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 TNateroLiIly SpeciallstARTINGTON
: DJEMT JIFRSE

## NYMPHÆA PULCHERRIMA

A wonderfully dainty, tender Water-Lily. The clear blue of the sky seems reflected in its petals, while the stamens form a


## WILLIAM TRICKER

Water-Lily Specialist
"And what joy and cheerfulness it makes up within us, to see all Nature beaming in brightness and sunshine."

- Nicholas Nickleby.
$\infty$
". . . . and I wish to say to you that my plants from you have been the joy of my life."
- From a Customer in Vinton, La.


A small stream which flows slowly through a channel that narrows and widens into pools and lakelets is the natural home of the Water-Lily


Mr. John S. Van Gilder, Knoxville, Tenn., writes: "The variety is Mrs. Edwards Whitaker. Nearly every day for three months I had from 15 to 18 splendid blooms."


HE culture and appreciation of Water-Lilies and aquatic plants, while only in its infancy in this country, dates back to the time of the Egyptian Pharaohs. Inscriptions, drawings, and preserved petals show the association of the flowers with ancient Egyptian art and Iiterature. The term Lotus was applied to both Nymphæas (Water-Lilies) and Nelumbiums (Lotus). Wrapped with the body in the mummy cloths have often been found petals of the white and the bue "Lotus" of the Nile.

Travelers and botanical explorers found many Water-Lilies indigenous to various parts of the world. From Egypt, Australia, Europe, Africa, China, Japan, East and West Indies, North and South America were gathered the native species, and in the hands of the hybridists these have produced many wonderful and startling varieties.

The first record we have of an aquatic greenhouse is that of one built in England, in 1849, for the purpose of growing that marvelous giant of the Water-Lily family, the Victoria Regia. Here also were grown some other water plants.

The earliest great impetus given to the advancement of aquatic gardening was through the work of M. Marliac, a Frenclman. This gentleman produced, through careful and patient hybridizing, some wonderful hardy Water-Lilies-some of which are still unsurpassed by Iater acquisitions. It was about 1885 that M. Marliac began to disseminate some of his hybrids. His work was entirely with the hardy types.

The tender or tropical Lilies received more attention on this side of the Atlantic. The Iate William Tricker produced several of sterling quality that rank among the best now offered. His Iast additions were in the viviparous group-those reproducing on the leaves.

In the last five years only very new varieties have been produced, and most of these have been the work of Mr. George Pring, of the Missouri Botanical Garden. His latest hybrid, named after his wife, represents the greatest single step along one line in the history of aquatics.

The commercial side of aquatic gardening has advanced so much in the last ten years that much of the research and experimenting work has of necessity been carried on in botanical gardens. Where, but a few years ago, it was unusual to see a water-garden, one now looks for a pool or pond beautified by this attractive family of plants. The Lily-pools in the parks are eagerly sought by the city dweller, attracted by the beauty and restful peace. But the parks are not the only places where one finds the Lily-pool. Thousands have small concrete pools, or even tubs and half-barrels, to accommodate the aquatic plants.

## Following These Cultural Directions Will Insure Success in the Growing of Water-Lilies and Aquatic Plants

The culture of Water-Lilies is so simple that it might almost be said that "they just grow themselves." Their modest requirements are sun, water, and rich soil. In deciding on a place for a natural water-garden, one is naturally led to select a low spot. A stream of water running through this or near it can easily be dammed or diverted so as to form a pond. The digging up and grading of the ground to be flooded is the first consideration.

Of course, it is not possible for everyone to have such a location, but almost everybody can have built or can themselves construct an artificial pool. In this event, any location that is available would be satisfactory, provided it is exposed to the full sun. The construction of an artificial pool is taken up on page 7 of this catalogue. These directions were written by an expert and anyone can follow them easily.

Rather than have no water-garden at aII, the interested party can grow many of the varieties in tubs or half-barrels sunk in the ground. The selection of Lilies suitable for tub-culture is easily made, as the varieties suited for this purpose are indicated in the catalogue.

Soil. The matter of getting the soil ready for the growing of aquatic plants is important. In preparing a piece of ground about to be flooded, it is well to dig into the soil a generous amount of thoroughly rotted manure, with the addition of a small amount of bone-meal. An excellent soil for use in tubs or artificial pools is made by mixing three parts of rotted sod, compost, or good top-soil with one part of cow-manure, or good barnyard manure. AlI manure used must be thoroughly decomposed, to prevent fermentation when covered with water. Ground bone or bone-meal may be used if necessary, at the rate of one quart to one bushel of soil.

Size of Pool. The Iarger the water-surface the better the results. A tub or half-barrel 2 feet in diameter will furnish a miniature pool. An artificial pool should be made as large as possible, and 2 feet deep. Where clay is very abundant, it is quite possible to line an excavation with this in such a manner as to have it watertight. Make an artificial pool as natural as possible and avoid stern lines and too apparent masonry. A generous planting of moisture-loving plants around the edge of the pool or pond will furnish an added charm to the plants in the pool itself. Such plants as are suitable for this purpose are listed in this catalogue.

Water. One foot of water over the soil is the most desirable depth in artificial pools. Some will thrive in shallower water, but few will stand a depth exceeding 2 or 3 feet. A continuous flow of water tends to keep the temperature in the pool low and must be avoided. After the pool is once filled it is only necessary to replenish that which evaporates. An occasional syringing in the afternoon will supply this and will benefit the plants.

"I had 90 lilies in this pool at one time. Thousands of visitors, from near and far, have admired the display." Chas. A. Sanders, Peoria, Ills.

How to Plant. To plant in natural ponds, where the water does not exceed 2 feet, it is only necessary to press the rhizome (the hard, fleshy part of the root) into the mud until the crown (the growing end) is just beneath the surface of the mud. If the root shows a tendency to float, a flat stone or brick may be employed as a weight to hold it down. To plant in a depth exceeding 2 feet, it is best to start the plants in baskets of good soil. Place these in shallow water and when the plants are rooted and making growth they may be sunk at the desired place.

In artificial pools that are not large, one foot of soil may be spread over the floor of the pool. For large pools there is no better plan than that of using boxes 2 to 3 feet square and 1 foot deep. By adopting this plan, it is quite possible at any time, even when the plants are in full growth, to move the entire box of soil. AII soil in artificial pools should be covered with a generous layer of sand to prevent anything rising from the soil to discolor the water.

For tub-culture, fill the tub two-thirds fuII of soil, cover with sand, and fill with water.

When to Plant. Hardy Lilies begin to grow in the latitude of New York City about the end of April. At this time I begin to ship hardy stock to southern points and the Pacific Coast. As the season advances I ship according to weather conditions. Tender Lilies should not be planted out until warm, settled conditions are assured. This is usually about the end of May in the latitude of New York City.

Last spring the season was very much advanced but later many plants suffered by cool weather. Please do not become impatient. We will ship orders just as soon as weather conditions are suitable and in the order received. We acknowledge every order as received, giving it a number for your convenience and to help us in locating it should that be necessary.


This charming pool is in the garden of Mr. John Castle Wright, Lansdowne, Penna.
How Far Apart to Plant. In small ponds allow from 3 to 5 feet each way. The idea of group planting in large ponds is most effective. Plant six or more plants of one variety in a group and let each group be 20 to 30 feet apart. The individual plants can be planted 18 to 24 inches apart. In this manner a very fine showing may be made. In tubs or half-barrels one plant is all that can be accommodated; the plant should be of moderate growth.

Winter Care. The one condition necessary for the safe wintering of hardy Lilies is to see that the roots are not actually frozen. This is provided in natural ponds by a sufficient depth of water. Artificial pools may be drained and then filled with leaves which will provide the necessary protection; or the pools may be covered with boards and a covering of manure or leaves placed on top. Tubs may be treated the same way or removed to a root-cellar for the winter.

Tender Lilies had best be considered as annuals, for unless one has the proper facilities for caring for them under glass, it is useless to attempt keeping them. Young growing plants, purchased at the right time in the spring, give greater satisfaction and save much trouble.

Goldfish and Mosquitoes. Any fish in the pool are attractive and serve to destroy the wigglers that hatch into mosquitoes and larvæ of other insects. One or two fish are all that would be needed in a tub, and a dozen would stock a 15 -foot pool.

Insect Pests. The insects met with in the growing of aquatics are mostly the green and black aphis. These collect on the upper surface of the Ieaves or any part above the water, where the fish are unable to reach them. They may be kept down by using a strong force of clean water to wash them off into the water where the fish may devour them. A solution of Aphine, mixed according to directions on the container and applied in a very fine spray, will destroy them.

Muskrats are sometimes troublesome in natural ponds and should be exterminated by the use of steel traps.

Green Scum. This often forms on the surface of the water in the spring, especially if fresh soil has been used or the soil disturbed. It does not last very long, especially after the Lilies begin to make strong growth. When really unsightly, this scum can be carried off by allowing the pool to overflow. It is safer not to attempt its destruction by the use of any chemical because of the very possible damage to the plants or fish.

Replanting Hardy Lilies. It will be necessary to provide new soil every second or third year for plants grown in boxes or tubs. Remove as much of the old soil as is possible without disturbing the roots and replenish the soil. After several years the plants should be divided and separated.

Fertilizing. This can be accomplished by applying ground bone early in the spring directly to the boxes, when so planted, or by broadcasting it over the surface of the water. It is quickly taken up by the water and furnished to the roots of the plants.

Packing. AII goods are packed carefully, to assure safe arrival. One customer from the state of Washington wrote last season that "the plants arrived in perfect condition and it was almost impossible to believe that they had actually crossed the continent." Of such a record I am proud and will always do everything in my power to see that every customer is just as well pleased. We ship anywhere and do not hesitate to assure you that goods, unless delayed by some unusual circumstance or mishandled, will arrive in good condition.

Assistance in the selection of varieties or in making suggestions will be gladly given. I aim to be of real service to my patrons. In requesting information, always give as full a description of your conditions as possible in your first letter. It will save time.

