

# Apricultural Lapire





# Texas

## AN AGRICULTURAL EMPIRE

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H. M. Cottrell, Agricultural Commissioner, Rock Island Lines

EXAS contains one-twelfth of the tillable area of the United States. Farmed intensively, the state could produce all the food needed for the present population of the United States, including the meat, bread, butter, milk, eggs, sugar, honey, vegetables, fruit, berries, nuts, fish and oysters and the gas and coal to cook it. The extreme width of the state east. and west, is 740 miles, and the extreme length, north and south, 825 miles. The climate varies from semitropical to temperate; the average annual rainfall from 9 to 50 inches. Land within the state equal to the combined area of Massachusetts and Connecticut requires drainage or levees; land equal to the area of several of the Middle States is adapted to dry farming methods only, and several million acres can be irrigated to advantage.

Texas farmers own twelve and a half million head of live stock and twenty-six million fowls. Texas pastures cover as much land as the German Empire. The live stock includes millions each of cattle, hogs, sheep, horses, mules and goats.

The Texas corn crop of 1912 was worth over a million dollars more than all the gold produced the same year in the United States. Texas wheat is worth \$2 an acre more than the average acre value for the country. The oat crop of Texas grows larger each succeeding year, and the farm value for the last 10 years has averaged \$13.13 an acre a year, while the average for the United States has been \$10.70. Texas is second among the states in rice production. There are 900,000 acres of Kafir and Milo raised in the State. Over three hundred thousand Texas farmers raise cotton, and the crop brings them a million dollars for every working day of the year.

Texas truck growers produce crops worth thirtyone million dollars a year, and the industry is steadily increasing. Heavy shipments begin in November. continue through the winter, and spring, and are lightest in midsummer, at the time when the supply through the country is greatest. Three thousand cars of onions and twenty-five hundred cars of tomatoes are shipped annually. The profitable crops include onions, tomatoes, cabbage, celery, beans, peas, spinach, egg plant, peppers, beets, okra, cucumbers and corn. Thousands of cars of melons and cantaloupes are shipped every season. Three million bushels of Irish potatoes are marketed early in the spring when the price is highest. The sweet potatoes and yams produced are worth double the Irish potato crop. Last year three million dollars worth of peanuts were raised.

Texas shipments of fruit, berries and grapes amount to four to eight thousand cars a year, besides heavy home consumption. There has been a large increase in plantings during the past three years. The market fruits include peaches, apricots, plums, apples, pears, figs and oranges. Early strawberries, blackberries and dewberries are grown in large quantities. The annual crop of pecans is about six million pounds.

There are 427 saw mills in Texas. The lumber industry employs one-third of the industrial labor in the state, and the annual value of the output is \$53,000,000. There are twenty-five billion feet of pine and ten billion feet of hardwood lumber in the workable standing timber of the state. There are 531 boats engaged in the fish and oyster industry. Some of the largest red snapper fisheries in the world are off the Texas coast. Texas has an enormous supply of coal and produces 19 minerals in commercial

quantities. Texas oil wells produce about twelve million barrels of petroleum a year. The gas wells yield a million dollars a year. Texas has 118 clay working industries, and is second among the states in output of asphalt and quicksilver. There are over six thousand manufacturing establishments in Texas. Every industry furnishes a market for farm products, and industrial Texas is making a vigorous growth.

There are over fifteen thousand miles of railroad in Texas, four deep water harbors for ocean going ships, and the sea line of the state, not including indentures, is 375 miles in length.

Galveston stands next to New York in the value of foreign commerce. The total value of exports and imports handled through the port of Galveston last year was \$396,999,134. The nearness to point of export is of great advantage to the Texas farmer in securing good prices for his products.

Texas has a well organized school system. There are 8,645 public schools in the state. The state furnishes higher education through its University, Agricultural College, State School for Women and four Normal Schools. Thirty church denominations are prospering in Texas, having 12,500 organizations. There are as many churches as school buildings in Texas. There are 28 active Y. M. C. A. organizations in the State. There are 300,000 telephones in use in Texas, and 985 newspapers and magazines are published in the state. It is estimated that there is an average of five papers taken by each family.

The population of Texas is four million people. The latest complete agricultural data are for 1912. The total value of all Texas crops for that year was \$563,250,000. The cotton and cotton seed raised that year were worth \$321,430,000, the corn and other grain \$136,941,000, the hay and forage \$15-,500,000, and the fruits, vegetables, nuts, potatoes and sugar \$45,000,000. The dairy products and the poultry and eggs were worth \$40,000,000. The sales of horses, mules, cattle, swine and sheep amounted to \$97,500,000.

### Opportunities for New Settlers.

When a homeseeker begins to look for a new location, his first thought of Texas is that with such an enormous production from her farms there is little need for more farmers. But with its large area the greatest need of Texas today is for farmers to raise staple foods for the people of Texas to consume. Texas people shipped in from other states last year pork and lard that cost them \$54,000,000, over a million dollars a week. Texas people bought grain and hay in other states that cost \$125,000,000. In the best corn year ever known in Texas, nearly



Home of J. W. Knox, Banker and Live Stock Man, Jacksboro, Texas

\$30,000,000 was sent out of the state to buy corn. Over nine million dollars are sent out yearly to buy Irish potatoes, five million to buy dairy products and over a million barrels of flour are shipped into Texas yearly.

The native Texan is a farmer with one idea. If he is a cotton grower, he usually raises cotton only, buying meat and flour the year through for his family, and often the grain and hay for his teams. Many cotton growers do not have a garden. If he is a stockman, he may own ten thousand cows, buy the butter needed for his family and use condensed milk in his coffee. When the last census was taken by the government it was found that 60,000 farms kept no poultry. Only 27 farms out of every hundred raised hav or forage. That means that over 300,000 Texas farmers bought hav or other rough feed. The prices of staple farm products are high in Texas, because so much has to be shipped in and the cost of freight and handling must be added to the price received by the producers. Texas farmers who have corn to sell get 15 cents a bushel for it above market price in states farther north.

There is a great home market in Texas for staple products, such as wheat, corn, oats, potatoes, beans and hay, and for cream, butter and fat hogs. There is a greater market, for many of these products or foods made from them in the West Indies and South America, and the Gulf ports furnish close communication and cheap transportation. The Gulf ports provide for easy access to the great consuming countries of Europe and to the large coast cities of Eastern United States. The market for staple farm products grown by Texas farmers is practically unlimited, with easy access to the world's great consuming centers.

