be secured from Christmas until spring.
F. Glaussen,

Importer, Wholesale & Retail Dealer in

CHINA and GLASSWARE,

Hanging Lamps, Plated and Britannia Goods, Table Cutlery, Fancy Goods and Glass Shades.

Goods Adapted for Wedding Presents.

No. 513 VINE STREET,

Between 14th and 15th Sts., CINCINNATI, O.
Preserving Cut Flowers.

It is not every one who has the opportunity of cutting choice flowers from the plants just at the moment when they are required for use. Under such circumstances, their preservation for a few days, or even hours, becomes a matter of importance. Even professional bouquet-makers, who receive supplies of fresh flowers every morning, find it necessary to adopt preservative measures; and I have often thought that if amateurs, and especially ladies, understood more thoroughly what precautions were necessary, they would not be so often disappointed in their attempts to keep cut blossoms and foliage fresh.

The flowers should be cut with a sharp knife, for scissors crush the tubes of the stems, and so prevent their power of absorption.

If the flowers are not immediately required they may be preserved fresh for several days by placing them in flat zinc or earthenware pans of water and living Sphagnum Moss. Each flower should be placed separately, inserting its freshly cut stem through the moss into the thin stratum of water
HEUCK'S OPERA HOUSE

VINE STREET,

Between 12th and 13th, - CINCINNATI, OHIO.

OPEN EVERY EVENING.

MATINEES:

Sunday, Wednesday, Saturday.

FIRST-CLASS ATTRACTIONS ONLY.

Prices: 75 Cents, 50 Cents, 25 Cents, 15 Cents.

Reserved Seats at Krell's Music Store, or may be reserved by Telephone Call 2024.
below. The edges of the pan should be deep enough to over-
op the flowers and foliage; and, as each pan is filled, dip a
cloth or napkin in cold spring water, and, after wringing it
out, spread it evenly over the surface of the pan. If the
latter be over a foot in diameter, some support must be placed
in the center, so as to keep the cloth off the flowers. Another
excellent plan, where flowers have only to be kept fresh for
a few hours, is to spread a wet cloth on a flat board, and to
gently lay the flowers on it, covering the whole afterward
with a large glass shade or bell glass; or, if this is not at hand,
an earthenware bowl, or even a wooden box, may be inverted
over them, and will answer nearly as well. This plan may
also be modified in the case of bouquets not immediately re-
quired.

The florists keep their choicest cut flowers in close-fitting
drawers or boxes lined with zinc; a layer of moist Sphag-
num or Wood Moss being laid on the bottom to keep the
atmosphere cool and moist. Sometimes they are laid on
wet moss in a tray and placed on a cool, moist cellar floor,
where they will keep fresh for a considerable time. Any of
these plans, the main object of which is to check evaporation,
may be adopted in cases in which it is requisite to keep
flowers for a short time after they are cut, and before they
are required for use. Clear water is as good as anything for
vases in which flowers are arranged, and if these are of
transparent material nothing else can be used; but wet sand,
which may be used in opaque vases, has the advantage of
retaining flowers more firmly in their places.

My flowers always keep best in clear water, changed every
morning—when the bases of the flower stems are cut with a
sharp knife, so as to afford every facility for active absorp-
tion of moisture.
JOHN GROSSIUS,
389 MAIN STREET, Opposite Court House, CINCINNATI, O.

and all Kinds of House Furnishing Goods,
Cooling and Heating Stoves of the Latest and Best Patterns,
Hints for the Care of Goldfish.

The goldfish is a carp and a native of Asia. Its natural habitat is standing water. In China and Japan goldfish are found of all colors except green; they also vary largely in shape and size—some varieties grow large enough for the table, while others never grow more than a few inches in size. The G. may well be counted to the domestic animals. It holds the same place among the finny tribe, that pigeons hold among birds—these, too, are prized for their shapes and colors. The first goldfish brought to Europe were of a golden color, hence the name for the entire family; and it will thus be understood why people speak of black, white, red or blue "goldfish."
The Fred. J. Meyers M'f'g Co.

WIRE WORKS.

169 Main Street, CINCINNATI, O.

Factory: COVINGTON, KY.

MANUFACTURERS OF

Wire Flower Stands, Bird Cages, Floral Designs, Flower Trainers, Moss Baskets, Window Gardens, Lawn Flower Vases, and wire goods of every description.

Orders solicited. Satisfaction guaranteed.

When ordering, please mention this book.
Goldfish are very easily kept pets—most of them are killed through mistaken kindness rather than neglect. One of the main troubles arises from the habit of some people to keep more than they can comfortably. A pair of two and one-half to three inch goldfish should have a gallon of water to live in. If they are larger, they need more in proportion. In buying fish select such that were raised and kept in standing water. The sizes of these should be in proportion with the vessel for which they are intended.

