

Texas Coast Country



ALONG THE LINE OF THE
SUNSET ROUTE

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THE GREAT ROUTE
FOLLOW THE LINE OF THE

TEXAS COAST COUNTRY



Issued by GENERAL PASSENGER DEPARTMENT

SUNSET ROUTE
HOUSTON, TEXAS



C. K. DUNLAP, Traffic Manager
G. H. & S. A. RY.

T. J. ANDERSON, Gen. Pass. Agt.
G. H. & S. A. RY.

JOS. HELLEN, Gen. Pass. Agt.
T. & N. O. R. R.

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THE COAST COUNTRY OF TEXAS

IT is certainly the modern land of promise. It contains the richest soil of any known section of America. Anything that will grow any where on earth will flourish with less labor and more regularity under the blue skies of this favored section. It is a country as yet in the cradle of its development, with possibilities beyond the ken of the human mind. It is a land where nature opened up all her stores. Here divine providence must have been active because He has given so much of wealth and happiness to Southwest Texas that it is a marvel that there were any favors left for any other portions of the world. Here is a soil so variegated and so blessed by heaven that it will yield double in abundance that of any known section of the Union. Here you will find meandering streams and flowing rivers sending their waters to the Gulf and moistening the earth. Here you will find a climate so congenial to man and beast that labor becomes a pleasure, where crops can be produced earlier and with half the toil required elsewhere, with double the results. Here are more sunny days under a sky blue as that of the famed celestial dome of Italy, than anywhere in the world. The winters are mild and summers so pleasant that life really becomes "worth living." To the South is the Gulf of Mexico stretching far beyond the range of human vision, its waters teeming with every variety of fish, and its bosom fairly covered during season with every variety of ducks and geese. Here are the cheapest lands in the world, providing an investment that is more certain of results and more lasting in its benefits, more alluring in financial returns than any proposition known to the agricultural world today. Here, in short, is the farmer's home, the hunter's paradise, the haven of the invalid, the delight of the tourist, the Utopia of modern history, blessed by providence, and only awaiting the labor and intelligence of man to more fully develop it.

Alexander Helper, a veteran Baltimore journalist, visited Texas in the interest of the Manufacturer's Record, and Texas captured him, body, brain and soul. The following are a very

few of the many complimentary expressions included in his report:

"Imperial and Potential Texas may well claim the world's attention as a predestined center of wealth, of population, of a civilization which shall rank with that of the greatest and best of the world."

"Every man who comes to the soil and pitches his tent is sure of three things. The soil yields abundantly, the harvests come and happiness spreads over his baliwick as freely as flowers shed their perfume every spring."

"A bale of cotton to the acre and a bale is worth \$60.00. How is that for prairie land production? Old Mother Earth in Texas is buxom and prolific, and needs but little coaxing to yield abundantly."

"Men delve and women spin, and frugality and contentment is perched on every hill top. Crops grow just for the sake of growing and to make the heart of man glad."

"Texas is one of the greatest States of the American Union, where health and happiness, wealth and contentment are to be found on every side, and in greater proportions than any where else. And this as a general rule, because men 'tote fair.'

"There seems to be in Texas a smile of divine favor over all the land, rich in the heritage of a law abiding, prosperous and contented people."

The Coast Country of Texas consists of a broad belt of nearly level prairie, extending from the timber line to the Gulf Coast. This line is well defined. Here the black lands of the prairie stalks into the Gulf proper, or forms bluffs from ten to forty feet above the level of the long bays or lagoons, which are peculiar features of the Texas Coast topography, and which makes the Texas Coast so pleasant as a place of residence, and so profitable as a farming country.

Broadly considered, the "Coast Country" extends from the Sabine River for about four hundred miles, or until it meets its extreme western boundary—Mexico, and the yellow Rio Grande, near Brownsville. Its width is from fifty to a hundred miles, and the variety of soil almost infinite. In general character it resembles the prairies of Illinois or Kansas, except that it is minus the "roll," which is more or less distinctive of the Middle West, the Texas prairie being as level as a floor, with an almost imperceptible decline to the coast. This latter insures good drainage and lessens the expense of cultivation, a fact that the farmer may not disregard in the selection of a home.

The greater portion of the Coast Country of Texas is virgin soil, undefiled by plow or spade, just as it was a hundred years ago; just as it was when LaSalle landed at Matagorda and met an untimely fate because of his valor and enterprise. This condition prevailed until the cultivation of rice added to values

and brought the vacant acres within the spell of the husbandman. The march of progress in this direction spread into the green pastures of Texas. It leaped the Sabine River, which marks its eastern boundary, and is today putting thousands of acres in the Texas belt into cultivation. The extent of these acres in the Lone Star State is so considerable, however, that much land classed as "virgin soil" today will be virgin soil twenty years hence, even with the rapid settlement of the sections referred to, and the constant and continual influx of settlers from the more populous sections of the West and North.



Hereford Yearlings in the Coast Country—Sunset Route

The region along the Gulf Coast, from the Sabine to the Rio Grande, is so vast that no matter how great the inroads upon its extent, posterity only will be able to determine the real capacity of this fertile empire, or the day when its surface shall be blossoming with the fruits of the orchard and of the field.

The Coast Country today offers more opportunities for the employment of brain and capital than any part of the United States. The facilities are remarkably extensive and the natural advantages without equal. Ever since the settlement of this

avored country, the prairies have been devoted to the raising of live stock, and although thousands of finely bred Herefords and Durhams dot the broad green ranges, and make a component part of the wealth of Texas, the roof tree of the farmer is going up everywhere, and the "cow man" is realizing that the land that will produce to the value of \$35.00 to \$100.00 per acre is too valuable to be given over to the steer, which needs many acres to produce a like amount.

The rich prairie lands will produce abundantly many of the prime crops. The future of intensive farming has been assured in the light of recent experiments, and the success which has attended the efforts of the farmers at various points in the Coast Country, along the Sunset Route, which penetrates that section will lead to the development of its greatest natural resources.

Ninety-one counties from the Coast Country of Texas have a population of nearly 750,000 persons, yet it must be remembered that but a small portion of the area is settled by farmers, practically the entire area being given over to the cattle people. As mentioned, however, the rice industry has put into cultivation 230,000 acres, and the present impetus bids fair to place five times that quantity in active crops within the next decade, to say nothing of the territory which will be devoted to other products.

The future of the Coast Country is fair, with the promise of a new agricultural dawn. Capital is being invested in this favored region, and thousands of investors from Illinois, Iowa, Missouri, Ohio and Minnesota are now pouring into the Coast Country of Texas with a view of making permanent location therein. There is room for half the population of the West in the great prairie belt, and, therefore, there will be no crowding for a long time to come, while the thrift, industry and intelligence of the new blood will make the Coast Country blossom like a rose.

PRODUCTS OF THE COAST COUNTRY.

Owing to the natural conditions, location and variety of soil, in the great Coast belt, it follows that the range of products is necessarily extensive, and of such character as to make it adapted to the demands of the farmer, no matter from what portion of the United States he may come.

Practically every crop grown and harvested in the various States of the Union, with the exception of barley and rye, may be successfully cultivated, and with profit, in the Coast Country. So harmonious are the conditions, that as many as five of the world's prime products may be raised to a complete fruition in the same field. Cotton, corn, sugar cane, rice and oats pro-

duce abundantly throughout the costal plains, and the splendid fertility of the soil is taxed but little in the process.

Long summers of growing weather, mild winters and a genial sky permit the practice of husbandry for nearly twelve months of the year. There is scarcely a day that work may not be carried on in the field. This fact is one which may be surprising to the farmers from the Northern corn and wheat belts, who are accustomed to the rigors and inconveniences of at least six months of exceedingly cold weather, when cattle must be housed and fed, and the plow remain idle—expense going on and the ground producing nothing but frost. Then, too, the settlers on the wind-swept plains of Dakota and Minnesota are compelled to give their attention to one crop—a character of farming which must, in the long run, cripple both farm and the farmer, and which renders the seasons long and arduous periods of anticipation, anxiety, and complete ruin when mortgages overwhelm and creditors become insistent.

Aside from the conditions which environ the cultivation of prime crops, and here the agriculturist may make his choice as to the variety, the opportunities for the raising and shipping of early fruits and vegetables are infinite. The Southern latitude and comparative freedom from heavy frosts of many portions of the Coast Country, enable the growers to cultivate the tender varieties of vegetables and ship to more Northern markets long before seed has begun to germinate in the vicinity of St. Louis, Chicago, St. Paul, or any of the other cities of the Middle West.

The development of this industry has been steadily augmented during the past few years, until shipments are now being made by the carload through Houston and San Antonio to the consumers in other States, and the trade is in its infancy. What these locations enjoy in the matter of early vegetables in the spring, they also enjoy in the fall. As late as November 15th and 30th the gardens of Beeville, Cuero, Victoria and San Antonio are green with fruiting tomato vines, potatoes, cabbage, cauliflower, lettuce, radish, and all the varieties of garden truck which so delight the soul and appetite of the vegetarian.

The yield is in proportion to the effort and the labor expended. The quickness of growth in the Coast Country is amazing. A branch of a grape vine grew forty-six feet in a single year and produced heavily. Figs grow well and produce large crops yearly. The opportunities in this direction are splendid, as 5-year-old trees often yield 400 pounds of fruit, which may be dried or preserved at a profit of \$30.00 to the tree. The tree is prolific and does well through the entire belt. The establishment of canning factories will make fig cultivation a splendid asset, as this delightful fruit is always in demand, and in the Coast Country it practically takes care of itself.

Texas is the home of the plum. It grows wild in the woods

and produces abundantly. The cultivated varieties pay well, while the three varieties of the wild plum are used for jams and jellies.

The following will give a fair idea as to what the settler may anticipate as the result of his efforts in the sections under discussion.

The cauliflower, when carefully cultivated, produces generously. A farmer near Beeville received \$900.00 from a single acre, which he irrigated with the output of a three-inch well. It is sown early in July, set out in August, and may be marketed in the latter part of December.

Cabbages are now being extensively cultivated in the Coast Country. Corpus Christi one winter alone sold \$100,000 worth of this vegetable. They are planted in September.

The tomato is another crop that will head the list for profit. It is safely demonstrated that the tomato will produce abundantly in the Coast Country. It begins to ripen May 20, and at once finds ready sale at high prices all over Texas and throughout the North.

The small white navy bean makes two crops a year on the same land and yields very abundantly.

The Creole, White Bermuda and Crystal Wax onions are as successfully grown here as around New Orleans. They mature in April, just when Northern onions are sprouting, and the demand is unlimited. Two hundred dollars an acre net is considered an average profit, but much larger sums have been made when greater care and cultivation has been given the crop. The White Bermuda, which is extensively grown, has yielded as much as 37,000 pounds per acre.

Irish potatoes do well everywhere; the early planting rarely brings under a dollar a bushel. They are a sure and profitable crop. The early crop is ready to be dug from the 20th of April to the 10th of May. One grower near Wharton, in 1906, by shipping in carload lots to Chicago and St. Louis markets, netted \$60.00 per acre, clear of all expenses, including cultivation, shipping and commissions, and immediately planted the same ground in cotton and picked three-fourths of a bale to the acre that fall. This same farmer, in 1905, shipped some nineteen cars to Chicago with even better results, and at once planted cotton on the same land.

Beans, peas, cucumbers, squash, beets and cantaloupes are grown in quantities, reach an early stage of perfection and find a ready market.

The melon crop is a very important and profitable one. One county realized from 230 acres one season the handsome sum of \$32,966.00. This county was equally successful with "garden truck," as it reports 399 acres, valued at \$130,660.00.

Experiments with California apricots and cherries in the vicinity of Victoria have proven most successful.

Of sweet potatoes there is literally no end. They grow here as they grow nowhere else, and numberless instances could be cited in proof of the fact. Two crops a year are grown on the same ground. B. C. Moffet, of Galveston County, raised 400 bushels to the acre, and found a ready sale for them at \$1.00 per bushel. Single specimens weighing over nine pounds were shown the writer. J. Brogden, living near Bryan, in Brazos County, demonstrated that the potato was a most profitable crop by planting six acres. He sold 200 bushels at fifty cents a bushel to the local trade and shipped 400 bushels to Waco, Texas, at forty-five cents per bushel, and had at home 200 bushels more. The money value of the crop thus reaching at least \$380.00, or nearly \$65.00 per acre. The sweet potato is one of the most important vegetables, according to the statistics of the Fifth Annual Report of the Agricultural Bureau of Texas. The value of the potato crop for the year was \$1,503,764.00. Total number of acres planted was 20,928. The value per acre was \$50.25. The cost of growing crops of corn, wheat, cotton and potatoes is very nearly the same. The tops of sweet potatoes make a fine feed for cattle, especially milch cows. The vineless potato tops are particularly valuable in that they remain green during severe drouths, when it is difficult to get green grass with which to feed. They may be cut with a mowing machine and put up like fodder. They should be mixed with cotton seed or cotton seed meal.

There is no limit to the possibilities of fruit growing. Any part of the State is adapted to the successful cultivation of certain fruits; those growing through the widest extent being peaches, plums, apricots, prunes, persimmons, nectarines, grapes and pears.

The cheap deforested red pine lands of Central East Texas, and the basin of the Rio Grande alike offer extraordinary inducements to the prospector. East Texas presents the greatest development along this line; the shipments from Jacksonville and other points in that section number thousands of carloads annually, and are increasing. As an illustration of the development of the vegetable and small fruit industry it may be interesting to note that during the year 1904 (the latest for which the figures are at hand) the shipments from twenty-four towns amounted to 895 cars of strawberries, 2,835 cars of cantaloupes, 1,072 cars of tomatoes, 1,332 cars of potatoes, 1,140 cars of cabbage, 162 cars of cucumbers, 2,810 cars of peaches, 470 cars of pears, 226 cars of vegetables. This total of 10,942 carloads from the few sections mentioned all went beyond the borders of the state. Alvin, located south of Houston, last year shipped small fruits, including strawberries, valued at \$86,680. When it is remembered that the seasons in the territory mentioned, are far in advance of those of any other section of the South, it

may be understood how considerable are the sources for profit and how permanent the demand. The populous centers of the West afford constant markets for all products.

The bee industry is one which promises much in the Coast region. At a late California convention of bee-keepers, Mr. Francis W. Blackford, in an essay on bee keeping, among other facts, said that the annual value of honey in the United States is close upon \$100,000,000, and the number of colonies of bees kept by apiarists equalled about one-fifth the number of sheep in the United States. This would place the number of colonies



Peach Orchard in the Coast Country—Sunset Route

of bees at 9,000,000, which, at an average value of only \$3 a colony, would represent an investment of \$27,000,000 in bees alone.

In regard to the cultivation of grapes, the Coast Country is, so far as known, the only part of the republic east of California where the finest European grapes attain the greatest perfection. As they ripen here from four to six weeks earlier than in California, the vinticulturists of this coast have the run of the markets when there is no competition, and their comparative proximity

to the body of consumers gives them great and permanent advantages over California. These grapes are pruned down to a mere stump and the trailers or vines permitted to run out over the ground as in California vineyards, without the vinticulturist being put to the expense of supports, wires or stakes. They are ready for market by June 1st, and frequently obtain high prices.