For several years the important immigration to Texas has been that of people who went to raise garden truck and berries and fruit. Thousands have made money and thousands of others have suffered severe losses in truck gardening in Texas. At present the production of truck crops is ahead of the market demands. Unusual efforts are being given



Representative Good Road between Fort Worth and Dallas

to extending the markets for these products, and in time the industry will be largely increased, but these lines offer little inducement now to new settlers. What Texas needs is more corn and grain raisers, more dairymen, more poultry men and more hog raisers and experts in fattening beef animals.

### Money in Raising Hogs.

Last year Texas people bought from other states pork and lard for which they paid fifty-four million dollars. Fresh pork was shipped into Texas from as far east as Pittsburg, Pa., and as far north as Detroit, Mich. There is a heavy demand for pork and pork products in the West Indies, and for lard in Mexico and the transportation facilities of Texas are specially advantageous for reaching these markets cheaply.

Northern Texas along the Rock Island Lines has many advantages that make hog raising profitable. The growing season averages from 230 to 240 days. This provides for eight months of summer pasture. Hardy plants like dwarf essex rape can be used to extend this period. More than half the weight of hogs, well fattened for market, can be made from cheap pasture. Alfalfa thrives on the bottom lands, and, as every hog raiser knows, is the best hog pasture in the world. Bermuda grass is adapted to all the uplands, and many hog raisers have found that growing shotes will make nearly as many pounds of gain per acre from Bermuda pasture as from alfalfa.

Northern farmers always feel doubtful about going to Texas when they read the low average corn yield, as reported by the government—about 19 bushels to an acre. Residents of Texas know that this low yield of corn is due to the general use of poor seed, planted on the poorest ground on each farm and given poor cultivation. In 10-acre statewide contests, conducted by the Texas Industrial Congress, where cost of production was an important feature, the contestants averaged in the dry year of

1911,  $31\frac{1}{2}$  bushels an acre against a state average of 9 bushels. In 1912 the contestants averaged 51 bushels of corn an acre against a state average of 22 bushels, and in 1913  $60\frac{1}{2}$  bushels per acre against a state average of 23 bushels. Good methods produced large yields of corn in Texas.

On the uplands of northern Texas Kafir and Milo will produce a yield of grain per acre that will make as much gains on hogs as is made from corn in the best sections of the northern corn belt. These crops are planted and cultivated like corn, are cheaper to harvest and as easy to feed. They are sure crop in either wet or dry seasons.

Spanish peanuts thrive in Texas, and an acre will put from 500 to 1,000 pounds of gain on fattening hogs, the hogs gathering the crop themselves.

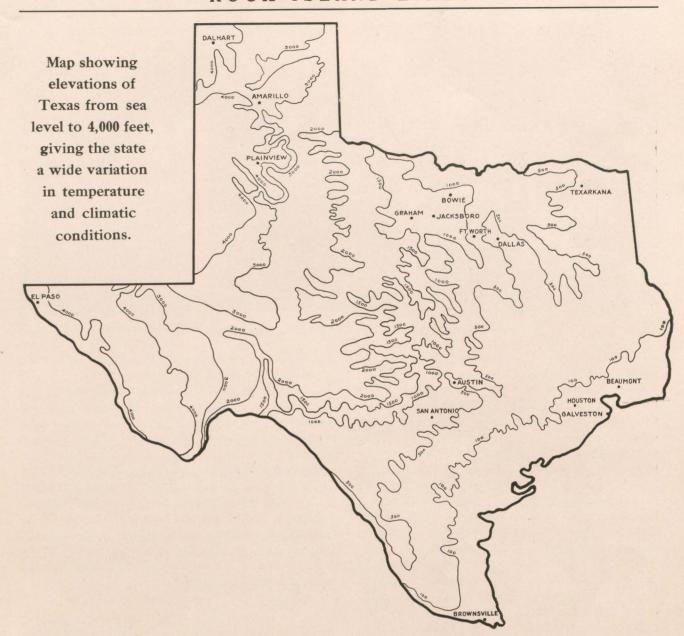
The hog raiser who is thinking of locating in Texas may rest assured that when that state becomes one of the great hog raising sections of the world, as it will, the hogs will be raised by northern farmers who have moved into the state. Many Texas farmers have raised hogs and made large profits, but the majority of native Texans do not like the business, and will not raise hogs, no matter how large the profits. Fort Worth, the chief packing center of the state, slaughtered only 41 per cent as many hogs in 1913 as in 1909.

Northern Texas offers hog raisers a long growing season in which to pasture hogs, mild winters, making two litters a year profitable, cheap grain feeds and good markets, with unlimited demands. Fort Worth, Tex., is one of the best equipped packing centers in the southwest, and has a slaughtering capacity for three million hogs a year, while receiving only 343,720 last year.

### Texas the Place for Dairymen Who Want a Mild Climate

The long growing season, the great variety of feeds, that can be grown, the mild winters and the good markets make northern Texas attractive to northern dairyman who are seeking a milder climate.

Texas people buy from other states an average of thirty-five million pounds of butter a year, for which the consumers pay an average of 30 cents a pound, or a total of ten and a half million dollars sent out of the state annually for this one table product. It is estimated that fully as much is sent out of the state each year for cream and milk. For several years good profits have been made in shipping cream from a dairy district north of Topeka, Kas., to Dallas, to be used on the breakfast tables of that city. This indicates the scarcity of home supply of dairy products in Texas and the consequent opportunities for dairymen in that state. A large part of the cream



used in Dallas and Fort Worth is shipped from a distance of 200 miles or more.

Texas has a long grazing season. The winters are so mild that expensive shelter is never needed. The richest milk producing feed, cotton seed meal, is the largest product of the state. The Texas dairyman has the advantage of securing this valuable feed at a low cost because he can buy direct from his local manufacturer.

Probably the chief reason that dairying has not had the great development in Texas that natural conditions warrant is that Texans have been among the last to appreciate the silo. With over six million cattle and over two million sheep, there were only 300 silos in the state in 1912 and 1,400 in 1913. In 1914 over 8,000 were built. Like all other dairy states, Texas usually has a mid-summer drought and because they had no silos, dairymen found feeding

expensive during these droughts. The silo practically solves all serious difficulties in dairying, both winter and summer, in Texas, making the business profitable every day in the year.

Texas dairymen have found the business a good paying one and will welcome a large addition to their ranks.

### Fattening Beef Cattle a Coming Industry

Texas has over six million cattle, and slaughters each year only about half a million. In the last 20 years Texas cattlemen have spent more money for pure bred beef sires of the highest quality than the cattle men of any other three states.