I would be very glad to have submitted to me photographs of pools, ponds, or tubs that would be available for illustrations either in catalogue or advertising matter.

## How to Make an Artificial Pool

So many people have asked me how to build or construct an artificial pool that I wrote to the Atlas Portland Cement Company about the matter. They replied with the following sketch and directions, which, if followed strictly, will give a permanent pool requiring no repairs. The unit taken - 20 by 10 feet-makes a very satisfactory pool, but larger or smaller dimensions can be followed.

A concrete Lily-pool will give perfect and permanent satisfaction. It is simple and inexpensive to construct and will always stay in perfect condition. The concrete pool is entirely suitable for growing. Water-Lilies. On this page is given a plan for a pool 20 feet long, 10 feet wide, and 2 feet deep. From this plan and the description given below any competent concrete constructor can build it.

Excavate the recessary depth and thoroughly compact the earth by tamping until it is uniformly firm. Then erect the form as shown in the cut. The forms for the inside of the walls are hung from the cross braces. In this way the concrete for the entire pool can be poured at one operation and joints will be avoided. Just before placing the concrete, thoroughly drench the ground so that it will not absorb the water from the concrete. Place a layer of concrete 3 inches thick on the ground, and on top of this place the woven-wire reinforcing, cut to the right length, so that it will project up into the walls to within 2 inches of the top. Lap the edges of the reinforcing 6 inches and bind together with wire. Then place the other 3 inches of concrete for the bottom and fill the wall forms.


Use a concrete mixed in the proportion of one part of Portland cement, two parts of sand, and three parts of stone. Work it thoroughly into the forms so that it will be as dense as possible. Remove the forms as soon as the concrete has hardened sufficiently and finish the surface by rubbing with a brick made out of a clean mixture of concrete. Sprinkle the concrete once a day for ten days and at the end of three weeks it will be ready for use.

## Another Manner of Building a Pool

Last summer, B. M. Cobb, of Davenport, Iowa, wrote me of a very successful pool he had built and very kindly described his method of procedure. As is the way with aII true garden-lovers, he passes the information on to you.
"My plan requires no wooden forms of any kind, cement-mixer, or skilled workmen. The only tools needed are a spade, a hoe, a 10 -cent-store trowel, a 12 -quart pail, and a tub or box in which to mix cement.
"Buy a medium-sized load of old brick, order seven sacks of waterproof cement, and a cubic yard of sand. Be sure to get waterproof cement, as common cement will not give good results.
"Stake out your pond in a sunny place, and dig a trench completely around the outlines of the pool. This trench should be 18 inches deep and 6 inches wide. Care should be used to keep the sides of the trench straight and clean cut.
"Now put broken or whole bricks in the trench, leaving holes or spaces between for the cement to flow in around them. Mix one part of waterproof cement to two parts sand. Mix thoroughly and have the mixture just thin enough to fiow in around the brick, filling up the entire trench.
"Let this stand at least twenty-four hours and then remove the dirt in the center of pool to a depth of 3 feet, leaving a center area of at least 4 feet by 3 feet that will be fully 3 feet deep. When the cement in trench is set hard enough to stand alone, dig down all around the inside of the cement wall one foot in depth, then remove the dirt between the wall and the deep area in the center of pool so that when aII dirt has been removed inside the rim the bottom or floor of pool will slope up from the deep area toward the top of rim but will meet the rim one foot from the top.
"Tamp the dirt all over the bottom of pool thoroughly with a heavy timber or tamper, and then pave the entire bottom of pool with the old


With water to the rim, less masonry would have shown and the pool would have been more attractive
brick, leaving spaces of about three-quarters of an inch between the bricks, which may be laid flat down and not on edge. Mix more cement in the same proportions as before and pour in pool, first spraying the bricks with water. Spread the cement over the interior of pool about 1 inch thick. Give the cement a few hours to set and then spray it occasionally with water for a day or two.
"If you wish to make the pool more attractive, secure sixty or seventy pieces of flat rock from 4 to 8 inches thick, 8 to 12 inches long, and 6 to 8 inches wide. Mix more cement a little thicker than before and lay these rough stones in cement, in a waII all around the pool on top of your original rim. The rock should line up fairly even with the inside face of rim, but should be rough and very uneven on the outside face and on top. If you wish the pool to hold water up to the top of the rock wall, care must be
taken to fill all joints with cement and to coat over the entire inside face of the wall.
"I made a pool a year ago this spring that did splendid service all last summer and passed through the winter without a crack. I am convinced that it is practical and will last for years if proper care is given it. Even though a few cracks should show up, half a sack of cement will go over the entire surface each spring and make it absolutely water-tight.
"By this plan any shape desired can be constructed, but the pool must always have length and breadth enough so that a reasonable slope from deepest part to the top or near the top of the side walls may be assured, or in other words this plan would not be very well adapted to a pool with perpendicular side walls.
"To drain such a pool, attach the garden hose to a hydrant in the cellar, remove the nozzle from the other end and drop that end into the deepest part of pool, turn on the water at hydrant and let run till you are sure water is entering pool, and then shut off hydrant, unscrew hose and drop that end on cellar floor. This creates a syphon and the water in pool will flow out through hose and into the cellar drain. If you have no cellar drain or hydrant, you are out of Iuck for that scheme and will have to devise some other way.
"In the faII, after first heavy frost, drain the pool and fill with leaves. Pile them up all around the cement work, the more leaves the better. You can leave the bulbs in the soil at bottom of pool.
"It is really surprising what an attractive pool can be made by following this plan. Such a pool will accommodate from six to ten wonderful WaterLilies, an abundance of Water Hyacinths, Water Poppies, and other beautiful aquatics."


Pools of almost any design can be as easily constructed as an ordinary rectangular pool. It simply means building the rough forms to the unusual shape. With a background of Bamboos, Caladiums, or similar plants, a decidedly tropical atmosphere is created.

## Growing Tender or Tropical Water-Lilies

The tender or tropical Nymphæas are all started in tanks in our greenhouses. The young plants are started in pots and are turned out of these before packing. They make very rapid growth but should not be planted out until warm settled weather is assured. In our latitude (that of New York City) this is the latter part of May or early June. The plants soon begin to flower, leaves and flowers getting larger as the plant develops. The climax is reached in August. AII the tender Lilies are free blooming and do their best during the hot weather.

This class of Nymphæas is best suited for artificial pools. A box of soil 2 feet square and 1 foot deep is none too much to provide for each plant. A surface space of at least 25 square feet should be allowed. For an unusual display, plant two plants in a 3-foot box and allow a little more surface space. The flowers of all the tender Lilies are produced on stout stems and are borne well out of the water. They are most desirable for cut-flowers, lasting from three to five days. The flowers close at night and open the following morning, except in case of the night-bloomers, which open in the evening and close the next morning.

The size of the bloom depends greatly on the room given to the plant, the amount of good soil, and the warmth of the summer. The quality of flowers produced is really remarkable. I have had plants that produced over 100 flowers in a single season. I noted last summer on one plant seven open flowers in one day. These were of varying ages from newly opened flowers to those five days old. The list beginning on page 12 gives these tender, or tropical, day-blooming WaterLilies.


This shows the form and vigor of our potted tender Lily plants

I have five ponds on my place and am pleased to send you pictures of some of them. One of my main ponds measures $18 \times 22$ feet, and some days ago I had 90 lilies on this one pond. I have had a thousand visitors from near and far, this summer, to view the pools and display of flowers. Eight smaller pools are connected with the main pond; in these I grow Lotus, Water-Poppy, and other plants which need only a small amount of water. In these various ponds and pools I have grown more than a thousand gold fish without any especial care on my part.-Charles A. Sanders, Peoria, Illinois.


A new Water-Lily, Mrs. George H. Pring, just introduced this year

## Novelties in Tender Lilies for 1924

As intimated in my 1923 catalogue, I am offering, this year, two new WaterLilies produced by Mr. George Pring, Horticulturist of the Missouri BotanicaI Gardens, of Saint Louis. Mr. Pring has devoted a great deal of time and patience to the developing of new Water-Lilies. It was in 1920 that I first had the privilege of introducing four hybrids from Mr. Pring's collection. These earned a well-deserved reputation. His Mrs. Whitaker has never failed to give great satisfaction and pleasure to those planting it. So with all his disseminated hybrids.

The two varieties-one white and one pink-that I offer this year are of decided merit and distinction. The descriptions given are from Mr. Pring's own notes.

## MRS. GEORGE H. PRING

For many years there has been available only one tender day-blooming white Water-Lily, and that has been of small size and rather unsatisfactory. While it has served as a parent for several very fine hybrids, it has always left much to be desired in itself. Mr. Pring had a very definite end in mind when he sought to produce a white variety in keeping with the present-day horticultural forms. Pure white in color, of large size ( 8 to 10 inches across), extremely fragrant, and most prolific in blooms, it has aroused admiration wherever seen. In 1922, the Society of American Florists awarded it their silver medal. Last summer I tried out several plants in various places. All did exceedingly well. One plant was sent to Brooklyn Botanic Garden and Mr. Free, the horticulturist there, wrote me-"The new white tropical day-blooming Water-Lily, Mrs. G. H. Pring, was quite a success with us during 1923 in spite of an unfavorabie season. It is a strong grower, moderately free-flowering, and in size and quality of flowers is a vast improvement on any other white day-blooming tropical lily."

I am very glad to be able to offer this Lily, and as it has propagated readily I am able to offer it at $\$ 10$ each for strong plants.

## GENERAL PERSHING

In the summer of 1922 I visited the Missouri Botanical Garden and there saw in one of the pools a superb pink Water-Lily of the day-blooming type. This variety Mr. Pring informed me he had named General Pershing. In size and color it is one of the very finest of the pink Water-Lilies. Being a hybrid
from Mrs. Whitaker and Castaliiflora,* it has inherited its size from the former but is an improvement upon the color of the latter. The dark green buds are striped with purple. The sepals are very light pink on the inside, but the petals are a warm bright pink. The flowers are of great substance, delightfully fragrant, open early in the morning, and are indeed most distinct from any of the other pink dayblooming Water-Lilies. A most prolific bloomer; awarded silver medal of the Society of American Florists in 1923. Strong plants, $\$ 10$ each.
*Both these varieties were produced by Mr. Pring and were first offered by me in 1920.