The strawberry season opens early, and about sixty days in advance of all competition. The sandy lands of the Coast Country are well adapted to this berry, and the annual net returns for some years has been \$150 to every acre of berries. The blackberry grows over a much larger territory, and by many has been found to be as profitable as the strawberry. Strawberry picking and shipping begins about the middle or latter part of January, and not later than February 15th, in any part of the Coast Country, and the early berries often bring \$1 per quart in the Northern markets. The shipping season lasts about three months. One man reported that he had gathered 1,000 quarts of ripe berries from one acre in one day. Another, who said he was only an amateur in gardening, reported that he made \$300 per acre profit on strawberries last season. Another, living two miles from Alvin, reported that he fertilized one acre of ground with stable manure, and, without any assistance whatever, he raised and marketed from that one acre a crop of strawberries from which he realized the sum of \$1,426. On the same acre of land in 1892, he raised a crop of celery which he sold for \$1,000, doing all the labor himself. The celery grown here is ready for market about the time the Northern crop is exhausted.

The following estimate taken from a reliable source is considered conservative. The cost of production in the estimate is sufficiently high to cover every item of expense, while the estimated profits are much less than the actual average, and is for an acre of raw prairie land.

One acre of land.....	\$15.00
Breaking first time.....	3.00
Harrowing and rebreaking.....	2.50
13,000 strawberry plants.....	26.00
Planting.....	7.00
Cultivating twice and fertilizer.....	7.00
Total.....	\$60.50

This one acre of strawberries, set out in June, July or August, will, if properly cared for, net the owner the following spring \$100 to \$150. The second year it will net from \$200 to \$250.

COTTON.—The cultivation of cotton is common to the Coast Country, as it is to the great central belt of Texas—the state contributing one-third of the cotton grown in the United States. All character of soil produces this staple in abundance, although the bottom lands make the best crop. In years of good yields the average return is from $\frac{3}{4}$ to 1 bale per acre,

CASSAVA.—The Coast country is well adapted to the growing of cassava, the tapioca plant, which has proven so valuable as a food for cattle and hogs. The yield under favorable circumstances is astonishing, one plant of one year's growth weighed fifty pounds. Eight hundred to one thousand bushels per acre can be confidently counted on. It is very productive; it has a remarkable immunity from drought, flood and disease; it is easy to harvest, easy of cultivation and occupies the ground during the whole growing season, to the exclusion of noxious plants. The pork made from feeding it is solid and delicate as chicken, and the lard is as firm as that of corn-fed hogs. It produces a good flow of rich milk and firm, golden butter. From one acre of cassava enough roots may be obtained to fatten ten hogs or feed three milk cows during the entire year.

Soil suitable for corn is appropriate for cassava. It must not, however, be wet land, or subject to overflow, as that will rot the tubers. Frost, if severe, will kill the plant so effectually that but a small portion will sprout again. By saving the stumps when the roots are dug and planting them they will sprout and grow, though the tops be killed two or three times.

The cassava root contains a large proportion of starch, about twenty-five per cent of the weight of the fresh root.

LAND IN THE COAST COUNTRY

Due to the wonderful extent of the Texas Coast country, it follows that there necessarily exists an infinite variety of soils which thus provide for nearly all of the great prime crops of the country, and for the smaller products which constitute no inconsiderable feature of the farmer's prosperity.

The open prairies are formed of light gray, dark brown and black sandy loam, and of a soil commonly known as "black waxy," or "hog wallow." The loams are friable and easily worked and kept in condition. They are well supplied with the chemical constituents necessary to force vegetation. The black waxy is very rich, but requires more power to thoroughly subjugate, but will return all trouble and expense.

The bottom lands following the course of the larger river which traverse the belt are of wonderful fertility and depth. The bottoms of the Brazos, Colorado, Guadalupe, Old Caney and Oyster Creek, are richer than the famed alluvial lands of the Nile,

and constitute the finest sugar lands in the world. All temperate zone crops yield to a remarkable degree in these lands, and cotton grows to a height of seven or eight feet. Garden truck makes a splendid yield. All products common to an alluvial country attain a rare degree of excellence in the section indicated, while the sub-tropical fruits, including the pomegranate, fig, Japanese persimmon, ginger, cinnamon and the cassava root thrive well, while near the immediate coast, oranges, lemons and limes produce well.

The price of land varies according to location and not particularly because of their inherent qualities. Near any of the larger towns or cities, land frequently sells for high figures, but in the areas devoted entirely to farming, fine lands may be purchased at prices running from eight to forty dollars per acre, according to natural advantages, improvements, etc.

These figures are very low, all things considered. Lands in Illinois, Iowa or Minnesota, which yield a net return of from eight to ten dollars per acre, are never on the market at values lower than \$75.00, while more commonly \$100.00 per acre. Lands in the Texas coast country, however, yield from \$50.00 to \$500.00 per acre, according to the crop grown. A farmer near Beeville, on an acre of irrigated land, grew \$900.00 worth of cauliflower. Another in the more arid section received a gross return of \$5,600.00 from 240,000 pounds of onions grown on seven acres by irrigation. A profit of \$200.00 on watermelons, cantaloupes and strawberries, is not uncommon, and yet it is on \$20.00 land, and frequently less.

These illustrations only serve to indicate the diversity of the Coast country lands, and do not consider the possibilities contained in the cultivation of prime crops, which will be treated under another head, their magnitude justifying this distinction.

CLIMATE IN THE COAST COUNTRY.

Few portions of the United States enjoy a more delightful climate than does the Gulf coast. It is free from the extremes of temperature which characterizes the North. East and West, and the balmy winds which sweep during the summer from the Mexican Gulf carry coolness and health in their very breath.

A feature of the summer climate, and one which explains the ability of the dweller in the Coast country to smilingly assert his belief that no other portion of the country enjoys a more delightful temperature, is the fact that the variation of the thermometer during the heated term is about twenty-five degrees from maximum to the lowest reading during each twenty-four hours. Thus particularly in the country districts of the coast, the use of a light cover becomes imperative during the early morning hours.

The average rainfall is in the neighborhood of fifty-six inches per annum, and this precipitation is well distributed during an average year, insuring, in a measure, a certainty of harvest, no matter what be the crop. The growing months are usually marked with abundant rains and the winter season, usually during the latter part of January and all of February, is also thus characterized.

The heated term is very healthy. Summer is usually a period of freedom from all ills which affect mankind. In this



A Woodland Scene in the Coast Country—Sunset Route

connection the Texas Commissioner of Agriculture, in his fifth annual report, said: "Away from low places subject to periodical overflows, there is no cause for sickness, and there is no reason why the State should not become a health resort as well as a refuge for persons seeking to escape the rigors of a Northern winter."

At all points eastward on the Gulf, and at all points above this latitude, northward along the entire Atlantic Coast to New York, the thermometer indicates lower temperature in winter

and a higher temperature in summer than at Galveston and along the Texas Coast Country. In other words, it is hotter in summer and colder in winter at any point on the Gulf or Atlantic Coast above this latitude than in the Coast Country of Texas. The "Norther," an important feature of Texas climate, is nothing more than what is called elsewhere a cold north wind. The wind usually attains its greatest velocity in twenty-four hours, then gradually ceases, veering again to the south.

The winter is a succession of pleasant days, with the temperature ranging from forty to sixty degrees, falling three or four times each winter to thirty-two or thirty-three degrees, and in seasons far apart as low as twenty-five and twenty-nine degrees, but these seasons of low temperature are of short duration and rare occurrence, and seldom causes injury. In summer the temperature ranges from eighty-four to eighty-eight degrees for weeks and months; the highest temperature in Galveston for three succeeding summers was ninety-one, ninety-three, and ninety-six. Injury from sunstroke is almost unknown. July is the warmest month. Killing frosts do not usually occur at Houston or Galveston until after December 1st, and the unwelcome visitation is frequently delayed until January. Four years in twenty there was no frost whatever in Galveston, and in five different years there was but a single frost. The last hard frost appears any time between January 5th and February 1st.

The Galveston weather station has issued the following table which shows the distribution of rainfall, the variations of temperature and the comparatively few cloudy days:

Month	Precipitation in Inches	Temperature		No. Days No Sunshine
		Highest	Lowest	
January.....	2.86	74	35	4
February.....	1.92	75	34	3
March.....	4.96	76	30	9
April.....	5.14	81	56	8
May.....	5.38	85	63	2
June.....	7.42	90	65	2
July.....	1.82	92	71	2
August.....	5.09	90	70	1
September.....	4.79	87	56	1
October.....	4.38	89	54	2
November.....	2.37	79	49	5
December.....	2.23	75	47	4
Total.	48.36	—	—	43

What these tables show as to the average annual temperature at Houston and Galveston applies pretty much to all the Coast Country. A record kept for thirty years at Victoria by Dr. Cook, and verified by the U. S. reports, shows the annual

mean temperature to be 70 to 76; in July, 80 to 85; in January, 55 to 65; maximum 95 to 100; minimum 20 to 30 above zero. Annual rainfall 35 to 40 inches the same as in Missouri, Iowa, Michigan and Wisconsin, and for spring and summer is 20 to 25 inches, the same as in the above states, together with Illinois, Indiana, Ohio, New York and Pennsylvania. A. W. McLain, late of the United States Department of Agriculture, and ex-director of the Minnesota State Agriculture Experiment Station, made a careful study of the Coast Country, and says of the matter of temperature and rainfall: Average temperature in the Texas Coast district, as shown by the signal service records, taken at an elevation of forty feet above sea-level, for the last fifteen years, has been for the spring months 70.5 degrees Fahrenheit; for the summer months, 82.2; for the fall months, 69.8, and for the winter months 55.7 degrees.

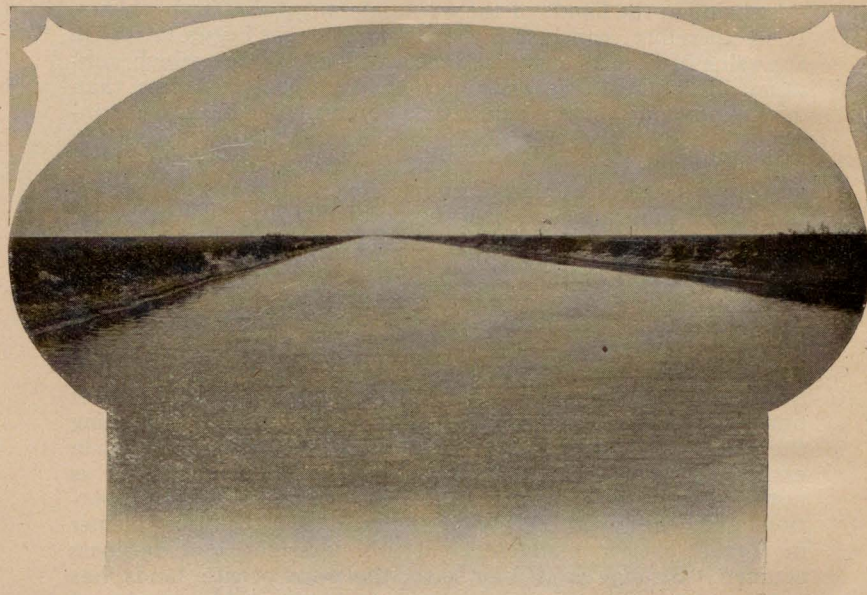
The brief description given here of general conditions which exist and obtain in the Texas Coast Country, will serve to give a general idea of what the homeseeker may expect. There is much room for absolute detail, but the scope of this pamphlet is too limited to permit a minute description of the peculiarities and characteristics which are features of the favored region. Suffice it to say that the sections of the State referred to and covered by all the foregoing are exactly as represented. There has been no attempt to exaggerate conditions. On the contrary, we believe the settler, upon making an investigation of the Texas Coast Country, will come to the conclusion that we have not done justice to the claim the territory has or should have upon the consideration of prospective settlers.

The Coast Country is gradually undergoing marked changes, due to the injection of new blood and of new ideas from other States of the Union. Its advantages are being recognized and realized by the farmers of the Western States, and as a result of this, many thrifty and intelligent people are building anew their homes in one portion or another of the country described. Thus the prospective settler will find much to his liking and little to his dissatisfaction in making a tour of the great coastal belt along the line of the Sunset Route.

RICE IN TEXAS.

There is no crop possible of successful cultivation in the Coast Country which brings as quick returns as does this cereal. The profits, under intelligent management, fully warrants the enormous investments which have been made in recent years by both capitalists and farmers who have tired of the indifferent returns and corresponding prices which prevail in States less favored. New comers engaging in this industry have elected to settle in communities which permitted of intercourse with

persons from their native State, with the result that towns may be found composed almost entirely of Illinois, Iowa, or Missouri families, and this condition is in a measure answerable for the general satisfaction that prevails among our farmers. The towns of El Campo, Edna, Louise, Bay City, Van Vleck, Markham and many others located on the Victoria Division of the G. H. & S. A. Ry., if not fathered by the Rice industry, at least owe their present prosperity to the successful cultivation of that cereal by our Northern friends. From the above you may infer with reasonable assurance, that you will meet either acquaint-



Rice Irrigating Canal in the Coast Country—Sunset Route

ances or friends at one or more of the Rice centers mentioned. The cultivation of Rice has been so far developed that it is possible to purchase lands under canals where water for irrigation is assured, to purchase where wells with a sufficient flow is guaranteed, or to purchase outright, making your own arrangements for development. Your profits will depend entirely upon your management, for there are good farmers and poor ones. Many farmers have netted a sufficient sum from the first crop to pay for the land. Others have met with only a moderate degree of success, while others have failed. This, however, was not the fault of the industry. The growing of rice is inexpensive,

no labor being required after seeding, and during the entire growing period a sufficiency of water is the only requirement. Harvesting is conducted the same as for wheat, the same implements being used. After threshing, the product is placed in bags of an average weight of 162 pounds and so sold, the market quotations showing the price per bag. With the exception of a limited area in the Carolinas and the extensive Louisiana belt there are no lands available for rice culture not included within the area of Texas, and it is significant as indicative of an increase in consumption, that the present market is bare, all rices being in the hands of the wholesale merchants and jobbers. It is, therefore, conclusive that the public has begun to realize the value of Rice as a staple article of food, as one which contains all the nutritive principles and in a greater degree than does almost any other single article of diet. Its digestive principles are also gradually being appreciated, many dyspeptics placing themselves on a rice diet for temporary relief. The prairie lands of the Coast Country are ideal for Rice production, containing sufficient soil to thoroughly nourish the plant, and the clay subsoil lying underneath retains the water used for irrigation purposes. Once drained these lands dry out very rapidly, and will easily sustain the most weighty harvesting machinery.

