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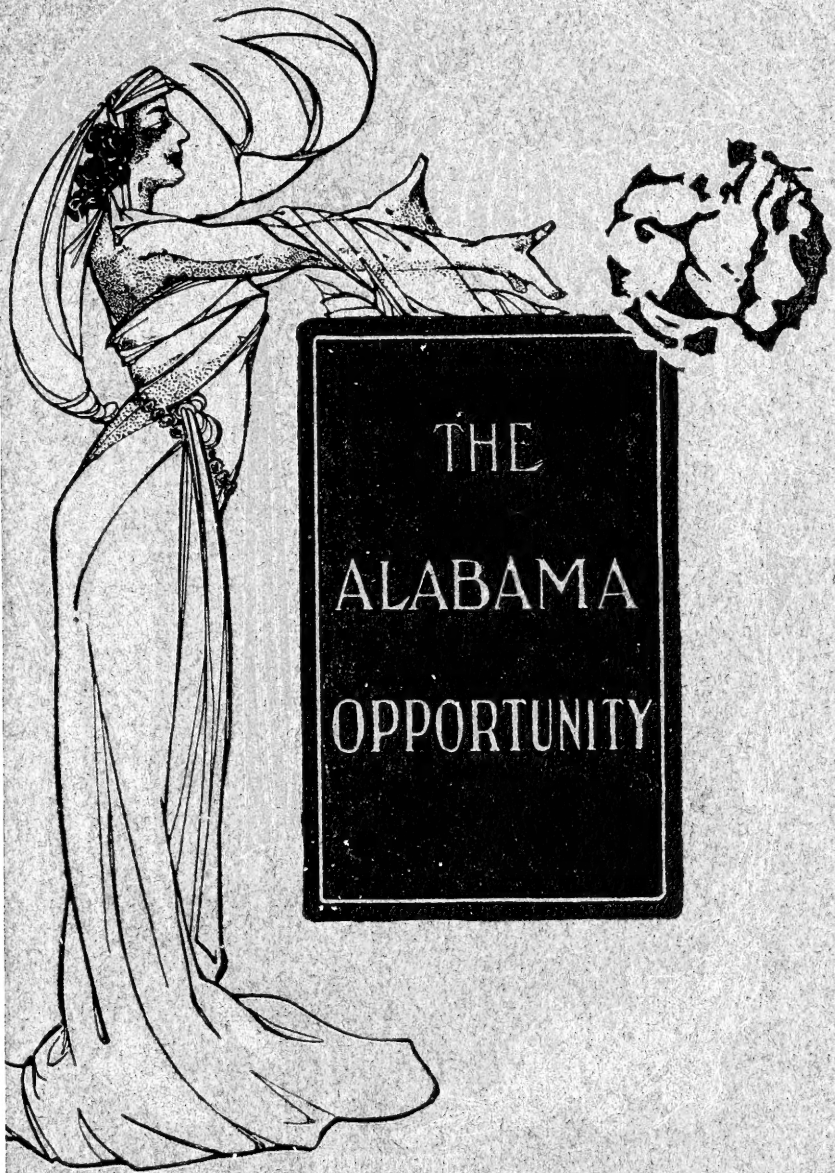
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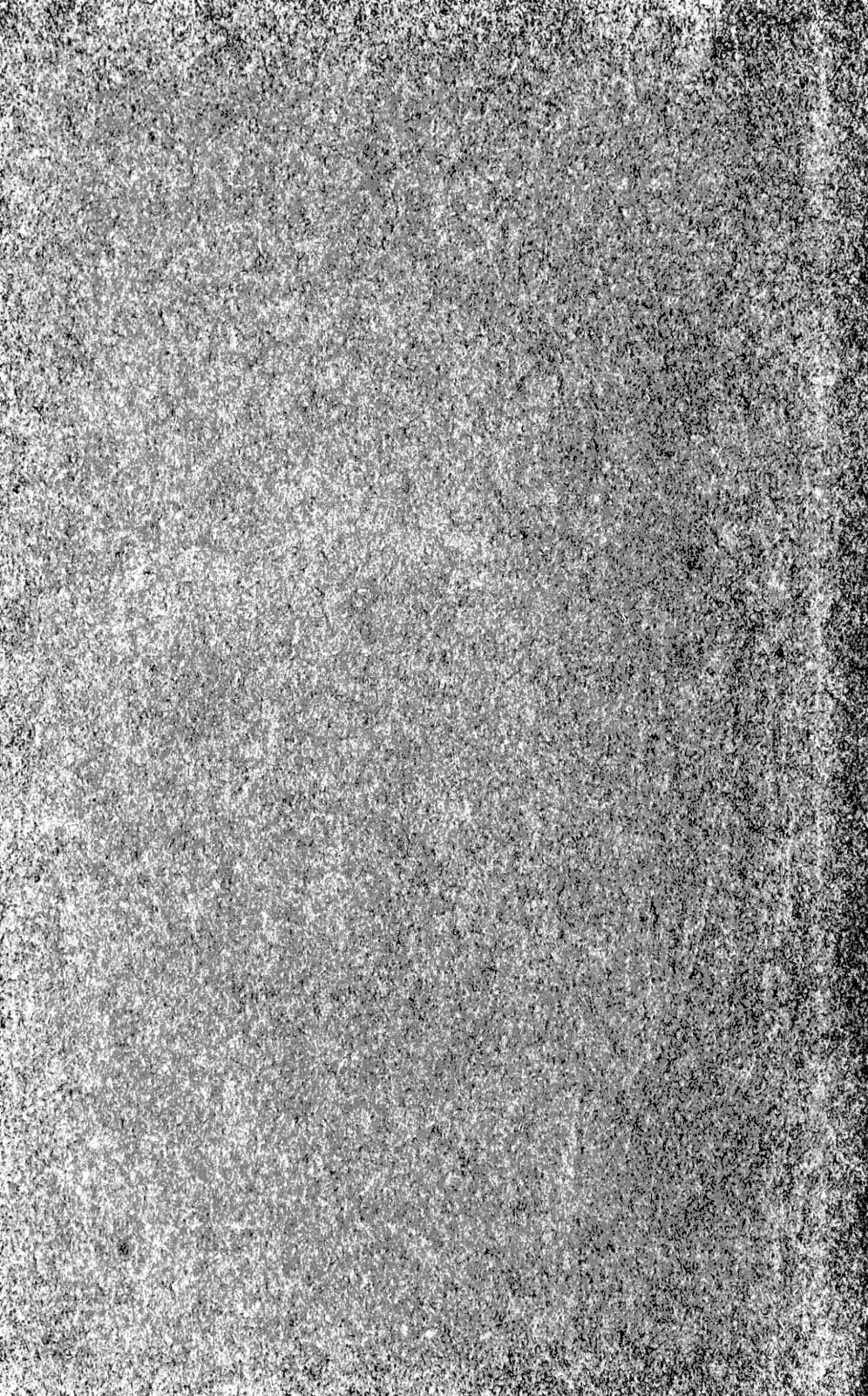


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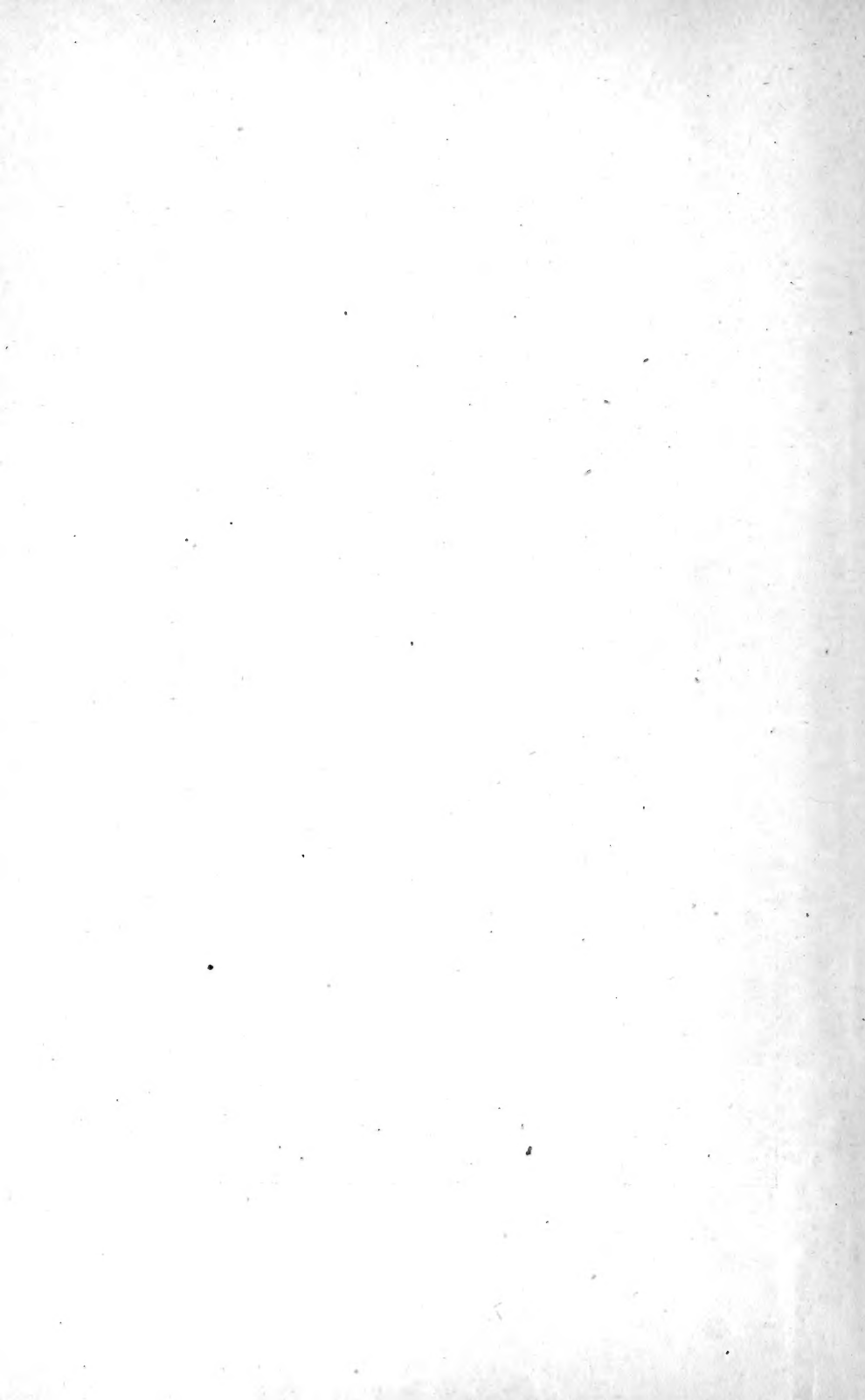


THE
ALABAMA
OPPORTUNITY





WM. D. JELKS, Governor of Alabama.



