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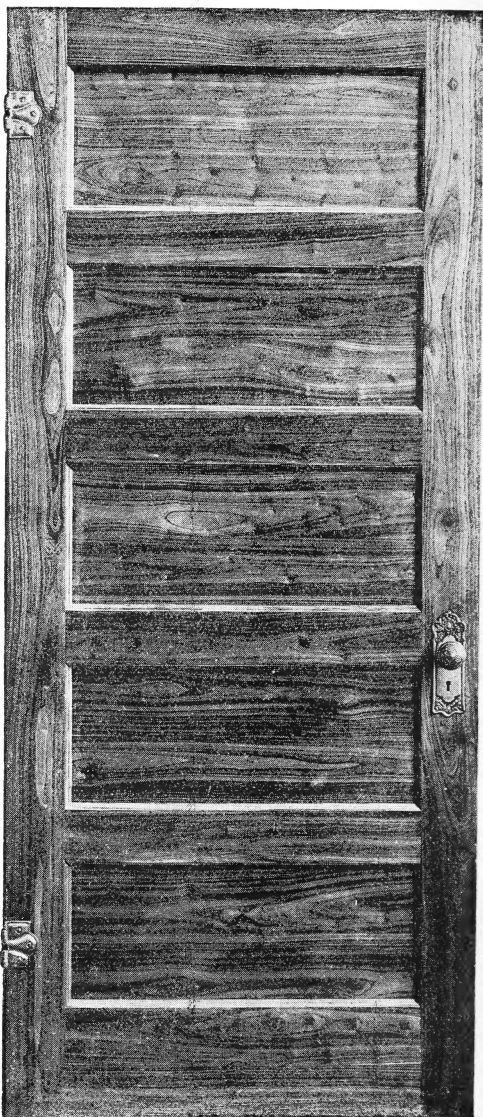


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PROFITS IN CATALPA FARMING



THE WINFIELD NURSERY COMPANY
Winfield, Kansas
A GROVE OF GENUINE SPECIES



DOOR FINISHED IN SPECIOSA CATALPA

This photograph was taken in Mr. Moncrief's private office, which is finished entirely in Speciosa Catalpa. Notice the beautiful markings in the wood.

PROFITS IN CATALPA FARMING

THE HISTORY AND USEFULNESS OF
AMERICA'S MOST VALUABLE TREE—
SPECIOSA CATALPA—AND HOW TO
MAKE IT THE FOUNDATION OF A
SURE AND PERMANENT INCOME

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THE WINFIELD NURSERY CO.

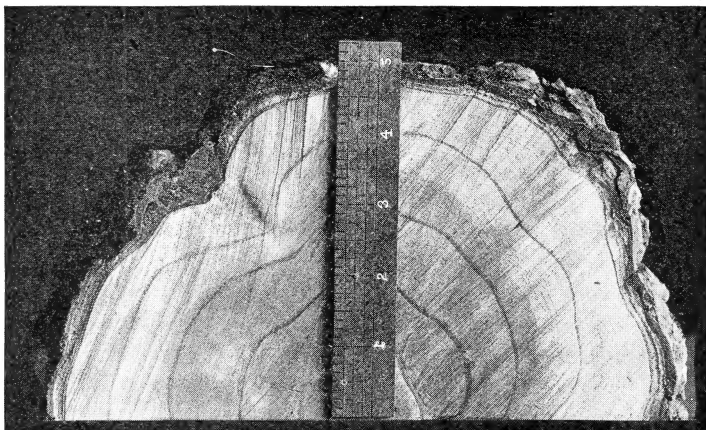
The Largest Growers of Speciosa Catalpa in the World

J. MONCRIEF, President

WINFIELD,

KANSAS

PROFITS IN CATALPA FARMING



CROSS SECTION OF FIVE YEAR OLD SPECIOSA CATALPA

Showing 10 inches growth in 5 years or 2 inches each year. Grove on C.W. Delker's plantation, Stafford county, Kansas. This shows the remarkable possibilities of Catalpa growing under right conditions.



THE POST HARVEST

C. W. Delker's grove in Stafford county, Kansas, after cutting. This 5 acre grove produced over \$2,000 worth of timber in 8 years. Read Mr. Delker's statement on page 25.



Growing Timber for Profit.

A Plain Talk About a Neglected Opportunity

STRANGE as it may seem, most every day we overlook some rich opportunity just beneath our feet, passed over in our search for fortune. I warrant that if I should tell you the whole truth of the actual profits in growing Genuine Speciosa Catalpa—that you could hardly be made to believe it all, regardless of the unimpeachable evidence which I should offer.

Almost twenty years ago, the Agricultural Department of these United States, began urging American farmers to begin a systematic planting of their future timber supply.

Speciosa Catalpa was one of the varieties specially recommended—and practically every farmer who intelligently followed that advice, made five-fold the profit that he could have made on the same acreage from any other farming pursuit.

I have yet to learn of a single planter of the pure Speciosa Catalpa, who did not become an enthusiast—and many made splendid fortunes with small investments.

I give you my word,—I do not know of any other crop that you can grow that will net you a surer or bigger profit on your investment and time—than Speciosa Catalpa.

If twenty years ago—you had planted eighty acres of Speciosa Catalpa—it is safe to say, it would have been worth a small fortune today.

Listen now carefully—Speciosa Catalpa—Genuine Speciosa Catalpa, planted on good soil, properly cultivated and cared for—will produce an average of *seventy-five* dollars an *acre per year*. It has done this—is doing it now.

Speciosa Catalpa is not ordinary timber — it's *extraordinary*.

It is the *only hardwood variety* that grows as fast or faster than soft wood. Do you know it averages an inch per year in



PROFITS IN CATALPA FARMING

growth and exceptional specimens show as much as two inches per year.

It is the only variety of early maturing wood that has all the useful qualities of other hardwood—such as strength, endurance and finishing texture.

And yet it will make more growth in one year than any other hardwood known, will make in three or five.

If you will plant your rows eight feet apart and your baby Catalpas three and one-half feet apart in the row—you will have 1550 trees on one acre.

At the end of the sixth year you may remove every-other-tree, which will give you 775 splendid 4-inch to 6-inch Fence Posts 6 to 8 feet long—besides as many nice Poles of smaller diameter 8 to 10 or 12 feet in length.

Now your remaining Timber Forest will stand seven by eight feet—the trees from now on will need this extra room.

In four more years you can cut 500 8 to 10 inch Poles, 18 to 20 feet long and 275 extra size Fence Posts, 6 to 8 feet, good length—and still have as before some nice light Poles which can be used upon any farm.

Thus we have in our *10 Year Forest*:

500 18 to 20 foot Poles	\$1.00	\$500.00
275 extra size Corner Posts	.40	110.00
775 4 to 6-inch Posts	.20	155.00
Making a total per acre		\$765.00

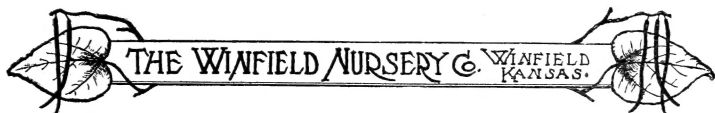
And we haven't counted perhaps 1000 small posts and a lot of fire wood.

The above estimates of both quantity and values are conservative. Many planters have secured greater returns.

In *quality* these posts will be superior to either Oak, Cedar or Hickory.

I would not have you believe that *Speciosa Catalpa* is Fence Post Timber alone—it is strictly *first-class* for Fence Posts—the longest life timber that can be used for the purpose.

But—it is just as valuable in sawed lumber for building purposes, furniture making, railway ties, telephone poles, cooperage, and practically every use calling for strong and lasting qualities. And where will you find a more beautiful wood—



with its rich shades of brown, fine texture, and wonderful markings. Turn to cover page and note the photograph of a door—taken in my own private office, which is finished entirely in *Speciosa Catalpa*.

A *Catalpa* plantation is a permanent investment. When the first crop is cut the *Catalpa* rapidly reproduces itself from the stump—thus a forest once planted becomes a perpetual source of income.

Every farm ought to have its own future timber supply—an acre or two—perhaps five to twenty, so that we can supply a neighborhood or a local market. There is always a big demand in every neighborhood for good fence posts.

And—there is no surer way to lay up a “nest egg” or a handsome “bank account” for old age—or for helping the boys and girls set-up-to-farming.

Catalpa growing is bound to become an immense business because:

First—we have to begin replenishing our forest supply.

Second—we cannot find any other timber so easily grown which will so fill all requirements.

Third—the splendid *profits* on time and investment.