## AUGUST KOCH

This variety, produced by a natural cross in the pools at Garfield Park, Chicago, under the care of Mr. August Koch, the chief florist, is very pleasing in color, character, and growth. It belongs in the same group as Daubeniana, Mrs. Wilson, and Panama-Pacific, all being in the viviparous class. By this is meant the peculiar characteristic of producing young plants upon the surface of the leaves. This variety, offered in 1923 as a novelty, has taken a forward place in this group. The flowers are 7 to 8 inches in diameter and open for four to six days. In color the sepals are purplish lilac and the petals pale wistaria-violet (Ridgeway Color chart). The foliage is strong and attractive. (See illustration in color on front page), $\$ 2.50$ each.

## Complete List of Tender or Tropical Lilies

## Varieties in CAPITALS are the latest novelties

August Koch. See above.
Capensis. The flowers of this variety are a rich sky-blue, 6 to 8 inches in diameter. The sepals (the outer part of the flower forming the bud) are green outside, whitish inside, flushed with pale blue. A free-flowering variety and very useful for cutting. \$1 each.

CASTALIIFLORA. This variety produces very large flowers of a charming pink color, 8 to 10 inches in diameter. The very fragrant flowers open early in the morning and remain open until evening. The leaves are light green, mottled with brown on top and flushed with pink underneath. $\$ 2.50$ each.

Cærulea. This is the ancient blue "Iotus" of the Nile. The flowers are light cærulean blue, fading to nearly white at the base; stamens yellow, outside of the sepals marked with black lines and dots. Flowers 4 to 6 inches across, with pointed petals, and are produced in generous quantity. $\$ 1$ each.

Daubeniana. This variety is of European origin and is remarkable in that young plants spring from the upper surface of the leaves, over the point where the leaf joins the stem. These young plants begin to flower early and make an unusual display. I have seen plants that had been set out but eight weeks bearing large flowers from the center and surrounded by many leaves with young


North or south, east or west, Water-Lilies are always alluring in their beauty and fragrance. Mrs. D. B. Fischer, New Orleans, La., is the proud possessor of this charming garden.

## TENDER OR TROPICAL LILIES, continued

flowering plants upon them. On one specimen I counted 56 small flowers. The color of the flower is very light blue. The blooms are delicately scented; mature specimens frequently attain a size of 5 inches. Awarded a silver medal by the Newport Horticultural Society. $\$ 1$ each.

General Pershing. See page 12.
Gracilis. This is the white day-flowering tender Nymphæa of Mexico. The leaves (often 15 to 17 inches across) are green in color and the flowers often attain a diameter of 8 inches. The stems are stout and bear the sweetly scented flowers well above the water. My strain of Gracilis is unusually good; awarded Certificate of Merit by the Society of American Florists at Houston, Texas. \$2 each.

Ernst Ludwig. This hybrid of the Stellata type produces enormous flowers of a violet-blue color. It is a very early and continuous bloomer. Being a very vigorous grower it should be allowed ample space. $\$ 2.50$ each.

Mrs. C. W. Ward. This splendid variety was produced from N. gracilis. It has the free-blooming characteristics of its parent, but produces a very much Iarger flower, deep rose-pink-almost red-in color. The stamens are yellow and the flowers rise well above the water. $\$ 2$ each.

MRS. EDWARDS WHITAKER. The Iargest flowering day-blooming hybrid, derived from the recently introduced Ovalifolia crossed with the manypetaled Castaliiflora. The enormous flowers are often 13 inches in diameter. They are produced on stout stems a foot above the water and open for the entire day. First the color is lavender-blue, lightening as the flower matures. This is one of the very finest of the blue Lilies and in great demand. $\$ 2.50$ each.

Mrs. G. H. Pring. See page 12


Bright yellow stamens and rich blue petals make Pennsylvania one of the most attractive varieties. See page 16

## TENDER OR TROPICAL LILIES, continued

Mrs. Woodrow Wilson. This is one of my hybrids from Daubeniana and bears the same leaf characteristics. This variety is, however, much strongergrowing than its parent and produces lavender-blue flowers of much greater size. The stamens are yellow, tipped with the color of the petals. An extremely satisfactory variety for medium-sized pools. $\$ 2$ each.

Ovalifolia. This variety of African origin produces flowers of the largest size. Upon opening the first day the flowers are very pale, almost white, but as they mature, a shade of blue suffuses them. It is very free-blooming and the flowers are sweetly scented. $\$ 5$ each.

Panarna-Pacific was produced in Arlington quite recently. It is everblooming, viviparous, strong-growing, and free-flowering. The buds, as they come out of the water, are bronzy green spotted with a reddish brown, opening rich, rosy red, which is quite pronounced in the full sun. When fully opened, the predominant color is reddish purple and the stamens are yellow. This is a new and distinct color in Water-Lilies. An excellent variety for the conservatory in winter. $\$ 2.50$ each.


Radically different from the other form, Nymphæa Zanzibariensis rosea should be grown in every large pool. See page 17

## TENDER OR TROPICAL LILIES, continued

Pennsylvania. This is, in reality, simply an improvement on Pulcherrima, next listed, but while possessing aII the good points of this excellent variety ${ }_{5}$, it surpasses it in size of flowers, which are also a deeper and richer blue. (See illustration, page 15.) $\$ 2.50$ each.

Pulcherrima. Of all the standard varieties, this is probably the most beautiful of the hybrid tender Nymphæas. Its flowers measure 10 to 12 inches in diameter and are of a delightful light blue color. The yellow stamens form a pleasing contrast to the petals. The sepals are marked on the outside with black lines and dots, and the leaves are spotted on the under side. A very free and continuous flowering variety. $\$ 2$ each. See color illustration.

STELLA GURNEY. A spontaneous seedling, raised in Tower Grove Park, St. Louis. The parentage, recently proved by Pring, determines it a seedling from Mrs. C. W. Ward. It is a strong, free-blooming variety. Flowers are above the average in size, light rose-pink. Leaves light green, bearing extremely long petioles. $\$ 3.50$ each.


Frequently the blooms of Dentata magnifica are over a foot across

## TENDER OR TROPICAL LILIES, continued

William Becker. An improvement on the variety, William Stone, with which it is identical, except the flowers are more violet-purple. $\$ 2.50$ each.

WILSON GIGANTEA. This is a hybrid from our own Mrs. Woodrow Wilson crossed with Castaliiflora and bears many of its characteristics. The variety that Mr. Pring has produced is however a much stronger grower and bears larger flowers. These are 7 to 8 inches across and rise a foot above the water. The color is dark Iavender-blue. $\$ 3.50$ each.

William Stone. This variety was produced from Gracilis. The purple flowers attain a diameter of 5 to 7 inches and have purple stamens and a yellow center. They open early in the morning and do not close until late in the afternoon. They are carried weII above the water. $\$ 2$ each.

Zanzibariensis. The superb Water-Lily from Africa. The color is of the deepest purple. Flowers measure 6 to 8 inches in diameter, are strongly fragrant and produced very freely. $\$ 2.50$ each.

Zanzibariensis rosea. A seedling variation from the type. The flowers are various shades of rose-pink; leaves pink on the under side. $\$ 1$ each.


Omarana produces extremely large blooms. Not suited for tub culture, but excellent for pools. See page 19

## Night-blooming Water-Lilies

This class of Water-Lilies differs from the other tropical Lilies in that the flowers open in the early evening and remain open until the morning sun becomes bright and warm. On cloudy days they remain open much longer and late in the season, when the weather becomes cooler, the flowers remain open nearly the whole 24 hours. They require the same cultural care as the day-bloomers. They are of distinct beauty and for evening decoration they are unsurpassed.

Bisseti. A night-bloomer of unusually free-blooming habit. The flowers are of a beautiful rose-pink color, 8 to 10 inches across; the petals are broad and slightly concave, giving the bloom a cup-shaped form. $\$ 2$ each.

Dentata. The flowers are of the purest white, 8 to 10 inches in diameter, and are produced very freely. The petals open out horizontally. \$1 each.

## NIGHT-BLOOMING WATER-LILIES, continued

Dentata magnifica. The very wide, slightly concave petals of this variety give the appearance, when open, of a cup. In color the flowers are creamy white and they often attain a diameter of 12 inches; the stamens are pure yellow. (See illustration on page 17.) $\$ 2.50$ each.

Dentata superba. This is a seedling from $N$. dentata, wich flowers 8 to 12 inches across. The petals are very wide, pure white in color, and open flat. The stamens are yellow, and the variety is very free-blooming and most desirable. $\$ 3$ each.

Devoniensis. The bright rosy red flowers are 8 to 10 inches across, and are borne on stout stems, well out of the water. The plant blooms most freely and is one of the most desirable of the night-bloomers. $\$ 1$ each.

Deaniana. A strong and vigorous plant, with bronzy green leaves crumpled at the margin. The flowers are pure, light pink; sepals deep rose-pink and stamens red. $\$ 1.50$ each.

Frank Trelease. A superb variety. The rich crimson flowers are 8 to 10 inches in diameter, and the stamens are mahogany-red. The leaves are very attractive, being dark bronzy red. This is a most desirable variety. $\$ 1.50$ each.

George Huster. A free-growing and free-blooming variety. Flowers 10 to 12 inches across, and of a crimson color. A desirable acquisition to the list of night-blooming Nymphæas. \$2 each.

Jubilee. The flowers of this variety are of great substance, creamy white flushed with pink at the base of the petals. An excellent variety. $\$ 1.50$ each.

