Historic, Archive Document

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



Indefee(1912

62.11

U.S. Deforment of Agriculture Washington, D. C.



TREE AND SHRUB SEEDS. OTTO KATZENSTEIN & CO. ATLANTA, GA.

INDEX OF BOTANICAL NAMES

C-in Conifer List.

T-in Ornamental Tree List.

H R-in list of Seeds, Roots and bulbs of Herbaceous plants.

PAGE		D. O.
Abies—C10	Erigeron—H R 28	Oxydendron—T 24
Acer—T		
	Eryngium—H R 28	Oxytropis—H R 27
Aconitum—H R 27	Erythronium—H R 28	Passiflora—H R 28
Aesculus—T 18	Euonymus—T 24	
Agave—H R	Exochorda—T 22	Paulownia—T 23
Ailanthus—T 24		Penstemon—H R 26
Alnus—T 17	Fagus—T 18	Ph!ox—H R 28
Amsonia—H R 25	Fraxinus—T 18	Picea—C12-13
Andromeda—T 17	114241143 1	Pinus—C 12
Anemone—H R 28		Platanus—T 24
Aquilegia—H R 26	Galax—H R	Populus—T 20
Asclepias—H R	Gentiana—H R 26	Prunus—T 22
Asimina—T 22	Gingko—C 12	Pseudotsuga—C 12
	Gleditschia—T 22	Pyxidanthera—H R 28
Aster—H R25-26	Gymnocladus—T 18	
		Quercus—T 22
Berberis—T 18	Habenaria—H R 28	
Betula—T 18	Halesia—T 28	Rhamnus—T 18
2 1111111111111111111111111111111111111		Rhexia—H R 27
Callicarpa—T 22	Hamamelis—T 24	Rhododendron—T 22
	Hicoria—T 20	Rhus—T 24
Callirrhoe—H R 28		Robinia—T 22
Calochortus—H R 27	Ilex—T17-20	Romneya—H R 28
Campanula—H R 26	Iris—H R 26	Rosa—T
Carpinus—T 20		1
Calycanthus—T 24	Juglanus—T 24	Sambucus—T 20
Carya—T 20	Juniperus—C10-12	Sarracenia—H R 27
Cassandra—T 17	Jamper ab C	Sassafras—T 24
Cassia—H R 28	Kalmia—T 22	Senecio—H R 28
Castanea—T 18	Koelreuteria—T 24	Sequoia—C10-12
Castilleja—H R 28	Rocheuteria—1 24	Shortia—H R 28
Catalpa—T 18	Talua di IIID	Sisyrrhinchium—H R 27
Ceanothus—T 20	Lachnanthes—H R 28	
Celtis—T 20	Larix—C 10	Solidago—H R 26
Cephalanthus—T 18	Lathyrus—H R 28	Sorbus—T 18
Cercis—T	Liatris—H R 26	Stokesia—H R 26
	Leucothoe—T	Symphoricarpus—T 20
Chamaecyparis—C 10	Libocedrus—C 10	/D 1: C 10
Chionanthus—T 24	Lewisia—H R 26	Taxodium—C
Clematis—H R 26	Lilium—H R 27	Thalictrum—H R 27
Clethra—T 24	Liquidambar—T 20	Thuya—C 10
Clitoria—H R 26	Liriodendron—T 24	Tilia—T 18
Coreopsis—H R 28	Lobelia—H R	Trilisa—H R 26
Cornus—T 20	Lupinus—H R 27	Tsuga—C 12
Corylus—T 20	Eupmus—11 K 21	
Crataegus—T 24	20 .	Ulmus—T 20
Cypripedium—H R 28	Maclura—T 22	Vaccinium—T 20
	Magnolia—T 22	Viburnum—T
Darlingtonia—H R 27	Melia—T 18	
Delphinium—H R 27	Morus—T 22	Viola—H R
Dionæa—H R	Myrica—T 24	Vitis—T 20
Diospyros—T 22		Wistaria—T 24
Dodecatheon—H R 26	Nyssa—T	Wistaria 1
Drosera—H R 27		Xolisma—T 17
	Oenothera—H R 26	Xvris—H R 27
Elæagnus—T 22	Orontium—H R 27	
Epigæa—H R 25	Ostrya—T 20	Yucca—T 18

Illustrations from "Country Life in America," New York City; "Forestry and Irrigation," Washington, D. C., and "White's Class Advertising," Chicago.



TREE AND SHRUB SEEDS OTTO KATZENSTEIN & CO. NEW YORK CITY. ATLANTA, GA.



These stately pines and spruces stand guard at the entrance to Ralph Waldo Emerson's house. Here the Cambridge turnpike and Lexington road make a junction near Boston, Mass.



Hemlock and spruce protecting stream-flow at the source of a river rising in the Adirondacks,

New York State.

APPY the farmer who wisely conserves his woodlands. He not only

adds riches to his own farm, but he confers a blessing upon every human being that lives near any stream which flows through his farm or has its source on his ground. Farms, villages, cities have the farmers along the banks of many rivers to thank for the even, uniform flow of the waters.

The saving of forests means the increased wealth for American farmers. Planting and growing trees, to replace the millions that have been uselessly wasted, is being recommended by Municipal, State and Government Commissions.

Men of training, experienced in forestry, are showing the farmer that prevention of forest devastation is a moneymaking proposition affecting his individual interests.

Thousands of acres all

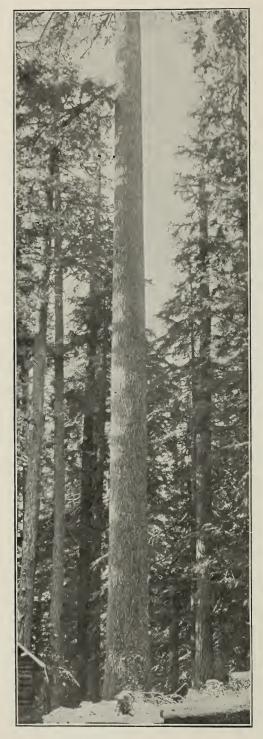
through the East, Central and Middle West are showing great declines in fertility and consequent land value. Unwise lumbering methods have denuded the lands, allowed streams to dry up and consequently the percentage of water available for growing crops has been greatly reduced.

There are many advantages to the farmer from planting forest and shade trees; for instance:

1. Ornamentation.—Paint, a clean lawn, good out-buildings, tidiness everywhere, well kept fences, rightly tilled fields, an abundance of ornamental, forest and shade trees mark the home of the far-sighted farmer. The value of such land is immediately apparent to the dullest observer. Such appearances, 99 times out of 100, are what sell a man's farm at a handsome profit.

Compare the dismal looking, treeless road and its borders of thistles, briars and tangled grass with the handsome rural thoroughfare bordered with trim maples, elms, cottonwoods, etc. Which would you choose to drive on?

2. A Place for Song Birds.—The farm without woodland and ornamental trees will be barren of the bug eaters—the song birds. The farmer who fails to encourage the birds to make their homes in the trees on his farm is short-sighted. They are bark and blossom protectors for fruit trees and many other farm products.



What a wonderfully straight trunk. A Southern pine tree. How such handsome fellows make warm the heart of the lumberman.

3. Profits From Waste Places. Many rocky, marshy or otherwise useless places can be made a savings bank, which, in future years, will return high dividends to the depositor. Mr. Farmer, send us today a description of the waste places on your farm. Let us advise you how you can put a little money in the soil that will draw rapidly compound interest.

4. Trees Promote Health. The exhalation of the foliage of trees in giving out clean water and oxygen is well known. But here their sanitary value does not cease. They are ready absorbents of poisonous odors, of animal exhalations and effete, disease-producing gases. To make a farm home healthful, grow trees around the house. Begin at once.

Screens From Winds. Houses exposed to either hot or cold winds can be made doubly livable by planting a wind-break of conifers at the angle from which the wind comes. Winds blowing over forest and woodland are robbed of their terrors and strength. Their heat in summer is absorbed by the foliage which gives to the wind a delicate moisture so welcome to the lungs. In winter the force of frosty winds is broken by waving pines and hemłocks. Reduce coal bills. cut down your work on the wood pile in winter! Make your home cooler and sweeter in summer, Mr. Farmer!

6. Shade for Cattle. The dairyman, stockman or plain farmer may know that when his cattle or dairy herd are resting comfortably in the shade that the

profit-giving milk is flowing into the bags in generous quantity or that fat and weight are rapidly increasing on his beef cattle. There is nothing like comfort, rest and shade to make cattle money-coiners for farmers.

- 7. Supply of Timber, Posts, Firewood, Etc. Solid is the foundation that the farmer builds who looks years ahead and provides for himself and children ample woodlands for timber and other wood supplies. It is a short-sighted policy that many farmers are regretting, that they have chopped thoughtlessly away at their bank accounts in the forests. Mr. Farmer, reforest your woodlands! Take time by the forelock!
- 8. Forests Promote Stream Flow and Protect from Floods. Don't let the little streams go unprotected. They are the greatest sources of wealth any man can have on his farm. Their best guardians are forests. Our Western deserts are the results of a lack of them. The rustling foliage in a forest is giving out hundreds of tons of water every hour. This enormous quantity makes clouds. In turn, the vapor from lakes, seas and occans is attracted toward this rising vapor from forests. The result is plenteous rain and the forming of springs and babbling brooks. Mr. Farmer, keep the trees, feed their roots, increase the fertility of your lands through which the streamlets and brooks flow. Moreover, forests will preserve you from floods. How the citizens of the Mississippi, Arkansas, Ohio and Missouri Valleys would rejoice if the sources and water-sheds of the Missouri, Arkansas, Ohio and Mississippi were not so badly denuded of their forests!



Here are pines again standing guard over a river's source where the hand of man has not depleted the forest growth.

Pressing Economic Needs of Steam and Trolley Railroads

Our methods of tree-seed planting and rearing are of acute importance and value to railroad corporations.

Many are purchasing forest reserves and endeavoring to save the growing trees for ties and fence posts. But the growth must be replaced.

Our tree-seed plan is far-sighted and economical.

On 218,000 miles of railroad we must replace in the next eight years 654,000,000 cross ties. Besides, 9,000,000 fence posts and 436,000 telegraph poles must be provided annually. Then there are stations, bridges, cars to provide for. Timber from 3,000,000 acres is demanded yearly for these purposes.

Catalpa speciosa seed is now being sown by railroad authorities, who engage the advice of expert foresters. This Catalpa grows in sixteen years, so that one tree supplies six cross ties. These will last from thirty to thirty-five years in the ground. It grows rapidly, adjusts itself to almost

all soils, locations and conditions, North or South.