The average yield per acre is 15 bags, and the crop of 1906 was sold under competitive bids to the millers at prices ranging from \$2.75 to \$4.00 per bag, resulting in a universal condition of prosperity in the rice districts. From an insignificant beginning the industry has expanded to such an extent that a production in excess of that of 1906 is looked for. An industry which is not productive to the farmer does not grow in such proportion, and the prosperity now enjoyed by the rice farmer in Texas speaks eloquently of his foresight and business acumen. Strange as it may seem, the price of rice lands has not kept pace with the development, and may still be purchased at prices very much below their productive value.

The system of rice irrigation, by means of canals, in Texas, had its inception in the year 1892, when a canal company in Jefferson county installed a plant of some magnitude. This system contemplated the irrigation of lands not located on the banks of running streams, and the water was conducted by means of earthen levees to the lands it was intended to serve. Such canals are built overland and not below the surface, and usually follow the course of ridges or the highest portion of the land, and are constructed by throwing up parallel levees from the outside. They vary in width from 75 to 200 feet, and their length is determined by the acreage it is proposed to irrigate. Branching from the main canals are what are termed sub, or lateral, canals, which are directed to the outlying farms. This means of irrigation

was found so successful that the promotion of other rice canals followed until there are now in the Coastal belt forty-one canal companies and pumping plants. Pumps are employed to lift the water from the river to the main canal, where it is carried by gravity to the point of diversion on the land. In some instances where the banks of the streams are high, more than one pumping plant is required, and in some cases there are re-lifts to place the water on higher areas than those which can be reached from the original canal. These pumping plants vary



Field of Rice in the Coast Country—Sunset Route

in capacity, the largest having an output of 125,000 gallons per minute.

For several years after the canal system of rice irrigation came into vogue, estimates of the area available for the crop were based entirely upon the water supply from streams, but it was soon discovered that the level Texas prairies were underlain with a water bearing gravel about forty feet thick, and reached at varying depths, but seldom exceeding 250 feet. For the purposes of irrigation in this territory, wells were bored

which were found to furnish an abundance of the purest artesian water. In some cases these wells flow of their own accord, but when it is necessary to pump the lift is rarely more than several feet. Thousands of such wells have been sunken throughout the rice area in the Coast Country, a single well being often sufficient to irrigate 150 acres of rice land, for it must be understood that during the entire period of its growth, and until maturity, it is necessary to keep the land submerged to a depth of several inches, the water being retained on the land by a system of earthen embankments thrown up with a plow to the height of from 18 inches to two feet, and nowhere else on earth are there so many wells yielding such an abundance of water. The cost of sinking a well of this character is nominal, and the well system has made thousands of acres of land available for rice culture which could not have been supplied from streams. The rice canals and wells combined irrigated during the year 1906, 232,000 acres, producing 1,900,000 bags of rice of a quality not surpassed in excellence by similar grain grown in any other part of the world. So many favorable comments can be made, and so many individual cases can be cited forcing a favorable consideration of this industry that they have been included in a publication devoted entirely to that subject, and which is being distributed free of cost, postage included. You are, therefore, at liberty to write for a copy of "A Few Things About Rice" and our book of "Rice Recipes."

RICE CULTURE.

(From the Sunset Route Rice Book)

While scores of people throughout the length and breadth of our State and the United States hear of rice culture and read of the great profits and plenty it pours into the laps of the fortunate producer thereof, still these same scores of people are in blissful ignorance regarding the mode, methods and general details of this "king of all crops."

The first essential in the cultivation of all crops is selecting land suited to the growing of the crop you desire to cultivate. In rice farming the lands must have a nearly level surface, so that the water will stand evenly on the land and enable large fields to come under the smaller levees, which hold the water on the land. The soil should be from four to fifteen inches in depth under which must be clay so as to prevent the sinking of water into the earth. There are also several other important reasons favoring shallow soil. The growth is not so rank, which gives a better head and less straw; the ground dries out more rapidly than deep soil, and the harvesting is much easier.

Probably the greatest element in the transformation of the industry from a small and insignificant beginning to what is recognized today as one of the leading and best paying industries in Texas and Louisiana, may be found in the extensive system of irrigation that has been established in the last few years. The most sanguine believers in rice culture never expected to see the many inexhaustible streams and bayous, with which the prairie region abounds and which connect the large bodies of fresh water lakes and bays lying close to the Gulf Coast, utilized for irrigation purposes, on account of the high lift from these streams, which, in many instances, is from twenty to sixty feet. In consequence, thousands upon thousands of acres of rice lands, which were supposed to be inaccessible for this purpose, have proven to be a "bonanza" to their owners. They have on this account suddenly developed an intrinsic value that readily places them by the side of the most valued agricultural lands in the United States. The development of rice culture requires considerable preparation, and goes much further than planting and harvesting. In the first place, companies are organized to build the canals and put in the pumping machinery. This necessitates an outlay according to the amount of land to be irrigated.

Canals are constructed by building two parallel levees over the prairie, one hundred feet apart, and varying from three to eight feet in height. The levees are made the same as railroad dumps, except not so wide, often extending fifteen miles, and from these main levees smaller ones extend four to six miles, and are termed lateral canals. Some canals have as many as six and eight laterals. The engineer in locating the main canal and laterals selects the highest lands, and hence, some canals have many different courses. The object in clinging to the most elevated land is that all land will be below the level of the water in the canal. Now, get pictured in your mind these parallel levees of the main canal, and branching therefrom the lateral canals, all of which penetrate, say, twenty thousand acres of land. The levees of the main canal begin on the bank of some inexhaustible stream, or its tributary, at which point the immense pumping plant is located. Whenever it becomes known that a rice canal is going to penetrate a certain territory, there is a rush for lands, and by the time the canal is finished, houses are completed and many farmers are engaged in breaking the sod. The two ten gang plows and four large mules do the work. After ploughing, the disc harrow is needed to cut the sod, and in April and May the sowing commences and is done after the manner of wheat, oats and similar grain. The press drill or seeder can be used, but the drill is preferable, for it gives a more regular stand and ripens more evenly.

The pumps started, and a regular stream is sent boiling and

foaming through the levees, filling them bank full. The flood gates to the lateral canals are loosed, and they are soon filled. You will note the water is now from one to six feet above the lands to be irrigated. You behold field after field of rice, which resembles so many wheat fields in appearance, and which are now ready for the water. The canal superintendent goes from farm to farm, and the flood gates from the main and lateral canals are lifted, and thousands of gallons of water goes pouring into the fields, which is held on the land by small levees constructed for this purpose, and with a view to have the water stand as evenly on the lands as possible.

The rice farmer from this time until harvest begins has only to watch his levees and cry out, "Give me water, water," which he keeps up for about seventy days, the usual period of irrigation. The flood gates are now closed, and the drainage gates are opened.

Harvesting begins as soon as the field dries sufficiently to permit the harvester to enter, which is from ten to fifteen days. The rice self-binder is identical with other grain harvesters, except stronger, heavier and with broad wheels to prevent cutting into the soft earth. The rice straw is larger and the yield of grain greater than wheat, hence the increased strength of machinery. Rice is shocked and permitted to stand about twenty days, when it is either stacked or threshed from the shock.

Threshing proceeds just as with wheat and oats. There is but little difference between the rice and the wheat thresher. The charges per bushel are practically the same. Rice is sacked at the machine, and the average weight is one hundred and sixty-two pounds. It is not unsacked until emptied into the bin at the rice mill, for the reason, each field may have a different grade, and hence it is sold in lots. The unloading of a field of red rice into an elevator of pure white rice would depreciate in value the entire lot, hence the handling of the crop in sacks. Rice is sold by the sack, which weighs one hundred and sixty-two pounds.

It is difficult to determine the exact average yield of rice, but it is safe to calculate, however, when an abundance of water is at hand, the average yield will run quite fifteen sacks per acre. Some farmers greatly exceed this.

Rice warehouses are found in all towns in the rice growing territory, for the farmers who desire to ship to the larger markets. This method, however, has been largely superseded by the rice mills, which have located in the towns and either buy the crops outright or mill it for the farmers account. The rice planter has, therefore, the opportunity of milling and selling his own crops, or the mills will do it for him, or he can dispose of it to the highest bidder "in the rough."

Now we have reached the vital part of rice culture, and which, of course, influences all business enterprises. The first consideration is given to calculating the cost and the profit. No wise man ever embarked in an undertaking without weighing well these two points. One man can easily handle one hundred acres of land. Some handle a hundred and fifty. The cost per acre, including water rent is about \$10. If you are a tenant add \$7 more for land rent, and your total cost is about \$17. The average price of rice is \$3 per barrel, and with an average yield you have \$36 an acre, or \$19 profit per acre, or \$1,900 from one hundred acres. These figures are conservative, and many farmers make much more.

The difference between rice culture and other agricultural pursuits is, that a rice planter grows nothing else. He does not want to do so, for the product from one acre of rice will buy several acres of corn, oats, hayseed. Therefore, he buys all his feedstuff, except, possibly, a portion of his rice straw, which, when properly saved and cured, is used instead of hay. The rice farmer is not a competitor, as regards any other crop grown. In fact, he has gone on to lands heretofore unoccupied, and, being a good consumer, he is creating a market for great quantities of corn, oats and hay. In fact, he goes further than this, and buys practically everything to eat and wear. He can afford to. Rice farming also takes just that much corn and cotton land from those crops, and pushes up the notch of diversification as regards this State.

COTTON

It is difficult to consider Texas from an agricultural standpoint, and omit what for all time will be its staple product. Producing as she does a goodly portion, estimated at one fifth of the cotton of the world, the speculative mind has long since ceased to juggle with the reasons why weather conditions during the growing season should form the subject of cablegrams to the cotton markets of the world. Notwithstanding the State's immense production of cotton, which will always be the basis of her wealth, it is estimated that the world's entire undeveloped acreage suitable for its production is contained within her borders, and the most productive of these are what are known as bottom lands. Such lands extend for many miles distant from the banks of the rivers penetrating the Coast Country, and emptying into the gulf. These rivers, for example the Colorado and Brazos, drain immense areas, and by frequent overflows in the past have deposited layer after layer of silt composed of the richest soil, thereby forming our river bottoms, acknowledged to be the most productive known. Upon such soil does cotton grow and produce its maximum yield per acre. One bale per acre, and a bale of 500 pounds at present prices is worth \$60.00,

is not considered an exception. In fact the farmers in Wharton and adjoining counties strive for and frequently obtain a production per acre in excess of one bale. The same may be said of Fort Bend, Brazoria, Colorado, Victoria, Goliad, Bee, De Witt and Wilson Counties, with very little advantage in favor of either. As before stated, the undeveloped cotton lands of the world are in Texas, for the older states have impressed every



Coast Country Cotton Field—Sunset Route

acre of their area in the past few years to meet the demand, and the quick consumption of their supply testified to their inability to meet the demands without the aid of Texas. Southwest Texas is the place for the cotton planters of the older states, as well as for the farmers from the North to invest their money. Here they will find lands, cheap lands, on which they can raise not only one crop of cotton but several crops. Southwest Texas needs more cotton mills, more cotton oil mills, in order that

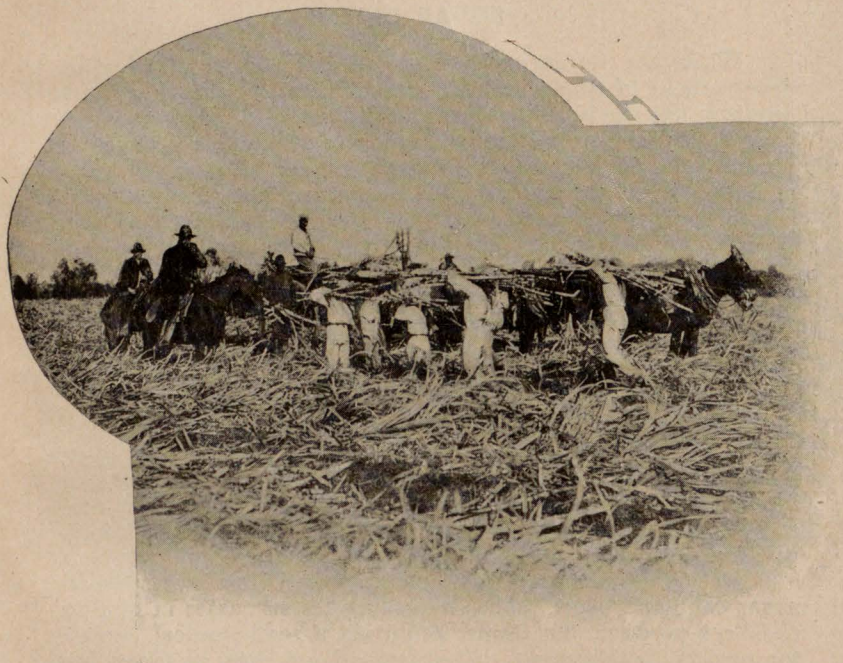
she may receive her full share of the bi-products of cotton. It can produce more of the staple than any country of the world area for area, and it will not interfere with her other crops. It will simply augment her growing wealth and more firmly establish her standing as the greatest cotton growing territory in the world. Compute, if possible, the worlds increase in population, bear in mind the fact that cotton goods in the form of some commodity is a daily necessity to a large majority, and the fact is patent that under normal conditions cotton will always be profitably grown.

SUGAR CANE

While the farmers of Texas are striving for the further development of its agricultural possibilities, they have without question left the bar down here and there. One point in which they have failed to keep up with their opportunities is the sugar industry. Texas ought to produce ten times as much sugar as the State now produces. The consumption of sugar is increasing enormously, and there has been no complaint regarding prices in recent years except on the part of the consumer. The total quantity of sugar imported into the United States during the nine months ending March 31st, 1907, was 2,692,000,000 lbs. The quantity produced in the United States in 1906 was, according to the best figures obtainable 1,304,000,000 lbs, which exceeds by 14,000,000 lbs. the figures of the year 1905. It is estimated that notwithstanding this large home production, it constitutes but one fifth of the sugar consumed in the United States. Another one fifth is supplied by our Islands, Porto Rico, Hawaii and the Philippines, so that we are dependent on foreign countries for about three fifths of our large sugar consumption averaging about seventy six pounds for each individual.

