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HOW TO PLANT IT
 TO GROW IT
 TO BUY IT
 ILLUSTRATED

G.M. BACON PECAN GROVES
 INCORPORATED

DE WITT
 GEORGIA



No new varieties

THE PECAN TREE

HOW TO PLANT IT
HOW TO GROW IT
HOW TO BUY IT
I L L U S T R A T E D

A Comprehensive Treatise Upon
PECAN CULTURE

SIXTH EDITION

OFFICERS

G. M. BACON, President R. J. BACON, Vice-President
C. D. MALLARY, Sec'y & Treas.

G. M. BACON PECAN GROVES, Inc.
SUCCESSORS TO
THE G. M. BACON PECAN COMPANY, Inc.
DEWITT, MITCHELL COUNTY, GEORGIA

G.M. Bacon  Pecan Groves

INCORPORATED



UNITED STATES OF AMERICA
 UNIVERSAL EXPOSITION SAINT LOUIS MDCCCIV
 COMMEMORATING THE ACQUISITION OF THE LOUISIANA TERRITORY
 THE INTERNATIONAL JURY OF AWARDS HAS CONFERRED A
 SILVER MEDAL
 UPON
 THE G.M. BACON PECAN COMPANY INCORPORATED
 PECAN TREES

W. D. Hoagland
 DIRECTOR OF EXHIBITS

Frederic W. Taylor
 CHIEF OF DEPARTMENT OF SERVICES

David Robinson PRESIDENT
 LOUISIANA PURCHASE EXPOSITION COMPANY

Walter B. Oliver
 SECRETARY

Grand Prize awarded The G. M. Bacon Pecan Groves, Inc.,
 St. Louis Exposition, 1914



Mr. G. M. Bacon and Granddaughter, "Roxana"

(*Hicoria Pecan* (Marsh), Britton; *Carya olivaeformis*, Nuttall.)

Introductory.—In issuing this, the sixth edition of “The Pecan Tree. How to Plant It, How to Grow It, How to Buy It,” it is done with the knowledge that the last five editions have been received with much favor, and that many unsolicited commendations from prominent growers, Government and State officials, have reached us.

The large growth of our business, and the great demand for the five previous editions, also affords confirmatory evidence of the value of the work.

The Pecan a Specialty.—By making a single specialty of the Pecan, and with our large acreage and long experience with Pecans, we are in a better position to serve and advise our customers than if we were engaged in a general nursery business and treated the Pecan as a subordinate or side issue.

It is our hope that the statements contained in the following pages will assist growers and prospective growers in the proper planting, culture and development of highly profitable Pecan orchards.

Gold Medal for Pecans.—We were awarded a diploma and gold medal for our exhibit of Pecans at the Louisiana Purchase Exposition, held at St. Louis, in 1904. We also received the only medal and diploma awarded specifically for growing Pecan trees planted on the Exposition grounds. We were also awarded the gold medal at Jamestown Exposition, 1909.

Location.—Our Pecan groves and nurseries (over 600 acres), are located at Dewitt, Mitchell County, Georgia, twelve miles south of Albany, Georgia, on the Albany and Thomasville Division of the Atlantic Coast Line Railway.

Two passenger trains each way daily afford visitors convenient means of visiting us.

Our offices are connected with both local and long-distance telephones, and we have arrangements with both the Western Union and the Postal Telegraph Companies for the prompt forwarding of telegrams by telephone from Albany, Georgia.

Descriptive.—Botanically, the Pecan belongs to the order Juglandaceae (Walnut family), Genus *Hicoria* (Hickory), to which genus also belong the various species of the common hickory, the shellbarks, pig nuts.

Of this genus (*Hicoria*), the Pecan (*Hicoria Pecan*), is by far of the greatest pomological importance.

A Handsome Tree.—The Pecan grows to a large, stately tree, eventually attaining a height of one hundred and fifty feet and over, with spreading branches and symmetrical top. Being a deciduous tree, it loses its foliage in late autumn, but furnishes an abundant shade during the warm summer months.

Range of Culture.—The Twelfth Census reported bearing Pecan trees in twenty-two States. The next census will doubtless report bearing Pecans in several more States. In a general way it can be said that the Pecan may be planted wherever cotton is grown, some Pecans are, however, being produced in States north and west of the cotton belt, including Illinois, Indiana and California. The Pecan is the only nut capable of successful culture over such a vast area of country, and it is for this reason that in a bulletin issued by the Government in 1896, it is said “the Pecan is probably destined to become the leading nut of the American market,” and that “if its culture is pushed with the usual skill and energy of American enterprise, there is every reason to believe that it will not be many years that the Pecan will become not only an abundant nut in our markets, but also an important article of export.” In the past few years we have shipped Pecan trees to thirty States and Territories, including Indian Territory, Oregon and New Mexico. Our trees or nuts have also been sent to Europe, Mexico, Canada, Australia, Hawaiian and Philippine Islands, and South America, while inquiries have reached us from British possessions in South Africa.

An Important Industry.—More intelligent attention is being given each year to the planting and cultivation of the Pecan. The permanent and increasing annual value of the tree is being realized. Experimental stages have been passed, and the outlook for the industry is brighter than ever. The demand for fine nuts for table and confectionery purposes is constant, and the supply is entirely inadequate. The industry, so far as the better nuts is concerned, is in its smallest infancy. The large nut meat manufacturers of New York, St. Louis and San Antonio, Texas, advise that the demand for shelled Pecans is constantly on the increase.

Soils.—Pecan trees have been planted on rich river bottoms, on stiff red clay, on deep sand hills, on pebbly soil, on sandy loam underlaid with clay, as well as on stiff, hard soil, largely fire and pipe clay (which cracks and bakes in dry weather). Soils continuously boggy or springy should be avoided, unless well drained. Occasional overflows do not hurt the Pecan. Many of our trees are subject to the overflow of the Flint River, and although they have stood several feet in the water for days and weeks at a time, they are as vigorous and as healthy as others. The wild Pecan trees of Texas are also found along rivers subject to overflow, the nuts, no doubt, being carried by freshets and deposited on overflowed land. For this reason the fact that wild Pecans have usually been found on river bottoms gives rise for the wrong impression that they will only succeed on bottom lands. Nuts are often carried by birds and squirrels far away from the river bottoms, and many magnificent wild trees exist on the uplands. Soil is not the most important factor in a successful Pecan orchard, but good trees and varieties, properly planted and well cared for.

Transplanting.—The Pecan is a very hardy tree, is easily transplanted, and adapts itself to both very variable soil and climatic conditions. Where trees are planted on land with a very wet subsoil, the tap-root ceases to grow after reaching a stratum where there is a sufficient supply of water; on the other hand, new tap-roots quickly form where more moisture is needed. There should be good surface drainage.