Special attention must be called to it that seed from naturally growing Catalpa trees is immeasurably more desirable for the production of hardy trees than seed collected from cultivated trees, which generally are not entirely true to name. While the price of this seed is rather higher than that for seed from cultivated trees, which we also carry in stock, we strongly advise the use of the more expensive seed, because it will prove cheapest in the end, and as there are about 20,000 seeds in a pound, the cost per seedling is very small anyway.

See Hardy Catalpa, quoted on page 18. Write for special quotations

on large quantities.

The Object of this Book

Our purpose in this book is to teach the farmer how to replace his

fast disappearing woodland with desirable trees at a minimum cost.

Otto Katzenstein & Co. is composed of men who are practical foresters, wholesale nurserymen and botanists. They understand the laws of forest growth and requirements of different localities.

To You Yourself

To you, who read this Catalogue, this personal invitation is extended. Write us about your farm. Tell us its size. How much wood land, how much under cultivation? Any streams; regular in flow or not? Ask us how we can help you make your farm more valuable by growing forest, shade and ornamental trees and shrubs.

Otto Katzenstein & Company,

Main Office and Warehouse, 68 S. Pryor Street, Atlanta, Ga. Branch Office, 373-375 Broadway, New York City.

OTTO KATZENSTEIN. OSCAR FALK.

> English Correspondence. Deutsche Correspondenz. Correspondance Francaise.



Here is a partial view of the apiary of the A. I. Root Company, Medina, Ohio. These evergreen trees were planted in 1879 as a windbreak, all around the apiary. They are very thrifty. Now they average 40 feet in height. Says Mr. Root, "In a few years more their branches will be tightly interwoven; a more solid and lasting phalanx could hardly be desired as a windbreak."



California Fir (Abies concolor), a handsome lawn tree with silvery blue needles.



ONIFERS are generally evergreens and socalled because they bear seeds

enclosed in a cone-shaped receptacle. Familiar examples often seen are spruce, hemlock, pine, cedar, and fir. They usually have awlshaped, needle-shaped or scale-like leaves.

The seeds mentioned above are what we are listing on pages 10 to 13.

Instead of the farmer—that's you—sending to a nursery and paying for the nurseryman's care and ground, you can better afford to send to us. With a few pounds of our conifer

seeds, under our specific directions for planting and caring, you can seed your ground and be your own nurseryman.

They Grow Anywhere

The forty varieties mentioned in this book give an excellent selection, mostly all hardy. Our bigger list for wholesale buyers contains eighty-two varieties. No matter how sterile, rocky, wet or rich your land or waste places may be, here are plenty of varieties that will grow, thrive and develop profitable woodland for you.

Conifers are adapted for windbreaks, for timber, for poles, fence posts, for forest cover, and stream protection. They make handsome ornamental growths for garden, lawn, park and boulevard.

If you are in doubt as to the kind best adapted to your locality, write us a letter explaining clearly the character of land—high, low, rocky, sterile, marshy, moist, dry, sandy, loamy, etc. We will help you promptly with practical advice which will be valuable.

A Few Suggestions on Sowing Conifers

These remarks will apply to ornamental trees and shrubs listed on pages 17 to 24.

Sow small quantities in cold frames or in shallow boxes filled with

carefully sifted, mellow, sandy loam. Larger quantities sow in seed-beds, which must be naturally or artificially sheltered from heavy East or Northeast winds. Enrich soil with well rotted manure. Work the soil—a well drained sandy loam—thoroughly to a depth of twelve inches, removing sticks, stones, etc. Destroy weeds before sowing and avoid subsequent annoyances. Seed beds can be used for a number of years.

Seeds with hard shells soak in almost boiling water just before sowing. Seeds with thick pulp (like Magnolia) soften in water and wash off pulp immediately before sowing.

Seeds which naturally dry up or which will not start growth for a year or longer after planting, "stratify" by placing them in boxes or other vessels between alternate layers of sand, storing them in sheltered places out of the way of mice and other vermin. In due time sow like any other seeds. Keep stratified seeds moist. Sow broadcast or in drills. Last is preferable, as facilitating cultivation. Cover seeds with soil equal to about the thickness of the seeds. Do not cover seeds too deep, especially not those of conifers; light mulch of seed beds with moss, pine needles or similar material, assists in retaining even moisture. After sowing, press soil firmly with roller or back of spade and water thoroughly with fine spray.

Shade seed - beds until seedlings appear, when shade must be removed gradually. Keep beds well weeded at all times.

To prevent "dampening off," sprinkle pulverized charcoal over and between the seedlings.

Regarding final planting, get our advice. Different varieties need individual treatment, directions for which we furnish at your request. Trees eight to twelve inches high are usually thought large enough for final planting. We can give approximate time estimates of growth on each variety, if you wish.



In the heart of a hemlock forest.



Firs and pines which ward off wintry north blasts from the house in the distance.

They cut the coal bill at least a third.

HE following 40 varieties of conifers or evergreens are selected from our larger list of 82 varieties. See our remarks on planting on pages preceding.

About Prices on Small Quantities.—Half ounce sold at ounce rates; quarter pound at pound rates. No seeds invoiced for less than 10 cents. All prices include delivery when orders are accompanied by cash.

*Asterisk means "Not Hardy" (will not outlast severe winters).

Figures following descriptions give approximate numbers of seeds contained in a pound.

a pound. Variety and Description		
ARBORVITAE (Thuya occidentalis)—Popular ornamental. Splen-	r oz.	Per lb.
did hedge plant and windbreak. Posts, railroad ties, shingles, fences, 70,000\$	0.30	\$2.50
BIG TREE (Sequoia gigantea)—Largest conifer known, up to 300 feet tall. Grand ornamental. Recovers easily from damage through frost. Lumber, shingles. 75,030	.70	6.50
CEDAR, INCENSE (Libocedrus decurrens)—Tall, rapid grower. Narrow pyramidal. Beautiful ornamental. Fencing, flumes, furniture, shing es	.35	3.50
CEDAR, PACIFIC RED (Thuya gigantea)—Rapid grower in moist locations. Fine lawn tree. Canoes, interior finish, shingles, 125,000	.55	5.00
CEDAR, RED (Juniperus virginiana)—Popular ornamental of symmetrical form. Quick grower in rich, sandy soil. Splendid timber, posts, railroad ties, lead pencils. 21,000	.10	.80
CYPRESS, BALD (Taxodium distichum)—Deciduous, very ornamental tree for low ground especially. Railroad ties, lumber, posts. 5,000	.10	.80
CYPRESS, LAWSON'S (Chamaecyparis lawsoniana)—Excellent lawn tree, but not entirely hardy in the North and Northwest. Railroad ties, lumber, flooring, ship building, matches. 100,000	.45	4.00
FIR, BALSAM (Abies balsamea)—Slender, graceful, very ornamental tree. Damp locations. Furnishes "Balm of Gilead" balsam. 32,000	.25	2.00
FIR, CALIFORNIA WHITE (Abies concolor)—Exquisite, tall lawn tree, with silvery-blue needles. Lumber, tubs. 2,500 Seeds selected from rich b ue trees only	.25 .35	$\frac{2.00}{3.50}$
FIR, GREAT OREGON SILVER (Abies grandis)—Elegant slender-growing lawn tree, with long, glossy, dark-green needles. Lumber, interior finish, cooperage. 5,000	.30	2.50
FIR, RED (Abies magnifica).—Splendid, tall, slender lawn tree with dark, blue-green needles. Lumber, fuel. 67,000	.45	4.00
FIR, SILVER CORK (Abies arizonica argentea)—Undoubtedly the finest hardy conifer under cultivation. Introduced by us. Needles silvery-blue. Bark of trunk and branches heavily corky and of pure white to cream-white color. 12,000	2.00	



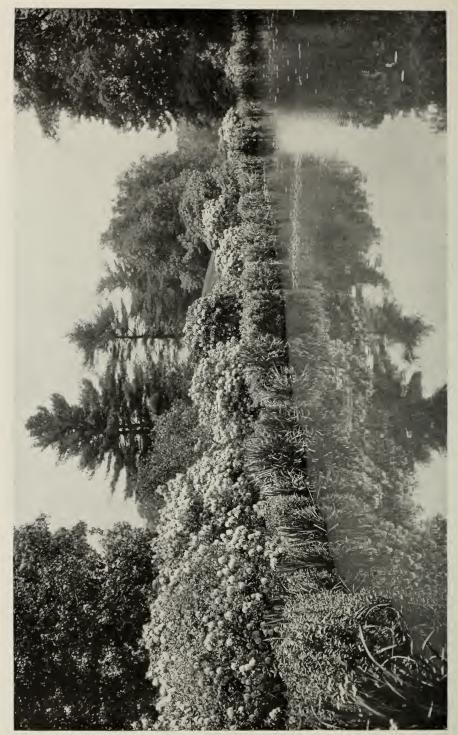
Cypress and firs in all their luxuriance bordering a handsome cemetery in northern Illinois. These stately evergreen trees are worth driving miles to see. Notice the symmetry and regular outline of the single tree at the left.

