Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.57 CATALOGUE

— OF —

Rare Water Lilies

*And other Choice Aquatic Plants, with Directions
for their Culture. Also, a List of*

Greenhouse & Bedding Plants

FOR SALE BY

EDMUND D. STURTEVANT,

CORNER OF FARNSWORTH AVENUE AND UNION STREET,

BORDENTOWN, NEW JERSEY.

1884-5.

TRENTON, N. J.

MACCRELLISH & QUIGLEY, PRINTERS, No. 16 EAST STATE STREET.

1884.

The following are a few of the names which have been placed on our list of patrons during the last four years :

PROF. ASA GRAY, of Harvard University, Cambridge, Mass.

PROF. SPENCER F. BAIRD, United States Fish Commissioner, Smithsonian Institution,
Washington, D. C.

C. H. MILLER, Esq., Superintendent Horticultural Hall, Fairmount Park, Philadelphia, Pa.

DIRECTORS OF ZOÖLOGICAL SOCIETY, Fairmount Park, Philadelphia, Pa.

PROF. T. G. RICHARDSON, University of Louisiana, New Orleans, La.

COMMISSIONERS OF GOLDEN GATE PARK, San Francisco, Cal.

DIRECTORS OF ORPHAN ASYLUM, Lynchburg, Va.

HON. JAMES ARKELL, Canajoharie, N. Y.

L. H. MEYER, Esq., Staten Island, N. Y.

PIERRE LORILLARD, Esq., New York.

GEORGE THOMAS, M. D., West Whiteland, Pa.

A. GIBBONS, Esq., Coatesville, Pa.

F. LEAF SMITH, Esq., Reading, Pa.

R. H. WARDER, Esq., North Bend, Ohio.

DR. F. L. YOAKUM, Palestine, Texas.

PROF. FAIRMAN ROGERS, Newport, R. I.

GEORGE R. EMMERTON, Esq., Salem, Mass.

❧ NOTICE. ❧

Since the issue of the first edition of our catalogue, in the Spring of 1881, the interest in the culture of choice aquatic plants has steadily increased. We have received patronage from every State in the Union, and numerous letters indicate a growing enthusiasm in this direction. We have increased our facilities for growing to perfection our floral treasures, having built a basin fifty by thirty-six feet, and two and a half feet deep, which we have christened "Our Water Lily Garden." In it, of a Summer's morning, could have been seen as many as fifty gorgeous blossoms of *Nymphaea Devonensis* open at one time, numerous other Water Lilies, representing nearly every color of the rainbow, and the Lotus, "delicious as the rose, and stately as the lily in her pride," altogether presenting a most charming spectacle. These, with the grand *Victoria regia*, successfully grown and flowered in an open-air tank by itself, have attracted to our garden a multitude of visitors from far and near. We are constantly adding choice varieties to our list, and intend to maintain our reputation for possessing the largest and most complete collection of aquatics in the country. We beg to assure our former patrons that we hope to give them many pleasant surprises in the not distant future. Many of our correspondents have expressed themselves highly gratified with the contents of our catalogue. This issue contains additional matter, not usually found in plant catalogues, which we trust our readers will find equally interesting.

At the combined exhibitions of the American Pomological Society and the Pennsylvania Horticultural Society, held in Philadelphia, in September, 1883, we were awarded a special premium for a display of our Lilies. During the same month, by special invitation of the Massachusetts Horticultural Society, we exhibited in Boston, and were awarded by them a *Silver Medal* for the new *Purple Water Lily*, and three other prizes, viz.: one for the "*Victoria regia*," one for "*Nelumbium speciosum*," and one for "*Nymphaeas in variety*." During July, August and September is the best time to see our collection. The bloom is most abundant in August.

Bordentown is located on the Delaware river, six miles below Trenton, and may be reached at almost any hour of the day by trains from New York or Philadelphia.

Our garden is located on the principal street of the town, and is only ten minutes' walk from the station.

All orders from unknown correspondents must be accompanied with the cash.

N. B.—No discount to the trade on the choicer varieties of Aquatics, except by special arrangement.

Native kinds supplied to the trade in quantity at cheap rates.

All plants are sent by express, unless specially ordered otherwise. This is by far the most satisfactory way. To remote points, including the Pacific coast, we will, whenever practicable, send by mail, post paid. As some kinds are too bulky to be sent thus, this matter must be largely left to our discretion.

N. B.—It is probable that no new catalogue will be issued for 1885, but that a supplement, giving a list of novelties, &c., will be sent to those desiring it.

Hymn to the Flowers.

[The following exquisite verses, from the pen of Horace Smith, are well worthy of republication and reperusal at least once a year]:

Day-stars! that ope your eyes with man, to
twinkle,
From rainbow galaxies of earth's crea-
tion,
And dew-drops on her lonely altars sprinkle
As a libation—

Ye matin worshipers! who, bending lowly,
Before the uprisen sun, God's lidless eye,
Throw from your chalices a sweet and holy
Incense on high!

Ye bright mosaics! that with storied beauty
The floor of Nature's temple tessellate,
What num'rous emblems of instructive duty
Your forms create!

'Neath clustered boughs, each floral bell
that swingeth
And tolls its perfume on the passing air,
Makes Sabbath in the fields, and ever
ringeth
A call for prayer!

Not to the domes, where crumbling arch
and column
Attest the feebleness of mortal hand;
But to that fane most catholic and solemn,
Which God hath planned—

To that cathedral, boundless as our wonder,
Whose quenchless lamps the sun and
moon supply—
Its choir the winds and waves—its organ
thunder—
Its dome the sky!

There, as in solitude and shade I wander
Through the green aisles, or stretched
upon the sod,
Awed by the silence, reverently ponder
The ways of God—

Your voiceless lips, O flowers, are living
preachers,
Each cup a pulpit, every leaf a book,
Supplying to my fancy numerous teachers,
From loneliest nook.

Floral apostles! that in dewy splendor
"Weep without woe, and blush without
a crime,"
Oh! may I deeply learn and ne'er surrender
Your lore sublime!

"Thou wert not, Solomon, in all thy glory,
Arrayed," the lilies cry, "in robes like
ours;
How vain your grandeur! ah! how transi-
tory
Are Human Flowers!"

In the sweet-scented pictures, Heavenly
Artist!
With which thou paintest Nature's wide-
spread hall,
What a delightful lesson thou impartest
Of love to all!

Not useless are ye, flowers, though made
for pleasure,
Blooming o'er field and wave, by day
and night;
From every source your sanction bids me
treasure
Harmless delight!

Ephemeral sages! what instructors hoary
For such a world of thought could fur-
nish scope?
Each fading calyx a memento mori,
Yet fount of hope!

Posthumous glories! angel-like collection,
Upraised from seed or bulb interred in
earth,
Ye are to me a type of resurrection
And second birth!

Were I, O God! in churchless lands re-
maining,
Far from all voice of teachers and di-
vines,
My voice would find, in flowers of thy
ordaining,
Priests, sermons, shrines!

WATER LILIES.

* * * Almost every town has its Lily pond. Ours is accessible from the larger lake only by taking the skiff over a narrow embankment, which protects our fairyland by its presence. Once beyond it, we are in a realm of dark Lethean water, utterly unlike the sunny depths of the main lake. Hither the Water Lilies have retreated, to a domain of their own. A decline in business is clear revenue to Water Lilies, and the waters are higher than usual because factories are idle. But we may notice, in observing the shores, that peculiar charm of water, that, whether its quantity be greater or less, its grace is the same; it makes its own boundary in lake or river, and where its edge is, there seems the natural and permanent margin. And the same natural fitness, without reference to mere quantity, extends to its children. Before us lie islands and continents of Lilies, acres of charms, whole, vast, unbroken surfaces of stainless whiteness. And yet, as we approach them, every islanded cup that floats in lonely dignity, apart from the multitude, appears as perfect in itself, couched in white expanded perfection, its reflection taking a faint glory of pink, that is scarcely perceptible in the flower. As we glide gently among them, the air grows fragrant, and a stray breeze flaps the leaves, as if to welcome us. Each floating flower becomes suddenly a ship at anchor, or rather seems beating up against the Summer wind, in a regatta of blossoms. Early as it is, the greater part of the flowers are already expanded. Indeed, that experience of Thoreau's, of watching them open in the first sunbeams, rank by rank, is not easily obtained, unless, perhaps, in a narrow stream, where the beautiful slumberers are more regularly marshalled. In our lake, at least, they open irregularly, though rapidly. But this morning many linger as buds, while others peer up, in half-expanded beauty, beneath the lifted leaves, frolicsome as Pucks or baby-nymphs. As you raise the leaf, in such cases, it is impossible not to imagine that a pair of tiny hands have upheld it, or else that the pretty head will dip down again and disappear. Others, again, have expanded all but the inmost pair of white petals, and these spring apart at the first touch of the finger on the stem. Some spread vast vases of fragrance six or seven inches in diameter, while others are small and delicate, with petals like fine lace-work. Smaller still, we sometimes pass a flotilla of infant leaves an inch in diameter. All these grow from the deep, dark water—and the blacker it is, the fairer their whiteness shows. But your eye follows the stem often vainly into those sombre depths, and vainly seeks to behold Sabrina fair, sitting with her twisted braids of Lilies, beneath the glassy, cool, but not translucent wave. Do not start, when, in such an effort, only your own dreamy face looks back upon you, beyond the gunwale of the reflected boat, and you find that you float double—self and shadow. Let us rest our paddles and look round us, while the idle motion sways our light skiff onwards, now half embayed among the Lily pads, now lazily gliding over intervening gulfs. There is a great deal going on in these waters and their fringing woods and meadows. All the Summer long the pond is bordered with successive walls of flowers. In early Spring emerge the yellow catkins of the Swamp Willow, first; then the long tassels of the graceful Alders expand and droop, till they weep their yellow dust upon the water; then come the Birch blossoms, more tardily; then the downy leaves and white clusters of the Medlar or Shadbush (*Amelanchier canadensis* of Gray); these dropping, the roseate chalice of the Mountain Laurel open; as they fade into melancholy brown, the sweet Azalea uncloses; and before its last honeyed blossom has trailed down, dying, from the stem, the more fragrant Clethra starts out above, the Buttonbush thrusts forth its merry face amid wild Roses, and the Clematis waves its sprays of beauty. Mingled with these, grow lower, the Spireas, white and pink, yellow Touch-me-not, fresh white Arrowhead, bright blue Vervain and Skullcap, dull Snakehead, gay Monkey-flower, coarse Eupatoriums, Milkweeds, Golden Rods, Asters, Thistles and a host beside. Beneath, the brilliant scarlet Cardinal-flower begins to palisade the moist shores; and after its superb reflection has passed away from the waters, the grotesque Witch Hazel flares out its narrow yellow petals amidst the October leaves, and so ends the floral year. There is not a week during all these months when one cannot stand in the boat and wreath garlands of blossoms from

the shores. These all crowd around the brink, and watch, day and night, the opening and closing of the Water Lilies. Meanwhile, upon the waters, our queen keeps her chosen court, nor can one of these mere land-loving blossoms touch the hem of her garment. * * * Her humble cousin, the yellow Nuphar, keeps commonly aloof, as becomes a poor relation, though created from the selfsame mud—a fact which Hawthorne has beautifully moralized. Undisturbed, however, the Water Lily keeps her fragrant court, with few attendants. The tall Pickerel-weed (*Pontederia*) is her gentleman usher, gorgeous in blue and gold through July, somewhat rusty in August. The Water-shield (*Brasenia*) is chief maid-of-honor; she is a highborn lady, not without royal blood indeed, but with rather a bend sinister; not precisely beautiful, but very fastidious; encased over her whole person with a gelatinous covering, literally a starched duenna. Sometimes she is suspected of conspiring to drive her mistress from the throne; for we have observed certain slow water-courses where the leaves of the Water Lily have been almost wholly replaced by the similar but smaller leaves of the Water-shield. More rarely seen is the slender *Utricularia*, a dainty maiden, whose light feet scarce touch the water—with the still more delicate floating white Water *Ranunculus* and the shy *Villarsia*, whose submerged flowers merely peep one day above the surface and then close again forever. Then, there are many humbler attendants, *Potamogetons*, or Pond-weeds. And here float little emissaries from the dominions of land; for the fallen florets of the *Viburnum* drift among the Lily pads, with mast-like stamens erect, sprinkling the water with a strange beauty, and cheating us with a promise of a new aquatic flower. These are the still life of this sequestered nook; but it is, in fact, a crowded thoroughfare. No tropical jungle more swarms with busy existence than these midsummer waters and their bushy banks.

Gathering Water Lilies.

Every flower bears a fragrant California in its bosom, and you hesitate to leave one behind. But after the first half hour of eager grasping, one becomes fastidious, rather scorns those on which the wasps and flies have alighted, and seeks only the stainless. But handle them tenderly, as if you loved them. Do not grasp at the open flower as if it were a *Pæony* or a *Hollyhock*, for then it will come off stalkless in your hand, and you will cast it blighted upon the water; but coil your thumb and second finger affectionately around it, press the extended forefinger firmly to the stem below, and with one steady pull you will secure a long and delicate stalk. Consider the Lilies. All over our rural watercourses, at midsummer, float these cups of snow. They are Nature's symbols of coolness. They suggest to us the white garments of their Oriental worshippers. They come with the white Roses, and prepare the way for the white Lilies of the garden. The Water Lily comes of an ancient and sacred family. It has assisted at the most momentous religious ceremonies, from the beginning of recorded time.

The Egyptian Lotus was a sacred plant; it was dedicated to Harpocrates and to Nofr Atmoo—Nofr meaning *good*, whence the name of our Yellow Lily, Nuphar. But the true Egyptian flower was *Nymphæa Lotus*, though *Nymphæa cœrulea*, Moore's "blue Water Lilies," can be traced on the sculptures also. It was cultivated in tanks in the gardens; it was the chief material for festal wreaths; a single bud hung over the forehead of many a queenly dame; and the sculptures represent the weary flowers as dropping from the heated hands of *belles*, in the later hours of the feast. Rock softly on the waves, fair Lilies! your Eastern kindred have rocked on the stormier bosom of Cleopatra. The Egyptian Lotus was, moreover, the emblem of the sacred Nile, as the Hindoo species of the sacred Ganges; and both the one and the other was held the symbol of the creation of the world from the waters. The sacred bull, Apis, was wreathed with its garlands; there were niches for water, to place it among tombs; it was carved in the capitals of columns; it was represented on plates and vases; the sculptures show it in many sacred uses, even as a burnt offering; Isis holds it; and the god Nilus still binds a wreath of Water Lilies around the throne of Memnon. From Egypt the Lotus was carried to Assyria, and Layard found it among Fir cones and Honeysuckles on the later sculptures of Ninevah. The Greeks dedicated it to the nymphs, whence the name *Nymphæa*. Nor did the Romans disregard it, though the Lotus to which Ovid's nymph Lotis was changed *servato nomine*, was a tree and not a flower. Still different a thing was the enchanted stem of the Lotus eaters of Herodotus, which prosaic botanists have reduced to the *Zizyphus Lotus* found by Mungo Park, translating also the yellow Lotus dust into a mere "farina, tasting like sweet ginger-bread." But, in the Lotus of Hindostan, we find our flower again, and the Oriental sacred books are cool with Water Lilies. The orb of the earth is

Lotus-shaped, and is upborne by the tusks of Vesava, as if he had been sporting in a lake where the leaves and blossoms float. Having got thus far into Orientalism, we can hardly expect to get out again without some slight entanglement in philology. Lily pads. Whence pads? No other leaf is identified with that singular monosyllable. Has our floating Lotus leaf any connection with padding, or with a footpad? With the ambling pad of an abbot, or a paddle, or a paddock, or a padlock? with many-domed Padua proud, or with St. Patrick? Is the name derived from the Anglo-Saxon *paad* or *petthian*? All the etymologists are silent on the subject; Tooke and Richardson ignore the problem; and of the innumerable pamphlets in the Worcester and Webster controversy, loading the tables of school-committeemen, not one ventures to grapple with the Lily pad. The Sanscrit name for the Lotus is simply *Padma*. The learned Brahmins call the Egyptian deities Padma Devi, or Lotus gods; the second of the eighteen Hindoo Puranas is styled the Padma Purana, because it treats of the "epoch when the world was a golden Lotus," and the sacred incantation which goes murmuring through Thibet is "Ommani padme houm." It would be singular, if upon these delicate floating leaves a fragment of our earliest vernacular has been borne down to us, so that here the school-boy is more learned than the savans. This lets us down easily to the more familiar uses of this plant divine. By the Nile, in early days, the Water Lily was good not merely for devotion, but for diet, "From the seeds of the Lotus," said Pliny, "the Egyptians make bread." The Hindoos still eat the seeds roasted in sand; also the stalks and roots. In South America, from the seeds of the Victoria (*Nymphaea Victoria*, now *Victoria regia*) a farina is made, preferred to that of the finest wheat—Bonpland even suggesting to our reluctant imagination Victoria-pies. But the European species are used, as far as we know, only in dyeing. Our own Water Lily has some strange peculiarities of structure. So loose is the internal distribution of its tissues, that it was for some time held doubtful to which of the two great vegetable divisions, exogenous or endogenous, it belonged. Its petals, moreover, furnish the best examples of the gradual transition of petals into stamens—illustrating that wonderful law of identity which is the great discovery of modern science. Every child knows this peculiarity of the Water Lily, but the extent of it seems to vary with season and locality, and sometimes one finds a succession of flowers almost entirely free from this confusion of organs. Our readers may not care to know that the order of Nymphaeaceae "differs from Ranunculaceae in the consolidation of its carpels, from Papaveraceae in the placentation not being parietal, and from Nelumbiaceae in the want of a large truncated disc containing monospermous achenia," but they may like to know that the Water Lily has relations on land, in all gradations of society, from Poppy to Magnolia, and yet does not conform its habits precisely to those of any of them. Its great black roots, sometimes as large as a man's arm, form a network at the bottom of the water. Its stem floats, an airy four-celled tube, adapting itself to the depth, though never stiff in shallows, like the stalk of the Yellow Lily; and it contracts and curves when seed-time approaches, though not so ingeniously as the spiral threads of the Vallisneria, which uncoil to let the flowers rise to the surface, and then cautiously retract that the seeds may ripen on the very bottom of the lake. The leaves show beneath the magnifier, beautiful adaptations of structure. They are not, like those of land-plants, constructed with deep veins to receive the rain and conduct it to the stem, but are smooth and glossy, and of even surface. The leaves of land-vegetation have also thousands of little breathing-pores, principally on the under side: the Apple leaf, for instance, has twenty-four thousand to a square inch. But here they are fewer; they are wholly on the upper side, and, whereas in other cases they open or shut according to the moisture of the atmosphere, here the greedy leaves, secure of moisture, scarcely deign to close them. Nevertheless, even these give some recognition of hygrometric necessities, and, though living on the water, and not merely christened with dewdrops like other leaves, but baptized by immersion all the time, they are yet known to suffer in drought, and apparently to take pleasure in heavy falls of rain.