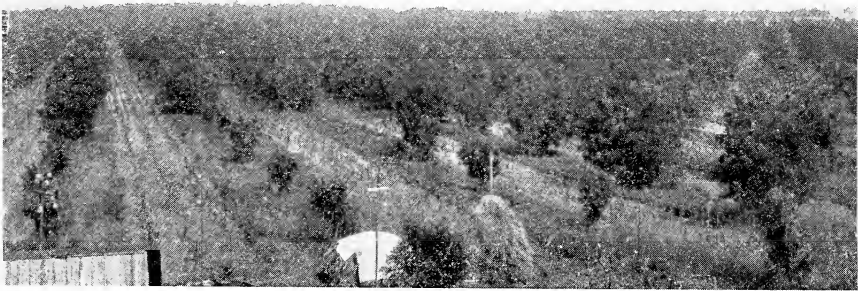
Quality of Nuts.—There is a great difference in the quality and market value of Pecan nuts. Some are small, thick-shelled and of poor quality. The best nuts are of medium to large size, with thin shells, well filled, of good keeping qualities, and delicious flavor.

Varieties.—Great care is necessary in the selection of varieties. In planting a Pecan grove it is not advisable to have only one variety,

for the following reasons: The staminate (male) bloom which furnishes the pollen is produced on the wood of the previous season's growth, and at the point from where the new growth starts; the pistillate (female) bloom, from which the nut is formed, is produced on the end of the new growth when it has grown from three to ten inches and over. It will occasionally happen that the staminate bloom (catkins) mature and release their pollen before the female bloom is sufficiently developed to be pollinated, or heavy rains may wash the pollen from the catkins at a time when pistillate bloom is in a receptive condition. Without pollination, the female



Young Orchard in Corn



Pecan Grove with Corn Placed Between Rows

bloom withers and dies, or produces nuts without meat, or only partially filled. Potent pollen is essential in a nut or fruit orchard. With several varieties a more constant supply of pollen will be available. The pollen of Pecans is a yellow, fine, dust-like substance, and capable of being carried by air currents a very great distance. Insects also are factors in the pollination of Pecan blooms. Potent pollen from one Pecan is fully as efficacious in fertilizing the blooms of another Pecan as it is its own, and this susceptibility results in lack of certainty of a seedling tree reproducing identically the seed (nut) from which it is grown. The effect of cross-pollination, where it occurs, does not necessarily affect the form or shape of the first generation (the nut we aim to produce to sell), but the next generation. It may be better or inferior, for there is no telling what took place at the time of impregnation. In our long experience, we do not know of a single instance of a Pecan perfectly reproducing itself from seed, and in only the rarest instances is there any improvement.

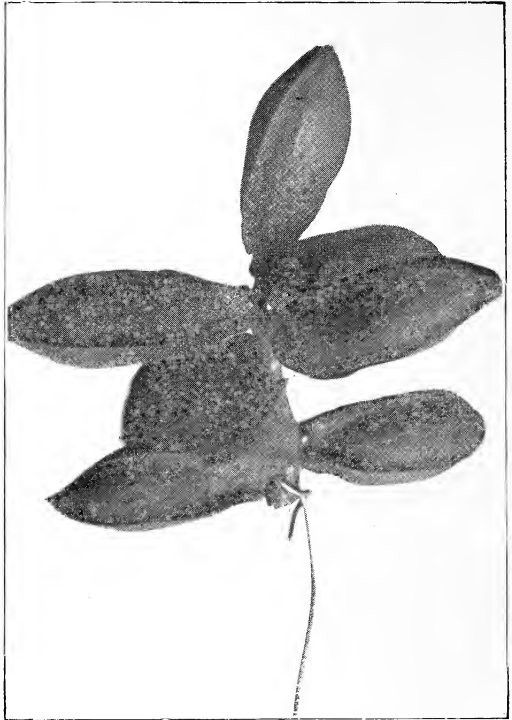
Ornamental, as Well as Valuable.—We can not too earnestly recommend the planting of the Pecan for shade and ornamental purposes in the South, instead of oaks, poplars, sycamores, elms, maples, etc. The root system of the Pecan permits the planting of crops, truck, flowers, etc., within a few feet of it, without filling up the surrounding surface soil with fibrous roots in which nothing will flourish, as is usually the case with the other trees mentioned. The Pecan is superior to all these. Two or three Pecan trees, even one tree, will in a few years yield revenue enough to pay taxes on a very valuable city

lot. For this purpose, we always keep a limited number of extra large four and five-year-old trees, running from eight to twelve feet high, on hand, and are prepared to quote prices on these extra large trees. They are ideal for planting on lots, streets and around residences, where both quick shade and early bearing are desired. These large trees should be properly trimmed by us before shipping, and if so instructed, we do this, as our customers' interests are our own, and we wish every tree sent out, to live, grow vigorously and bear early.

Age of Bearing.—The subject of age of bearing is more fully discussed under Profits, Budding and Grafting. The most impossible stories are told by irresponsible and dishonest dealers upon this subject, many seedling trees having been guaranteed to bear in two years and to come true to seed. It is not an uncommon occurrence for budded and grafted trees to begin to bear at three to five years, and we have many which have borne fair crops of nuts at six years. If Pecans reproduced themselves from seed, there would be no need for their propagation by budding and grafting.

World Market.—The Pecan in Europe is practically unknown, but our many friends there who have distributed the large, thin-shelled varieties, say that an unlimited market is open as soon as nuts in sufficient quantities can be supplied. It forces the conclusion that those now going into the industry will reap large rewards. The prediction that the fine Pecans will eventually supersede the English walnut is made by many competent judges.

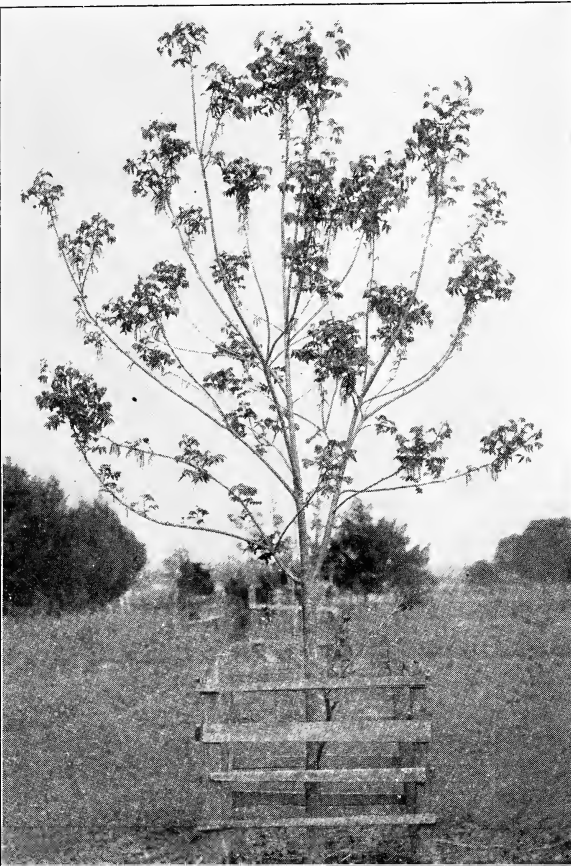
What Dealers Say.—We quote the language of a firm of brokers, importers and exporters of Duluth, Minn. (The Louis M. Park Co.),



