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BULLETIN SPECIAL.

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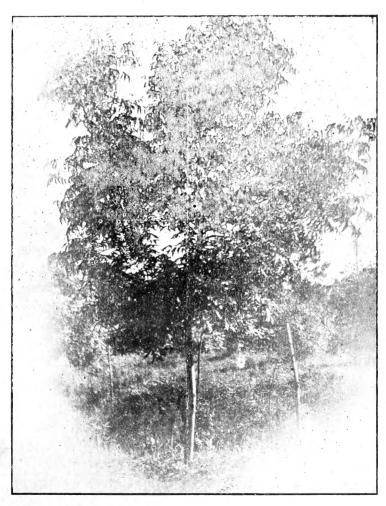
U.S. Dens rmant of Agriculture

## LILLY ORCHARD COMPANY.

BLOOMINGTON, ILLINOIS, SEPTEMBER, 1902.

## The Budded Pecan.

"The Soft Shell Pecan is the Favorite Nut of the World"—U. S. Department of Pomology.



Four year old budded Russell pecan tree in Pabst Orchard, Ocean Springs, Miss. Photographed June, 1901. The tree is about 12 feet high, and well set with pecans.

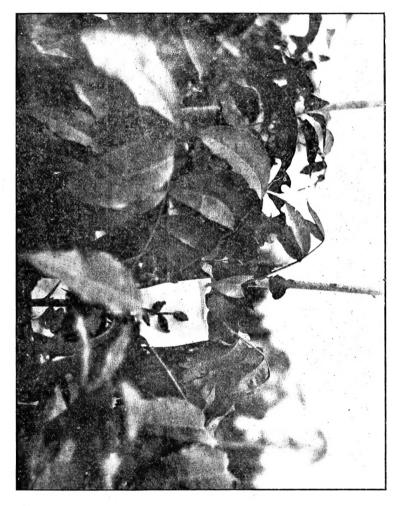
#### The Budded Decan.

Along the streams of some of our southern states, the wild pecan tree has its home. On A Page of Pecan History, the banks of rivers farther north these trees are found also; but only in the South do they form the immense forests which furnish the main commercial supply of this nut. These forests are meeting the fate of forests everywhere; and each year finds them growing less and the nut supply therefrom smaller. The uncertainties of production and the difficulties of harvesting in the case of these wild trees, together with a lessening yield, have gradually forced up the market price, even of the lowest grades of these nuts, to nearly double that of a decade ago.

Seedling

To meet the increasing demand, and to take advantage of the advancing prices, a large number of seedling pecan orchards were planted; Orchards. and many of these years ago reached the bear-But disappointment in these has resulted from the fact that only about 15 per cent of the trees planted yield nuts marketable for table use. However large and fine flavored the nuts selected for seed, however profitable the parent tree, its progeny could not be relied on. A page of this circular illustrates fairly the results of such planting. As a consequence, we have seen the saw in use freely in many of these orchards on the Gulf Coast, cutting back nearly the whole of the trees close to the trunk; and into the limb-stubs grafts from choice varieties were being set, thus changing the orchards from seedling to grafted orchards.

We shall apply this term in our circulars indis-The Budded criminately to budded and grafted trees; for though the methods differ, the results agree Pecan. closely,—the production of trees that perpetuate the qualities and characteristics of the high grade parent tree. Pecan literature of a decade ago asserts that the hickory family, to which the pecan belongs, cannot be grafted;



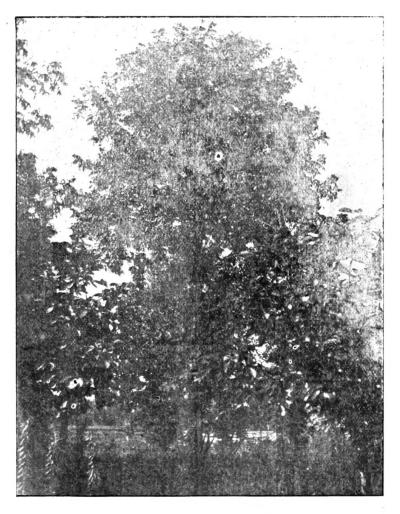
Pecan nuts growing on one year old tree in nursery row, in Pabst Nursery, Ocean Springs.

and even some years later the literature asserts that the percentage of successful budding,—about three successes in a thousand attempts,—is so low as to render this process unavailable for commercial planting. In this field, however, as in every field of careful experiment, persistent effort was rewarded by success; and the goal reached is one well worth the effort expended. Even yet the successful budders are few. Perhaps as leader among these might be mentioned Charles E. Pabst, of Ocean Springs, Mississippi, who now secures as high as 85 per cent. of growth in his work as budder. These men have indeed opened up a new industry—the propagation and growth of the budded pecan; and this industry is destined to play a leading part in furnishing the choice nut supply of the world's markets.