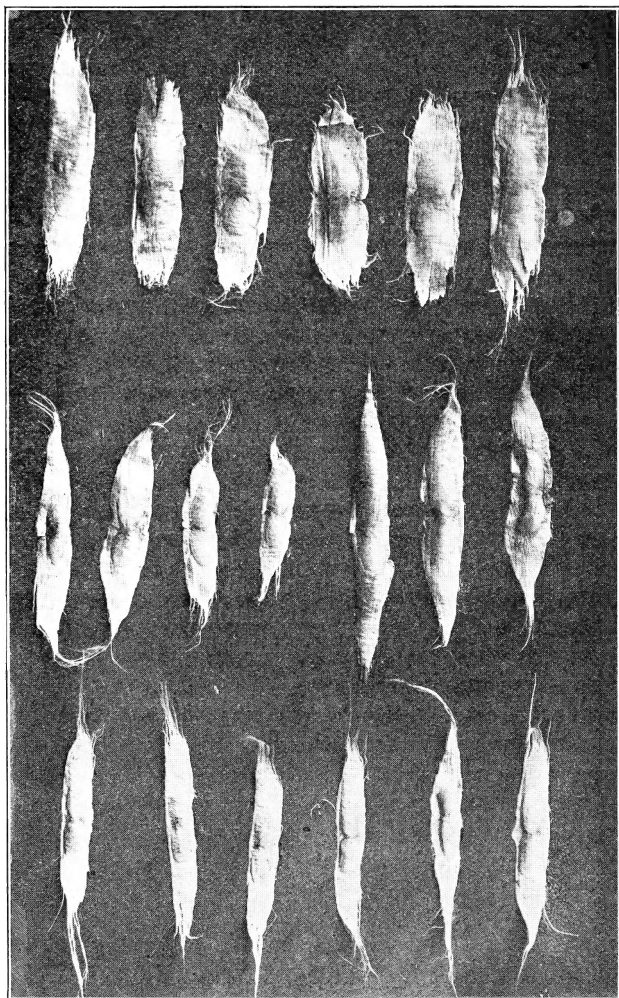
Twenty years ago Alfalfa was considered a weed—red clover growers were hard to convince that there was more profit in it—but merit won out.

Ten years from now American Farmers will be fully awake to the wonders—both in practicability and in profits—of Pure *Speciosa Catalpa*.

Don't wait—plant your grove at once. Have the matured posts and poles ready for the market—and that market is right at your door knocking now—*NOW!*

J. H. H. H.
President

PROFITS IN CATALPA FARMING



THREE KINDS OF CATALPA SEED

Upper row—*Speciosa* Catalpa. Middle row—Hybrid Catalpa. Lower row—Catalpa *Bignonioides*. See page 10 for full description.



Facts in Catalpa History

The Speciosa Catalpa is a native of America and until 1818 was not known to exist anywhere in the world except in a restricted portion in the river valleys of Indiana, Ohio and adjoining states. Its high value as timber, and its ornamental flowers, attracted the attention of early white settlers and it was soon distributed to all parts of the country. The first settlers found the Indians using the Catalpa in canoe building. The light weight of the wood, strength, durability and lasting qualities, appealed to them. Whether in water or mud, or exposed to the sun they found it proof against checking and cracking.

**Found
Valuable
By Indians**

Early in the nineteenth century General William Henry Harrison, later president of the United States, called attention to the Catalpa as a useful and valuable tree for artificial planting. Dr. John Warder, a former president of the U. S. Horticultural Society, also investigated its growth and habits, and was first to make it clear that there was more than one type of Catalpa and that the Speciosa was a distinct variety of much value.

The demand for wood will always exist. The use of building materials is increasing with our population and nothing yet invented or discovered can supplant wood as a building material.

**Over-
Production
Impossible**

Railroads are being pushed into every corner of our land, and an ever enlarging network of interurban electric lines is connecting our towns and cities. Ties and poles must be obtained from somewhere not only for the first construction of these steel highways but also for the upkeep afterward. As our population grows, farms are being cut up and new homes established. The open range is almost a thing of the past. Where there was one mile of fence fifteen years ago, ten miles are needed now.

In artificial tree culture lies the only hope of relief from a threatening timber famine. The ease with which a grove of trees may be planted and maintained and the returns it insures, commends forest farming to the enterprising farm owner. He considers his grove of timber trees of as much or greater importance than his orchard, garden or potato patch. One planting and a little care is all that is needed in a life time but the crop is always ready for harvest after three to five years growth. He need not replant every year and crop failure is unknown.

PROFITS IN CATALPA FARMING.

The first great essential in forest farming is to select the right tree. It must be adaptable to the demands made upon it, quick

Selecting
the Right
Tree

Danger in
Planting
Worthless
Varieties



Speciosa
Catalpa

18-YR. OLD SPECIOSA CATALPA

maturing, easily grown, the wood durable, resistant to insects and weathering, and easily wrought. The tree that meets these requirements far better than any other is the Speciosa or Hardy Catalpa. It is unanimously recommended by unbiased authorities such as the officials of the U. S. Department of Agriculture, Experiment Stations, Forestry Societies, and the owners of extensive Catalpa plantations in many states.

Until the last 15 or 20 years the Catalpa was planted and grown in an irregular sort of way. Today there is no other timber tree so widely used in artificial planting for commercial purposes and returning as handsome a profit. The great drawback to Catalpa-growing prior to the present period was the unfortunate mixing of seeds with the worthless varieties. Failure followed and the Catalpa was given a black eye wherever this happened.

The Speciosa Catalpa has a characteristic deeply furrowed bark, with a tall, straight trunk when grown in a plantation. It bears only two or three pods to the cluster and very few clusters to the tree. The common variety has a short trunk with a scaly bark, many branches, and bears seed in great quantities. The seed has five times the germinating power of true Speciosa.

The tree shown on this page is a Kansas product, growing on the farm of Thos. Mason in Sumner County. In eighteen years it has reached a height of seventy feet and a diameter of thirty inches. Note its erect habit of growth as compared with Soft Maple in the background.

How to Identify Speciosa Catalpa.

The most notable feature of true Speciosa Catalpa is the erect habit of growth. It is as distinctly upright as one Lombardy Poplar. It frequently obtains a height of 100 feet and a diameter of 2 to 4 feet.

**Habits
and
Growth**

The common Catalpa seldom exceeds thirty feet in height, has a spreading, very crooked and irregular habit. The trunks usually



25-YEAR OLD CATALPA BIGNONIOIDES

This is the common or scrub variety. The tree shown here is less than 20 feet high.

divide into several branches of about equal size. Notice these characteristics as shown in the above photograph.

The difference in bark does not show in young trees, as its real character develops only on older stems. The bark of the Speciosa Catalpa is similar to that of the Ash or Box Elder, being heavy, thick, and deeply furrowed, the ridges quite prominent.

Bark

PROFITS IN CATALPA FARMING.

The common varieties have a thin, scaly bark, peeling off in short strips, never deeply furrowed.

Blossoms

Under normal conditions, the Speciosa Catalpa blooms about two weeks earlier than the common varieties. Flowers are much the same in appearance, although the inferior sorts have a narrow white margin, while the Speciosa Catalpa has a broad white border.

Pods

The seed pods of the Speciosa Catalpa grow singly, in pairs, or occasionally three in a cluster. They are from 14 to 18 inches in length, three-fourths of an inch thick, and the walls of the pod are thick and strong.

The pods of common Catalpa grow 6 to 18 in a cluster, 6 to 15 inches long, and one-half an inch thick, walls thin and brittle.

Seed



CATALPA PODS

Speciosa Catalpa—2 pods, length 23 inches
Common Catalpa—7 pods, length 8 to 12 inches

A pound of Speciosa Catalpa contains about 10,000 seed. Catalpa Bignonioides and other inferior kinds are much lighter, ranging from 20,000 to 40,000 seed to a pound.

Danger of Hybridizing

The Speciosa Seed will mix very readily with that of the common kinds, when both are grown in the same locality. Bees have been known to carry the pollen from the flower clusters as far as two miles and this is responsible for the hybridizing. The hybrid tree is almost as worthless as the common variety and this fact is responsible for many failures. Planters who were positive they had



secured seed or seedlings from the true Speciosa had in fact done so but the seed was hybridized by the presence of worthless trees.

It is not an easy matter to obtain genuinely pure Speciosa seed. On the other hand the seed from common varieties may be secured in large quantities at small expense. For this reason and since the genuine seedling cannot be told from the worthless one by Government Forestry Experts, even at 2 or 3 years old, there has been opportunity for fraud. Unprincipled seedmen and nurserymen have foisted both seeds and seedlings upon unsuspecting planters, who did not learn of their costly mistake until years afterward. Ignorance on the part of nurserymen is perhaps as much to blame as wilful error. Many seed houses buy seed in large quantities from seed gatherers. The only object of the seed pickers is to obtain as large a quantity as possible, regardless of the kind of trees on which it grew. Under these conditions, how may a nurseryman using seed of this kind, honestly recommend his stock?