The domestic supply of sugar is derived from two sources, sugar cane and beets. The cane sugar far surpasses in quality the beet product, the former requiring a semi-tropical climate for perfect development. The demand for cane molasses has exceeded the supply for many years, and there is room in Texas in Fort Bend, Colorado, Wharton, Brazoria, Matagorda, Victoria, Jackson and De Witt Counties alone, for a hundred or more large sugar plantations. The average tonnage of sugar cane per acre in the rich bottom lands found in the counties mentioned above is 25 tons, the yield of first or white clarified sugar per ton is 150 lbs of 96 : test, and the cost of manufacturing per 100 lbs. will average \$1.65. The cost of production per ton is less than \$2.00, figures being governed entirely by the managers ability for "cutting corners" and otherwise securing in labor, material, etc., the full value of such moneys as may be

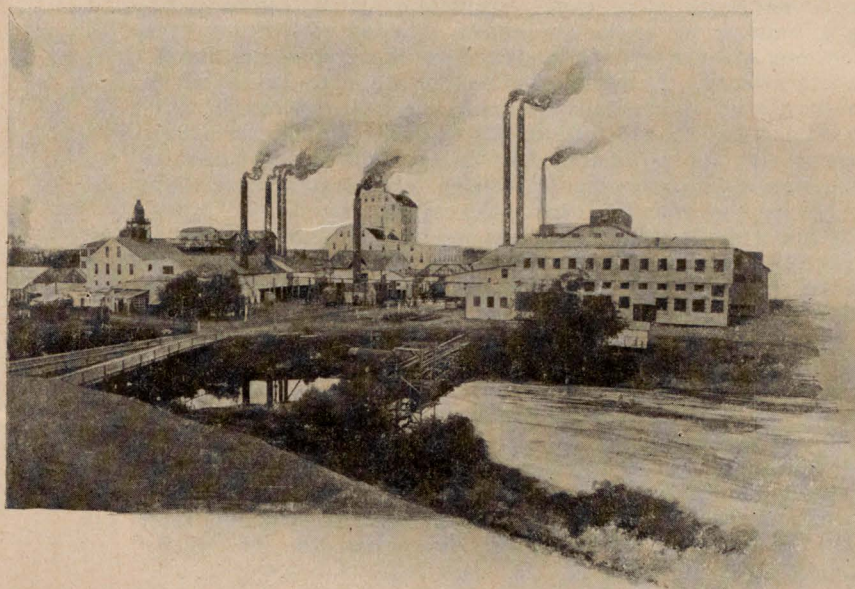
paid out for the purpose of cultivating and harvesting his crop. The molasses thrown out by the centrifugals in drying first sugar is reboiled and placed in iron tanks, where it slowly granulates, and after again passing through the centrifugals is sold at prices ranging from 5 to 10 cents per gallon. The sugar obtained by this second process is known as seconds and thirds or yellow sugars. It should be borne in mind that sugar cane requires re-planting only every three or four years, and after the first harvest, is known as stubble, the tonnage per acre however, being largest the year the cane is planted. The dif-



Loading Sugar Cane in the Coast Country—Sunset Route

ference in yield is offset by a corresponding decrease in cost of production, the original cost of planting or seeding being eliminated after the first year. It would therefore appear that sugar lands, which will produce 25 tons per acre, and which can be purchased at \$30.00 to \$35.00 per acre can be made to almost pay for themselves with the proceeds of a single crop, under careful and intelligent management. The price paid per ton by the refineries is \$3.00 F. O. B. no charges for transportation being applied. Should the farmer become his own manufac-

turer, which is possible by the erection of an inexpensive mill he may increase his profits very materially by the manufacture of syrup for table use, the demand being always in excess of the supply obtainable. From 250 to 300 gallons would be a fair yield of syrup from one acre of cane, and since the process of manufacture is inexpensive, this industry is one of brilliant promise. Neither prairie lands in Texas or elsewhere will produce sugar cane, for the reason that it is not sufficiently nourishing, and the area in Texas exclusive of the southeast is almost limited to the counties mentioned. A point very



Sugar Refinery in the Coast Country—Sunset Route

much in favor of cane culture in Texas is the fact that no fertilizers are necessary, nor is it incumbent to provide any expensive system of ditches, canals, and pumping plants.

Before the Civil War the sugar plantations in Texas were worked with slave labor, and it is of interest to note that records are on file showing that such lands were mortgaged for as much as \$100.00 per acre as late as 1860. Since the Civil War the industry has never been as extensive as it was before. Some difficulty in securing labor, together with the capital required

for the operation of sugar plantations according to modern methods have had a tendency to hold this industry in check. Utilized for other crops, as they are at present, the value of such lands are not considered from a sugar producing standpoint, hence their present low value. It may be of interest here to note that where loans are negotiated for the purpose of growing sugar cane in other states, so firmly has it been established that the plant cannot be successfully cultivated except by an expensive system of fertilization, that its use is made one of the conditions of a loan. On the rich bottom lands of the Coast Country not a ton of any commercial fertilizer has ever been found necessary for cane production, such lands yielding a tonnage in excess of those devoted to cane culture elsewhere, and upon which lands the use of a commercial fertilizer is necessary. Neither cotton seed meal nor tankage, (which are the fertilizers generally used in cane culture,) can be purchased for less than \$18.00 to \$26.00 per ton, and since it is necessary to apply not less than one ton per acre, there is a direct tax applied to sugar culture in other states from which tax the cane growers in Texas are exempt.

One of the largest plantations and sugar mills in the South is located in Fort Bend County, on the Sunset Route, and in connection with it a complete refinery is operated. That there are fortunes to be made growing sugar cane in the Coast Country is certain, and there are not less than a million acres admirably suited to its growth, and a more extensive utilization of that territory for this purpose waits only upon the establishment of more mills to care for its product. This condition is being rapidly brought about, and the erection of a mill and refinery at Wharton, and another contemplated about twelve miles south of that point, is but the inception of a movement calculated to promote the cultivation of sugar cane upon every acre of land in the Coast Country suitable for its production.

CORN

The first question put by an Illinois or Iowa farmer, when told the number of bags of rice or pounds of cotton produced on an acre is, "Well, How About Corn." This for the reason that the cultivation of corn has engaged his attention at home, and was possibly his main or money crop. When told that alluvial lands will produce under proper cultivation and drainage from 50 to 75 bushels per acre, he generally expresses surprise that corn is not more generally cultivated, and reasonably so. Yet the cultivation of Corn in the Coast Country has been very attractive to those who have given due attention to that cereal, and the results have in many cases exceeded their expectations. The corn grower who caters to the market exercises due care

in his selection of seed, and otherwise gives such attention to his growing crop as will insure returns in keeping with his efforts. Where corn is grown for feed only, it is not intended to apply to the maintenance of the farmer except in an incidental way, and in a majority of cases little care is exercised in the selection of seed, less care given to proper cultivation—result poor crops—and a calamity howl that Texas is not a "Corn State". However, the production of 1906 was 135,000,000 bushels, valued at over \$65,000,000.00. It is desired to call your attention to the fact that whereas Iowa or Illinois will produce more bushels per acre, the Texas crop is disposed of at prices fully 100% in excess of that obtained for a similar commodity in any of the other corn growing states. When Texas makes a large crop of corn and has a surplus for sale, exporters eagerly purchase it. They prefer it to other corn because experience has shown that it reaches foreign ports in better condition than crops produced elsewhere. The reason is that Texas corn is cured by the Sun's heat, and is therefore perfectly cured. The home product is quite often mixed with the grain from other states in order to raise the grade.

In certain sections of the Coast Country, and particularly at Rosenberg, tile drainage is being placed and an increase in yield of thirty per cent. has been secured. Near Wharton in the same county an acre on the Taylor farm produced 83 bushels by actual measurement of land and grain.

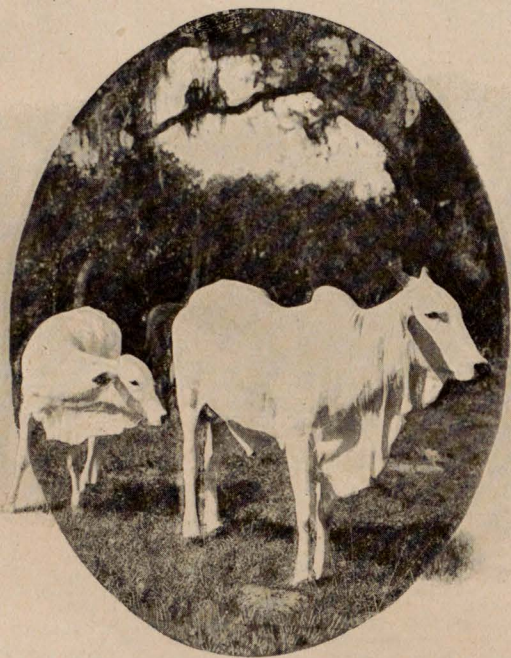
CATTLE.

The position Texas maintains as a cattle raising state is of such general knowledge as to require no comment. But that there are certain sections of the State which on account of humidity caused either by natural precipitation or proximity to large bodies of water, furnishes a greater variety of nourishing native grasses, and are for that reason reckoned better cattle ranges, may not be so generally known. All ranches may be used for the same purpose, but cattle will naturally flourish to a greater extent where conditions are the most favorable, and where the native grasses are never checked in their growth by excessive drouth or a freezing temperature. The Coast Counties generally are favorable to forage plants as the soil contains all the elements necessary in the make up of first-class pasture lands. Stock raising is therefore engaged in extensively, and some of the most successful stockmen in the State, place a high valuation on their ranch properties located in the Coast Country. These ranch owners and stockmen almost without exception make Victoria, "The City Of Roses" their headquarters, and their handsome homes, (than which there are none more beautiful to be found), speak volumes in favor of the



MAP OF SUNSET ROUTE
 SHOWING STEAMSHIP LINES AND RAIL CONNECTIONS

cattle industry. It should be borne in mind that the native or "long horns" the theme of many a newspaper story, and a filler for magazines innumerable, began to disappear many years since, and in their places are to-day found graded Jerseys, Holsteins, and Herefords, the greatest producers of milk, butter fat and flesh. Not content with the success attained by crossing the native cattle with the highest graded stock to be found on the continent, Mr. Tom O'Connor of Victoria, the most extensive owner of livestock in the Coast Counties, sent his emissaries to the East, and imported from India a number of Burmah



Burmah Bulls on Mr. Tom O'Connor's Ranch, Victoria, Texas

Bulls, better known as the "Sacred Bulls" of the East. These are magnificent animals, large, compactly built and meaty. But for a "Hump" of considerable size just over the shoulders, they very much resemble the hereford sires. The cattle are remarkable hardy, and it is the intention by in-breeding to impart that quality to his range cattle. Mr. O'Connor has large holding in Victoria, Goliad and Calhoun counties, and is prominently identified with other important enterprises. The

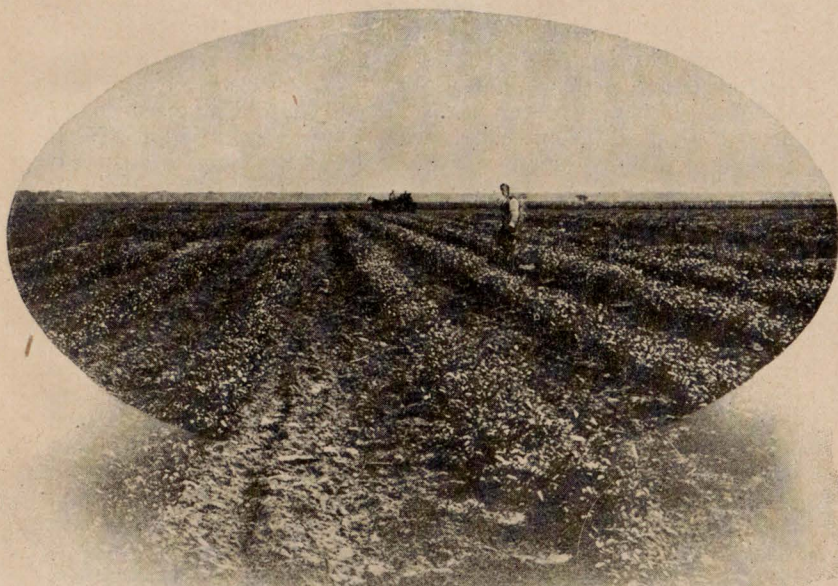
Bee County ranches are particularly rich in forage plants, and frequently herds of cattle are there pastured while being topped for market. Texas is to-day furnishing not only to the people of United States, but largely to the people of the world their meat supply, the exports for the year 1906 amounting to \$250,000,000. A car-load of Texas steers, yearlings, raised on a Texas ranch took the prize at the Chicago International Cattle Show, were sold at an average price of \$107.00, and weighed 1077 pounds each. Such is not possible where all conditions do not favor the industry.

ALFALFA.

Four harvests a year, and at least one ton per acre per cutting is the history of Alfalfa in the Coast Country, and this is because of a rich soil and a genial climate adapted to its growth. Since the price of Alfalfa may be reckoned at \$15.00 per ton it is by no means a problem in mathematics to ascertain whether or not it is a profitable crop. The seed is sown with equally good results either in the early spring or early fall, with the preference in favor of the fall planting. The proper preparation of the soil is of great importance. The land should by all means be perfectly level, and should be ploughed several times and then carefully sub-soiled before planting. The cost of harvesting is about \$3.00 per acre. After Alfalfa has been cut it is allowed to remain on the ground to be cured, and it is then baled and either stored or shipped to market, the grower handling it as little as possible as the foliage falls off easily. As a feed the hay is considered three times as valuable as that prepared from other forage plants, and equal in every respect to Bran. The hay alone will winter hogs, and it is specially recommended for young colts and mules, as it has a tendency to produce muscle rather than mere fat, and all live stock seem to prefer it to any other food. The yield of seed from an acre of Alfalfa is from 150 to 300 pounds and its market price is 10 cents per pound. Taking 200 pounds as an average, value \$20.00, and the valuation of hay per acre per annum at \$60.00, the fact is established that Alfalfa deserves the popularity it has attained. Large fields of Alfalfa may be seen in many counties traversed by the G. H. & S. A. Ry., notably on the Borden farm at Pierce Station. The life of the plant is perennial, and it is known that there are Alfalfa meadows in Old Mexico, which have produced continuously for over 100 years without the necessity of replanting. Mr. A. P. Borden stated that compared with the interest manifested in the growing of Alfalfa ten years ago, the hold its culture now has upon the planters and practical farmers in the Coast Counties shows a growth of popularity unequaled by any other crop.

TEA.

Four years ago the U. S. Department of Agriculture began its experiment in tea culture on the farm of Mr. A. P. Borden at Pierce, in Wharton County, Texas. Beds were prepared and, no fertilizer was used. Transplanting took place at the end of twelve months, and there is now under cultivation forty acres, the plants being particularly flourishing and hardy in appearance. The demonstrator in charge stated that the plants were free from the depredation of injurious insects,



Tea Farm, Pierce, Texas

and required only ordinary attention. In preparing the leaves for market, the tips only are removed by pinching, and the operation can be repeated every twelve or fifteen days. The leaves are rolled by machinery and dried by steam. In making black tea the leaves are oxidized for three or four hours after the rolling process has been completed. The yield per acre per annum will average 300 pounds, and the product readily sells for 30 cents per pound on the market. For the purpose

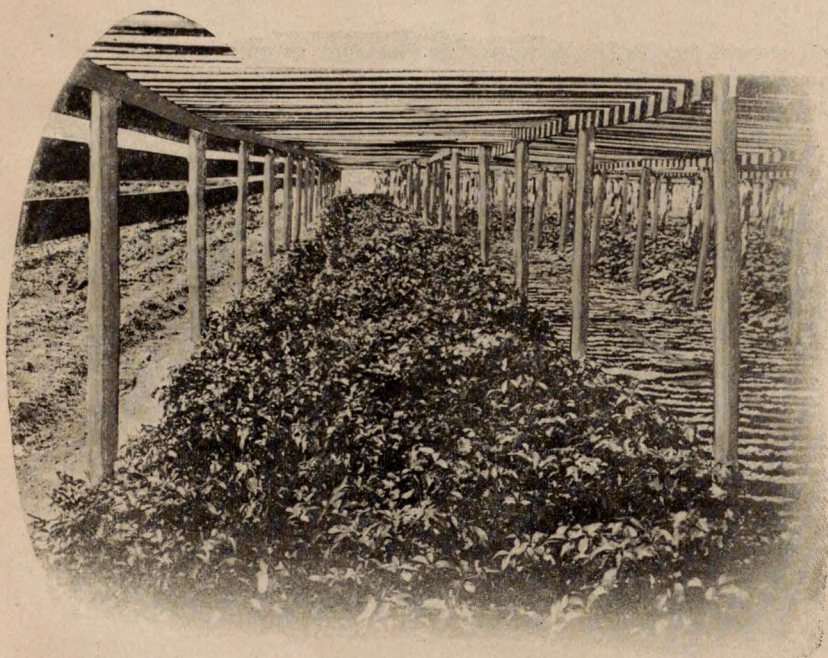
of fully testing its merits guests were recently invited by a Wharton newspaper editor to meet at Fords Hotel, sample the tea and express themselves freely regarding its merits, the verdict being that in every respect the brew was "first class" many stating that the term was used advisedly.