Cattle feeders in all the northern corn states have depended on Texas for their main supply of feeders. Some day the beef cattle of Texas are going to be fattened in Texas. This business offers great in-



Plowing on Stovall Irrigated Plantation, Graham, Texas

ducements to expert cattle feeders who want to locate in a mild climate.

Cotton seed meal is one of the richest fattening feeds. Texas the greatest cotton producing state, produces nearly forty million dollars' worth of cotton seed annually and feeds less than one sixth of it. Recent experiments have shown that when sorghum is cut at the right time, it makes silage worth pound for pound, as much as the best corn silage. In every part of Texas sorghum yields well, and in many parts the yield is enormous. Corn in some districts, and Kafir and Milo in all other cultivated sections of the state, produce good yields of feed grains.

With an ample number of silos and a full utilization of her cotton seed meal, combined with corn, Kafir or Milo, Texas can produce the highest quality of beef at a low cost. The high quality of the beef cattle in the state is an important factor.

### Poultry and Eggs.

The value of poultry and eggs produced yearly in Texas is about twenty-one million dollars. The home consumption equals the production. There is a large amount of poultry and eggs shipped out of the state every year, and an equal amount shipped in. One of the best locations in the United States for making money from poultry and eggs is between Fort Worth and Dallas. The home markets of these hustling cities are among the best. The demand is increasing daily.

### Wheat.

Texas buys a million barrels of flour yearly from other states, and wheat is grown on only two farms out of each one hundred in the state. The northern part of the state has a soil and climate peculiarly well adapted to the production of large yields of soft wheat of high quality.

The flour from most of the Texas soft wheat is not in favor among bakers because it produces a much smaller number of loaves per barrel than flour from northern wheat.

A few years ago Mr. F. S. White, then agricultural commissioner for both the Rock Island and Frisco railroads, secured a high yielding strain of soft wheat from the north, a strain from which the flour produced a full number of loaves. This seed introduced into northern Texas produced large yields and a quality of flour desired the world over. Wheat growers who want to live in a mild climate should locate in northern Texas.

### Hay.

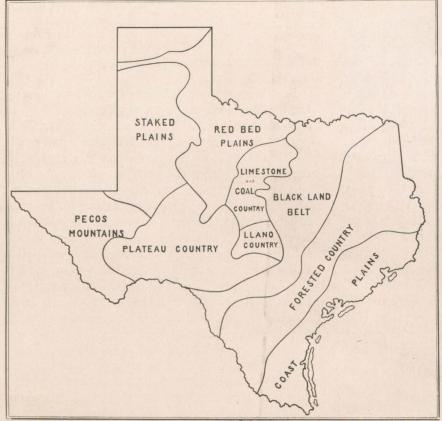
When the U. S. census was taken in 1910 it was found that there were 304,000 farmers in Texas that were not producing hay or forage. Each year from five to fifteen million dollars are sent out of the state to buy hay for home feeding.

This is another golden opportunity for homeseekers who want to live in a country where the growing season is long and the winters mild. In every part of the state there is some grass or forage plant that yields well.

Alfalfa is becoming a staple crop in many of the river valleys, and under irrigation it produces from four to six crops a year. The northern part of Texas has large areas adapted to alfalfa.

### Corn.

Texas people have to buy from other states yearly from 50,000,000 to 150,000,000 bushels of corn. Yet corn is a staple crop through the central and eastern



parts of the state. It is estimated that there are fifty million acres in the state well adapted by climate and soil to the profitable raising of this crop.

The average yield per acre in the last 10 years has been about 19 bushels, yet 4,000 farmers cooperating with the Texas Industrial Congress averaged 51 bushels an acre in 1912.

Texas offers large profits to corn growers who use well bred seed from high yielding strains, rotate with crops that enrich the soil and give thorough cultivation. Corn in Texas commands a higher price every year than the average crop of the country, the U. S. Department of Agriculture reporting a difference of 15 cents a bushel in 1912. Should corn growing increase in Texas until the supply was greater than the demand, the nearness to the four great ocean shipping Gulf ports will still make corn bring a higher price than in the northern corn belt.

Texas is the largest state in the Union, has the greatest amount of tillable land, the most farms and farmers, and leads all the states in the value and variety of agricultural products. Texas presents wider variations in the different districts, in temperature, rainfall, length of season and character of soil than any other state. Whatever conditions of climate, kind of soil, or kinds of crops you want to grow, come to Texas. They are all there. Would you like to live near the ocean? Do you prefer a country of forests? Do you want a home on rich

alluvial river bottoms? Does prairie country appeal most to you? Do you like to live among mountains or do you love best the broad, billowy plains? There are immense areas of all these kinds in Texas. Come and take your choice. You can find millions of acres that have to be drained, an enormous acreage that can be profitably irrigated, a great territory where the rainfall is ample, and a greater area of semi-arid land. Come to Texas.

### Map Information.

GOAST PLAINS. These are flat, almost level prairies, lying along the coast. Over a considerable part of these plains the slope is so slight that the rainfall has no run-off, and drainage is the important problem. The rice fields which make Texas rank second among the rice producing states are in the eastern part of these plains. In the central portion of these plains truck gardening and fruit growing are important industries. There are many oil wells in this district.

FOREST AREA. The country is undulating to hilly, and generally covered with timber. The pine forests

and the great lumber industry of the state are located in the eastern part of this area. It is estimated that there are still standing twenty-five billion feet of pine, and ten billion feet of hardwood. There are enormous deposits of lignite coal in this district.

BLACK LAND BELT. Named from the famous black, waxy prairie soils. This is the richest agricultural district in the state, and includes the cities of Fort Worth, Dallas, Austin and San Antonio. This is the corn and cotton section of Texas, although other parts of the state are adapted to these crops.

LLANO COUNTRY. Is hilly and rugged. It has large deposits of iron. In the northern part is artesian water and a rich, clay soil.

LIMESTONE AND COAL COUNTRY. Large beds of bituminous coal. The country generally underlaid with limestone. Some irrigation has been started.

**RED BED PLAINS.** Great prairies with red clay soils A great grazing country, well adapted to the raising of feed crops, and to raising and feeding of hogs and beef cattle, and to dairying.

STAKED PLAINS. Great level grass covered plains, once given over entirely to range cattle. Well adapted to the raising of milo, cane and other feed crops, and to dairying, beef cattle and hogs. Over one million acres in this district is underlaid with an abundant supply of water, at so shallow a depth as to make irrigation by pumping highly profitable.