**Make Sure
of Your
Planting
Stock**

There is only one way to insure safety and profit in planting Catalpa and that is to plant the genuine Speciosa. Here is where the reliability of your nursery means everything. We need not tell you it will be to your interest to deal with the firm that has an unquestioned reputation for doing business strictly on the square. It will mean not only satisfaction in later years but money in your pocket, to buy seedlings from a house that has made a specialty of Catalpa for years and that can furnish unquestionable proof as to the genuineness and purity of the seed planted. You should demand this proof before you buy your seedlings.

Why Catalpa Lasts a Hundred Years.

**Catalpa
Produces
Little
Sapwood**

Being a rapidly growing tree the question is often raised as to why the Catalpa wood is so resistant to decay, as opposed to the early rotting of other quickly developing woods. George L. Clothier, of the National Forestry Service, explains this very clearly in a report made following an investigation of timber areas in Oklahoma. A portion of this report follows:

"All the trees are rapid growers in this section (Old Indian Territory) and the quality of their wood is well known. It should be noted however that young, quickly grown trees usually have more sapwood than those of the same kind that grow quickly. Hence, having wood that is less durable and sometimes less valuable in other ways than old trees. Catalpa however produces little sapwood under any circumstances, and the rapidly grown wood is more valuable than that grown slowly, because straighter."



PROFITS IN CATALPA FARMING

**Wood
Contains
Natural
Preservative**

One of the strong points in favor of Catalpa growing is the freedom enjoyed from insect ravages and fungus diseases. Nature has provided the Catalpa with a repellent within itself. In speaking of this property of the tree, Mr. John P. Brown has this to say:

"Catalpa is permanently protected because nature has enabled the tree to make its antiseptic a part of the wood itself. Usually those woods which are dense and slow to mature, have great durability, while quickly growing trees with softer wood would soon perish. The reverse is true of the Catalpa, its chemical constituents being permanent antiseptics, preserve the fibers from decay."

Along the same line, Bulletin No. 108 of the Kansas Experiment Station, says:

"Wood of the Catalpa is remarkable for durability in contact with the soil. Well authenticated and reliable observations, give a record of 100 years for board timber, in large, mature specimens. The immunity of Catalpa wood to decay means the existence of certain compounds in the tissue which render them antiseptic to saprophytic fungi. The presence of this compound or compounds likewise renders the living tree remarkably free from plant disease caused by parasitic organisms."

The Catalpa's Field of Usefulness

**Posts
and Poles**

Few timber trees have so wide a variety of uses as the Hardy Catalpa. It is sufficiently resistant to decay to make it the best of commercial trees for post and pole production. Classified as a hardwood by the Government Forestry Service, it has proven to be a first class material for furniture and cabinet making, and is equally good as a finish for indoor work. Its quick growth makes it especially desirable for shelter belts, windbreaks and shade, while for ornamental purposes and lawn planting it is a general favorite.

The Catalpa is no longer an experiment as a post timber. Instances without number could be cited to show its great possibilities if space would permit. The following is a striking example:

**Letting
Nature
Produce
\$400 an Acre**

A five year old grove in Stafford Co., Kans., owned by C. W. Delker, yielded an average of 3250 posts per acre in five years growth. The posts were sold at an average price of 12 ½ cents each, which amounts to over \$400 an acre as the value of the crop. All this with but little labor; one planting and one harvest; no worry over chinch bugs and crop failure; no hired help problem; just quietly allowing Nature to work for you month after month and year after year.

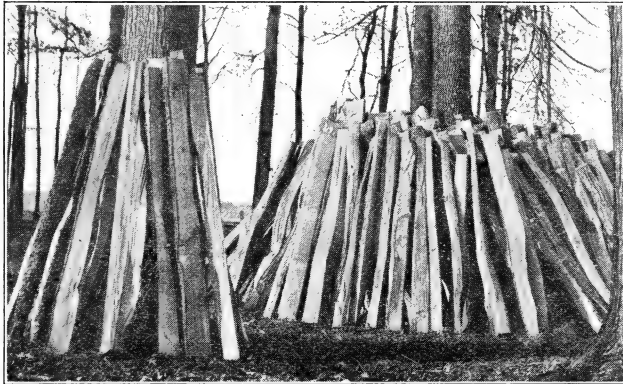
That the Catalpa will be the logical successor of the oak, wal-

nut, mahogany, and other fast disappearing hardwoods, was predicted some years ago and this prediction is now coming to be realized. That the Catalpa can take the place of these standard hardwoods has been abundantly proven. The lumber is practically free from all insect injury and decay. It has a clear rich grain, is light, but compact, takes a high polish, and most beautiful finish.

Mr. John P. Brown, previously quoted, is authority for the statement that Catalpa wood may be substituted for any purpose for which walnut and butternut are used. He says:

“It compares with the butternut in texture and appearance, and is suitable for any purpose for which the walnut and butternut are suited. Its color is a handsome shade of brown. The somewhat open grain absorbs the finisher’s ‘filling’ and is capable of

**Successor
to Oak
and Walnut**



SPLIT CATALPA POSTS

Posts like these readily bring 15 to 20 cents each.

being used for imitation of many woods, if desired. Yet in its natural state it is equal to any American wood. It is especially beautiful for interior finish of railroad coaches and makes one of the most artistic pieces of woodwork to be found anywhere. The lumber is also suited for inside finishing for dwellings and all kind of furniture, especially the medium grades. As a base for veneering it has a special value, as it neither swells nor shrinks with changes of weather, while glue clings to it with tenacity. It will be sought for interior finish for fine buildings, it is almost as easily wrought as white pine, and much richer in grain and color.”

**Unsurpassed
as Finishing
Material**

Catalpa wood has been put to various uses in the wood working shops of Kansas Agricultural College at Manhattan. Mr. W. L.

**Valuable
for Cabinet
Making**

PROFITS IN CATALPA FARMING

House, foreman of the college shops speaks of the wood in these terms:

"It has a beautiful grain, polishes easily, and takes a fine finish. It has sufficient strength for the various kinds of cabinet work, and is desirable in every way for this purpose. For wide surfaces it joins nicely, matching the grain easily. It works easily either with the lathe or with hand tools, and is in every respect a valuable wood for the finisher and cabinet maker."

Demand from Vehicle and Furniture Makers

One of the great present day problems in furniture and vehicle making, and similar wood crafts, is to find an adequate source of material. The standard hardwoods will soon reach famine prices. Manufacturers are looking about for substitutes and some have already adopted Catalpa. Others will follow as soon as they learn



THE SPECIOSA CATALPA AS A ROADSIDE TREE
Along the entrance to "Catalpa Knob" farm, Eureka, Kansas

how well the wood stands the test. The shrewd landowner does not need to be told what this will mean in a very few years. With the demand for Catalpa wood increasing from a dozen different commercial sources, the man who will put out a grove of trees now will realize that he acted wisely in the years to come.

Dr. John Warder, a former president of the United States Hor-



ticultural Society, and an authority on Catalpa culture, speaks of its possibilities in the following language:

"That the wood would be exceedingly valuable for lumber is demonstrated by the occasional specimens that have been sawed, finished, and made into furniture. The open grain of the wood enables it to take a filler easily, while in color and marking there is scarcely a more beautiful lumber product. So well satisfied am I of the great durability of the Catalpa, the fine polish it will take, its great beauty as a cabinet wood, and its value for railroad purposes, that I wish myself a young man again, and that I might plant a quarter section in Catalpas."

**Few Woods
as Beautiful
or Durable**

As a building material, exposed to the weather, few timber trees are as durable as Catalpas. It is especially well adapted as a material for the framework of buildings where timbers of strength and lasting qualities are required.

**Durable
Building
Material**

One of the newer uses to which Catalpa wood has been put in recent years is wood pulp and paper making. What is true of the materials used in other industries is likewise true of the paper making business. The uses of paper are being extended by leaps and bounds while the materials from which it may be made are being rapidly depleted. Paper mills have thoroughly tested Catalpa wood pulp and have found it to make paper that would grade up to the best of book stock.

**Book
Paper**

For general repair work about the farm, Catalpa wood has been found very serviceable. Its light weight, soundness, strength, proof against cracking, checking, swelling or shrinking, and its easy carving qualities, make it well suited for this purpose. It is very adaptable for tongues on vehicles and implements, sweeps for horse powers, doubletrees, neckyokes, in fact it will do good service on any farm tool requiring wooden parts. It is already being extensively used in vehicle and implement factories and this is one cause for the growing demand.

**Nothing
Better
for Farm
Repairs**

But the money return from Catalpa plantings is not the only consideration. The value of windbreaks, shelter belts, and shade trees cannot be computed in dollars and cents but the enterprising farm owner places a high estimate on all three. Quick growth and heavy foliage make the Catalpa a special favorite for these plantings. A grove of Catalpas on the north exposure of a feedlot will break the cold wind of winter to a surprising extent. In summer the same grove will furnish shade for stock through the heat of the day.

