

Alluvial Empire of Southeast Missouri and Northeast Arkansas One of World's Richest Sections

Famous "Super-Soil" Section Served by Frisco Offers Remarkable Opportunities to Homeseeker—Only One-fourth Developed Now

DID you know that the Gulf of Mexico once extended up into the United States to about the present mouth of the Ohio River?

When you were on the Frisco between Chaffee and Memphis, did you notice that the land is as level as a floor?

If you've knocked around in that part of Southeast Missouri and Northeast Arkansas do you recall having seen a rock or stone as big as your fist?

Or did you notice the soil, or hear anyone talk about it?

There is an interesting and instructive story in the super-soil section, served so thoroughly by the Frisco Lines.

But first let us tell you of the admirable service which this railroad gives to the "finest soil in the world".

The Frisco Lines, with its two trunk lines out of Memphis leading toward both St. Louis and Kansas City, penetrate the heart of the alluvial land district of Southeast Missouri and Northeast Arkansas. These trunk lines with tributary branches form a perfect network of steel rails, affording this region splendid transportation facilities. Beginning just below Cape Girardeau, Mo., a thriving city with a population of approximately 18,000 people, and located one hundred and thirty-two miles south of St. Louis, this great alluvial district of Southeast Missouri and Northeast Arkansas extends southward to the very suburbs of the City of Memphis and in a northwesterly direction from Memphis to the foothills of the Ozarks, which can be readily traced on a map of the Frisco Lines, following their main lines from Memphis toward Kansas City, to Jonesboro, Ark. With St. Louis imme-

diately to the north, the gateway to the northern and eastern markets; Kansas City to the west, and Memphis as an outlet to the principal marts of the Southeast, this section is indeed fortunate in its location. A car of cattle, hay, grain or produce may be loaded one day and be in St. Louis or Memphis the following morning.



CLEARING VIRGIN TIMBER LAND

Its Geological History

Geologists say that the Gulf of Mexico once had an "arm" reaching up into the United States to about the present location of Cape Girardeau, a little north of Cairo. This "arm" varied in width from a few miles at its upper or north

end, to 50, 60 and almost 100 miles in width farther down toward the place where New Orleans now stands.

It is the theory that this land was made thousands of years ago by deposits from the Mississippi River whose mouth, in those days, was just below Cape Girardeau or perhaps about where the Ohio River now comes into the Mississippi.

This process of filling in the Gulf of Mexico is going on today below New Orleans. If you will look at a map you will notice that there is a long neck of land stretching out into the Gulf on either side of the Mississippi miles below New Orleans. All this land was "made" from river deposits. Government engineers figure that a mile of new land is created at the Mississippi's mouth in from 16 to 20 years' time.

You may have heard of the Delta of the Nile River and its great fertility. The name "Delta" supposedly came from the Greek letter which is triangular in shape—the shape of the land at the mouth of the Nile.



THE FIRST "CROP" READY FOR MARKET

So we sometimes refer to "made" land as delta land. Its proper name is alluvial land—deposited land.

More than 7,000,000 Acres

There are more than 7,000,000 acres of this kind of land in Missouri and Arkansas, the heart of which the Frisco Lines serve. There is a long strip, an extension of the Missouri "made" land in Eastern Arkansas and it continues on into Louisiana. On the east side of the river there is a great body of it in Mississippi, and the name "Mississippi Delta" is as common in referring to this great farming section as is the name, the "Delta of the Nile". As a matter of fact, perhaps, it is not a "delta" because it is several hundred miles back inland from the mouth of the Mississippi today. But the name hangs on, and at Memphis, for example, a trip "to the Delta" is understood just as readily as if you would say a trip to St. Louis or to Kansas City or some other well-established place.

There are bits of this alluvial or "made" land in Illinois, in Kentucky and in Tennessee, but the major portion lies in Southeast Missouri, Eastern Arkansas, Eastern Louisiana and the north-west quarter of Mississippi.

In all, the area is between 25,000,000 and 30,000,000 acres. This is about as much land as there is in the combined states of Maryland, Delaware, New Jersey, Rhode Island, Connecticut, Massachusetts and New Hampshire. It is as much land as there is in all of Holland, Belgium and Denmark.

The Mississippi River "made" all of it. It was some job—and no wonder that it has taken thousands of years, as the geologists tell us.

Remembering how it was created, it is not difficult to understand why

the land is so level. The river could deposit it only to a certain level, its highest stage in flood times.

And this explains why there are no rocks or stones in the region, for the river deposits only light matter that it can carry along—silt, it is called.