To plant nuts from choice trees, while certainly more likely to yield good results than would Selection of Parent Trees. the use of ordinary nuts, is no more likely to give satisfactory orchards than would the planting of peach-pits from a favorite tree. And what orchardist to-day would risk such planting! Here and there, however, a tree will result having the good points of the parent tree; and in rare cases, with these good points improved upon. By such selection, continued through a series of years, we now have a number of varieties of extra choice, thinshelled, sweet-flavored, plump-kerneled pecans, that bear heavily. From these selected varieties wood is taken for budding the nursery trees; and these last, after a year of nursery growth, are transplanted in our orchards. Each tree, then, planted by us, yields nuts of the choice variety from which it was budded; and every tree produces only nuts of the highest market value,—such nuts as are not yet known to the trade, but are bought up for special purposes at fancy prices. These budded trees, when properly cared for, begin bearing at four and five years after transplanting. Of course, it must be remembered that at that time they have a three year old root.

From numerous inquiries sent us, the impression seems to be general that the pecan approaches a shrub in size. On the contrary, it is a magnificent forest tree, growing three to five feet in diameter, and from 75 to 150 feet in height. It is

a species of hickory, hardy and free from enemies. Like the hickory of the Northwoods, the pecan is among the last to unfold its leaves in the spring, and among the first to shed these leaves as fall approaches; thus protecting itself against late and early frosts. An orchard of these gray-colored, clean-limbed, sturdy trees is a pleasing sight; and impresses the beholder with a belief in their boasted longevity, hardiness, and ability to breast the storms that may beat upon them. These trees find their homes as far north as the river bottoms of Illinois; but it is along the Texas and Louisiana



Pabst pecan tree in Pabst Orchard, Ocean Springs, which bore last year, 1901, between \$72 and \$100 worth of nuts. The tree is a seven year old graft on an eleven year old trunk.

streams that they most abound; and in the swamps of the latter state are found the choicest of the wild nuts. In these states, however, but little attention has been paid to the cultivation of these; and it is to Mississippi, Georgia, Alabama, and Florida we must look especially in our study of the vast possibilities of the pecan industry when taken up as a business.

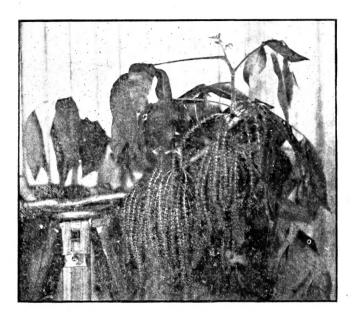
Many of the Gulf Coast homes have a few Beginniugs of pecan trees in their dooryards. Here and there, an orchard an acre or so in extent is seen. Where these are of seedling trees, most of these trees are now being cut back and budded. In the orchards where this was done six or seven years ago, or where are planted budded trees of age to begin bearing, the results have been highly satisfactory; and such orchards are now giving fine returns and are being enlarged.

Charles E. Pabst, of Ocean Springs, has one of the latter orchards, of which we shall allow him to tell later; and he is now getting ready for a much more extensive plant.

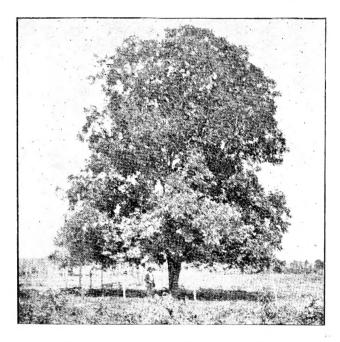
A. E. Lewis, of Scranton, Mississippi, has a small orchard on his home place, composed entirely of budded or grafted trees, all bearing heavily this year (1902). These bearing trees vary in age from 4 to 16 years. Mr. Lewis has 40 acres more that will soon begin bearing; and is planning further extension.