**Windbreaks
Shelterbelts**

Again for lawn planting, an easily grown, slightly tree is wanted. Nothing will fill the bill better than Catalpas. Planted with plenty

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of room the Hardy Catalpa will develop side branches and in a very few years will have grown into an ideal shade tree.

Increase Usefulness of Ponds

At blooming time in spring a Catalpa tree is a thing of beauty and adds much to the appearance of the home yard. Only the cottonwood rivals it for quickness of growth but the objection to cotton blowing puts it far below the Catalpa as a desirable lawn and shade tree. For lanes and driveways the Hardy Catalpa is a general favorite.

Much attention has been given in recent years to artificial farm ponds and lakes. In the drier sections of country it is believed that these bodies of water in considerable numbers would materially affect the rainfall and act as a tempering force on other climatic condi-



POSSIBILITIES OF SPECIOSA CATALPA AS A SHADE TREE

On farm of W. S. Wheelock, Girard, Kans

tions. There are a dozen other highly valuable uses to which such a pond on each farm might be put. A belt of Catalpa trees about each one would complete their usefulness. We quote L. L. Dyche, State Fish and Game Warden of Kansas, on the possibilities of one of these timber skirted ponds.:

"These small lakes and ponds would be of value in a number of ways to the farmer who, in a new country is not only an agriculturist but frequently a horticulturist and stock raiser as well. Groves of both forest and fruit bearing trees might be planted around them. These would serve various purposes and while serving as windbreaks and furnishing shade, would grow into trees that would produce posts, wood, and even lumber.



A Tree for Railroad Use.

Telegraph, telephone, and electric railways are more and more looking to artificially grown Catalpas to supply the enormous, and constantly increasing demand for poles and ties. And while the use of ties and poles has been doubling and trebling, the available supply of timber suited to these needs has been diminishing at an alarming rate.

**A Great
Future
Market**

As an authority on the adaptability of timbers for railroad building, the statement of a railroad superintendent cannot be questioned. Superintendent William Arthur of the Illinois Central Railroad is quoted in the following:

"The tree under favorable circumstances, makes a very rapid growth. Posts have been known to last 100 years. Railroad ties have been examined after 15 years of hard service still in good condition." These examples of remarkable durability might be extended indefinitely. Without doubt, therefore, one may say that for fence posts this wood has no equal, and in view of the fact that it can be grown so easily, it ought not to require much argument to cause investors to plant Catalpa where it will grow to the best advantage. The same is true of telegraph poles. Wherever trees can be grown straight and tall enough it will be found that they will serve as poles, lasting longer than almost any other class of timber. For ties the same is true.

**Telegraph
Poles
and Ties**

Superintendent D. Axtell of the Missouri Division of the Iron Mountain Railroad adds this to the foregoing:

"In regard to the durability of Catalpa it is useless to multiply words. Fence posts twenty years in the ground are always as sound as when first put in, and no decayed Catalpa logs are ever found in the swamps. A section of Catalpa log known to have lain in the ground in the swamps for 50 years is in the office of the land department of the roads in St. Louis, and is as sound as it ever was."

**Log Lasts
50 years
in Swamp**

In the Cincinnati office of the Big Four railway system is a railroad tie that was taken up from one of the lines of that system after having been in use for twenty years or more. J. W. Cooper, engineer of maintenance of way of the Big Four, has made an official report on this tie, a portion of which is quoted herewith:

"This Catalpa tie, taken out of the track three miles north of Harrisburg, Ill., was put in about 1887, in mud ballast. The wood is perfectly solid, showing very little sign of decay. With tie plates and good ballast, these ties would, I think, without doubt, last fully thirty to thirty-five years." Mr. Brown of Connersville, Indiana,



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obtained half of this tie and had it sawed into boards and a frame made and finished to determine its value as a furniture wood. In appearance it resembles white walnut, also similar in texture. It is as easily wrought as white pine; the polish which it received put the Catalpa upon a plane with the walnut, cherry and our finest cabinet woods.

Most Durable of Native Trees

The following statement was made by a prominent official of the Iron Mountain Railroad, and is taken from *Arbiculture*:

"The Catalpa tree is well known and appreciated by our officials. It is beyond question the most durable of all species growing in this country, except, perhaps, the Cedar. There are miles of fencing built years ago by the company with Catalpa posts, none other now being used. A limited supply of ties and telegraph poles were secured.

"In 1871 William A. Arthur, Superintendent of the Illinois Central Railroad, stated that the Catalpa would make a tie that would last forever; that it was easily cultivated, was of rapid growth, and would hold a spike as well as Oak and would not split."

E. B. Barney, the well known Car Builder, of Dayton, Ohio, is authority for the following:

Post Sound After 75 Years Use

"There is in our office (1887) a Catalpa post taken from a post and rail fence in Indiana, that J. S. Miller, Supt., Richmond, Ind., vouches for as having been placed two feet in the ground 75 years ago, where it has remained until quite recently, when it was taken up and sent me as a sample of the durability of Catalpa. It is perfectly sound in every part. For railroad cross-ties, it is better than Mulberry or Cedar, in fact it may be regarded as imperishable under, or lying on the ground. Mr. R. E. Starnate has measured Catalpa in the White River bottoms, two and one-half, three, and even four and one-half feet in diameter. This timber is universally credited with wonderful powers to resist decay and time."

What Iowa Growers Say

Few states are as progressive agriculturally as Iowa and in few states has so much been accomplished with the *Speciosa* Catalpa as in that state. We can tell the story of Catalpa growing in Iowa in no better way than to reproduce three letters from Catalpa growers, sent to Iowa Experiment Station and published in Bulletin No. 120. The letters follow:

Sold Trees Standing

"I think the Hardy Catalpa is the best post tree to grow in this part of the state. A year ago I sold two acres of my grove to a neighbor for \$200. He did all the work of cutting and hauling and was well satisfied with his bargain. He used the trees for posts and poles. I had in addition to this the benefit of protection afforded by the trees, which I valued quite highly. The sprouts from the stumps made a remarkable growth last summer, many of them exceeding

12 feet in height. I now believe we will have a better grove of trees in 8 or 10 years than we had before cutting." Signed: George S. Waller, Pioneer, Ia.

"A short time ago when visiting at my old farm, I looked the Catalpa trees over for the first time in years and was surprised at the rate of growth they have made. Some of the largest measure 42 inches in circumference and are tall and straight. My son has cut posts from this grove for the past eight years and says that he

**Better than
White Oak**



CUTTING SIX YEAR OLD CATALPA TREES
 150 acre grove of H. C. Rogers, Mechanicsburg, Ohio

believes the Catalpa posts to be as good as White Oak posts, if not superior. For general farm purposes I think the Catalpa the best timber I know of." Signed: George Meinemann, South Amana, Ia.

"I consider the Hardy Catalpa the best tree to plant in this part of Iowa for posts and poles. I value it very highly for general repair work on the farm, such as making eveners, single trees, tongues, blocks for underpinning, etc. I like it especially for repairing farm machinery because it combines considerable strength with lightness. I have some posts still standing that have been in the ground at least 19 years. They were peeled and charred without being allowed to season before they were set. From observations, however, I believe that if the posts are seasoned one year or longer before setting they will last longer than when treated as above mentioned. Signed: Theo. C. Blume, Denison, Ia.

**Best for
Farm Repairs**

PROFITS IN CATALPA FARMING

Successful in Ohio

**Most
Valuable
American
Tree**

H. C. Rogers, of Ohio, an accepted authority on all questions pertaining to Catalpa growing, delivered an address before an Ohio Forestry Society, from which we quote in part:

"I will tell you why I am planting Catalpa Speciosa in preference to any other kind of tree. Common sense would dictate the planting of trees that make the quickest growth, combined with valuable qualities of wood. Catalpa trees possess these qualities above all other trees. In the Northern states, Catalpa trees, in



A CAR LOAD OF SPECIOSA CATALPA LOGS

suitable locations, will make very near one inch in thickness of wood each year. In the Southern states considerably more than an inch per year diameter.

"Catalpa wood can be put to more valuable uses than any other American tree. This is a strong statement, but I make it advisedly, and will enumerate some of the uses to which it is preeminently adapted:

**Takes Place
of Oak, Ash
and Hickory**

"For interior house furnishing, nothing is more beautiful. For furniture, it scarcely has an equal. For carriage makers' uses, it takes the place of Oak, Ash and Hickory, and especially valuable is it for buggy bows on account of its lightness, combined with toughness and stiffness.

"For uses in the ground it is the equal of Black Locust in resisting decay.



"For telephone and telegraph poles, its lightness, combined with strength and durability, places it in a class by itself.

"For any use to which wood is put where strength, lightness, durability, beauty of finish, and capacity to hold its place without warping or checking is valuable, Catalpa wood will be found par excellence.

"Without doubt, Catalpa trees, if of the true Speciosa type, and grown in suitable location, will produce more wood and of greater value than any known tree.