THE
ALABAMA OPPORTUNITY

OBSERVATIONS UPON AND DESCRIPTIONS OF
THE RAPID COMMERCIAL, INDUSTRIAL
AND AGRICULTURAL ADVANCEMENT
OF ALABAMA IN RECENT YEARS.



PUBLISHED BY
DEPARTMENT OF AGRICULTURE AND INDUSTRIES
R. R. POOLE, COMMISSIONER.

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ALABAMA OF TO-DAY

LETTER FROM HON. R. R. POOLE, COMMISSIONER OF AGRICULTURE AND INDUSTRIES, TO GOV. W. D. JELKS, IN SUBMITTING THE PUBLICATION.

MONTGOMERY, ALA., March, 1906.

To His Excellency, HON. W. D. JELKS,
Governor of Alabama.

Sir:—I submit herewith the publication, presenting in a measure, the resources and development of Alabama during my administration of the office of Commissioner of Agriculture and Industries, a publication authorized and directed by act of the Legislature.

The difficulty in compiling a publication which will, even in a degree, present the splendid natural resources of the State, or adequately portray the wonderful mineral and agricultural development of Alabama in the past six years, must present itself to every man at all conversant with conditions in our State. The best that we may do with a limitation of space as well as of finance, is to set down in type some information that bears upon the unusual richness of Alabama and picture some few of the most remarkable developments of recent years.

That Alabama, starting late in life, has, in the development of her unparalleled mineral resources, outstripped her sisters of the Union until she is now second in the sisterhood of States in the production of iron and third in the production of coal, may be known to the informed Alabamian, but it is not a matter of knowledge to the general public out of the State or in the State for that matter. Nor is the continued rapid exploitation of our buried treasures of coal and iron, a development that will in time place Alabama at the head of the iron making and coal producing States of the Union, known as it should be known.

The growth and development of its agricultural interests have been hardly less remarkable. An era of farming prosperity is upon us. The assertion may be safely ventured that the past three years have been the most prosperous the Alabama farmer has known in a third of a century. It has been a beneficent era for the State's great staple, cotton. The satisfactory market for the great crop of cotton which Alabama produces has infused a new vitality in our agriculture and in our commerce. It has stopped, too, the exodus of the white man from the farms and plantations to the city and it has done more in turning back this moving stream from cityward to the farm house and the cultivated field than any other one cause.

A period of development is a period of change, and change and development are rich in opportunities. To present as best we may the richness of the Alabama Opportunity is the primal purpose of this publication submitted for your approval. The earnest and intelligent efforts, now making for the presentation of Alabama's splendid claims to consideration, by the workers for thrifty and intelligent immigrants must command the assistance and cooperation of every patriotic citizen of the State. If what has been gathered and published here shall give aid and assistance to the organizations working to that end, one purpose, at least, of the work here represented will have been served.

A time ripe for this general movement has been chosen. If what is published here shall fail to show the opportune timeliness of a general immigration movement throughout Alabama this publication will have fallen short of its object. The failure will have come, not through lack of zeal nor lack of evidence to prove the case of those of us who are responsible for this publication.

I am persuaded that what is within the covers of this volume will amply repay reading and consideration, by the ambitious and thrifty wherever they are located and by the people of the State as well, who may not know how rapidly Alabama is stepping forward in the march of time.

Our change, our development has come quietly upon us. Alabama, unlike some of the Western States has not suffered and is not suffering from overadvertising. No disheartening revelations await the new comer. It is not his fate in Ala-

bama as in some other states, to find the opportunities which were once so attractively painted and which in truth one time existed, but passed away and gone. Nor will he find, I am absolutely convinced, that our opportunities have been exaggerated or overpainted.

Our handicap, on the other hand has been underadvertising. The outer world has known too little of what we have to offer. The public mind is beginning to grasp in a way and to approximate in a degree the richness of our mineral stores. The idea of our mineral wealth has gotten abroad because of its marvelous development in the past quarter of a century. In the same way our agricultural interests are undergoing change and progress.

Upon our farms the negro is now ringing in the greatest change. The movement of the negro from the farms and plantations, to the mines, to the lumber camps, to the railroad works is little short of a race exodus; this exodus, this agricultural evolution, entails loss and embarrassment upon the larger land owners, the larger planters, it presents a serious question to them.

But for the interest of the State as a whole this wholesale removal of the negroes from the farm does not spell misfortune for Alabama. In many sections of Alabama the negro's free handed occupancy, as a thriftless and careless tenant, has all but eclipsed the sun of that section's agricultural prosperity. He was not a successful farmer. His leaving has broken up some of the great plantations of the State, lands that were held in bodies of three, four and five thousand acres; they are rich acres, too, for the wealthy land owners, the slave holders of ante-bellum days had an eye for only the richest and most fertile acres.

The land may now be had at a modest figure. It will be offered to the new comer to Alabama at a low figure, at an astonishing figure to him, particularly if he is familiar with land prices in the eastern and middle states, not because it lacks fertility or agreeable surroundings, but because it lacks men to till the soil.

That in fact is what Alabama needs above all else, men to till the soil.

Nor is the need confined to the great cotton raising sections of Alabama. It is felt in the newer portions of the State,

in those sections over which the big saw mills have passed and in which are thousands upon thousands of acres of "cut over" land, acres which need only working of the soil to repay every effort a hundred fold and to become in the whole a most valuable asset to the State. Nor is this an untried portion of our State. In the wide expanse of this "cut over" section there are thousands of farmers prosperous and contented, but the number of farmers to the number of acres is disproportionately small and inadequate. And again the land is offered at a ridiculously low figure when compared with the prices that prevail further north.

Nor should one think that cotton growing is the only agricultural interest of the State worthy of mention. Undoubtedly a richer opportunity in Alabama is presented to the man who is familiar with truck farming, stock raising, fruit growing and kindred farming, than to the man who is reared in familiarity with the growing and cultivation of cotton, for the former has nothing to unlearn. Moreover, in the majority of those portions of Alabama where inducements are being offered to immigrants, there are demonstration farms, places which show exactly what the land will do and places where the best and most promising methods are taught.

In the matter contained in this publication, I feel, that the tribute paid the splendid climate of Alabama is inadequate. The Southern portion is Gulf Coast. There is not a section of the State, but in which summer heat is delightfully tempered by Gulf breezes. There are but few weeks in the entire year, but that an active outdoor life may be lead. There are but very few weeks in which the farmer finds it necessary to feed his grazing cattle. The summers are longer than those of the northern states, but the heat is never so intense. In that wide stretch of territory lying between Montgomery and Mobile, a distance of 180 miles, there never has been an instance of a sun stroke. The continued cooling breezes from the south are responsible for the tempered heat and the agreeable days of summer, while the earlier springs, the longer summers, the later falls, and the shorter winters give fine chance for rotated crops on the same land in the same year.

That Alabama is a splendid goal for the man who is looking for opportunity and to whom a rich soil and an unrivalled climate at a small cost, is reflected in the pages of this publication, I sincerely hope.

In casting about for material to represent the richness of Alabama and its splendid opportunities I have been impressed with the letters written by Will T. Sheehan as staff correspondence in the Montgomery Advertiser, one of the leading papers of the South and a paper of the highest standing. I have been particularly impressed with the value of these letters, in such a cause, from the fact that they were not written to boom Alabama to the outside world. I feel that they are more of value because when they were written it was not suspected that they would be put in a publication exploiting Alabama's resources and chances. They had no such end in view.

The Montgomery Advertiser sent out Mr. Sheehan to lay before the people of the State the wonderful development, the remarkable progress of the State in recent years. As a newspaper man of training and experience he was put in the field to tell the people of one portion of the State what the people of another portion was doing. He was simply to show Alabama in 1905 for the benefit of the readers of the Advertiser.

The entire expense of the undertaking was borne by the Advertiser. Neither the Advertiser nor its staff correspondent were under a dollar's obligation to the State, to any county or town, to any man or any set of men.

So much of explanation is due because of the space in this publication I have set aside for those letters, which have been here reprinted without change.

It has been my wish and my endeavor to have every section of Alabama represented in this publication. There are sixty-six counties in Alabama and even if it were practicable to secure a letter or a chapter from every county in the State the whole would be of such a bulk, that it could not be embraced in a publication intended as a handbook of the State. The letters which have been given a place in the volume have been selected, out of the great number written for the Advertiser, with the special purpose of representing every section of the State. The letter from each county mentioned as a county is selected because it best represents that section of which that particular county is typical or representative.

I came to feel that even this method of selection could not give every section its particular dues. Even then some portion of Alabama might go unrepresented, a thing I most earnestly wished to avoid.

For a valuable article on the weather and climatic conditions of Alabama, with information exhaustively gathered, together with some interesting reports and comments on conditions in Alabama I am indebted to Captain D. W. McIver, a veteran newspaper man and one who is thoroughly familiar with his native state of Alabama.

The great Tennessee Valley is one of Alabama's proudest boasts. It was not to be considered that so rich, so fine an agricultural section should be inadequately presented in any publication bearing upon Alabama's wealth. The special chapter on the Tennessee Valley is from the pen of Editor Charles P. Lane, of the Huntsville Tribune, a pungent and forceful writer who has spent the greater portion of his life in that section of which he writes.

In closing I may be permitted to again express the hope I cherish, that the rapid growth and manifest prosperity of the past few years, in which you have been so interested, and to which you have contributed by means of every opportunity the office of Governor has afforded you, will continue until Alabama is safely established in the high place, appointed for her by nature and by destiny.