Kewensis. Very pale pink flowers; moderate grower, but freeflowering. \$1.50 each.

Lotus. This is the variety indigenous to Iower Egypt and mentioned so often in Egyptian Iiterature. Petals of this variety have been found in the tombs of the Pharaohs. The flowers are Iarge and somewhat cup-shaped and the petals are white and often slightly flushed with pink. The large green leaves have serrated edges and the plant is a strong and vigorous grower. $\$ 1.50$ each.

Omarana. A very vigorous and strong-growing variety, producing flowers of the greatest size. The color is reddish pink with almost white stripes in the center of the petals. An illustration of this variety may be seen on page 18. $\$ 1.50$ each.

Rubra rosea. The oldest and best red night-bloomer in cultivation. The flowers are rosy carmine in color and attain a size of 8 to 10 inches. The plants grow very freely and produce many flowers which are always a delight to flow-er-lovers. \$1 each.

Sturtevanti. An exceedingly beautiful flower, 8 to 12 inches across; bright red. One of the very best Nymphæas, but requires liberal treatment and a hot summer to bring it to perfection. $\$ 2$ each.


Paul Hariot

## Hardy Nymphæas

The hardy Lilies or Nymphæas are best adapted for natural ponds, where the roots may be planted directly in the mud at the bottom. They may also be used to advantage in large artificial pools, and certain of the moderate-growing varieties are suited for small pools and tubs. The matter of planting and spacing is taken up in the general cultural notes in the fore part of this catalogue. In placing in natural ponds, avoid planting too near springs or any cold inlet. One should bear in mind in regard to hardy Lilies that they are hardy as long as the roots are not actually frozen or disturbed by the ice. A sufficient depth of water will afford all the protection needed.

Even though you have never attempted to grow Water-Lilies you need have no fears about undertaking their culture. No special skill is required-just see that they have plenty of water and sun. The demand for hardy Lilies for the past few years has been so great that stock of some varieties was depleted and had to be taken from the list. This season several are again offered although in limited quantity.

## Recent Introductions

Importation of European varieties of new and rare Nymphæas has been considerably restricted by quarantine, but through the courtesy of the Federal Horticultural Board I was enabled, in 1922, to import from France some of Marliac hybrids for trial. Several of these have proven exceedingly good and will be offered as stock is increased. Through the importation I have also been enabled to offer some varieties the stock of which had become depleted in this country.

## NOVELTIES OF STERLING WORTH

COMANCHE. An introduction of M. Marliac in 1908. The flowers are produced very freely from strong-growing, vigorous plants. Of all the varieties on trial in our ponds last summer, none gave better results than this one. The flowers are Iarge, of a rich apricot color on opening but as the flower ages it becomes a dark copper-orange, streaked with glowing red. The foliage is olivegreen flaked with brown. $\$ 7.50$ each.

GRAZIELLA. M. (Marliac's introduction.) This variety is of moderate growth and well suited to tub culture. The foliage is mottled with maroon and is brownish underneath. In color the flowers are yellow-red deepening to orange-red. \$5 each.

MASANIELLO. (Marliac, 1908.) The flowers of this variety are very fragrant and in form are all that could be desired of a hardy Lily. The plant is a very free grower and needs considerable room. The flowers are rose-pink, dotted with carmine; the sepals of the flowel are white, making a very odd contrast to the color of the petals. $\$ 5$ each.

SEIGNOURETI. Although this variety was introduced by Marliac in 1879 and imported to this country, it has been impossible to obtain any here for some time. My stock has been replenished by a recent importation, and I am glad to be again able to offer it. The flowers are medium in size and rise 4 to 6 inches above the surface of the water. Upon opening, they show a predominating light yellow color which on the second day is slightly tinted with pink. Before the flower is finished, the pink shading has deepened to carmine. The leaves are spotted brown and the stamens are orange-yellow. The whole effect is most pleasing and the soft color was admired by all visitors here last summer. $\$ 5$ ea.

## Select and Rare Varieties of Hardy Lilies

The choicest American and European hybrids are included in this collection. In the unique colors, exquisite tints, magnificence of form and substance of the flowers, they are not surpassed by any collection of Nymphæas. The prices at which the different varieties are offered will permit the owner of even the smallest garden to gratify his desires for a few of these splendid plants.

Andreana. Flowers beautiful red and yellow; distinct and desirable variety. Can be grown in a tub. $\$ 1.50$ each.

## SELECT AND RARE VARIETIES OF HARDY LILIES, continued

ATTRACTION. This wonderful French introduction is one of the finest hardy Lilies ever produced. The flowers often measure 8 inches across and are produced very freely. Upon opening, the color of the petals is garnet-red and the sepals almost white; stamens yellow, lightly touched with mahogany. As the flowers mature the color deepens until it becomes a pronounced dark red and the sepals are streaked with garnet. A most worthy and valuable addition to any collection. $\$ 10$ each.

Aurora. A very much-desired variety. Its flowers are rosy yellow on the first day, red-orange on the second, and deep red on the third day. The stamens are orange-red and the leaves are mottled with brownish red. $\$ 2$ each.

ESCARBOUCLE. A most attractive and meritorious variety. The flowers are most striking in color, being a uniform vermilion-red. A free bloomer and a strong grower. Sure to become popular. \$12.50 each.

FORMOSA. A large-flowering, clear pink Lily, with petals broad and incurving. $\$ 7.50$ each.

James Brydon. A superb variety, being a free grower with rosy crimson flowers, 4 to 5 inches in diameter. $\$ 3.50$ each.

LOOSE. A beautifuI, Iarge, white Lily, 5 to 7 inches across, with a delightful fragrance. Especially desirable because of its freedom and continuance of blooming. The flowers open very early in the day. One of the best of the white Nymphæas. \$1.50 each.

Paul Hariot. A grand and magnificent variety, producing flowers of large size, distinctive in color, firm in texture, and lasting in quality. Upon, opening the first day, the flowers are clear canaryyellow, the second day they are shaded with pink at the base of the petals, and on the third day this pink suffuses the whole flower. This variety is very freeflowering, grows well under varied conditions, and has met with favor whereever seen. Awarded Society of American Florists' Certificate of Merit. (See illustration, page 19.) Price $\$ 5$ each.

PINK OPAL. While this novelty is not of exceptional size, it has some other unusual points. The color is an excep-


Nymphæa, Sioux tionally deep pink, and the bud is of a peculiar rounded form, the petals being very short and of unusual substance. The outstanding merit is its lasting qualities as a cut-flower. $\$ 2$ each.

ROSE AREY. A wonderful variety of the Odorata type, very free-flowering, and strong growing. The flowers are very large (last year we had flowers 8 inches across), and are sweetly scented. The color is clear cerise-pink and does not lighten toward the center of the flower. Awarded a Silver Medal by the New York Horticultural Society. \$2.50 each.

Robinsoni. Large, floating flowers of dark orange-red. A free bloomer and should be in every collection. $\$ 4$ each.

SIOUX. Large flowers of rich, brassy yellow, shaded red as the flower grows older; petals Ianceolate; stamens deep yellow; bronzy green foliage, spotted reddish brown. French novelty. IIlustrated above. $\$ 3$ each.

## SELECT AND RARE VARIETIES OF HARDY LILIES, continued

VESUVE. The flowers are of an amaranth-rose, extra large, free-blooming and constant. One of the very best dark-colored, hardy Nymphæas. $\$ 5$ each.

William Falconer. One of the finest of the dark red hardy Water-Lilies. The color is a warm, brilliant red set off by the bright yellow of the stamens. The flowers are 5 to 6 inches in diameter, and, when the plant is well established, produced very freely. $\$ 5$ each.

## Complete List of Hardy Nymphæas

Alba candidissima. A vigorous and desirable variety. Flowers good-sized and pure white. An early and free bloomer. \$1 each.

Andreana. See page 20.
Attraction. See page 21.
Aurora. See page 21.
Comanche. See page 20.
Escarboucle. See page 21.
Eugenia de Land. This grand variety belongs to the $N$. odorata group, and is unequaled by any other of the same genus. Flowers extra large, of true $N$. odorata type, floating, petals long and lanceolate; color an exquisite shade of deep rose-pink of iridescent hues, with yellow stamens. Vigorous and freeflowering plants. Awarded Silver Medal by the Newport Horticultural Society. $\$ 1.50$ each.

Formosa. See page 21.
Gladstoniana. Flowers dazzling white, 6 to 8 inches across; petals concave and broad. A free and continuous bloomer and one of the finest white Lilies


Nymphæa, Eugenia de Land in cultivation. Strong grower, and should be allowed plenty of room. $\$ 1.50$ each.

Gloriosa. A superb variety, with flowers 4 to 6 inches across, of deep car-mine-rose. Free, continuous bloomer and a desirable Lily for general use in tubs or ponds. $\$ 5$ each.

Graziella. See page 20.
Helen Fowler. A natural cross of the $N$. tuberosa type; strong and of vigorous growth; flowers are borne on stout stems making it useful for cut purposes; deep pink and very fragrant. Certificated by the Horticultural Society of New York. \$1 each.

James Brydon. See page 21.
Laydekeri lilacea. Flowers 3 to 5 inches across, rosy lilac, shaded bright carmine, with a tea-rose fragrance. Very desirable for tub culture. $\$ 2.50$ each.

Laydekeri purpurea. A free-blooming variety; flowers medium-sized, rosy crimson, with reddish orange stamens. Does well in tubs. \$2 each.

Loose. See page 21.
Marliacea albida. A vigorous variety; flowers large, of sparkling whiteness; stamens light yellow, sepals flushed pink; fragrant and produced freely and continuously through the season. Desirable and handsome. \$1 each.

## COMPLETE LIST OF HARDY NYMPHÆAS, continued

Marliacea carnea. Similar to the preceding save in color, which is of a soft flesh-pink, deepening toward base of petals. $\$ 1$ each.

Marliacea chromatella. A free and vigorous grower; flowers 4 to 6 inches across, bright canary-yellow, stamens deep yellow; leaves deep green, beautifully blotched with brown. \$2 each.