The Royal Water Lily.

We have spoken of the various kindred of the Water Lily; but we must not leave our fragrant subject without due mention of its most magnificent, most lovely relative, at first claimed even as its twin sister and classed as a *Nymphaea*. We once lived near neighbor to a *Victoria regia*. Nothing, in the world of vegetable existence, has such a human interest. The charm is not in the mere size of the plant, which disappoints everybody, as Niagara does, when tried by that sole standard. The leaves of the Victoria,

indeed, attain a diameter of six feet; the largest flowers, of 23 inches—less than four times the size of the largest of our Water Lilies. But it is not the mere looks of the Victoria, it is its life which fascinates. It is not a thing merely of dimensions, nor merely of beauty, but a creature of vitality and motion. Those vast leaves expand and change almost visibly. They have been known to grow half an inch an hour, 8 inches a day. Rising one day from the water, a mere clenched mass of yellow prickles, a leaf is transformed the next day to a crimson salver, gorgeously tinted on its upturned rim. Then it spreads into a raft of green, armed with long thorns, and supported by a frame-work of ribs and cross-pieces, an inch thick, and so substantial that the Brazil Indians, while gathering the seed-vessels, place their young children on the leaves;—grape, or water-platter, they call the accommodating plant. But even these expanding leaves are not the glory of the Victoria; the glory is in the opening of the flower. We have sometimes looked in, for a passing moment, at the greenhouse, its dwelling place, during the period of flowering, and then stayed for more than an hour, unable to leave the fascinating scene. After the strange flower-bud has reared its dark head from the placid tank, moving it a little, uneasily, like some imprisoned water-creature, it pauses for a moment in a sort of dumb despair. Then, trembling again, and collecting all its powers, it thrusts open, with an indignant jerk, the rough calyx-leaves, and the beautiful disrobing begins. The firm, white, central cone, first so closely infolded, quivers a little, and swiftly, before your eyes, the first of the hundred petals detaches its delicate edges, and springs back, opening towards the water, while its white reflection opens to meet it from below. Many moments of repose follow—you watch—another petal trembles, detaches, springs open, and is still. Then another, and another, and another. Each movement is so quiet, yet so decided, so living, so human, that the radiant creature seems a Musidora of the water, and you almost blush with a sense of guilt in gazing on that peerless privacy. As petal by petal slowly opens, there still stands the central cone of snow, a glacier, an alp, a jungfrau, while each avalanche of whiteness seems the last. Meanwhile, a strange, rich odor fills the air, and Nature seems to concentrate all fascinations and claim all senses for this jubilee of her darling. So pass the enchanted moments of the evening, till the fair thing pauses at last, and remains for hours unchanged. In the morning, one by one, those white petals close again, shutting all their beauty in, and you watch through the short sleep for the period of waking. Can this bright transfigured creature appear again, in the same chaste beauty? Your fancy can scarcely trust it, fearing some disastrous change; and your fancy is too true a prophet. Come again, after the second day's opening, and you start at the transformation which one hour has secretly produced. Can this be the virgin Victoria—this thing of crimson passion, this pile of pink and yellow, relaxed, expanded, voluptuous, lolling languidly upon the water, never to rise again? In this short time every tint of every petal is transformed; it is gorgeous in beauty, but it is "Hebe turned to Magdalen." But our rustic Water Lily, our innocent Nymphaea, never claiming such a hot-house glory, never drooping into such a blush, blooms on placidly in the quiet waters, till she modestly folds her leaves for the last time, and bows her head beneath the surface for ever. Next year she lives for us only in her children, fair and pure as herself. Nay, not alone in them, but also in memory. The fair vision will not fade from us, though the paddle has dipped its last crystal drop from the waves, and the boat is drawn upon the shore. We may yet visit many lovely and lonely places—meadows thick with Violet, or the homes of the shy Rhodora, or those sloping forest-haunts where the slight Linnæa hangs its twin-born heads—but no scene will linger on our vision like this annual feast of the Lilies.—*Atlantic Monthly*.

THE WATER LILY TANK.

"A piece of color is as useful as a piece of bread."—Henry Ward Beecher.

Although Water Lilies may be cultivated in tubs, they may be grown to much greater perfection if allowed plenty of room, especially the larger-growing tropical species. Those who wish to cultivate a number of kinds, and have complete success, should build a tank about twenty by thirty feet, and two feet deep. If sunk entirely in the ground it would be more easily protected from frost in cold climates. But it may be partially sunken, and the soil which is taken out used as an embankment around the outside, sloping it up to the top. I prefer that it should be sunk to the level of the surrounding surface, for the reason that the banks can be made more ornamental. It may be built of either brick or stone. The bottom may be laid with rough stone, cobble-stone, or old brickbats, and grouted with cement. Or, if the soil is of a firm nature, a thick coat of cement alone, may be spread upon it. This latter plan has been perfectly successful with us, though we consider a concrete bottom preferable. The walls should be nine inches thick, laid in cement, and, in cold climates, made to slope outwards from the bottom. If it is desired to grow *Nymphaea Devonensis*, or similar kinds, to full size of leaf and flower, then it will be necessary to sink a pit in the center, one foot deep and four feet square, to hold soil for them. Provide means for emptying the tank of water, when desired; also, a waste-pipe, near the top, for overflow. After the walls have been built, and the bottom laid and grouted, the whole must receive an additional coat of cement. About four feet from each end of the tank, build a partition wall about ten inches high. Bricks laid on edge will do, if laid in cement. These spaces can be cut in two by another partition. The compartments thus formed are for the purpose of confining the roots of the different kinds of *Lotus* within proper limits, and for planting out those kinds of *Nymphaea* which do better in such a position. The remaining portion of the tank can be taken up with pots and large shallow boxes, which will be movable at will. After the cement has properly hardened, fill the compartments and boxes with soil, and cover with an inch or two of clean sand. Fill the tank with water, and let it get well warmed before planting anything tender. As warm weather approaches, run a stream of fresh water in, for an hour or two each day, to prevent stagnation. When the surface of the water is covered with leaves, there is less tendency in this direction; and all that seems to be necessary is to replace what is lost by evaporation.

The Lily tank must be placed in a warm and sunny position, for these plants will not do their best unless the water is thoroughly warmed. On the north side may be a border filled with Musas, Cannas, Bamboos, Ornamental Grasses, Caladiums, &c., which form a fine background for the lilies, and give the whole a tropical appearance.

In such a tank as above described, the tenderest species named in this catalogue may, in this latitude, be planted out by the 10th of June, and remain until the frosts of Autumn appear. If it is desired to enjoy the longest possible season of bloom in the open air, then the Lily pond may be located near a greenhouse, and some connection made with the hot-water boiler. Our manner of doing this is to extend the hot-water pipes (both flow and return) from the boiler to the tank, and reaching a few inches inside of the wall. The ends of these pipes are left open, and when extra heat is wanted a fire is kept in the boiler. The circulation being constant between tank and boiler, the water in the tank may thus be warmed early in the Spring, the tender Lilies planted out earlier, and thus earlier bloom be the result. Fire heat can be discontinued as soon as the Summer sun begins to do its work. The season of bloom can be prolonged in the Autumn in the same manner.

For the protection of the tank in Winter, place planks or boards around the edge in such a manner as to cover a space two or three feet in width all around, that is, over the water, and cover them with a thick layer of leaves or litter. This will help to keep the

ice from forming at the edge, and consequently from expanding too much and cracking the walls. Another plan is to drain the water entirely from the pond, and cover with a thick coat of leaves. Any one having a large factory could place a Lily pond near it, so that the waste steam or hot water (if free from chemicals or filth) might be utilized for keeping the water warm, and from freezing in Winter. It may be asked, "Why all this trouble and expense? Why not grow the Lilies in ponds with a bottom of natural earth?" We answer, that for the hardy kinds this is undoubtedly a good plan, and very fair success may be had in the same way with the tender kinds; but in a pond with a cement bottom the water is more readily heated by the sun, and retains its heat better.

THE WATER LILY GARDEN COMPLETE.

I will add here a few words upon the "possibilities" of aquatic gardening. One argument in favor of cultivating tropical Lilies in the open air is, that larger leaves and flowers are obtained, and in case of the colored kinds, greater depth of color than under glass. Another argument is, the grand effect which may be produced on the lawn or in any part of the pleasure ground. Let us suppose that you wish to have an aquatic garden, fifty, sixty or a hundred feet in diameter. We will not build it in the stiff form of a circle or oval, but the outline shall be irregular, with here and there a small bay, across which we will throw a rustic bridge to a miniature peninsula. Somewhere on the margin we will build a rustic Summer-house. It shall be a two-story affair, for sometimes we shall want to view our pets from an elevated position, for, unlike our fellow creatures, they smile upon us when we look down upon them. If we have a rocky ledge in our grounds, let us place our pond near it. Now let us suppose that all has been planted, established, and come to midsummer perfection. Some morning before the night-blooming Lilies have begun to take their midday sleep, let us ascend the low tower and take a view of the picture. There, beneath us, the noble *Nymphaea dentata*, covering a space twenty feet in diameter, some of its leaves two feet across, and its milk-white flowers twelve inches across; there is the grand *Nymphaea rubra*, with its immense cups of glowing color; and there, queen of them all, is *N. Devonensis*, surpassing in brilliancy of flower, if not in size of leaf, the famous *Victoria regia*. Then come groups of these same Lilies, planted more thickly, and though the flowers are smaller, yet they are more numerous and just as brilliant. Yonder a little bay is filled with Egyptian Lotus, its pink and white flowers, on stalks three feet above the water, looking like immense tulips. Next is a mass of the American Lotus, with its sulphur-yellow flowers; some of its floating leaves have strayed out into an open space, and are thirty inches in diameter. Let us descend and walk along the border of our little lake. Here is a plantation of the lovely blue *Nymphaea scutifolia*; you perceive its fragrance before you come near it. Next is the beautiful Yellow Lily, from Florida, and our own sweet Water Lily is not forgotten, for it is here in masses. Associated with it are its charming new, rose-colored variety, *N. odorata rosea*, and the delicate pink-tinted one. Here are *N. alba* and *N. alba rosea*, with their waxy petals, similar in color to some of the others, but having their own distinctive merits and attractions. The favorite Calla of our Winter gardens lifts its white trumpets towards the sky, and numerous smaller flowered aquatics are found in profusion along the edge of the water. Coming around to the Lotuses again, we find growing near them, in shallow water, great clumps of the Egyptian Papyrus, with its plummy heads on stalks six feet high. Now let us look at some of the plants which associate well with water, and help form a background for our picture. Scattered along the margin we find groups of ornament-l grasses, *Eulalias*, *Erianthus* and *Pampas Grass*. Yonder, on our little peninsula, stands a noble Banana (*Musa ensete*), twelve feet high. Farther on is a clump of the tall Bamboo (*Arundo Donax*), and its variegated variety. There are groups of Cannas, and a large Palm, brought from the greenhouse to spend the Summer in the open air. Another stately plant is *Alocasia arborea*, with a tree-like trunk and fine, large leaves. What is this great-leaved plant near the water's edge? It is *Gunnera scabra* (the Giant Rhubarb), with leaves six feet in diameter. Now do you wish to give your friends a glimpse of fairyland? Then illuminate your grounds and invite them to an evening fête or garden party. The Lotuses and hardy Lilies have closed their flowers, but the night-blooming Water Lilies offer us a feast for the eyes at night. Place large lamps, with reflectors, in such a position as to throw a powerful light directly upon the flowers—or perhaps Edison's magic lamps are available, and you suspend a number of them in midair over the water. Now the red Lilies fairly glow with color, and are far more beautiful than by daylight. The water is like a mirror, and in its depths you behold

another glorious picture—a perfect image of the flowers themselves. The large, star-like white ones keep company with the red in their night watches, and are not unworthy companions for them. Look around at the floating leaves, the numerous buds which will open with to-morrow's sun, the tall shields of the Lotus, the rich, tropical foliage on the banks, the rustic arbor covered with myriads of the silvery blossoms of the night-flowering Ipomea, and tell me if this is not a fairy scene. And having taken a view of the Water Lily Garden by daylight and by lamplight, will you not acknowledge that in all that is really beautiful it far surpasses the most elaborate exhibition of carpet bedding?

Perhaps you will say that this is a fancy sketch. Our answer is, that it has been so far realized that we do not hesitate to place such a garden as we have described among the list of "possibilities of horticulture" in America.

SOIL FOR GROWING AQUATIC PLANTS.

The best soil for growing all kinds of aquatic plants in gardens, we have found to be good, rich loam, and the best decayed stable or cow manure, in equal quantities. Leaf-mold or fine black peat can no doubt also be used to advantage. Rich mud from the bed of a pond or sluggish stream will answer in place of the loam, but I do not consider it essential. The compost should be well mixed, placed in the tank, and covered with about an inch of good, clean sand, to keep the manure from rising; then let in the water several days before putting in the plants.

WATER LILIES IN TUBS AND CEMENT BASINS.

Those who have means to build large Lily tanks in spacious glass houses, with hot-water pipes placed in the water, can no doubt obtain very desirable results. The tender species can be planted permanently, and a longer period of bloom be enjoyed. But a good degree of success may be attained by planting them in large tubs or half-barrels in the open air, either on the surface or sunk in the ground. They should be placed where they will receive the full benefit of the sun for at least the greater portion of the day. If for the whole day, so much the better. Fill them about half full of the compost recommended for all aquatics. The large growing kinds would do better in large half-hogsheads or tierces sawed in two. The next best arrangement for growing aquatics is to build of bricks and hydraulic cement a basin two feet deep and six feet in diameter, either round or square. This can be sunk in the lawn in a sunny position, or on the south side of a building or fence. If convenient, provide means for emptying the tank from the bottom, and a waste pipe near the top for overflow, so that fresh water can be run in occasionally to prevent stagnation. Such a tank would need to be well protected from severe frost in Winter. Aquatics may also be grown in the basin of a fountain, but they will not flourish if the spray is allowed to fall upon the leaves. Water enough to keep that in the basin fresh, may be allowed to run in, but no more, as that would lower the temperature too much.

NATURALIZING HARDY AQUATICS.

The beautiful cut upon the cover of this catalogue gives an excellent idea of what may be done in this direction. Any one having a fine piece of water where the common Water Lily would flourish, can produce similar results; and, with the addition of the tender kinds put out for the Summer, the effect would be grander still. We will give a list of the plants shown in the picture: *Nelumbium luteum*, *Nymphæa odorata*, *Calla palustris*, *Sagittaria variabilis* (the Arrow Head). In the center is the common Cat-Tail (*Typha latifolia*), and on the right is the curious Pitcher Plant (*Sarracenia purpurea*).

Another fine plant for shallow water is *Pontederia cordata*, with spikes of blue flowers. On the banks might be planted masses of scarlet Lobelia and the beautiful meadow Lilies (*Lilium supernum* and *L. canadense*). Hardy Ferns should not be forgotten. The Royal Fern (*Osmunda regalis*) is a fine one for such a position.

We quote the following from *The Garden*, an English periodical, which, in our opinion, is the very best and ablest journal of horticulture in the world:

"The plants that grow by the water side, so much admired in natural scenery, are seldom taken so much advantage of for cultivating as they might be; otherwise, the bare water edges, so often found in connection with lakes and other ornamental water, would be of less frequent occurrence than they are. With the vast resources of suitable

plants at our service, if appropriately employed, the margins of artificial water might be made to surpass even the choicest examples of natural riverside vegetation. In the majority of cases, if the edges of artificial water are clothed at all, they have a monotonous appearance, on account of the continuous fringes of plants of a common-place type used; whereas, if a greater variety of kinds, of varied height, habit and flower were employed and disposed in bold, irregular groups—some close to the margins, others at a distance from them, and some even partly submerged—some of the most charming effects could thereby be obtained.

The principal consideration is a knowledge of the positions in which the plants thrive best, the degree of moisture in which they will flourish; then grouping them effectively is easily accomplished. Our native flora affords great numbers of really handsome waterside plants, many of which are in no way inferior to exotic kinds.

ENEMIES OF AQUATIC PLANTS.

The conditions which we recommend for successfully growing tropical aquatics (*i. e.*, still, warm water, and a rich compost), favor the growth of a low form of vegetable life called confervæ, or green scum, which becomes very unsightly and troublesome unless eradicated. As the result of several years' experience, we are quite positive that if abundance of Gold-fish are kept in the tank, or pond, there will be no trouble in this direction. Other kinds of fish, which are vegetarian in habit, might, perhaps, answer as well, but the German Carp is not to be recommended for tanks kept solely for the choicer varieties of aquatics, on account of their propensity for rooting in the mud and feeding upon the fibrous roots which proceed from the rhizomes of the Lilies. Should it be determined to keep a few German Carp in the Lily Garden, it will be necessary to place whole pieces of roofing-slate or large pebbles on the soil around the crowns of the tender Nymphæas.