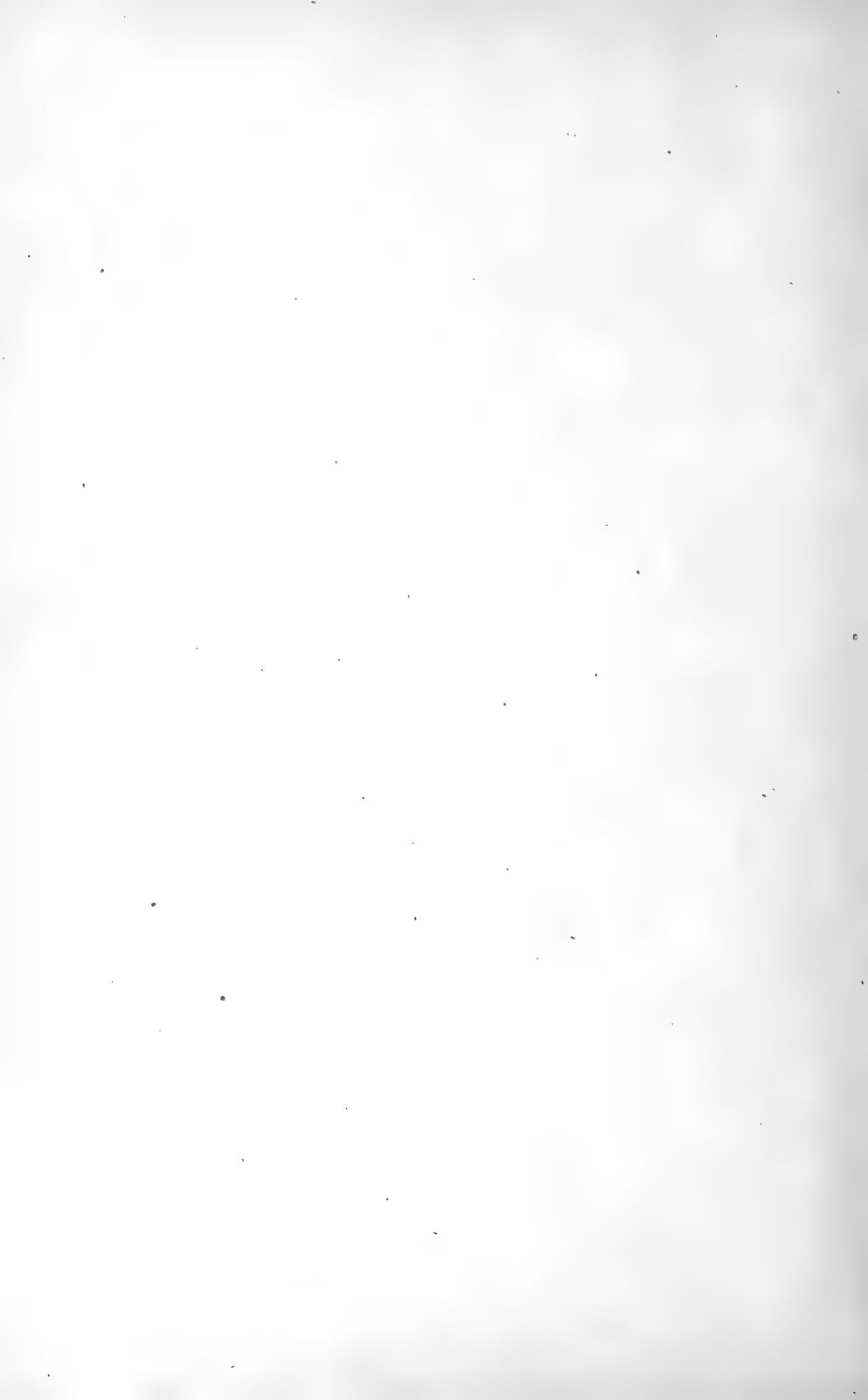
I am, very respectfully yours,

R. R. POOLE

Commissioner of Agriculture and Industries.



R. R. POOLE, Commissioner of Agriculture and Industries.



A Word in Explanation

The letters which comprise this publication are taken from a series written as Staff Correspondence of the Montgomery Advertiser. For none of the letters did the Advertiser receive a cent from the community or section spoken of in the letters and which from their publication might receive benefit or advantage. The Advertiser management undertook the burdensome expense of this work in the patriotic desire to help along the industrial and progressive movement which has become so emphatic in Alabama in recent years.

It was felt that the State's agricultural, industrial and commercial advancement had become so pronounced in these recent years that a closer study of existing conditions, a wider distribution of information concerning these conditions were due the energy of the people who had brought them about, if for no other reason. And with a view of, not only informing the outside world of what Alabama was doing, but of laying before the people of one section of Alabama an account of what the people of other communities within the borders of the State were doing for the upbuilding of Alabama. In the accomplishment of this double purpose it was only natural that it should be shown that although Alabama, like other Southern States in the despondent days that followed the great war had marked time, while her northern and western sisters who had received no dire and cruel wounds in that war had marched forward with unweakened and undiminished steps, she has now felt the impetus, the exhilaration of a new era of industry and she had sprung forward and with swift and certain steps was moving to the front.

That she has overcome the industrial misfortunes of other years is due no less to the twin facts that in the bosom of her northern mountains lies greater mineral wealth than any State South of Pennsylvania may boast of, and that her fertile acres to the south are equal to the best that Texas or Mississippi may show, than to the quickened spirit of energy and progress of her people.

The within letters were written on the spot, while the facts were fresh in the mind of the writer and while the impressions of progress and prosperity were still undimmed. If the imperfections of the letters are too pronounced, it may be here plead, in extenuation, that they were written with the haste and speed that is so remorselessly demanded by daily newspaper work.

There are collected here and published for distribution by Hon. R. R. Poole, Commissioner of Agriculture and Industries of the State of Alabama, as a part of the Department's continual work of exploiting Alabama's wealth and progress and of drawing to the State her just and proportionate share of the tide of immigration which is turning from the west to the South. For the encouragement of energetic men in various communities of the State Commissioner Poole has had a sufficient number of copies printed to supply moderate demands for the pamphlet.



STATE CAPITOL AT MONTGOMERY, ALABAMA.

Modern Methods of Montgomery Farmers

WHEN a neat little waterworks system is built for them, with a big wind mill and a cemented surface cistern, when their food is cut and chopped for them by specially built machinery, when practically the whole farm has been laid out for their advantage and their benefit, it would seem that the horse, the cow, the hog and the sheep are coming into their own in the agricultural economy of a prairie plantation of Montgomery County.

This is the condition on the Hunter Vaughn place six miles southeast of Montgomery. There cattle of all sorts are given the highest sort of consideration. There is money, much money in cattle in Montgomery County, more than most farmers realize, but the money making possibilities of stockraising is fully appreciated by the energetic and intelligent proprietor of the big farm.

He has built round little cement pools in his great pastures, and these little pools are for all the world like little fountains. They are more like fountains because of the iron posts fixed to the bottom of the pools, and through which iron chains are run. These iron chains and pools are not, however, for the purpose of ornamentation. They are there to keep the cattle from taking a bath when they should only take a drink. These cemented pools rising from the green Bermuda pasture, are more than mere details. They are symbols of the high standing of stock and cattle on that particular farm. They are symbols that the great monopoly of cotton upon the lands of Montgomery County has been broken, that at least some of the tentacles of the royal octopus, King Cotton, has been broken loose.

Where cotton raising has full swing, everything else is subordinated to it. Cattle and other things are mere side issues to be brushed aside if they interfere in any way.

REIGN OF COTTON DISPUTED.

And if the main sway of cotton can be successfully disputed on prairie acres and prairie plantations, why it can be disputed and set at naught in any section of Alabama.

So these cemented cisterns are things of special significance. They show for one thing that the question of the proverbial dryness of the prairie pasture has been solved. The cisterns are connected with a storage tank of 5,000 gallons, a tank that is filled and kept full by the big wind mill on the hill.

This comprehensive water works arrangement is a necessity for Mr. Vaughan, who has so many dollars of his own invested in stock and who takes other people's cows and horses to board during the spring and summer months. Mr. Vaughan has for instance 250 sheep. This drove of sheep is of value for its wool alone, for the sheep are sheared regularly. But its chief value lies in the rapid way in which the size of the drove increases. Now, young lambs in the spring bring \$3 each when they are carried to the city and sold for Montgomery's tables, and lambs from a flock of 250 sheep are frequent and numerous.

There are cattle of proud ancestry on the Vaughan place. There are fifteen head of Hereford stock, thoroughbred and registered. The monarch of the herd cost Mr. Vaughan \$525, and several heifers were bought at \$200 or \$225 each. And then there are scores of native cattle feeding upon the farm. The importance of cattle raising on this well known place may be estimated when it is understood that 800 acres of it alone are devoted to pasture. Over 200 of these acres are grazing a big drove of native hogs, hogs that are being raised for the market.

TWO PLANTATIONS IN ONE.

The Vaughan place, all in all, is a remarkable farm. It is composed of two plantations as plantations went in the old days, and it contains about 2,500 acres. The two plantations which comprise it are known to the older citizens of Montgomery County as the Remsen place and the Davidson place. The Woodley Road runs between.

It is a splendid piece of farming property, these two plantations, amounting to 2,500 acres. And it is owned by a young man, a young man on the sunny side of 30 who started ten years ago with eighty acres of this land and some few debts. The big farm, its splendid equipment, its fortune in stock and cattle, he has acquired by intelligent perseverance in the past ten years.

One thousand acres is devoted to the raising of hay. It is a big industry. The crop this last year amounted to 1,500 tons. Much of the hay is yet in the big dark colored stacks that are seen on nearly every hill. But the traction engine with its twenty-horse power is constantly puffing away along side the big square stacks and the steam hay press is constantly digging into the piled up hay. One can hardly drive along the beautiful Carter Hill road without meeting one of the four mule wagons piled high in the air with baled hay.

TWO CROPS GROWN.

The acres that grow hay are made to grow oats too, in many instances. The land is harrowed, the oats are broad casted, allowed to grow and then cut. After which the land is permitted to grow up in grass for the production of hay. Every sort of modern machinery is used in the planting, cutting and baling of the hay.