It may not be generally known by consumers that the great bulk of imported tea that finds its way to the tables of the American people is of inferior quality, and that very little of a first class grade is handled by retailers. Nevertheless it is true. In casting about for new agricultural industries much might be gained by a careful study of the tea plant, and the most approved methods of preparing its leaves for market. It should be borne in mind that samples of tea grown on the Borden farm have been tested by the agricultural Department, and an opinion other than favorable would have resulted in a discontinuance of their efforts in that direction. Almost daily the Texas press calls attention to the State's possibilities in almost every line of human endeavor, and by preaching the doctrine of diversification many avenues of profitable agriculture have been made possible. The work undertaken by the Department of Agriculture cannot be too highly commended, and the results attained in tea culture is but an example of their successful efforts in other directions.

CAMPHOR.

Camphor growing is an agricultural possibility in Texas which is just now also engaging the attention of the U. S. Department of Agriculture, and the Coast Country is the favorite field for experimentation. Several years since camphor seeds were planted at the demonstration farm at Pierce, Wharton County, Texas, and the experiment under the intelligent handling of Mr. P. C. Clarke, the Demonstrator in charge, soon established the fact that both soil and climatic conditions were peculiarly favorable and justified engaging in this particular branch of agriculture on a scale commensurate with its commercial value. From information secured from A. P. Borden, Mgr. of the Pierce estate, it was ascertained that the plants grew to a height of 18 inches in one years time, the seed being planted in rows without the use of any fertilizer whatever. The plants are tap rooted and deep feeders, and do not require more than ordinary care. Dr. J. W. Watkins of the Bureau of Plant Industry U. S. Department of Agriculture, stated that Japan controlled the camphor markets of the world, when coming into the possession of the Island of Formosa at the close of the China-Japanese war, this island being the largest camphor producing region in the world. The trees grow wild and attain a large size, many being found measuring from two and a half to three feet in diameter. The trees are chopped

down, thence into sizes which permit of easy handling, and every particle is subjected to a distilling process, with the gum camphor of commerce as a result. The average yield is about one per cent. After the tree has been cut no leaves or twigs appear the next season, and in order to estimate the value of the camphor tree per acre per annum, it is proposed as the commercial properties appear in the twigs and leaves during the early stages of its growth, to cut the stalks with a mowing machine about one foot from the ground, the leaves and twigs being distilled, while from the stalks and roots remaining in



Camphor Plants at Pierce, Texas—Sunset Route

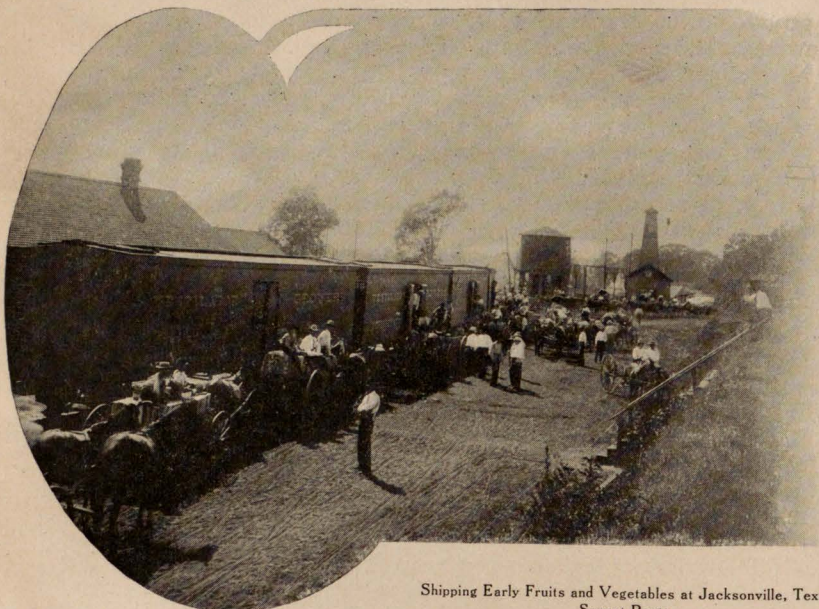
the ground the next seasons crop will spring. The camphor business, the Doctor stated was a very profitable one, at it was estimated that one acre would yield a profit of from \$300.00 to \$450.00 to any one who undertook its cultivation in the proper manner, and persevered in the work. Southwest Texas, he further stated was particularly adapted to the growth of Camphor trees, and it is probable that a vast and profitable industry is on the eve of being developed. Since the recent marked advance in the science of warfare camphor has played a most

important part in the manufacture of high explosives, and its production is therefore a valuable asset to a nations armament. There has been recently established a camphor farm on a large scale in Florida; several have for years been established in the East, but it is only recently that its possibilities have attracted the serious attention of the Federal Department of Agriculture and further developments will be noted with interest.

TRUCK FARMING.

While much attention is being given to the more staple products, the trucking industry is manfully following in the wake of the more pretentious enterprises, and all markets of the North and East are now looking to Texas and the coast counties for their table supplies of early vegetables. Not boastfully, but in a spirit of fairness the declaration is made that in the matter of early vegetables south Texas has every state in the Union whipped to a finish. With strawberries in December, roasting ears, tomatoes, beans, okra, cucumbers etc. in March, and the luscious Texas melon in April we are entitled to some consideration, even though it be deemed timely to quote the parable of the Pharesee and the Publican. Not only do our truck gardens mature their crops earlier, but they are matured with less effort, and our truck growers are thereby enabled to secure for their product the very highest market prices. In many sections, notably at Beeville in Bee County, the terminus of the Victoria Division, there has been established a State Demonstration Farm, which has been productive of many good results, and has enabled our farmers to learn the most approved methods of cultivation, and how to properly prepare their products for market. As an example there was produced and marketed from one acre of land in charge of the state's demonstrator \$700.00 worth of Tabasco peppers. The peppers were carefully picked, shipped in sacks, and sold to a manufacturing firm in Pittsburg. Cauliflower, Celery and Cabbage are grown with little effort, and an asparagus farm has been recently established. Irish and sweet potatoes do well on the rich, sandy bottom lands, and some phenominal yields are recorded. Close proximity to four flourishing cities, Houston, San Antonio, Beaumont and Galveston, with a combined population of over 280,000, furnishes a ready market, virtually at the gardeners very door, and so great is the demand for table usage that the markets are never glutted. By intensive farming and a rotation of crops many gardeners secure large returns, and easily rank among our most prosperous citizens. It is seldom that artificial irrigation is resorted to for the reason that our rains are well distributed, and usually supply all the moisture required for the growing crops. But in order to provide against a possible season of drouth, the

larger growers provide for artificial irrigation, a bountiful supply of pure artesian water being obtainable at depths ranging at from 40 to 150 feet. Texas onions, both the Crystal wax and White Bermuda have attained a national reputation for flavor and shipping qualities, and hundreds of carloads are sold annually in the northern and eastern markets. Secure a tract of good bottom land properly drained, and every acre, with intelligent cultivation, should net you from \$100.00 to \$300.00 annually, and when it is considered that by the addition of cows, hogs and poultry, which can all be maintained on a truck



Shipping Early Fruits and Vegetables at Jacksonville, Texas
Sunset Route

farm, no cash outlay is required for family maintenance, the inducements to engage in that industry are particularly alluring.

TEXAS TIMBER.

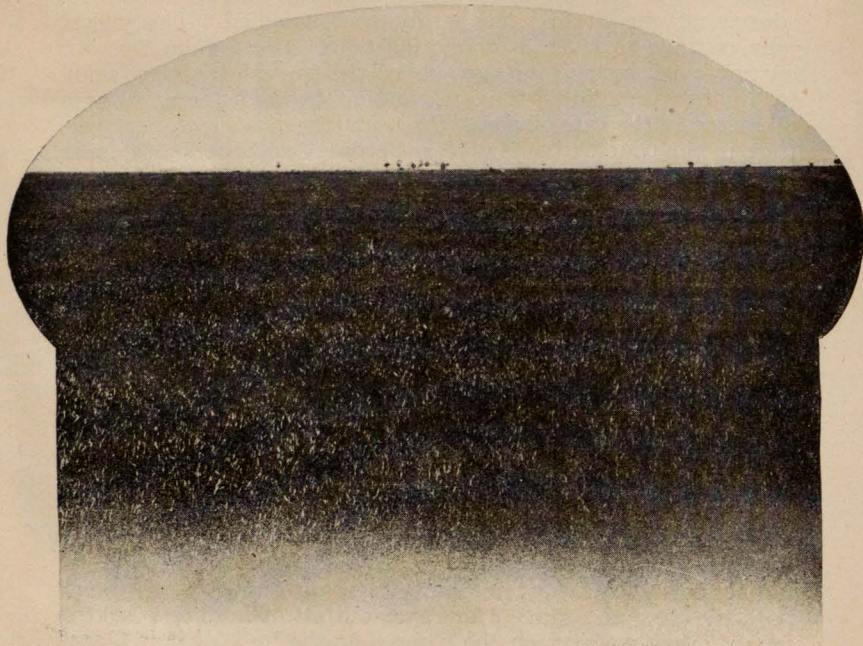
It has been estimated that about twenty-five per cent. of the area of Texas is covered with timber, and for that reason the manufacture of lumber is one of its great manufacturing industries. Its timber area is thrice valuable for the reason that it embraces such a variety of valuable woods, from the loblolly, short, and more valuable long leaf pine, oaks, cottonwood, ash, gum, pecan, etc., to the high priced hardwood of the tropics. While this timber is to be found throughout the north,

east, and southern portions of the State, the principle wooded area lies between the Sabine and Trinity Rivers in eastern Texas, and is largely to be found within that section designated as the Coast Country.

A government expert several years since estimated that there was still available, notwithstanding the immense output of the 800 manufacturing plants now in operation, a total of not less than 67,000,000,000 feet of merchantable yellow pine timber alone, irrespective of the millions of acres containing a magnificent growth of valuable hardwoods. With the exception of a small number of unimportant enterprises, the hardwood resources of the State have hardly been touched. The yellow pine output, however, is about 900,000,000 feet annually. In cutting over the land for saw timber, the trees that are too small for lumber are allowed to stand, and as the young trees grow in diameter at the rate of about three fourths of an inch per year, they in the course of a few years become available for the saw. Notwithstanding the fact that much of the young timber is being converted into hewn ties, the interest now being devoted to forest preservation in Texas justifies the hope that our magnificent pineries will stand the drain upon them for many years to come. There is also a growing demand for the cut over pine lands for agricultural purposes in eastern Texas, and large tracts which once supported stately pines have responded to an intelligent husbandry, and are now producing valuable crops of cotton, corn, tobacco, fruit and truck. The bulk of the lumber manufactured in Texas comes from points on the T. & N. O. R. R. and its Dallas Division, Beaumont being the general distributing point. For foreign shipments, Sabine Pass, Port Arthur and Galveston are the ports where both the lumber and timber are handled, Sabine Pass having been long noted for its shipment of white oak staves to the wine producing countries of Europe. Orange probably ranks first in the production of lumber with Beaumont second. Logs are sent to both points both by river and rail. The Texas output of lumber is sold in nearly every country on the globe, but the bulk of it is placed in the United States and Mexico. A large quantity of pine timber is used by the railroads for car-sills, bridge timbers, etc., and because of the fact that its strength almost equals that of oak, its use has almost supplanted that wood for many purposes. But the most glittering opportunities in the manufacture of lumber in Texas today lies in the utilization of its valuable hardwoods, which could be so readily and inexpensively converted into thousands of articles of daily use, furniture, wagon material, tool handles, churns, stepladders, crates, baskets, barrel staves, basins, etc. All of the above would meet with a ready demand at home, in addition to which the exportation of many of the articles enumerated could be developed.

OATS

In the production of oats for 1906 we have a total of 30,000,000 bushels, valued at \$11,000,000.00. The yield will average from 60 to 75 bushels, and the grain is exceptionally firm and heavy. Corn lands in the Coast Country are likewise suitable for oats, and its cultivation is very much in favor. As late as 1875 black oats was the variety planted, but about that time experiments were made with the



Field of Oats in the Coast Country—Sunset Route

large red or bearded oats, and the variety at present known as the Texas Red Rustproof has been produced exclusively since that time. While most of the oats grown is used for feed without being threshed, that grown for commercial purposes is sold almost exclusively for seed, the returns being about 10 cents per bushel over the market price when sold for that purpose. The Red Rustproof is very much in favor among growers in Illinois, Iowa and Kansas as well as the Southwestern states.