HEMLOCK (Tsuca canadensis)—Resutiful tall lawn tree or broad	Per oz.	Per lb.
HEMLOCK (Tsuga canadensis)—Beautiful tall lawn tree or broad shrub. Fine undergrowth, hedge plant. Lumber, tanning, railroad ties. 65,000	\$0.55	\$5.00
HEMLOCK, CAROLINA (Tsuga caroliniana)—Very rare, excellent lawn tree of pyramidal growth. 100,000	.90	8.00
HEMLOCK, WESTERN (Tsuga mertensiana)*—Fairly hardy. Regular growth. Branches drooping to ground. Tanning, lumber. 90,000	.80	7.50
JUNIPER, ALLIGATOR (Juniperus pachyphloea)—Excellent well shaped tree with silvery-blue needles. For stiff soils in the Western deserts. 650	.25	2.50
JUNIFER, DWARF WESTERN (Juniperus occidentalis monosperma) —Small, very decorative tree for dry, gravelly slopes. Pyramidal growth. Fuel, fencing. 3,500	.25	2.00
JUNIPER, ROCKY MOUNTAIN (Juniperus scopu orum)—Very ornamental, with silvery-blue needles. 4,000	.25	2.00
tarch, European (Larix europaea)—Deciduous. Rapid grower. Highly ornamental. Suited to lightest soils. Sunny locations. Fine screen and windbreak. Wood for ship building, piles, lumber, greenhouse, construction, etc. We import a very select grade from Tirol, which comes from choicest mother trees. 9,000	.15	1.25
LARCH, HACKMATACK (Larix americana). Tall. Deciduous. Moist soils. Straight growth. Ship timbers, railroad ties, te e- graph poles. 120,000	2.00	
MAIDENHAIR TREE (Gingko biloba). From Japan. Tall; perfectly hardy. Leaves light green, broad, similar to those of the maidenhair fern. Splendid lawn and avenue tree. 280	.10	.75
PINE, BULL (Pinus ponderosa). Very decorative enormous tree of luxuriant growth. Dry sites. Valuable timber, lumber, railroad ties, fuel. 8,000	.25	2.00
PINE, GRAY (Pinus sabiniana).* Very ornamental. Hardy in she tered positions only. Nuts edible. Fuel. 450	.20	1.60
PINE, JACK (Pinus banksiana). Small. Very desirable as ornamental tree. Valuable forest tree for barren soils and rocky, sandy locations. Lumber, fue'. 70,000	.75	7.00
PINE, JEFFREY'S (Pinus jeffreyi). Tall. Luxuriant grower. Young branches covered with silver-gray bark. Fine lumber. 3,000.	.30	3.00
PINE, LUMBER (Pinus flexilis). Medium. Slow grower. Rock planting. Construction timbers, lumber. 1,800	.35	3.50
FINE, NORWAY OR RED (Pinus resinosa). Rapid grower in light sandy loam. Very handsome. Ship timbers, piles, flooring, lumber. 75,000	.75	6.00
PINE, FITCH (Pinus rigida). Medium. Quick grower. Rich soil or deep cold swamps. Lumber, fuel, charcoal, pitch, tar, turpentine. 20,000	.35	3.50
PINE, SCOTCH (Pinus sylvestris). One of the most important European forest trees. Tall. Quick grower in any soil, preferring rich ground. Lumber, ship masts, fuel, tar, pitch, turpentine. 40,000.	.30	2.50
PINE, SILVER (Pinus monticola). Tall. Rapid grower for open high locations. Beautiful tree, much resembling White Pine. Timber, lumber. 6,000		5.50
FINE, SUGAR (Pinus lambertiana). Largest pine known—up to 300 feet. Fairly hardy. Sandy soils. Stately ornamental. Good lumber, sashes, doors, interior finish. 2,000	.25	2.00
PINE, WHITE (Pinus strobus). Grand, tall tree. Rapid grower. Most desirable forest tree. Imperative that present area be increased immediately. Lumber, timber, matches. 29,000		2.50
REDWOOD, CALIFORNIA (Sequoia sempervirens).* Hardy under light protection. Splendid ornamental. Damp locations. "Redwood" lumber. 35,000	.45	4.00
SPRUCE, COLORADO BLUE (Picea pungens). Tall. One of the finest conifers with rich blue needles. Rare	.65	6.00
SPRUCE, DOUGLAS (Pseudotsuga douglasi). Rapid grower. Very ornamental. Pyramidal. Almost any soil. Very valuable lumber, railroad ties, tanning bark. 30,000	.30	3.00



There's a cheeriness and warmth to the landscape that reveals a good stand of thrifty pines like these dignified fellows.

SPRUCE, ENGELMANN'S (Picea engelmanni). Exquisite lawn tree with silvery needles. Lumber, fuel, charcoal, tanning bark. 90,000	\$0.55	\$5.50
SPRUCE, NORWAY (Picea excelsa). Favorite spruce of central Europe. Fine ornamental and forest tree. Any but very poorest soils. Hedges, wind-breaks, Christmas trees, lumber, fuel. 80,000	.15	1.25
SPRUCE, RED (Picea rubra). Medium. Valuable heavy timber tree for any soil. Ship building, lumber, railroad ties, posts, piles. 120,000	.45	4.00
SPRUCE, TIDELAND (Picea sitchensis). Tall. Fine ornamental. Invaluable forest tree for sandy, moist soils. Lumber, construction timbers, boat building, fencing, cooperage. 100,000	.45	4.00
SPRUCE, WHITE (Picea alba). Grand lawn tree of gracefully pyramidal growth. Especially for moist soils unfar coast. Lumber. 140,000	.45	4.00



Words fail to adequately describe this surpassingly beautiful scene. Rhododendron maximum in glorious luxuriance skirts the border, with water-loving Iris in the placid waters. In the middle distance rise lofty pines and ornamentals.



An impressive view from a Bar Harbor (Maine) estate. On the middle left notice the creeping juniper; in background pines and firs; on the driveway wall, hydrangea. Although the lawns are well kept, the natural forest growth has been fostered to advantage.



O see a shaded road with its charming vista of maples and elms is one of the supreme delights of a ride in the country. How such a thoroughfare adds to every farm nearby! How it attracts! Mr. Farmer, are you adding to the market value of your acres by planting ornamental trees by the roadside?

Then there's the well kept country or city yard and entrance road with its borders, shrubs and flowers.

Mr. Farmer, or Mr. Cityman, one of the simpler, more direct ways for you to rear hardy shrubs and ornamental trees is to sow our seeds. They will soon overtake the kind of trees you buy from the nursery, because there will be no call to shock them by planting into a soil foreign to that of the nursery.

Send us your ideas for decorative shrubbery and ornamental trees. We can be of great help to you and save you much disappointment. Long experience directs our advice.

To help you in selecting appropriate shrubs and trees for practical reforestation; for city streets; for wind breaks and hedges; for ornamental lawn decoration, etc., we list on next page eighty different suggestions. If you will compare these with our price lists and note our descriptions you can obtain a slight idea as to whether they will suit your individual purpose. Then write us freely and ask all the questions you wish.

Remarks on sowing conifers apply as well to shrubs and ornamental trees. See pages 8-9.

Suggestive List of Shrubs and Trees for Farm and City

Trees for Woodland and Forest.

Trees for Street and Ornament.

Cedar, Red.
Fir, Balsam.
Hemlocks.
Larch.
Pine, Bull.
Pine, Jack.
Pine, Pitch.
Pine, White.
Spruce, Douglas.
Ash, White.
Beech, American.
Catalpa.

Catalpa.
Chestnut.
Gum, Black.
Hickories.
Locust, Yellow.
Locust, Black.
Manles

Locust, Yellow.
Locust, Black.
Maples.
Oaks.
Tulip Tree.

Shrubs, for Windbreaks, Hedges, Berries.

Alder, Black. Arrow Wood. Ash, Mountain. Barberry. Common. Chokeberry. Coral Berry.

Dogwood, Flowering. Elder, Sweet.

Elder, Sweet.
Grapevines, Wild.
Hazelnut, American.

Huckleberry. Mulberry, French. Olive, Russian. Osage Orange. Plum, Wild Yellow.

Sassafras. Sweet Shrub. Waxberry. White Fringe. Witch Hazel. Arbor Vitæ. Big Tree.

Gypress Lawson's.
Fir, California White.
Fir, Silver Cork.
Maidenhair Tree.
Pine, Silver.
Spruce, Douglas.
Spruce, Tideland.
Spruce, White.
Ash, White.
Basswood.

Coffee Tree, Kentucky. Elm, White.

Holly, American. Magnolias. Oaks. Maples. Walnuts.

Birches.

Shrubs for Ornamental Planting and lawn decoration.

Alder, Black. Andromeda. Barberry, Japanese. Button Ball. Bayonet, Spanish. Chokeberry.

Dogwood, Flowering.

Inkberry. Jersey Tea. Laurels.

Mulberry, French. Pearl Bush. Roses, Wild. Strawberry Bush.

Sumach.

Sweet Pepper Bush.

Sweet Shrub. Wax Myrtle. White Fringe. Wistaria.



A garden at Cazenovia, New York. Notice the white pine in the background; spanish bayonet in border and cypress at left. The conifers and other thick foliaged trees beautify and render exclusive this delightful garden.

HE following 140 varieties of ornamental trees and shrubs are selected from our larger list of 361 varieties in our wholesale catalogue. See our remarks on planting on preceding pages.

We use the following abbreviations: "e" means "evergreen."

"e" means "evergreen."
"d" means "deciduous," that is, drops its leaves and fruit in autumn.

"t" means "tree."
"s" means "shrub."

rather moist soils.

"v" means "vine or climber."
Example: "et" stands for "evergreen tree."

' near price column means that "seed will be furnished cleaned, free from

"db" near price column means "delivery of seed in natural hull, dried berries, etc."

Prices include delivery, whenever orders are accompanied by cash.

* Asterisk means "not hardy" (will not outlast severe winters).

Ornamental and Forest Trees and Shrubs

Per o	z. Per lb.
abundant throughout winter. Light green foliagedb \$0.10	0 \$0.65
ALDER, OREGON (Alnus rubra) dt. Tall, handsome tree for moist soils. Furniture	5 3.00
ANDROMEDA. A class of highly ornamental shrubs, which ought to be represented in every planting by at least one kind.	
Andromeda speciosa. Exquisite bell-shaped white flowersdb .3:	5 3.00
Andromeda floribunda. es. Very rare. Beautiful flowersc 1.2	5
Dog Laurel (Leucothoë catesbaei). es. Another elegant ever-	
green shrub for undergrowth	5
Fetterbush (Andromeda nitida). es. * Moist soils. Fine foliage.	
and elegant flowers resembling lily-of-the-valley 3	5
Leather Leaf (Cassandra calyculata). es. Recommendedc .73	5
Mountain Leucothoe (Leucothoë recurva). ds. Very graceful	
for massing and undergrowthdb4	5
Frivet Andromeda (Xolisma ligustrina). ds. Very handsome.db .3	5
ARROW WOOD (Viburnum). ds. Tall, very handsome shrubs. Showy foliage. Flowers and berries in large clusters. Rich,	