While cotton is of secondary importance on the Vaughan place, one would hardly gather this from the size of the crop. A four hundred bale yield on any one farm or plantation is a thing to excite comment and praise. This is what was gathered last year from the 500 acres in cotton on the Vaughan place. A pretty good crop for the number of acres used and a much better cotton crop than appears at first glance, inasmuch as Mr. Vaughan plants cotton in a way that is a little out of the ordinary. Cotton and corn are planted together. There being eight rows of cotton and two rows of corn. That some of these prairie acres planted in this way produced a bale to the acre is nothing short of remarkable.

USES OF MACHINERY.

That traction engine of Mr. Vaughan's place would be a valuable adjunct upon any farm. Take the single item of plowing alone. This engine pulls two gang plows, each of which has four plow points. It is no trouble to break up thirty-five or forty acres a day with the untiring traction engine.

All the corn on the place is cut and not allowed to remain until the fall months on the stalk. It is thrown into a patented shredder which separates the ears from the stalk. The stalk

and fodder having been shredded the shreds are shot up into the barn by an arrangement like the round tube which picks up the seed cotton from the wagons at the modern gins. The ears are carried into the crib by an endless chain.

The value of labor saving machinery is given its true estimate on the Vaughan place. The traction engine and the corn shredder are interesting because of their novelty, but mowers, reapers and binders and other modern farm conveniences are called upon there to do the work in their separate spheres.

The machinery and the business correspondence on Mr. Vaughan's place has reached so high a degree of importance that they demand the time of one man. Thomas Jones, well known in Montgomery, has the responsibility of these important charges.

AS TO STOCK RAISING.

The Hagan stock farm was originally a part of the Vaughan place. It was sold off early last year to Francis J. Hagan, one of the best known stockmen of Kentucky, and who was a number of years upon the staff of *The Breeder's Gazette*. Mr. Hagan was greatly impressed with Montgomery County as a stock raising section. He had bought fifty-nine head of pure breed short horns to put on his Montgomery County place and was going extensively into stock raising here, but on a visit to Kentucky he fell a victim to the hatred of a violent man who was his enemy because of a business transaction. Since his death the place has been ably managed by Mrs. Hagan, who was reared in the blue grass regions of Kentucky and who is familiar with the care and the raising of stock. Of her it is said that the stock and cattle upon her place receive better care and attention than any stock upon any farm or plantation in Montgomery County.

There are now on the Hagan place thirty-three head of the finest short horn cattle in the country. These cattle were bought by Mr. Hagan from the best stock farms in the country and they are registered as the best of their class. It is said that there is not a cow upon the place that cost less than \$100 and some of them were bought for double the money.

The cattle on the Hagan place are not to be sold for beef to butchers. The stock is too valuable for that purpose. They

are of a pure strain and are to be sold breeders and growers. The herd now includes a number of Alabama born calves that are strong and thriving and whose birth and breeding is as good as the best of the herd.

Mrs. Hagan has also a drove of Berkshire hogs. Her barn yards are covered with fine chickens and geese, for these things are the usual accompaniments of a Kentucky farm and this Alabama stock farm is being run on the Kentucky plan. The geese are of the Hong Kong variety and the chickens are pure Plymouth Rock. It is a way that the Kentucky people have of insisting on the best and purest breed whether it be of animals, fowls or of farm products. Geese and chickens from the Hagan farm will be seen at the coming Poultry Show in Montgomery. Mrs. Hagan also could exhibit some of the finest fox terriers in Alabama.

Being a distinctly stock farm the Hagan place, that is the acres in cultivation, are being put out in alfalfa, hay and corn. There is no place for cotton on the farm.

Denuded Timber Lands Planted With Sugar Cane

Some Things Which Have Been Accomplished.

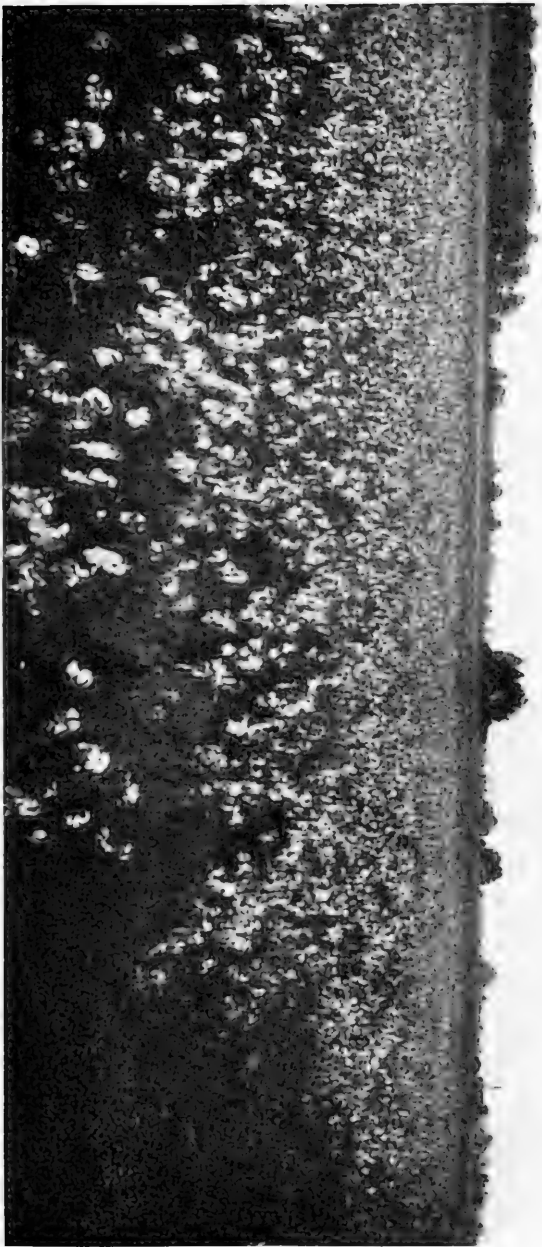
A DEVELOPMENT, an agricultural development, with a scope so wide and with possibilities so vast that they may not be appreciated at this time is shaping in the Gulf States. The movement now is in its inception. But the results that have already been attained are pregnant with the promises of riches.

The movement is the planting with sugar cane of the timber lands which the lumber men have denuded of trees. A vast field is open to this endeavor. In the South, in Alabama especially, there are millions and millions of acres awaiting the coming of the farmer and his plow. The lumber man and the turpentine man have passed along and done their day's work in the woods. The scarred and seared woods now await the true worker, the true wealth bringer, the farmer and the producer.

The lands upon which the pine woods stood will pay best if they are devoted to the raising of sugar cane.

This is not the writer's opinion. It is the opinion of the men who have organized and who are maintaining the Inter-State Cane Growers' Association. It is the opinion of men who have lived in Baldwin County and who have had enough experience to know. It is the opinion of Professor B. B. Ross, State Chemist, and other members of the faculty of the Alabama Polytechnic Institute, that pine lands are especially adapted to the growing of sugar cane and that the richest results can be had from growing the crop, if industry and intelligence are mixed in the cultivation of the land.

There is, for example, the sugar cane farm of Mr. E. Smith, near Fairhope. The farm has only six acres of land in cane, but on each acre the enormous total of 660 gallons of syrup



COTTON FIELD IN MONTGOMERY COUNTY.

was raised. This syrup was sold to the trade at 50 cents a gallon. These figures mean that Mr. Smith received as a gross total \$330 an acre from his sugar cane.

Nineteen miles from Fairhope Dr. J. H. Foley, on his model farm, near Magnolia Springs, has gone extensively into the same sort of farming. Dr. Foley has twenty-one acres in cane. Having a larger field Dr. Foley did not use as much fertilizer or employ such intensive methods of farming as did Mr. Smith. Yet from each of his twenty-one acres Dr. Foley is now securing 600 gallons of syrup. This syrup is being packed in air tight cans and shipped to Chicago in car load lots. Dr. Foley has sold his entire crop to Chicago dealers for 50 cents a gallon.

The soil is sandy, with a clay subsoil. It is the same sort of soil as thousands and thousands of other acres in the pine belt of Alabama, a soil that is rich but not extraordinarily so, but which has the firmness necessary to its building up by the use of fertilizer.

MODERN AND SCIENTIFIC METHODS.

The richness of these returns from Baldwin county sugar cane fields is no doubt due to the use of a modern steam mill and evaporating plant. The mill which is owned by Mr. Smith is similar to the five-roller mills of the Louisiana cane fields. This mill in the first place, extracts from the cane about 20 per cent more juice than does the old-fashioned cane mill whose motive power is a mule traveling around and around in a circle. This alone gives an increase of one-fifth to each acre, as compared with the old method.

A fine description of the principles, the use and the advantages of this steam mill is furnished by Professor B. B. Ross, the State Chemist. Professor Ross superintended the installation of the mill. He went to Fairhope and assisted in the adjustment of the machinery and watched the first run of syrup.

In speaking of the machinery of Mr. Smith's cane farm Professor Ross says:

"I was at Mr. Smith's place during a portion of the time in which the syrup making apparatus was being installed and I looked after a portion of the evaporating apparatus during

the first run which was made, although I was able to remain during only a portion of the syrup making season. In Mr. Smith's plant, steam is employed both for the operation of the mill and for the evaporation of the juice and syrup. The mill employed is of the most modern type and consists of two heavy crushing rollers for crushing the cane thoroughly, and three rollers of the ordinary type for thoroughly expressing the juice from the crushed cane. With this mill an extraction of from 15 to 20 per cent. more juice can be secured than by the employment of an ordinary horse mill and as the common horse mill frequently extracts not more than 55 to 60 per cent. of juice it will be noted that the relative increase in juice extraction is even greater. It will, therefore, be seen that the employment of a mill of this kind enables the syrup producer to save and utilize a large portion of the juice that usually goes to waste in the imperfectly crushed cane."

WORKINGS OF THE CANE.

The mill referred to is similar in construction to the more improved types of five roller mills in use in Louisiana and Cuba. The juice runs from the mill to a small tank situated on a lower level and is thence pumped up to the top of a filtering box filled with Spanish moss and any suspended mechanical impurities are removed during this filtering process. The juice runs from this filtering apparatus to evaporators which are arranged in pairs, the first evaporator being on a higher level than the second.