A. G. Delmas, of Scranton, has a number of choice trees, and is topworking many of his seedlings from his best varieties. He sold the nuts this year at from 35 cents to \$1 per pound, depending on variety; and from his few trees shipped \$240 worth in one day. Lewis received 30 cents wholesale for his entire crop.

Many additional instances might be cited to show that the pecan industry has passed the experimental stage and has become a business; and to prove that those who enter into this business understandingly will reap large profits. Like Indian corn, the pecan is indigenous to America. Nowhere else does it grow, and even here its range is limited. Therefore the orchards planted will have the world for a market; and fortunately the product is of such nature as to allow of its being carried to the farthest markets. As yet, these fancy budded nuts are strangers even in our own markets. When



Branch of pecan tree showing young pecans and catkins, or male and female flowers.



Eighteen Year Old Seedling Pecan Tree.

once they reach these markets, there will be for them an urgent demand, because of their fine flavor and other desirable qualities.

Paper-Shell Pecan Nuts.

Of these improved varieties, 35 to 60 nuts will weigh a pound;—the nuts ordinarily marketed running from 80 to 150 to the pound. On cracking the ordinary pecan, the meat crumbles,

and portions of the corky division walls adhering to the kernel frequently give a bitter taste far from agreeable. The hard shell is usually in marked contrast with the soft shell of the selected varieties. On cracking the latter properly, the plump, fine-grained, sweet kernel generally drops out in halves, entirely free from the bitter, corky partitions. nut is quite its equal; and none commands so high a price from dealers in fancy candies and nuts. It is certain to be the favorite nut for general table use, whenever it reaches the open market and becomes known to the public.

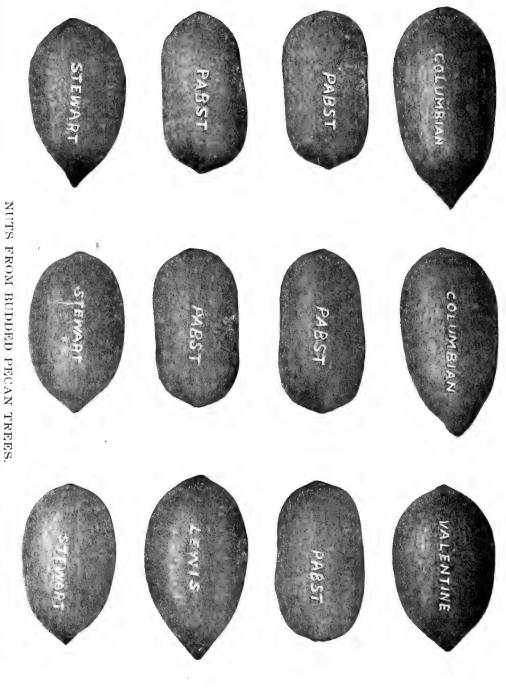
Yield of the Pecan.

The properly cared for, budded trees will begin bearing four or five years after transplanting; and at seven years will bear in marketable quantities. Indeed we have on Lake Bird plantation trees loaded with catkins the second year out from nursery row. From seven to seventeen years these will average 100 pounds per tree annually, increasing in yield at least to the twenty-fifth year, and living over 100 years. There are found individual trees that yield year by year 500 pounds of fine nuts, that market readily at 25 cents per pound;—these of course being choice seedlings, as none of the budded trees

A Safe Enterprise. , Pecan growing is one of the surest and safest of business enterprises. In any given orchard a portion of the trees each year are likely to rest; but the returns from the orchard do not

vary greatly from year to year. After the nuts are gathered, if these are properly matured and stored, they can be placed on the market at the will of the grower at any time within a year, or may be held longer in cold storage without affecting their flavor. Instead of being obliged to rush to market within a few days or weeks, as with most fruits, and by costly methods of transportation, the grower can ship by freight or water to distant markets, thereby securing the highest prices

have had time to reach sufficient size to bear up such a crop.



Some nuts of each variety gathered from different trees of that variety. Shows uniformity in size, shape and value of nuts in a budded orchard. Natural sizes, photographed from nuts in our possession.

for his products. Fancy pecans bring more per pound than any other nut, and more per bushel than any fruit. When the orchards are cared for by parties who understand the business, there is no uncertainty as to the outcome of the investment.