You can readily understand why this great stretch of alluvial land is coming to be a tremendous producer of railroad business. It is now being developed for farms. The soil, being "skimmed" by the Mississippi and its tributaries from some 30 states, is the very cream of soil from the very heart of the

United States. It is tremendously rich and productive. Those of you who have farmed do not need to be reminded that the "bottoms" always produced the best and the most corn, or whatever was planted. In a measure, the alluvial soil region of the lower Mississippi is a huge "bottom" land.

A study of the findings of soil experts is most interesting, but we won't go into technicalities here, save just to give you an idea.

Soil Rich in Phosphorus

The soil is so rich that it can produce 50 crops of corn (50 years) before its fertility in phosphorus is brought down to the equal of the best Illinois corn land. This phosphorus content, before being brought down equalling Illinois' best land, would produce 60 crops of wheat, averaging 35 bushels an acre; 65 crops of oats, averaging 60 bushels; 70 crops of potatoes, averaging 500 bushels—and so on—and it then would be as good as the best Illinois land. This is based on the findings of Dr. Bain, soil chemist for the State of Illinois a few years back. The richness in



COTTON-PICKING TIME

phosphorus is mentioned because it is the most difficult soil element to restore. Nitrogen can be put back in the ground with legume crops like peas, clover, alfalfa and the like. The other element potassium, is seldom deficient in any soil, so phosphorus is the important thing. Restored artificially by a farmer, it often costs several dollars an acre.

It is little wonder, then, that splendid farms are being developed in Southeast Missouri and Northeast Arkansas along the line of the Frisco, and further south toward the Gulf in this same "Alluvial Empire."

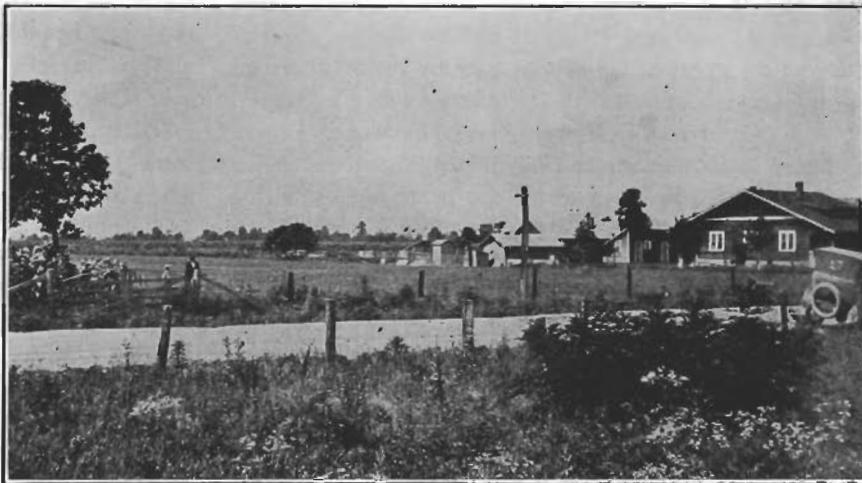
The region has been slow to come to the front but when one knows the causes, it is readily understood.

Even today, many people have an impression of the country that was gained in the old days when the region was not reclaimed and developed as it is now.

1,700 Miles of Levees

In the old days, the land being level and just a bit above the high-water stage of the Mississippi, it was subject to periodical overflow when the Mississippi was high. To stop this, great levees or dikes have been built. These are now practically complete and they total more than 1,700 miles in length. They are merely big "fills" in an unbroken line on both sides of the river where the land is level—where there are no bluffs to prevent overflow.

One easily could imagine that these levees were thrown up as "fills" for a railroad. In places they tower 50 feet high, with a base of 300 or more feet. People in the lower Mississippi Valley have been building such protecting levees since 1717, the year that the City of New Orleans was laid out by French engineers.



SPLENDID ROADS AND BEAUTIFUL HOMES

Only in the last twenty-odd years have great strides been made, for it was not until 1917 that the Government started making appropriations to rush the work along and finish it.

Now there are no longer any great overflows by the Mississippi and the rich, level land stretching out for miles on either side of the stream is protected. Homes have been built under the very shadow of the levee lines and the country appears more like prairie land than "bottom land" as so many think of it.

Another development, however, was necessary before the safest farming could be practiced. Recalling that the land lies level for mile after mile, the question of drainage had to be solved. In rainy weather, the water passed off very slowly, for the land has a fall of but a little more than one foot to the mile. So artificial drainage was necessary.