FRUIT GROWING

The subject of fruit growing from every standpoint, and including every variety which has been successful, has been exhaustively treated by practical fruit growers, and is included in a special booklet prepared for that purpose and distributed free of cost. It is merely our purpose to call attention to the fact

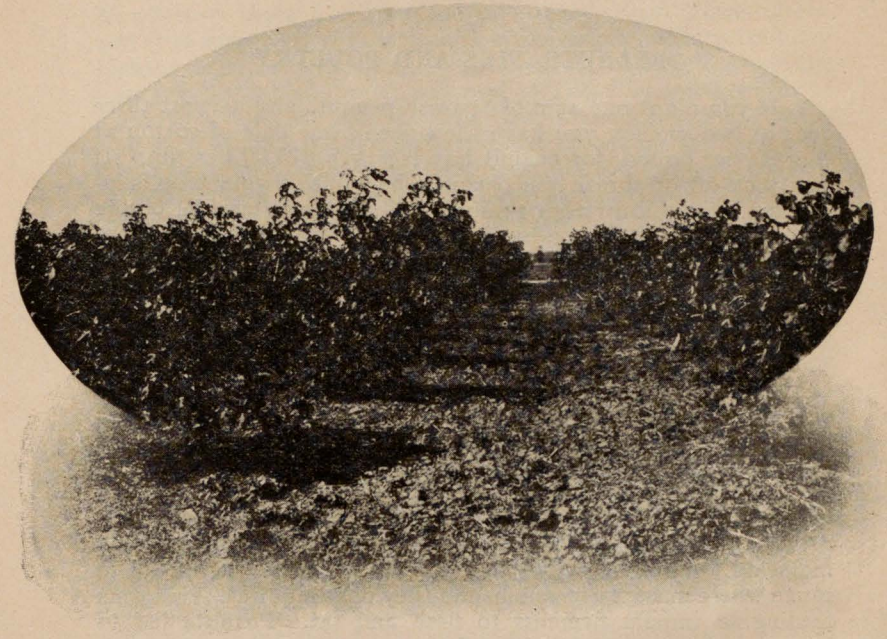


Fig Orchard, Pierce, Texas

which may not be of general knowledge, which is that the Coast Country is the home of many varieties of fruit grown for commercial purposes. Figs, plums, peaches, pecans, lemons, oranges, persimmons, both native and the Japanese variety, as well as grapes, are not only grown but are prolific in their returns. Oranges of several varieties flourish, and by a process of grafting have been made hardy, and withstand our mild winters, yielding abundantly each season. Figs of every variety find in the Coast Counties every element of soil

and climate essential to the production of size, flavor and shipping qualities, although shipments are never made except to near by points owing to an active local demand. Commercial orchards are now being planted for the purpose of supplying several preserving plants recently established, and it is understood that the entire crop of figs has been contracted for covering a period of several years. There are vast possibilities in fig culture, and it is an indication of the spirit of diversification that our farmers are preparing to grow this most delicious fruit as a commercial crop.

PEANUTS, PIGS AND POULTRY

If you plant one acre of Spanish peanuts and harvest three tons of goober hay, you have the price of one bale of cotton at 9 cents per pound, for peanut hay is worth \$15.00 per ton. If you pick off or thresh the peanuts the value of your crop is increased two fold, for your peanuts will sell for at least \$1.00 per bushel, beside which you have three tons of hay worth \$45.00.

Two or three acres of peanuts would be the best forage crop a farmer could cultivate, as it would supply feed for horses, cows and hogs, would fatten chickens and turkeys, and furnish your children with one of the most nourishing nuts in the south. The nuts will produce on any soil, but will flourish and yield heaviest on rich well tilled land. There are many counties where the soil is of the light sandy variety specially adapted to growing peanuts, and the future will no doubt find the humble "goober" raising the notch of diversification in many of our Coast Counties. To say that hogs grow wild in Texas is literally true, and there is no industry of greater promise. Multiplying rapidly, and being great foragers, they maintain themselves throughout the entire year if permitted to range where mast is accessible, and they only require a few weeks feeding to impart firmness to flesh and fat. Peanuts fed to hogs imparts a most delicious flavor, in addition to which the low cost of production is an item of no mean consideration. That the raising of poultry has attained considerable importance, it may be mentioned that from Gonzales an important station on the G. H. & S. A. Ry. there was shipped a total of 2,360,000 pounds of dressed fowl during the past year, requiring 118 refrigerator cars to move the product. These shipments added a total of \$350,000.00 to the circulating medium in that vicinity, and it is no wonder that the people of that section are directing their attention to so profitable an occupation.

Except those engaged in raising poultry, very few persons realize the importance of this industry and its possibilities, for it must be said that as compared with the poultry that could

be raised with scarcely any expense and little labor the number of fowls to be counted as one of the assets of Texas hardly deserves mention. Unlike certain agricultural products whose growth is confined to some one of the five points of the Texas star, there is not to be found a section of the State that is not suitable for the raising of some class of poultry, chickens, ducks, geese or turkeys. When this fact becomes more generally known, the industry will doubtless make more rapid strides than it has in the past, and the grocery bill of many more farmers will be paid entirely by the products of their barnyards. Nowhere is there a climate more favorable than Texas offers, and it is surprising that investors in the numerous large poultry plants in the North, East and West where only a few months of the year are favorable, are not removed to Texas where there is not a month in the year that chickens cannot be hatched and reared, and for a greater portion of the year without any artificial heat whatever. As a field for large plants devoted to the raising of broilers and fryers, as well as egg farms, Texas courts the investigation of those engaged in the raising of poultry generally. There are at present no extensive poultry farms in Texas, but there are a number of small ones, and they are making a success of the business, finding a ready market and good prices for the entire output of their farms. It is impossible to compute the number and value of poultry in Texas, figures not being available, but the signs of the times indicate that the good farmer is no longer permitting his fowl to run at large, get their own food, and roost in trees, on fences, wagons and anything else they may happen to get on. The example of the German farmers at Columbus, Flatonia, Seguin, Hallettsville and Gonzales is being followed with corresponding success by farmers elsewhere, and the crowing of the proud cock in the early morning hours is music to the ear of the good housewife. May his harem ever increase. Thorough bred poultry is raised, and there are several establishments with an annual output of over \$5,000.00, eggs selling for as much as \$5.00 per sitting. The shipping of dressed turkey just previous to the holidays is extensively engaged in. The fowl after being dressed are kept in cold storage until ready for shipment, when they are placed in refrigerator cars which insures perfect condition when the market is reached.

PECANS

And now comes Alabama, jealous of the reputation, quality and quantity of the Texas pecan, and is frustrated over the fact that last year, 1906, Texas shipped over \$2,000,000.00 worth of the toothsome nuts. Texas has long been the chief pecan state of the union, and she proposes in the future to outdo her efforts in that direction. Not only is every native pecan tree being

cared for and preserved, but every nurseryman is actually engaged in propagating the celebrated soft shell variety for which the State is famous.

All told, the State has over one million wild trees, and about one half million trees that have been propagated by the Texas pecan growers. Each tree is expected to produce from three to five bushels of nuts which are worth from seven and one-half to twenty cents per pound on the open market. The wild pecan sells for the former price, while the cultivated pecan ranges in value up to the latter figure, and it is estimated that a yearly income of from \$25.00 to \$50.00 should be the returns from a ten year old tree of an improved variety. As 25 trees can be grown on an acre, it will be readily seen that the present interest in pecan culture is fully warranted. That Texas has only recently begun to realize her possibilities in this direction is to be seen in the fact that in former days pecan trees were ruthlessly destroyed in clearing her lands for farming purposes, but of more recent years such trees have begun to receive their proper valuation, and in the years immediately ahead of us, they are destined to be treasured yet more. It is not alone the vegetarian and nut food folks who have an appetite for the pecan. We all like them, and their place cannot be filled by any other nut. In view of the fact that the pecan tree has propagated itself, and grows wild in every county in the Coast Country, it is truly surprising that the nurserymen should have so long delayed an active campaign looking to the establishing of commercial orchards in Texas the same as has been done in California with the English Walnuts.

While it is true that Texas placed upon the market during the season of 1906 over 200 car loads of pecans, no credit is due to its citizens, but they do merit the severest censure for the ruthless manner in which large areas of the finest pecan growth have been destroyed, and the shipment referred to is in the face of all this destruction.

FISH

The importance of the fish industry of Texas has been considered of such moment that special laws have been enacted for their protection during spawning season, for it early became apparent that if the fish were not to be exterminated they must be allowed to propagate, and that for fishermen to go into the breeding Bays for their catch was literally killing the hen that lay the golden egg. Rigid enforcement of the fishing laws was followed by a natural increase in all species of fish inhabiting the waters of the Texas Coast. Those most desirable and appreciated for table use are the trout, red snapper, flounder, spanish mackerel, sheephead, blue-fish, croaker and pompano.

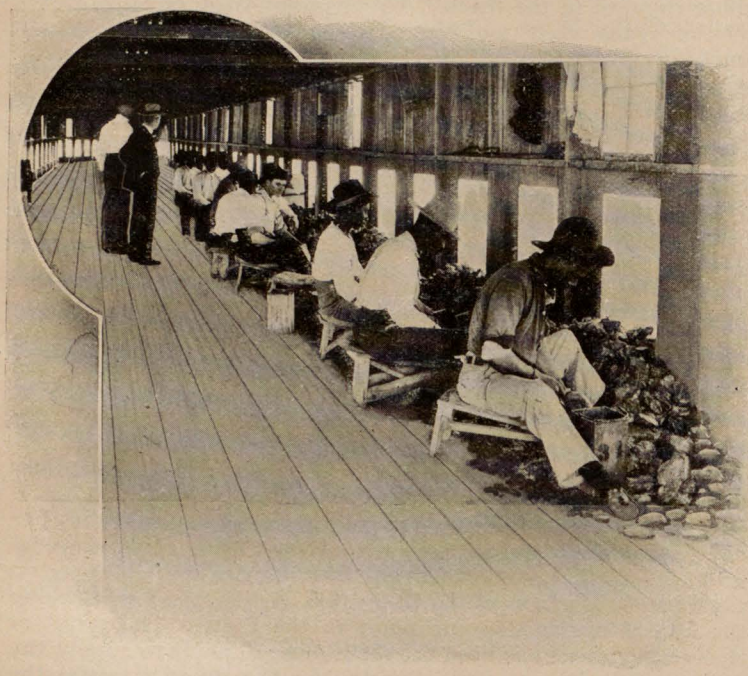
The fish industry of our Coast towns is estimated at 10,000,000 pounds annually, valued at over \$700,000, one plant alone located at Galveston being valued at over \$500,000, with an annual output of over 4,000,000 pounds. This company has in service twenty large seagoing schooners with a crew of ten men each, engaged in this business. Besides edible fish, the Tarpon is also found in quantities, and is a perpetual delight to anglers who visit Texas for the purpose of indulging in this splendid sport. In times past sea turtles were caught in quantities in Texas waters, and were handled with much profit by those engaged in the trade. The diamond back terrapin thrive on the Texas coast and raising them for eastern markets will some day prove a profitable industry. The demand is usually strong, and the prices good. Considering the possibilities of the Texas fish industry, it would seem that our people have been slow in realizing its importance.

However, the industry is being fully investigated and, followed by investments, and the signs of the times point to a no distant day when Texas will take her place among the leading fish producing States of the Union.

OYSTERS

The oyster industry of Texas, although of recent origin has been rapid, but it has only followed in the footsteps of Texas enterprises of a similar character. As late as 1880 the only oyster shippers in the State were located at Galveston, and the output was inconsiderable. With the construction of new lines of railroad, many of the Gulf and Bayshore towns by reason of adequate shipping facilities began working the extensive oyster beds, until there are at present numerous firms engaged solely in the oyster industry, notably at Port Lavaca and Palacios on the Victoria Division of the G. H. & S. A. Ry. the former being the largest oyster shipping point in the State. The result of this development has been that it is more difficult to supply the demand than it is to find a market for the superior oyster the Texas Coast is producing. The industry has assumed such importance that laws have been enacted looking to the protection of the natural oyster beds by enforcing the regard of the oystermen for a long breeding period, and a regulation of the size of the oyster that may be taken. At the same time these laws amply protect the investor in oyster culture. The cultivation of oysters contemplates the selection of some suitable water area not already an oyster bed, and the stocking and planting of that location with seed oysters procured from the natural oyster reefs. Of course, the planters profits are derived from the natural increase and growth of the oysters planted, and as

an acre of oysters set in a good locality will produce at least 300 barrels of marketable oysters in three years after planting, which at 25 cents per barrel will net \$75.00 per acre, the profits should equal that of many land crops. The natural advantages for successful cultivation of the oyster in Texas are unequalled, and the numerous oyster shucking establishments, prominent



"Oyster Shucking" at Port Lavaca—Sunset Route

features of the industrial life of our seacoast towns, is fully warranted by the importance which the industry has assumed. The oyster catch for the year 1906 according to the most correct figures available was over 300,000 barrels, and there are at present over 10,000 acres of private oyster beds located on the Texas Coast.

CARGOES OF ONIONS

The shipment of onions via the Southern Pacific steamers from Galveston to New York has assumed considerable importance, and the movement is being eagerly watched by the Texas onion grower. Special provision is made in these steamers to accommodate this class of freight which requires considerable ventilation, and everything is being done for the success of the trade. Nearly one hundred cars of onions were loaded during one week's time, and they are arriving in Galveston by every train from the southwest. A prominent grower stated that his district would ship alone not less than 1200 car loads this season. Twenty thousand pounds per acre is an average yield, and the entire shipment from his district will be about 24,000,000 pounds.

On account of the delicate flavor of the Texas grown Bermuda or Crystal Wax onion the price obtained has never been less than 2 cents per pound, which means a circulating medium of \$480,000 from the onion crop alone. Under careful manipulation and an intelligent system of farming, onions in Texas have produced as much as 47,000 pounds per acre, and larger yields are not infrequent. However, the larger returns are only obtained by the use of fertilizers and where the most approved methods of onion culture are employed.

BEEKEEPING IN TEXAS

Expert beekeepers place the total number of colonies in Texas at over one half million with a production of over 5,000,000 pounds of honey annually. In the number of colonies Texas is well in the lead, yet it has only been about fifteen years since the industry received any of the attention it should have had in the way of employing up to date methods. New hives and improved methods of handling have taken the place of the old time hives and the antiquated ways of the beekeeper of the past. The average yield of honey is 12½ pounds per colony and of wax 45 pounds. For the extraction of honey from the comb the following methods are employed. The honey cells after having been filled, are capped by the bees with a thin coating of wax, and the honey cannot be extracted until the caps are removed, which is done by means of a sharp knife. When the combs are uncapped they are placed in the extractor. This vessel is usually made of zinc, and about the size of a large barrel, supplied with racks made to fit the comb frame which by centrifugal force is made to throw out the honey which is drawn from the extractor by means of a faucet. The frames are then replaced in the hive to be again uncapped when filled with

honey. Some years it is possible to make an extraction every six weeks, the production of honey being entirely governed by the profusion of wild flowers. For the market, honey is placed in tins of various sizes and so sold. The profusion of wild flowers in the Coast Country makes it an ideal section for bee-keeping, and the regularity of our flowering plants renders it possible for the industrious little workers to keep busy during the entire year.

Mrs. Jennie Atchley, of Beeville, who is one of the most successful apiarists in the country, says:

"Since I have located my queen rearing establishment and bee keeping plant in Bee County I have spared neither time nor pains to fully explore this as a bee country, and I find wild bees in great profusion here as well as tame bees, and find that the bees kept here are the native stock with only a touch of the Italian blend occasionally, and they are rich in stores and prosper without attention. I am fully satisfied that this country will never experience a failure of the honey crop, as does California and other parts of the Pacific Coast, because our honey here is gathered from trees and shrubs that are not affected by dry weather like the sages and honey plants of California. I find that the honey here will compare favorably with the clearer honey of the North, and is pronounced by A. I. Root, a noted bee man of Medina, Ohio, as being as fine honey as he ever saw. The climate here is just right for the propagation of the honey bee the year round, and to make a long story short, will say that I consider this the finest bee country in the United States."