"The bottoms and sides of these evaporators are of wood, while coils of copper pipe, supported about an inch from the bottom, furnish the means of heating the juice, steam being admitted to the coils or shut off by simply turning a valve. The first evaporators are termed clarifiers and in this part of the apparatus the juice is first gently boiled and the skums are carefully removed. The well skimmed juice is next run out through a valve into the larger evaporator which is located on a lower level, and the juice can be rapidly boiled down to syrup in this part of the apparatus.

"In order to ascertain when the syrup has reached the desired destiny, a specimen of the hot liquid collected in a tall jar and the density can be easily ascertained by employing a

Beaume Hydrometer, weighed at the lower end, and having graduations on the stem by means of which the density can be readily determined.

RESULTS OF MR. SMITH.

"By the employment of steam heat, the temperature and the rate of evaporation can be regulated with great exactness, and a much more thorough clarification and satisfactory evaporation is secured than by the employment of the ordinary evaporators, where a large proportion of the scums are frequently boiled down with the syrup, darkening its color and rendering its preservation difficult.

"Mr. Smith secured a yield of about 660 gallons of syrup per acre the season of 1903 on four and one-half acres of land, or a total of about 3,000 gallons of syrup. I understand further that he has been able to virtually secure a market for his whole output in advance of its production largely by reason of the care and skill employed in the manufacture of his syrup and by reason of the uniformity in quality and composition of the article.

"I might further say in this connection that a number of analysis of cane produced in Baldwin County and one or two adjacent counties in South Alabama have shown that the cane is much sweeter and richer in cane sugar than the cane grown on the rich alluvial lands of Louisiana, and a given weight of this cane would of course produce a relatively larger amount of syrup than the same weight of the Louisiana cane. In addition to its excellence in quality over the Louisiana cane I would also say that where there is proper preparation and fertilization of the soil a very heavy yield of cane per acre can also be obtained in South Alabama, and in Baldwin County in particular."

WORK ON CANE MILL.

This year the machinery of Mr. Smith's plant, after he had ground all his cane and put it into cans for shipment was taken up and hauled nineteen miles to the Foley place where it was used in grinding the large crop of Dr. Foley. The mill was installed in its new location by Mr. Smith and who superintended

the first runs. On the occasion of my visit to the Foley farm the mill was grinding and turning into the evaporation vats 800 gallons of cane juice daily.

At the direction of Professor Ross Thomas Bragg, Assistant Chemist, has in December visited a number of localities in Baldwin County inspecting the syrup made in that county. The syrup was reported to be of fine quality and Mr. Bragg found that in the past year the production of syrup had largely increased in that county.

The visit of Mr. Bragg to Baldwin is another indication of the interest of the Alabama Polytechnic Institute in the growing of sugar cane.

As Professor Ross says: "This department of the college and experiment station has for a number of years past endeavored to encourage improving methods of syrup manufacturing as well as an increased production of syrup and it is our desire to promote the growth and development of this industry in every possible way."

In these words there is promise of assistance and encouragement to those who may see the possibilities of cane growing in the southern section of the State and who may enter into it. If they need any other encouragement they have but to write to the cane growers of Baldwin who have applied intelligent and modern methods not only to the growing of cane, but to the manufacture of syrup.





CORN IN BUTLER COUNTY, MR. DAN'L REUSE, GREENVILLE.

Land as it is Found in Wiregrass Region

To paraphrase a verse of Scripture, the farm lands of the Wiregrass differ from each other as one star differs from another in glory.

These lands, practically all of them, are firm and consistent wealth producers, lands which are not given to failure in the production of crops, and lands which assimilate and grow stronger with intelligent fertilizing. Naturally there are acres in the Wiregrass which are neither strong nor fertile, as there are such acres in every State and in every section, but their proportion is inconsequently small when compared to the wealth of strong and fertile soil that abounds in this favored section.

The main run of land throughout the Wiregrass is clayey and sandy. It is oftentimes mixed, this clay and sand. And in this the clay or the sand so predominates that there is often a clay streak and a sand streak running clear across the Wiregrass if not entirely across the State. The streaks may be likened to the streaks of fat and streaks of lean found in a neatly browned piece of breakfast bacon. There are men so familiar with the Southeast Alabama lands that they can tell where the red clay streak begins and where it ends, and where the sand lands begin and where they end. The lands with the more clay in them are called "stiff" lands, and they are reported to be of more value for farming purposes than the sandier soil, although both, as the expression goes "lie well" and both hold fertilizers well. To "lie well" means that the land is not so level that it is a sand blot nor so hilly that it washes and rolls away with heavy rains. These lands whether they be red or sandy have a clay subsoil which gives them durability and which stores and economizes the fertilizer the farmer entrusts to them.

My attention was called to the special richness of the soil about Enterprise, Hartford, Dothan and Headland. The soils about these towns I was told were the richest of the Wiregrass. The distinction, which was given to these particular soils and which may or may not be true and just, is not my own. It was pointed out and argued by merchants and by farmers of the

Wiregrass with whom I stopped and who of a certainty should know the soils thereabouts.

It is worthy of note that wherever popular voice assigned the most fertile thereabouts would be found one of the newly risen and prosperous towns. Such belts of territory were given to Hartford, to Dothan, to Enterprise and to Headland, the latter being an old town that is being moved forward by new strength and new vitality.

At Enterprise they claim the prettiest farming section in Southeast Alabama. Now, this is a patriotic claim made by loyal and interested people and it may be susceptible to a refutation. However that may be, it is not to be doubted that about this new town is a big garden of farms, so fertile, so well kept that the country never fails to make a deep impression on all who see it. And the visitor who has passed through it and failed to tell its praises when he passed out of it has gone unrecorded.

This particular section is either unusually fine or it has an extraordinarily industrious set of farmers. The general satisfaction, the financial strength of the farmers of Enterprise's particular territory is not open for argument. At every turn it is impressed upon the visitor.

An instance to emphasize this fact was brought up by an attorney who was familiar with the incident. An Enterprise farmer in January lent an Enterprise merchant the sum of \$5,000. This particular merchant needed the sum to carry forward his business. Instead of going to a bank he made his need known to a farmer friend with the result that he got the money immediately. Of course the country is not full of farmers who have \$5,000 to lend at a moment's notice, but the section has in it many farmers who have cash to pay for what they get and who have cotton to sell when the price suits them. Especially is this true. In a half day's drive through the country one can hardly pass a farmhouse in the yard of which there is not a row of cotton bales, sometimes as few as two and sometimes as numerous as forty. Of course, it is frequently the case that money is borrowed on the cotton, that some merchant or some broker is more or less interested in the store of cotton. Nor is the idea to be had that every farmer in the territory about Enterprise is absolutely free from debt.

A new thought on the financial condition of the section was brought out by Vice-President Byrd of the Enterprise Banking Company, who moved into Enterprise from Ozark last August.

"This is of course a new country about here," said Mr. Byrd, "and being a new country the prosperity of the farmers is remarkable. You see most of them come in with but very little. Some of them had enough to make a small payment on their place. Others did not have that much. They, therefore, had to build from the ground up. They had to buy their land, clear it up, establish homes and pay for it all. All this had to be done in the past seven years. In fact, the average time the farmer of this territory has been here is four years. That they have done so well in so short a time is decidedly to their credit. That a good many of them owe some money is not to their discredit. Our bank is carrying a good deal of cotton in money loaned to farmers. We have a number of customers on our books who are holding from 20 to 25 bales. Naturally the older settlers who have been in the longest are in the best condition, but the entire section is much better off than ever before. An indication of this is in the fact that lands are held right now at the highest figures that were ever known in Coffee County. A few days ago a sale was made of forty acres of land at \$25 an acre. Our farms are much smaller than those of other sections. The average farm here is a two mule farm, a farm having perhaps sixty acres in it. It is a hog and hominy country here. The farmers are given to raising syrup, potatoes, corn, meat and other things needed at home."

Enterprise has grown large enough to support two prosperous banks, the Enterprise Banking Company and the First National Bank.

In speaking of the physical aspect of the country about Enterprise, A. S. Edwards, one of the older farmers, said: "I tell you, it is the finest farming section of the State. And the country is so thickly settled that you could hardly appreciate it without seeing it. The immediate territory about Enterprise is as thickly settled as Jefferson County. There is another phase of the agricultural condition of this section that should not be overlooked and that is the rapid way in which new farming territory is being opened. You see we have several saw mills in Coffee County. One of them, the Henderson-Boyd

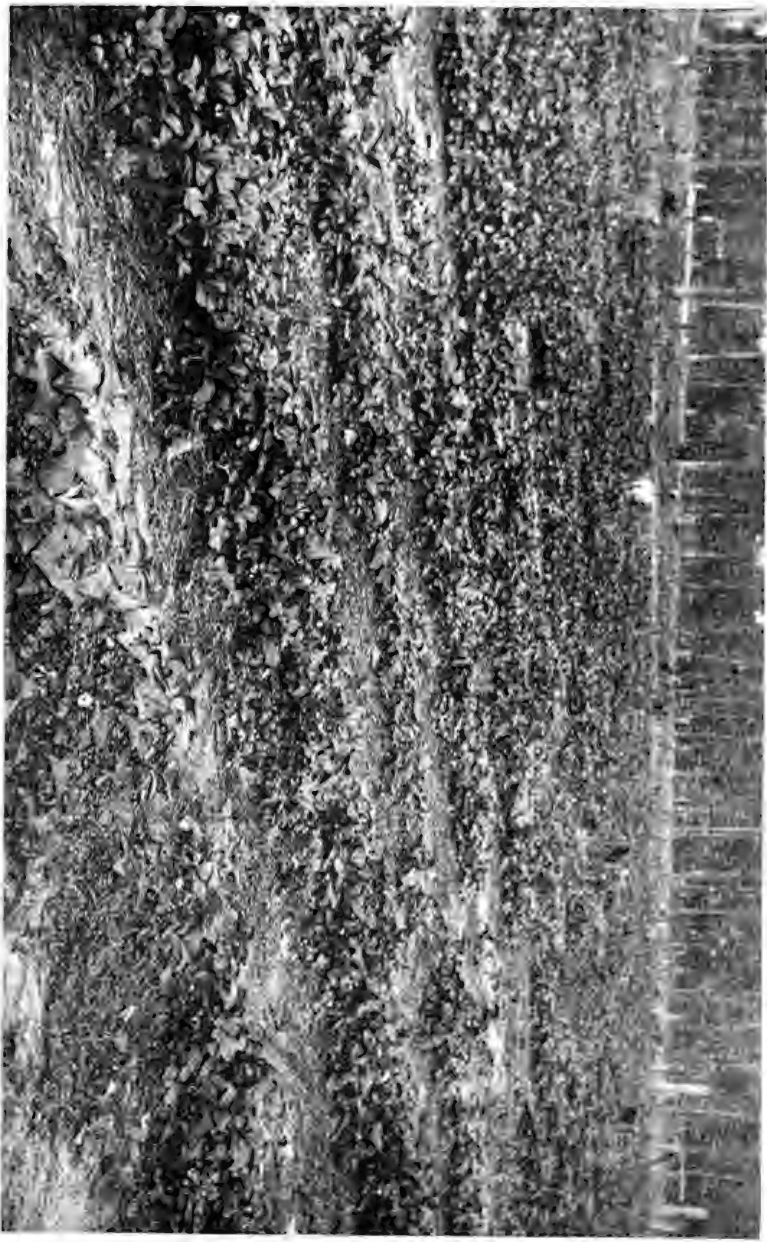
lumber Company, is one of the largest in Alabama. As these saw mills cut down the pine forests new settlers follow them and put the land into cultivation. And this new land, like the older land, is susceptible to any kind of improvement and there is no limit to what it can make."