Could arrangements be made with a reliable A Paying company which has learned the business by experience, to plant out for you 200 of these Enterprise. choice budded trees, allowing you to pay for these in montbly installments of \$20, and allowing you inter-

est on the even hundreds as paid in, you would in seven years have your 200 trees paid for, and they should already be giving you a good and ever increasing return on the investment. The ninth year, instead of paying out \$20 monthly, you should receive that amount; the fifteenth year, \$50 monthly; the twentieth year, \$75 monthly; and should you so desire, the twenty-fifth year after planting you could retire from business with a steady income of \$100 per month;—an income which would continue throughout your life and that of your children's children. A net income of 30 cents per tree the sixth year, with an increase of 30 cents each succeeding year till the twenty-fifth year, will give the above results. Can any endowment or tontine plan of life insurance equal this as an investment?

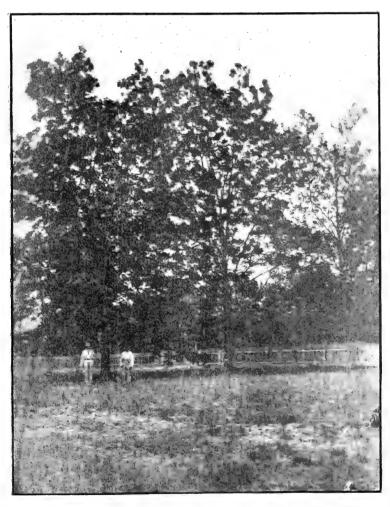
Overproduction Improbable.

The pecan can be shipped to all parts of the world, thus differing from most fruits. These fancy nuts are a new thing,—large, plump kernels, delicious. No other nut compares with them. Nuts are rapidly growing in favor as a food. The belt wherein these fine nuts can be successfully grown is a limited one, -near the Gulf Coast. The years of waiting for returns discourage the planting of these orchards. You, who have other means of support, can afford to wait for the big returns that are certain to come to you. A limited area for production! The world for consumption! Rapidly growing demand, with which increased cultivation cannot keep pace! These facts insure against overstocked markets and low prices for this nut.

#### The Pecan Industry As Others See It.

To show that the preceding estimates, remarkable as they may appear, are really very conservative, we quote from those who speak from the widest experimental knowledge of the subject,—men who are widely known, most of whom we know personally to be men whose reputation for veracity and business judgment is unquestioned in their section.

A. E. Lewis. of Scranton, Miss., who has several acres now in bearing, and forty acres soon to come in, and who is still further extending his orchards, says his experi-



Seedling pecan trees, 18 years old, in the orchard of the Lake Bird Plantation, Jackson County, Miss.

ence has convinced him that the income from 1,000 trees will keep their owner in good circumstances throughout life, and within a few years after planting will be yielding an income of \$5,000.

Chas. E. Pabst, the well-known Ocean Springs nurseryman and pecan budder, writes us under date of July 28th, 1902: "Budded pecan trees will bear in four or five years, when properly cared for; and will give a paying crop in six years. I am about to plant fifteen or twenty additional acres for myself; and when my trees are five years old, I should refuse \$1500 per acre. Why? Because if planted with 25 trees per acre, well cared for, each acre at five years will bring me \$25; at ten years of age, I shall expect at least \$250 per acre, -a 17 per cent. interest on \$1500. Knowing from experience that from that time forward I can count safely on a constantly increasing income therefrom, I must hesitate to give an estimate on fifteen year old trees; and I should then certainly refuse to sell even at the large price named above. From twenty trees last season, 1901, I sold over \$300 worth of nuts, besides saving out \$75 for business purposes, and what we needed for our own consumption, for samples, etc. The oldest of these trees were budded nine years ago upon seedling trunks. As I used the twigs from these for scions for my nursery work, probably half my crop was taken off in this manner."

J. H. Girardeau, Monticello, Fla., a general dealer in various fruit and nut trees, and therefore unbiased, says:— "The pecan, which is by far the finest American nut, has attracted a good deal of attention lately. There are marvelous possibilities ahead of the man who plants a pecan grove with judgment. All the factors necessary to success must be employed. Soil and climate may be just right; but if the nut produced is not first-class, it will not sell at fancy prices.