Marliacea rosea. Resembles $N$. Marliacea carnea in habit and growth; flewers large, deep rose color; young leaves purplish red, changing to deep green. One of the best for cutting. $\$ 2$ each.

Masaniello. See page 20.
Odorata. The fragrant Pond-Lily of the northeastern United States; flowers white, 3 to 5 inches in diameter, stamens yellow; leaves dark green above, under surface deep red to reddish green; splendidly adapted for planting in quantity in natural ponds. 35 cts. each, $\$ 3.50$ per doz.

Odorata gigantea. A native variety of the southeastern states. Both the leaves and flowers are very much larger than the native Pond-Lily of the North, and this variety requires deeper water and more room to spread than any other sort. It is excellent for naturalizing. The leaves are light red underneath and the flowers are very large and pure white in color. A very effective variety to use for bold contrasts. 50 cts. each, $\$ 5$ per doz.

Odorata, W. B. Shaw. Flowers Iarge, of rich rose-pink and very fragrant. A strong grower and continuous bloomer. \$1 each.

ODORATA SULPHUREA GRANDIFLORA. Flowers fragrant; 5 to 7 inches across; sulphur yellow in color and rising well above the surface of the water. Light green leaves mottled with brown. Very desirable. $\$ 2$ each.

Paul Hariot. See page 21.
Pink Opal. See page 21.
PYGMÆA. This is the Chinese pygmy Water-Lily which is best suited for shallow water or tub culture. The flowers are white with golden yellow center and sweetly scented. The flowers seldom are more than $11 / 2$ to 2 inches across but are produced freely. Foliage dark green and mottled with brown on top, red underneath. A unique and lovely variety. $\$ 1.50$ each.

Pygmæa Helvola. A yellow N. pygmæa, a very dainty Lily and extremely free-flowering. Very satisfactory for tub culture. \$1 each.

Rose Arey. See page 21.
Robinsoni. See page 21.
Sioux. See page 21.
Seignoureti. See page 20.
Tuberosa rosea. Flowers of an exquisite shade of pink, 4 to 5 inches across, standing well out of the water. $\$ 1$ each.

Tuberosa Richardsonii. Flowers white, $\boldsymbol{\delta}$ to 8 inches across, forming with its numerous petals a perfect globe when fully open. $\$ 1$ each.

Vesuve. See page 22.
William Falconer. See page 22.

## SPECIAL OFFERS

THE ARLINGTON TRIO. Three Marliacea varieties suitable for tubs or artificial pools. One pink, one white and one yellow. Three plants, enough for a six-foot pool, for $\$ 3$.
THE PARK TRIO. Three strong-growing varieties suitable for planting in natural ponds with a water-depth up to two feet or in artificial pools. One each of Tuberosa Richardsonii (white), Tuberosa Rosea (pink) and Marliacea chromatella (yellow) for $\$ 3$.
THE JERSEY TRIO. Three varieties of my own introduction, tender, of moderate growth and suitable for tubs or artificial pools. One each of Daubeniana (very light blue), Mrs. Wilson (lavender blue) and Panama-Pacific (purple) for $\$ 5$.
THE PRING TRIO. Three varieties produced at the Missouri Botanical Garden. AII of the largest size and finest color. Mrs. Pring (white), Gen. Pershing (pink) and Mrs. Whitaker (blue). Three plants for the price of the first two, $\$ 20$.

## Nelumbiums

Perhaps the most strikingly beautiful plant in the aquatic realm is the Lotus


Nelumbium speciosum is almost as interesting for its associations as for its beauty or Nelumbium. In all stages of growth the plant has an artistic appeal. The great concave leaves, often over 2 feet in diameter, like wonderful green shields borne on stout stems high above the water, are beautiful enough to win general admiration even without their "thou-sand-petaled flowers." Then too, the brown seed-pods, remaining after the flowers have blown, are so decorative that none can pass them by without observing them.

A symbol of evolution, it springs from the mud, lifting its golden-hearted blossom high over the water that it may open pure and spotless to the sun. Held sacred by the Buddhist, it is to him emblematical of the soul of man, resting always in calm above the surging activities of the world; existing in the sunlight pure and undefiled; rooted in a world of experience.

Its personal beauty is appealing in leaf, bud, and opened flower, its poetic charm in its poise above the water, its perfume, and its symbolic appeal of religious thought. One may readily slip into the past when brought face to face with the open flower. He can in fancy see the kings and queens, the courts and courtiers of ancient Egypt; the priests and devotees of the temples, the scholars and poets of that long-age time; a great company who paid homage, who worshipped, and who sang of this royal plant-the Lotus. The spell of the Nile still hovers around the blooms, even while their glory adds to the charm of our twentieth century gardens.

They are of easy culture, these Nelumbiums, but as they are rampant growers and heavy feeders they must be supplied with a very rich soil. They are transplanted in tuber form but must not be removed until favorable weather conditions prevail-usually during the month of May. The tubers can only be supplied during a period of about six weeks for after that period they have usually advanced too far in growth for safe shipping. After that time pot-grown plants are available. They are produced by potting up tubers as soon as dug and placing them in warm tanks in the greenhouse.

Nelumbiums may be grown in half-barrels, in artificial pools, or in natural ponds. The tubers are hardy as long as they are protected from actual freezing, and are undisturbed in their natural winter quarters. For naturalizing in ponds, there is no variety better than Speciosum. The flowers, deep rose in color, rise like mystic flames from the dark water. Later, when the blooms open in the heat of the sun, the creamy tints about the bases of the inner petals render them even more beautiful. Album grandiflorum, white, is also fine for naturalizing; our native Lotus, Luteum, with its yellow bud rising above the water, is superb.

Truly this is a wonderful genus of plants and worthy of every effort of cultivation to invite the inspiration that has served to elevate the minds of men for thousands of years.


Even the so-called cold of Canada does not interfere with the blooming powers of the Nelumbiums. This pool is in the garden of Mr. A. E. Raynes, 7illsonburg, Canada

## NELUMBIUMS, continued

Album grandiflorum. Flowers pure white, large, and fragrant. $\$ 2.50$ each.
Kermesinum. A delicate rose-pink; early. \$2 each.
Kinshiren. White, shaded rose-pink; early-flowering. UsefuI for tub culture. $\$ 2.50$ each.

Luteum. The American Lotus, or Water Chinquapin. This is a native variety indigenous to the southern and western states, but grows well in our eastern states. Flowers are creamy yellow. \$1.50 each.

Osiris. A beautiful globular flower; deep rose. Blooms are produced in large numbers early in the season. $\$ 2.50$ each.

Pekinensis rubrum. Flowers brilliant rosy carmine, 10 to 12 inches across. Plants vigorous and free. $\$ 3.50$ each.

Pekinensis rubrum plenum. This splendid Nelumbium is identical in color with the variety listed above, but the flowers are very double, resembling a giant peony. Double-flowering Nelumbiums are very scarce. $\$ 5$ each.

Roseum. Deep rose-pink; beautiful globular flowers. $\$ 2$ each.
SHIROMAN. This superb variety surpasses all other Nelumbiums in stateliness and size. Flowers pure white, large, and very double. The plant is a vigorous grower, free-flowering, and can be grown without difficulty under ordinary conditions. $\$ 5$ each.

Speciosum (Egyptian Lotus). Exquisite flowers of a beautiful rose-color; vigorous and free-flowering. (See illustration, page 24.) $\$ 1.50$ each.

## Pot Plants of Nelumbiums

After the middle of June tubers of Nelumbiums cannot be supplied. I usually have at that time some pot-grown plants. These are tubers that have been potted early and started into growth indoors in our heated tanks. \$1 more than listed price will be charged for such plants. Thus a pot-grown plant of Nelumbium album grandiflorum will cost $\$ 3.50$.


No water plant is more interesting in a large pond than Victoria Trickeri. The immense floating leaves, and the distinct blooms, form a wonderful combination

## VICTORIAS

Early in the year 1837, Sir R. Schonburgh was traveling in British Guiana when he came upon what he described as a "vegetable wonder." The plant he discovered had enormous leaves floating on the water, six feet in diameter and turned up on the edges five or more inches. The flowers were immense and rested upon the surface of the water; the fragrance was heavy and exceedingly rich. Previous to this date this plant had been observed by other travelers in other parts of South America, but Dr. Lindley was the first to describe it and he named it Victoria Regia in honor of Queen Victoria. The first plant which flowered under cultivation was in England in 1849. Seeds which came to America produced plants which were first flowered outdoors in the gardens of Caleb Cope of Philadelphia, in 1851.

In 1894 a variety was introduced that habitats the Rio Parana and its tributaries. This variety coming from a cooler section of the tropics, adapted itself to our climate much better than Victoria Regia which it has now practically surplanted. It was identified as Victoria Cruziana but was introduced to this country under the name of Victoria Trickeri.

A large area and plenty of rich soil are needed to mature the Victoria; at least three hundred square feet of surface room and a cubic yard of soil would be needed to produce large leaves but it can be grown under the same conditions as the tender Iilies. A tub or half barrel of soil with 15 inches of water over the crown of the plant will provide growing quarters for a plant that will flower and produce leaves three feet in diameter. It is not safe to plant out Victorias in the vicinity of New York City until the middle of June. Select a warm, sheltered spot in which to plant this wonderful specimen of the vegetable kingdom.

Victoria Trickeri. This species is of vigorous and rapid growth, and produces its marvelous flowers at an early stage. A single plant often has from ten to fifteen well-developed leaves and frequently two flowers open at the same time. The flowers are white when first open, changing to deep rose the second day, and have a fragrance like a ripe pineapple. Plants, $\$ 7.50$ and $\$ 10$ each.