PLATEAU REGION. A plateau country, cut up by breaks and canyons, particularly adapted to grazing. The valleys are good farm lands; the rainfall is light, and irrigation is advisable wherever water can be secured.

PECOS MOUNTAINS. A rough mountain country, largely devoted to grazing cattle. This section is cut up by several mountain ranges, with many breaks and canyons, and considerable areas of level land and valleys. It contains the highest mountains in the south, among them being Guadalupe Peak, 9,500 feet; and El Capitan, 8,690 feet. The quick-silver mines of the state are in this district.

By VICTOR H. SCHOFFELMAYER.

MONG the famous "Black Lands" of Texas no spot is richer or offers greater opportunities to the farmer of comparatively limited means than the Trinity Valley between Fort Worth and Dallas. This fertile region stretches for thirty miles between the two cities. On each side of the Trinity river immensely productive fields testify to the richness of the black sandy loam which covers the valley from six to 30 feet deep. Where the Trinity river has cut its gorge through the deposit of ages may be seen the practically inexhaustible layer of alluvial soil, which rivals the Nile Valley. If such fertile land lay hundreds of miles removed from large cities or railroad facilities it would still have to be ranked with the best land in the United States, but the Trinity Valley lands are in the very center of a population of almost 200,000 persons, with unsurpassed railroad facilities and within easy hauling distance of either Fort Worth or Dallas. The finest highway in Texas connects the two cities, and progressive farmers who have availed themselves of the rare opportunities in the Trinity Valley are buying auto-trucks in which to haul their produce to either

of the cities and return in time to do a good day's work on the farm.

Fort Worth, a city of more than 80,000 inhabitants, offers a big market for milk, cream, butter, eggs and truck. The man who is willing to milk a few productive cows, or who intensively will cultivate ten acres of garden produce, or who engages in the chicken business on a practical scale cannot help but make a financial success. It is a well known fact that much of the milk, cream and butter consumed by the inhabitants of Fort Worth is shipped in from the North. Hundreds of thousands of dollars are annually lost to farmers in the Trinity Valley who have not availed themselves of the privilege of supplying the demand for dairy products. A start has been made by several progressive farmers, and they have been so successful that they are enlarging their dairy herds and are building silos to be filled with corn and cane silage vielding from 6 to 15 tons an acre, according to season. Experiments with alfalfa show that practically the entire Trinity Valley was fitted by nature to be one huge alfalfa field. Measured cuttings show that this crop can be counted on to yield from



Forty Acres Irrigated Sweet Potatoes, Yielding 350 Bushels per Acre. Stovall Plantation, Graham, Texas

5 to 7 tons an acre. In several instances alfalfa has cut as high as two tons an acre the second cutting, and a total of 8 tons an acre in a single season. This is remarkable, especially since it was thought up to a few years ago that alfalfa could not be profitably grown in this region.

### Land Prices Reasonable.

Careful inquiry by the Agricultural Department of the Rock Island Lines shows that land near Fort Worth or Dallas or near any of several thriving towns along the railroad right-of-way can be bought for an average of \$50 to \$60 an acre. Similar land farther from town, but in no case more than a few miles from the Rock Island Lines, will be sold as low as \$22 an acre. Based upon its yielding power, an annual rainfall of 35 inches, a growing season of 240 days, adaptability to irrigation with a maximum lift of only 32 feet, the prices are astonishingly low. The big market at either end of the valley land alone is sufficient to double the quoted price. On an average the bulk of this land can be bought for \$40 to \$60 an acre. Half of a farm in alfalfa alone would yield larger returns on the investment than perhaps can be gotten off much land which commands double the price.

The cities of Fort Worth and Dallas are among the most rapidly growing centers in the Southwest. One of the largest stockyards in the country is located at Fort Worth, and thousands of beeves and hogs are daily slaughtered and shipped southwest, to Cuba and Mexican ports. This assures a home market for live stock, in itself one of the most important features to be considered by the prospective farm buyer. Dairving combined with hog raising offers unusual opportunities to the farmer. A few farmers in the vicinity of Hurst and Tarrant on the Rock Island Lines have made a success of dairying and hog raising. They have demonstrated that they can raise a 200-pound hog in nine or ten months at an average cost of about  $2\frac{1}{2}$  cents a pound by having the hogs follow the cattle, and keeping them on alfalfa, winter oats or wheat and barley pasture.

### Hogs Make Settler Prosperous.

The success of J. T. Morrow, of Hurst, Tex., on the Rock Island Lines between Fort Worth and Dallas, is based entirely upon his practical methods of feeding Duroc Jersey hogs. Five years ago Mr. Morrow settled on his 160-acre farm in the Trinity Valley. The soil is black and slightly sandy. Mr. Morrow's means were limited, but he managed to buy an old sow and five "runty" pigs of no particular breed for \$25.00. He also bought a Jersey cow and began to milk and sell cream and butter to Fort Worth at an average price of 35 cents a pound for



Nissley Creamery Co., Ft. Worth, Which Churns 41,000 Pounds of Butter a Week.

butter fat. He raised corn yielding 40 to 45 bushels an acre, wheat that threshed 40 bushels, and he cut every wisp of native hay on the place. He sowed a winter pasture of oats, in which the hogs ran, and the following fall sold \$150.00 worth of pork. He also salted down 700 pounds of pork for summer's use. Next he invested \$50.00 in a pure bred Duroc Jersey boar, the sire of his succeeding herd of brood sows. The third year Mr. Morrow's hogs netted him \$1,300. The fourth year they brought in \$2,000 even, and this year the writer saw more than \$3,000 worth of hogs and pigs on the Morrow farm. There were a dozen fine brood sows, each with nine to twelve pigs, and Mr. Morrow says he usually succeeds in raising nine or ten to a litter. Winter pastures of oats, rye, barley and wheat are credited by Mr. Morrow for his ability in producing pork so economically and surely. He always lets the hogs run in wheat until the crop is ready to harvest. He says the hogs do not spoil the wheat, but keep down the weeds and insects. Land adjoining the Morrow farm can be bought for \$50 an acre, and several miles away can be had for \$40 an acre.

### Income from Truck Crops.

As a truck growing section the Trinity Valley will soon take rank with the most productive lands in the South. The opportunities are almost limitless, with the markets of Fort Worth and Dallas at the farmer's very door. Every variety of vegetables and small fruits can be profitably grown, and prices are always attractive. The long growing season from March till November permits of successive crops on the same acre. The opportunity awaiting the truck grower in the Trinity Valley may best be judged from the success of Owen Finlan, one of the leading truckmen in the Hurst vicintity.