"A rough scale whereby to judge pecans would be about as follows:

1.	Cracking qualities, -	20 points.
2.	Flavor,	20
3.	Size,	18 ''
4.	Thinness of shell, -	15 ''
5.	Prolificness, -	15 ''
6.	Shape,	. 12 "
	Total, -	100 ''

"Now there are a great many people who claim to be able to grow trees from seed that will produce nuts combining all these good qualities. We do not think this possible, as it is contrary to all experience. Consequently we advocate the planting of grafted trees, providing the grafts are taken from trees that are known to bear just such nuts as are desired."

"There is a wide difference in pecan trees," he continues, "ranging from perfect barrenness to the magnificent tree that bears a crop of 500 lbs. of fancy nuts which sell readily at 25 cts. per pound. Such a tree will yield a revenue of \$100 per year; and, as an investment, this one tree is worth \$1000; and an orchard of such trees would be worth a fortune. Such being the case, what would be thought of the judgment of men who would plant an orchard of seedling trees to save a few dollars on the initial cost?"

F. V. Munson, Denison, Texas:—"The pecan is the finest nut known, and destined soon to be cultivated extensively for commercial purposes."

Wm. Nelson, Carrollton, La.:—The pecan nut has always been a favorite with our people; but beyond the planting of a few trees around the home for home consumption, there have been, up to this time, few trees planted. The nuts now sent to market are the surplus from these trees, or nuts from the wild groves. The tree grows to a large size and is long lived, reaching 100 years or more. Full-grown, good-bearing trees will yield from one barrel to three barrels of nuts, averaging about 120 pounds to the barrel, varying in price from 5 cents to 50 cents per pound, according to size and quality. Budded trees will come into bearing in about four or five years from planting."

J. C. Quintette, Jefferson Parish, La.:—"One of my largest trees last season (1897) bore five barrels of pecans, averaging 120 pounds per barrel. These nuts, being medium size, sold at 10 cents per pound. Another tree, the largest I have ever seen, measures ten feet in circumference at a height of five feet from the ground. This bore four barrels of nuts, which sold at 15 cents per pound. Other trees bear smaller nuts that sell from 7 cents to 9 cents per pound."

This orchard is, of course, a seedling orchard.

Dick Waylor, in Farm and Ranch:—"If any man on the birth of his first son would plant for him twenty acres of pecan

frees, that boy when he attained his majority would have an independent income of \$5,000 a year, with merely the trouble of picking it up. This might be a bad thing for the boy; but the income would be there just the same."

- J. B. Walker:—"Pecans can be kept for months and shipped anywhere without injury or loss. I don't know of anything better that a young man, who has a few hundred dollars, can do than to invest it in a pecan orchard near navigation or a railroad."
- O. D. Faust, Bamburg, S. C., in News and Courier:—
  "No danger of oversupplying the market. Too many doubting Thomases for that. Only those who can see ahead are willing to wait for a good thing. My trees at ten years old bore at the rate of \$150 per acre". [Seedlings, corresponding to our seven year old trees, as ours are three years old when set out.—Ed.] "At fifteen years old, [twelve years for budded trees.] the yield was \$300 per acre. A gentleman living near me sold \$47.50 from two trees, and still had enough left for family use. No industry in the South pays better than a pecan grove."

Editorial in *Times-Democrat*, New Orleans:—"It is an investment for the young man that will pay him twenty-fold at middle age, and fifty-fold should he live to grow old;—a future endowment for his children and grand-children; one that will pay better than stocks or bonds or business enterprises of any kind, however promising."

Paper read before the Mississippi State Horticultural Society:—"One Stewart pecan tree, soft-shell, yielded this year over \$250 worth of nuts, at the price readily obtained for them. We have record of one wild pecan tree that grew over 1,000 pounds of nuts in one season." "The pecan has taken its place in the first rank as the best and most profitable nut-bearing tree; while the nut itself is pronounced superior to all others."

E. E. Risien, San Saba, Texas:—"A tree growing on the place of Widow Barnett, near San Saba, gave 22½ bushels in one season, and fully three bushels were still left on the tree. Fifty dollars per year for three successive years was the price M. A. Post, of Milburn, Texas, received from the nuts from a single tree."

Writer in *Irrigation Age:*—"I have seen trees produce 40 bushels of nuts each; and I have paid \$150 for the product of one tree."

NUTS FROM SEEDLING PECAN TREES.

Showing the varieties and varying sizes of nuts grown on seedling pecan trees which were raised from nuts from a single parent tree. Taken from a colletion in our possession.