Innumerable kinds of aquatic insects breed in the water, and some of their larvæ prey upon the leaves of the Lilies, but the common water-snail is the greatest enemy of aquatic plants. The Gold-fish assist very materially in destroying these larvæ and snails, but we have found a complete preventive of injury to the foliage from this source, by keeping in the tank, in addition to the Gold-fish, some of the common, spotted Sun-fish. They are carnivorous in habit, and very alert and active. Moreover, it is impossible for mosquitos to breed in a Water Lily basin in which abundance of the above named fish, or those of similar habit, are kept. Thus, one objection to locating these tanks or ponds in the vicinity of the dwelling-house is removed. Their beautiful appearance, and the ease with which they may be taught to feed from the hand (though it must not be done too frequently) make them a charming adjunct to the Water Garden. If the tank is two feet or more in depth, they can be left in it all winter with perfect safety, in this latitude.

Sometimes, toward Autumn, brown aphides, or plant-lice, become troublesome on the Lily leaves. A somewhat new insecticide, which any one can prepare, has proved effectual with us. It is called the kerosene emulsion, or kerosene butter, and is prepared as follows: Take two parts of kerosene and one part of thick, sour milk; warm the latter (to blood heat only); put the two liquids together, and agitate violently with a greenhouse syringe, or a force pump. They will soon completely unite and form a white, soapy mass. This kerosene butter mixes readily with tepid water. One part of the butter should be thoroughly mixed with fifteen parts of water, and applied to the infested leaves with a syringe. With us, one application entirely destroyed the insects, without any injury whatever to Nymphæas. A weaker solution of the emulsion must be used on any plants which are found to be injured by the proportions above given. Experience will be a guide in this matter. Very few applications of the remedy will be needed during the season.

DESCRIPTION OF VARIETIES.

THE VICTORIA REGIA.

This giant Water Lily of the river Amazon is the grandest of all aquatics. That it may be successfully grown and flowered in the open air in this latitude, we have proved beyond a doubt, having done so for two seasons past. By this plan, it is treated as a tender annual. In Winter or early Spring, seeds are placed in water, kept uniformly at a temperature of from 80 to 90 degrees. After germinating, they are potted and shifted on, as they require it. Early in a June a plant is placed in a bed of very rich soil in a tank, fully exposed to the sun, and which can be artificially heated until hot weather sets in. It produces leaves six feet across, one plant covering a space thirty feet in diameter. The flowers are from twelve to sixteen inches across. The first night that they open they are a lovely white, and emit a delicious perfume, resembling that of pine-apples, which is often perceptible some rods distant. The second night the flowers have changed to pink, and have lost their perfume. In the Southern States, it may be grown with complete success in open ponds. Plants, \$10.00 to \$15.00 each. Fresh and perfect seeds, of our own raising, 50 cents each; \$5.00 per doz.

NIGHT-BLOOMING WATER LILIES.

Unlike our wild *N. odorata*, the following five kinds open their flowers at night, beginning about eight o'clock and remaining expanded until about ten the next morning, each flower opening three nights in succession. They stand on strong foot-stalks ten or twelve inches above the surface of the water. If given the right conditions as to soil, temperature, &c., they will begin to bloom in about forty days after being put out, and continue to be constantly in bloom until cold weather. They all require the same culture and treatment. Their tubers are about the size of a hickory nut or walnut, but make a most astonishing growth in a single season. In Spring they should be placed in small pots with good loam or ordinary greenhouse potting soil, and immersed in water kept at 80 degrees to start them into growth. If you are satisfied to have flowers from four to six inches in diameter, then, when warm weather arrives, shift them into large earthen pans or tubs, and place them out-of-doors, or keep them in a greenhouse, according to the latitude in which you live. If the finest specimens are desired, then, as early in Summer as the water becomes warm enough for bathing with comfort, plant them out in a Water Lily tank, in large beds or wooden boxes filled with the compost recommended for aquatics. In the Autumn, around the old plant may be found hard, nut-like tubers. These are the best for wintering. They ripen and shed their leaves, when they may be placed, several together, in a pot of soil or clean sand, and the pots immersed in water kept at a temperature of about 60 degrees the entire winter. Lower than this may do, but we have found this the safest. Monster flowering crowns are valueless for wintering over, being sure to decay. If you wish to grow them in a pond with a bottom of natural earth, they must first be planted in large boxes or half-barrels filled with the prepared compost, and sunk where the water is two or three feet deep. In the Southern States this will not be necessary, but do not put a dormant bulb at once into deep water. Let it first get a good growth in a pot placed in shallow water. The day-blooming tender *Nymphæas* are managed in much the same way as the night-blooming ones, except that they do not increase by suckers, and the old plants may be kept over from year to year. Dormant bulbs are easily sent by mail from March to December.

NYMPHÆA DEVONIENSIS.

This is one of the choicest, if not the very choicest, Water Lily in cultivation. Under the liberal treatment which we recommend for producing the finest specimens, in one season a single plant will cover a circle twenty feet across, with leaves twenty-five inches in diameter, and flowers twelve inches from tip to tip of petals. If confined in pans, tubs,

(NYMPHÆA DEVONIENSIS.)

or boxes, the flowers are smaller, but otherwise just as fine. The leaves are rich green, with serrated edges and occasional brown blotches. No person can form an adequate idea of the beauty of a red Water Lily until they have seen one of these gorgeous blossoms. These are rosy red (with scarlet stamens), glowing by lamplight with indescribable color. Price, \$3.00 each.

+ NYMPHÆA STURTEVANTI (New Semi-Double Red Water Lily).

This is a new variety, which originated in our establishment. A specimen was sent to the Botanic Garden, at Cambridge, Mass., where a company of the most celebrated botanists in the country pronounced it "the fullest, most massive and gorgeous Nymphæa blossom they had ever seen." The following note from Dr. Asa Gray explains the origin of its name:

HERBARIUM OF HARVARD UNIVERSITY.
BOTANIC GARDEN, CAMBRIDGE, MASS., September 28th, 1882. }

MR. FALCONER.—Although Mr. Sturtevant's very wonderful Nymphæa is only a "seedling sport" from its hybrid parent, it is certainly different enough to deserve, as a plant of cultivation, a distinct name. And we should all agree in wishing that it should bear the name of its producer, as one who has done so much for Water Lily culture, besides this crowning achievement.

Giving names to cultivated forms is not in my line; still, if you and your correspondent would prefer a name from me, I would call this + *Nymphæa Sturtevantii*—retaining the symbol of the cross in mark of its originally hybrid origin; for I suppose there is no doubt that its immediate parent is a hybrid.

ASA GRAY.

This new Lily grows to the same size as its parent *Nymphæa Devoniensis*. It has the following distinct characteristics: The leaves are covered with peculiar indentations and curls, instead of having a smooth surface, and are of a beautiful crimson bronze color—the young ones sometimes almost crimson. The flowers are bright red, some of them a soft rose color, and present a most charming appearance at night. They are cup-shaped, like *N. odorata*, a form which is much more graceful than *N. Devoniensis*. When well grown they are from nine to eleven inches in diameter, having a greater number of petals than the parent, and may not inaptly be called double. The petals are thick and waxy, some of them measuring nearly three inches in width. The plant is a continuous bloomer, but does not produce as many flowers at a time as its parent. It will be a grand

addition to any collection, especially where there is a large tank, aquarium or warm pond, affording plenty of room for its development. \$5.00 each.

NYPHÆA RUBRA.

This magnificent species is a native of India, and one of the parents of *N. Devoniensis*. The picture of the latter gives a good idea of *N. rubra*, except that the flowers are a little more cup-shaped, and their petals somewhat broader. Their color is also a brilliant red, sometimes of a deeper shade than *N. Devoniensis*, and both foliage and flowers attain nearly the same size as that variety if given the same treatment. The foliage is quite distinct, being of a rich brown color, turning, when old, to gold and crimson, like Autumn leaves. \$3.00 each.

NYPHÆA DENTATA.

This species is a native of Sierra Leone, and has white flowers with petals expanding horizontally, making them star-shaped. They have an agreeable odor, but not as sweet as our native Lily; the leaves are rich green, with serrated edges. With ordinary culture, flowers will be produced six or seven inches across; but give them plenty of room and a rich soil and both foliage and flowers will be as large as those of *N. Devoniensis*. \$2.50 each.

NYPHÆA LOTUS PYRIDORA (Apple-Scented Water Lily).

This is a choice variety of the same type as "dentata," "Devoniensis," and other night-blooming varieties. Its flowers are creamy white, of good size, beautifully cup-shaped instead of being flat, like *N. dentata*, and have a most delicious odor, like that of early ripe apples. \$10.00 each.

DAY-BLOOMING NYPHÆAS, AND OTHER TENDER AQUATICS.

NYPHÆA SCUTIFOLIA—(Cœrulea, or Cyanæa).

The Lilies cultivated under these names are of a beautiful shade of lavender blue (not a deep blue), about three or four inches across, but when the plant is given abundance of room and rich soil the flowers will be much larger, and of a decidedly deeper tint. They are very fragrant, the perfume being entirely distinct from that of *Nymphæa odorata*. It may be successfully grown in a natural pond, where the water is still and the mud rich. Probably hardy in the South. Winter temperature 50° to 60°. Our plants are of the best variety. \$3.00 each.

NYPHÆA STELLATA ROSEA.

This is an exact counterpart of *N. scutifolia*, except in the color of the flowers; these are pink, with a lilac shade. \$5 00 each.

NYPHÆA ZANSIBARENSIS (The Royal Purple Water Lily).

This new species, from Africa, was first flowered in this country by us in the Summer of 1882. In September, 1883, the Mass. Horticultural Society awarded it their *Silver Medal*. It is, unquestionably, the deepest colored and finest of all blue Water Lilies known, and some European horticulturists declare it to be the finest of the whole family. It is of a shade of blue so deep that it is not unreasonably called purple. Some parts of the flower are of the color of "*Lasiandra macrantha*" (a greenhouse plant). It has the same fragrance as *N. cœrulea*, and, even when grown in small tubs or pans, produces larger flowers than that variety. Under the treatment given it in our Water Lily garden, they attain a diameter of twelve inches, and the leaves a diameter of two feet. It blooms constantly until frosty weather, and requires the same culture and treatment as other blue Lilies. We are exercising every care to have the plants we offer true to color, but, if our customers wish, we will bring them into flower, and prove them before shipping. Our stock is limited, and orders will be booked and filled in rotation as received. Price, \$10.00 each.

LIMNOCHARIS HUMBOLDTII (The Water Poppy).

A charming and easily cultivated plant, with oval floating leaves and flowers of a bright lemon color with black stamens. The flowers stand a few inches out of water, and are produced freely during the entire season. Easily grown in a tub, but better still in the Water Lily garden, planted in a box or a tub, which must be elevated so that the plants may grow in shallow water. Wintered in the greenhouse. 50 cents each.

LIMNOCHARIS PLUMIERI.

This is quite distinct from *L. Humboldtii*, being an upright growing plant, producing rich green elliptical leaves six inches long. Flowers straw color. 50 cents each.

PONTEDERIA AZUREA.

This is the finest of all the Pontederias. Its smooth, green leaves are borne on spongy stalks, about a foot long, which are somewhat inflated, like those of *P. crassipes*. Its lovely and delicately-tinted flowers are produced in large pyramids like a hyacinth, each individual blossom being nearly two inches across, and of a bluish-purple color. Should be grown in a pot immersed in water, and wintered in a hothouse. It is a grand novelty, and has received unstinted praise in Europe. We hope to have it ready for our customers by July 1st, 1884. Price on application.

OUVIRANDRA FENESTRALIS (The Lattice Leaf Plant).

Though by no means a new plant, it is extremely rare in this country. We copy from "Store and Greenhouse Plants," by B. S. Williams, this description: "It is popularly known as the *Lace-Leaf* or *Lattice-Leaf*, and is one of the most singular plants in existence. The leaves are from six to eighteen inches in length, and from two to four inches in breadth; oblong, with an obtuse apex, and spreading out horizontally beneath the surface of the water. They are of a dark olive green color, and consist of a strong midrib and what would be called the primary nerves of an ordinary leaf, and thus present the appearance of a beautiful piece of net-work, or of a skeletonized leaf, indeed, it is a veritable living skeleton. The flowers are inconspicuous." Native of Madagascar. It must be kept under glass all the year, and should be grown in a pan filled with a mixture of good loam and leaf mold or fine peat. The pan should be placed in a tub of water, and great care taken to keep the water sweet and the leaves of the plant clean. A watering-pot full of tepid water should be poured into the tub every day. Winter temperature about 60°. \$5.00 to \$10.00 each.

CERATOPTERIS THALICTROIDES (The Water Fern).

This is an extremely curious and interesting fern, growing with its roots entirely submerged in water, either in a pot or planted out in a shallow place in the Water Lily basin. The fronds are from one to three feet high, and beautifully forked. The finest ones are produced on plants kept in partial shade. It is sometimes called the "Floating Stag's-Horn Fern." It must be wintered in a warm greenhouse. 75 cents each.

HEDYCHIUM ACUMINATUM (The Garland Flower).

Hedychiums belong to the family of the ginger plant. This species grows from four to six feet high, each flower-spike producing, for several weeks in succession, lovely, snow-white blossoms, over two inches across, resembling an orchid in form, and deliciously scented. It may be grown as a semi-aquatic, by planting it in a tub, and placing it where the soil will be kept wet, but the crowns must not be immersed. If kept warm enough, it will flower the whole year round. \$1.00 each.

CANNA EHEMANI.

This is the most magnificent Canna ever introduced. It grows to a height of five or six feet, with large, green, banana-like foliage, and the flowers are marvelous in size, being as large as a *Gladiolus* bloom. They are of a rich, crimson scarlet color, and hang pendant in clusters from the top of the plant. Each stalk produces a succession of these clusters, one after another, for a long time. This Canna may be treated as a semi-aquatic, by planting it in a large tub partly immersed in water. It is a grand acquisition, and should be in every garden. 50 cents each.

RICHARDIA ÆTHIOPICA ("The Calla," or "Lily of the Nile").

This old and favorite plant can be made a charming feature among the Water Lilies. The only way known to us for making it bloom in Summer is to keep the bulbs entirely dry and dormant during Autumn and Winter. They can then be potted and grown as an aquatic during Summer. 25 and 50 cents each; \$2.50 and \$5.00 per dozen.

COLOCASIA ESCULENTUM (Caladium, or Elephant's Ear).

When grown in the very richest soil, this plant will produce monstrous leaves, sometimes four or five feet long and of proportionate breadth. It may be grown successfully in from six to twelve inches of water. 25 cents each; \$2.50 per dozen. Extra large bulbs, 50 cents; \$5.00 per dozen.

PAPYRUS ANTIQUORUM.

This is the true Egyptian Paper Plant. From the snow-white pith of its triangular stalks the first paper was made. They are five or six feet high, and support at the top a tuft of long, thread-like leaves, which give the plant a graceful and striking appearance. It grows finely in shallow water, with rich soil or mud, and makes a splendid companion for flowering aquatics. It will also flourish and make a fine clump in the garden, with no more water than Cannas or Corn require to make them do well. \$1.00 each.

CYPERUS ALTERNIFOLIUS.

Will also grow with its roots submerged in water, its reedy stems, with tufted heads, resembling miniature palm trees. 25 cents each.

CYPERUS LEPTOCLODUS.

A distinct species of Pandanus-like growth, with long green leaves, of a beautiful, glossy green. It grows three or four feet high, producing sedge-like heads, and may be grown in moist places, or as a vase plant. 30 cents each.

SCIRPUS NUTALENSIS.

A grass-like plant, with light green foliage, and graceful, tufted heads, similar to *Cyperus alternifolius*. Height, about twelve to eighteen inches. Fine, either for the margins of water or as a basket or vase plant. 30 cents each.

FLOATING PLANTS.

PISTIA STRATIOTES.

A very curious plant, which floats upon the water, with its long, fibrous roots extending downwards, but having no connection with the soil. It forms a rosette of light green, velvety leaves, about six inches across; likes plenty of heat, and must be shaded from the direct rays of the sun. It does finely in a tub of water, placed in a vinery or greenhouse, in Summer, or in the open air, under a tree. It is sometimes called the Water Lettuce. 25 cents each; \$2.00 per dozen.

PONTEDERIA CRASSIPES.

This is an extremely interesting plant, which floats upon the surface of the water like Water Lettuce. Each crown produces neat rosettes of leaves, the stems of which are enlarged in the middle into curious oval bulbs filled with air cells, which enable the whole plant to swim. If it is desired to flower it, the root must be put in a pot of loam and kept covered with water by corking up the hole in the bottom. But, then, the leaves become elongated, and lose the attractive expansion of the petiole. Flowers, bluish lilac. It should be wintered in a warm greenhouse. 50 cents each.

TRIANÆA BOGOTENSIS.

A floating plant, with thick, spongy leaves, from one-half to one inch in diameter. Very curious—tender. 25 cents each.

AZOLLA CAROLINIANA (Floating Moss).

A floating plant, which produces no flowers, but is exceedingly interesting on account of the delicacy and beauty of its foliage, which resembles a lovely green moss or *Selaginella*. A small plant, placed in a pan of water, soon covers the whole surface, and presents an appearance something like a pan of "*Selaginella densa*." If grown out of doors, in Summer, it should be kept in the shade. 25 cents each.

PITCHER PLANTS.

As these are water loving plants, we have thought best to introduce them here. *Sarracenia purpurea* is perfectly hardy. *S. flava* and *S. variolaris* have stood the Winter in this latitude, naturalized in a peat bog. The most of this class, however, are best grown in pots of fine peaty soil, surfaced with live sphagnum, and kept standing in a pan of water.

CEPHALOTUS FOLLICULARIS.

This curious little Australian plant has pitchers about an inch deep, variegated with purple, and furnished with true lids. It should be grown in a greenhouse. \$3.50 each.

DIONÆA MUSCIPULA (Fly-Catcher).

A most wonderful little plant, called "Venus' Fly-Trap." It has strange trap-like arrangements at the ends of the leaves, which, owing to the hair-like sensitive organs on the inner surface, will close instantly when touched by an insect or any light substance. 25 cents each.

SARRACENIA DRUMMONDI ALBA.

The pitchers of this are two feet high, slender at the base and widening at the top like an ordinary tin horn. They are of a fine green, except towards the top they become pure white, netted with crimson veins. The flowers are crimson. This is the most beautiful of the family. 50 cents to 75 cents each; \$5.00 per dozen.