Mr. Finlan farms 60 acres, of which 50 acres are irrigated with water lifted 36 feet from the Trinity river with a centrifugal pump and solar oil engine, operated at a cost of about \$1.00 an acre the season. Mr. Finlan only irrigates when rains fail, and he is



Turkeys that Brought \$150 on Farm of J. T. Morrow, near Hurst

always governed by the amount of water present in the soil. His plant has a capacity of 1,200 gallons a minute, and cost about \$2,000.00. It has trebled the income from his farm. His chief crops are tomatoes, which last year yielded as high as \$550.00 an acre on 3 acres. He plants in June, and last August he counted more than 100 tomatoes on one vine under irrigation. He hauled 10 miles to Fort Worth by wagon, but the business has become so paying that Mr. Finlan has invested in a large motor truck, with which he takes his truck crops to both the Fort Worth and Dallas markets. An acre of Ruby King peppers last year yielded \$600.00. The peppers were packed in half bushel baskets and brought from 75 cents to \$1.50 a basket. One of the best paving crops of the Finlan farm were cucumbers which yielded at the rate of \$1,000.00 an acre, or 400 baskets off less than a third of an acre. Early Wakefield cabbage returned \$150.00 an acre, selling for  $1\frac{1}{2}$  to 2 cents a pound. Red white-tipped radishes brought \$250.00 an acre and sold for 30 cents a dozen on the Fort Worth and Dallas markets. He raised three successive crops of radishes on the same acre. Rockyford cantaloupes netted at the rate of \$300.00 an acre on a half acre and averaged 8 to 10 melons to a hill. Watermelons on an eighth of an acre yielded \$50.00. Mustard greens sold for 8 cents a pound from April 1 to middle of May, and again were sold for 30 cents a dozen bunches at Dallas as late as the end of September. They scarcely needed irrigating. Red beets yielded \$100.00 an acre and sold for 30 cents a bunch, coming on the market early in June.

### Money in Roasting Ears.

White Pearl corn was harvested in the roasting ear stage after only one irrigation of about 8 inches of water early in the season. It yielded about 80 bushels an acre, and sold for an average of 15 to 20

cents a dozen ears. Mr. Finlan planted early climbing beans between the corn rows, and the plants used the stalks for supports. The beans were planted May 1, after the corn had long been up. The two crops together netted \$200.00 an acre. This year Mr. Finlan will plant 6 acres to corn and beans. Early turnips made \$100.00 an acre at 30 cents a dozen, and bulk turnips sold for  $1\frac{1}{2}$  to  $2\frac{1}{2}$ cents a pound. Pumpkin yams yielded \$250.00 an acre and sold for \$1.00 a bushel. They were harvested in September. Yellow Prizetaker onions in rows 14 inches apart, and thinned to 3 inches in the row, vielded 300 to 400 bushels an acre, and sold for \$1.50 to \$2.00 a hundred pounds. "This crop," said Mr. Finlan, is not more troublesome than any other garden crop, properly taken care of. They were cultivated six times by hand, and were drilled with a Planet Junior machine. Lettuce on half an acre made \$50.00. Many heads of Buttercrust lettuce weighed one pound.

"We can raise garden truck as early as March and as late as Christmas," said Mr. Finlan. He believes in the future of the Trinity Valley as a truck country, and was one of the organizers of the Hurst Produce Association, which has 134 members, and of which he is Secretary. The association will ship truck to Chicago, St. Louis and other northern cities. Land that can be bought for \$25.00 to \$60.00 an acre can be made to yield an average of \$100.00 to \$150.00 an acre by irrigation and proper tillage. This is just beginning to be understood by the residents here. Those who do not want to raise garden crops can make good money raising alfalfa and hogs, or oats, which cuts 60 to 75 bushels an acre, or amber cane making from 6 to twelve tons of silage an acre or 2 to 3 tons of dry feed.

The Hurst Produce Association this year will plant 250 acres of Rockyford cantaloupes. Based on past performance the melons ought to yield 100 to 200 crates an acre. The association is guaranteed 50 cents a crate. Next year other crops will be shipped north. Many progressive truck gardeners



Truck Farm, Owen Finlan, near Hurst, Texas.

and several dairymen have settled in the vicinity of Hurst, and their success is an incentive to other settlers in the Trinity Valley.

### Dairy Cows Bring Money.

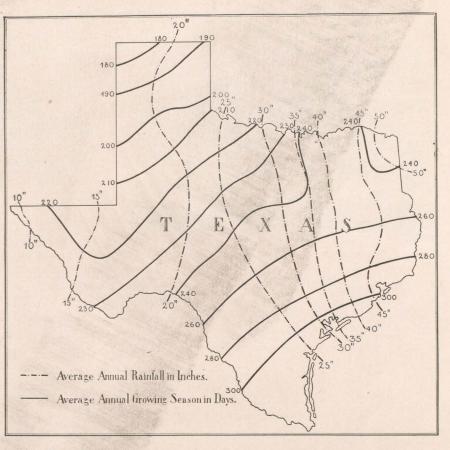
One of the most successful dairymen in the Hurst vicinity is August Reimers, who farms 100 acres. Several years ago he started milking a few cows, and his herd today consists of 23 Jerseys. He has a gasoline engine which operates a separator and churn, and sells butter at an average price of 35 cents a pound in Fort Worth. His feed consists chiefly of barley hay, yielding 2 tons an acre; oats in bundles, vielding 3 to 5 tons an acre, and corn averaging 40 to 50 bushels an acre. He fattens 50 to 60 hogs a year, the hogs following the dairy cows. There are 7 horses and mules on the place, all fat and sleek. Last year he also raised

15 acres of cotton which yielded three-fourths of a bale to a bale an acre. The cows also are fed cotton seed meal and oil cake.

H. E. Seyster, 2 miles northeast of Hurst, started a small dairy a few years ago. Today he milks 75 Jersey cows and sells the butter at Fort Worth at an average price of 35 cents. He filled his 150-ton silo with Amber cane off 30 acres. His farm consists of 190 acres. Other crops are barley and oats, cut for hay and yielding from 2 to 4 tons an acre. Corn yields 45 to 60 bushels an acre. Sweet potatoes on 33 acres last year yielded an average of 260 bushels, and brought \$1.50 a bushel, sold for seed. Cotton seed meal is used to balance the ration for the dairy cattle.