ARROW WOOD (Cont.)	er oz.	Per lb.
Arrow Wood (V. dentatum). Tall. Erect growth Glossy green		\$1.60
Black Haw (V. prunifolium). Tall. Excelent for massing.	φV.15	
leaves Black Haw (V. prunifolium). Tall. Excelent for massing Berries glossy black, edible	.15	1.20
fall coloring	.15	1.60
enormous clusters	.10	1.00
	.15	1.60
ASH, BLACK (Fraxinus nigra). dt. Large quick-growing, fine tree. Young buds almost black. Furniture, interior finish, barrel hoops, etc. 6,000	.15	1.20
ASH, MOUNTAIN (Sorbus americana). ds. Strikingly pretty small tree in foliage, flower and fruit	.25	2.00
ASH, WHITE (Fraxinus americana). dt. Rapidly growing, finely shaped lawn, street and forest tree. Agricultural implements, oars, handles, carriage building, cabinet work. \$40 per 100 lbsc		
	.10	.60
BARBERRY, COMMON (Berberis vulgaris). ds. Upright, thorny branches. Pretty foliage and ornamental fruits. Hedge plant.db	.15	1.00
BARBERRY, THUNBERG'S JAPANESE (Berberis thunbergi). ds. Low grower. One of the most ornamental hedge plantsdb	.15	1.60
BASSWOOD (Tilia americana). dt. Excellent street and lawn tree. Windbreak. Flowers much valued by bees. Inner bark used for cordage, mattings. Wood for paper pulp, cheap furniture, etc.db	.10	.80
BAYONET PLANTS (Yucca). Evergreen shrubs with long, stiff-pointed leaves. Flowers on tall spikes. Light dry soils.		
Adam's Needle (Yucca filamentosa)	.35	3.00
Adam's Needle, Western (Yucca glauca)	.50	4.50
Adam's Needle, Large Fruited (Yucca macrocarpa)	.65 .90	6.00
Bayonet, Spanish (Yucca aloifolia)*	.45	
BEECH (Fagus americana). dt. Majestic tree with round head and remarkably smooth gray bark. Lawn tree. Wood worked into chairs, shoe lasts, fuel, etc. 1,800. \$35 per 100 lbs	.10	.75
BIRCH (Betula). dt. Very graceful, quick-growing trees of great ornamental value, especially the Canoe Birch with its glossy white bark. Furniture, cabinet work, ship building, fuel, 2,000,000.		
Birch, Black (Betula lenta)	.25	2.25
Birch, Canoe (Betula papyracea)	.25	2.25
Birch, Fountain (Betula fontinalis). Very rarec Birch, White (Betula populifolia)c	2.30	$\frac{15.00}{2.00}$
Birch, Yellow (Betula lutea)	.25	2.25
BOX ELDER (Acer negundo). dt. Very rapid-growing medium sized street tree. Paper pulp. Cooperage. 15,000	.10	.65
BUCKEYE, OHIO (Aesculus glabra), dt. Rapid growing tall street		
tree. Large leaves, fine flowers. Paper pulpc BUCKTHORN, YELLOW (Rhamnus caroliniana). dt. Very desirable	.10	.50
small tree with edible blackish-red berriesdb BUTTON BALL (Cephalanthus occidentalis). ds. Medium sized. Moist soils. Very handsome. Seeds in button-shaped ballsc	.10	.65
CATAT.PA dt Medium sized renid growing trees of successions	.15	1.25
mental value. Large leaves. Flowers on splendidly showy spikes. Catalpa speciosa is undoubtedly the tree now for quick results from reforesting, producing railroad ties, fence posts, rolls atc. Indian Bean Catalpa is local back backers.		
Chinese Catalpa (Catalpa ovata). 100,000 s per lb	.15	1.00
Chinese Catalpa (Catalpa ovata). 100,000 s per lb	.35	3.50
Indian Bean (Catalpa bignonioides). 40,000 s	.15	1.00
Teas' Hybrids (Catalpa hybrida). 50,000 s	.15	1.00
CHESTNUT (Castanea dentata). dt. Rapid growing, stately shade tree. Nuts very sweet. Railroad ties, posts, fencing, cabinet making. \$20 per 100 lbs. 100s	10	40
CHINA BERRY (Melia azederach).* dt. Very showy tree with		.40
ular umbrella shape. Seed at same pricedb	.10	.60
CHOKEBERRY (Sorbus arbutifolia). ds. Rapid-growing, tall shrub, Bright foliage. Abundance of bright red berries throughout winter	.10	1.00
coffee tree, Kentucky (Gymnocladus canadensis). dt. Tall, hand- some tree, with enormous feathery leaves. Very clean for lawn and street, fence posts, rails, cabinet work. 450	.10	.85



Cozy nook in a "rock" garden. Wild azaleas in bloom. Rhododendrons in front corner, ornamental grass (Eulalia) in right front foreground.

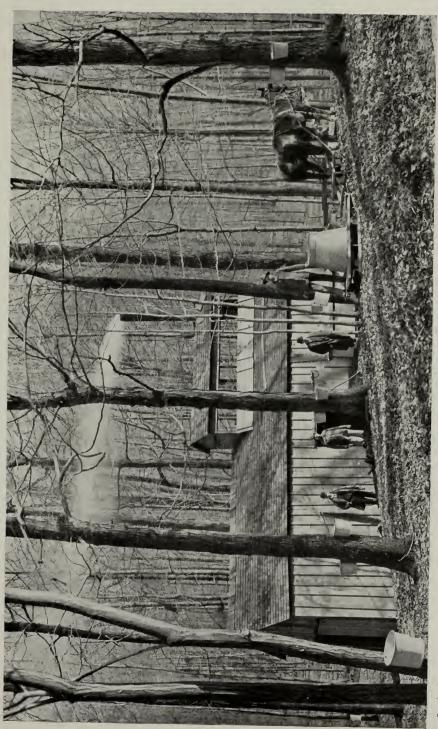
A tempting, restful retreat.

I	er oz.	Per lb.
CORAL BERRY (Symphoricarpus vulgaris), ds. Small shrub, Fine for undergrowth any soil. Foliage nearly persistent. Thick		\$2.00
clusters of red berries, very showy	40.20	
1,350,000	.15	1.20
 DOGWOOD, BLUE (Cornus alternifolia). ds. Large. Branches and leaves in whorls. Berries dark blue. Very handsomedb DOGWOOD, CALIFORNIAN (Cornus nuttalli. * dt. Unfortunately not entirely hardy. A very brilliant small tree. Wood 	.15	1.25
very useful for handles, mauls, cabinet workdb	.15	1.60
pogwood, silky (Cornus amomum). ds. Tall. Branches purple. Latest dogwood in bloom. Berries bluish-whitedb Dogwood, white Flowering (Cornus florida). ds. or small tree. Without question the most beautiful denizen of the forest and landscape, when in earliest spring the large white flowers	.15	1.25
and landscape, when in earliest spring the large white flowers appear in greatest profusion. Wood used for wood engraving (boxwood), wheel hubs, bearings	.10	.50
DOGWOOD, WHITE FRUITED (Cornus candidissima). ds. Compact bush. Berries white on red peduncles. Very prettydb	.15	1.25
ELDER, SWEET (Sambucus canadensis). ds. Showy for massing. Berries glossy black, used for medicinal purposesdb	.10	.75
ELM, WHITE (Ulmus americana). dt. Splendid, tall tree for all purposes. Wood used for boat and ship building, flooring,		
cooperage. Sow seed as soon as possible after ripeningc	.15	1.60
EMPRESS TREE (Paulownia imperialis). * dt. Naturalized from China. Very attractive. Enormous leaves. Blue flowers in large upright spikes. Very rapid growerc	.20	1.60
GRAPE VINES, WILD (Vitis). dv. Very showy climbers with edible fruits. Often employed for grafting or producing new varieties.		
Fox Grape (Vitis labrusca)	.25	2.00
Muscadine (Vitis rotundifolia). Very fine eating grapec Summer Grape (Vitis aestivalis). Strong c.imber; berries	.25	2.00
winter Grape (Vitis cordifolia). Berries black, rather sourc	$.25 \\ .25$	$\frac{2.00}{2.00}$
GUM. BLACK OR TUPELO (Nyssa sylvatica). dt. Finely shaped	.20	2.00
GUM, BLACK OR TUPELO (Nyssa sylvatica). dt. Finely shaped tree for preferably moist ground. Very tough wood. Piles, Wheel hubs	.10	.80
GUM, SWEET (Liquidambar styraciflua). dt. Magnificent, lofty tree for lawn and street. Exquisite fall coloring. Lumber, cab-	.35	3.00
inet work. 85,000	.00	3.00
Furniture, fencing	.15	1.50
HAZELNUT (Corylus americana). ds. Spreading. Very ornamental. Nuts very sweet	.10	.60
HICKORIES (Hicoria). dt. Trees of greatest value for lawn, street and fruit. Invaluable forest trees. Wood for agricultural implements, carriage building, tool handles, etc.		
Bitter Nut (Hicoria minima). 100 lbs., \$16.00		.35
Pecan (Hicoria pecan).* 100 lbs., \$25.00		.65 $.35$
Pignut (Hicoria glabra). 100 lbs., \$16.00 Shellbark (Hicoria ovata). 100 lbs., \$18.00		.35
HOLLY, AMERICAN (Ilex opaca). et. Exquisitely fine tree. Dark- green leathery leaves. Abundance of bright red berries. Wood splendid for turnery, cabinet work, interior finish. Seed lays		
splendid for turnery, capinet work, interior initial. Seed alys over two years	.10	.75
Foliage elm-like. Wood very durable in contact with soilc	.25	2.00
HORNBEAM, OR BLUE BEECH (Carpinus caroliniana). dt. Medium. Any soil, preferably deep moist ground. Fine hedge plant and windbreak. Wood very strong and hard. Too:	1.0	e e
handles. 12,000	.10	.75
Dwarf Huckleberry (Vaccinium pennsylvanicum). dsdb		2.50
Tree Huckleberry (Vaccinium arboreum). dtdb INKBERRY (Ilex glabra). es. Handsome for massing. Dark green leaves. Dull black berries in abundance through win-	.30	2.50
		.80
INKBERRY, TALL (flex lucida). es. Taller than above. Not quite as hardy. Foliage glossy green. Berries glossy black from fall until spring in greatest abundance	.15	1.00
JERSEY TEA (Ceanothus). ds. A group of shrubs producing highly ornamental flowers in early summer. 100,000. Blue Myrtle (Ceanothus thyrsiflorus). Western kind		
Blue Myrtle (Ceanothus thyrsiflorus). Western kind	.35	
Jersey Tea, Eastern (Ceanothus americanus)		



A charming vista—a pine-bordered lane skirting the edge of the Cazenovia garden shown on page 17. The tail trees at the back of the latter view are the ones standing guard along this shady pathway.