"I have a block of wood that was cut from a Catalpa tree that grew at Woodstock, Ohio. This tree was 19 years old when cut, and the block of wood measures 21 inches across (diameter). The tree was about 50 feet in height.

"This section of wood was taken at about one foot above the ground. It is very remarkable that this tree was adding as much to its thickness toward the latter years of its growth as it had while a small tree.

"Any four-year period of its growth measures just a little more than four and one-half inches. Growing not more than 30 feet from this true Catalpa Speciosa tree was a Hybrid Catalpa tree of the same age, but it was not half so large a tree.

"I have examined the native growth of Catalpa Speciosa in southern Indiana and Illinois, and found trees that would make a fifty-foot saw-log, perfectly straight and smooth.

"The farmers of that region will sometimes haul fence posts of this wood 20 miles, when they could get Oak posts on their own land.

"This proves the very high opinion of this wood held by the people who are familiar with its use.

"The fact is, this wood has been so highly praised by the farmers of the region where it grew that it is practically all gone. There are only a few localities where it is growing in its native state at the present time, and these areas are very small.

"My investigations have demonstrated to me that I can make many times as much profit growing Catalpa trees as I can hope to realize from ordinary farming of the land.

"I was drawn into the idea of timber growing solely from the business and commercial view of it; but I am a lover of trees and know there are many reasons why we should grow them, aside from the dollars and cents point of view. However, I know it is the profit, the money consideration only, that will ever induce the mass of farmers to plant trees; therefore, the great returns that are possible from timber growing must be made the central idea—the working point from which to interest the land holder and farmer."

**Diameter
Increases
Over One Inch
Each Year**

**Cut 50-foot
Saw Logs**

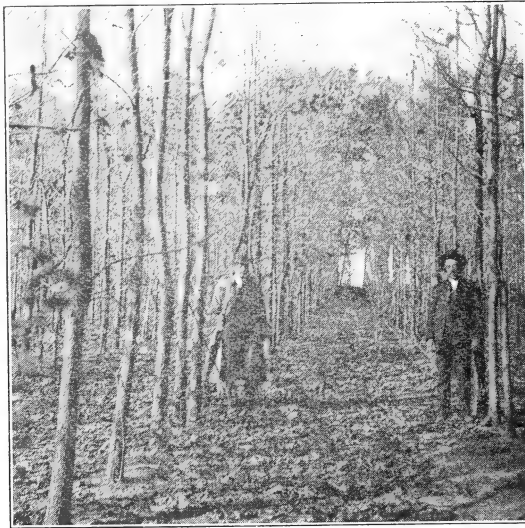
**Few Native
Catalpas
Left**

PROFITS IN CATALPA FARMING

Binford Grove Greenfield Indiana Our cover page shows a photograph of this interesting grove. These trees are the typical Speciosa Catalpa, and enough timber has been marketed from this planting to show what a Catalpa Plantation will produce when properly managed. In spite of too close planting and lack of proper care, it produced a net profit of over \$500 an acre, and has proven the best investment on the Binford farm. Some of the trees in this grove measure as large as forty-six inches in circumference.

Big Industry in Kansas

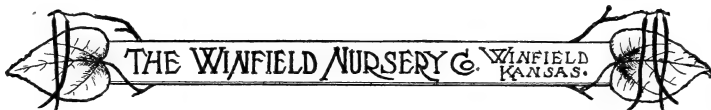
Catalpa Has No Competitor State Forester Scott of Kansas says: "In this state the Catalpa is practically without a competitor. As a tree, it is easily handled and grows into commercial size in a comparatively short time. When



J. W. CESSNA'S FIVE YEAR OLD GROVE

cut it makes the most desirable post on the market. Geographically Kansas is ideally situated to make the growing of Catalpa posts and poles an important industry.

"The demand for the posts comes largely from the plains region lying farther south and west. The Kansas plantations are nearer the field of consumption than is any other source of supply.



This shortens the distance that the products must be hauled, and saves immensely in cost of transportation. The lightness of the wood is another factor favoring the Catalpa. The air-dried wood weighs only about half as much as the same volume of Osage Orange, its closest competitor.

"The uniform size and smoothness of the Catalpa posts allow them to pack closely in the car. In the range country the posts are frequently hauled long distances, and again the lightness of the posts and the compactness of the load are a big factor. On average country roads a team can easily haul from 250 to 300 posts at a single load."

This planting began 1879 in Crawford County. In 1904 over \$100,000 worth of posts had been sold. This in spite of the fact the plantation received scarcely any care. With proper treatment, it would have produced five times this amount in cross-ties and lumber.

**Farlington
Forest
400 Acres**

The Catalpas on Mr. Cessna's plantation have made a remarkable growth as is shown by the following letter. Picture of grove on opposite page.

**\$775 an Acre
in Five Years**

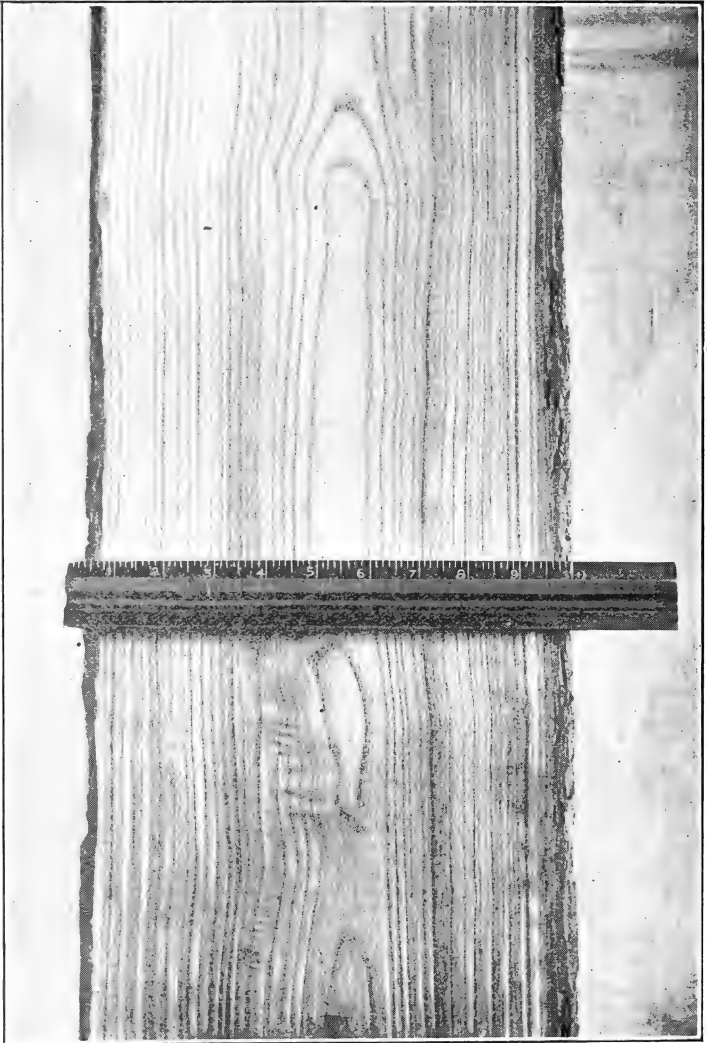
"My Catalpa grove comprises about two acres, and is located in Kingman County, Kansas, just west of Adams. The trees were planted on very sandy soil in the Chikaskia bottoms, being located about one mile from the river. Before the grove was planted, it was worth about \$30.00 per acre.

The grove is now five years old from nursery seedlings. The rows were planted about eight feet apart, the trees being set about an average distance of three feet apart in the row. The trees stand at an average height of eighteen to twenty feet, many trees reaching the height of twenty-five feet. In diameter, the trees were an average of from four to seven inches at the base. The grove was cultivated about the same as a corn crop the first two seasons, and has had no cultivation since. If the grove was cut this year, it would turn out about the following number of posts and poles in addition to quite a lot of fire wood on which I have placed no value.

Estimate of Present Worth per acre.	
1000, 16 ft. poles, @ .75	\$750.00
1500, 6½ ft. posts, @ .10	150.00
	<u>\$900.00</u>
Cost per acre of planting and care for five years	\$75.00
Estimate cost per acre of harvesting,	\$50.00
	<u>\$125.00</u>
Net worth per acre,	\$775.00

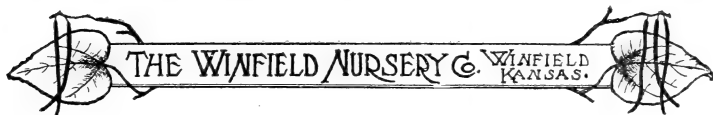
From the above figures, it will be seen that this grove

PROFITS IN CATALPA FARMING



A TEN INCH BOARD OF SPECIOSA CATALPA

"In color and marking there is scarcely a more beautiful lumber product."—John A. Warder, former President United States Horticultural Society.



has proven a very profitable investment. In fact, more so than any other crop that could have been grown on this land. With suitable land to start with, I regard the Catalpa plantation as one of the most profitable investments that can be made, and also an investment that produces profit much quicker than is ordinarily supposed." Signed: J. W. Cessna, Argo, Kans.