There are two or three show places about Enterprise. The most famous of them is "Arlington," the country home of Captain John Rawls, late of Virginia and South Carolina. It is a beautiful home on an excellent farm, a large and commodious house with every convenience and every attention. The people of Enterprise say that it is one of the very finest country homes in all South Alabama.

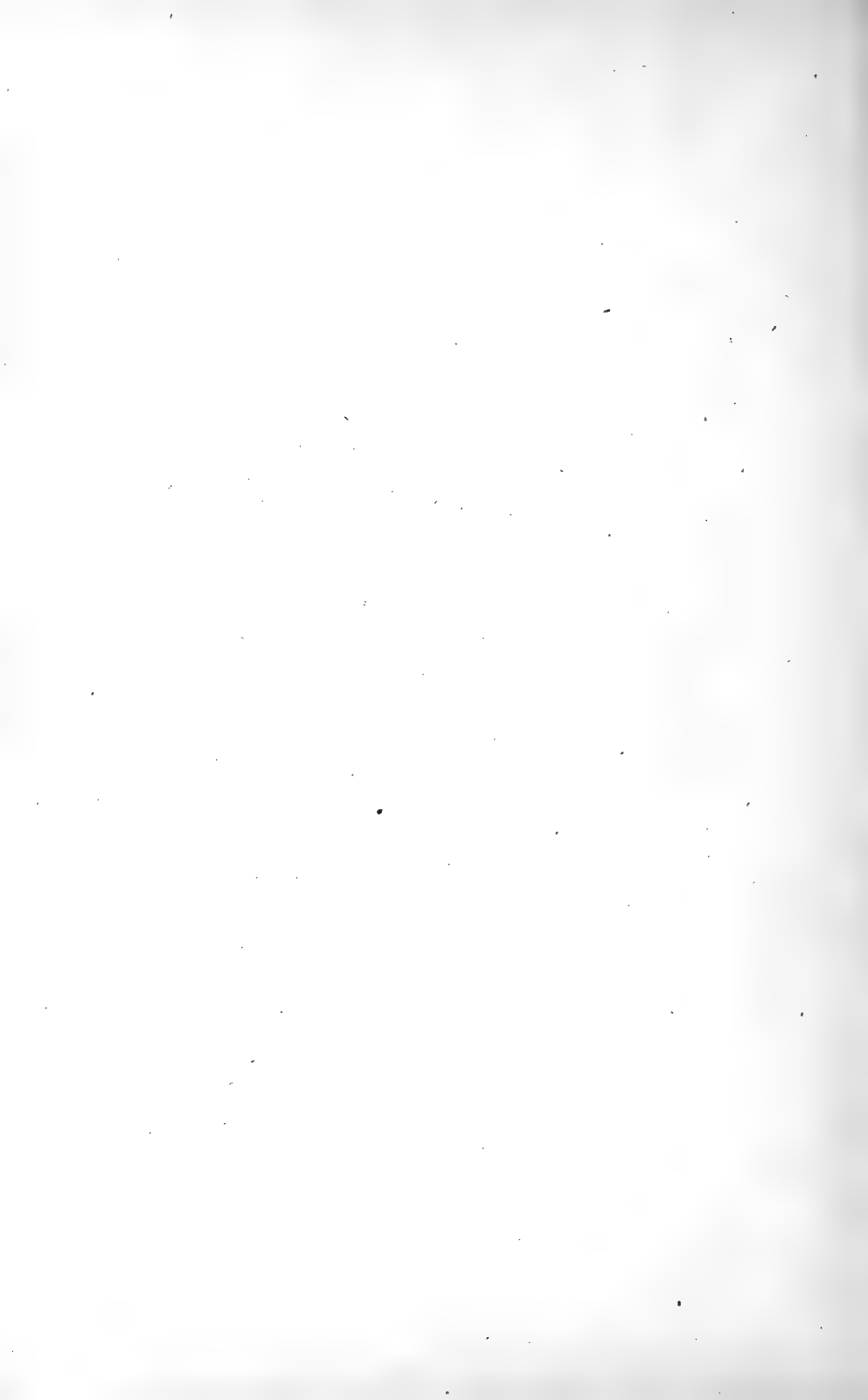
Then there is the model farm of Sam Smith, who has gone already into the stock business. Mr. Smith's specialty is the raising of registered Berkshire hogs. The hogs he raises are too valuable to be sold as pork in the local market or in any other market. They are raised and sold for breeding purposes. A pair of those hogs sell for \$10 and Mr. Smith has off and on sold several cars of them.

When prospective land buyers come into Enterprise they are shown some of the successful and paying farms of the territory, farms like those belonging to J. M. Heath, W. A. Goff, C. C. Alberson,, Hiram Pridgen, Jim Baker, William Ormar, J. W. Fleming, Bud Armor, W. H. Warren and Rush Hutchinson. And several of this list, it is said have farm property worth over \$10,000.

The section about Enterprise must be a fine fruit country. An orchard on the Rawls place did excellently. Station Agent J. A. Middlebrooks of the Atlantic Coast Line is convinced that the sand and clay soil, the climate is equal to the best in Georgia or to that at Red Level where the Rumph orchard did so well, and where the soil so much resembles that about Enterprise. Mr. Middlebrooks has gone in to demonstrate the possibilities of peach growing at Enterprise. He wishes to put the industry of peach growing on a firm footing there, to create an interest in it that the section has not known before. With this purpose in view he has planted fifty acres in peaches. The land he has planted is almost within the city limits of Enterprise. The principal varieties that Mr. Middlebrooks has set out on his lands are the Arp Beauty and the Elberta. His extensive experiment is being watched with deep interest by the community.



A STRAWBERRY FIELD IN CONECTUH COUNTRY



Truck Gardening Success Around Mobile

Climate and Soil Favor the Industry

ACCORDING to the calendar it was November, late in November, the day before Thanksgiving.

A skirt of woods back from the bay and in the distance, all bedecked with buff, red and yellow glory confirmed the calendar.

The word of the calendar needed confirmation along the old Shell Road. It might have been April, May or August but not November. The sunlight danced upon countless waves, the smell of the salt sea was in the balmy breeze that blew up from the Gulf, the road was lined with myrtles, magnolias and evergreens. It was spring along the Bay Shore road, spring with gentle breezes and soft luxuriant sunshine.

Over in his field a few feet from the road, a gardener in his shirt sleeves was industriously digging his Irish potatoes. He was turning the rounded potatoes, with projecting eyes, from the ground in great batches with a hoe. An assistant in a battered derby hat and smoking a short stemmed pipe was running a wheel barrow up and down in the rows, now filled with potatoes and now empty.

And this in the latter part of November. I was told that it was his second crop the man was gathering, a former crop having been made and gathered on this same piece of land earlier in the year.

As we drove out of the city I recalled that we had passed three car loads of cabbages, green and succulent. The cabbage had been piled in immense crated cars through which their verdant and inviting beauty could be seen. They were for the Northern markets for the Christmas season. I was told too, that it was the second crop of cabbage for Mobile for the year. The first crop had been gathered in the late spring and early summer.

At the end of the drive we lunched at Frederic's road house. Succulent spring vegetables were on the bill of fare and Frederic, proud of his ability as a gardner, exhibited the fine potatoes, cabbage and other things that he had grown in the fall, upon the same land upon which he raised and gathered vegetables in the early months of the year. Tomatoes and turnips grow on the same land twice in the same year.

THE CLIMATE'S ADVANTAGES.

That drive showed why Mobile County is one of the best truck gardening counties in the United States, one of the very best. It emphasized the fact that two crops of vegetables could be grown in Mobile County. It explained why truck farming in Mobile County had gone forward with strides and bounds. It showed why the railroads were fostering the industry in every possible way and spending great sums in building it up and inducing other people to enter into it. The afternoon was explanation of why the gulf coast of Alabama is now the garden of the State.

It is the climate.

The soil is good, very good. But there is much better soil even for raising vegetables in some other portions of Alabama. Still this soil is peculiarly adapted to that purpose.

S. H. Comstock, a truck gardener and a produce merchant put it this way: "There is something about the soil around Mobile which just seems to suit vegetables."

Still there is as good soil and perhaps better soil in other portions of the State, but the other portions of the State may not possibly raise two crops of vegetables in one year. The climate makes this possible around Mobile. The truck farmer here is enthusiastic about the climate. It is a many-sided climate full of goods points.

"You see," you are told, "the climate here is even and well tempered. It is horizontal, very near the same throughout the year. There are no sharp contrasts in it. The vegetables are not scorched in the summer as they are further north in the State. The sun never gets hot enough for that. The heat is tempered by the sea breezes and even in hot, dry weather the vegetables preserve their greenness and virility. The winters are short and inconsequential. We have no real cold weather."