BROOM CORN

While the intelligent comment of other states upon the prosperity so apparent and also so real in Texas, is to the effect that much of it is due to the preaching by the press of the gospel of diversified industries, it is in order for us to extend the diversification. There is nothing that is more profitable to a state than the growth of such products as naturally suit her soil and climate, and when they are only produced in circumscribed localities, and can be readily converted into manufactured articles they are certain to find a ready sale at home. The broom industry is one of these. Texas can raise broom corn in sufficient quantities to meet at least the necessities of her own market. Not many of the states have done anything with this staple, and outside of a few counties in Illinois, there is no centralization of the industry. Good broom corn sells at from \$60.00 to \$125.00 per ton, according to the quality and the demand, and it seems to the layman that it would be a good thing for more of our farmers in the Coast Country to engage in its

production. It has been demonstrated that a ton of broom corn per acre is not an uncommon yield in the Coast Country, and such farmers as have devoted any attention to this industry, are more than pleased with the returns obtained.

POTATOES IN TEXAS

This has by all means been the most prosperous year enjoyed by the potato grower. The prices have held up well, and there has been no overcrowding of the market. The growers of early Irish potatoes in the Coast Country are more wedded to the tuber than at any time in the past, and the coming year will witness a material increase in the acreage planted. Growing potatoes for the market has become a very important industry, as it has been fully demonstrated that the light sandy lands of the Coast Country are eminently adapted to its growth and a ready market found for the entire output. Mr. Morris of Orange County, planted several acres in potatoes the past winter, and began harvesting March 29th. The yield was not less than 100 bushels per acre, and netted him \$3.50 per bushel. Mr. Morris says he is more than pleased with the results of his efforts, and believes that it will not be long before the Irish potato crop will become a staple one in his section. As two crops of potatoes can be grown in a twelve month, their cultivation should engage the attention of truck growers to a considerable extent. Many individual cases could be cited where equally large returns have been secured. The price of sweet potatoes will average 75 cents per bushel and the yield per acre is phenomenal.

MEDICINAL PLANTS IN TEXAS

Some time since there was published a letter from Mr. J. L. Long of Sherman, Texas, giving the results of his work during the past year in growing medicinal plants. This letter showed that his efforts had been signally successful, more so possibly than he had anticipated. Mr. Long quoted a letter received from a firm of manufacturing chemists, who considered the quality of the plants submitted most excellent, and desired to arrange for his entire crop for the year 1908. Mr. Long's experience showed that it was not only possible but practicable and profitable to grow a large list of medicinal plants in Texas. He has also demonstrated that their quality grades well, and that there is a demand for them. These conditions would seem

to be all that is necessary to induce those who have the land to enter into their production at least to a small extent. The quantity produced on a given area was satisfactory and the market certain. Several letters have been mailed to the department of agriculture and others will follow, urging that the department extend every assistance possible in promoting this new agricultural possibility. It is proposed to have the government establish permanent experimental farms in Texas, and it is hoped to have such institutions established.

CELERY

Over one thousand dollars net from one acre of farming land may sound almost incredible to those farmers who are wont to feel that they have done well, if they manage to clear from ten to twenty dollars cultivating some other crop, but that is what was made the past season by a farmer in the Coast Country. To be exact, Mr. Voltz sold from this one acre about 39,000 pounds of celery, for which the gross receipts was \$1,979,80, the net profit after paying all expenses of growing and marketing being \$1,025.00.

The celery planted was of the golden self-blanching variety, and was sown during the month of September, cultivated three times, and 1000 pounds of fertilizer applied to the acre. This fertilizer was applied shortly after the celery was transplanted and thoroughly incorporated in the soil by cultivation and irrigation. Water was applied every 12 to 14 days except near the period of maturity. The first celery was marketed on April 1st, and shipments continued until May 10th. The total amount harvested was 390 crates of about one hundred pounds each. The result of this phenomenal yield has induced many of the truck growers to prepare for the growing of celery, which maturing as it does in the Coast Country when the markets of the North are bare, can be depended upon to bring profitable returns.

OIL

The Texas "fuel oil" fields, as they are frequently termed, represent one of the most remarkable phases of nature's wonders. Man's research has given to man a material which is destined to revolutionize existing methods, and place a lever in the hands of the manufacturer which must force the State to a position its facilities and advantages demand. Cheap fuel is the center about which the manufacturing world revolves. It makes possible the conversion of raw products into finished articles and enables the artisan and capitalist alike to demonstrate the possibilities con-

tained in nature's storehouse. In its possession, Texas is at once placed to the front and enabled to compete with the great coal States, and to offer inducements to idle capital in the rich Eastern and Middle States. The Texas oil fields have exceeded in results the known oil territory of the entire world. Discovered on January 10, 1900, the Texas oil fields have developed so rapidly that today they are capable of supplying the entire demand for this commodity in this country and have attracted the attention of capital throughout the entire world. Over \$10,000,000 have been expended in actual operations. The total capitalization exceeds \$300,000,000. Nearly \$20,000,000 has been spent in the purchase of oil stock. Over 350 miles of six and eight-inch pipe have been used in wells and pipe lines. The production of oil, in the Texas oil fields, during the year 1905, foots up the grand total of 30,404, 263 barrels of 42 gallons each. This represents the greatest output of fuel oil the world has ever known, and the extension of the territory will soon demonstrate a source of unending wealth for the State, and of prosperity to the surrounding country. Who will dare to sketch the possibilities along this line alone?

GROWING CIGAR LEAF-TOBACCO IN TEXAS

Texas raises the finest Cigar Leaf-Tobacco that is grown in the United States, such is the report of the U. S. Department of Agriculture in Bureau of Soils—Bulletin Number 27, Page 9, which calls particular attention to the ample area of soil suitable for growing this high grade of Cigar Leaf-Tobacco in East Texas, and further states that as a result of the Bureau's experiments "A Cigar Filler Leaf-Tobacco of superior quality has been produced, a leaf pronounced by the trade the finest filler so far grown in this country." These experiments were carried on in 1903 and 1904 on Orangeburg soil around Nacogdoches, Woodville and Lufkin, all in East Texas, in Sunset Route territory, and since then experiments have extended to adjoining counties with fine success.

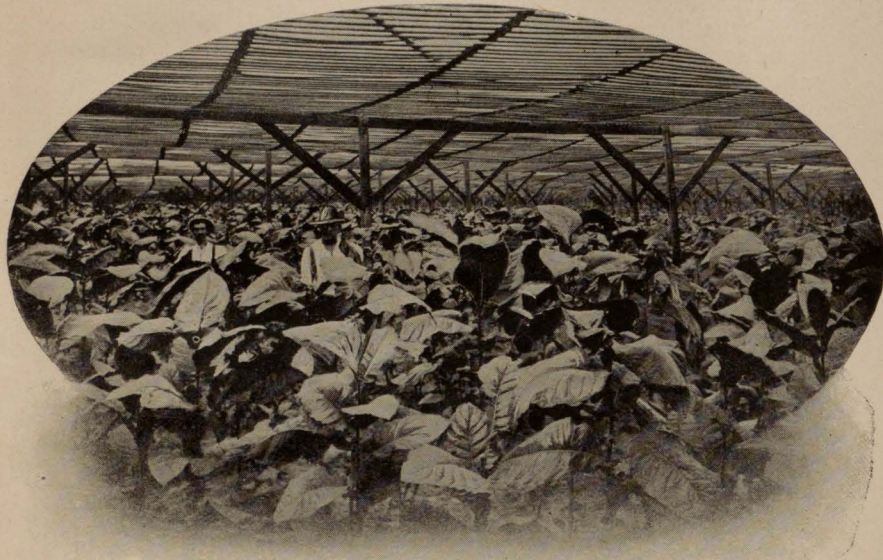
On comparing the temperature and rainfall for six months of the growing season of East Texas and Cuba, there is found to be a close correspondence between the figures for East Texas and that Island.

The soils contain enough potash salts to make them desirable for tobacco, and the chemical analysis of the Orangeburg soils of East Texas are very similar to those of the tobacco soils of Cuba.

This being the case, it is now an established fact that East Texas raises as fine cigar Leaf-Tobacco as Cuba. Remember

these facts are taken from Government reports and they never exaggerate.

One advantage the tobacco planter has over the cotton planter is that he has generally harvested and delivered his crop before the 15th day of August, while the cotton planter does not finish picking his crop until near Christmas. The tobacco planter's children can attend the full school year while the cotton planter loses the help of his children at his busiest time, if he starts them to school at the opening, or else the children lose the first three or four months of schooling, and children perform no small part of the harvesting of both crops, Tobacco and Cotton.



Growing Cigar Leaf Tobacco Under Shade, Orange, County, Texas—Sunset Route

Open field grown tobacco can be raised as cheap, if not cheaper, than cotton, and the tobacco planter can contract for the sale of his tobacco before the seed is put in the ground, at 15 cents per pound for the open field-grown as soon as stripped from the stalk, and 40 cents per pound for the shade-grown as soon as the stem is sufficiently dried. It costs more per acre to raise shade tobacco, but the yield is larger and the profit much greater, the first cost of putting up the shade being near \$300.00 per acre. After the shade is once put up, however, the sup-

ports will require only a small amount of repairing from year to year and the net profits should be from \$350.00 to \$400.00 per acre. Mr. J. L. Gill of Nacogdoches, in 1906, cleared of all expense \$4004.00 on ten acres of shade-grown tobacco. He writes that he will have 35 acres in 1908. Mr. D. H. Muchelroy of Nacogdoches cleared \$169.55 net on two acres of open field grown tobacco in 1906. Mr. H. M. Bowzer of Nacogdoches planted $1\frac{3}{4}$ acres open field tobacco and cleared net \$141.15. L. H. Shelfer of Orange raised over 2000 pounds near Orange in the open field on less than two acres, for which he was offered 65 cents per pound after it was cured, which offer was refused.



Harvesting Tobacco at Nacogdoches, Texas, on Sunset Route

Mr. Shelfer has since started a factory and is working up his tobacco into cigars and smoking tobacco.

There is a cigar factory at Nacogdoches using only Texas grown tobacco. The demand for Texas grown leaf will never be satisfied, for the more raised the greater the demand as it takes the place of the imported Cuban cigar filler and the Cuban and Sumatra wrapper. The Cuban filler pays an import duty of 28 cents per pound, the Cuban wrapper pays \$1.48 per pound and the Sumatra wrapper pays \$1.85 per pound, so Texas has that much advantage over the imported article, the total cost to the manufacturer being from \$1.00 to \$2.00 per pound for the filler and from \$3.50 to \$5.00 per pound

these facts are taken from Government reports and they never exaggerate.

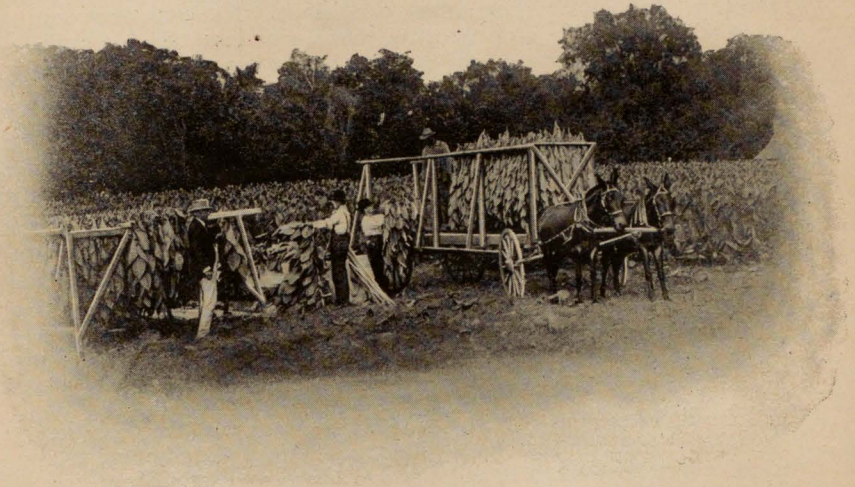
One advantage the tobacco planter has over the cotton planter is that he has generally harvested and delivered his crop before the 15th day of August, while the cotton planter does not finish picking his crop until near Christmas. The tobacco planter's children can attend the full school year while the cotton planter loses the help of his children at his busiest time, if he starts them to school at the opening, or else the children lose the first three or four months of schooling, and children perform no small part of the harvesting of both crops, Tobacco and Cotton.



Growing Cigar Leaf Tobacco Under Shade, Orange, County, Texas—Sunset Route

Open field grown tobacco can be raised as cheap, if not cheaper, than cotton, and the tobacco planter can contract for the sale of his tobacco before the seed is put in the ground, at 15 cents per pound for the open field-grown as soon as stripped from the stalk, and 40 cents per pound for the shade-grown as soon as the stem is sufficiently dried. It costs more per acre to raise shade tobacco, but the yield is larger and the profit much greater, the first cost of putting up the shade being near \$300.00 per acre. After the shade is once put up, however, the sup-

ports will require only a small amount of repairing from year to year and the net profits should be from \$350.00 to \$400.00 per acre. Mr. J. L. Gill of Nacogdoches, in 1906, cleared of all expense \$4004.00 on ten acres of shade-grown tobacco. He writes that he will have 35 acres in 1908. Mr. D. H. Muchelroy of Nacogdoches cleared \$169.55 net on two acres of open field grown tobacco in 1906. Mr. H. M. Bowzer of Nacogdoches planted $1\frac{3}{4}$ acres open field tobacco and cleared net \$141.15. L. H. Shelfer of Orange raised over 2000 pounds near Orange in the open field on less than two acres, for which he was offered 65 cents per pound after it was cured, which offer was refused.



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for the wrapper. Tobacco land in East Texas can be bought at from \$10.00 to \$35.00 per acre according to location and improvements, while the tobacco lands of Cuba range in price from \$1,000.00 to \$2,000.00 per acre, and in Sumatra the lands can not be purchased at any price, the Holland Government having a monopoly on all tobacco lands and derives a revenue of nearly \$40,000,000.00 per year from the sale of tobacco alone. With these advantages that Texas has over other tobacco growing States in the Union, it will not be many years before she will grow more fine cigar tobacco than any other State in the Union, and the price of these lands will go up in leaps and bounds. To the farmer this discovery opens up a new and profitable field. Here he can buy the proper land very cheap, live in a healthful country, and under economical conditions. He can grow an unusually profitable crop in three months or less, sell for cash at once, and still have a long growing season for other products. Don't think for an instant, that tobacco is all these lands will produce. The East Texas farmer can raise from 200 to 300 bushels of sweet potatoes, or from 100 to 400 bushels of irish potatoes to the acre.