Showing clever arrangement of shallow water at edge of pool, successfully hiding masonry

## Miscellaneous Aquatics

In a natural pond there is much shallow water in which one finds growing grasses, sedges and various perennials suited for that location. Here indeed a great many plants, interesting and beautiful, can be grown; and in an artificial pool it is well to simulate such a location. This can be done by means of pots, tubs or boxes of soil, or by making an inner wall- 18 inches or more inside the wall of the pool. This wall, or the tops of the receptacles, should come to within six inches of the water surface. In this manner much unsightly masonry could be hidden. The list of plants following are suitable for planting in the above mentioned location.
ACORUS japonicus variegatus (Variegated Sweet Flag). One of the finest variegated plants in cultivation. Hardy, 2 to 3 feet, 8 to 10 inches. Plant in very shallow water. 50 cts . for $2, \$ 2.50$ per doz.
A. gramineus variegatus. A dwarf-growing variety; very pretty variegation; useful also as a pot-plant. 50 cts. for 2.
APONOGETON distachyus giganteus. An improvement on the old variety from Cape of Good Hope. The leaves float on the surface and are lanceolate in shape. The flowers are white, with dark anthers, borne on forked spikes in pairs, and are very fragrant. Does best in cool water. 75 cts. each.
CALLA palustris (Water Arum). A dwarf perennial aquatic. A miniature Calla, an interesting plant for the margin of a pond. 50 cts . for 3.
C. Richardia (Calla Lily). One of the best water plants for summer use. Perpetual flowering; fine white flowers. Not hardy but can be kept indoors through the winter. Flowering plants, $\$ 1$ each.
CERATOPTERIS (Water Fern). A unique floating plant. 50 cts. for 3.
COLOCASIA multiflora (Japanese Water Taro). A very unique foliage plant. The leaves are rich green, on dark purple stems. Can be grown as a house plant from tubers, using same cultural directions as for Chinese Sacred Lily (gravel and water in a shallow dish). As a marginal plant for the pool, it is very ornamental, as it will grow to a height of 4 or 5 feet. 50 cts. each.
CRINUM americanum. A native plant of the Florida swamps. It produces its flowers in umbels of six or eight large, white and very fragrant blooms. Grows in any kind of soil, but must be kept wet. 35 cts. each.

## MISCELLANEOUS AQUATICS, continued

CYPERUS adenophorus. From Brazil; grows about 2 feet high. The flowers, greenish white in color, are produced in umbels and are quite interesting. Thrives well either as pot-plant or marginal plant. 25c. each, $\$ 2.50$ per doz.
C. alternifolius (Umbrella Palm). A very attractive plant for growing in small pools or in moist ground. 25 cts. each.
C. alternifolius variegatus. A white-variegated form of the preceding variety; very distinct and attractive. $\$ 1$ each.
C. gracilis. Dwarf. Very useful for aquariums or small tubs. 75 cts. for 3.
C. papyrus. This unique aquatic plant is extremely decorative and adapts itself readily to a very moist position. It is native to Egypt and is the true "Egyptian Paper Plant" of ancient fame. It can be grown in a large spot or tub of soil, submerged in water, or in the ground near the pool where it can be supplied with an abundance of water. 35 cts . and 50 cts . each.
EICHHORNIA crassipes major. The native Water Hyacinth of Florida, which grows so Iuxuriantly that it hinders navigation on the St. Johns River, but in our northern states it is destroyed with the first frost and thus could not become a nuisance. The flowers are rosy lilac and much resemble an orchid. If placed in shallow water, over soil, the roots will soon anchor the plants by penetrating into the soil, and under such conditions they flower most freely. 50 cts . for $3, \$ 1.50$ per doz.
E. azurea. Flowers of a lovely shade of lavender-blue, with a rich purple center; petals delicately fringed. Creeping habit. 50 cts . each.
GLYCERIA spectabilis fol. var. A hardy perennial grass, desirable for low ground and margins of ponds; 3 to 4 feet; leaflets striped green. 50 cts . each.
HEDYCHIUM coronarium (Butterfly Lily). A tender subaquatic plant which forms in moist ground a dense clump 3 to 6 feet high. The masses of pure white fragrant flowers look like large white butterflies. $\$ 1$ for 3.


The Water Hyacinth is an interesting aquatic plant for the greenhouse or conservatory
H. gardnerianum. A native of India, and while similar to the preceding variety, is considered the best of the genus and very desirable. In habit it is tall-growing and the light yellow flowers are followed by bright red berries. Quite a desirable semi-aquatic plant. \$1 for 3.
JUSSIÆA longifolia. A very attractive and desirable aquatic, growing 2 to 3 feet high, erect, slightly drooping at the points, and producing numerous axillary flowers of a rich golden yellow, like an evening primrose. A good plant for tubs or planting on the edge of a pond. $\$ 1$ for 3 , $\$ 3.50$ per doz.
IIMNANTHEMUM indicum (Water Snowflake). A pretty, lily-like plant, producing masses of dainty snow - white flowers, beautifully fringed. 35 cts . each.
L. nymphæoides. A hardy aquatic plant, with nym-phæa-like leaves and bright yellow flowers, produced very freely. $\$ 1$ per doz.

## MISCELLANEOUS AQUATICS, continued

LIMNOCHARIS Humboldtii (Water Poppy). A pretty plant, with floating leaves and yellow flowers; continuous bloomer. 50 cts. for 3 , $\$ 1.50$ per doz.
L. Plumieri. An erect-growing plant, standing 1 to 2 feet out of the water, with elliptical leaves 4 to 6 inches long, of a velvety green. Flowers strawcolor. 50 cts. each.
MARSELLIA Drummondii. A very pretty subaquatic plant with foliage resembling a four-leaved clover. Grows very quickly. 35 cts . each.
MENYANTHES trifoliata (Buckbean). A perennial aquatic with creeping rootstocks in shallow water. Its fragrant white flowers are borne on stout stalks, fringed and suffused with pink. 50 cts. for $3, \$ 1.50$ per doz.
MYRIOPHYLLUM proserpinacoides (Parrot's Feather). An aquatic plant having long, trailing stems, covered closely with whorls of most delicate foliage. Planted in a tub or water-tight hanging-basket, it will quickly grow over the edges and becomes a beautiful sight. 50 cts. for $3, \$ 1.50$ per doz.
PISTIA Stratiotes (Water Lettuce). A floating aquatic. The leaves, which radiate from a common center, are soft and velvety; very pretty, and a rapid grower. 35 cts . each, $\$ 2.50$ per doz.
PONTEDERIA cordata (PickereI Weed). A free-flowering plant, growing 2 feet high and producing spikes of blue flowers. 25 cts. each, $\$ 2$ per doz.
SAGITTARIA montevidensis (Giant Arrowhead). Attains gigantic proportions, growing 4 to 5 feet high, leaves 15 inches long; flower-scape towers above the foliage, bearing white flowers, with dark blotch at base of each petal; suitable for margins or tub cultivation. 35 cts. each, $\$ 1$ for 3 .
S. japonica fl.-pl. The double-flowering Arrowhead; very desirable for planting in tubs or on margins of ponds and streams. 50 cts. each, $\$ 5$ per doz.
S. sinensis (Giant Sagittaria). Leaves broad and strong, dark green; a free grower. Suitable for aquarium. 50 cts. for $3, \$ 1.50$ per doz.
SALVINIA braziliensis. A dainty floating plant. Leaves soft green, covered with delicate hairs. Suitable for aquarium. 25 cts . a bunch.
THALIA dealbata. A fine and stately aquatic, with canna-like leaves, to be grown in shallow water or wet soil. Hardy. 50 cts. each.
TRAPA natans (Water Chestnut). A hardy annual and very desirable for the aquarium, pool, pond, or tub culture. Foliage beautifully mottled or variegated; flowers white, smaII in proportion to the fruit or nuts which, when ripe, drop off and remain in the water until the following spring. $\$ 2$ per doz.
TYPHA latifolia. WeII known in the East as "Cat-tail." Is very attractive and decorative when grown in small clumps. It grows about $21 / 2$ feet high, and from the center the flowerspike arises 4 or more feet above the water. The spike is about 1 inch in diameter, 4 to 6 inches long, and dark brown in color. The foliage is narrow and very graceful. \$1 per doz.
ZIZANIA aquatica (Wild Rice). This native aquatic annual is very ornamental; its graceful panicles of bloom are borne on stalks 5 to 10 feet high; should be grown in shallow water. \$1 per doz.


The Water Poppy has large, floating leaves and strawyellow flowers


Hemerocallis has decided beauty at the eage of a pool

## Hardy Perennials for the Edge of the Pool

The question often arises as to what should be planted around the pool that will be in keeping, with the aquatic plants. The answer can only be such perennials as will thrive in wet soil. Such a condition must be "made" around an artificial pool but around a natural pond the place is already there. The following plants are most suited of all the hardy perennials for use under such conditions. Be sure to keep the ground around the artificial pool always moist. The luxuriant growth of these plants when plenty of moisture is available is astounding. Most of the perennials are grown in 3- and 4 -inch pots, and when shipped from such are in best condition for planting. No roots are disturbed, as in digging from the field, and the plants quickly begin to produce results.
ASCLEPIAS incarnata (Swamp Milkweed). A good waterside plant, 2 to 3 feet high, with rosy purple flowers. Especially good in a semi-wild garden. 20 cts. each, $\$ 2$ per doz.
ASTER novæ-angliæ. These hardy New England Asters are very showy, and by reason of their late flowering are very desirable around the pool. They grow very easily under most conditions, but thrive in moisture. The color is violet-purple. 25 cts. each, $\$ 2.50$ per doz.
A. novæ-angliæ rosea. A pink form of the above described variety. 25 cts. each, $\$ 2.50$ per doz.
A., Peggy Ballard. A dwarf form of the hardy Asters. The color is delicate lavender-blue. 20 cts. each, $\$ 2$ per doz.
A. St. Egwin. The plant grows about 3 feet high, densely branched and of bushy habit. It produces fine, pure pink flowers in September, very valuable for cutting. This splendid Aster was given an Award of Merit by the Royal Horticultural Society, England; Certificate of Merit, Elberon Horticultural Society; Certificate of Merit, New Haven Horticultural Society; First-class Certificate of Merit, Newport Horticultural Society, Newport, R. I. 25 cts. each, $\$ 2$ per doz.