The following letter from Mr. Joseph Lange of Adams, Kans., **240 Acres in Kingman County** shows what he thinks of Speciosa Catalpa as an investment:

"Speciosa Catalpa plantations have proven such a sure and profitable investment, that last year I decided to set 240 acres. 70 acres were set last spring and I will make an additional planting each year until the 240 acres is complete. My plantation is located in Kingman County, south of Adams, on the Chikaskia bottoms. The soil is sandy and worth about \$30.00 per acre, the way land is selling in this section.

The plants sent me for setting the 70 acres were vigorous and stocky and arrived in perfect condition. I have secured practically a perfect stand as you will notice by the photograph taken Oct. 10th. I estimate that the land already planted has an investment value of not less than \$100.00 per acre." Signed: Joseph Lange, Adams, Kans.

When you examine the photograph on page 2 showing cross section of 5 year-old stump from Mr. Delker's grove, you will understand how his grove produced over \$400 worth of timber per acre in 8 years. His affidavit appears below:— **Big Profit From 8-Year-Old Grove**

"C. W. Delker of lawful age, being first duly sworn on oath says that his post office address is Wichita, Kansas;; that eight years ago he planted five acres of sandy sub irrigated land to Catalpa trees, being nursery seedlings; that the land at the time said trees were set out was of about the value of thirty dollars per acre, and said trees were set out four feet apart each way; said land is five miles north of St. John, Kansas, and five miles south west of Hudson, Kansas.

That the following statement constitutes the actual returns from said Catalpa grove, to-wit:—

434 Corner Posts, 8 feet long @ .50.....	\$ 217.00
200 Extra posts, 6 feet 8 inches .25.....	50.00
9690 No. 1's 6 feet 8 inches .12.....	1162.80
3138 No. 2's 6 feet 8 inches .10.....	313.80
2800 No. 3's 6 feet 8 inches .05.....	140.00
18 twelve foot poles .60.....	10.80
120 loads of cord wood 1.25.....	150.00

Total returns for 5 acres of trees....\$2044.40

That since becoming aware of the remarkable value of Catalpa trees, he has planted about thirty acres of Winfield Nursery Speciosa Catalpa, and has ordered plants sufficient for ten additional acres." Signed: C. W. Delker, Wichita, Kans.

Planting 40 Acres More

PROFITS IN CATALPA FARMING

**Our
Plantation in
Montgomery
County, Kans.**

The growing of Catalpa is good business for us as well as for you. Our 120 acres in Montgomery County offer abundant proof of our belief in Catalpa growing as an investment. In three years time we have made worthless overflow land, worth \$200 an acre. The photograph on this and following pages show the remarkable growth made on this Kansas plantation. Many trees reached a height of fifteen to eighteen feet the first year after cutting back.



ONE YEAR'S GROWTH—OUR KANSAS PLANTATION

On page 30 is shown a tree from this plantation that reached a height of 17 feet the first year after cutting back

**Yaggy
Forest
500 Acres**

This plantation in Reno County has proven a very profitable investment. We quote the following letter from the Yaggy Plantation Co.:

"Answering your inquiry of recent date relative to Catalpa growing as an investment. After some 20 years experience in that line of business can say we know of no investment that combines such security with such certain large returns, all this with a minimum of worry and attention. The grower of a Catalpa plantation is one of the few men who can contemplate with any degree of satisfaction the rapidly diminishing lumber supply of the country, for his property is being enhanced in value thereby.

With one thousand acres of fairly good land located anywhere in the rainbelt (where a reasonable amount of moisture is available) we should plant at least nine hundred of it in Catalpa trees in preference to any other crop we know of. And I question whether we would not after-

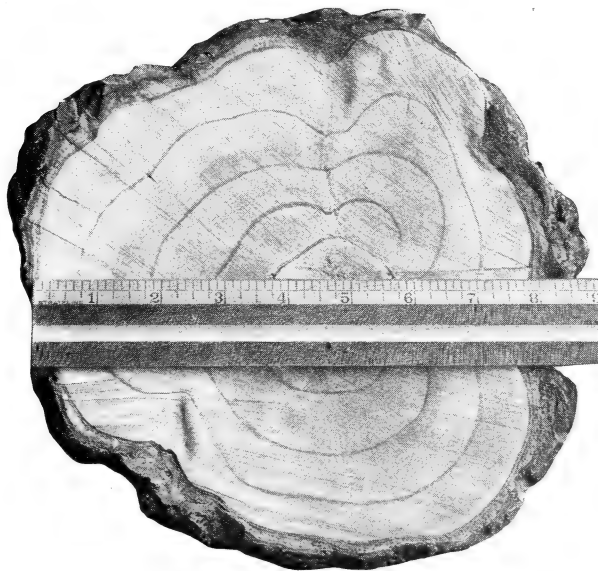
ward plant the remaining hundred acres to Catalpa also.

A poor soil, or deficient water supply will result in disappointment to the planter of Catalpas. We have every reason to believe that Catalpa growing will be more profitable in the future than it has been in the past 20 years."

O. M. Morris, horticulturist of the Oklahoma Experiment Station, is enthusiastic over the possibilities for Catalpa in that state. In Bulletin No. 73 of that station, he makes these statements:

**Oklahoma
Enthusiastic
Over Catalpa**

"Catalpa Speciosa is the variety of Catalpa that should always be selected for general planting. It is sometimes difficult to obtain, but the other varieties are not suitable for general planting. This tree grows rapidly and often attains a height of 60 feet and a trunk diameter of 3 feet. It grows best on deep rich soil. It sprouts well from the stump when the trees are cut in the winter and the second growth makes a tall, straight, central trunk of much better form than the first growth. The wood is light, and extremely durable when placed in contact with the soil. It is considered first class for posts and fence material. The Catalpa and Black Locust are the best trees that can be grown in Oklahoma for the purpose of producing post timber."



CROSS SECTION OF FIVE YEAR OLD SPECIOSA CATALPA

Showing eight inches growth in five years. Grown in Stafford county, Kansas, by C. W. Delker. © They will grow just as fast for you on good land.

PROFITS IN CATALPA FARMING



TWO YEAR OLD SPECIOSA CATALPA.
Our Kansas Plantation.

This picture was taken in our Catalpa Plantation in Montgomery County, just one year after the picture shown on page twenty-six. These trees were planted on overflow ground considered worthless for farm crops, and have been under ten feet of water for several days time. Many of the trees are twenty-five feet high and four inches in diameter.



How and Where to Grow Catalpa

We can do no better than to quote John P. Brown, perhaps the foremost authority on Catalpa growing in America: "There is no record in the history of any tree, which has an adaptability to so universal a range of soil, climate and locality as Catalpa Speciosa. **Soils Suited for Catalpa**

"At 44 degrees North Latitude in Maine, and at 20 degrees North Latitude in Mexico the trees are doing well. Experiments have been made upon every variety of soil; on mountain lands of Pennsylvania, throughout the southern portion of Michigan, in the pure sands of Florida, and in numerous other localities. There is no other tree in the world that has proven to be so cosmopolitan as the Catalpa."

It has been grown most extensively in Indiana, Kentucky, Nebraska, Oklahoma, Illinois, Missouri, Kansas and Iowa. The tree will succeed on an average rainfall of 20 inches annually, but it has the advantage over other farm crops in being able to live over a dry year, holding the growth made and forging ahead again as soon as moisture comes.

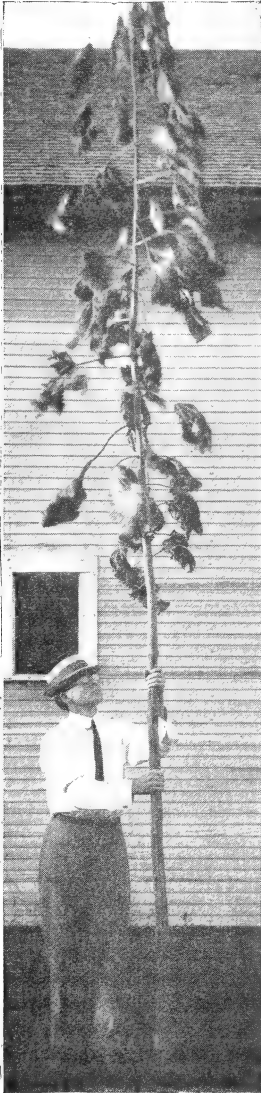
The Catalpa flourishes on a great variety of soils, growing well in clay, sand and limestone soils. Its roots find abundant nourishment in sandy loam and even in pure sand. There are hundreds of acres of sub-irrigated sandy land in the great plains region, where Catalpa will thrive. Being a deep feeding tree the roots will quickly penetrate to moisture. The soil is enriched each year by the added leaf mold.