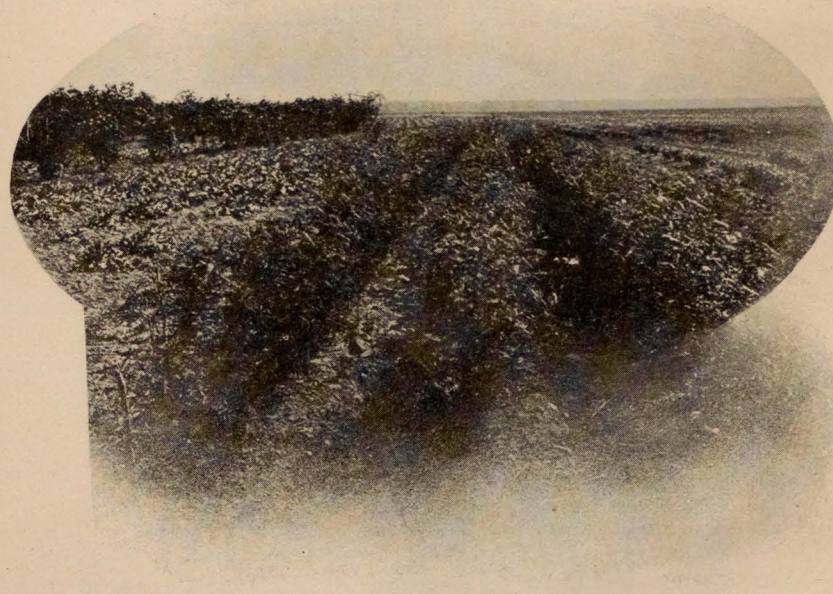
He can plant one acre in artichokes and fatten 50 hogs on it; the hogs can do their own digging and waste nothing. He can raise all kinds of stock 100 per cent cheaper than it can be done further north. He will not have to fertilize his land to make it yield a good harvest, although here as elsewhere, judicious fertilizing pays. He can run a farm without a mortgage on it. He can raise finer fruit, a greater variety and more of it than any other country in the world. He can have vegetables on his table the year round. He can plant one acre in cane and make 500 gallons of beautiful clear syrup with no sorghum twang to it. Bees require no attention further than taking what honey you wish. Wet land sown in red top forms an everlasting meadow of the finest hay in the world. One-half bale to one bale of cotton is the average yield, although one and a half bales per acre is no uncommon crop. One hundred peach trees can be planted to the acre and three to five bushels of choice fruit per tree can be counted on after the third year.

The school system is the finest, and all religions are represented. The people are refined and hospitable, and invite the industrious farmer to make his home among them and participate in the pleasure, profit and honor in the development of this fine country, where lands are still cheap, where one can soon own his own land, become independent, and give his children and children's children a chance to do likewise under their own "vine and fig tree".

No ceremony is required, the gates are open and a cordial welcome from a brave and generous people awaits those who come.

TO SEE WITH YOUR OWN EYES

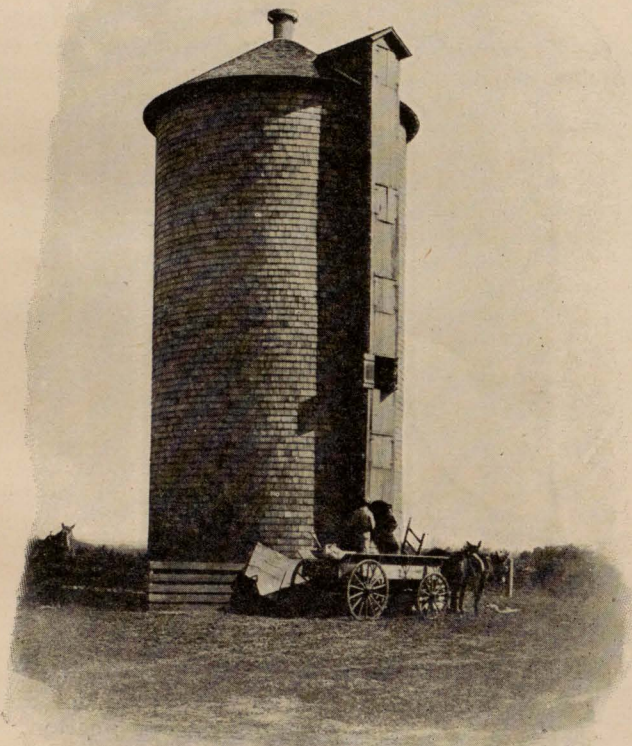
We suggest a visit to the Borden estate at Pierce in Wharton County. There may be an object lesson productive of more speculation as to the future of the Coast Country, but a diligent search has failed to discover its location. Mr. A. P. Borden, proprietor of this model plantation is not a visionary enthusiast, but is working his land for what there is in it. With him it is not farming for pleasure, but, on the contrary, he expects each product cultivated to yield a maximum return and show a balance on



Sesbania, a Leguminous Plant of India—Sunset Route

the right side of the ledger. It is therefore evident that diversification is a doctrine in favor with Mr. Borden and is being practiced to a successful issue. The following products may be found growing side by side on the Borden farm: cotton, corn, sugar cane, oats, India wheat, alfalfa, sorghum, camphor, tea, figs, sesbania, a leguminous plant and soil restorer, rice, together with a fine vegetable garden. Horses, mules, cattle and

hogs have each their separate lots and ranges. The first silo erected on the Victoria Division is to be seen on the Borden farm, and is a model of its kind. It is circular in form, forty feet high, and twenty feet in diameter, and its capacity is 250 tons of ensilage. Sorghum placed in this silo during the summer of 1906 was perfectly preserved as late as May 1907, and its value as stock feed was demonstrated at that time. This farm was traversed from end to end and is a most magnificent property, superbly managed. No broken fences or doors, not even a stay-pole or guide wire was attached to the corner posts, for they were substantial and standing on their own legs. Truly a "MODEL FARM," and one which should be the pride of the entire Coast Country.



A 250 Ton Silo Plant, at Pierce, Texas—Sunset Route

A Few Additional Reasons why You and TEXAS

Should Get in Conjunction

From Chattanooga Tradesman, January 1907

POPULATION OF TEXAS

1850, 212,590; 1860, 604,215; 1870, 818,579; 1880, 1,591,749; 1890, 2,235,523; 1900, 3,048,710; 1906, 3,600,000.

The vast extent of Texas has formed a fitting and ample scene for the employment of the noblest powers of the men of the new world. Its area equals 265,780 square miles, or 170,099,200 acres. Its greatest extent from east to west is about 800 miles, and from southeast to northwest over 1,000 miles. Texas is sixteen times larger than New York, seven times larger than Ohio, and 100,000 square miles larger than all the eastern and middle states combined, including Delaware and Maryland.

To show the great room for immigration, compare the above figures with the following: England, Ireland, Scotland and Wales have a combined population of 31,465,480 and an area of only 120,760 square miles. This area is less than half that of Texas, while the population is almost nine times that of Texas.

GENERAL CHARACTERISTICS

Texas may be divided into three separate regions geographically, each differing in many respects from the others. First, or nearest the Gulf, is the Coast Country, a region extending along the Gulf Coast, 400 mile in length, and varying in breadth from 150 miles in the east to about 50 miles in the west, and ranging in altitude from sealevel to about 500 feet. The soil of this region is alluvial, very rich and productive, and unexcelled for the growing of cotton, rice, sugar cane, corn and all kinds of fruit and vegetables.

The second, and by far the most extensive, is the undulating or rolling prairie region, which extends from 200 to 500 miles farther inland, and has an elevation varying from about 500 to 2,500 feet above sealevel. It is composed of wide grassy tracts alternating with others that are thickly timbered; the latter

prevailing in the east, although the entire region may be considered well timbered. Sandstone and limestone form the common substrata of this region; the upper soil consists of a rich friable loam. In the eastern portion there is some sand and the well known "red lands," soils that nevertheless admit of the cultivation of the most exhaustive crops. The fertility of this soil is inexhaustible; abundant crops may be produced year after year without the expense of fertilizing or the necessity of interchange of crops. The third division includes the Staked Plains of Western Texas, interrupted in the west and southwest by the spurs of the Rocky Mountains.

RIVERS

The rivers of Texas all have in general a uniform course flowing from the foot of the mountains and staked plains in a southeastwardly direction into the Gulf of Mexico. The principal ones are the Sabine, Neches, Trinity, Brazos, Colorado, Guadalupe, Nueces and Pecos, with Red River and Rio Grande on the borders. These rivers give a geographical unity to the State, and greatly reduce the steps of transition in passing from one region to another.

That the valleys of these streams and their innumerable tributaries are very rich and productive goes without saying. The price of these lands is very cheap.

Until within recent years Texas has devoted itself almost exclusively to agriculture and stock raising; and, notwithstanding that other industries have been introduced, the farmer is still the most potent factor in the production of its wealth.

Farms and Farm Acreages 1850 to 1905.

Year	No. of Farms	Total Acreage	Improved	Unimproved	Average
1850....	12,198	11,496,339	643,976	10,852,363	942.5
1860....	42,891	25,344,028	2,650,781	22,693,247	590.9
1870....	61,125	18,396,523	2,964,936	15,431,687	301.0
1880....	174,184	38,292,219	12,650,314	23,641,905	208.4
1890....	228,126	51,406,937	20,746,215	30,660,722	225.3
1900....	352,190	125,807,017	19,576,076	106,230,941	357.2
1905....	400,000				

This is due to a series of conditions maintained by its extent and climate, and these conditions make it possible for the farmer to grow in perfection any of the prime crops grown in the United States, and grow them all in abundance. It becomes to the prospective settler merely a question of what he desires to grow; the choice is with himself. Texas opens wide its doors, presents its grand opportunities, bids him welcome, and he is satisfied with the prospect.

Possessing every advantage offered by its sister States, north, east and west, it also actually contains every element of human necessity—wheat, cotton, sugar, rice, oats and corn; and with the exception of wheat, which is confined to North Texas, all may be successfully cultivated in the same field in the Coast Country. This much for the staples, to say nothing of the various other products that go to form man's daily ration.

SHOWING BY THE BANKS

The end of the fiscal year 1904 showed the resources of all national banks in Texas to exceed \$150,000,000. On August 14, 1905, our new state bank law went into effect, authorizing the organization of state banks. Since that date until August 13, 1906, 113 state banks were organized with a paid up capital of \$4,271,000, and deposits amounted to \$8,918,999.71. All these state banks were organized within a period of one year. This fact alone points to a prosperous and happy condition of our people.

EDUCATIONAL

Texas controls 38,000,000 acres of land applied to the support of the educational system. Over 15,000 teachers occupy desks in the public schools. Its permanent free school fund is represented in—

State Bonds.....	\$ 2,183,100.00
County Bonds.....	3,915,556.60
Railroad Bonds.....	1,603,317.00
Municipal Bonds.....	91,547.55
Land Notes.....	13,101,330.78
Lands valued at.....	20,613,527.00

Total..... \$41,508,378.93

This is the largest free school fund of any state in the Union, or in any country in the whole world. Every person who comes to Texas becomes a joint owner in this great fund, and their children will enjoy fully their share of all its grand benefits without cost and without price.

FARM VALUES

The Twelfth United States census credits Texas with 352,190 farms, the largest number of any of the states, with a total valuation of \$964,476,273. We now have over 400,000 farms with a total value of \$1,345,286,372. The value of live stock is placed

at \$250,000,000, and of farm products at \$290,000,000. The state's taxable value increased from \$170,473,778 in 1870 to \$1,682,779,775 in 1905. During the same period the railroad mileage increased from 771 miles to over 12,000 miles. Forty-four miles are under construction now. This places Texas first in the matter of railroad mileage among the states.

VALUE OF FARM PRODUCTS FOR THE YEAR 1905.

Crops	Acres	Quantity	Values
Cotton.....	7,500,000	¶ 2,500,000	\$125,000,000
Cotton Seed.....		‡ 1,000,000	20,000,000
Hay.....	350,000	‡ 500,000	3,500,000
Potatoes.....	30,000	* 1,000,000	500,000
Oats.....	750,000	* 30,000,000	10,000,000
Wheat.....	1,500,000	* 23,000,000	16,100,000
Corn.....	5,000,000	*135,000,000	60,000,000
Rice.....	150 000	† 1,500,000	5,250,000
Total.....	15,280,000		\$240,350,000

¶Bales. †Tons. *Bushels. ‡Barrels.

Estimated acreage in fruit, vegetables, sugar cane, tobacco, barley, rye, etc., 19,380,000. Total valuation, \$275,000,000.

Texas leads all the other states in the Union in the number of cattle and total value of beef cattle, etc., excepting milch cows. In 1905 7,250,000 head were valued at \$75,000,000. This credits Texas with the ownership of one-sixth of the total number in the United States, and estimated at one-ninth of the total value of such cattle in the United States.

*The Cotton crop of 1906 amounted to 4,200,000 Bales, valued at \$223,546,000

VALUE OF THE CATTLE INDUSTRY

	Number	Estimated Value
Cattle.....	7,250,000	\$75,000,000
Cattle marketed during the year.....		35,000,000
Cattle Products, Milk and Butter.....		20,000,000
Cattle Products, Miscellaneous.....		35,000,000
Hogs.....	2,500,000	15,000,000
Hogs marketed during the year.....	1,000,000	8,000,000
Sheep.....	3,000,000	8,000,000
Mutton.....		2,000,000
Wool.....		1,500,000
Horses.....	1,500,000	45,000,000
Mules.....	300,000	15,000,000

IF YOU

Contemplate a change for the purpose of establishing a home, or desire to make an investment, your objective point should be

TEXAS

We will be glad to assist you in any way possible



WRITE US

C. K. DUNLAP, Traf. Mgr. T. J. ANDERSON, Gen. Pass. Agt.
Galveston, Harrisburg and San Antonio Railway

JOS. HELLEN, Gen. Pass. Agt.
Texas and New Orleans Railroad

HOUSTON, TEXAS

Let Us Know

what crops you are growing
and we will send you

SWORN AFFIDAVITS

showing the yield of similar
products on the



SUNSET ROUTE

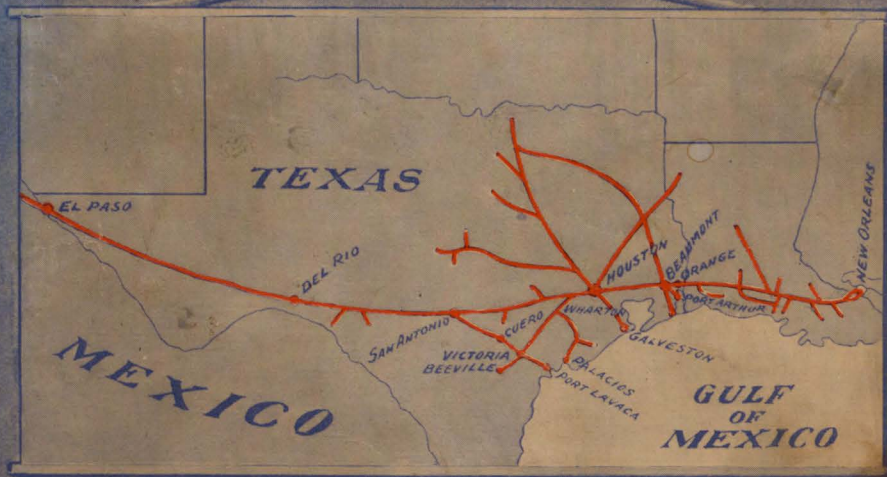
IN

TEXAS

And What They Sell For

ALONG THE LINE OF THE
SUNSET ROUTE

Texas Coast Country



ALONG THE LINE OF THE
SUNSET ROUTE