Cluster of Nuts

to whom we sent samples of several varieties of Pecan nuts in May, 1906. They say:

"We duly received yours of the 20th ult., and the samples of the new kind of Pecans which you are growing. We showed these to each one of our buyers here and allowed them to try one. It is the universal opinion that this is the greatest product in the nut line that has ever been produced. Buyers predict that this nut will displace, to a large extent, every other nut on the market, and for shelling purposes they will be universally used. You certainly have a great product. The demand will be unprecedented in the history of the nut business."



Heavy Blooming Four-Year-Old Budded Pecan Tree, the Pendulous Tassels Along the Twigs and Branches Are the Male (Staminate) Blooms

The better varieties of Pecan nuts almost universally cause comment of this nature from persons who have only been familiar with the ordinary commercial nuts. It is safe to say that when these fine nuts are produced in sufficient quantities to find their way to the general markets there will be 100 persons eating Pecans to one now.

Nut Oil.—In 1901, 365,747 gallons of nut oil were imported, valued at ports of entry in the sum of \$169,892. In 1902, 405,021 gallons were imported, valued at \$177,145. The increase has steadily continued. All varieties of Pecans contain a rich, delicate and nutri-

tious oil in profitable quantities, but some varieties contain much more than others. To demonstrate the richness in oil of the Pecan, we suggest that a kernel be placed upon a piece of wire and lighted. The kernel of one good Pecan will burn brightly for from five to ten minutes.

The various nut oils, which are practically pure fats, have a very high fuel value, and, like olive oil and other oils, may constitute an important energy yielding constituent of the diet. Of the various nuts shown in the table on page 12, the richest in fat is the Pecan, with an average of 70.7 per cent.

Composition of Nuts.—The composition of nuts and nut products has been studied at a number of the Agricultural Experiment Stations, notably California, Maine and Iowa, and the table on page 12 summarizes the result of the work so far as some of the better known sorts of nuts are concerned. For purposes of comparison, several other common food materials are included. Nuts are, comparatively speaking, well supplied with mineral matter, this constituent in the majority of nuts exceeding 2 per cent. The constantly increasing consumption of nuts throughout the United States augurs well for a better appreciation of their food value.



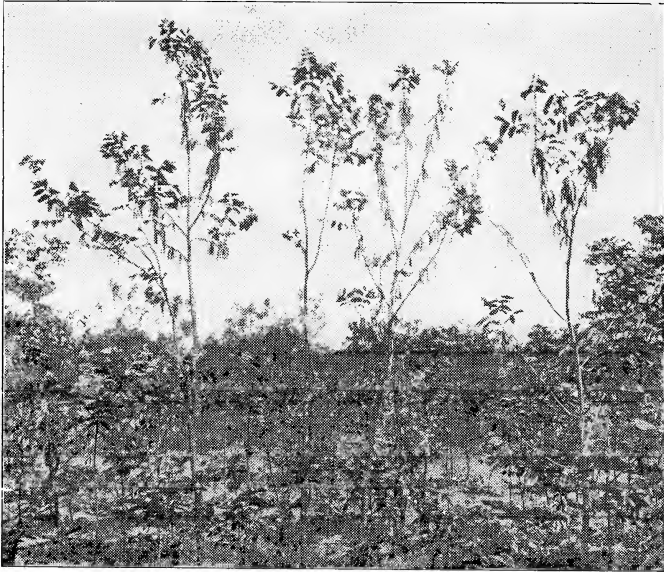
A Thriving Specimen



Budded on Three-Year-Old Stock
Bore in Two Years

Average Composition of Some Nuts and Other Foods.
(United States Year Book, 1906.)

Kind of Food	EDIBLE PORTION							Ash	Fuel Value per lb.
	Refuse	Water	Protein	Fat	Carbohydrates Sugar, Starch, etc.	Crude Fiber			
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	
Almonds	47.00	4.9	21.4	54.4	13.8	3.0	2.5	2,895	
Brazil nuts	49.35	4.7	17.4	65.0	5.7	3.9	3.3	3,120	
Filberts	52.08	5.4	16.5	64.0		11.7	2.4	3,100	
Hickory nuts	62.20	3.7	15.4	67.4		11.4	2.1	3,345	
PECANS	50.10	3.4	12.1	70.7	8.5	3.7	1.6	3,300	
English walnuts	58.80	3.4	18.2	60.7	13.7	2.3	1.7	3,075	
Chestnuts, fresh	15.70	43.4	6.4	6.0	41.3	1.5	1.4	1,140	
Chestnuts, dried	23.40	6.1	10.7	7.8	70.1	2.9	2.4	1,840	
Acorns, fresh	17.80	34.7	4.4	4.7	50.4	4.2	1.6	1,265	
Beechnuts	36.90	6.6	21.8	49.9		18.0	3.7	2,740	
Butternuts	86.40	4.5	27.9	61.2		3.4	3.0	3,370	
Cocoanuts	34.66	13.0	6.6	56.2	13.7	8.9	1.6	2,805	
Cocoanuts, dessicated		3.5	6.3	57.4		31.5	1.3	3,125	
Pistachio		4.2	22.6	54.5		15.6	3.1	3,250	
Pinenut or pinion, (shelled)		6.2	33.9	48.2	6.5	1.4	3.8	2,710	
Peanuts	27.04	7.4	29.8	43.5	14.7	2.4	2.2	2,610	
Litchi nuts	41.60	16.4	2.9	.8		78.0	1.9	1,510	
Meat—Round Steak		65.5	19.8	13.6			1.1	950	
Wheat Flour—High Grade		12.0	11.4	1.0	74.8	.3	.5	1,650	
Potatoes	20.00	78.3	2.2	.1	18.0	.4	1.0	385	
Cheese, cheddar		27.4	27.7	36.8	4.1		4.0	2,145	
Eggs, boiled	11.20	65.0	12.4	10.7			.7	680	
White bread		35.3	9.2	1.3	52.6	.5	1.1	1,215	
Beans, dried		12.6	22.5	1.8	55.2	4.4	3.5	1,605	
Apples	25.00	84.6	.4	.5	13.0	1.2	.3	290	
Raisins	10.00	14.6	2.6	3.3	73.6	2.5	3.4	1,605	



View in Nursery—Showing Four-Year Trees Blooming Profusely

Profits.—The profit in Pecan growing depends almost entirely upon the kind of Pecan trees planted and the care taken of them. The Pecan is a tree which responds readily to cultivation, and to get the best results it should be treated as a fruit tree, at least during its earlier years. Many customers to whom we sold trees in 1903 and 1904 report them bearing in 1906, some trees with as high as fifty nuts. Many business and professional men, both North and South, are investing in Pecans. This Company would not have planted so large an acreage without the fullest confidence in the extreme value of the Pecan as a profitable and permanent investment.