## HARDY PERENNIALS, continued

ASTILBE Davidii. A first-class plant recently introduced from China. The graceful flower-spikes are 5 to 6 feet high, with blooms of clear rosy violet. 50 cts. each, $\$ 5$ per doz.
A. grandis. Somewhat similar to the preceding variety, but more vigorous; often 6 feet in height, with large, pinnate leaves 2 feet in length, and panicles of white flowers 2 to $21 / 2$ feet long. 25 cts. each, $\$ 2.50$ per doz.
A., W. E. Gladstone. A very free, Iarge-flowering variety, snow-white flowers; desirable for moist, shady places; June and July. 35 cts. each, $\$ 3.50$ per doz.
A., Queen Alexandra. A beautiful hybrid of lovely pink. Largely used with the preceding variety as a pot-plant for forcing, but both are perfectly hardy and very desirable for the flower-garden. 25 cts. each, $\$ 2.50$ per doz.
A. Arendsii hybrida. A new type of this most interesting and very valuable plant, especially for the subaquatic garden. The plants are of very vigorous growth, 2 to 4 feet high, densely branched; feathery plumes of delicate coloring. The following varieties are offered:
A. carminea. Well-branched spikes of rosy lilac; 3 feet. 50 cts. each.
A., Ceres. Well-branched panicles; a brilliant rose; $21 / 2$ to 3 feet. 50 cts. each.
A., Gruno. Finest of the pinks; light, graceful, spreading spikes; salmon-pink flowers; 4 feet high. 50 cts. each.
A., Venus. Early-flowering; similar to Ceres; brilliant rosy purple. 50 cts. each.
A., Salland. Very strong spikes of red flowers; 6 feet high. 50 cts. each.
A., Salmon Queen. Very graceful spikes of a fine, light salmon-pink; 21/2 to 3 feet high. 50 cts. each.

BOCCONIA cordata. A taIl-growing perennial that grows weII in moist ground. Foliage silver-green. The flowers come in July and August, borne on stout stems like plumes. 25 cts. each, $\$ 2.50$ per doz.
CALTHA palustris (Marsh Marigold). Bright yellow flowers early in spring; 1 foot high. 25 cts. each, $\$ 2$ per doz.
CLETHRA alnifolia (Sweet Pepper Bush). One of the most charming of our native bushes; will succeed in almost any soil, but prefers a wet ground or margin of pond or stream; flowers white, of a spicy fragrance. 50 cts. each.
EUPATORIUM ageratoides (White Snakeroot). A strong-growing plant; most desirable for the semi-wild garden, growing 3 to 5 feet high; many white blossoms in Iate summer. Good cut-flower. 25 cts. each, $\$ 2.50$ per doz.
E. coelestinum. Light blue flowers similar to the ageratum; very free-flowering; late summer. 18 to 24 inches. 20 cts. each, $\$ 2$ per doz.
FUNKIA undulata picta-media. The beautiful variegated Plantain Lily. Flowers in July on stems 2 feet high, lilac ir color. 20 cts . each, $\$ 2$ per doz.
GENTIANA Andrewsii (Closed Gentian). A strong-growing plant, very pretty by the water-edge, with clusters of deep blue flowers in July and August. 25 cts. each, $\$ 2.50$ per doz.
HELENIUM autumnale superbum. A very attractive plant, growing 4 to 5 feet high, with broad-spreading heads of goIden yellow flowers in late summer and fall months. 20 cts. each, $\$ 2$ per doz.
H. autumnale rubrum. A variety having bright terra-cotta flowers. 20 cts. each, $\$ 2$ per doz.
H., Riverton Beauty. A free-growing, distinct variety, having flowers of a rich Iemon-yellow with a large cone of purplish black. 20 cts. each, $\$ 2$ per doz.
H. pumila. A dwarf variety with bright yellow flowers. 20 cts. each, $\$ 2$ per doz.
H., Riverton Gem. Of strong growth, $21 / 2$ to 3 feet high; flowers brilliant old-gold, suffused with bright terra-cotta, changing to wallflower red. 25 cts. each, $\$ 2.50$ per doz.
HEMEROCALLIS aurantiaca. The hemerocallis, or Day Lilies, as they are commonly known, are especially adaptable for planting around pools and ponds. This particular variety is of great worth. It grows 2 feet high and the rich orange-yellow flowers are of Iarge size and sweetly scented. 25 cts. each, $\$ 2.50$ per doz.

## HARDY PERENNIALS, continued

Hemerocallis Dumortieri. Dwarf; flowering in June. The flowers are a rich cadmium-yellow but the buds and the reverse side of the petals are more of a bronze-yellow, making a pleasing contrast. 25 cts. each, $\$ 2.50$ per doz.
H. fulva. A stronger variety than the preceding; grows 4 to 5 feet high; flowers orange, with deeper shadings. 20 cts. each, $\$ 2$ per doz.
H., Kwanso fl.-pl. A double form of the variety Fulva. Very satisfactory. 25 cts. each, $\$ 2.50$ per doz.
H., Dr. Regel. Very early flowering; a rich golden yellow. One of the very best Day Lilies. 20 cts . each, $\$ 2$ per doz.
HIBISCUS. New Hybrids. Probably no other hardy plant has increased in popular favor more than the Hibiscus. It has always been an attractive flower, with its large, white, pink, and rose-colored flowers, but the hybrids are a new creation, not at all in the same class. The plants are vigorous and free-flowering, often exceeding 6 feet in height, branching, with monstrous flowers 24 to 30 inches in circumference, in all shades of color; a large planting in bloom is a magnificent sight. Being perfectly hardy, the plants are well adapted to all sections of the United States and Canada. My selection comprises the choicest deep, rich crimson shades, together with pink and white. These can be grown successfulify in the herbaceous border; they will succeed in any good garden soil, but to have them in perfection, plant in the water-garden or on the margins of ponds. Selected varieties of White, Pink and Crimson, 35 cts. each, $\$ 3.50$ per doz. General assortment, $\$ 2.50$ per doz.
IRIS germanica aurea. Golden yellow; distinct and fine. Dwarf in habit and desirable around artificial pools. 25 cts. each, $\$ 2$ per doz.
I. germanica, Mrs. Neubronner.


Iris Kaempferi Golden yellow. Probably the darkest pure yellow German Iris. 25 cts. each, $\$ 2$ per doz.
I. orientalis. Rich violet-blue; early flowering; very free; a useful and distinct variety. Should be in every collection. 20 cts. each, \$1.50 per doz.
I. orientalis, Snow Queen. Snowwhite variety of the preceding form; a distinct and very desirable companion. Extra. 20 cts. each, $\$ 1.50$ per doz.
I. pumila. Very interesting and attractive, being one of the earliest and showiest of spring flowers; of dwarf habit; royal purple. 20c. each, $\$ 1.50$ per doz.

## Iris Kaempferi

Iris Kaempferi, or Japanese Iris, are the elite of the Iris family. The flowers begin to open about the third week of June (New York City Iatitude) and continue for several weeks. They grow well in any good garden soil but delight in an abundant supply of water. Planted in a moist situation they are wonderfully productive of blooms. They should be planted either early in the spring or in the month of September. They are valuable as cut-flowers and as such should be cut in the bud and allowed to expand in the water.

## HARDY PERENNIALS, continued

There are hundreds of varieties of Iris Kaempferi, but I have selected the following twelve varieties as a most suitable collection for small gardens. The most simple descriptions possible are given, as the charm of these wonderful flowers cannot be truly described.

All varieties, 35 cts . each, $\$ 3.50$ per doz.
Alba plena. White, six petaled variety; very Iarge.
A. L. Sherwood. Purple, veined with white.

Babylon. Reddish purple-very rich color; extra-Iarge flowers.
Blue Bird. Intense blue throughout; large and full.
Blue Danube. Pure rich blue, yellow center; six petals.
Gold Bound. White with yellow center; Iarge; six petals.
Harlequin. Whitish Iavender; Iarge.
Mahogany. Dark red, shaded maroon; six petals; very distinct.
Ondine. Pure white, shaded with light blue toward center; Iarge and fine.
Painted Lady. White, richly suffused and striped bright pink. A showy variety.
Turban. Beautiful light blue and white; very desirable; six petals.
Venus. Pure white. A strong grower and a free bloomer.
Special Offer: One each of the above named varieties for \$3