T.AURET. (Phododondron Volmin) or Undoubtedly the group of	er oz.	Per lb.
LAUREL (Rhododendron, Kalmia). es. Undoubtedly the group of finest American broad-leaved evergreens. Grow well from seed. Wood much in demand for engraving and carving. 1,000,000.		
Laurel, Great (Rhododendron maximum)	\$0.50	\$4.50
Laurel, Rose (Rhododendron catawbiense). The best	.70	6.50
Laurel, Western (Rhododendron californicum)	2.50	
Laurel, Mountain (Kalmia latifolia)	.35	3.00
LOCUST, ELACK OR YELLOW (Robinia pseudacacia). dt. Medium sized, quick grower. Ornamental, with fine flowers. Wood		
for ship building, timbers, construction work. \$32.50 per 100 lbs. 30,000	.10	.65
LOCUST, HONEY (Gleditschia triacanthos). dt. Tall lawn tree. Handsome. Stout thorns. Easily pruned as hedge plant. Wood durab e in soil. \$25.00 per 100 lbs. 3.200	.10	.65
MAGNOLIAS. Strikingly fine lawn and street trees. Very large foliage and grand flowers. Seed must be planted soon after rip-	•••	.00
ening or kept moist in sand until spring.	9.5	9.00
Cucumber tree (Magnolia acuminata). dt	.25 $.50$	$\frac{2.00}{4.50}$
Fraser's Magnolia (Magnolia fraseri). dt	.15	1.25
Sweet Bay (Magnolia glauca). et	.15	1.50
Umbrella Magnolia (Magnolia tripetala). dtdb	.25	2.00
Umbrella, Large-leaved (Magnolia macrophylla). dt db	.35	3.00
	.50	3.00
MAPLES (Acer). dt. Rapid growers. Of great value as lawn and street trees. Seed of maples very often faulty and rarely exceeds a germinating quality of 40 to 50 per cent. Sow soon after ripening. Red and soft maple can be supplied in spring only.		
Silver Maple (Acer dasycarpum). Furniture, flooringdb	.10	.75
Broad-leaved Maple (Acer macrophyllum).* Enormous leaves.db	.15	1.00
Red Maple (Acer rubrum). Very early bloomerdb	.15	1.60
Sap produces maple sugar. Wood for furniture (Bird's-eve		
Sugar Maple (Acer saccharinum). One of the best street trees. Sap produces maple sugar. Wood for furniture (Bird's-eye Maple) and ship building. 7,000	.15	1.00
Vine Maple (Acer circinatum). Globular treedb	.25	2.00
MULBERRY, FRENCH (Callicarpa americana). ds. Very ornamental. Flowers and fruits in bunches around branchesdb	.10	.65
MULBERRY RUSSIAN (Morus alba tatarica). dt. Fine ornamental. Much planted for silk worm cultivation	.30	2.25
OAKS (Quercus). A very large family of stately lawn, street and forest trees of fairly slow growth. Very valuable lumber, timbers, railroad ties. Bark for tanning. We can supply acorns of all commercially desirable oaks in their season and shall with pleasure quote prices in correspondence on any kinds and quantities required. No acorns retain their vitality very long. White oak, Chestnut oak and a few others must be sown at once after ripening. Prices range from 25c to 75c per pound and from \$12 to \$20 per 100 lbs.		
 OLIVE, RUSSIAN (Elaeagnus angustifolia). ds. Ta l. Ornamental. Foliage narrow, silvery. Flowers and fruits yellow. OSAGE ORANGE (Maclura aurantiaca). ds. Tremendous grower. 	.20	1.60
Popular cattle fence. Fence posts, railroad ties, paving blocks. 13,000	.10	.75
PAWPAW (Asimina triloba). dt. Small tree or large shrub. Handsome dark-green foliage. Edible fruits	.10	1.00
PEARL BUSH (Exochorda grandiflora). ds. Unsurpassed orna-	.10	1.00
PEARL BUSH (Exochorda grandiflora). ds. Unsurpassed ornamental. Rapid grower. Shrub completely covered with large, loose clusters of large snow-white flowers in May	.30	3.00
FERSIMMON (Diospyros virginiana). dt. Very ornamental. Fruits very palatable after having been frosted. Wood very durable. Shoe lasts, plane stocks, shuttles. 4,000		
durable. Shoe lasts, plane stocks, shuttles. 4,000	.10	.45
Charry Carolina Laurel (Prunus caroliniana) * et Fine tree		
Cherry, Carolina Laurel (Prunus caroliniana).* et. Fine tree and popular hedge plant in the southdb	.10	.75
Cherry, Choke (Prunus virginiana). dt. Dark purple astringent		
fruits. 4,500	.15	1.20
Cherry, Wild Black (Prunus serotina). dt. Highly recommended. 4,500	.10	.80
Plum, Wild Yellow (Prunus americana). ds. Fine for massing	.15	1.60
REDBUD (Cercis canadensis). dt. Rapid grower. Small. In earliest spring the whole shrub is covered with a mass of pink flowers. 18,000		
flowers. 18,000	.10	1.00
REDBUD, WESTERN (Cercis occidentalis). dt. Very handsome, but not as hardy as former	.45	4.50



In the heart of a New England "Sugar-bush." It has been a frosty, freezing night. But now the sky is clear, the sun shines and the sap is running.

These are sugar maples (Acer saccharinum).

ROSES, WILD (Rosa). Very ornamental in flower and fruit. Splen-	Per oz.	Per lb.
did for massing and as undergrowth. Dwarf Frairie Rose (Rosa arkansana). dt. Dwarf. Exposed places	\$0.25	\$2.00
Japanese Rose (Rosa rugosa). ds. Large flowers, pink and		
whitedb	$.20 \\ .15$	1.75
Meadow Rose (Rosa blanda). ds. Branches wholly unarmed.db Swamp Rose (Rosa carolina). ds. Massing, moist soildb	.15	$1.25 \\ 1.60$
SASSAFRAS (Sassafras officinale). dt. Tall shrub or small tree. Spreading. Very handsome. All parts are very aromaticdb	.10	.75
SILVERBELL TREE (Halesia tetraptera). dt. Small. Profusion of white bell-shaped flowers before the caves in springc	.15	1.60
SNOWDROP TREE (Halesia diptera). dt. Small, broad tree. Profusion of white drooping bell-shaped flowers in early springe	.25	2.50
SOURWOOD (Oxydendron arboreum). dt. Excellent. Fine foliage.		
Wood very hard "Ironwood"	.25	2.00
dium-sized. Leaves bright green. Fruits crimson in very showy capsules. 7,000	.15	1.60
sumach (Rhus). ds. A family of very ornamental shrubs or small		
trees. Fine for undergrowth and massing. Tanning and dyeing. Scarlet Sumach (Rhus glabra). Searlet fall coloringdb	.10	.50
Shining Sumach (Rhus copallina). Rieh crimson in falldb	.10	.80
Staghorn Sumach (Rhus typhina). Enormous foliagedb	.15	1.25
SWEET PEPPERBUSH (Clethra alnifolia). ds. Compact grower. Medium. Adapted to even thinnest soils. Flowers very frag-		
rant; white, in upright spikesdb	.15	1.00
SWEET SHRUB (Calycanthus laevigatus). ds. Medium. Fine for undergrowth and massing. Reddish-brown flowers of exquisite fragranee in spring. 1,800		
undergrowth and massing. Reddish-brown flowers of exquisite	15	1.00
Tragrance in Spring. 1,000	.15	1.00
SYCAMORE (Platanus occidentalis). dt. Very picturesque for lawn and street. Wood for butchers' blocks, tobacco boxes, etc.		
1,500,000	.10	.60
THORNS (Crataegus). dt. Al thorns are of great ornamental value in flower, foliage and showy fruit. Splendid hedge plants.		
Thorn, Scarlet (Crataegus coeeinea). Large scarlet fruitsdb	.10	.65
Thorn, Cockspur (Crataegus crus-galli). Long thornsdb	.10	.65
TREE OF HEAVEN (Ailanthus glandulosa). dt. Young plants require protection. Rapid grower. Street tree. Female plants		
preferable	.10	.65
TULIP TREE OR YELLOW POPLAR (Liriodendron tulipifera). dt. Tall. Rapid grower. Symmetrica. Lawn and shade. Sow very thick because only limited percentage of seeds will germ- inate. Wood valuable timber, lumber, boat building, shingles.		
very thick because only limited percentage of seeds will germ-		
inate. Wood valuable timber, lumber, boat building, shingles.	1.0	75
9,000	.10	.75
VARNISH TREE (Koelreuteria paniculata). dt. From China. Very pleasing lawn tree. Flowers in July golden ye low, in long		
panicles	.15	1.25
WALNUT (Juglans). dt. Rapid growing, stately trees for lawn and street. Nuts very sweet. Wood very valuable. Interior finish, cabinet work, gun stocks. Beautiful polish.		
finish, cabinet work, gun stocks. Beautiful polish.		
Black Walnut (Juglans nigra). \$6.50 per 100 lbs. 30s Butternut (Juglans einerea). \$7.50 per 100 lbs. 16s		.20
WAXBERRY (Myrica carolinensis). ds. Tall. For bogs. Berries		.35
covered with grayish waxy substance, formerly boiled into		
candle wax	.15	1.60
WAXMYRTLE (Myrica cerifera). ds. Of sterling value for massing. Adapted to any soil and to seashore planting. Ornamen-		
taldb	.15	1.50
WAXMYRTLE, DWARF (Myrica ecrifera pumila). es. Globular compact form with small, graceful, light green leaves. Not		
quite as hardy but highly recommended where suitable. Any		
soil db	.20	1.80
WHITE FRINGE (Chionanthus virginica). ds. Tall. Vigorous.		
For any soil. In spring very showy when the snow-white, daintily fringe-like flowers cover the plant in profusiondb	.20	1.50
WISTARIA. dv. Climbers of the greatest beauty. Very rapid		
growers and profuse bloomers. Flowers in heavy spikes in spring.		
Chinese Wistaria (Wistaria chinensis). Blue flowersc	.49	3.50
Chinese White Wistaria (Wistaria chinensis alba). Rare white flowering form of the popular Wistaria	.50	4.50
American Wistaria (Wistaria frutoscone) Rooms later than	.50	4.50
the Chinese forms, but about as handsome	.15	1.50
Splendid American Wistaria (Wistaria frutescens magnifica). Earlier and larger flowers than preceding	.20	1.75
WITCH HAZEL (Hamamelis virginica). ds. Tall. Very desir-		
WITCH HAZEL (Hamamelis virginica). ds. Tall. Very desirable. Leaves dark-green. Flowers in late fall on bare wood. Bark and leaves furnish the "Witch Hazel Extract"	.15	1.60
Dark and leaves furnish the Witch Hazer Extract	.10	1.00



The True Double Violet.