Twelve dairy cows are making a good living for Albert Souders, who lives between Hurst and Tarrant on the Rock Island Lines in the Trinity Valley, about twelve miles from Fort Worth. He raises all his feed, chiefly barley, wheat and oats, which yields from 2 to 5 tons an acre and is bundled. Mr. Souders sells his butter in Fort Worth at 30 to 35 cents a pound.

Otto Kurz keeps several dairy cows which bring in from \$5.00 to \$7.00 a week in butter. He raises peanuts for hay for his cows and horses. He annually raises 35 to 50 hogs, and says they can be grown at an average cost of not to exceed 3 cents a pound. He also raises from half a bale to a bale of



cotton an acre, and his corn yields from 40 to 50 bushels an acre. He is well pleased with the Trinity Valley as a farming and dairying country.

Edward Johnson has a dozen dairy cows which bring him a fair income. His chief crops are corn, oats, wheat and prairie hay, which cuts from 2 to 3 tons an acre.

### Trucking Successes Near Tarrant.

Enoch Sexton is one of the successful truck raisers of the Tarrant vicinity. He is located about 14 miles from Fort Worth and 17 miles from Dallas. A splendid gravel road serves him in going to either city. He raises large crops of lettuce, beets, turnips, cabbage, carrots, radishes, cantaloupes, watermelons and other produce. His land is sandy, black and heavy loam, and is very fertile. Land in his neighborhood can be bought for from \$30.00 to \$50.00 an acre, according to location.

Ben Arthur, of near Tarrant, annually fattens about 75 to 100 head of hogs, and lets them get their growth on winter oats and wheat. He also raises corn producing 50 bushels an acre and cotton making from one-half to one bale an acre. He is a successful melon grower and is a member of the Produce Association. He milks several cows, and hauls his butter and cream to Fort Worth.

Ben Johnson milks a dozen cows, and keeps them in good condition on oats, wheat straw and cane





Hogs on Farm of J. T. Morrow, Hurst, Texas.

silage. He sells about 50 pounds of butter a week. and gets from 30 to 35 cents a pound for it in Fort Worth. He says he can let his cows graze on wheat or oats pasture all winter, from October till March. He also raises 100 head of hogs a year. He is preparing ground for alfalfa.

Near Hurst M. S. Hurst feeds 125 hogs on winter wheat pasture from September till March, and says he can produce pork at less than 3 cents a pound. After he takes the hogs off, the wheat will make 30 bushels an acre.

### Trinity Valley Irrigation Successful.

The first man to irrigate in the Trinity Valley is R. A. Randol, of Randol's Mill, near Hurst, Tex., on the Rock Island Lines. Mr. Randol farms 600 acres, of which 350 acres are on Trinity bottom and can be irrigated. On 250 acres cotton is raised, which under irrigation yields a bale and more an acre. Mr. Randol has two plants, one being a water driven mill, operated by a dam in the Trinity river, and the other is a centrifugal pump and engine with a capacity of about 2,000 gallons a minute. The hydraulic plant lifts 40,000 gallons an hour 22 feet. Laterals carry the water over all the fields. The lay of the Randol farm, as well as most of the farms in the Trinity Valley, is ideal for irrigation purposes.

Alfalfa under irrigation has been made to yield 7 tons an acre in six cuttings. The stand is six years old, and Mr. Randol planted it with considerable misgivings. It had not been thought feasible to plant alfalfa, but his success has stimulated others to do likewise. He now has 120 acres of the finest alfalfa to be found in the South.

The alfalfa is irrigated every thirty days in the summer. Last year the crop sold for \$18.00 a ton, laid down in Hurst, or close to \$12,000.00. This is but one of the many successes possible in the Trinity Valley. Mr. Randol was one of the first to engage in truck raising on a large scale. Last year he raised about 25 acres of onions, cabbage, beets,

sweet potatoes, Irish potatoes, radishes, turnips and lettuce, vielding from \$50.00 to \$200.00 an acre. The crop was shipped to Fort Worth and Dallas. Spinach and hardy vegetables were raised till Christmas time. Early tomatoes brought the highest returns, and onions were a close second. This year Mr. Randol has 20 acres of cantaloupes. having been one of the founders of the Hurst Produce Association. In addition to his truck and alfalfa crops Mr. Randol raises annually about 40 acres of corn, yielding from 40 to 50 bushels an acre; 100 acres of barley, yielding 40 to 55 bushels an acre; 20 acres of sweet potatoes, making 250 bushels an acre. He has a large feed mill, and fattens 250 hogs annually. The hogs have the run of the alfalfa the entire winter, and keep in thrifty condition on the pasture.

### Model Dairy Near Dallas.

One of the agricultural show places near Dallas is the Tennessee Farm Dairy. When the writer visited the plant 325 Jersey cows were being milked daily, and were returning in the neighborhood of 1,200 gallons of milk every twenty-four hours. The cattle are kept in separate pastures, which consist largely of native hay. This dairy has been the means of raising the standard of dairy cattle in northern Texas. Gradually the Jersey cow is displacing the old Spanish Longhorn. Several other large dairies are in operation near Dallas, and all of them report the demand for milk and cream greatly in excess of the supply. It was not so many years ago that most of the dairy products were shipped into both Fort Worth and Dallas. The opportunity which awaits the man who is earnest in the dairy business or in truck growing and poultry raising in the Trinity Valley can best be judged from the examples cited. This part of Texas is one of the most rapidly growing in the country, and every year the demand for fresh vegetables, small fruits, milk, butter and eggs is increasing faster than farmers can supply the demand.



One of the Pumping Plants on Stovall Irrigated Plantation, Graham, Texas



Hereford Cattle on Ranch of J. W. Knox, Jacksboro, Texas

### Profits in Turkeys and Chickens.

The possibilities of poultry raising in the Trinity Valley may be best judged from the success made by Mrs. J. T. Morrow, of near Hurst, Tex. Last fall and winter she sold almost \$600.00 worth of turkeys. The birds were of the standard bronze variety, and made their living largely off the farm range. They were fed regularly in the fall on a ration of corn, chopped greens and various other grains grown on the farm. Mrs. Morrow annually raises about 150 to 175 birds, and says they are no more trouble, when the art of raising them is mastered, than other poultry. She also raises several hundred chickens a year, and the returns from eggs average from \$6.00 to \$10.00 a week, according to season. There is a warm, windproof hen house for the layers, and suitable brooders for the chicks. Everything is kept scrupulously clean.