SARRACENIA FLAVA (Trumpets).

This is the largest of all, producing in its native swamp, its handsome green, trumpet-like pitchers often three feet high. Flowers large yellow. 35 cents each; \$3.00 per dozen.

SARRACENIA PURPUREA.

This hardy northern species is not unworthy of a place in any collection. By giving it peaty soil and moss, it may be naturalized on the margin of a pond or stream. Flowers purple. 25 cents each; \$2.00 per dozen.

SARRACENIA VARIOLARIS.

Pitchers from twelve to eighteen inches high, very curiously hooded at the top, these hoods being spotted with white. Flowers yellow. 35 cents each; \$3.00 per dozen.

SARRACENIA PSITACINA.

\$1.25 each.

SARRACENIA RUBRA.

\$1.00 each.

DARLINGTONIA CALIFORNICA (The California Pitcher-plant).

This has the most curiously-formed pitchers of any of the tribe.

They grow to the height of from fifteen inches to two and a half feet, and have some resemblance to those of the *Sarracenias*, but differ from them in having the upper part arched over, like an inflated hood, and having a large triangular appendage hanging loosely from it. They are beautifully mottled with white, and veined with red. Flowers straw-color and pale purple. 50 cents to \$1.00 each.

DROSERA FILIFORMIS.

A rare, curious and hardy little bog plant, with pretty lilac flowers. 35 cents each. *Drosera rotundifolia*, 20 cents each.

HARDY AQUATICS.

The roots of the native American Water Lily will not endure actual freezing, but still it is commonly called hardy. When we speak of an aquatic as being hardy, we do not mean that it is so in the same sense that *Pæonias* and *Dicentras* are, but that it will endure the Winter when placed in the water below the reach of frost.

NYMPHÆA ODORATA.

The praises of our fragrant native Water Lily can never be too highly sung. Its lovely white flowers are worthy of a place beside the most costly exotics. It can be successfully grown in a tub, and wintered in a cellar. Does well in one of the beds in the Lily tank; but a more satisfactory way than either is to naturalize it in a pond, or slow-running stream. Do not tie a stone to it and sink it, as many recommend, but push it carefully into the mud with the hands or feet. Where the mud is very rich, it will produce flowers six inches, and leaves thirteen inches across. Strong roots, by mail, 40 cents each, or three for \$1.10; by express, 30 cents each; \$3.00 per dozen.

NYMPHÆA ODORATA MINOR.

A variety of our native Water Lily, possessing the same qualities of hardiness and fragrance, but producing flowers only one and a half or two inches across. Color, white, tinted with pink on the outside. Prices the same as for *N. odorata*.

NYMPHÆA ODORATA ROSEA.

This is the famous Pink Water Lily of Boston, and is the grandest acquisition ever made to our list of hardy *Nymphæas*. It is in every respect like *N. odorata*, except in color, which is a deep pink—a shade somewhat like that of the rose called “*Hermosa*.” It is very fragrant, and, in favorable situations, produces flowers larger than the white as

commonly seen. The demand for cut flowers of this variety always exceeds the supply. As the principal stock of this charming lily is kept for producing cut flowers, we regret to say that only a limited number of plants are for sale. \$15.00 each.

NYMPHÆA TUBEROSA.

Quite distinct from *N. odorata*, having flowers from four to seven inches in diameter, pure white, with a faint odor like that of ripe apples. The petals are broader and less pointed than those of *N. odorata*—leaves sometimes fifteen inches wide. Very desirable. 75 cents each.

NYMPHÆA ALBA CANDIDISSIMA.

This is a large-flowered variety of the Water Lily of England and other parts of Europe. Though not a tropical species, it does not object to a warm climate, and does finely under the same conditions as the tender ones. When naturalized in still water, with a very rich soil, it will produce leaves thirteen inches wide, and flowers six inches in diameter. The latter are pure white, the petals being very broad and much more waxy than those of *N. odorata*. It begins to flower earlier, and continues in bloom for a much longer time, than that species. It is a great favorite with us, and the universal testimony of our customers goes to prove everything we have said in its favor. \$3.00 each.

NYMPHÆA ALBA ROSEA (N. Alba Var Sphærocarpa Rosea).

A variety which was first discovered in Sweden, and has received great praise in Europe. It is like *N. alba*, except that the flowers are deep pink, shaded to lighter pink at the edge. Very choice. \$10.00 each.

NYMPHÆA FLAVA (The Yellow Water Lily).

A charming addition to any collection, having leaves variegated with brown, and flowers nearly as large as those of *N. odorata*. They are of a bright golden yellow color, and deliciously scented; something like Locust-tree blossoms, but more delicate. Perfectly hardy at the North, but should have a warm position in Summer. 50 cents to \$1.00 each.

NYMPHÆA PYGMÆA (The Dwarf Chinese Water Lily).

A little gem, producing leaves from two to three inches across, and deliciously scented white flowers no larger than a silver half dollar, which open at noon and close at sunset. It has the additional merit of being hardy. Young plants, \$2.00 each; large plants, \$3.50 each.

SONNET.—THE LOTUS.

[The CENTURY Magazine for January, 1884.]

"Love came to Flora asking for a flower
That would of flowers be undisputed queen;
The lily and the rose long, long had been
Rivals for that high honor. Bards of power
Had sung their claims. 'The rose can never tower
Like the pale lily, with her Juno mien.'
'But is the lily lovelier?' Thus, between
Flower factions rang the strife in Psyche's bower.
'Give me a flower delicious as the rose,
And stately as the lily in her pride——'
'But of what color?' 'Rose-red,' Love first chose,
Then prayed: 'No, lily-white, or both provide.'
And Flora gave the lotus, 'rose-red' dyed
And 'lily-white,' the queenliest flower that blows."

NELUMBIUM SPECIOSUM.

The beautiful lines just quoted were written by Toru Dutt, a highly gifted Hindu poetess. They so accurately describe this *Nelumbium* as to leave no doubt that it is entitled to the name of "Lotus." It was cultivated in Egypt, in most ancient times, where its seed was known as the "Sacred Bean." It is the "Sacred Lotus" of India and China, and is also cultivated in Japan. This wonderful plant, though coming from such tropical and semi-tropical regions, has proved to be entirely hardy in this country, enduring any degree of cold, short of actual freezing. We have, for many Winters, kept it in water, upon the surface of which ice formed from four to eight inches thick. No

aquatic plants have a more tropical aspect than *Nelumbiums*. We have naturalized it, in one corner of a mill pond, where the mud is very rich, and where, in Summer, could have been seen, among abundance of noble leaves from one to two feet in diameter, a hundred buds, in all stages of development, and twenty expanded flowers at one time. *N. luteum* is a beautiful plant, and well worthy of a place in any collection, but *N. speciosum* far surpasses it in ease of culture, rapidity of growth, and freedom of bloom. It will flower the first season it is planted, which is seldom the case with *N. luteum*, and is constantly in bloom from July till late October. In the "Water Lily Garden," *N. speciosum* has produced some leaves thirty inches across, on foot-stalks five and six feet in length, and flower-stalks of a total length of from five to seven feet. The first day the flowers appear like gigantic tea-rose buds, of a bright rose color. The second day they open like a tulip, the base of the petals being creamy white, most beautifully and delicately shaded off toward the ends into bright pink. In their last stages of expansion they measure from ten to thirteen inches from tip to tip of petals. They are also delightfully fragrant. The plant is of a rambling nature, and, when placed in a pond, spreads rapidly. If grown in a Lily tank, along with a general collection, it should be planted in the separate compartments specially arranged for it. It may be grown in a large tub, but better in basins such as we have described. It should not be planted till the growing season has fully arrived, but we will ship to southern customers earlier than to northern. Flowering tubers, \$3.50 each. Strong tubers, \$5.00 each.

NOTE.—The cut of *Nelumbium*, on the last page of the cover, is more true to nature than the one inserted on the preceding page.

NELUMBIUM LUTEUM (American Lotus).

Though a native of this country, it is not common. There is scarcely any difference between this and *N. speciosum*, except in the color of the flowers, which is of a rich sulphur yellow. They are as large as a quart bowl, and have a strong fragrance, entirely unlike that of a *Nymphæa*. Still, warm water and very rich soil are the conditions for success with these noble plants. A large patch of them, with hundreds of flowers and buds, is a sight never to be forgotten. Tubers, \$3.00. Plants (not mailable) from a natural pond in May or June, \$1.50.

NOTE.—We reduced our stock of *N. luteum* too low last season. In 1885 the price will be reduced.

LIMNANTHEMUM NYMPHÆOIDES (Villarsia).

This European relative of our American Floating Heart is perfectly hardy. Its *Nymphæa*-like leaves are variegated with brown. The flower^s, which are freely produced, are about an inch across, of a golden yellow color, beautifully fringed, and stand erect like the Water Poppies. Should be grown in shallow water. 50 cents each.

LIMNANTHEMUM LACUNOSUM (Floating Heart).

A native species, which at first sight appears to be a miniature water Lily. Its leaves are from one to two inches in diameter, beautifully blotched with brown, giving them an appearance similar to those of the Cyclamen. The flowers are white, about half an inch across, and very curiously borne upon the same stem which bears the leaves. The plant blooms freely all Summer, will grow in either shallow or deep water, and would make a charming plant for the aquarium. 25 cents each.

APONOGETON DISTACHYON.

A highly interesting tuberous-rooted water plant, which, though perfectly hardy, does not do well in Summer if kept too warm. We recommend that it be tried in cool spring water. It flowers freely all Winter if kept in a greenhouse. Its leaves are oblong, about six inches by two. The pearly-white flowers, with black anthers, are produced in curious fork-shaped spikes, and are deliciously scented. \$1.00 each.

TRAPA NATANS (the Water Chestnut).

This is a hardy annual aquatic, bearing, from the midst of a rosette of green leaves, small white flowers, which are followed by good-sized nuts with several sharp thorns. These nuts are edible, and taste something like a cocoanut. After once being planted in a pond it will reproduce itself from year to year. Plants, 25 cents each.

JUNCUS ZEBRINUS (the Porcupine Plant).

This is a true rush, growing from one and a half to three feet high, producing leaves variegated in exactly the same manner as a porcupine quill, with alternate bands of green and pure white. It may be grown either as an aquatic or as a garden plant, but should never be grown with the crowns of the plant under water, for then the leaves lose much of their variegation. Perfectly hardy. 50 cents each.

The following plants, though native, are not unworthy of cultivation :

SAGITTARIA VARIABILIS (the Arrow-Head).

A native plant suitable for shallow water, growing about two feet high, bearing arrow-shaped leaves and pearly-white flowers. 25 cents each; \$2.00 per dozen.

SAGITTARIA GRACILIS.

A small variety of the above, having linear leaves, with linear, very long, acute and spreading lobes, forming an arrow of peculiar shape. Flowers white. 25 cents each.

PONTEDERIA CORDATA.

Another interesting plant for shallow water, with heart-shaped leaves and spikes of blue flowers, produced all Summer. 25 cents each; \$2.00 per dozen.

CYPRIPEDIUM SPECTABILE.

This is the most beautiful of all North American Orchids, and, in our opinion, finer than any of the tropical species; grows best in wet places in partial shade, with peat and moss. Flowers white and pink. After September 1st we can supply good clumps at 50 cents to \$1.00 each.

LOBELIA CARDINALIS.

A mass of this brilliant Scarlet Lobelia is a fine sight. It likes moist places. 25 cents each; \$2.00 per dozen.

LILIUM SUPERBUM AND L. CANADENSE.

These beautiful Meadow Lilies do finely in moist places. 15 cents each; \$1.50 per dozen.

BAMBOOS AND GRASSES SUITABLE FOR MOIST PLACES.**ARUNDO DONAX.**

This noble plant is the plain, green-leaved Bamboo, and grows to the height of twelve or fifteen feet. 50 cents to \$1.00 each.

ARUNDO DONAX VARIEGATA.

The variegated form of the above, white and green, five feet high. 30 cents to 75 cents each.

ERIANTHUS RAVENNÆ.

From nine to twelve feet high, resembling the Pampas Grass, but perfectly hardy. 25 cents; clumps, 75 cents.

EULALIA JAPONICA VARIEGATA.

A splendid grass, with leaves striped with white; sending up stalks from four to six feet high, and bearing curly, feathered plumes. 25 cents; clumps, 50 cents and 75 cents.

EULALIA JAPONICA ZEBRINA.

This is like the above, except that the leaves are marked cross-wise with broad, creamy-white bands, instead of being striped lengthwise. It also bears feathery plumes. 30 cents; clumps, \$1.00.

GYNERIUM ARGENTEUM (Pampas Grass).

The most effective and stately of all Ornamental Grasses, producing, with its graceful foliage and silvery plumes, a grand effect among a group of a similar character placed near ornamental water. 25 to 50 cents. Extra strong, \$1.00 each.

PANICUM PLICATUM VARIEGATUM (Palm Grass).

The leaves are very broad for a member of the Grass family, and have the appearance of Palm leaves, hence the name. Very pretty and graceful. Must be wintered in the greenhouse. 25 cents.

AQUATICS FOR CARP PONDS.

All who are interested in the culture of the German carp are aware that the authorities on this subject make it a most essential point that the ponds should be stocked with abundance of aquatic plants, for furnishing food, shade and concealment for the fish, and for attracting aquatic insects. Also, in shallow places, thick masses of water plants afford the material upon which they prefer to deposit their eggs, and for the protection of the fish while in a very young state. We quote from a letter recently received from a gentleman in Ohio: "I am enthusiastic in the cultivation of our fresh water plants, and it seems to me that you are the first to propose it to the public. I think your industry most opportune, as now the people are starting out in carp culture, and when the carp ponds can be made beautiful, there will be health and wealth combined, *i. e.*, whatever is beautiful leads to health, and without it there is no industry." A pond stocked with these most interesting and useful fish, and with a collection of aquatic plants, embracing our choicest native species, together with the lovely tropical varieties, cannot fail to be an endless source of pleasure and enjoyment, as well as profit.

A FEW HINTS.

The carp is a vegetarian, and has a propensity for rooting in the mud and feeding upon the fibrous roots which proceed from the rhizomes of Water Lilies and other plants. Any specially choice variety should, after planting, have its roots covered with a layer of large pebbles, to protect them from the fish. In the South all the tender *Nymphæas*, etc., will do grandly in the fish pond, but they must first be well started in pots kept in shallow water before planting them out. In one instance, which has come to our knowledge, the *Victoria regia* was grown in a carp pond in a Southern State, and produced leaves six or seven feet in diameter and flowers fifteen inches across. If it is desired to grow the tender *Nymphæas* in the carp pond, in more northern latitudes, the best results will be obtained by planting them in half-barrels or large boxes, filled with rich compost, and placed in the warmest part of the pond, in water about two or three feet deep, placing around the plants a layer of large pebbles or pieces of slate, as above recommended.

LIST OF VARIETIES.

The whole list of hardy aquatics which we have heretofore described are adapted to this purpose. Nearly all the hardy *Nymphæas*, especially *N. odorata*, produce seeds, which are readily eaten by carp, and should be planted in large numbers, if practicable. No grander ornament can be found among hardy kinds than the *Nelumbiums*, especially *N. speciosum*. These should be planted in about one foot of water. To prevent the fish from disturbing them until thoroughly established, a space ten or twelve feet in diameter around each plant should be enclosed by a little fence, made by pushing old barrel staves

into the mud, leaving them about half an inch apart. Besides these mentioned, we offer the following desirable kinds:

	Each.	Per Doz.
Nuphar advena (Yellow Mud Lily).....	20c.	\$1.50
Nuphar pumila.....	15c.	1.00
Nasturtium officinale (Water Cress).....	15c.	1.00
Glyceria fluitans.....	25c.	2.00
Valisneria spiralis (Tape Grass).....	15c.	1.00
Trapa natans (Water Chestnut).....	25c.	
Brasenia peltata (Water Shield).....	15c.	1.00

The following are best adapted to shallow water, and are upright growing plants, their foliage standing out of the water:

Acorus calamus (Sweet Flag).....	20c.	1.56
Colocasia esculentum (Caladium).....	25c.	2 50
Orontium aquaticum (Golden Club).....	20c.	1.50
Peltandra Virginica. Like a Calla Lily, with greenish flowers.....	20c.	2.00
Pontederia cordata. See description.....	25c.	2.00
Sagittaria variabilis.....	25c.	2.00
Typha latifolia (The Cat-Tail).....	25c.	2.00
Juncus effusus. A handsome Rush, three or four feet high.....	20c.	2.00

ZIZANIA AQUATICA (Indian Rice, or Water Oat).

This grass grows from four to twelve feet high, and is not only very ornamental but is highly recommended as one of the very best plants for furnishing food for carp. Being grown in shallow water, near the margin of the pond, the ripened seeds fall into the water and are readily consumed by the fish. 10 cents per ounce; 25 cents per quarter pound; 50 cents per pound.

Many of the plants in the preceding list will grow in moist places, just above the water line. Others, previously described, such as Lobelia cardinalis, Meadow Lilies, Juncus Zebrinus (Porcupine Plant), and all the plants mentioned under the head of "Bamboos and Grasses," are especially fine for this purpose. In peaty soil, Pitcher Plants also may be added.

The following are also desirable in this class:

	Each.	Per Doz.
Caltha palustris (American Cowslip).....	20c.	\$1.50
Hibiscus moscheutos. Beautiful flowers, as large as Hollyhocks....	25c.	2.00
Iris pseudacorus. Rich golden yellow flowers.....	25c.	2.00
Pancratium rotatum. Lovely snow-white flowers, with a delicate crown or cup in the center, (tender).....	35c.	3.00

To parties desiring to purchase by the hundred, we will give special cheap rates.

GREENHOUSE PLANTS.

NEW AND RARE PLANTS.

We do not boast that we have the largest establishment in the country, but we believe that we have some things in this department which will please our customers.

ANTIGONON LEPTOPUS.