E list here 141 of native American herbaceous plants the best varieties of which will give a a pleasing succession

of flowers throughout the growing season. Our instructions make the raising of flowering plants from seed a simple matter. Our wholesale catalogue lists 414 kinds of herbaceous seeds and roots, so if you do not find the kinds you are looking for, ask us.

We charge a uniform price of 10c per packet for the seeds of following list unless otherwise specified.

Kinds which are marked † can be supplied as plants or roots only.

Remember, that the prices for seeds include delivery, when orders are accompanied by cash. Roots are not delivered prepaid, but we allow the selection of \$1.20 worth of plants from this list for every dollar sent with

order, provided the amount of the order exceeds \$5.00.

Sowing Seeds of Herbaceous Plants

Sow in late fall or early spring either in cold frames or preferably in shallow boxes, filled with finely sifted, mellow, sandy loam. Press soil firmly before sowing and cover seeds with loam to their own height after sowing. Water well and carefully and do not let the soil get dry. To prevent "dampening off" sprinkle pulverized charcoal over and between the seedlings. Shade carefully. Transplant as soon as the second leaves appear. Cover seed-boxes with mulch of chopped peat moss or some similar material, to retain even moisture. Write us fully for special directions in particular cases.

Early Orders Necessary.-Most of the roots and bulbs listed here will have to be collected and early orders are very desirable therefore. Delivery will be made as soon as the plants are ready for shipment. We shall at all times be glad to quote by letter on other American plants or on larger quantities of those listed here, and solicit correspondence.

About Roots and Bulb Prices on Smaller Quantities .- 5 and over at 10 prices and 40 and over at 100 prices.

† means roots only.

Seeds, Roots and Bulbs of Herbaceous Plants

DE, HARDY (Agave applanata parryi). Rare, hardy Century plant. Leaves stiff and fleshy. Flower-stalks twelve feet tall. Flowers 2-4 inch, greenishyellow. A grand novelty introduced by us. Seed, 25c per pkt. Plants from 50c to \$1.00 each, according to size. ATOE.

AMSONIA (Amsonia angustifolia). Three feet. Graceful leaves. Dainty light blue flowers. Sandy soils. Each, 10c; 10, 90c; 100, \$7.50.

ARBUTUS, TRAILING (Epigaea repens). Evergreen trailer. Sweet scented, waxy-pink flowers in earliest spring.† Each, 15c; 10, \$1.25; 100, \$10.00.

ASTER (Aster). Easy growers. Profuse autumn bloomers.

Early A. (A. ascendens). 3 ft. Pale lilac.

New England A. (A. novae-angliae). 2-5 ft. Very showy. Violet purple.†

Each, 15c; 10, \$1.25.

Fendler's Aster (A. fendleri). 1 ft. Peculiar shade of rose lilac.

Leafy Aster (A. foliaceus). 2 ft. Lavender. Very early.

Many-flowered A. (A. multiflorus). 1-2 ft. Rare. Purple.

ASTER (Cont.) PR (Cont.)

Porter's A. (A. porteri). 1 ft. Rare. Snow white.

Sky-Blue A. (A. azureus). 2-3 ft. Many-flowered sky-blue.

Smooth Furple A. (A. laevis). 2-3 ft. Large blue to lilac.

Violet A. (A. canescens). 1-2 ft. Rare. Pale pink to purple.

Wreath A. (A. commutatus). 1 ft. White. Abundant bloomer.

ASTER, CORNFLOWER (Stokesia cyanea). 18-24 inch. Easily grown. Remarkably pretty lavender blue flowers from May to October. Improves with age. Each, 10c; 10, 90c.

age. Each, 10c; 10, 90c.

BEARD TONGUE (Penstemon). Sow very early for bloom during first year.

Beautiful flowers. Warm, well drained, sandy soil.

Dwarf B. (P. humilis). Dwarf; deep purple.

Graceful B. (P. gracilis). 1 ft. Pale lavender.

Scarlet B. (P. barbatus). 3 ft. Excellent.

Sky-blue B. (P. caeruleus). 1 ft. Very showy dense racemes.

Smooth B. (P. glaber). 6-9 inch. Rare; azure-blue compact racemes.

Tall B. (P. secundiflorus). 2 ft. Splendid tilac or purple.

BELLFLOWER (Campanula). Showy constant bloomers of easy culture.

Bellflower (C. alliariaefolia).

BELLFLOWER (Campanula). Sellflower (C. alliariaefolia). Hairbell (C. rotundifolia).

Alpine Hairbell (C. uniflora).

BITTER ROOT (Lewisia rediviva). Very fine, rare, dwarf. Rockeries. ers large rose-red.† Each, 15c; 10, \$1.25.

ers large rose-red. 7 Each, 19c, 10, \$1.29.

BLAZING STAR (Liatris). Very showy pink or purple flowers on bold, upright spikes. Summer and fall.

Button Snake Root (L. graminfolia). 4-6 ft. Deep purple. Each, 10c; 10, 75c; 100, \$6.00.

Scaly Blazing Star (L. squarrosa). 1-2 ft. Purple. Early summer. Each, 10c; 10, 75c; 100, \$6.00.

Vanilla (L. (Trilisa) odoratissima). Very fine. Leaves have vanilla fragrance. Much used for tobacco flavoring. Each, 15c; 10, \$1.00; 100, \$7.50.

BUTTERFLY PEA (Clitoria mariana). Low climber. Flowers large, pea-shaped, light blue; very handsome. Each, 10c; 10, 75c.
 CARDINAL FLOWER (Lobelia cardinalis). 1-3 ft. Leaves dark green. Flowers intensely cardinal in close racemes. Moist places.

CLEMATIS (Clematis). Vigorous climbers. Beautiful bell-like flowers, followed by showy seeds.

by showy seeds.

Douglas C. (C. douglasi). Low, deep purple without, lighter inside.

Fremont's C. (C. fremonti). Rare, persistent bloomer; also a selection of extra fine hybrids. 40c per pkt.

Marsh C. (C. crispa). Beautiful blue flowers.† Each, 10c; 10, 90c; 100, \$7.50.

Scarlet C. (C. coccinea). 4-8 ft. Branching. Scarlet or purple. Each, 10c; 10, 90c; 100, \$7.50.

COLUMBINE (Aquilegia). Showy long-spurred flowers. Half shade. Garden soil.

soil.

Golden C. (A. chrysantha). Flowers large, golden yellow.

True Wild C. (A. caerulea). State flower of Colorado. Magnificent kind.

Flowers very large; petals white, spur blue. True seed.

COWSLIP (Dodecatheon). Hardy. Earliest spring, well drained garden soil.

Flowers dainty white to yellow or purple.

Red flowering C. (D. hendersoni).† Each, 15c; 10, \$1.25.

Yellow C. (D. patulum).† Each, 20c; 10, \$1.50.

EVENING PRIMROSE (Oenothera). Large family of herbs with very beautiful flowers, generally for warm, light, well-drained soils.

Gooding's E. P. (O. goodingii). Dwarf, yellow; very large.

Howard's E. P. (O. howardi). Clear yellow; very large. Clay soils.

Pale E. P. (O. pallida). 3 ft. White.

Sundrops E. P. (O. serrulata). 1 ft. Yellow. Day blooming.

Tall E. P. (O. albicaulis). White, annual.

FLAG, BLUE (Iris). Generally moisture-loving. Early bloomers with very

FLAG, BLUE (Iris). Generally moisture-loving. Early bloomers with very flowers.

Crested Flag (I. cristata). Dwarf blue. Each, 15c; 10, \$1.00; 100, \$7.50.

Douglas Flag (I. douglasiana). Rare, pale lilac, purple vein. Each, 15c; 10, \$1.25.

10, \$1.2 rf Flag (I. verna). Dwarf, blue with yellow veins.† Each, 10c; 10, 85c;

Dwarf Flag (I. verna). Dwarf, blue with yellow veins. Each, 10c, 10, 80-, 100, \$6.00.

Large Flag (I. versicolor). Beautiful large blue flowers. Each, 15c; 10, \$1.00.

Missouri Flag (I. missouriensis). Pale blue or white. Each, 25c; 10, \$2.00.

GALAX (Galax aphylla). Very choice ground cover. Leaves rich green to bronze. Valued for decorative work; Each, 10c; 10, 90c.

GENTIAN (Gentiana). Late bloomers. Very showy flowers from white to light and true blue. Damp shady locations. 20c per pkt.

Bigelow's G. (G. bigelovii). Enormous clumps, purple to bright blue.

Hooded Blue G. (G. bracteosa). Rare. Intense blue in large clusters.

Narrow-leaved G. (G. angustifolia). Clusters bright blue. Each, 15c; 10, \$1.00; 100. \$7.50.

Narrow-leaved G. (G. angustiona). Custers bight blue. Each, 150, 100, \$7.50.

Parry's G. (G. parryi). Intense blue. Dry rocks.

Soapwort G. (G. saponaria). Rare. Light blue. Each, 15c; 10, \$1.00; 100, \$8.00.

Western Fringed G. (G. elegans). Very rare. Exquisite blue.

White G. (G. alba). Snow white to dull green.

GOLDENROD (Solidago). Large family of very showy fall bloomers. Flowers

in large golden racemes.
Missouri G. (S. missouriensis).
Rigid G. (S. rigida).
Showy G. (S. spectabilis).

GRASS, BLUE-EYED (Sisyrrhinchium angustifolium). Grass-like foliage. Pretty baby-blue flowers. Border plant. Each, 10c; 10, 60c; 100, \$4.00.
GRASS, YELLOW-EYED (Xyris). Bog plants. Flowers in small light brown globular spikes, resembling diminutive pine cones.
Short-leaved Yellow-Eyed Grass (X. brevifolia). 6-12 inches. Each, 10c; 10, 80c; 100, \$6.00.

Tall Yellow-Eyed Grass (X. caroliniana). 2-3 feet. Each, 10c; 10, 75c; 100,

INSECT-EATING AND BOG PLANTS. A class of easily cultivated highly interesting plants with very conspicuous leaves and flowers. Wet peat moss. 25c per packet.

25c per packet.

California Pitcher Plant (Darlingtonia californica). Very rare and most interesting insect-eating plant. Each, 50c; 10, \$4.00.

Sundew (Drosera rotundifolia). Very small. Leaves covered with sticky hairs, to which insects adhere. Each, 10c; 10, 75c.

Short-leaved Sundew (D. brevifolia). Similar to above. Each, 15c; 10, \$1.25.

Venus Fly Trap (Dionaea muscipula). Exceedingly rare, dwarf plant. Leaves have sensitive hairs, which upon touch cause the leaves to close suddenly, thus catching insects which venture too near. Each, 15c; 10, \$1.25; 100, \$7.50.