It is as easy to raise the fine varieties as the common nuts. The bearing of seedling trees is so variable that the yields of seedling groves of to-day are absolutely no criterion to go by, but when, by selection of varieties, groves of early and large thin-shelled varieties can now be planted, it will quickly be seen that the average yields and profits of the future must be enormously greater. A careful writer succinctly states the matter in the following language: "The value of a single Pecan tree of the common choice varieties may be reckoned at ten times the value of its annual yield. The small average crop of ten pounds per tree, with selling price of ten cents per pound, a crop and price a very ordinary seedling can make, shows \$1.00 per tree per year, and would undoubtedly show an investment value of

\$10.00. But take a budded or grafted tree yielding 100 pounds, which sell for twenty-five cents per pound, and we have \$25.00 for a single crop, showing an investment value of \$250 per tree, or \$5,000 per acre, with twenty trees in that area. If this calculation is not correct, we will be obliged to the person who can show the error."

The planting of budded and grafted trees is a matter of comparatively recent years and none have yet reached their maximum productiveness, both on account of age and as so few persons have given them the care they deserve. Since, however, large commercial orchards are now being planted by experienced horticulturists and others, we may look for maximum results in the future.

Pecans and Peaches.—The planting of Pecan trees in conjunction with peaches is an excellent one. Before the early-bearing peach trees have outlived their usefulness (eight to twelve years), the Pecan trees will be furnishing profitable and permanent crops. In the meantime peaches will give an income while the Pecans are coming into bearing. The necessary cultivation of peach trees is ideal for the Pecan. We expect to see all peach orchards thus utilized.

Inquiries.—We receive numerous inquiries regarding the setting out, care and cultivation of Pecan groves. As we give our personal attention to all the details of propagation, packing, shipping, etc., we find it impossible to always answer such inquiries by letter as fully or as promptly as we would like, and we have, therefore, embraced herein practically all the main and material points, including the selection of trees, their planting, fertilization and subsequent



Budded Tree—Showing Union of Bud with Seedling Stock

cultivation. If, however, there is anything you wish to know not contained herein, kindly write us about it, and we will take pleasure in advising you at the earliest moment. Do not be disappointed if you do not hear from us by "return mail."

Plant Trees.—We have planted nuts where we wanted permanent trees, but have entirely abandoned that method, finding that transplanting from a nursery is far preferable. When others have contended with the same difficulties we have, in the shape of field mice, squirrels, moles, salamanders, pigs, wood lice, ants, etc., and find themselves (after yearly replanting for five or six years) with a grove (?) of trees running from ten inches to twenty feet high, they will come to the same conclusion. Buy trees from a reliable grower rather than to try, without any experience, to raise your own trees and subsequently bud and graft them, with its attendant expense. When you consider the time spent in getting a grove started, the cost of seed, fertilizer, cultivation and percentage of losses in non-germination, you will readily see that it would have been better to have bought three or four-year-old budded or grafted trees all ready for planting, in the first place, and have a grove of trees uniform in size and age from the beginning. By no means every nut which germinates produces a vigorous tree, and we destroy many thousands of seedlings each year which do not indicate thrift and vigor.

Budded and Grafted Trees, Results the Same.—Between a budded and a grafted tree there is no difference, so far as results are concerned. A budded tree will bear as soon as a grafted tree, and vice versa. Grafting is done in the winter and spring months, while scions are perfectly dormant. Budding is done in the summer and fall by the annular, patch or veneer methods, at any time when bark will slip. The mechanical operations of grafting and budding are entirely different, but a budded tree is just as desirable as a grafted one. Owing to some growers being able to graft more successfully than bud, and vice versa, statements are made to the effect that "only budded trees" or "only grafted trees" should be planted! The statements are both unfair and unnecessarily perplex the investigator. Neither the grafting nor budding seasons are respectively long enough for extensive propagators like ourselves to get all their work



A Specimen Showing "How Trees Should Be Headed"

done, hence some trees being budded and others grafted. We reserve the right to ship either budded or grafted trees, according to our stock of each kind.

Budded and Grafted Trees Compared With Seedlings.—Grafted and budded trees have great advantages over seedlings because (1) they usually begin to bear much earlier than seedlings; (2) they reproduce the variety from which buds and grafts were taken; (3) the bearing characteristics of the variety is perpetuated; (4) greater value of the product and the uniformity of same; (5) no greater cost



Pecan Grove, Ideal Place for Poultry Business

of raising the trees; (6) less cost of gathering and marketing the nuts than with seedlings, as each variety can be gathered at one time and sold under its own name or brand.

Cost of Budded and Grafted Trees.—As a consequence of the variable success attending the propagation of Pecans by budding and grafting and the comparative slowness and expense of the processes as compared with the simpler propagation of peaches, plums, oranges, apples, etc., the trees must necessarily sell at a price which allows a margin to cover (1) great losses, frequently, in budding and grafting from unfavorable weather, such as prolonged drouths, or excessive rains; (2) sacrifice of nuts from bearing trees by the cutting therefrom

of scions or budding wood; (3) temporary disfigurement of seedling trees where grafts or buds fail to take; (4) the great care and attention necessary by the propagator the first season after the respective operations; (5) high cost of material and expert labor.

When to Plant.—In the Southern States Pecan trees may be set out any time after the leaves drop in the fall until generally the end of March.