The Morrow farm is first of all a truck farm and the birds are fed great quantities of green food. They also have the range of oats and wheat fields. Alfalfa has also been specially planted as a range for the birds. It is no uncommon sight to see several hundred chickens and turkeys on the Morrow farm at a time. Eggs command a high price in Fort Worth and Dallas, and spring chickens are in demand at fancy prices.

On all the farms visited by the writer there were large flocks of chickens, ducks, turkeys and geese. Farmers have not made a specialty of this branch of work in the Trinity Valley, but they are convinced that as a poultry country this section cannot be sur-

### Irrigation at Graham.

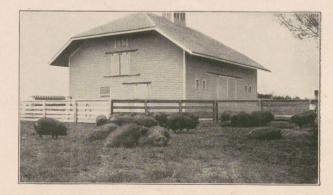
Irrigation in the fertile valley of the Clear Fork of Brazos river in Young county, Tex., is bringing success to farmers and stockmen. A start was made four years ago by M. K. Graham, a well known resident of Graham. Today Mr. Graham's example is being followed by a half dozen enterprising farmers, and what was once a grazing country is transforming into one of the most productive farm sections in the Southwest.

The largest irrigation project is on the farm of E. C. Stovall, where 1,400 acres are watered by means of three gasoline and one steam engine. The water is lifted 25 to 30 feet out of the Clear Fork river and is transmitted through concrete conduits to the fields. The combined horse power of the plant is about 210, and some 12,000 gallons a minute can be pumped. The land is a dark sandy loam, generally level, with a little rougher portions as the valley approaches the hills. The valley is from one-quarter to one mile wide and embraces about 25,000 acres of irrigable land within a reasonable distance of Graham, a thriving town of 2,000 inhabitants, and terminus of the Rock Island Lines. The Stovall plantation is nine miles from Graham. Improved land on the Stovall plantation can be bought for from \$125.00 to \$150.00 an acre, with a charge of 75 cents an acre per year for water service as often as needed. Unimproved land throughout the valley, but which can be irrigated at comparatively small expense, is quoted at from \$15.00 to \$50.00 an acre, according to its character and location. A large dam holds storage water in the Clear Fork river, and there is sufficient water to irrigate the entire valley.

### Alfalfa Brings \$90.00 an Acre.

The largest returns are obtained from alfalfa under irrigation on the Stovall plantation. A year ago last August Mr. Stovall sowed 60 acres of alfalfa. He irrigated the land twice, filling the field level with the embankment. Last summer five crops were cut, averaging about a ton each and selling for \$18.00 a ton, a total yield of \$90.00 an acre. This success has centered attention on alfalfa in the Clear Fork Valley and a large acreage will be sowed to this crop during the year. Mr. Stovall intends to irrigate all of his 2,000 acres next season. The whole tract will be sold in small farms.

Other crops under irrigation on the Stovall plantation consisted of wheat, 14 acres, averaging 42 bushels an acre; corn, 7 acres, 57 bushels an acre: 18 acres cotton, one bale an acre; 100 acres Kafir, 5 tons of dry fodder an acre; 35 acres Amber cane, 5



Duroc Jersey Hogs of J. W. Knox, Jacksboro, Texas

tons dry fodder an acre; 5 acres sweet potatoes, 350 bushels an acre; one acre tomatoes, yielding an income of \$200.00. There were large vegetable yields commanding good prices in Graham. In another year truck will be shipped to Fort Worth and Dallas, as Graham is only about 100 miles northwest of the two largest cities in northwest Texas.

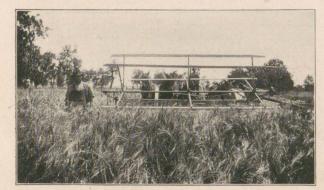
To the wide-awake dairyman and truck farmer the Clear Fork Valley offers unusual advantages. Fertile and comparatively cheap land, within hauling distance of a good town, and excellent railroad facilities make the Clear Fork Valley unusually desirable. At present there are no dairy herds in that section, and up to only a few years ago this rich valley was merely considered a grazing country.

M. K. Graham irrigates 230 acres on his Clear Fork Valley farm. He also is a leader in the raising of fine Hereford and Durham cattle. He recently erected four 250-ton concrete silos, being one of the first in the country to recognize their value. He has a large field of alfalfa under irrigation, which cuts from four to five tons an acre. Young county now has about a dozen silos, and more are to be erected. Many cattlemen who used to confine themselves to merely grazing cattle now finish their live stock with the aid of silage feeds consisting of corn, Kafir and cane, yielding from 5 to 7 tons an acre.

Among progressive cattlemen owning silos in the Graham vicinity are S. R. Jeffrey, with three silos, and George Shearer, who owns a large stave silo. A successful truck farmer who irrigates is A. S. Slater. He has 15 acres under water along Salt creek. A small gasoline engine pumps the water into conduits. He makes a good living raising tomatoes, lettuce, cabbage and other garden truck, supplying the home market. Irrigation also plays an important part on the plantation of McCharen and Donnell, the water being taken from Clear Fork river.

### Dairy Opportunity at Jacksboro.

S. S. Lard, general manager of the Nissley Creamery Co., of Fort Worth, one of the largest plants in the Southwest, told the writer that opportunity in



Another View of Wheat Harvest on J. T. Morrow Farm. This Wheat was Pastured by Hogs all Winter.



Cutting Wheat that Yielded 49 Bushels an Acre. On Farm of J. T. Morrow, Hurst, Texas

the form of dairying went begging in the Jacksboro and Graham sections. With an average rainfall of 30 to 35 inches annually, a well drained, loose and fertile soil, a genial climate growing large crops of Kafir, Milo, corn, cane and alfalfa, and with exceptional railroad facilities, and proximity to Fort Worth and Dallas, Mr. Lard said he saw no reason why Jacksboro and Graham should not become the leading dairying centers of northern Texas. The Rock Island Lines maintain efficient service throughout this territory.

Pastures can be relied on from April till middle November. Wild hay grows rank, and tame grasses respond well. Alfalfa yields 4 to 5 tons an acre under irrigation, and corn from 25 to 35 bushels an acre. Kafir and Milo vield 3 to 5 tons of dry fodder an acre, and 7 to 8 tons of silage. Jack county is erecting silos and filling them with Kafir, corn and cane. Jack county is on the edge of the section where the grain sorghums have proved themselves to be the most important crops. In the past cotton and cattle raising have been the two most extensive occupations. Jacksboro ships out about 18,000 bales of cotton in a normal year. It also has the largest limestone quarries and crushers in the Southwest, the output being 160,000 long tons for 1913. There is a population of about 2,300 in Jacksboro.