Landowners undertook artificial drainage on a big scale only a decade ago. Now there are organized drainage districts, just like road districts or school districts, and these raise the money and let contracts for drainage ditches. Once these systems are finished, the district is immediately converted into an ideal farming section. Where conditions were bad from the health standpoint before drainage, with standing water, mosquitoes and the like, all these troubles quickly disappeared. There is no more healthful country for farming anywhere. Practically every foot of the great area of alluvial land in Southeast Missouri as well as in Northeast Arkansas now is drained. Most of it has been accomplished only in the last few years. The result is that the fast growth in popula-



BRINGING COTTON TO THE GIN

tion and in number of farms has only begun. The counties in Southeast Missouri and Northeast Arkansas showed the greatest population gain by the 1920 census of any other counties in the two states.

Artesian Water Everywhere

There is another interesting feature about the region and this is that artesian water can be found by boring wells from a few score to a few hundred feet down. It is the finest, purest water to be found anywhere and practically every town, including the City of Memphis, and almost every energetic, progressive farmer, depends entirely for water upon this strata of artesian supply. In some places the pressure is sufficient to shoot water into the air from wells. A steady flow, much like a spring, is almost to be guaranteed for every farm yard.

From the farming standpoint, the region probably is not surpassed by any other farming region anywhere.

Former Governor Frank O. Lowden, of Illinois, who owns more than 30,000 acres of land in the alluvial section of Arkansas, declared in a speech at Memphis not long ago that he had sent experts over the world to find the richest lands and they picked the lands in the lower Mississippi Valley.

"Wherever I have gone, in this country or in any other, I have seen no lands that in my opinion are the equal of the alluvial lands of these southern states," Mr. Lowden declared.

In a book dealing with southern agriculture and soils, Hugh Hammond Bennett of the Bureau of Soils, U. S. Department of Agriculture, says:

"These alluvial soils constitute one of the most productive agricultural regions in the world. The great area of these lands already in cultivation," he continues, "is being rapidly added to by the reclamation of swampy lands and the clearing off of the timber. Much of the soil consists of 'buckshot land' (Sharkey clay) the productiveness of which is probably not exceeded by any soil anywhere."

A Splendid Climate

In that section of the "Alluvial Empire" through which the Frisco Lines pass, it is neither "up north" nor "down south" but a happy combination of both. The winters are short and mild. Livestock can run out all winter and can graze 10 months of the year.

Costly barns and the like are not necessary. Spring is early, meaning early crops for the early markets—and fat prices. Fall comes late and the growing season is so long that two crops of many things, such as Irish potatoes, can be grown on the same land in the same year. Wheat and oats can be followed with some other crop for two crops a year.

Not only can this region produce everything that the so-called corn belt and wheat belt produces, but it is the finest cotton country in the world. "In the world" takes in a lot of territory, but it is true. Mississippi County, the northeast corner county of Arkansas, not only is the greatest cotton county of Arkansas, but it is the greatest in the world! And the Frisco line runs right through the very choicest of Mississippi County's farming section. Incidentally, this county isn't yet one-half in cultivation and it has less than 500,000 acres—just an average county. The town of Blytheville, Ark., now is just 25 years old. It

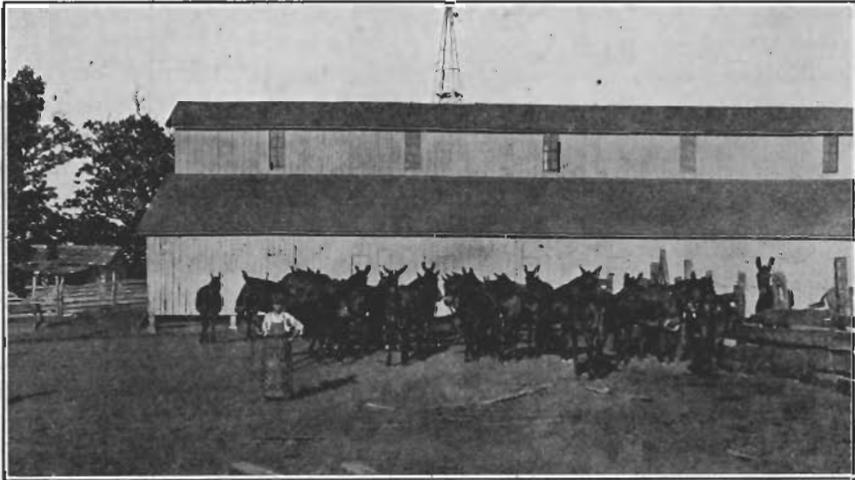
had 302 people about 24 years ago. Today its population is more than 10,000—nearer 12,000 according to late figures. Other towns that are thriving and growing and are prosperous centers of business have sprung up in the last few years.