Care of Trees Upon Arrival.—Upon arrival of shipment of trees, bundles or boxes should be opened, a sloping trench dug in a shady place, and roots and half the tops of trees laid therein at a slope; covering them very thoroughly with damp well pulverized earth and lightly watering to settle the earth. Trees may be kept in good condition several days this way. There must be good drainage, as

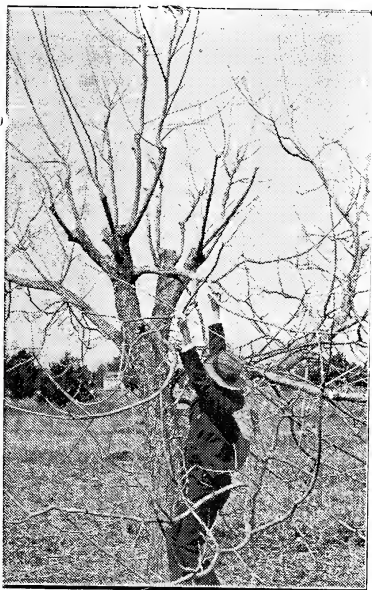


Winter in Pecan Grove—Shady in Summer; Sunshine in Winter

it will injure the trees for roots to remain in standing water. At no time must roots be allowed to dry out, although an excess of moisture is not necessary. If trees are frozen upon arrival, bury them entirely in cool, moist earth, or let them thaw slowly in a cool, damp cellar. If trees have dried out in transit, open the bundle and bury trees completely for a week or ten days, and they will usually resume a natural condition. Roots should be covered with wet sacking, wet hay or other material when taken out to field for planting. Many trees are lost and nurserymen consequently blamed on account of failure of the planter to take this precaution. By a process of our own we protect roots of trees before packing, thus reducing the danger from exposure and drying out to a minimum, but we advise our

customers to use every precaution to protect the roots of these valuable trees.

Note—We shipped one hundred Pecan trees to the Louisiana Purchase Exposition, St. Louis, 1904, which were planted on the Exposition grounds after a delay of many weeks. The package of trees arrived in St. Louis frozen in a solid mass, but by gradually thawing



Old Tree, Seedling, Partially Top Budded. Slow, Difficult and Expensive. Taken in 1905.



Same Tree, September, 1907. Fully Topworked and Bearing

them out, they recovered and were planted. This exhibit of growing Pecan trees was awarded a medal and diploma, being the only award made for live Pecan trees.

How to Set Out Pecan Trees.—In setting out a Pecan tree, a hole 24 inches in diameter and 32 inches deep is usually large enough, although wider holes may be dug with advantage. When setting out a tree, fill in with top soil. Well-rotted manure may be put in outer sides of hole while being filled, eight to twelve inches beyond lateral roots, so as not to come in contact with the roots.

The use of dynamite in preparing the holes for planting out Pecan trees has been very highly recommended. We advise taking matter up with the Dupont Company as soon as you can, as some claim it is best to do the blasting as far ahead of setting out as possible.

Place tree in hole at proper depth; one man to hold same firmly



A Prosperous Pecan Grove

in position. Throw in dirt and water alternately. Use plenty of water to dissolve and settle compactly around the roots every shovel of dirt, thrown in gently. Continue the process gradually and carefully till surface of ground is reached; then finish off with loose earth. Remember to use water copiously, no matter how much moisture there is already in the earth at time of planting. As a matter of course, the wetter the land is, the more water it will take to produce the ideal result. However, we appreciate that whereas only a few trees are to be planted this method should by all means be used, in very large planting, it may be quite inconvenient, possibly impracticable. Work and firmly press the dirt among the roots, laying each root in a natural position. No holes or cavities in the soil should be left and soil should be in close contact with all roots, especially the tap-root.

The tree should be set at such a depth that after a copious watering and the permanent settlement of the soil, it will be about one inch to six inches deeper, according to height, than it stood in the nursery. It is very important that no part of the crown (collar) be exposed to the air during the first year's life of a transplanted tree. As a matter of prudence, it is better to plant them an inch or more deeper than they stood in the nursery than to have the crown of root exposed or become exposed. The crown roots of Pecan trees are of a reddish brown color, which color may usually be noticed for several inches above where first roots start, tapering off into the green bark. All that portion of tree showing any reddish brown tint should be under ground and never allowed to become exposed. The land should be plowed deeply either previous to planting or soon afterwards. It is

better to do this before planting, as trees or roots may be disturbed by plowing afterwards. If tap-roots are inconveniently long, say over 30 inches, they may be cut off by a sloping cut with a sharp knife. All ragged ended roots should be smoothly cut off.

Note.—The foolish theory about a Pecan tree not bearing if its tap-root has been cut, has been so universally disproved by ourselves and others that it is not worth discussion. If the tap-root is cut when the tree is dug, as is often convenient, the cut quickly heals over, and a new tap-root is formed, if the tree needs it.

Ordinary care should be taken to see that no pieces of wood or other debris be contained in the soil used in filling up holes when setting out trees.

Preparation of Trees.—Our endeavor is to send our trees properly prepared and trimmed, as if for our own planting, leaving the planter nothing to do but set them out. We invariably recommend the proper trimming or pruning of the tops of the taller grades of trees. It balances the unavoidable loss of some roots when tree is dug.

Height of Trees.—We should mention that our prices are made on the heights of trees when dug. When properly top-trimmed, the height is often reduced nearly one-half. Therefore, if the height of a trimmed tree when received is less than catalogue

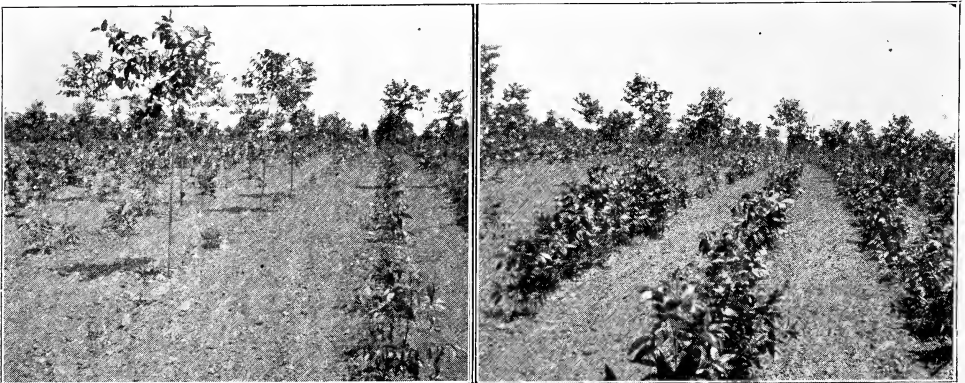


Budding Wood Showing Waste of Nuts. Right Hand Figure Shows Method of Detaching Annular Buds

height, this is the explanation. The diameter of the tree where cut off will usually indicate the original height of tree.

Our most satisfied customers are those who have been guided by our experience and judgment in such matters. It is needless to say our customers' interest and our own are identical.

Fertilizers.—A rotted barnyard, stable or lot manure contains practically all the plant-food needed by a young Pecan tree. As it is difficult to get this in very large quantities, as a substitute, both to cause vigorous growth and early bearing, we advise the use of a high grade commercial fertilizer. After a tree has bloomed the first time, and is of sufficient size, with surface to bear a fair crop of nuts, highly ammoniated or nitrogenous fertilizers, such as stable or lot manure, cottonseed meal, fish, blood, tankage, etc., should not be solely used, but potash and phosphoric acid in almost any of their respective forms should be added to induce bearing, although many trees will bear, no matter what they are fed on. Nitrogenous fertilizers cause principally a rapid growth, and while the tree is young it is as well to encourage as much healthy growth as possible, so that in five years from setting



Views in Nurseries

out it will have a large top. Fertilizers should be broadcast and well worked into the soil around the tree, commencing at a radius of about the extremities of the branches after the first year. The application of fertilizers too near the tree causes a congestion of roots and may injure them.