It is the climate which differentiates Mobile County and gives it pre-eminence in truck farming. Baldwin County, of course, has a similar climate, but truck farming is not so well developed there as in Mobile County. But it is making phenomenal strides in Baldwin County. Hundreds and hundreds of people are coming into Baldwin County each year to engage in vegetable raising.

SOUTHERN MEN PIONEERS.

Southern men were the pioneers in truck farming about Mobile. They first discovered its pregnant possibilities and they were first to engage extensively in the industry. They outnumber now by far the Northern men who have come to the coast to engage in promising industry.

Why vegetable raising on a large scale has only been a thing of recent years in this section is hard to understand. In antebellum days the gardens about the picturesque old southern homes were most fruitful and productive. And the small farmer who raised a few vegetables for the Mobile market found it most remunerative. But it was but little thought of as an industry until recent years. The wealthy farmer or planter had his plantation up the river although he might have had his home in the city. The lands lying about the city of Mobile was lightly thought of. Only a part of them were tilled and hundreds of acres from which fortunes are being taken in the aggregate were allowed to remain in grass and woods.

But all this is changed now. The up-State man hardly realizes the proportions the industry assumes until he is brought face to face with some of the figures that pertain to it.

Take for instance the figures of the Mobile and Ohio, which relate to the movement of vegetables. This road alone, during the past season, hauled 1,242 car loads of farm products. These are impressive figures. If the figures of the business done by the other roads leading out of Mobile were at hand, as they are not, perhaps a showing equally as good might be made by other lines from Mobile.

There are other figures that send home the big importance of truck farming in and around Mobile. There is for instance, the conservative estimate placed upon the value of the vegetable crops about Mobile. At the minimum cost it is figured that this crop is worth \$500,000.

The principal part of this amount is made up of the value of the cabbage, potatoes and beans. Other vegetables are raised and both sold in Mobile, and shipped, but the principal shipments are in these three vegetables.

VEGETABLE SHIPPING SEASON.

The main shipping season is between the first part of April and the latter part of June. The vegetables sent out from Mobile go to St. Louis, Chicago, Burlington, Minneapolis and Columbus, Paducah, Detroit, Sioux Falls and Des Moines. Some cabbage are shipped out of Mobile as late as December.

In some instances the Mobile County produce raisers sell direct to the merchants in these cities or they dispose of their produce through commission men in Mobile and other cities.

Mobile is itself a large consumer of vegetables. It is fortunately situated. Fresh and inviting vegetables can be bought cheaper, in greater quantities and in more months of the year there than perhaps in any other Southern State.

The railroad officials are doing everything in their power to encourage and build up the industry in Mobile and over South Alabama counties. The unprecedented increase in the amount of shipments to the north has meant much for the railroads and with their customary foresight the officials are laying the foundation for still larger business.

Now, a word or two as to their increase in truck farming in the country around Mobile. The figures from the books of the railroads show that the vegetable shipments during the season of 1904 was twice as large as the shipments during the preceding year.

The railroads are, in accordance with their fostering policy, sending out advertising matter, distributing information among the truck raisers who may be new to the business and endeavoring to secure immigrants to engage in the industry.

BRINGING IN COLONISTS.

In the past few months several hundred colonists have been brought to the southern part of the state to engage in vegetable and fruit growing. The most of these colonists have been carried across the bay to Baldwin County where land can be

had more cheaply than in Mobile County and where there is not so much competition and more room for development. A new line is now in the process of grading from Bay Minette through Baldwin County along the east side of the bay. The possibilities of vegetable raising had much to do in inducing the promoters and builders of the road to undertake this development. The soil in Baldwin county is similar to that of Mobile County and it gives great promise to the trucking industry.

In the meanwhile Mobile does not have to look to the future. The industry has arrived, so far as she is concerned. The Louisville and Nashville, The Mobile and Ohio, the Southern and the Mobile, Jackson and Kansas City railroads send out each year increasing numbers of cars filled with vegetables for northern and western markets.

"The Mobile County vegetables," said J. S. Comstock of the Comstock Produce Company, "bring the highest market prices wherever they are offered for sale."

"You see our vegetables are among the very first to be put upon the northern market. This gives the farmers around here an additional advantage over their competitors.

"The industry is prospering and thriving in a way that could hardly be credited. All the farmers who are in the business are planting full crops. All a truck farmer has to do here is to put in a fair amount of the labor in an intelligent manner and the soil and the climate will do the rest."

Most of the truck farms in Mobile County are within a radius of twenty miles of the city to the west, north and south of the city. The vegetable field is constantly widening. Many new farms have been opened within twenty-five or thirty miles of the city. In this section two crops of turnips, two crops of tomatoes and frequently two crops of cabbage and potatoes can be raised. The land is well fertilized each season, but it stands fertilizer well. It holds the fertilizer and gets the best results from it.

The growing of fruit is a more recent industry in this section. But like truck farming it is most promising. Strawberries, however, have been raised for northern and western markets for several years.

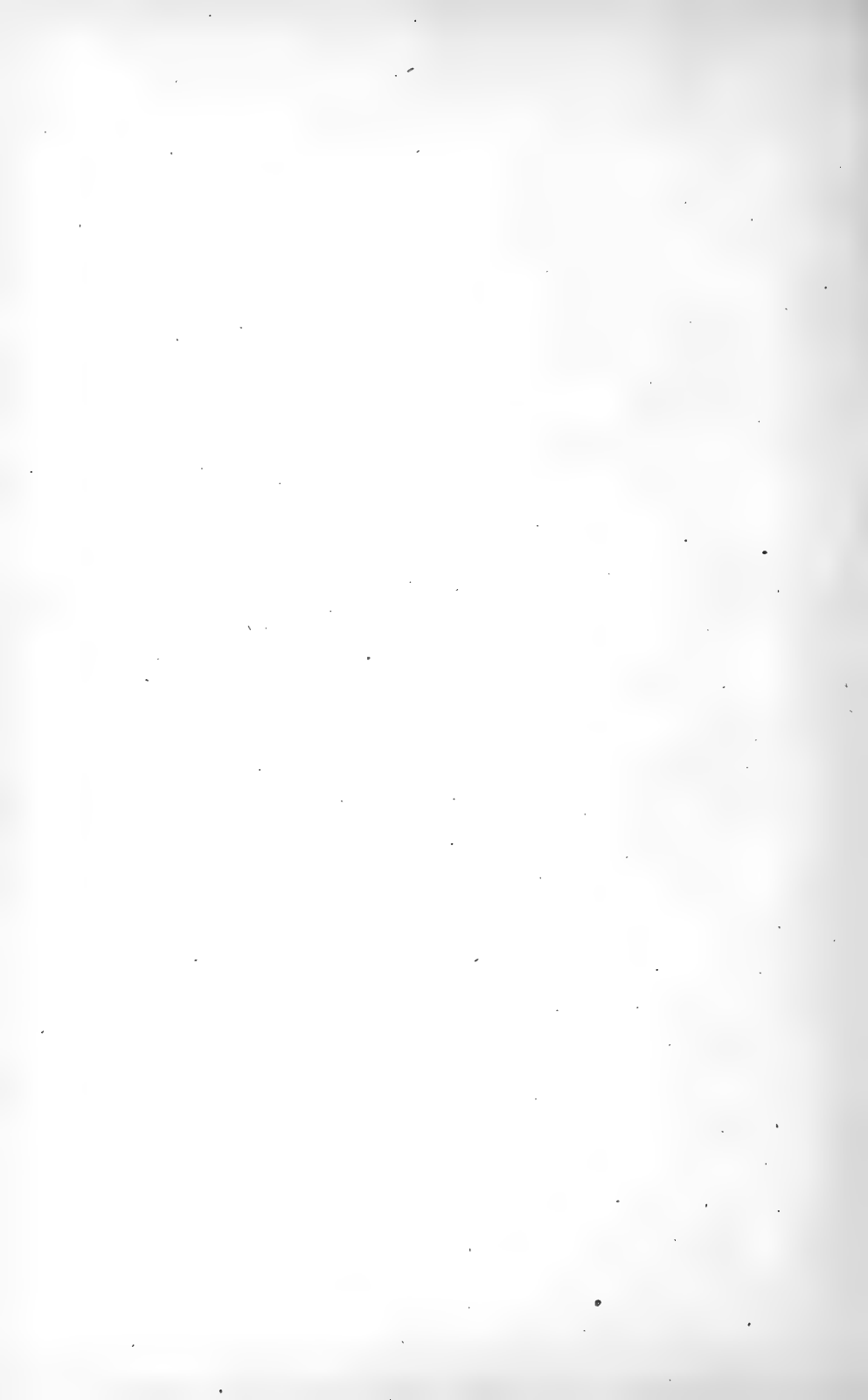
It is a fine strawberry country about here and the berries are put on the market earlier than any others except those shipped from central and south Florida.

Peach growing has in the past few years attracted great attention. Thousands of acres of peach orchards have been put out and thousands of acres more will be put out in the near future. These peaches are said to be the best that are offered for sale and they too bring the top of the market, wherever they are sent. Many of the recent importations of colonists will engage in the peach raising industry.

This section is, in short, the garden of the State.



RICE FIELD IN BALDWIN COUNTY



Conecuh Land is Devoted to Trucking

Evergreen Farmers are Planting Strawberries, Peaches and Vegetables and are Decreasing Acreage of Fleecy Staple

Evergreen is upon the threshold of a new industry—an industry whose prospect is pleasing and whose future is promising. This is the growing of peaches, first, the production of strawberries second, and the raising of vegetables for Northern markets third.

It will be a surprise to the remainder of the State that vegetables have been grown for shipment out of Evergreen for the past twelve years. This business, however, assumed no great importance until recently, but what is now only an indication of what the future promises.

The great Castleberry fields in the past year attracted the attention of the State to the possibilities of strawberry growing in the section about Evergreen. The strawberry fields of Conecuh County are to-day steadily encroaching upon the old cotton plantation. The cotton plant is giving way to the advance of the strawberry vine and the vegetable plant.

But peach growing is the latest industrial development here. It was inaugurated in fact in 1899, when Col. E. M. Rumph, the famous Georgia peach grower, planted his big orchard of "Slappy" peaches about here. The orchards have expanded around Evergreen and during the coming summer there will be twice as many peach trees in this section than there ever were before.