A splendid new climbing plant from Central Mexico, producing, in racemes, rose-colored flowers two feet long. The profusion of its bloom is such as to give the resemblance of roses at a distance; hence one of its Mexican names is *Rosa de Montana*, or Mountain Rose, described by its discoverer as the most beautiful climber he had ever beheld. This plant is moderately hardy, with protection. The vines are killed to the ground by frost; but as this plant has tuberous roots, it quickly shoots up in the Spring and develops its flowers from June till frost. 50 cents each; three for \$1.00.

ANEMONE JAPONICA ALBA.

One of the most beautiful of the hardy herbaceous plants. It is of a strong, upright habit, growing from two to three and a half feet high. Its flowers, which are of the purest white, with yellow center and dark eye, are produced in the greatest profusion from August until cut down by severe frost. This is one of the most valuable of Fall-flowering plants; the pure white flowers are of exquisite shape and invaluable for cut-flower work. It thrives best in a light, rich soil; a covering of leaves, straw or long manure in the Autumn is sufficient for our most severe Winters. 30 cents each; \$3.00 per dozen.

ALTERNANTHERA AUREA NANA.

This surpasses in effectiveness any yellow carpet plant we have ever seen, equalling *Pyrethrum Golden Feather* in its rich coloring, never dying out, and bright from the first day of the season until the last. The habit is dense and compact, requiring but little shearing; and no fine pattern-work will be complete without it. Too much cannot be said in its favor. 25 cents each; \$3.00 per dozen.

ASPARAGUS PLUMOSUS NANUS.

The stems of this extremely elegant plant are tufted, slender and gracefully arching. From the upper portions the branches, which are finer than the fronds of the most delicate Fern, spread in all directions. The whole plant is of a bright cheerful green. It is one of the most distinct and effective decorative plants for the greenhouse or conservatory. As a plant for delicacy of foliage, it is unrivalled, and for bouquets its cut sprays have the advantage of much greater persistency than any Fern, retaining their freshness in water for three or four weeks. \$5.00.

ASPARAGUS TENUISSIMUS.

A beautiful species of semi-scandent habit. Remarkable for the extreme tenuity and delicate appearance of its foliage; the leaves are longer and of a lighter tint than those of *A. plumosus nanus*. As a decorative plant for the greenhouse or conservatory it is very striking, and for contrast with the foliage of other plants it is also one of the most effective. Like *A. plumosus nanus* the sprays are beautiful adjuncts to the bouquet, and possess the advantage over the most finely cut Ferns; of greater persistency when kept in water after being cut. \$1.00 to \$2.00.

BATATAS PANICULATA.

A splendid new climber, bearing clusters of purplish rose-colored morning-glory-like flowers. It grows rapidly planted out, and blooms profusely the whole Summer. The foliage is palmate, like that of *Ipomea Horsfalliæ*. It is tuberous rooted, and should be wintered in a warm greenhouse or dwelling. 75 cents each.

NEW ORNAMENTAL-LEAVED BEGONIA.

Louis Chretien. A splendid variety, with green foliage tinted violet-crimson, the whole suffused with metallic lustre; a grand, attractive variety. 50 cents.

NEW FANCY CARNATIONS.

Black Knight. Rich, dark crimson; a decided improvement on the well-known Crimson King.

Beatrice. This is a pure white-fringed variety, of very dwarf growth and very large flowers.

Cymbeline. Rich, bright orange-ground, flaked with very bright scarlet.

Fairy Princess. Very large flowers, pure white, pencilled with fine lines of rich purple crimson.

Imogen. A lovely variety, pale straw-ground color, flaked, margined and dotted with bright carmine.

Juliet. Ground-color white, flaked and lined with pink and maroon.

Miranda. Richest plum-crimson, finely shaped and remarkably free-flowering.

Mrs. W. A. Harris. A very large and finely-shaped variety, of a pure white color, marbled with rich, rosy pink.

Mrs. F. Mangold. Pure, soft salmon; distinct and handsome.

Petunia. This so much resembles a double Petunia as to be most appropriately named; color rich lavender rose, mottled with white and deeply fringed.

Portia. The most intensely bright scarlet; a fine variety.

Rosalind. A lovely shade of pink, very large and free; a fine grower. 35 cents each; set of twelve varieties, \$3.50.

NEW YELLOW CARNATION ("Buttercup.")

This fine novelty is the nearest approach to a pure yellow that we have ever had in Carnations. The flowers are immense in size, rich yellow in color, and only slightly flecked with crimson. It is a fine grower and profuse bloomer. 50 cents each.

CANNA EHEMANI.

This is the most magnificent Canna ever introduced. It grows to a height of five or six feet, with large, green, banna-like foliage, and the flowers are remarkable in size, being as large as a *Gladiolus* bloom. They are of a rich crimson-scarlet color, and hang pendant in clusters from the top of the plant. Each stalk produces a succession of these clusters one after another, for a long time. This Canna may be treated as a semi-aquatic, by planting it in a large tub partially immersed in water. It may also be grown in the garden like other varieties. It is a grand acquisition, and should be in every collection. 50 cents each.

NEW COLEUS.

We have selected the following, as being the best and most distinct among the newer kinds:

Blackbird. Leaves and stems jet black, the whole plant growing very vigorously; the best of all really dark varieties for bedding.

Fairy Knoll. Maroon, with deep wine-red markings.

Garfield. Maroon crimson, mottled white and green.

Golden Bedder. This has proved with us the best of all yellow varieties for bedding.

Kirk Alloway. Rich carmine, maroon and purple; fine.

Joseph's Coat. A distinct variety, mottled violet, white and purple on a green ground.

Micawber. White stems and mid-ribs, carmine and maroon markings on broadly margined green leaves.

NEW COLEUS—Continued.

- Mrs. Humphreys.** Mottled pink, yellow and maroon, green margins.
Progress. Golden yellow, rose, carmine and green; beautifully spotted and speckled.
Queen of the Lawn. A bright-colored variety, carmine, black and green.
Ruby. Carmine center, maroon border, deeply toothed, margined yellow and green.
Verschaffelti Splendens. Bright, glowing red, decidedly more brilliant than the old *Verschaffelti*. 15 cents each; \$1.50 per dozen.

CACTUS DAHLIA.

Single Dahlias are becoming very popular. The one which we offer is not new, but we consider it equal to any. The flowers are semi-double, six inches across, and of the most vivid and glowing scarlet color. As brilliant as a *Gen. Grant Geranium*. 50 cents each.

SINGLE FUCHSIAS.

- Erecta Var Novelty.** Remarkably novel and distinct variety, tube and sepals white, with stained pink, sepal broad, corolla light pink, margined with rose; free bloomer; habit strong and branching. Instead of being pendant, like other varieties, the flowers of this stand entirely erect. Very pretty. 50 cents each.
Mrs. G. Rundle. A much improved *Earl of Beaconsfield*; tube and sepals bluish-white; corolla rich orange scarlet; a grand variety. 50 cents each.
Speciosa Splendens (?). Tube rather short, sepals long, both of a rich salmon pink; corolla very large, rich carmine scarlet; flowers nearly three times the size of *Speciosa*. Not of a very good habit, but the beauty of the flowers covers this defect. A magnificent flower, and a great favorite with us. 20 cents.

NEW DOUBLE GERANIUMS.

The following grand new varieties are the product of the efforts of the most successful raiser of new Geraniums in America:

SECTION I.

- B. K. Bliss.** Of all varieties this has the largest flowers and most vivid coloring; the individual flowers are two inches in diameter, of good shape, trusses large, color a rich tone of pure scarlet. 75 cents.
Foxhunter. Rich deep crimson-scarlet, large individual flowers and trusses; one of the very best for bedding.
George Thorpe. As a bedding Geranium we have not seen its equal; the trusses are of immense size, on very strong foot stalks; the color is of the most intense light crimson; the habit is branching and the foliage never burns; a grand variety.
Gilded Gold. An entirely new color, being of a rich deep golden-orange; the flowers are of medium size; the trusses compact and freely produced, and one of the most distinct breaks of color ever made in the Geranium; in fact it is the finger-post to the yellow variety not far distant. \$1.00.
Hoff. Beach. Rich amaranth-purple, of fine habit and robust constitution, the foliage wearing well in the hottest weather; the flowers are of good size; the trusses large and freely produced; a good variety for bedding.
Jennie Hamilton. A very distinct variety, opening flesh-pink, maturing into a rich currant-red; the trusses are of good size, the habit very dwarf and free; one of the best for market purposes, flowering very early in Spring.
John Heron. Rich plum-purple flowers and trusses large; habit compact and spreading; a fine bedder and quite an acquisition.
Miss McMurray. An immense flower of fine shape; color a rich warm salmon, with lighter margins; large bold trusses, of a sturdy habit; distinct and fine.
Mrs. Cope. Rich carmine-red, of large size and immense trusses; the habit is all that can be desired, and a really fine bedder.
Phallas. A rich apricot-orange, most vivid in coloring; trusses very large; habit neat and free; a fine and distinct bedding variety.
Queen of the Fairies. A bi-color variety, of the most perfect shape, rich flesh color, mottled with pearly-white; this has the largest and most perfectly shaped trusses of any variety we have ever seen; grand.

NEW DOUBLE GERANIUMS—Continued.

Sunlight. A most intensely fiery-salmon color, shaded orange; of very free growth, with large and bold trusses; a valuable and distinct bedding variety.
50 cents each, except where noted. The entire set of 12 varieties, \$5.00.

SECTION II.

Crimson Velvet. Flowers of the richest dark velvety-crimson, shaded black.

Emile Lemoine. A magnificent deep crimson-scarlet, with immense pips of great substance.

Emerson. Very large trusses of deep shaded pink and salmon.

James Y. Murkland. Bright peach-rose center, broadly margined with white.

James Vick. Flowers and trusses of great size; color deep flesh, with dark bronze shadings.

Longfellow. Deep soft crimson, slightly shaded with purple-rose.

Maggie Hallock. A deep pure pink shaded rose, with reflex of petals silvery-white.

Peach Blossom. Flower white, shaded and marbled with light and dark peach-pink.

Pocahontas. Immense trusses of rose-pink flowers, upper petals margined with white.
30 cents each.

NEW SINGLE GERANIUMS.

Cygnets. Immense trusses of the purest white flowers, of free habit and a very early bloomer.

Jasper. Very large trusses of deeply shaded bright orange flowers with white eye.

May Queen. Flesh color, half of upper petals pure white, margins of white on lower petals.

30 cents each. The set of 12 varieties, \$3.00.

HELIOTROPE (Purple and Gold).

An entirely new style. Foliage golden yellow, flowers large purple, making a beautiful contrast with the leaves, hence the name "Purple and Gold." In fragrance and profusion of flowers, it is in both respects equal to the best old sorts. 25 cents each.

HELIOTROPE (Swanley Giant).

In this we have an entirely new color, the first shade of red yet obtained in the Heliotrope, the color being what might be termed a carmine purple. The size of the truss is immense, often measuring 10 inches in diameter, and of the most exquisite fragrance. 30 cents each.

IMPATIENS SULTANI.

This is one of the most distinct and beautiful of all flowering plants of recent introduction, either as a winter-blooming pot-plant, or for bedding in the border in the Summer. It is of a compact, neat habit of growth, with good constitution, and a perpetual bloomer; the flowers are of the richest carmine-magenta color, of a peculiarly distinct but most effective hue, about one and a half inches in diameter, and are produced singly or in twos and threes from the axils of the leaves, especially towards the summit of the stems, but so freely that a well-grown specimen appears to be quite a ball of flowers. 50 cents; \$5.00 per dozen.

IPOMEA NOCTIPHYTON (the Evening Glory).

We would like to see this fine climber in every garden in the land. It will grow to a height of thirty feet, bears flowers with a long, slender tube, expanding at the end into a flat corolla five inches in diameter, pure white, with the impression of a star in the center. They burst open suddenly just after sunset, and remain open until morning. They are also fragrant. It blooms very profusely, so that when viewed by lamplight it is very attractive. 25 cents; \$2.50 per dozen.

JASMINUM "DUCHESS D'ORLEANS."

Flowers pure white; double; with a fragrance which is far more pleasing than that of the Cape Jessamine. 50 cents to \$1.00.

LAPAGERIA ALBA.

A lovely companion to the beautiful *L. rosea*, with flowers of thick and waxy texture and pearly whiteness. \$3.00 each.

LILIUM LONGIFLORUM FLORIBUNDA, OR HARRISI.

It is evidently a variety of *Longiflorum*; like it, the flowers are trumpet-shape. In color pure white, rather larger in size than *Longiflorum*, the petals more recurved, and in addition is exceedingly fragrant. But its great merit is its free-blooming habit. Large bulbs of the old variety give from two to three flowers, but the main stem of this sort will produce from four to eight or more flowers. It frequently sends up new shoots which will bear from two to four flowers, thus continuing the season of blooming for months. Bulbs the size of a walnut will produce in this manner, but still smaller bulbs will flower. This variety is admirably adapted for forcing and can be brought into bloom as early as the holidays. We believe this to be one of the finest novelties ever offered in the way of a Lily. 50 cents to \$1.00.

MONTBRETIA POTTSI.

A splendid bulbous plant, growing about three feet high, and bearing branching spikes of rich orange-scarlet flowers, resembling those of *Tritonia aurea*. It is hardy in England, but should be treated as a greenhouse bulb here. 35 cents.

NICOTIANA AFFINIS (the Sweet-Scented Tobacco).

This is a species of tobacco with ornamental flowers. They have tubes three inches long, and a white star-shaped corolla over two inches across. They emit a delicious fragrance at night, perfuming the whole surrounding atmosphere. The plant blooms freely the whole Summer, and should be Wintered in the greenhouse or dwelling. 30 cents each.

NEW REGAL PELARGONIUMS.

This is a new class, with petals frilled in such a manner as to make the flowers appear double, and with wonderfully brilliant colors.

Beauty of Oxtou. The upper petals are of a rich maroon color, darkly blotched; under petals very dark crimson, shaded with maroon; light center, tinted with rose. All the petals are regularly margined with white and beautifully fringed. 50 cents each.

Edward Perkins. Is also a grand variety in this class, resembling the last in habit and formation of flowers, which are of a bright orange-scarlet, maroon blotch in upper petals, which are beautifully fringed and undulated. 75 cents.

Maid of Kent. An exceedingly attractive variety, of neat dwarf habit and extremely free-blooming; the flowers are pure white, with bright rose-colored spots on all the petals, which are beautifully undulated. 75 cents.

Queen Victoria. Crispy petals, color rich vermilion, broadly margined with pure white, and the upper petals blotched with maroon. 75 cents.

NEW AND CHOICE DOUBLE PETUNIAS.

The collection here offered is particularly rich in color, of the largest size, with fringed margins, fine form, and very double.

Attraction. Purple and white, mottled and blotched; fringed.

Gloriosa. Rosy crimson, splashed and blotched with white; finely fringed.

Hesperus. Pure white, mottled crimson center; fringed.

Morning Star. White, splashed and striped with crimson; finely fringed.

Ne Plus Ultra. White, carmine and crimson, shaded and mottled.

Splendor. Bright crimson, edged with white; fringed.

Trophy. Pure white, edged and marked with crimson; finely fringed. 20 cents. \$2.00 per dozen.

NEW TEA ROSE (Sunset).

This new rose is identical in every respect with that hitherto unequalled Rose, *Perle des Jardins*, except that its color, instead of being a canary-yellow, as in that variety, is of the rich tawny shade of saffron and orange, similar but deeper than the coloring of

Safrano or Madame Falcot. In size, vigor and productiveness, it is, in all respects, the same as the variety from which it sprung, except that the color of the young foliage is of a much deeper crimson. It will prove most valuable for Winter forcing as well as a Summer-blooming rose. \$1.50 each.

NEW TEA ROSE (White Bon Silene).

A sport of the well-known Bon Silene, with which it is identical except in color, which is pure white. 50 cents.

SCIRPUS NUTALENSIS.

A grass-like plant with light green foliage; very effective for hanging-baskets, or for planting in aquariums or moist shaded places. 30 cents each.

SUMMER-BLOOMING HYACINTH (*Hyacinthus Candicans*).

A fine new species, with flower stems three feet high, bearing from twenty to thirty large pendant white flowers, blooming in Summer. Just as easily cultivated as a *Gladiolus*. 25 cents.

TROPEOLUM MAJUS GRANDIFLORUM PLENISSIMUM.

A new double nasturtium. Flowers yellow with a maroon blotch at the base of each petal. Plant of vigorous habit and a free bloomer. 25 cents each.

NEW DOUBLE SCARLET NASTURTIIUM (*Hermine Grasshoff*).

A splendid acquisition. The flowers are perfectly double, from two to two and one-half inches across, of a brilliant scarlet color, and are freely produced nearly all the year. Fine, either for pot culture or for baskets and vases. 20 cents each.

VIOLET (Swanley White).

A sport from the popular and well-known Marie Louise. It is in every way equal to its parent, having the same growth, the same freedom of flowering, the same perfume, and the individual flowers are equally as large, and are of the purest white color. The finest double white violet in cultivation, and is a grand acquisition. 50 cents.

GENERAL COLLECTION OF GREENHOUSE PLANTS.

ABUTILON.

Boule de Nieve.—A fine variety, with pure white flowers.

Darwini. Large, orange-scarlet, spreading flowers. This does best in a warm house in Winter.

Vexillarium aureum pictum. Foliage marbled with yellow; trailing habit; fine for vases and baskets. 15 cents each.

AGAPANTHUS UMBELLATUS.

A member of the Lily family. Flowers borne on stalks two or three feet high, in large clusters; rich blue. 50 cents to \$1.00.

A. umbellatus alba. A fine companion for the above, with white flowers. \$1.00.

AGAVE ("Century Plant").

Americana. Dark green leaves. 50 cents to \$8.00.

Americana Variegata. Dark green, variegated with creamy yellow; of various sizes. 50 cents to \$10.00.

ACHRYANTHES EMERSONII.

A great improvement on the old varieties, the stems and a large part of the foliage being deep rose color. 20 cents.

AGERATUM.

Lady Jane. Blue flowers; an effective bedding plant; dwarf habit, very free. 15 cents each.

DOUBLE WHITE SWEET ALYSSUM.

The old single variety is not worth cultivating in comparison with this. The trusses are larger, and the flowers are of a purer white. 15 cents; \$1.50 per dozen.