Golden Club (Orontium aquaticum). Fleshy, glossy leaves. Golden yellow flowers in early spring on club shaped scape. † Each, 15c; 10, \$1.25.

Pitcher Plant (Sarracenia purpurea). Hardiest kind and purple leaves, pitchershaped. Rather squatty. Flowers early purple. Each, 10c; 10, 75c; 100, \$5.00.

Parrot-Beaked P. (S. psittacina). Pitchers short, spreading, greenish with

100. \$5.00.

Parrot-Beaked P. (S. psittacina). Pitchers short, spreading, greenish with white spots. Flowers purple. † Each, 20c; 10, \$1.50; 100, \$10.00.

Trumpet-Leaf (S. fava). Tall, yellow trumpet shaped leaves, large yellow flowers. Each, 10c; 10, 90c; 100, \$6.00.

Red Flowered Trumpet Leaf (S. rubra). Trumpets narrow, yellow-green, flowers purple. Each, 10c; 10, 90c; 100, \$6.00.

Spotted T. (S. variolaris). Rather smaller trumpets, yellowish green, mottled whitish. Bright yellow flowers. Each, 15c; 10, \$1.25; 100, \$.00.

whitish. Bright yellow flowers. Each, 15c; 10, \$1.25; 100, 8.00.

LARKSFUR (Delphinium). 2-4 feet. Shade-loving plants with very showy flowers. Geyer's L. (D. geyeri). Large, intense blue or purple.

Scarlet L. (D. cardinale). Magnificent scarlet.

Western L. (D. cocidentale). Rare. Very deep blue.

Whitish L. (D. albescens). Very rare. Creamy white.

LILIES (Lilium). Plant Lilies in well drained not too heavy soil. Put bulbs at least four inches under ground and surround them with sand. Avoid fresh manure and do not transplant unless unavoidable.

Humboldt's Lily (L. humboldti). 4-6 feet. Orange-red, spotted maroon. Bulbs very large. † Each, 20c; 10, \$1.50.

Leopard Lily (L. pardalinum). 3-5 feet. Very hardy. Reddish orange with maroon dots near base. Splendid. † Each, 20c; 10, \$1.50.

Turk's Cap Lily (L. superbum). 4-5 feet. Orange. Each, 15c; 10, \$1.25; 100, \$9.00.

Washington Lily (L. washingtonianum). 3-6 feet. Pure white, large, magnifi-

Washington Lily (L. washingtonianum). 3-6 feet. Pure white, large, magnificent kind. † Each, 10c; 10, \$1.50.
Wild Yellow Lily (L. canadense). 2-5 feet. Red and yellow. † Each, 15c; 10, \$1.25; 100, \$8.00.

LILIES, MARIFOSA (Calochortus). Hardy. Flowers numerous, often very large, satiny, of very dainty shades. Light well drained and thoroughly loosened soil. Plant about three inches deep. †

Cat-Ears M. (C. maweanus). Silky white, filled with soft blue hairs. Each, 10c; 10, 90c.

Lovely M. (C. amoenus). Glowing pink. Each, 10c; 10, 90c.

White M. (C. albus). Flowers elegant. Tulip shaped. White, Each, 10c; 10, 90c.

Wille M. (C. albus). Flowers elegant. Tunp shaped: White, Each, 10c, 10, 90c.
 LOCO WEED (Oxytropis lamberti). Silky feathery leaves in rosette forms. Flowers blue in very showy long spikes. Also a variety with white flowers.
 LUPINE (Lupinus). Leaves generally thick, woolly. Flowers in long showy spikes. Very fine for sandy soils.
 Deer Cabbage (L. diffusus). Intensely silvery-woolly. Flowers light-blue. Very early. Forms large clumps. Sandbinder.
 Silky L. (L. decumbens). Rare. Flowers creamy or light blue.
 Silvery L. (L. argenteus). Indigo-blue flowers. Silvery leaves.
 Tree L. (L. arboreus). 4-6 feet. Shrubby. Flowers yellow, fragrant.
 MEADOW BEAUTY (Rhexia). Moist meadows in half shade. Flowers rich colored. Seeds in gracefully urn-shaped vessels. Easily grown from seed.
 Deergrass (R. mariana). 1-2 feet. Showy pink to purple. Each, 10c; 10, 90c.
 MEADOW BEAUTY (Rhexia). 6-12 inches. Bright purple with yellow stamens. Each, 10c; 10, 90c.
 MEADOW RUE (Thalictrum). Tall herbs with ample fern-like leaves and large flowers on enormous panicles.
 Meadow R. (T. polygamum). 5-8 feet. Flowers white. Highly recommended. Mountain M. R. (T. fendleri). Considerably smaller in every way.
 MILKWEED (Asclepias). More or less spreading showy plants with large showy

MILKWEED (Asclepias). More or less spreading showy plants with large showy flowers in June-July. Dry, open woods.

Butterfly Weed (A. tuberosa). Flowers bright yellow to orange. Each, 10c;

MILKWEED (Asclepias). More or less spreading showy plants with large showy flowers in June-July. Dry, open woods.

Butterfly Weed (A. tuberosa). Flowers bright yellow to orange. Each, 10c; 10, 90c; 100, \$7.00.

Showy Milkweed (A. speciosa). 3 feet. Fragrant purple flowers.

Swamp Milkweed (A. incarnata). Flowers rose purple. Each, 15c; 10, \$1.25.

MONKSHOOD (Aconitum). 3 feet. Very showy flowers. Moist shade.

Columbia Monkshood (Aconitum columbianum). Blue. Each, 15c; 10, \$1.25

White Flowered Columbia M. (A. c. albidum).

Wild Blue M. (A. uncinatum). Blue. † Each, 15c; 10, \$1.25; 100, \$7.50.

- MOSS, FLOWERING (Pyxidanthera barbulata). One of the choicest native low-growing perennials. Leaves very fine, resembling moss. In early spring the the plant is covered with masses of loveliest starry white and pink flowers. Forms clumps. Grows in moist not too heavy soil and stays in a bloom a long time. Rare. † Each, 25c; 10, \$2.00.

MOSS PINK (Phlox). Glorious flowers for spring and fall. Light sandy soils.

Douglas' M. (P. douglasi). Creeper. White and purple flowers.

Trailing M. (P. subulata). Large clumps unexcelled for massing and borders.

White to deep red. Each, 10c; 10, 90c; 100, \$7.00.

ORCHIDS. Very showy, hardy plants of easy culture. Rich, peaty soil in shady rather moist locations.

rather moist locations.

Lady's Slipper, Moccasin Flower (Cypripedium acaule). Large, purple flowers with whitish lips. † Each, 25c; 10, \$2.00.

Lady's Slipper, Snowy (C. spectabile). Finest species. Flowers have soft rose pouch and white petals. † Each, 40c; 10, \$3.50; 100, \$25.00.

Orchid, White Fringed (Habenaria ciliaris). Flowers in dense racemes, white or in the next yellow. Truly exquisite flowers. Each, 10c; 10, 75c; 100, \$6.00.

Orchid, Yellow (H. blephariglottis). Each, 10c; 10, 75c; 100, \$6.00.

Note—We have through our extended connections splendid opportunities to supply collections of exquisite Orchids from Old Mexico, Central America, etc., at very reasonable cost and we solicit correspondence from interested parties.

PAINTED CUP (Castilleja). 1-2½ feet. Flowers very showy in bracts. Rich woods.

woods.

Scarlet Painted Cup (C. linearifolia). Scarlet bracts.

White Painted Cup (C. pallida). White bracts.

Yellow Painted Cup (C. sessiliflora). Yellow bracts.

Yellow Painted Cup. (C. sessiliflora). Yellow bracts.

PASSIONFLOWER (Passiflora incarnata). Luxuriant vine. Flowers large pinkish white with triple crown of exquisite design. Fruits, hen's egg size, contain a juice of pleasant subacid taste. Each, 10c; 10, 75c.

POPPY MALLOW, PURPLE (Callirhoe involucrata). Trailer. Very showy, crimson or purple flowers. Each, 25c; 10, \$2.00.

RED ROOT (Lachnanthes tinctoria). 2-3 feet. Moist places. Leaves very long. Flowers yellow, woolly in lateral or terminal heads. All summer. Each, 15c; 10, \$1.25; 100, \$7.50.

ROBIN'S PLANTAIN (Erigeron). Very handsome bloomers, resembling Asters. Large Flowered R. P. (E. macranthus).

Purple R. P. (E. asper).

White R. P. (E. caespitosus).

SEA HOLLY (Eryngium). Tall herbs with glaucous, finely divided foliage. Though entirely hardy of quite a tropical aspect. Blue and white.

Adam's Needle-leaved S. H. (E. yuccaefolium).

Elue S. H. (E. planum).

Adam's Needle-leaved S. H. (E. yuccaefolium).

Blue S. H. (E. planum).

Gigantic S. H. (E. giganteum).

SENNA, WILD (Cassia marylandica). 3-5 feet. Feathery foliage. Yellow peashaped flowers in August. Moist soils.

SHORTIA, GALAX LEAVED (Shortia galacifolia). Very rare dwarf plant for shady locations. Flowers pink or white on upright flower stems. Leaves color rich bronze in autumn. † Each, 35c; 10, \$3.00.

SQUAW WEED (Senecio). Showy with golden yellow flowers in rays. Dry soil. Little (S. fendleri).

Nodding S. (S. bivgolovii).

Nodding S. (S. bigelovii).

SWEET PEA (Lathyrus). Choice trailing plants with pale rose to deep purple flowers.

White S. (L. niger).
White S. (L. albus).
Pride of California (L. splendens).

TREE POPPY, CALIFORNIAN (Romneya coulteri). 6-12 feet. Half shrub. Excellent well drained soil. Fragrant white flowers, very large. 20c per packet. TICKSEED (Coreopsis). 1-3 feet. Showy flowers in rays. Leaves finely divided. Very ornamental.

very ornamental.
Larkspur-leaved T. (C. verticillata). Each, 15c; 10, \$1.25; 100, \$8.00.
Palmate T. (C. palmata). highly recommended.
Tall T. (C. tripteris).
VIOLET, DOG'S TOOTH (Erythronium). Hardy. Flowers lily-like, nodding on slender stems. Very early. Leaves finely mottled. Leaf mould in shady

Common D. (E. americanum). Yellow with dark spots near base. † Each, 10c; 10, 60c; 100, \$2.50.