J. W. Knox, banker and one of the wealthiest citizens of northern Texas, is known all over the country as a leading breeder of Aberdeen Angus and Hereford cattle. He annually finishes about 3,000 head. Mr. Knox raised the Grand Champion Sweepstakes winning Angus cattle sold to Swift & Company at the Fort Worth fair several years ago.

Another well known cattle raiser is T. H. Cherryhomes, who annually ships about 80 to 90 carloads of fat steers. His cattle roam over 25,000 acres.

According to figures compiled by Louis Johnson, secretary of the Jacksboro Board of Trade, land can be bought in Jack county for from \$8.00 to \$12.50 an acre for grazing purposes. The best unimproved

land commands from \$16.00 to \$30.00 an acre, and improved land sells for from \$30.00 to \$60.00 an acre. Some of the richest lands are in the Keechi valley, where alfalfa is being grown, yielding two to three tons an acre without irrigation. R. R. Clayton, a pioneer alfalfa grower of near Bryson, last year raised three tons of alfalfa an acre on 60 acres. The stand is four years old and last year successfully stood one of the most prolonged droughts in the history of northern Texas.

### Jersey Herds Increasing.

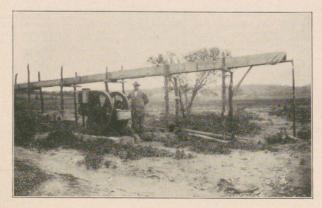
A start in the dairying business has been made at Jacksboro by J. D. Graves, who milks 20 Jerseys; N. Ramsay, who milks 25 head, S. Castleberry, who milks 30 Jerseys, and J.S. Newman, who milks 15 Jersey grades. The cows give an average of from 3 to 4 gallons of milk a day. The cream is selling at 20 to 35 cents a pound in Fort Worth for butter fat. The dairy cows have range over large tracts of wild hay, but many of these ranches are being sown to tame grasses and Kafir and Milo.

Tom M. Marks, government demonstration agent for Jack county, told the writer that Kafir yields from 2 to 4 tons of dry fodder an acre, and 7 to 8 tons of silage. Mr. Marks has succeeded in introducing the sowing of burr clover on the rolling lands of Jack county to replace the less productive wild hay. Oats yield from 20 to 30 bushels an acre; wheat from 15 to 30 bushels; corn from 15 to 40 bushels and alfalfa from 2 to 3 tons an acre without irrigation. Peanuts yield from 15 to 35 bushels an acre, and the area is being increased annually.

### Hogs and Peanuts.

L. T. Richardson, of Jacksboro, last year put 800 acres into a vast hog pasture consisting of part burly clover, cane, grain sorghums and peanuts. He also had a large stand of rape. He annually fattens about 300 hogs, and says they are produced at a cost of 3 or  $3\frac{1}{2}$  cents a pound.

L. T. Adams has ten acres of alfalfa and runs 100 Tamworth hogs on it.



Irrigation Plant on Truck Farm of Owen Finlan, Hurst, Texas



Silo on Dairy Farm of H. E. Seyster, Hurst, Texas

Col. A. C. Eason feeds 250 Duroc Jersey hogs a year on 600 acres, of which 100 acres are in rape, 60 in alfalfa and the balance in wild pasture.

W. L. Brumbelow raises 75 to 100 Poland China hogs a year on 125 acres of rotated pastures consisting of winter oats and rye, rape, peanuts and alfalfa. He has water piped into the fields, and has never lost a hog from cholera. J. W. Knox annually fattens 250 to 300 Duroc Jersey hogs. They follow his Angus and Hereford cattle and have a large pasture.

### Truck Gardening Pays.

Several truck growers are making a success at Jacksboro with the aid of irrigation from storage ponds. J. M. Storie has two small ponds out of which he syphons water to irrigate three acres of tomatoes, lettuce, cabbage, berries, onions and other truck crops. He says Jacksboro is a good market.

T. L. Middlebrook irrigates a two-acre truck garden from a pond. A small gasoline engine and pump supplies the water. He says tomatoes and peppers have yielded as high as \$200.00 an acre.

Miles E. Graves irrigates a small truck garden, pumping the water from west fork of Trinity river. Numerous family gardens are successfully irrigated with the aid of wells and windmills. The land is very productive and yields large crops when properly supplied with moisture.

### Cream is in Big Demand.

Double the amount of cream now being received in Fort Worth could easily be handled by the creameries in that city. The Nissley Creamery Company, of Fort Worth, has churned more than 41,000 pounds of butter a week. The company maintains 125 receiving stations in Texas and Oklahoma. The plant has churned as high as 9,000 pounds in twenty-four hours, and can handle 4,000 gallons of cream daily. It is expected that production will be brought up to 60,000 pounds of butter weekly. Butter is shipped to Louisiana, Texas and Arkansas points. The price paid for butter fat ranges from 20 to 35 cents.

Statements made herein have been fully investigated and can be absolutely relied upon.

# To Farmers and Homeseekers

O you wish to double the yield of your corn?
Do you want to make money in dairying?
Do you want to raise hogs with profit and learn how to combat hog cholera? Do you want information about silos? Or about Sudan grass, the new hay crop; or Spanish peanuts, the new fattening feed for livestock? Are you a dry land farmer, and do you want a handbook on that subject? Are you interested in the kafirs, or in sweet clover, the legume that will thrive where you can't raise alfalfa?

We will furnish free of charge authentic literature on the above subjects. Send in your name for the free mailing list of the Southwest Trail, which is issued monthly for the benefit of the farmers along Rock Island Lines.

If you are looking for a good location on the farm, tell us what line of farming you prefer; what expe-

rience you have had, if any; how much capital you have to invest, and whether you have any particular preference as to locality or climatic conditions. Rock Island Lines own no land for colonization purposes, but we are in touch with owners in our territory.

Descriptive state pamphlets are available free of cost on the following sections: Arkansas, Louisiana, Oklahoma, Texas, New Mexico, Colorado, Missouri and Kansas.

Our Agricultural Department is in charge of Prof. H. M. Cottrell, an eminent authority in his line, formerly with Kansas and Colorado Agricultural Colleges. The services of this department are available to farmers on Rock Island Lines, as well as to intending settlers. Correspondence invited.

Address all communications to

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