ALTERNANTHERAS.

Dwarf plants, with very bright foliage, of many colors. Excellent for ribbon beds.

Amæna spectabilis. Crimson, the brightest of them all.

Amabilis tricolor. Orange, red and green. 15 cents each; \$1.50 per dozen.

AMARYLLIS.

Bulbous plants, with gorgeous, lily-like flowers; produced in Winter. They make a fine growth, if planted out in Summer in a bed of rich soil, in a partially shaded place. Lift in the Autumn, and pot them.

Johnsoni. Beautiful scarlet, with a white stripe. \$1.50.

Hybrids, of our own raising, 75 cents to \$2.00.

Prince of Orange. Bright orange, large. \$2.00.

Vittata. White, striped with dark rose; extra. \$1.00.

ALOCASIA ARBOREA.

The Tree Caladium is greatly superior to the common Elephant's Ear as an ornamental foliage plant. The leaves are large, glossy and upright. When the plant acquires some age, it has a tree-like trunk, two or three feet high. It should not be dried off in Winter, but kept in a growing state. Young plants, 25 cents each; larger, 50 cents to \$1.00.

BEGONIA (tuberous-rooted).

Mixed. Raised from choice English seed. 35 cents.

BEGONIA (shrubby section).

Glaucophylla scandens. A trailing variety, with flowers richly shaded, orange and red. 25 cents.

Miniata. A very pretty shade of orange-scarlet.

Multiflora. Light pink, pendant flowers.

Nitida. Large pink flowers, in panicles. 25 cents.

Nitida alba. Same as the above, with white flowers. 25 cents.

Manicata. Large panicles of numerous, small, delicate pink flowers. 25 cents.

Rubra. This bears clusters of bright scarlet flowers all the year round, and is very popular. 20 to 50 cents.

Saundersoni. Deep, rosy red; very free bloomer.

Weltoniensis. Rich pink; very abundant.

15 cents, except where noted.

BOUVARDIA.

Shrubby plants with corymbs of white, rose, crimson and scarlet flowers, blooming during the Autumn and Winter. Their dazzling richness of color and formation of flower make them one of the most useful of our Winter-blooming plants for bouquets.

Strong, thrifty plants of last season's growth, which can be bedded out for Summer blooming, and lifted in the Fall for Winter-flowering. 30 cents; \$3.00 per dozen. Smaller size, \$2.00 per dozen; \$10.00 per hundred.

Davidsoni. The best of the white-flowered varieties; sometimes delicately tinged with pink.

BOUVARDIA—Continued.

- Dazzler.** A splendid variety, of bushy, compact habit; very floriferous. It produces fine clusters of large, rich, scarlet flowers.
- Double White.** The flowers are composed of three perfect rows of petals of the purest waxy white color, each floret resembling a miniature tuberosa; a very valuable acquisition.
- Elegans.** Light scarlet carmine; flower and truss immense size, measuring three to four inches in diameter.
- Humboldti Corymbiflora.** Long, tube-shaped, pure white flowers; very fragrant.
- Leiantha.** Fine scarlet; compact, deep green foliage.
- President Garfield.** Bright pink double flower, in the style of double white.

CACTUSES.

We have several varieties of this interesting family, including the following:

- Cactus speciosissimus.** Brilliant scarlet and crimson.
- Cereus grandiflora.** White, night-blooming.
- C. Macdonaldi.** The largest night-blooming.
- Triangularis.** Immense white flowers. 50 cents each.

CALADIUM ESCULENTUM.

We have seen leaves of this six feet long and three feet wide. 25 cents to \$1.00.

CALLA (*Richardia Æthiopica*).

Everybody's plant. If rested in Winter, may be made to flower in Summer, and used as an aquatic. 25 cents to \$1.00.

Richardia Maculata (the Spotted Calla). Leaves marked with white spots, flowers smaller. 25 cents.

CANNA (the Shot Plant).

We offer a small but choice collection of these noble plants, with tropical foliage and large, brilliant flowers.

Adele Levallois. Grows only three feet high, with stout green leaves, and bears abundance of very large flowers of a dazzling scarlet.

Compactum. Long green leaves; flowers bright yellow; six feet.

Ehemani. See new plants. 50 cents.

President Faivre. Flowers rich dark crimson, of a very beautiful shade; rich violet-purple foliage.

Except where noted, 25 cents; \$2.00 per dozen.

CARNATIONS.

A good collection of the best varieties. 25 cents each; \$2.50 per dozen.

CENTAUREA GYMNOCARPA.

Gracefully divided silvery foliage; useful for bedding. 15 cents each; \$1.50 per dozen.

CHRYSANTHEMUMS.

Exhibitions devoted entirely to these charming flowers have recently been held in many of the large cities. This has given a great stimulus to their culture. Our collection is the result of enthusiastic observation and study, and comprises about seventy-five varieties. Besides those here offered, we can furnish many other choice, fancy and show varieties. Except where noted, 15 cents each; 10 for \$1.00.

Large-Flowering Incurved Chinese.

Baron Beust. Red-chestnut, tipped with gold. Very rich color.

Empress of India. White, very large and fine, perfect in shape, one of the finest.

Golden Queen of England. Golden canary, large and fine.

Gloria Mundi. Bright yellow, dwarf habit and very fine. Early.

CHRYSANTHEMUMS—Continued.

- Jardin des Plantes.** Bright golden-orange, like the heart of a Marechal Niel Rose. The richest among the yellows.
- Lady Talfourd.** Delicate rose-lilac, silvery back, finely incurved.
- Mrs. George Rundle.** Pure white, beautifully incurved; the best white in cultivation.
- Mr. George Glenney.** Finely incurved flower, of the most delicate and beautiful pale-primrose yellow.
- Mrs. C. H. Glover.** Rich golden yellow, of exquisite form, and a free bloomer.
- Pink Perfection.** Delicate pink, large, and of exquisite form.
- Refulgence.** Rich purple, maroon; very attractive, grand color.
- Temple of Solomon** A king among Chrysanthemums. Flowers, five inches in diameter, with broad petals, beautifully incurved, and of the brightest golden yellow. Magnificent. 20 cents.
- Venus.** Lilac-peach color. A most perfectly formed incurved flower.

Large Reflexed Chinese.

- Alfonso.** Bright maroon-crimson, tipped with gold; very showy.
- Dr. Sharpe.** Magenta-crimson, one of the finest for specimens.
- Early Rose Queen.** Purplish-rose, abundant bloomer, early.
- Julie Lagravere.** Velvety crimson, very rich color.
- Perle des Beautés.** Finely imbricated, ranunculus flowered; color bright crimson-amaranth.
- Princess Meletia.** Pure white; most exquisitely fringed. 25 cents.
Except where noted, 15 cents each; 10 for \$1.00.

Pompon and Intermediate Sized Flowers.

- Brilliant.** Crimson scarlet; medium size.
- Bolide.** Delicate pale yellow. One of the best.
- Compactum.** Delicate blush. Very fine.
- Crimson Perfection.** Bright Crimson. One of the richest colored varieties.
- Gaillardia.** Orange, shaded with red; free bloomer. Very double and full.
- Golden Pheasant.** Fine golden-yellow. Splendid form.
- James Forsyth.** Orange-crimson. Distinct and early flowering.
- Kift.** Pure white, very high center; good white Pompon for florists' use. Early.
- Little Bob.** Bright maroon-red. Very profuse.
- Md'lle Marthe.** Pure white. Of the most perfect shape, like miniature dahlias.
- Model of Perfection.** Very fine form; lilac-rose; each petal edged with white. Early.
- Princess Louisa.** Bright rosy-lilac; very double. Early and profuse bloomer.
- Snowball.** Dwarf habit; flowers medium size; prettily incurved. White.
Except where noted, 15 cents each. 10 plants for \$1.00.

Japanese Varieties.

- Comte de Germiny.** Rich buff-yellow, striped with crimson; large flower, with broad petals. Very peculiar. 30 cents.
- Elaine.** Large, pure white, tinted with carmine when they become old. Early.
- Ethel.** Splendid large white flower, with ribbon-like petals. May be had in flower as late as Christmas.
- Fair Maid of Guernsey.** Pure white, with ribbon-shaped petals, but distinct from the above and earlier.
- Golden Dragon.** Rich yellow, with long petals, twisted and curved in a fantastic manner. Extra.
- Golden Thread.** Fine yellow, with long thread-like petals.
- Kata Kana.** Very large, rich, deep, bronzy-buff, with a peculiar warm chrome shade.
- Lacinatum.** Pure white, so finely fringed as to appear more like a pink than a chrysanthemum. Charming. 20 cents.
- Luteum Striatum.** Splendid yellow, slightly marked with brown-red.
- Lord Palmerston.** White, thread-like petals, shaded with pink.
- Mrs. C. Carey.** A magnificent variety, with large, broad petals of pearly-white, much curved and twisted. On first opening, the flowers show disc, but after, the petals incurve, and form a nearly perfect ball in shape. Fine bold foliage. 30 cents.

CHRYSANTHEMUMS—Continued.

- Mad. Lemoine. White, tinted with yellow; flowers large.
 M. Wm. Bull. Crimson-maroon, shaded brick-red; reverse of petals yellow. Fine.
 Nuit de Automne. A splendid, rich shade of dark cinnamon.
 Peter the Great. Fine large flowers, of a lemon-yellow, with strap-shaped petals, slightly incurved. Extra. 30 cents.
 Purple King. Brilliant purple, shaded with mauve and magenta.
 Parasol. A very large and fine incurved flower, of a golden-buff color, shaded with rich salmon.
 The Sultan. Large. Florets bright rosy-purple, with a lighter back.
 The Cossack. Flowers of the richest maroon and yellow; shaded. Very fine.
 Except where noted, 15 cents each. 10 plants for \$1.00.

- Daphne indica alba.—Very sweet, pinkish flowers. 35 cents to \$1.00.
 Dahlias.—A good collection. 20 cents each; \$2.25 per dozen.
 Cactus Dahlia.—(See new plants.) 50 cents.

GENERAL COLLECTION OF FUCHSIAS.

Fuchsias with white tubes and sepals, and pink or scarlet corollas.

- Arabella. Arabella improved. Brilliant Starlight.
Fuchsias with salmon colored or rosy tubes and sepals, and scarlet corollas.
 Earl of Beaconsfield. Speciosa Speciosa splendens. 30 cents.
 Mrs. G. Rundie. 50 cents.

Fuchsias with scarlet tubes and sepals, and rose colored corollas.

- Swanly Gem. Gov. Baker. Bird of Paradise. 20 cents.
Single Fuchsias, with scarlet tubes and sepals and purple or crimson corollas.
 Charming. Galatea. Inimitable. 20 cents.
 Wave of Life.

Double Fuchsias, with white corollas and scarlet tubes and sepals.

- Snow White. In our opinion this is the finest double white Fuchsia in cultivation. It is a good grower, of fair habit while the flowers are immense, fully as large as some of the largest dark varieties. Tube and sepals coral red, corolla pure waxy white and of very fine form. 20 cents each.
 Voix de Peuple. Very fine bushy habit, and the freest flowering of all the double whites; fine large flower.

Doubles, with dark purple or bluish corollas.

- Alpha. Avalanche. Elm City. Sir Colin Campbell.
Varieties with variegated foliage.
 Acubæfolia. Large foliage, variegated and blotched with yellow; flowers red.
 Sunray. Beautifully variegated with white and red, like a tricolor geranium. 30 cents.
 Prices of all Fuchsias, except where noted, 15 cents each.
 Ten varieties, \$1.20.
 Ten choice varieties, our selection, \$1.50.

- Gardenia Florida. The fragrant Cape Jessamine. 25 cents to \$1.00.
 Gardenia Fortunei. Flowers twice the size of the above. 50 cents to \$1.00.

ZONAL GERANIUMS—GENERAL COLLECTION.

This list comprises standard varieties, which have stood the test of several years' culture.

- Comte de Gomer. Very large, round flower; brilliant scarlet, white eye. Fine for Winter.

ZONAL GERANIUMS—Continued.

- Gen. Grant. Bright scarlet. The best bedder among the single-flowered.
 Jeanne d'Arc. One of the finest pure white Zonals ever sent out.
 Jersey Belle. Large trusses; each flower of good shape; nearly two inches across and of a soft, rich scarlet.
 Master Christine. The best pure deep pink bedder.
 New Life. Brilliant scarlet, distinctly striped with white.
 Rev. Wm. Atkinson. The most intense dark scarlet; exquisite color.
 Marshal MacMahon. Golden bronze. 20 cents.
 Mountain of Snow. Silver-edged. 20 cents.
 Happy Thought. Bright yellow center. 20 cents.
 Rose scented.
 Mrs. Taylor. Leaf like the Rose Geranium; flowers scarlet, ever blooming.
 Lemon scented.

Price, except where noted, 15 cents each; ten plants for \$1.00.

DOUBLE-FLOWERED ZONAL GERANIUMS.

These are becoming more popular than the single, are quite as free flowering, and fine for bedding and Winter blooming.

- Bishop Wood. Scarlet and rosy-crimson shaded. Very popular.
 Henri Beurier. Color beautiful rich salmon, each flower margined with white.
 Jean Dolfuss. Beautiful purple magenta; a peculiar shade of color. Extra.
 Madame Amelie Baltet. The best pure white double. Very fine for cut flowers.
 Mad. Thibaut. Very rich, deep pink. Extra fine.
 Mad. Revore. Base of petals rose, tipped with white. A good bedder.
 M. G. Lowagie. Individual flowers large, lovely orange scarlet.
 Robert Buist. Brilliant scarlet. Extra fine for bedding.

Price, 15 cents; 10 plants for \$1.00.

HELIOTROPE.

Everybody's favorite, both for Summer and Winter.

- Chieftain. Lilac, large truss and unusually fragrant.
 Violet Queen. Fine violet.
 Mad. de Blonay. Pure white when grown under glass. An incessant bloomer.
 15 cents each; 10 plants for \$1.00.

HANGING-BASKET AND VASE PLANTS.

Abutilon vexillarium pictum. \$1.00 per dozen.	Lycopodium. 15 cents.
Begonias; various.	Lophospermum scandens. 15 cents.
Cissus discolor (shade). 25 cents.	Maurandias; three colors. 10 cents.
Ferns; various.	Othona crassifolia. 10 cents.
Fuchsia procumbens (the Trailing Fuchsia). 15 cents.	Parlor Ivy (Senecio). 10 cents.
Isolepis gracilis. 15 cents.	Panicum variegatum. 10 cents.
Ivy; English. 25 cents.	Peristrophe aurea. 10 cents.
Linaria (Kenilworth Ivy). 10 cents.	Russelia juncea. 15 cents.
Lobelias (erinus and compacta). 10 cents.	Torrenia asiatica. 15 cents.
	Tradescantia multicolor. 15 cents.
	Thunbergias; various colors. 10 cents.
	Vinca major variegata. 10 to 25 cents.

HYDRANGEA—THOMAS HOGG.

Like the old pink Hydrangea, with large trusses of pure white flowers. 25 cents to \$1.00.

- Hedychium acuminatum. \$1.00.
 H. gardnerianum. 50 cents.
 Hibiscus Rosea Sinensis. Very large scarlet flowers; fine either Summer or Winter. 25 cents.

Hedera Helix (English Ivy). 25 to 50 cents.

Imantophyllum Miniatum. Splendid buff-orange; lily-like flowers in large clusters, produced in Winter. \$1.00 to \$2.00.

Justicia Coccinea. Scarlet Salvia-like; flowers in Winter. 25 cents.

LILIUM.

The following members of this beautiful family are not quite hardy, but are fine for greenhouse culture:

Longiflorum. Trumpet-shaped, pure white, fragrant flowers. 25 cents.

Krameri. A rare new Lily, with delicate pink flowers; similar in shape to the above. \$1.00 each.

Harrisi. (See new plants).

Lasiandra macrantha. Large flowers of a rich indigo-purple. 50 cents.

Linum trigynum. Splendid golden yellow, flowers in Winter. 30 cents.

Lantana. Good varieties, of all the usual colors. 15 cents each; \$1.50 per dozen.

Mahernia odorata (Honeybell). Very fragrant, yellow, flowers in Winter. It may be nicely grown in a hanging-basket by itself, when it makes a beautiful object. 25 cents.

Myrsiphyllum. Smilax. The well-known climber. 25 cents.

Myosotis dissitiflora (the Forget-me-not). Lovely delicate blue flowers. Fine for Winter forcing. 15 cents.

MUSA (the Banana).

No plants will produce a more tropical effect in the garden than these. All the species named below can be grown in the open air in Summer. The leaves of the last two will be better preserved if the plants are somewhat sheltered by buildings or trees.

Ensete. The noblest of all plants is this great Abyssinian Banana. The fruit of this variety is not edible, but the leaves are magnificent, long, broad and massive, of a beautiful green, with a broad crimson midrib; the plant grows luxuriantly from 8 to 12 feet high. During the hot Summer, when planted out, it grows rapidly, and attains gigantic proportions, producing a tropical effect on the lawn, terrace or flower garden. It can be stored in a light cellar or cool greenhouse during the Winter, with a covering of soil, or planted in a tub, watered sparingly. We offer a fine lot of these plants. Large plants, 5 feet high, \$5.00. 2 to 3 feet high, \$2.50.

Cavendishi (the Dwarf Fruiting Banana). Very easily fruited in a warm greenhouse, and fine for planting out in Summer. \$2.00.

Sapientum. This is the large fruiting banana of the tropics. Quite distinct from the others, with a tall trunk and grand foliage. \$2.00.

Oxalis Bowii. The largest flowering of all the Oxalises. Bright rose color. Bulbs, 15 cents each; pots, 25 cents.

Pansies. Raised from the choicest European seed, including "Show," "Fancy" and "Odier," or blotched varieties. Plants from frames, 75 cents per dozen.

Panicum plicatum var (Palm Grass). Broad, graceful foliage; about two feet high. Good for large urns or vases. 25 cents.

Passion Flower. See Greenhouse Climbers.

Pelargonium. See New Plants.

Primula Chinensis (crimson). From choice English seed. 25 cents.