The Catalpa will thrive on any soil that will grow corn. The soil needs of the two seem to be identical in many ways, although Catalpa succeeds on soil so sandy that other crops prove failures. The tree is least adapted to heavy gumbo, but will penetrate it if the strata is not too deep. Early growth will be slow on this kind of soil.

One of the great problems in farming in the Middle West is the proper utilization of bottom lands subject to overflow. Catalpa growing will solve this problem as nothing else can or will. The rich, black soil of overflow land is just what is needed to make Catalpas thrive. High water will not hurt them even if covered completely, if not for too long a time. An instance is on record in Oklahoma where a grove of Catalpa trees was under water for five days without injury. Turn to the illustrations of groves shown on pages 26 and 28. These were planted on overflow land that had been abandoned for farm crops. **Goldmine for Overflow Land**

PROFITS IN CATALPA FARMING

**Floods
Do Not
Injure
Trees**



ONE YEAR GROWTH CATALPA

**Hold Soil
From Washing**

**Low Land
Desirable**

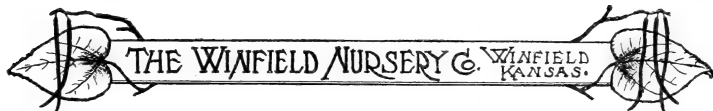
On page 28 we show a picture of our Kansas plantation of Catalpa 2-year old from cutting back, yet large enough to yield an average of one post per tree. These two year old Speciosa Catalpa are growing on ground that was abandoned for farm crops. Such sites are ideal for the Hardy Catalpa. The ground on which these are growing is not over fifteen feet above the normal water level and is frequently under ten feet of water in time of floods.

Besides growing into money, the trees will hold the rich soil from being carried away as silt after each overflow. More than that, the trees and vegetation beneath will catch and hold a rich deposit of soil after the water recedes. Many landowners who have streams running through their lands, skirted by timber growths, are finding it profitable to cut away the native timber and plant Catalpa in their place. There is little increase or profit in leaving a scrubby growth of native timber in possession of the best soil on the place that would otherwise grow into a valuable crop of posts, poles, and fuel in 6 to 15 years.

In the "Mail and Breeze" of April 20, 1912, Mr. Scott has an article speaking further along this line. We quote it in part:

"During the present season I have received inquiries about the advisability of planting Catalpa on low land, especially on cleared timber land along creeks and rivers. Such locations are the most desirable that can be found for the Catalpa, as it is a tree that naturally grows on deep rich soil and it is not injured by occasional floodings.

A grove of 27-year-old Catalpa trees on George Newcomb's farm in Washington County, Kansas, is growing on



ground not more than 6 or 8 feet above the water level in the creek that surrounds three sides of the plantation. It is not uncommon for the ground in this grove to be flooded with from 3 to 6 feet of water several times a year. However, as they are along the creek, the water seldom stands on the ground more than a few hours at the most. The trees in this plantation range from 6 to 16 inches in diameter. The tallest of them are from 45 to 50 feet in height. Many of them will cut poles clear of objectionable limbs from 24 to 32 feet in length with 4 inch tops."

**50-Foot
Trees on
Creek Bottom**

Were the banks and valleys of our western streams protected by timber trees there would be far less danger of floods and the fertile settlements washed from our soil would not be carried away to build up the delta of the Mississippi river in the Gulf of Mexico.

**Protect
River Banks**

On almost every farm is more or less waste land because of the difficulty of getting at it for cultivation and cropping. There are many small nooks, fence corners, and strips that contain the best of soil but under present conditions are worse than useless because of the weeds grown there that befoul the whole farm. In nearly all cases this waste land could be profitably planted to Catalpa trees for posts and fuel. Two or three years would place the trees where they could take care of themselves with very little expense to the land-owner and it would surprise the average farmer how small an area would supply the needs of the farm in posts and firewood.

**Plant the
Fence
Corners**

Planting, Care, and Cultivation

Catalpa may be planted either in the fall or spring. In open climates where the seedlings may be handled without danger of freezing, they can be safely planted during the winter months. In the latitude of Oklahoma and Kansas, the planting season will usually range from Nov. 1st to May 1st. Some of our customers have planted successfully as late as the middle of June, but where planting is done in the spring, the seedlings should be set as early as possible. Fall planting is not advisable when the ground is excessively dry.

**When to
Plant**

Rows and trees should be spaced fairly close, as this condition forces the trees to grow into tall, straight trunks so much desired. Spaced too far apart, the trees will develop heavy side branches. A short trunk will be the result, most of the tree's energy going into branches. If wanted for shade or shelter-belts, such a planting would be more desirable. It is a good plan to take pains and make the spacing even, as this will aid in cultivation.

**Planting
Distance**



PROFITS IN CATALPA FARMING

Planting Distance

The most satisfactory planting distances are given in the following table. For rich and medium soils we would recommend the first plan. The others proportionately as to the capacity of the soil to support them:

- 4 feet by 7 feet, 1555 trees per acre.
- 4 feet by 8 feet, 1360 trees per acre.
- 5 feet by 7 feet, 1244 trees per acre.
- 5 feet by 8 feet, 1080 trees per acre.

Some of the most successful Catalpa growers very strongly advocate planting:

- 4 feet by 4 feet, 2722 trees per acre.
- 3 feet by 6 feet, 2420 trees per acre.

This crowding of trees will induce what is known as self-pruning or the removal by nature of the side branches as the tree grows taller. The fall and winter will provide a mulch on the ground, which, together with the shade, will help to prevent weed growth, retain moisture, and enable the grove to care for itself at an earlier age. For poles and larger timber, we believe bigger profits can be made by planting 4x8 feet and cultivating the ground longer before laying by.

Caring for Seedlings

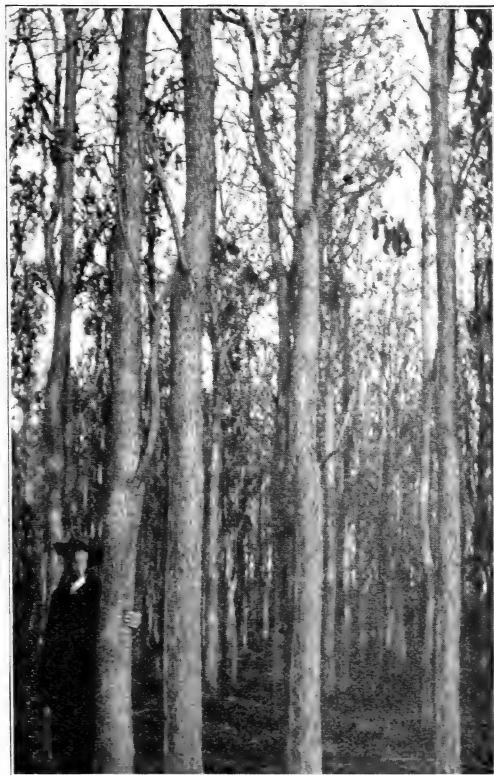
Should the trees arrive from the nursery before the ground is ready for planting, they may be kept in a cool cave or cellar just as packed in the boxes for a week or ten days. Should you wish to hold them longer heel in as follows: Dig a trench on well drained ground, wide enough to receive the roots, throwing the dirt to the south for the first row of trees to rest on. Moisten the roots, place a row of seedlings in the trench sloping against the south side, work soil in among the roots, and cover this layer completely. Add a second layer of trees and so on, until the entire number are disposed of.

How to Plant

Soil for a Catalpa plantation should be plowed and prepared in much the same way as for any farm crop. Planted in well prepared soil and given thorough cultivation the trees will make a growth of from 3 to 6 ft. the first summer. Cross-mark the plot for planting distances desired. Do not expose the seedlings to the sun or drying winds at any time and keep the roots covered with wet chaff or straw while waiting to be planted. It is also a good plan to wet the roots just before putting the seedlings in the ground.

Before planting trim off the roots with a knife, sharp spade or cutting box, which permits planting seedlings at proper depth without twisting roots. Well pulverized ground, thoroughly prepared to a good depth, makes very easy work of actual planting. In setting a small grove the following is a good method: Thrust the

spade into the ground the full depth, push forward and insert the seedling behind the spade, leaving it about three inches deeper than it set in the nursery. Put the spade down again about four inches from the first opening, then press the earth over firmly against the roots, finish by covering the second hole with foot or spade. **Careful Planting Necessary to Success**



CATALPA GROVE IN WASHINGTON COUNTY, KANSAS

In which every tree will cut a 24-foot telephone pole. Located on George Newcome's farm. For further description see page 33.

In planting a large grove mark the ground both ways at proper distances with a convenient marker, then open up the rows one way with a lister. Have one man drop the plants just ahead of the planter, who can follow, placing the plants at proper depth, and



PROFITS IN CATALPA FARMING.

Perfect Stands from Winfield Plants raking in pulverized soil with the feet, leaving the plant firmly set. Finish the work promptly by following with a cultivator. Successful planting can be done rapidly and at small cost, if you have a foreman who will carefully follow these instructions.