Large Flowered D. (E. grandiflorum). Alpine. Leaves not mottled. Golden yellow. Each, 20c; 10, \$1.50; 100, \$9.00.

Watson's D. (E. revolutum). White to purple. † Each, 20c; 10, \$1.50.

LET (Viola). Shady places. Very profuse showy bloomers in early spring.

VIOLET (Viola). SI Easy cultivation.

Easy cultivation.

Birdsfoot V. (V. pedata). Enormous light lilac or blue flowers. Sandy, dry.
Each, 10c; 10, 90c.

Rydberg's V. (V. rydbergii). Enormous leaves. Purple and white. Nearly all summer. Rare.

Western Blue V. (V. cognata). Lilac. Large clumps.
White Marsh V. (V. alsophila). Rather large and white flowers.
Yellow V. (V. nuttallii). Bright yellow. Sunny, dry.

WINDFLOWER (Anemone). Very showy herbs for light, well-drained soils in

sunny exposures.

Globosa Windflower (A. globosa). 1 foot. Bright red.

Long Fruited Windflower (A. cylindrica). 2 feet. Greenish white.

Pasque Flower (A. patens). 6 inches. Blue to purple or white. Earliest.

HOW WE SEND ORDERS



E prepay all Charges for delivery of seeds selected from this catalog when orders are accompanied by cash. Roots and Bulbs are not delivered "charges prepaid," but we allow the selection of \$1.20 worth of roots and bulbs for every dollar sent with order provided the amount of order exceeds \$5.00. A remittance of \$5.00 entitles to the

selection, therefore, of \$6.00 worth of roots and bulbs chosen from this catalog.

GREAT CAUTION.—We are extremely careful in wrapping, labeling, boxing and addressing. Every package of seeds, roots or bulbs tells plainly and distinctly what is within—depend upon us, you'll not be disappointed.

SUBSTITUTION.—In ordering, kindly say what we can substitute if we are out of the variety you order. We will not substitute unless your permission accompanies your order.

TERMS .- Cash with order.

REMITTANCES.—Requested by Postal or Express Money Order, Registered Letter or Draft on a New York or Atlanta Bank. Our banks charge for collection of local checks.

REQUEST FOR EARLY OR-DERS.—We do not sell any old seeds and do not take in stock, therefore, much larger quantities than we

can be reasonably sure of selling during the ensuing season. It is very important on this account, especially, that orders for large quantities of early maturing kinds, should reach us as early as possible in the season to assure complete execution. While we anticipate at this writing a supply of all kinds offered, our acceptance of orders is not a warranty for delivery, but it is subject to crop accidents and limits of crops. All quotations are subject to change without notice.

WARRANTY.—While we exercise greatest care to have all our seeds, bulbs, plants, etc., pure and reliable, they are sold without warranty and without any responsibility, expressed or implied, in respect to the crop. If our goods are not accepted on these terms, we must be informed at once after their inspection upon arrival at destination to arrange for their return. We cannot consider deferred claims, or claims after the seeds have been planted.

An exchange of catalogs, seed lists, etc., is desired.



Part of a garden at Germantown, Pa. Rhododendrons, peonies, tree rose and box-wood border.



A sturdy cottonwood, standing as sentinel for the fast disappearing grove at his back.

SEVEN REASONS For Buying TREE SEEDS



HE consensus of opinion of expert foresters is that foresight and expediency teach that tree seeds get the

surest and quickest results for the planter. They are—

1—Easier to buy.

2—Cheaper to handle.

3—More likely to grow because planted in soil where they are to remain.

4—True to name and easily distinguished.

5—Cultivation not difficult.

6—After once a farmer has planted and grown trees from seeds he will not return to nursery-grown stock. The work is pleasant and takes no more time than the cultivation of corn or other farm products.

7—Experience in growing trees from seeds is extremely valuable to the farmer because

each year the problem of reforestation is going to force itself on him more heavily. Tree-growing from seeds is the most direct, immediate and sensible solution that can be presented.

A Strong Plea

"We have 5,674,875 farmers in this country. Could one-third of these be induced to plant half an acre each in forest trees a year, we would have nearly a million acres a year added to the forests. In a decade at this rate we would have gone very far in solving a problem of great moment, and feel that we had done much towards offsetting the destruction and preventing the coming desolation.

The preservation and restoration of the American forests will greatly add to the comfort and beauty of our homes and tend to keep the youths of the land in the rural districts free from the temptations and vices of city life. The migration from country to city is an alarming feature of our social life. There are already indications of the returning tide. The preservation of the forests and the beautifying of country homes will strengthen the patriotic sentiment in the country and intensify reverence for home."

Thus pleads Hon. John Lamb before "The American Forest Congress,"

held in Washington January, 1905. In other parts of his excellent address, in a book published by the magazine Forestry and Irrigation, Washington, D. C., he says: "Farmers all over the United States are suffering because of the alarming menace to health developed by the destruction of forests; in counties in Virginia, where malaria was never known before, it became prevalent after the cutting off of the woodlands; cities and villages that were not affected years ago are now yearly flooded with water—eight to fifteen feet deep; many valuable farms have been destroyed by sand and debris washed down by their overflows; two hundred square miles of fertile soil are washed into the rivers each year, destroying crops and property junning up into the millions, not to mention scores of lives sacrificed to the flood demon."

Mr. Farmer, help the good work along. Reforest your woodlands. Preserve your streams. Attract rainfall your way. Make your home more healthful. Head off drouth and hot winds from your growing fields. Make your land more fertile. Prepare for yourself and coming generations plenty of wood, poles, posts, timber and surface protection.

Katzenstein & Co.'s Tree Seeds will do it Simplest .. Quickest .. Cheapest



What a delightful prospect

How We Send You \$1.85 worth of Garden and Tree Teaching for \$1.00

SEE COUPON ON PAGE 32



Garden Insurance HOW-TO-PLAN One Dollar THE CARDEN MACAZINE



OUR OFFER:

THE GARDEN MAGAZINE

How to Plan THE HOME GROUNDS 1.00
These insure success | Sold separately for \$1.85

All for a very low sum if you send NOW-use Coupon below

HOW TO PLAN THE HOME GROUNDS

By SAMUEL PARSONS, JR.

This is a most helpful and up-to-date book at any time of the year as a complete general guide to planting. The author is a Fellow of the Society of American Landscape Architects, and was for years Superintendent of the New York Parks. He gives practical directions not only for laying out the home grounds, selection of site, the care and making of roads and paths, lawns, woodlands, hedges, gardens, selection of plants and trees, etc., but also in a second section he treats of the village improvements designed to elevate public taste, as it concerns the highways, the schoolhouses, the stations, and the village outdoor life generally.

lite generally.

(ONTENTS: Selection of Home Grounds; Selection of a House Site; Roads and Paths; Lawns; Flower Gardens; The Terrace; Plantations; Deciduous Trees and Shrubs; Evergreen Trees and Shrubs; Hardy Herbaceous Plants; Aquatic Plants; Hardy Vines and Climbers; Bedding Plants; Pools and Streams; Woodlands: The Use of Rocks; Residential Parks; Fences, Bridges, and Sunnmer Houses; Plants for General Use on Home Grounds; Contracts and Specifications; Parks and Parkways; Churchyards and Cemeteries; Seaside Lawns; City and Village Squares; Railroad and Station Grounds.

Size, 5 x 7½; pages, 249; illustrations, 56; binding, cloth; price, net, \$1.00

THE GARDEN MAGAZINE

Is the representative American gardening magazine. A veritable up-to-date encyclopedia of practical horticulture. It is by far the most beautiful, helpful and readable periodical on the subject—a constant reminder and guide for the growing of flowers, vegetables and fruits, in many superbly illustrated articles and twenty-five regular departments.

GREAT PLANTING NUMBER (Ready March Fifteenth)

With the pace set by the Double Planting Number last April, the Great Fall Planting Number for October, the August Evergreen Manual and other special issues, it will easily be the most important and helpful garden publication of the year.

"Would not take \$50 for my April number if I could not get another," says one man who enjoys the pleasures of a good garden.

\$1.00 a Year; 10 Cents a Copy; double numbers, 25 cents each, when sold separately

"I have learned more about practical gardening from the first numbers of The Garden Magazine than from all my reading of books and horticultural magazines for several years" W. E.——, Indianapolis, Ind.

- - - Cut the Plum, or

Pin One Dollar Bill to This Page

OTTO KATZENSTEIN @ CO., Atlanta, Ga.

I enclose \$1.00, for which send me The Garden Magazine (seven months), including the Achievement Number, Great Planting Number and other special

issues, and How to Plan the Home Grounds (one dollar edition, postpaid). You will return the money to me, and I will send back the book and magazine at your expense if not what I expect.

Name

Address

This offer may be withdrawn, without notice, at any time. Book and magazine sent to separate addresses if desired.

Write to-day, before it is too late



Country Life in America



S announced, beginning with the January number the price of Country Life in America will be \$4.00 a year, single copies 35 cents; double numbers 50 cents, as before. The increased size will make it

possible to cover the many subjects in this field even more completely than before.

The Consolidation with "The Country Calendar"

Beginning with the January issue, COUNTRY LIFE IN AMERICA and "The Country Calendar" are to be consolidated under the main title of the former. The publishers of the two magazines believe that by working together they can serve the interests of country-loving Americans better than by working apart. The consolidation of these two magazines will result in a magazine of country living—sumptuous in illustrations and typography—that will be without a peer in this country.

The Inside of the Country House

. Since the magazine was first started it has devoted special attention to every branch of home-making in the country—except furnishing and decorating the inside of the house. Every issue hereafter will contain at least one article on this important subject.



A night-blooming cactus with twenty-six flowers.

Outdoor Life

Mr. A. Radclyffe Dugmore made a trip for us to the Pacific Coast and to the Northwest last summer, and secured a number of his wonderful photographs of different sorts of fishing. It is not too much to say that Mr. Dugmore's photographs have revolutionized the illustrations of sport—they give one the actual thrill of the sportsman.

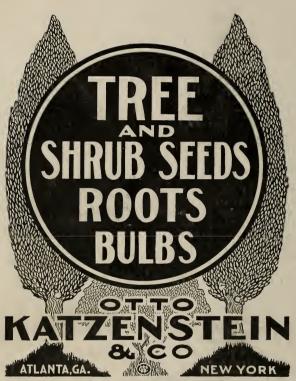
The Planter's Guide

Is the first of a practical series which will tell readers just what tree, shrub or flower is best for every special place and purpose.

\$4.00 a Year

Single Copies, 35c.





Our Trade Mark