One-fourth Developed Now

The "Alluvial Empire" of the lower Mississippi Valley is less than one-fourth developed now. It already produces 90 per cent of America's finest cotton, known as "long staple upland cotton" to distinguish it from Egyptian cotton. It yields almost every crop imaginable, including truck or garden crops, which are just being started on a scale to warrant car-load shipments. Radishes, tomatoes, beans, etc., can be gotten to market for the fat spring prices—and practically overnight to St. Louis, Chicago, Cleveland and other buying centers—via Frisco, of course.

The people who live in this wonder country are mostly from other states—come into start anew or to grasp new and better opportunities. They are confident that there is no better land anywhere.

And it is a source of constant satisfaction to folks of the Frisco that this railroad played such a large part in the development of this territory, and is now
(Now turn to Page 20, please.)



THIS SECTION IS FAMOUS FOR THE PRODUCTION OF FINE MULES

Five Carrigan Brothers Serve One Hundred and Eighty-two Years With Frisco

Matt, Frank, John, Tom and Charlie Carrigan Started as Sectionmen on Same Section—Father Before Them With Frisco

IN THE little city of Knobview, Missouri, ninety-five miles west of St. Louis on the Frisco Lines, the residents will tell you an interesting story of a pioneer Frisco family. They tell it proudly out there, for the Frisco spirit is instilled deeply in the community life of the town.

The name "Carrigan" is almost one to invoke reverence from Knobview residents, for they know and believe in the five members of that family who have worked for the Frisco Railway for a total of 182 years.

The histories of Matt and Frank, Charlie, John and Tom Carrigan, the Frisco men, are an open book to those of Knobview. They know of their continuous service and glory in it.

Not only do the Carrigans reach the grand total of 182 years of Frisco service. The brothers started their career on the same section, each in the same capacity, only a few months apart, and each holds his seniority on the Eastern Division. Charlie, now in the employ of the St. Louis Terminal Association, is the only one of the five who left the service.

But, to start at the beginning of this remarkable history of service with the Frisco:

Along in the early 50's a family by the name of Carrigan came to America from Ireland. There was the father and mother, three children and the grandmother. They drifted down into Missouri at the time the old Atlantic & Pacific, now the Frisco, was being constructed from Cuba to Rolla, Missouri.

ALL HELPED TO BUILD

All of the family helped in the construction of the road. One of the sons was a contractor and sublet the road to other men, while the father worked on the grade by day, and the mother kept a great number of section men who were at that time employed, as boarders. They moved from place to place with the construction of the road.

After the road was completed, the Carrigan family came to Knobview and bought a farm, where they lived for eighteen years.

The little family consisted of five sons and four daughters, born to the Carrigan's while they lived on the Knobview farm.

And here the present generation began with the Frisco.

Each of these boys started his career on the section near Knobview, each was promoted to brakeman and three of them at this time are passenger conductors out of St. Louis on Frisco trains.

Frank Carrigan is the passenger conductor on trains Nos. 1 and 2. He is the oldest of the five brothers, and his career started in 1881, when he worked on the section. He was promoted to brakeman in '82, and in '91 was promoted to passenger conductor. That was long ago when hand brakes were in vogue and, according to Mr. Carrigan, one of their "huge" type engines could now be put in the tender of one of the new 1500's.

AN ATTEMPTED HOLDUP

And here is an incident of great interest:

It was in September of '93 that the train on which Frank Carrigan was conductor came suddenly to a stop just east of Pacific. It was in the early evening, and Mr. Carrigan alighted to investigate and found that the train was being held up. Several men were on the train with hunting paraphernalia, and Mr. Carrigan told them the situation. He borrowed a gun and together with another passenger, slipped up by the side of the train. The bandits had covered the engineer and fireman, and to shoot them, they would run a chance of killing the crew. They went through the train on the other side and by this time, the bandits had put dynamite to the safe in the baggage car and had gone some distance back from the car, but the charge did not explode. The bandits retreated to the woods, where Mr. Carrigan and Dr. Bonder followed. The engineer and fireman pulled the train on into Pacific, and shortly thereafter, Mr. Carrigan came into Pacific with one of the bandits, who was turned over to the authorities at that point.

STORY NEVER TOLD

Mr. Carrigan shunned publicity, and would never allow an account of this act to be published before.

Below is a copy of the letter Mr. Carrigan received concerning his courageous act, from Mr. H. L. Morrill, vice-president and general manager at that time:

Frank Carrigan, Esq.,
Conductor, Frisco Railway.

Dear Sir:

I take much pleasure in commending your prompt and gallant services in capturing train robbers last week.

While the company does not expect its train and enginemen to rashly imperil their lives, or the lives of their passengers, in resisting train robbers who have