Pruning.—The Pecan needs very little, if any pruning, especially the first season. With young budded and grafted trees, seedling sprouts (below bud or graft unions), should, of course, be taken off as soon as discovered. This can be done any time, winter or summer. The Pecan will naturally form a strong symmetrical tree if left to

itself. If, however, a tree of a particular form is desired, it may be pruned and shaped to conform to grower's wishes. Should a tree not be making a vigorous growth, a severe pruning in the winter or early spring will greatly stimulate it.

Enemies.—The Pecan is not entirely free from insect and fungous enemies, as is sometimes said, but of all the valuable food-producing trees, it is attacked by fewer insects or fungous diseases than almost any other. In other words, it is subject to no more enemies than its close kin, the hickory, which is one of our hardiest forest trees. In the case of the Pecan, profitable crops can be made with less expense and with less trouble from insects than any other known food-producing tree in this country.

Polishing of Nuts.—There is a ready market for properly gathered, mixed seedling nuts at remunerative prices **without polishing or coloring.** The small, wild, usually thick-shelled nuts of the western Pecan-producing States are polished to make them saleable, and from custom.



This Exhibit was Awarded Gold Medal at Universal Exposition,
St. Louis, Mo., 1904

The bulk of the Pecan crop is at present from the large, wild, uncultivated seedling trees in the river bottoms and alluvial lands, but very extensive plantings of the improved varieties of budded and grafted trees are being made. These wild nuts are very frequently stained and dirty by the time they are picked up, and cleaning and polishing is resorted to. Probably over 50 per cent. of Pecan nut buyers, dealers and consumers have at present seen no other kind.

In cases where we have sent our correspondents specimens of the finer varieties **unpolished or uncolored**, the prediction is made that such nuts would eventually displace every other nut on the market, and that for shelling purposes they would be universally used. These large, thin-shelled nuts are a revelation compared to those of the common, polished kind.

The delicate natural color and markings on the shell of a high-grade nut are not objectionable, and appeal strongly to people who have



Nursery Scene



Four-Year-Old Budded Tree "In Bearing"

seen them and cracked them beside the artificial-looking, colored and polished small, thick-shelled nuts generally seen. There is no necessity now, nor, in our opinion, will there ever be any need for polishing, staining or coloring the better varieties of Pecans.

Marketing.—We receive a great many inquiries from commission houses for Pecans in car lots. Pecan nuts do not have to be forced on the markets. If necessary, they can be held for a considerable length of time. They may be kept in good condition, in cold storage, from one season to another.

General Culture.—In Pecan orchards, crops, such as peas, melons, cantaloupes, potatoes, peanuts, corn, cotton, truck, etc., may be raised.

The land should be plowed and harrowed early in the spring, and again in the fall. Young trees are benefited by being kept free from grass and weeds, and occasional hoeings and thorough pulverization of the soil for several feet around the tree during the growing season are very beneficial. Trees of all sizes, and especially newly set ones, may be mulched with leaves, straw, dead weeds, etc., to great advantage, conserving soil, moisture, reducing expense in hoeing and affording a slowly decaying supply of natural plant food. This mulching should be kept from direct contact with trees.

Gathering of Nuts.—The hulls of all the better grades of Pecans begin to open when nut has fully matured. The nuts will in time fall to the ground by their own weight, and are shaken out by the wind. The gathering of this valuable crop is simple, and may be leisurely done. It is advisable to gather nuts soon after the hulls have opened, for if they fall and remain on the ground a long time during rainy weather, the shells may become dirty and stained. After nuts are gathered, they should be spread out and dried a week or ten days, as when first gathered the shells and inner divisions are moist and disagreeably bitter. The drying out makes the shells brighter, more brittle, and more easily cracked, as well as making the meat much sweeter. As the season advances and the nuts become more and more mature this will become less and less necessary.

Rake away from around trees all debris in which nuts might fall and become hidden, then, with a long bamboo pole lightly tap the clusters, and the ripe nuts will fall. When the trees become too large to reach the limbs comfortably from the ground, send a man with rubber shoes or bare feet, up the tree, and either let him jar the limbs with his feet or heavy rubber mallet, or take the bamboo pole up the tree, hook on to the limbs as far out as possible, and shake them. Rubber shoes, bare feet, or rubber-tipped mallets are advised in order that the bark of tree may not be bruised or injured, as is often the case where leather-soled shoes are used.

A Pecan Orchard or An Insurance Policy, Which?—Always compared to life insurance, but more especially in the light of recent events, as an investment, much is in favor of Pecans. After the land is paid for a non-forfeitable property and a home place results, annually enhancing in value, and held by one's self and heirs forever, by the mere payment of taxes.

The planting of fine Pecan trees almost immediately quadruples its land value. The cost is insignificant, contrasted with the permanency

and daily enhancement in value of the trees. **Those who have given the Pecan the greatest study are to-day the heaviest investors therein.**

The "Atlanta Journal" tersely and truthfully expressed itself in the following language: "The premium on a life insurance policy of \$5,000 invested in a Pecan grove will soon earn annually an amount equal to the face of the policy and annual increase. Parents and guardians of children will find in this industry safety, surety of annual incomes throughout life, which can be reached by no other investments. In the Southern States are thousands of acres, so-called 'worn out,' that will grow Pecans under cultivation, as the roots of these trees feed upon soils not reached by other tree-roots and soon can be made to pay a handsome income where now such lands only grow taxes. Investigation will furnish proof of all we have said of the valuable industry, the value of which is beyond the figures we have yet stated in the public prints."

Pecan culture may be carried on in conjunction with so many other things that a person desiring to own their own home, and willing to work, can by means of truck, berries, poultry and peaches, etc., soon be making a living.

Trees for Monuments.—Ex-Governor Hogg, of Texas, when consulted on his death-bed as to the kind of monument he wished when he should die, said: "I want no monument of stone, but let my children plant at the head of my grave a pecan tree and at the foot of my grave a walnut tree, and when these trees shall bear, let the pecans and the walnuts be given out among the plain people of Texas, so that they may plant them and make Texas a land of trees."

Commercial.—In horticulture (for profit), as in all other business matters, the best generally proves to be the cheapest, especially where permanent results are desired. A Pecan tree lives to an indefinite age (300 to 700 years), and generation after generation will enjoy the fruits of what we are now planting, therefore plant the best you can get and leave a permanent monument of your good judgment.