## Seedling Japanese Iris

These seedlings are fine for group planting. They possess a splendid range of colors and many are far above the average in quality of flowers. $\$ 1.50$ per doz.
Iris Pseudacorus. This is the common yellow water-flag, flowering in May and June. Planted in water about 2 inches deep, it reaches its perfection, growing to a height of 4 feet. 20 cts. each, $\$ 2$ per doz.
LOBELIA cardinalis (Cardinal Flower). One of the most attractive plants of our native flora, seen along streams and low, moist ground, sometimes a few spikes of rich, fiery cardinal flowers; again in masses, when the sight is brilliant and dazzling. 15 cts . each, $\$ 1.50$ per doz., $\$ 10$ per 100 .
L. syphilitica. Grown under conditions similar to those of the preceding variety, it produces large spikes of flowers, 2 to 3 feet high, of a lovely shade of blue and occasionally white. 15 cts . each, $\$ 1.50$ per doz., $\$ 10$ per 100.
LYTHRUM roseum, Perry's Variety. A grand improvement on the wellknown Rosy Loosestrife, with much Iarger flowers and Ionger spikes of a glistening cherry-red. July to September. 25 cts. each, $\$ 2$ per doz.
MYOSOTIS palustris (Forget-me-not). A light blue flower with yellow center, growing by streams or in wet places. 15 cts . each, $\$ 1.50$ per doz.
SAURURUS cernuus (Lizard's TaiI). A desirable plant for the margins of ponds or moist ground; grows 2 to $21 / 2$ fect high, with terminal, drooping spikes of white, sweet-scented flowers. 25 cts. each, $\$ 2$ per doz.
SENECIO clivorum. A plant of recent introduction from China, with enormous round leaves resembling somewhat the gigantic petasites, producing yellow flowers borne on stems 4 feet high. 25 cts . each, $\$ 2.50$ per doz.
SPIREA palmata elegans. The Spireas are well suited to the water-garden, and S. palmata elegans is perhaps the best of the group. The broad corymbs of flowers are white but appear to be a delicate pink because of the protruding pink anthers. 20 cts . each, $\$ 2$ per doz.
S. ulmaria. fl.-pl. (Meadowsweet). Grows $21 / 2$ to 3 feet high; a double white form; fine for naturalizing. 25 cts . each, $\$ 2.50$ per doz.
STENANTHIUM robustum (Mountain Feather Fleece). A tall-growing plant, with showy panicles of pure white flowers. 35 cts . each.
STYRAX japonica. A handsome shrub or small tree of graceful habit, well adapted to the water-garden. The flowers are white, sweet-scented, produced abundantly on medium-sized bushes; 3 feet. 50 cts. each.
THALICTRUM dipterocarpum. A charming perennial. Its rosy lilac flowers are produced on tall, graceful spikes, 5 to 7 feet high, and contrast beautifully with the citron-lemon of the anthers. 50 cts. each, $\$ 5$ per doz.

## Plants for Small Aquariums

Aquariums, with a few water-plants and several goldfish, are quite popular as an ornament for the city home, and furnish an everchanging amusement for the whole family. As an assistant to the nature-study class in the public schools the aquarium is indispensable, for through it the pupils become acquainted with various forms of aquatic life-fish, mollusks, plants, and algæ.

The fish must have water, but not stagnant, impure water, and the growing plants help to keep the aquarium clean and pure. When the aquarium is well balanced, that is, a given number of fish to the quantity of water, with sufficient plant-life to supply oxygen, then the aquarium is attractive and a source of pleasure. The following plants are adapted to the purpose, a few or more according to the size of the aquarium.
ANACHARIS canadensis gigantea (Elodea; Water-weed). A beautifuI, submerged plant, with elongated, branching stems, thickly set with sessile, whorled or opposite leaves. A rapid grower and one of the best oxygenators. 50 cts. for $3, \$ 1.50$ per doz.
CABOMBA viridifolia (Green Fan-Wort; Washington Grass). A very interesting and popular plant. The light green leaf is fan-shaped, composed of filaments or ribs like a skeletonized leaf. 50 cts. for $3, \$ 1.50$ per doz.
EICHHORNIA crassipes major (Water Hyacinth). A curious and pretty plant in the aquarium, the long, silky, steel-blue roots reaching down in the water. The plant is of value in the aquarium during the breeding season, the roots being receptacles for fish-spawn. 50 cts. for $3, \$ 1.50$ per doz.
HYDROCHARIS Morsus-ranæ (European Frogbit). A delicate, floating plant, with rather thick, heart-shaped leaves, about 2 inches across. Its fine, silky roots are beautiful and attractive in the aquarium, and the plant itself is most graceful. 35 cts . each.
LUDWIGIA Mulerttii. One of the best and most usefuI plants for the aquarium, valuable as an oxygenator. The foliage is glossy dark green on the upper surface, the underside of leaf bright red. An attractive and distinctive plant. 50 cts . for $3, \$ 1.50$ per doz.
MYRIOPHYLLUM verticillatum (Popular Green Milfoil). Very fine Ieaves, pinnately parted and capillary; color a beautiful soft green. 50 cts . for 3, $\$ 1.50$ per doz.
PISTIA Stratiotes (Water Lettuce). A very attractive aquatic, floating plant, with soft, light green velvety leaves; requires warm treatment in winter. 25 cts . each, $\$ 2.50$ per doz.
SAGITTARIA sinensis gigantea. This is the most popular of submerged aquarium plants, and quite indispensable, as it can always be had in a good condition; a free grower and oxygenator. Leaves strap-like and broader than the preceding variety, of a dark, rich green color. 50 cts. for $3, \$ 1.50$ per doz.
UTRICULARIA vulgaris (Greater Bladderwort). A beautiful submerged plant, crowded with primate, many-parted capillary leaves, bearing numerous bladders. 50 cts . for $3, \$ 1.50$ per doz.
VALLISNERIA spiralis. (Italian type.) An evergreen form of eel-grass best suited for the aquarium. It has long, narrow leaves and is an excellent oxygenator. 50 cts . for $3, \$ 1.50$ per doz.

## Seven Assorted Aquarium Plants mailed prepaid for \$1

Note.-It is not possibe to supply all the aquarium plants listed above at all seasons of the year, but I do endeavor to have on hand, in the faII and winter, a supply of those best suited for indoor aquariums.

Those desiring to establish aquariums in their homes will do weII to consult books on the subject. Much valuable information for beginners-and breeders, too-is contained in "Goldfish Varieties and Tropical Fishes." This book is well written by one well informed. It contains 250 pages, with 195 illustrations. I can supply this book for $\$ 4$, postpaid.

## Hardy Ornamental Grasses

The Ornamental Grasses are one striking feature in the garden in clumps, beds or borders, or on the margin of lakes, ponds, etc. In isolated clumps the Pampas is majestic; it is regrettable that it is not hardy. The next best is Erianthus ravennx. The Eulalias are best planted in irregular beds or groups with Pennisetum for a border or edging. Eulalia gracillima unirittata is the most graceful and may be planted very effectively near the water. For Iarge beds Arrhenatherum makes a very desirable dwarf border plant.
ARRHENATHERUM bulbosum variegatum. A dwarf variegated Grass; fine for bordering where a white border is desired, as it retains its clear coloring all season. 20 cts . each, $\$ 2$ per doz.
ARUNDO Donax (Giant Reed). One of the most stately of all Grasses. 50 cts . each.
A. Donax variegata. A beautifully variegated form, not so tall-growing. 50 cts. each.
EULALIA gracillima univittata. The most useful and desirable of all the Eulalias. Its long, narrow, graceful foliage with silvery midrib renders it a very striking and distinct plant as a specimen or for grouping. 25 cts . each, \$2 per doz.
E. japonica variegata. A very ornamental Grass, 4 to 6 feet high, with long, narrow leaves conspicuously marked with green and white, with handsome plumes. 25 cts. each, $\$ 2$ per doz.
E. japonica zebrina (Zebra Grass). Very similar to the above variety, but the blades instead of striped are barred with yellow. 25 cts. each, $\$ 2$ per doz.
ERIANTHUS ravennæ (Plume Grass, or Hardy Pampas). A very ornamental grass; flower-spikes 10 to 12 feet high; makes a most desirable specimen or clump on the lawn. 25 cts. each, $\$ 2$ per doz.
PENNISETUM japonicum (Hardy Fountain Grass). This new addition to the Hardy Grasses is quite an acquisition; its habit of growth is heavier than the annual varieties; it grows from 3 to 4 feet high; foliage narrow, of a bright green, the flower-heads a silvery color, well above the foliage. 25 cts. each, $\$ 2$ per doz., $\$ 15$ per 100.

## Hardy Bamboos

There seems to be something very fascinating about oriental things and the Bamboo is no exception to the rule. The beautiful foliage and the interesting canes are always attractive. They require a rich, well-drained soil. The banks of streams and the edges of ponds and pools make an ideal situation. The varieties listed are all hardy as far north as New York City and should be hardy even farther north if given a slight protection during the winter.
BAMBUSA aurea. Close-jointed canes; leaves light green, small and very graceful. \$1 each.
B. auricoma. A green-and-yellow variety; very pretty; will grow to 3 feet. Makes a rather compact growth, and is most effective when used in connection with the green-leaved varieties. $\$ 1$ each.
B. Fortunei variegata. A dwarf variety, about 18 inches high, with green-and-white foliage. 75 cts. each.
B. palmata. Undoubtedly the most attractive and satisfactory. Broad, rich green leaves, dense in growth; grows about 2 to 3 feet high. $\$ 1$ each.

Please remember that I shall be glad to help you in planning for a water garden. If you will tell me the size of the pool, or tub, I will advise you about suitable varieties, colors, time of blooming, with other information of distinct value.

## To Help in Making Up Your Order for Plants



RICES are quoted net. All goods travel at purchaser's risk and expense.

Shipping. All plants will be packed with the best of care to secure safe transit, but under no circumstances do I undertake responsibility for delay or damage to goods during transit.

Parcel Post. Small plants can be sent by parcel post, but delays occur very often. Beyond the 3d zone it is not only more satisfactory but even cheaper to send by express. I do not prepay postage, therefore please allow sufficient extra to pay postage; any money in excess will be returned.

I Guarantee my plants to be true to name, and in good condition when shipped; but I cannot be responsible for results. Unusual climatic conditions and disregard of planting instructions are entirely beyond my control.

Complaints, if any, as to quality of goods, etc., can be entertained only when made immediately on receipt of goods. I shall always be ready to advise in regard to planting watergardens, and selections of varieties for certain purposes, and invite patrons to consult with me.

Place Order Early for spring delivery and prevent delay of shipment or planting.

Open Accounts. Financial references must be sent to open an account. No account opened on an initial order of less than $\$ 10$.

Substitutions. Sometimes-especially toward the end of the shipping season-I am unable to supply strong plants of some varieties. In such cases, unless otherwise instructed, I will substitute a variety as near like the one ordered as possible, of equal or greater value.

This is our 1924 Catalogue; it cancels all other previous price-lists

WM. TRICKER : Arlington, New Jersey

## PLEASE USE THIS ORDER SHEET

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## WIILIAM TMICRER Water-Tily Specialist 

ARLINGTON



Nelumbiums add beauty and novelty to the aquatic garden. (See page 24)