Plumbago larpentæ. Flowers in trusses, something like a Verbena, and of the richest shade of deep blue. We have no other plant of this color which can compare with this for Summer bedding. 20 cents; \$2.00 per dozen.

Pyrethum (Feverfew). Double white. 15 cents; \$1.50 per dozen.

Pyrethum aureum (Golden Feather). Finely-cut golden leaves; much used for bedding. 10 cents each; \$1.00 per dozen.

Rogeria Thyrsoflora. Large trusses of pink flowers; deliciously fragrant, especially at night. \$1.50.

ROSES.

In the following list, Teas, Noisettes, Bourbons, &c., are classed together.

EVER-BLOOMING ROSES.

- Appoline.** An extra fine Rose; very large, full and double; exceedingly sweet; color clear pink, dashed with rosy crimson, edges and reverse of petals silver rose; one of the best.
- Agrippina.** Brilliant fiery red; good size and form; very double, full and sweet; an early and profuse bloomer.
- Arch Duke Charles.** Brilliant crimson scarlet, shaded with deep pink, changeable colors; large, very double and sweet; a good hardy grower and constant bloomer; a splendid Rose.
- Bougere.** This is a superb Rose; extra large, very double and full; exceedingly sweet Tea scent; color bronze rose, or violet crimson, delicately shaded with lilac.
- Bon Silene.** Noted for the beauty of its buds; deep rose color, occasionally pale light rose; very sweet and beautiful.
- Camellia.** A fine large Rose; full and double, very sweet; color pure white, sometimes slightly shaded with canary yellow and pale rose.
- Cornelia Cook.** This beautiful Tea Rose is now in great demand for its magnificent buds, which are of immense size, and the most lovely and perfect form imaginable; the color is pure white, sometimes faintly tinted with blush; delightful Tea fragrance. Price, 25 cents to 50 cents.
- Chestnut Hybrid.** A fine new variety, purple maroon, shaded with crimson; large and full; Tea scented and climbing habit.
- Chromatella.** Clear, bright yellow; good form and substance; large, very full and double; very sweet; much prized in the South for a pillar or veranda Rose.
- Duchesse de Brabant.** Soft, rosy flesh, changing to deep rose, edged with silver; delightful Tea scent; beautiful buds and flowers.
- Douglass.** Dark, cherry red, rich and velvety; large, full and double, fragrant; a neat, compact grower; very desirable for bedding.
- Devoniensis (Magnolia Rose).** Beautiful creamy white, with rosy center; large, very full and double, delightfully sweet, Magnolia scent; one of the finest Roses.
- Emperor Russia.** Large, fine form, full and double; color a bright scarlet, shaded and dashed with crimson; fragrant; a splendid Rose.
- Gloire de Dijon.** A magnificent old Rose, one of the very finest in every respect; large, perfectly double and Tea scented; color rich, creamy yellow, shaded with lovely amber; a splendid climber or pillar Rose. Strong budded plants 50 cents to \$1.00.
- Gloire de Rosamond.** Rich, velvety crimson, flamed with scarlet; full medium size, double and fine.
- Homer.** Extra good; large, very full and double; Tea scented; color light flesh, changing to silvery rose; very fine.
- Hermosa.** An excellent Rose; a constant bloomer; hardy; color beautiful clear rose; one of the best.
- Isabella Sprunt.** Bright canary yellow; large beautiful buds; valuable for decorative purposes; very sweet Tea scent; profuse bloomer.
- Jean Pernet.** Beautiful pale yellow; large, very full and double; Tea scented; a splendid Rose.
- James Sprunt.** Deep cherry red; medium size, full and double; fragrant; a strong grower and profuse bloomer; valuable for a pillar or climbing Rose.
- Louis Philippe.** Rich, dark, velvety crimson; profuse bloomer; good form and substance, full and double; fragrant; and excellent bedding Rose.

EVER-BLOOMING ROSES—Continued.

- Lamarque.** Pale canary yellow, almost pure white; beautiful buds; large, full flowers, very sweet; climbing.
- Mad. Bernard.** A grand Rose; large, full form, very double and exceedingly sweet; color fine apricot yellow, sometimes golden yellow, faintly tinged with blush.
- Marcelin Roda.** A splendid Rose, of large, fine form; very full and double, and exceedingly sweet; color pale lemon yellow, deepening towards the center to golden yellow; lovely buds and flowers.
- Mad. Maurin.** A magnificent Rose; extra large size, very double and full; immense buds; color pale flesh, changing to salmon-rose, shaded with carmine; very sweet Tea scent; a splendid sort.
- Mad. Lawrence.** Pink button Rose; a very interesting miniature Rose, about the size of a ten-cent piece; very double and fragrant; a profuse bloomer; color clear, bright pink.
- Mad. Bosanquet.** A fine old variety, much esteemed; pale flesh; large size, very double and sweet.
- Mad. Damazine.** Beautiful salmon rose, changing to amaranth and bright pink; large, very double and fragrant.
- Mad. Bravy.** Rich, creamy white, with blush center; perfect form; large, very double and sweet.
- Mad. Falcot.** Fine apricot yellow, with beautiful orange buds, much valued for bouquets; Tea scented; a constant bloomer; medium size.
- Melville.** Bright pink, changing to silvery rose; good, full form, double and fragrant.
- Malmaison.** Rich, creamy flesh; very large, perfectly double and exceedingly sweet; one of the very finest varieties; quite hardy.
- Marechal Niel.** One of the largest and most beautiful Tea Roses grown; flower extra large, very double, and deliciously perfumed; deep, golden yellow, buds of immense size. Good plants on their own roots, in five inch pots; price, 30 cents each. Strong budded plants, 50 cents to \$1.00.
- Niphetos.** This is the White Rose par excellence; color of the purest white, large, full, fragrant. It grows dwarf and compact, and flowers in great profusion, nearly every shoot producing a bud. It is now grown almost exclusively, as being the best White Tea Rose either for Winter or Summer. Price, 30 cents to \$1.00 each.
- Pink Daily.** Clear, bright pink, medium size, full and double; fragrant; a constant bloomer; much esteemed.
- Pierre St. Cyr.** An excellent Rose, extra large, very double, full and sweet; color deep, rosy pink, edged and shaded with lilac rose.
- Perle des Jardins.** This magnificent Rose still retains its place as one of the very finest sorts lately introduced. Its color is a rich shade of yellow; large size and perfect form, Tea fragrance, a healthy, free grower, and unequalled in profusion of bloom, either in greenhouse in Winter, or in the open ground in Summer. 30 cents to \$1.00 each.
- Queen of Bedders.** A splendid variety, with flowers of a bright, dark crimson color. It is not much used for cut flowers, as its buds are not pointed enough, but for bedding singly or in masses it is superb. It is probably the freest flowering Rose known. It literally covers itself with flowers, every shoot being a cluster of dazzling bloom. Price, 50 cents.
- Setina** (Climbing Hermosa). Flowers exactly like Hermosa, but the plant is of a climbing habit.
- Souv. d'un Amie.** A beautiful Rose; large, very double, full and sweet; color deep, rosy flesh, tinged and shaded with purplish lilac.
- Safrano.** Bright, apricot yellow, changing to orange and fawn, sometimes tinted with rose; valued highly for its beautiful buds; fragrant.
- Sombrioul.** Pure white, edged and tinged with silvery rose; very sweet, large and double; splendid.
- Sir Joseph Paxton.** Bright, glowing rose, changing to purplish crimson; large, fine form, very double and sweet; one of the best.
- Viridiflora** (Green Rose). Flower quite double; pure, deep green; a great curiosity.

HYBRID PERPETUAL ROSES.

This class is entirely hardy, and produce large, fragrant flowers of varied and beautiful colors.

Auguste Mie. Clear, bright pink; very large and finely cupped; fragrant and good.

Baronne de Maynard. A very pretty White Rose, sometimes shaded with blush; medium size and desirable.

Baronne Prevost. Beautiful clear, bright rose, shaded with crimson; very large; finely perfumed.

Coquette des Alps. The finest White Hybrid Perpetual; a profuse bloomer; flowers pure white, sometimes shaded with blush; very desirable; should be in all collections.

Dingee Conard. The flower is borne in clusters, and is large, very full and fragrant; color a rare shade of brilliant scarlet.

Duke of Edinburgh. Dark, velvety maroon; medium size, very full.

General Washington. Bright, vermilion rose; large, fine form, perfectly double, very free bloomer; fragrant.

General Jacqueminot. Rich, velvety scarlet, changing to scarlet crimson; magnificent bud.

Giant of Battles. Brilliant crimson; large, very double and sweet; esteemed one of the finest.

John Hopper. Brilliant rose, changing to bright crimson; reverse of petals lilac purple; a fine, large, showy sort; very fragrant.

Jules Margottin. Bright, cherry red, large, well formed; a splendid old variety.

Jean Rosencrantz. Bright red, shaded with reddish purple; center of lighter tint.

Lady Emily Peel. A charming Rose; medium size and full form; very sweet; color white, sometimes tinged and shaded with blush.

La France. Peach color shaded Rose. A vote was taken in France to determine the best Rose in existence, and this variety received the greatest number of votes of any in its class. Fragrance like that of the old Damask, and one flower will perfume a whole room. It is the sweetest Rose in the world. Price, 30 cents to 50 cents.

La Reine. Beautiful clear, bright rose; fine full form, very fragrant; well named "The Queen."

Mad. Victor Verdier. Rich, bright, cherry red, changing to satin rose; large, full and fragrant.

Mad. Plantier. Pure white; large and very double; a good, hardy Rose, suitable for cemetery planting.

Pæonia. One of the finest old Roses, never goes out of fashion, not excelled by any; very large, full flower; clear, bright rose, very sweet.

Paul Neron. Extra large, full, fine form; deep, carmine color; very fragrant; free bloomer; an excellent Rose.

Pierre Saletsky. Dark purplish red, shaded with violet; flowers large, well formed, full and fragrant.

Pierre Notting. Deep blackish red, very dark; large, very double, sweet; a splendid Rose.

Paul Verdier. An excellent Rose of clear, brilliant pink color; large, very full and sweet.

Prince Albert. Beautiful bright Rose; very large, extra fine.

Prince Camille de Rohan. Rich dark velvety crimson, changing to scarlet maroon; full, very double and sweet.

Rev. J. B. Camm. Flowers of large size; fine globular form; bright rosy pink; very fragrant; one of the best.

Reynolds Hole. Dark velvety crimson maroon; flower large and full; a first-class Rose.

Souvenir de Wm. Wood. Good size, very double; color, intense dazzling crimson.

Thomas Mills. Extra large, fine cup shaped; color, bright rosy carmine, sometimes with fine white stripes.

Triumphe de l'Exposition. Clear, lavender pink, and bright, transparent rose, beautifully shaded; very fine.

MOSS ROSES.

Elizabeth Rowe. Light Rose; very large and double, somewhat variable, but fine.

Princess Adelaide. Fine, strong grower; hardy; flowers bright, rosy pink, large and very double, beautifully mossed.

BANKSIA ROSES.

Charming little Rose, borne in clusters, and having no thorns upon their branches. For the greenhouse only.

White Banksia. Double flowers about one inch across; white, and having the fragrance of mignonette.

Yellow Banksia. Similar to the above, with pretty buff-yellow flowers. Small plants of each variety, 25 cents.

CLIMBING ROSES.

Prairie Queen. Clear bright pink, sometimes with a white stripe; large, compact and globular, very double and full; blooms in clusters; one of the finest.

Baltimore Belle. Pale blush, variegated carmine rose and white; very double; flowers in beautiful clusters, the whole plant appearing a perfect mass of bloom; one of the very best Climbing Roses.

Most of the Roses we offer in the foregoing list are in five and six-inch pots, and are strong plants.

Price of all Roses, except where noted, five-inch pots, 30 cents each; \$3.00 per dozen; six-inch pots, 45 and 50 cents each; \$5.00 per dozen.

SUMMER CLIMBERS.

Antigonon leptopus. See new plants.

Batatas paniculata. See new plants.

Ipomea Leari. Very large blue flowers, much finer than the annual Morning Glory. 20 cents.

Ipomea Noctiphyton. The finest of the Morning Glory family. See new plants. 25 cents.

Lophospermum scandens. Rosy flowers, shaped like a Foxglove. 15 cents.

Maurandia Barclayana. Elegant either for Summer or Winter. White, rose and purple. 10 cents each.

Mannettia cordifolia. Tubular flowers, of the most vivid orange scarlet. A charming vine. 25 cents.

Solanum Jasminoides. Jessamine-like white flowers, in clusters. Produces freely. 15 cents.

Thunbergia alata. White, buff and orange flowers, with black eyes. Each 8 cents; 75 cents per dozen.

Tropeolum. Fine double varieties. See new plants.

Salvia patens. Sky-blue, of the most lovely shade. 25 cents.

Salvia splendens. Scarlet sage. 15 cents each; \$1.50 per dozen.

Stevia compacta. Fine white flowers in Winter. 15 cents.

Stevia Variegata. Leaves edged with white, much used in ribbon-beds, with red Coleus. 15 cents each; \$1.50 per dozen.

Verbenas. A fine collection of thirty named sorts. \$1.00 per dozen.

Vinca Major Variegata. (Periwinkle). Beautiful training plant; leaves variegated with white. Very much used in baskets and vases. 10 cents each; \$1.00 per dozen. Larger, 25 cents.

Violets. "Marie Louise," dark blue; the best double. "Neapolitan," double light blue. "Queen Victoria," large single dark blue, good either for forcing or the garden. 15 cents each; \$1.50 per dozen. See, also, new plants.

HOT-HOUSE PLANTS.

ALOCASIA.

Gibsoni. Leaves like a Caladium; rich green and black. 25 to 50 cents.

Metallica. Rich bronze. \$1.00.

Violacea. A strong-growing plant, with purplish leaves and stems, covered with a violet bloom. Very fine. 50 cents.

Achimene. "Eclipse," rosy crimson; "Longiflora major," bright blue. 20 cents each.

Ananassa sativa variegata. The variegated Pineapple; the best variety. \$1.00 to \$5.00.

Anthurium Sherzerianum. The Flamingo flower. \$2.00.

Begonia. Fine foliage varieties. Seven kinds. 15 to 25 cents each.

Cyperus alternifolius variegatus. 50 cents.

CALADIUM.

Nothing among foliage plants in the conservatory will attract more attention than these. They may also be successfully planted out in Summer in a partially-shaded position.

Auber. Green, spotted with white and pink.

Argyrites. Small, but elegant; white and green spotted.

Belleymei. Large leaves, nearly all white, with a green network.

Beethoven. White, veined with green; midrib, rosy pink.

Bicolor picturata. Fine, narrow, green leaf, with coppery-crimson midrib. 50 cents.

Canarte. Light green border, spotted with white. Center, bright rose.

Chantanii. Bright crimson, blotched white, green border.

Chantanii Fulgens. Spotted rose and crimson; bright center.

Duchartre. Green, with large white patches, shaded with blush-pink. Very fine.

Duc de Rathbor. Green, crimson-veined, white spots.

Dr. Lindley. Green, with rose spots. Center, deep crimson. 50 cents.

Emperor Napoleon. Flaming crimson center, with radiating rays and crimson spots. 50 cents.

Hercules. Gray center, red spots and veins.

Meyerbeer. White, veins green, midribs red.

Prince Albert Edward. Groundwork green and white; beautiful crimson midrib, shading off from the center; black leaf-stem. Extra. 50 cents.

Pictum. Habit like an Alocasia, and may be kept growing in Winter. Rich green, with large creamy-white spots. Extra fine. 50 to 75 cents.

Reine Victoria. White ground, with a few red spots; green veins and border. 50 cents.

Splendens. Bloom red, with a green margin. Extra. 50 cents.

Triomphe de Exposition. Deep crimson center, with red ribs and green border. One of the finest. 50 cents.

Prices, except where noted, 25 cents; \$2.50 per dozen.

Dracena Terminalis. Crimson and brown. 25 cents to \$1.00.

Dracena Indivisa. Long green foliage; very graceful. 50 cents.

EUCHARIS.

These beautiful "Star Lilies" are among the choicest flowers in cultivation.

Grandiflora. Lovely star-shaped, pure white flowers, four inches across, having a large cup in the center, similar to the Narcissus. Blooms several times a year. 50 cents to \$1.00.

- Euphorbia jaquiniflora*. Flowers, bright orange-scarlet, in long wreaths. Indispensable for Winter. 25 and 50 cents.
- Fittonias*. Various kinds. 15 to 25 cents.
- Francisea latifolia*. Deliciously fragrant lavender flowers, which turn to white as they fade; blooming in Winter. 50 cents.
- Gesnera refulgens*. Dark leaves, covered with crimson plush. Flowers, orange-scarlet. 25 cents.
- Gesnera macrantha*. This is worthy of more attention than it receives. The root is a large, club-shaped tuber; leaves of the richest, velvety green, shaded with yellowish green. The plant produces at the top a cluster of tubular flowers, nearly three inches long, scarlet, covered with hairs of the most intense vermilion scarlet. Blooms in Winter. 25 and 50 cents.
- Gloxinias*. Erect varieties, raised from the choicest English seed. Mixed colors. 25 cents each; \$2.50 per dozen.
- Maranta zebrina*. 25 and 50 cents.
- Musa*. See Greenhouse Plants.

PALMS.