Inferior Trees Expensive.—In the 44th Annual Report of the Horticultural Society of Missouri (1901), appears an article by Albert Brownwell, "Northwest Horticulturist," upon the subject of "Cheap Trees." It is replete with so much truth and common sense that it may be read with profit by all concerned. It reads:

"It costs more to produce a good article than a poor one, and in buying, the first question should be not how cheap, but how good it is. Many people understand this well enough, and yet how few ever stop to apply the rule to nursery stock. In no other kind of purchase is the quality of the article of such vital importance as in nursery stock. The price of a tree is the smallest part of its cost by the time it has come into bearing. If a man buys cheap trees, to save a few cents on each, by the time the tree comes into bearing the expense of the land, labor, etc., has amounted to several times the cost of the

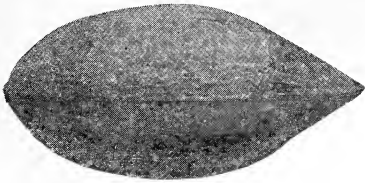
tree; and, consequently, if his cheap stock turns out, as it uniformly does, to be of inferior and worthless varieties, then it is a serious loss to him, and he has to begin all over again. Now, is it not plain to all that it is rank folly for any one to risk this dead loss of trees, use of land for years, expense of cultivating, etc., to save a few cents on the tree, when, for a trifling increase in price he can get the very best warranted stock? As a matter of insurance, a man can not afford to buy anything but the best warranted stock. It is a general rule, which can be relied on, that 'cheap' stock is worthless stock, and therefore dear at any price. If a man won't pay for good stock, and buys cheap stock in order to save money, he is very sure to lose all he puts into it. Most of the worthless stock is worked off by strange agents, who sell on their own account and are not authorized by any responsible firm to take orders for them. Such men buy up refuse stock from large nurseries for almost nothing and fill their orders with it, claiming it to be good. They also frequently warrant the stock, but as they are unknown or irresponsible, their warranty is absolutely worthless. If people would buy only from agents who can show a certificate authorizing them to represent a responsible firm, there would be no danger of being cheated. **We can not get something for nothing.**

"This is not a world where we can get something for nothing, and when an article is offered at an extraordinary low price, there must be some good reason for it. The very simple reason is that as the article is of bad quality it can not be sold in competition with first-class goods, and is therefore necessarily worked off on the public at a low rate to catch those people who will bite at anything cheap, without regard to quality. Such people never get ahead because they waste their money on poor trash that gives them no 'value received' for their outlay."

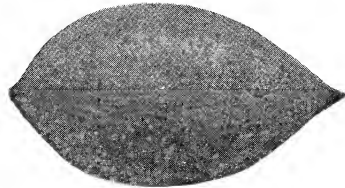
No San Jose Scale.—Our nurseries are annually inspected by the Georgia State Entomologist, copy of whose certificate accompanies every shipment of trees. The Pecan tree is not subject to the attacks of the San Jose scale, and there is no case on record of its having ever injured a Pecan tree.

Illustrations and Descriptions.—Illustrations of nuts will be found on following pages. The illustrations are made from the actual nuts. The demand for specimens and nuts in bulk is very large, and nuts are often engaged long in advance of shipping time. We will, however, be glad to send specimen nuts as long as they last.

Visit DeWitt.—We would respectfully suggest that if possible before buying, you visit our large groves and nurseries, where many valuable object lessons in Pecans may be seen.

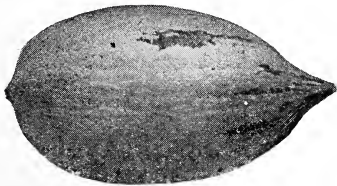


Van Deman

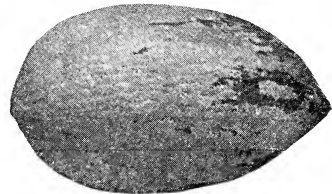


Russell

- ✓ **Van Deman.** (Synonyms: Bourgeois; Duminie Mire; Mere and Meyer erroneously; Paragon, in part; Southern Beauty.) The original tree (now seventy or more years old), is a beautiful, thrifty tree, and bearing large crops of nuts. Size large to very large, averaging forty-five to fifty-five nuts to pound. Flavor delicate, quality good. The variety is a strong, vigorous grower, with light green foliage. Productive and profitable. Budded and grafted trees fruiting at DeWitt.
- ✓ **Russell.**—The parent tree, which stands on a city lot, crowded with other trees and vegetation, in poor soil, averages about 150 pounds of nuts a year. Size of nuts medium to large, averaging fifty-five to sixty-five nuts to pound. Thin shell. Flavor and quality good. Budded and grafted trees fruiting at DeWitt.



Schley

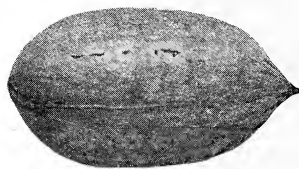


Pabst

- ✓ **Schley.** (Synonym: Admiral Schley.) Size medium to large, ranging from forty-five to sixty nuts per pound. Form oblong-conical to long obovate, with conical apex. Shell very thin, cracking very easily. Flavor delicate, sweet and rich, quality very good. The parent is unduly crowded by other trees in a poor soil. With us this variety has proved a very vigorous grower and early and prolific bearer. Budded and grafted trees fruiting at DeWitt.
- ✓ **Pabst.**—The variety is sturdy, strong and a vigorous grower. Size large, averaging forty-five to fifty-five nuts per pound. Flavor and quality good. Early bearer and productive. Budded and grafted trees fruiting at DeWitt.



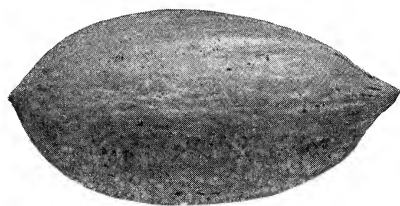
Frotscher



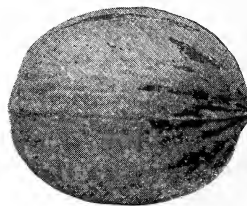
Teche

✓ **Frotscher.** (Synonyms: Frotscher's Egg Shell, Egg Shell in Part, Oliver, Majestic.) Parent tree about fifty years old. Nuts medium to large, averaging from forty-five to sixty nuts per pound. A budded tree set out in Southwest Georgia in 1892 yielded nuts to the **wholesale** value of \$65.00 in 1905, notwithstanding the loss of a large portion of top of tree by a gale, and the sacrifice of many nuts by the cutting of budding and grafting wood therefrom. A strong, handsome grower. Budded and grafted trees fruiting at DeWitt.