Uncle Sam Speaks. Dr. I. M. Cline, United States Department of Agriculture:—"It is claimed that a tree 10 years old will yield ten bushels, which is 270 bushels per acre, worth about \$4 per bushel;

which figures a gross income of more than \$1,000 per acre. The pecan tree will bear annually for hundreds of years, and the yield increases with age. This can not be said of any other nut tree known which commences bearing so young. The English Walnut will not stand comparison with it in this respect, and it is nothing like so remunerative as the pecan promises to become. The olive tree, which lives so many years, and is noted for the value of its products throughout the world, is far below the pecan tree, both as to age and the value of products. When the trees are ten years old, the pecan will yield a crop which, when sold at only 1 cent per pound, will pay ten times more than an acre of cotton with the average yield; and this productiveness of the pecan will increase as the years advance." "The uses which can be made of the pecan are varied, and no fears need be entertained that the markets will be overstocked, for the markets of the world are unquestionably open with remunerative prices for this product."

Department of Pomology, Washington, D. C.:

Growing Nut

-"The cultivation of nuts will soon become

Demand. Pecan one of the greatest and most profitable industries in the United States; and there is no use denying that the soft shell pecan is the favorite nut of the world."

Seessel, Ashner, and Sugarman, of New Orleans, large commission merchants, early in the nineties, made the following prices on pecans:—"Small and inferior nuts,  $3\frac{1}{2}$  to  $5\frac{1}{2}$  cents; medium, hard shell, 9 to 12 cents; medium, soft shell, 10 to  $12\frac{1}{2}$  cents; large, soft shell, 18 to 30 cents." During the last two seasons, their lowest quotation on the lowest grade of these nuts has been 7 to 8 cents, showing the upward tendency in the price of pecans.

The Koerber Nut Meat Company, of New York City, which makes a specialty of fine nuts as food, says:—"We stuff dates, prunes, and also figs with delicate and appetizing nutmeats, mainly the pecan, surely the finest nut in taste and flavor."

Mrs. Rohrer, in the Ladics' Home Journal, for July, 1902, under "Nuts as Food," says:—"Most nuts, like cheese, take the place of meat, and are perhaps one of the choicest, most palatable, and nutritious articles of diet. The difficulty is that in this country we use our nuts dry and dense, which makes them difficult of mastication, hence difficult of digestion. To meet this demand, there has been placed on the market a small iron machine for the grinding or emulsification of nuts." "The valuable nuts from a food standpoint are the pine or pinon nuts, the ground nuts, and the pecans."



"No industry in the South pays better than a pecan grove." "One Stewart pecan tree yielded this year over \$250 worth of nuts at the price readily obtained for them." "Fifty dollars per year for three successive years was the price M. A. Post, of Milburn, Texas, received for the nuts from a single tree."

"I have paid \$150 for the product of one tree."
"There is no use denying that the soft shell pecan is
the favorite nut of the world."

"When my trees are five years old I should refuse \$1,500 per acre." "By far the finest American nut." "The income from 1,000 trees will keep their owner in good circumstances throughout life; and a few years after planting will be \$5,000 annually."

If you can secure an annual income of \$1,000 by investing \$2,000, or \$100 for \$200 invested, which careful study of conditions, made during years of personal investigation in the pecan belt, and years of close watching of this industry, fully convinces us you can do, your duty to yourself and family is plain. Act at once.

Address, LILLY ORCHARD COMPANY,
Bloomington, Illinois.

Or the Treasurer, R. O. GRAHAM.

Samples of the budded nuts will be sent on receipt of 6 cents for postage.

Photographed from a miscellaneous collection made by us from nuts in our possession. Hazlenut last, for comparison. NUTS FROM SEEDLING PECAN TREES.



## A NEW INDUSTRY!

WITH THE WORLD FOR A MARKET.

THE BEST PAYING INVESTMENT IN THE WORLD.

### A Budded Pecan Orchard.

Atwo thousand dollar investment should give you one thousand dollars annually throughout your lifetime and that of your children's children. "But I'll be obliged to wait!" Yes, but meantime you go right on living while you're waiting, same as if you weren't waiting.



You can secure an interest in a Pecan Orchard and hare it cared for by a small saving each month. :: :: LILLY ORCHARD COMPANY, Bloomington, Ill.

Don't throw this down!

It is new!

It will pay you to read it!