When you see the great root system of our pure Speciosa Catalpa plants, observe our manner of packing and shipping, and add to this the careful planting methods used by our customers, you can easily see how they secure such perfect stands. The following letter from R. E. Frazier, an extensive Catalpa grower of Butler County, Kansas, is one of many similar letters which we have on file:

"The Catalpa Speciosa which I purchased from you last spring have made a very satisfactory growth, attained an average height of five or six feet.

Of this 50,000 trees planted, I believe there are not to exceed a dozen dead ones, due largely to the fact that the trees furnished me were of exceptionally fine quality and were delivered in perfect condition.

The service I had from your company and from your representative who had charge of the planting was most satisfactory."—R. E. Frazier.

Importance of Cultivation

Success in Catalpa growing depends in a large degree, upon the care the Catalpa receives after planting. Cultivation is just as necessary during the first few years as with any other crop. Stir the soil frequently and keep the ground free from weeds. With everything else in their favor, many amateur planters have greatly lessened the chance of good returns by allowing grass and weeds to take possession of the plantation.

Other Crops Between Rows

Other cultivated crops may be grown profitably between the rows while the trees are small. This insures the ground being kept clean besides bringing in a return while the trees are growing up. Corn, potatoes, and root crops are most frequently grown.

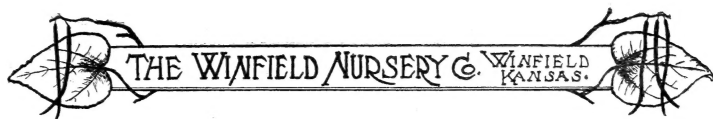
In from three to four years the trees will take care of themselves without further cultivation. At that age, the shade will be dense enough to keep down the weeds and grass. Little care will be required from that time on until the timber is ready to harvest.

Injury from Rabbits

Rabbits often attack the young trees the first year, but do no serious injury as the trees are cut to the ground the next year. They will do less damage the second year on account of the thickened bark of the new growth. Any trees that are badly knawed the second year, should again be cut to the ground. With our one hundred and twenty acres, we have found this method cheaper than using washes on a tree. The cleaner you keep your grove, the less trouble you will have with rabbits.

Object of Pruning

Quoting from Bulletin No. 204 of the Ohio Experiment Station: "Methods must necessarily vary, according to the products and pur-



poses for which the trees are intended. Lateral branches are necessary in order to obtain diameter growth, and the more leaf surface the tree has the faster it forms the diameter, which is just as essential as height growth. It is the ultimate aim in most cases to obtain a straight tree free from limbs, which is the ideal condition. This cannot be accomplished by too severe pruning at the start. The removal of all side branches will cause an increased height growth at the expense of diameter, thus the stem of the tree is not large enough to support a heavy crown, which is characteristic of the Catalpa. The result is a crooked and distorted tree and through the action of heavy wind and rain-storms the tops of the trees are liable to be broken off entirely. It is therefore better to remove the lower branches each year, allowing a goodly number to assist in forming the diameter or body of the tree."

To insure rapid growth and straight trunks, the trees should be cut back to the ground when one year old. This work is done in early spring, about March, after the frost is out of the ground and the sap has begun to start up in the tree. This can be done very rapidly with a large hawkbill-pruning knife, one man cutting back about two acres a day.

**Cutting Back
After
First
Year**

As soon as growth starts, each stump will send out a number of shoots. Rub or break off at once, while easily done, all but the strongest one. If this work is properly done, about twice the first of the year, it will save the expense of knife pruning. By the end of the first season, the sprouts will have grown from ten to fifteen feet. The sprouts that are broken or injured in such a way as to grow into undesirable trees, could again be cut to the ground. At the end of the second season after cutting, they will have gained all the growth lost and be larger than the original tree would have been if left standing.

February or March are the best months for cutting when a second crop is wanted, otherwise, fall or winter cutting is considered best as the work is not so pressing at that time and the wood will season a little better. After the first cutting of timber from a plantation, the sprouts left standing are often split from the stumps by storms. To prevent this, leave at least three or four rows of trees uncut along the edges of the grove to act as a wind-break. These are finally cut back at the end of two seasons when the young trees will be sufficiently large to resist the wind.

**Cutting
First Crop**

A low cut stump produces the best sprouts and these should be thinned down to one stocky shoot on each stump just as was done in cutting back. After a second thinning in a week or two for the

Seasoning



PROFITS IN CATALPA FARMING.

A Perpetual Forest

purpose of removing new shoots, the new growth will need a little attention until the next post harvest.

Lumber of every sort requires thorough seasoning to give satisfactory results. Don't set a green Catalpa post in the ground and expect it to last 50 years. A well seasoned post will be far more resistant to decay and fungus attacks when in contact with the soil. From 6 to 9 months will be required to thoroughly air-dry posts and poles, this depending upon the season and size of posts. Pile in open ricks for proper drying.

A catalpa forest once planted becomes perpetual. This fact combined with other advantages, makes it an ideal investment. After the first harvest is made, the second growth starts rapidly from the old stump with its well established roots. The second crop of trees will require much less care than the first planting, will be straighter, have fewer limbs, and will be ready for harvest in two-thirds of the time. The Speciosa Catalpa thus renews itself after each cutting, every crop growing quicker and being more valuable than the previous one.

What the Best Authorities Say

Prof. Wm. L. Hall, U. S. Dep't of Agriculture:—"The Hardy Catalpa has been more abundantly planted as a post timber than any other tree. If to its durability we add its rapid growth, good form, lightness, strength, elasticity, immunity from checking or becoming unduly hard we have an array of good qualities that to men of experience place it first among post timbers."

Ohio Agricultural Experiment Station:—"Catalpa Speciosa is the only Catalpa which can be planted with profit, and it is on suitable soil, the most profitable tree to grow for post timber."

John A. Warder, Former President U. S. Horticultural Society:—"I wish myself a young man again that I might plant a quarter section in Catalpas."

John P. Brown, Leading Authority on Catalpa Growing:—"With the true Catalpa Speciosa stock planted properly and cultivated, there is no possibility of failure."

W. G. M. Stone, Former President Colorado Forestry Assn:—"Its durability (Catalpa wood) seems to be beyond question. Its texture is capable of a beautiful polish, sufficient to gladden the eye of the cabinet maker and satisfy the most fastidious taste for the elegant in furniture."

About Ordering Your Plants

If a man should attempt to sell you Cottonwood posts for Oak, you would at once discover the deception by the appearance of the wood. Buying Catalpa seedlings is different, the valuable and the worthless look alike at planting time. That's why so many worthless plants have been sold as genuine Speciosa, resulting only in loss and disappointment to the planter. That's why you should demand positive proof and a guarantee that the plants offered are the genuine Speciosa Catalpa, before placing your order.

For fifteen years we have made a specialty of the Speciosa Catalpa, having sold more plants than any other firm in this country, and are today the largest growers in America.

Our seed is gathered at great expense by experts from pure Speciosa Catalpa trees planted by nature in the lower Wabash Valley, the home of Speciosa Catalpa. There is no common Catalpa in this section, so hybridization is impossible.

For further protection, a sample of our seed is submitted each season to the U. S. Department of Agriculture for their certificate of purity. One of their letters is reproduced on this page.

A Real Guarantee

We guarantee our Speciosa Catalpa plants are grown from pure Speciosa Catalpa seed, gathered from select trees. Should any plants not prove genuine, we will refund **five times the purchase price**.

We guarantee our stock to reach you in good growing condition. Shipments lost or damaged in transit will be replaced immediately without extra charge.

Prices

	100	1000
8 to 12 in. Speciosa Catalpa	\$1.00	\$ 6.00
12 to 24 in. " "	1.50	12.00
2 to 3 ft. " "	2.00	16.00
500 or more at 1000 rate. Freight paid on orders of \$10.00 or more.		

Certificate of Purity

U. S. Department of Agriculture
Forest Service
Washington, D. C.

The Winfield Nursery Company,
Winfield, Kansas.

Dear Sirs—Your communication of Jan. 27, has come to this office, together with the sample of seed sent for identification. The seed is genuine Hardy Catalpa, Catalpa Speciosa and of the most typical form.

I shall be very glad to identify Catalpa and other tree seeds, whenever you may desire to send them. The Forest Service is particularly anxious to be as helpful as possible to tree planters in enabling them to get tree seeds true to name. We find that both seed dealers and tree planters are having much difficulty in getting genuine Hardy Catalpa seed. The market supply, unknown to dealers and frequently to collectors, is very likely to be a mixture of from two to three different species of catalpa seed. As a help to the trade and tree planters, an illustrated publication is being prepared, and I hope it will be of assistance in helping users of catalpa seed to distinguish the different species and varieties.

Yours truly,

Geo. B. Sudworth, Dendrologist.