In fitting up the globe or tank for them, see that it is cleaned without the use of soap; cover the bottom one inch deep with sharp sand (sea sand); in this plant one or more varieties of aquatic plants; place several little rocks or pebbles about their roots to hold them in place until established, and then carefully fill the vessel to within two inches of the top with pure water—whether this is spring, well, cistern or hydrant water is immaterial. As long as it is fit to drink for yourself it is all right, but it should be clear. Now gently place your fish in the water, together with a few snails and one or two tadpoles, which will act as scavengers, and set the entire collection where it will have an abundance of pure air, good light, but no sun. Submerged water plants, when exposed to light, purify the water.

Once a day fish should be fed with prepared fish food. A piece as large as a cent piece, crumpled up, is enough for two small fish each time. If you feed more than they eat at once it will spoil the water. To this, their regular meal, you may add once a week some scraped raw beef or liver in quantities to allow a small mouthful for each fish.

The inner side of the glass of the vessel must be wiped off at least once a week, after which also the water lost by evap-
oration is replaced. If these instructions be followed it will not be necessary to change the water of a globe oftener than every two or three months, while a square tank will keep six months and longer, but after six months it is best to rearrange an aquarium. The best temperature for goldfish is between 40° and 100°F. They will stand less and likewise more, but they are very sensitive to sudden changes—10° one or the other way may prove fatal. When goldfish gasp for air on the surface of the water, it indicates that they are uncomfortable. Find out the why. It may be caused by a close atmosphere before a thunderstorm, impure air in your room, or decomposing objects, such as minerals or sea shells, etc., contained in the water; at any rate, when you see your fish in that condition attend to them at once or they will die a fearful death by suffocation.

These are the main points one has to observe to keep goldfish in a healthy state; and under such treatment they may be kept in a thriving condition for ten years and even longer. The important question, "how often the water ought to be changed on goldfish," is therefore thus answered: As often as it becomes necessary under the reigning circumstances.
The Canary Bird and Its Care.

The canary bird is a native of the Canary Islands. Its original color is as modest as that of a sparrow; the bird as we see it now, is the result of careful selection and cross-breeding. The most celebrated birds are those raised on the Hartz Mountain, in Germany, where they are bred principally by the wives of the miners of that district for the purpose of adding to the income of their households, while the children are employed in making the little wooden cages used for shipping the birds.

The first point the Hartz breeder aims for, is the voice. Great pains are taken to cultivate this. Shape and color of the bird rank second, while the Belgian canaries are celebrated for their graceful form and brilliancy in color. It is but natural that certain localities have been more successful in this or that point, so is Andreasberg, i.e. Hartz, noted for the finest singers, and $25.00 for a bird is not at all an unusual price paid for an "Andreasberger" in Germany, the ordinary price for that breed ranging between $7.00 and $15.00.

(79)
The care of a canary bird is very simple: keep your bird in a comfortable, suitable cage, the bottom of which should be slightly covered with sharp sand; keep the entire cage, including the perches, the seed and water-cups, clean; feed only the purest seed that you can obtain. If you want your bird to have a few hemp seeds occasionally, do not mix them with the regular seed in the cup—drop them on the bare bottom of the cage, as in the other case your bird will get into the habit of spilling the seed while hunting for more hemp among the other seed. You may treat your bird occasionally to some "extras," such as a piece of apple, lettuce or chick-weed, also to a piece of loaf sugar, but do not overdo this, and remove the remnants as soon as the bird has satisfied its appetite. If you neglect this, you will soon get the bird's stomach out of order, which is the beginning of all kinds of ailments.

During the warm season let your bird take a bath daily, but it is not advisable to do so in the winter. Never expose the bird to draught. An ordinary room temperature of 65° F. is most suitable; if you keep it too warm it becomes too sensitive against fresh air and will surely catch a cold if the window is opened to air the room. On severe cold days set the cage on the table in the center of the room, and during such nights cover it well with towels or a woolen shawl, taking care, however, to leave a hole on top for air. In localities where mosquitoes abound, the cage should be covered at night with mosquito netting. During the summer let your pet enjoy the fresh air; a little morning sun will do it good, but be careful not to expose it to the hot midday sun nor to rain.
Queen and Crescent Route,
(Cincinnati Southern and Associate Roads),

Most Direct, Favorite and Quickest Line

— to the —

LAND OF FLOWERS.

Two Express Trains Daily with

MANN'S ELEGANT BOUDOIR BUFFET CARS

— and —

Pullman's State Room Sleepers

— from —

CINCINNATI TO JACKSONVILLE, FLA.

Without change.

Faster Time than by any Other Route.

The Queen and Crescent runs Double Daily Trains to

NEW ORLEANS and SHREVEPORT,

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