The following is a select list of rare and handsome varieties, which can be recommended of easy culture for apartments, conservatory decoration, or vase plants during the Summer. The prices vary according to size and rarity:

- Areca Baueri*. \$3.00.
- A. Lutescens*. Fine yellow stems; a beautiful palm of fine color and graceful habit; for a dinner-table or greenhouse decoration. \$3.00 to \$6.00.
- A. Verschaffelti*. One of the most elegant varieties. \$3.00 to \$6.00.
- Brahea (Pritchardia) Filamentosa*. Resembles *Latania Borbonica*, hung with long white threads. \$1.00 to \$2.00.
- Carludovica Palmata*. The Panama hat palm. In growth like *Latania Borbonica*. \$1.00 to \$5.00.
- C. Incisa*. Cut foliage. \$1.00 to \$5.00.
- Caryota Urens*. \$1.00.
- Chamædora Elegans*. As the name implies, this is an elegant plant. \$3.00 to \$10.00.
- Chamærops Excelsa*. A handsome fan palm; fast grower and easy culture. 50 cents to \$1.00.
- C. Giesbrechti*. \$1.00.
- C. Humulis*. \$3.00.
- Cocos Weddelliana*. The most elegant and graceful of all the smaller palms. \$3.00 to \$5.00.
- Corypha Australis* (Australian Fan Palm). Of easy culture and good grower. 50 cents to \$1.00.
- Curculigo Recurvata*. A remarkably graceful palm-like plant, for decorative purposes. 50 cents to \$3.00.
- C. Recurvata Variegata*. A beautiful variegated form of the above. \$5.00.
- Cycas Revoluta*. (Sago Palm). \$5.00.
- Heterospathe Elata*. This plant ranks amongst the most ornamental of the pinnate-leaved series. \$1.50.
- Kentia Belmoreana*. The leaves are beautifully crisp. \$1.50.
- Kentia Fosteriana*. Robust habit and growth. \$1.50.
- Latania Glaucophylla*. Glauous green leaves. \$2.50.
- Latania (Livistona) Borbonica*. (Chinese Fan Palm). One of the most desirable for ordinary cultivation; a good grower. 50 cents to \$15.00.
- Oreodoxa Regia*. \$3.00.
- Phoenix Dactylifera*. (The Date Palm). \$2.50 to \$5.00.
- Phoenix Rupicala*. A beautiful species. \$5.00.
- P. Reclinata*. \$3.00 to \$5.00.
- P. Sylvestris*. \$3.00 to \$5.00.
- Seaforthia Elegans*. One of the handsomest of greenhouse palms, of very easy culture. \$1.00, \$3.00 and \$5.00.
- Pandanus Veitchi*. This splendidly variegated Screw Pine is one of the most attractive plants. The leaves are light green, beautifully marked with broad stripes and bands of pure white, and most gracefully curved. \$1.50 to \$5.00.

POINSETTIA PULCHERRIMA.

A hothouse plant of great beauty, producing bracts or leaves that surround the flower one foot in diameter, on well-grown specimens, of the most dazzling scarlet. It blooms from November to February. Largely used by bouquet-makers for designs of cut flowers, etc. 25 cents to \$1.00, according to size.

Poinsettia Pulcherrima Plenissima. New Double Poinsettia. Very brilliant scarlet, tinted with orange color; a dazzling color. The head grows on a specimen plant fourteen inches in diameter by ten inches in depth, giving it the appearance of a cone of fire. 50 cents to \$1.00.

Passiflora. (See Climbing Plants).

Peperomisa. "Arifolia" and "resedæflora." 15 to 25 cents.

Plumbago rosea. The scarlet Plumbago. A splendid Winter-blooming plant. 25 to 50 cents.

Thyrscanthus rutilans. The flowers are tubular; bright scarlet, borne on long, thread-like pendulous racemes, sometimes two feet long; very graceful and pretty, blooming in Winter. 50 cents.

Tydæa amabilis. A beautiful Gesnerad, with silvery leaves, and bright yellow and scarlet spotted flowers. 25 cents.

Tydæa insignis. Beautiful scarlet flowers, with spots of a darker color, resembling a ripe strawberry. In bloom all the year. 25 cents.

Tydæa—Lady Digby. Rosy crimson, beautifully spotted. 25 cents.

Tabernæmontana coronaria F. Pl. Pure white flowers, something like the Cape Jessamine, but with a more delicate fragrance and texture, blooming both Winter and Summer. 25 and 50 cents.

URCEOLINA PENDULA.

A bulbous plant, with leaves similar to the Eucharis. The flowers are pendant, on slender stems, from stalks about one foot high; tubular, with a bell-shaped mouth; color, bright yellow, with light green tips. Unique and graceful, blooming in early Winter. 25 and 50 cents.

GREENHOUSE AND STOVE CLIMBERS.

Allamanda Hendersoni. Noble, rich yellow flowers. 40 cents.

Bignonia venusta. 50 cents to \$1.00.

Cissus discolor. 25 cents.

Clerodendron Balfouri. Scarlet and white; fine for cut flowers. 25 cents.

Passiflora Princeps. Scarlet flowers in racemes, all the year. 50 cents.

Tacsonia exoniensis. Magnificent magenta flowers, five inches across, pendant, on long stems. 50 cents.

Tacsonia Buchananii. Large, vivid scarlet. 60 cents.

Thunbergia laurifolia. Large, porcelain-blue; free blooming. 50 cents.

Thunbergia fragrans. Pure white. 25 cents.

Stephanotis floribunda. Clusters of pure white, fragrant flowers. Indispensable. 75 cents.

ORCHIDS.

These are the gems of the floral kingdom, and many of them can be grown with complete success in the same house with Geraniums and a general collection of greenhouse plants.

Bletia hyacinthina. Spikes of crimson flowers in Winter; of very easy culture. 50 cents to \$1.00.

Celogyne cristata. A charming kind for Winter. Flowers pure white, with wavy petals and a golden spot in the center of the lip. \$2.00 to \$5.00.

Cattleya mossiæ. Very large and showy. \$3.00 and upwards.

ORCHIDS—Continued.

- Cattleya amethystina*. Blush-white; lip, crimson-tipped. \$3.00 to \$5.00.
Cypripedium insigne. Its flowers will last two months. \$1.00.
Dendrobium nobile. The most easily cultivated and flowered of all "air plants," and very beautiful. 50 cents to \$5.00.
Dendrobium nobile pendulum. Far superior to *Nobile* in depth of color and size of flower. Pendulous habit. \$5.00 to \$10.00.
Dendrobium moschatum. Buff, tinged with purple. Dark purple lip. \$3.00.
Dendrobium thyrisflorum. Creamy-white, with a golden lip. \$4.00.
Dendrobium densiflorum. Rich golden yellow. \$4.00.
Lælia anceps. Rich rosy crimson, blooming in early Winter. \$3.00 to \$6.00.
Phaius grandifolius. Of easy culture; fine for Winter. 75 cents and upwards.
Phaius Wallichii. Very much larger and finer than the above; rich buff, shaded with purple. \$5.
Phaius maculatus. Rich yellow flowers, and spotted leaves. \$5.00.
Stanhopea insignis. \$2.00.
Stanhopea tigrina. \$3.00.

These last have very curious pendant flowers, and a strong odor of vanilla.

- Zygopetalum Mackayi*. Delightfully fragrant; beautiful, and lasting a long time. \$3.50 to \$7.00.

We have other choice Orchids. Those desiring to purchase would do well to correspond with us, stating the kinds they desire, and we will give them our best attention.

FERNS.

Our collection embraces the leading sorts of this beautiful class of plants; their graceful and great diversity of foliage make them much valued for Wardian cases, Ferneries and rock-work where there is moisture and shade; the stronger varieties succeed well when planted out in shade and moisture. 20 cents; \$2.00 per dozen, except where noted.

- Adiantum*. (Maiden Hair).
Amabile.
Assimile.
Capillus Veneris.
Concinnum Latum.
Cuneatum.
Decorum.
Farleyense. 50 cents to \$1.00.
Formosum. 50 cents.
Gracillimum. 50 cents.
Pubescens.
Seemani. 75 cents.
St. Catherineæ.
Trapeziforme. 50 cents.
Alsophila Australis. Australian tree fern. \$1.00 to \$2.00.
Asplenium Belangeri.
Cyrtomium Falcatum.
Davallia Mooreana. 50 cents.
Dicksonia Antarctica. Australian tree fern. \$2.00.
Gymnogramma. *Chrysophylla*. (Golden Fern).
Peruviana Argyrophilla. Finest silver fern.
Decomposita.
Sulphurea. (Sulphur Fern).
Lomaria Gibba. 50 cents.
Gibba Crispa. 75 cents.
Lygodium Scandens. (Japonicum.) A climbing Japanese fern, of great beauty.
Microlepia Hirtha Cristata (new). An elegant crested fern, of good habit and growth. 50 cents.
Nephrolepis Exaltata. Strong grower. 25 to 50 cents.
Davallioides Furcans. A beautiful and ornamental crested fern, of easy culture.
Nephrolepis Duffi (new). Compact, elegant habit. 50 cents.
Tuberosa.
Polypodium Aureum.
Pteris Argyrea. A very showy, strong-growing fern, with variegated foliage; excellent for interior or outside decoration.
Cretico Albo Lineata.
Hastata.
Nemoralis.
Palmata.
Serrulata.
Serrulata Cristata.
Tremula.
Tricolor. Very rich crimson veins. 50 cents.
Sitilobium Circutarium. A strong grower.

LYCOPODIUM—SELAGINELLA.

20 cents; \$2.00 per dozen.

Arborea. Steel blue, creeping.

Cæsia. Steel blue.

Cordata.

Densa. Resembling a light green cushion of moss. 15 cents; \$1.50 per dozen.

Denticulata. 15 cents; \$1.50 per dozen.

Denticulata Variegata. 15 cents; \$1.50 per dozen.

Involucratum.

Martensi Compacta.

Martensi Variegata.

Plumosa. Large, spreading, erect, fern-like.

Serpens. Creeping habit, bright green.

Wildenovi. Delicate, bright green, fern-like.

SUMMER-BLOOMING BULBS.

Gladiolus. Fine varieties, mixed. 10 cents each; \$1.00 per dozen.

Hyacinthus Candicans. See new plants. 25 cents each.

Tigridia Pavonia. The most brilliant variety; rich scarlet. 10 cents each; 75 cents per dozen.

Double Tuberoses. Strong flowering bulbs, 8 cents each; 75 cents per dozen. Very extra fine, 10 cents each; \$1.00 per dozen.

HARDY PERENNIAL PLANTS.

No true lover of flowers will be satisfied alone with what are called bedding-plants. This class of plants is quite as well worthy of attention.

The first four can only be supplied in Autumn.

Cypripedium Spectabile (See Aquatic department). 50 cents to \$1.00.

Cypripedium pubescens. Lovely, rich yellow. Will grow in heavy loam. 50 cents.

Cypripedium acaule. 20 cents each; \$2.00 per dozen.

Mertensia virginica. Porcelain-blue flowers. Extra fine. 20 cents each; \$2.00 per dozen.

Hemerocallis flava. Bright canary yellow. 25 and 50 cents.

Iberis sempervirens (Perennial Candytuft). Covered in Spring with a mass of snow-white flowers. 25 cents.

Funkia subcordata. The sweet, white Day Lily. 25 cents.

Funkia ovata. Smaller blue flowers. 25 cents.

Iris. Several old varieties which are not common. 25 cents each.

Myosotis alpestris. This pretty blue Forget-me-not is hardy, with a slight protection. 25 cents.

Platycodon grandiflora. A new plant, belonging to the Blue-Bell family. The flowers are two inches or more in diameter, shaped like an inverted umbrella, and of a violet-blue color. Blooms freely for a long period. 25 cents.

Platycodon grandiflora alba. A white variety of the above. Splendid. 25 cents.

Plumbago larpentæ. This charming blue-flowered plant is hardy, with some protection. 20 cents.

Primula vulgaris (the double white English Primrose). Needs protection. 25 cents.

Tritoma uvaria. This does well, planted near water. Needs some protection. 25 cents.

Yucca filamentosa (Adam's Needle). 25 and 50 cents.

Yucca recurva. Recurved foliage; somewhat tender. 25 and 50 cents.

Ampelopsis Veitchii. A beautiful climber, clinging like Ivy. 20 cents; \$2.00 per dozen.

Clematis Flamula (Virgin's Bower). Fine foliage, with small white flowers, in clusters; fragrant. 25 to 50 cents.

Clematis Jackmani. Large, rich violet purple; very fine. 75 cents.

Clematis coccinea. A splendid new variety, with flowers of brilliant coral scarlet, and very abundant. 50 cents each, or three for \$1.00.

STRAWBERRY PLANTS.

Sharpless' Seedling. One of the most popular Strawberries in cultivation. 25 cents per dozen. \$1.00 per hundred.

"THE LESSON OF THE LILIES."

But I remember that God has strewn flowers all over the earth. He has adorned this abode of sinners—this great scene of our probation—this vast human penitentiary—with every natural attraction. This is wonderful. As a sinner, I find myself in *this world as in a great reformatory institution*. I am put within the high walls of restraint and discipline. I am confined, chastened, thwarted, controlled by a power which I feel to be irresistible. I suffer pains and disappointments. I am conversant with sorrow, tears and death. All this I know to be the result of sin; for it is written all over the walls which inclose me, that my unhappiness and peril are only sin's fair wages. In such circumstances—living in an accursed world—toiling at tasks which are in a sense penal—somehow reading in every furrow of the field, "Cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life; thorns also and thistles shall it bring forth to thee"—in such circumstances, I should have expected that all nature would be somber and menacing; that the hills would rise around me in bare, black, volcanic crags; that the scenery of earth would everywhere be such as my sins deserve; and that voices of reproach and of withering shame should reach me from every quarter. But is it not wonderful that *God has filled this world with flowers?* He has covered the hills and checkered the crags with verdure. The wild flower smiles to us from Alpine summits. The fields are brilliant with lilies. Under our feet, everywhere, are growing most exquisite creations of God. Stoop now, and take up a little flower. Ponder. Who made it? Examine it; its beauty, variety, completeness, ingenuity, adaptation to charm your taste. Reflect. It is a masterpiece of living mechanism. Chance never put such lines and such hues together. It is no result of wholesale manufactory, which dispenses with care and attention. It impresses us with the conviction that intelligence, and taste, and sympathy, and a desire to please us, have somehow been enlisted in its creation. It speaks to us. It says: Your Maker loves you; he would win you; he would prove by this gorgeous floral drapery of your prison, that he respects you in your ruin; that he would win you to a normal self-respect and hopefulness; that he would elevate your tastes and affections, and make earth's flowers and earth's songs to be constant remembrancers of the Paradise lost, and symbols of the Paradise to be regained.

But I cannot trust myself to linger here. Time presses. I repeat my argument. Here is more than infinite skill. *Here is a moral power.* Here is an appeal to the most delicate susceptibilities of my soul. Here is a voice to my heart. As adjuncts and scarlet-robed attendants of religion, these things are adapted to elevate my affections and to educate my nature for the scenery of heaven. Let none misunderstand: nature is not revelation; beauty is not piety; *taste is not holiness.* Nor will flowers and all the exquisite gifts of nature do for the soul what the power of the Cross alone can do. Let India, and South America, and Bishop Heber, witness to this:

"What though the spicy breezes
Blow soft o'er Ceylon's isle—
Though every prospect pleases,
And only man is vile!"

Still I do affirm that the ministry of the beautiful is a reality; flowers have a mission, and the lesson of the lilies is one which Christian hearts will always love to study. I cannot tarry to show the practical bearing of these ideas on our domestic culture, or to tell what flowers may do to refine the tastes and manners of our children. But I must observe the *relation of this subject to our reformatory institutions*, which abound so much in these days. It is the honor of our age that no class is despaired of. The victims of every vice are gathered into homes prepared for them, where they are kept, restrained, admonished, instructed and evangelized. But this I have to say, that our reformers had better imitate the wisdom and the condescension of God. He covers the walls of our penitentiary with vines, and lavishes flowers in our path. He sends the Gospel to melt and purify our souls; and He sends every variety of beautiful form, to educate our tastes and to call out our natural sympathies. An institution which ignores this principle contains an absurdity. The relations of taste to moral culture are close and intimate. Were I founding an asylum for the reformation of the vicious, my first investment, after shelter and food and Bibles, should be the construction of a garden which should do on a limited scale what God is doing on the grander scale of nature. *Real reformation cannot be effected by a system of mere restraints and negations.* On this principle, I should count it a most unpromising undertaking to attempt the moral elevation of a class whose tastes for natural beauty I left uncultivated. Hence, if I were visiting an asylum for delinquents, I would visit the garden sooner than the dormitories; and I should hope as much, *after proper religious instruction*, from the refining influence of horticulture, as from any other department of regimen and discipline.—Rev. Frederick G. Clark, New York.

APPENDIX.

SPECIAL ANNOUNCEMENT.

NELUMBium SEEDS.

GRAND NEW VARIETIES.

Could our customers know something of the pleasure we have experienced in cultivating Nelumbiums, they would then realize with what delight we hail the acquisition of new varieties of these charming plants. Those who wish to have Lotus flowers the first season will, of course, purchase tubers of *N. speciosum*. But to those who are willing to wait a year or two for bloom we are pleased to offer seeds of very choice new varieties, which we have just received from a locality where special attention is paid to their culture. Each packet, possibly, may contain several shades of color. Each nut should have a hole the size of a pin drilled in its shell, with the point of a penknife, or by using a file, to allow the moisture to penetrate the kernel, or otherwise they will not germinate. They should then be planted in warm water in a greenhouse, or, if it is desired to plant them in a pond, it should not be done until warm weather, and then in water about one foot deep.

NELUMBium NUCIFERUM ALBUM.

Splendid new white-flowered variety. Price \$1.00 per packet, or three packets for \$2.50.

NELUMBium NUCIFERUM ROSEUM.

Rose-colored flowers. Possibly of several shades. Price \$1.00 per packet, or three packets for \$2.50.

NELUMBium NUCIFERUM RUBRUM.

Magnificent red-flowered variety. Price \$1.00 per packet, or three packets for \$2.50. One packet of each of the three varieties for \$2.50.

POND CANE.

We are also able to add to our list of aquatics this splendid novelty. It grows from six to twelve or fifteen feet high, with jointed stalks which are fine for pipe-stems. It has beautiful grassy foliage, and bears at the top magnificent heads or plumes of a pinkish hue, spangled over with a silvery inflorescence. These heads, when cut and dried, feather out in the most beautiful manner into fluffy, silky plumes, of a soft gray color. The plant grows in water, and makes a fine ornament in the Water Garden, or in a carp-pond. It may also be grown in the garden, like the Papyrus or Cannas. It is a perennial plant, and entirely hardy in water, and hardy in the garden with protection. Strong roots. 75 cents each.