✓ **Teche.** (Synonyms: "Frotscher No. 2, Egg Shell, Duplicate Frotscher, etc.) A rapid grower and early and prolific bearer, nuts medium to large. This variety has been largely disseminated under the name of "Frotscher" on account of the wood of the variety being sent out some years ago, mixed with true Frotscher wood. Fortunately, the "Teche" is proving itself an early and heavy bearer, and, except in mere size, has some advantages over the true Frotscher. Budded and grafted trees fruiting at DeWitt.



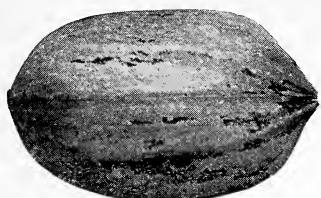
Delmas



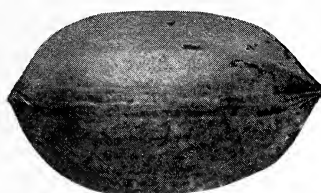
Moneymaker

✓ **Delmas.**—Strong, vigorous and handsome grower. Early bearer. Nut large to very large, averaging thirty-five to fifty to pound. Quality good. Budded and grafted trees fruiting at DeWitt.

✓ **Moneymaker.**—This variety is reported to be the best of some seedlings planted on lands contiguous to the Mississippi River. Size medium, averaging fifty to sixty nuts per pound. Flavor and quality good. A vigorous grower, with pale green foliage. The variety is promising for test in the more northern Pecan districts. Budded and grafted trees fruiting at DeWitt.



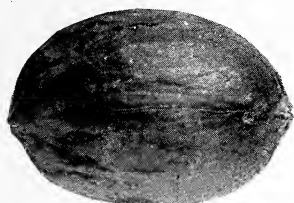
Stuart



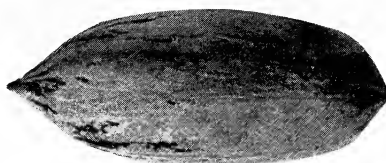
Alley

✓ **Stuart.** (Synonym: Castanera.) Average yield of parent tree at Pascagoula, Miss., from 1889 to 1892, about one hundred and forty pounds a year. In 1892 the crop was about three hundred and fifty pounds, most of which was sold for one dollar per pound. This variety is a strong, upright grower. Size large to very large, averaging forty to fifty-five nuts to pound. Flavor and quality good. This was one of the first varieties to be widely distributed, and in consequence has been reported as giving satisfactory returns over a wider climatic range than many other varieties of later introduction. Budded and grafted trees fruiting at DeWitt.

✓ **Alley.**—A budded tree of this variety produced thirty pounds of nuts in its sixth year from setting out. The variety is an early and heavy bearer, very vigorous grower, and profuse bloomer. Size of nuts, medium to large, averaging forty to sixty-five per pound. Shell thin and nuts well filled with bright meat of fine flavor and keeping qualities. Large plantings of this variety are being made, and it should be included in every order. Budded and grafted trees fruiting at DeWitt.



Success



Carmen

✓ **Carmen:** Origin, Northern Louisiana. While doing well in South Georgia, it is specially recommended for more northern latitudes.

✓ **Success:** Origin, Southern Louisiana. This is considered one of the very best varieties. Good bearer and highly recommended.

Gibbsland, La., January 1, 1916.

"Liked the trees I got from you fine. Will give you another order soon."
Signed: IRA W. BOBO.

Atlanta, Ga., December 12, 1916.

"You will recall that some three or four years ago I bought from you for the Oglethorpe Plantation Company, 1,000 pecan trees. These trees are developing so favorably that I have decided to set as much as 200 to 250 acres additional during the present season."
Signed: H. C. BAGLEY.

Reidsville, Ga., December 12, 1916.

"Mr. E. Widencamp asks the writer to place with you his order for 25 grafted or budded pecan trees. Mr. Widencamp and the writer have bought trees from you before, which have been highly satisfactory."
Signed: B. H. GROOVER, Cashier,
The Tattnall Bank.

Swainsboro, Ga., December 2, 1916.

"I enclose you order for 12 trees and hope to buy more from you later. Set out orchard five years ago and they bore a few nuts this year."
Signed: W. P. GARY.

Clemson College, S. C., December 27, 1916.

"I am in receipt of the pecan trees that you sent me. The quality of your trees is very pleasing to the farmers of our State and I trust that you will receive further business from all wanting trees."
Signed: GEO. P. HOFFMANN,
Extension Horticulturist.

Huntingdon, Tenn., June 12, 1916.

"Please quote me prices on 100 to 200 pecan trees for fall delivery. All those I bought from you last year are living and growing nicely."
Signed: JAMES JOHNSON.

Washington, N. C., January 29, 1917.

"Trees bought from you in 1907 have been bearing since 1914."
Signed: HENRY N. BLOUNT.

Ava, Ill., December 21, 1916.

"Pecan trees arrived in good shape. The oldest tree I bought from you is now eleven years old. At nine years it had seventy well-filled nuts. Even this year when we had no native nuts at all, it had some; therefore I think they have stood the test well."
Signed: HENRY RIECKENBERG.

Ava, Ill., R. D. No. 4, Jackson County.

All of our testimonials are absolutely unsolicited and are on file in our office subject to inspection.

Order your trees early, so that they may be reserved and you may not be disappointed later on in the season. We are firmly convinced that when you once become our customer we will be certain to get your future orders when in the market for trees.



A Nursery Scene

We invite inquiries relative to your requirements. We solicit your orders, which will be appreciated and given our very best attention, whether small or large.



How to Order.—Please use our order blank, carefully filling in blank spaces and inclosing payment for full amount of order. Write very plainly, or print: name, post office, county, State, street, house or R. F. D. number where you get your mail. Be careful not to confuse Shipping Point with Post Office Address, where they are different.

Terms: Cash With Order, Unless Otherwise Specially Arranged.
Our Guarantee: ALL SHIPMENTS ARE GUARANTEED TO REACH YOU IN GOOD CONDITION; MISTAKES, IF MADE, WILL BE PROMPTLY RECTIFIED. EXAMINE AND COUNT YOUR TREES ON RECEIPT OF SHIPMENT AND NOTIFY US AT ONCE SHOULD THERE BE ANY ERRORS OR DAMAGED STOCK. THIS GUARANTEE IS NOT GOOD, UNLESS YOU COMPLY WITH ABOVE REQUIREMENTS. WE DO NOT GUARANTEE GROWTH OR ASSUME ANY RESPONSIBILITY FOR STOCK AFTER DELIVERY TO OUR CUSTOMER IN GOOD CONDITION.

Notice: While every effort and precaution are used in having our trees true to name, errors are possible; and it is understood and agreed by all parties concerned that we are liable only for the price paid for the trees.

G. M. BACON PECAN GROVES, INC.,
DeWitt, Georgia.