Outside of cotton the Georgia peach and the Georgia watermelon are the best advertised agricultural products of the South. The Atlanta papers admit that the Georgia peach, the Elberta peach is the most toothsome fruit in the world.

Probably it is, but there is something wrong with the market when the Elberta peach from the environs of Fort Valley

sell for only seventy-five cents a crate while the Slappey peaches from the hills of Evergreen brought \$1.50 a crate in the same market. Without disparagement to the Elberta, a sweet and delightful peach, the Slappey peach from the Alabama hills was preferred by the commissionmen and the customers in the open market.

What particular merit is there in the Georgia soil anyhow that makes it the only soil which can grow perfect peaches, as Georgia people would have the outside world believe? This claim was knocked into smithereens when the Alabama "Slappey" and the Georgia Elberta met in the open market last May and June. And the Elberta peach grows just as beautiful and just as toothsome upon the Alabama hills as it ever did upon the hills of Georgia.

And moreover the Alabama peach beats the Georgia peach to the Northern market by a week or ten days, a great advantage. The first carload of peaches that went into Chicago last May from all over the United States, was grown, packed and shipped from the big Stores orchard at Dolive, some distance south of Evergreen. True they were Elberta peaches, but they were equal in every particular to the Georgia Elberta and they reached the buyers two weeks earlier than did the delicate fruit from the State across the Chattahoochee.

Peach growing is as yet in its infancy in South Alabama, but unless clear headed business men who have put their money in the industry are wrong, it will, in the next four or five years, be grappling with the Georgia industry for supremacy. But the market is wide and there are enough buyers to go round.

The men who are planting peach trees around here by the thousands boldly proclaim that the Alabama peach orchards are superior and more promising of the future than the Georgia orchards. First of all it is asserted that the soil about Evergreen is equal to or better than that of southwest or middle Georgia where peach growing has assumed wide proportions. It is a sandy soil with a clay subsoil. The Evergreen peach growers do not hesitate to say they think their soil is better than the Georgia land.

CLIMATIC ADVANTAGES.

Then comes the question of climate. Evergreen is not so many miles moved from the warm waters of Mobile Bay. It is high above the waters of the bay on a ridge, but the balmy breezes from the bay give an equable climate in the summer months and minimize the dangers of frost and freezes almost to nothing. They have no disastrous frosts here.

"I have been here five years," said Edward A. Beaven, who is a large peach grower, "and we have had a peach crop every year that I have been here."

One fact is reiterated, namely that peaches from Evergreen have been put upon the market as much as two weeks ahead of the Georgia peach of the same brand.

The Rumph orchard was planted a few miles out of Evergreen in 1889 by Colonel E. M. Rumph, of Marshalville, Ga., who has been called the Georgia "Peach King." The work was done under the auspices of the Louisville and Nashville Railroad, a road which has done much to foster and encourage fruit and vegetable growing in South Alabama. Colonel Rumph after two or three years in Evergreen returned to Georgia. The orchard is now owned by a Chicago corporation. It has not received the care and attention that it needed in the past year or two, but notwithstanding that it continues to give forth good returns and is a valuable piece of property.

The orchard is made up of trees that bear the "Slappey" peach." Colonel Rumph brought the Slappey peach to the Evergreen section and it has monopolized the peach orchards hereabouts. It is considered the aristocrat of peaches and no other peaches are considered worth while.

"The Slappey peach" is a yellow, free stone peach of generous proportions. It is hardy and it ripens for market earlier than any of the other varieties which are shipped northward. It is a good shipper. Wherever it has been put in the market the retailers and the commission merchants have wired back the order "more;" the "Slappey" peach growers have been assured by the commission men that they can sell all the "Slappey peaches" they can raise at a good figure.

Asked to define the excellence of the Slappey variety a peach grower said: "The difference at one time was a dollar a crate between it and the Elberta peach. For awhile during

the season, the Elberta was selling for 75 cents a crate and the Sloppy peach was bringing \$1.75.

Here about Evergreen it takes a fruit tree only two or three years to bear. The tree is usually good for one crate at the end of three years and at the end of five years with anything like fair conditions the trees will produce three crates.

While the Rumph orchard was the pioneer, the first to be planted, it is not the largest orchard in this section. While the Rumph orchard has 15,000 trees, there is a larger orchard at Red Level on the L. and N. branch road between Georgiana and Andalusia. These orchards are planted on Owassa Ridge, which is said to be excellent peach soil, a location which not only gives the trees a firm soil, but it places them sufficiently high to give them the altitude that is said to be necessary for the growing of peaches.

GREAT ORCHARD.

Messrs. William Cunningham and Edward A. Beaven are going extensively into the growing of peaches. They propose to have an orchard of 50,000 trees, of which 15,000 trees have been planted and are a year old. The other 35,000 trees are being planted this fall. These gentlemen are showing their confidence in peach growing in South Alabama by investing \$25,000 in that industry. Their orchard is located four and a half miles north of Evergreen. They have sent over to Arkansas, and secured the service of a fruit expert who is a graduate of a school of technology and secured his practical training under McNair, the famous peach man of the Ozarks.

Yates, Brown and Shepard have an orchard of 15,000 or 20,000 trees near Brewton. In addition there are other orchards of smaller size around about Evergreen, the largest of which is owned by Dr. Marcellus McCreary.

Peach growing is in its infancy here but the industry is a healthy infant. It is developing and expanding at a remarkable rate, at a rate which bids fair to enable the Alabama peach grower to throw down the gauntlet to his Georgia rival.

Strawberries brought big money in Evergreen last year, and unless something is wrong with the weather in the spring they will bring in more money next year. A hurried look at the figures of the business done by the big Castleberry Com-

pany last year will convey some idea of the gold mine that has been uncovered by the South Alabama strawberry growers. That company last season sold ninety-nine cars of strawberries for \$96,000.

"I saw a car load of strawberries at Castleberry sell for \$1,237.50," said Superintendent J. I. McKinney, "and I saw another man offered \$1,225 for a car load. That's the highest price paid for any car load of agricultural products that were shipped out of the State last year. You might ship gold quartz out of Alabama and get more for a car load of it than for a car load of Escambia County strawberries, but that's about the only thing that would bring the money."

The Castleberry plantation is of course the biggest single item in the strawberry industry in Alabama; but Evergreen has been making some history in raising and shipping strawberries. Out of Evergreen, a man in the business told me there were shipped \$50,000 worth of strawberries. The Evergreen strawberry growers shipped between 25,000 and 35,000 cases last year, each case containing twenty-four quarts. That's a pretty good showing for an incidental industry and one of which the Evergreen community has not yet begun to boast.

But the possibilities of strawberry raising are recognized by the Conecuh County people. They are not ignorant of nor indifferent to its value. The acreage of strawberries is being rapidly increased. The plants are being put in the ground at every convenient place and next year there will be a heavy increase in the strawberry shipments from Evergreen.

The other parts of Alabama hardly know that truck farming is a distinct, and profitable business in Conecuh County, and yet they have been shipping vegetables out of Evergreen for the past twelve years. The growth of this business has been slow, but steady. It has not gone forward in leaps and bounds like the business of growing strawberries and peaches.

Tomatoes are great products of this county. No less than fifteen full car loads of tomatoes were shipped out of Evergreen during the past season. Many other tomatoes went forward to northern consumers by express in express cars. The fine climate, the sandy soil, with its clay subsoil is said to be ideal for the raising of vegetables. In addition to the tomatoes, large quantities of cabbages, beans, and radishes went forward last spring and summer in refrigerator cars.

So well have they done in the raising and selling of vegetables that Ethridge Bros., of this place are going to increase their truck farm near here from twelve to twenty-five acres next spring.

In reply to a question a member of that firm told me, "We estimate that \$250 an acre can be easily cleared in vegetables around Evergreen. Vegetables pay from three to five times as much as the production of cotton."

In like manner other truck farmers are largely increasing their vegetable acreage. It is deeply significant that within five miles of Evergreen the growing of cotton is steadily decreasing and the growing of vegetables is steadily increasing.

Model Farm One of the Sights of Baldwin.

What Can be Done With Soil of South Alabama.

FOLEY'S Model Farm, three miles east of Magnolia Springs, is a perennial agricultural fair for Baldwin County.

It is a demonstration of two things, first, the possibilities of the climate and soil of Baldwin, and, second, the uses and advantages of methods which have been brought into the county by the incoming immigrants from the North. It is designed to show the new immigrant what the old immigrant could do when brains and work are mixed in the effort to get the best returns from a good soil and a perfect climate. The circulars that are sent out from the offices of the various Baldwin County land companies in Chicago picture in glowing words the beauty and healthfulness of the climate, the fertility of the soil and the richness of the returns from the truck and vegetable farms. The Model Farm is proof to back the claims of the circulars.

The prospective land buyer is brought to the Foley farm and told, "Gaze on this picture. There is sugar cane over there, twenty-five acres of it. We are told that this cane is as fine as any grown in Louisiana. Over here you see five acres of cassava, the rich, new forage plant, a food for man and beast. We raise from four to ten tons of this forage on an acre. It is not grown successfully in any other part of Alabama. You can see for yourself how luxuriant and promising the peach orchards are here. In this land last year Irish potatoes were grown and from the crop of Irish potatoes on two acres we realized \$211.44. After the potatoes were grown two other crops were raised on the same land. Take a look over the stock we are raising. Now look over the cow pea hay and get some idea of the possibilities of this section."

BEAUTIFUL PIECE OF SCENERY.

The farm is a beautiful piece of scenery, even in December. There is not so much difference down here in the appearance of things in May and in December. The sugar cane crop is being harvested and this to the Southern man indicates more than anything else that the year on the farm is drawing to a close. There is a winter garden in front of the farm house all rich and green. It is confirmation of the statement made by the immigrants that they have vegetables all the year around. The garden is flourishing now with cabbages, turnips and multiplying onions. The house, a modern two-story cottage, sits in a grove of trees. Behind the house are the big barns, the extensive yards which accommodate eight fine mules and two horses that do the work on the farm. A herd of cattle is there feeding eagerly on a pile of casava roots. Dr. Foley has not yet introduced fine blooded cattle in Baldwin County, although it is announced that it is his purpose to do so.

The cattle on the farm now are of the hardy piney woods breed which has been identified with Baldwin County for years and years. The immense barn is now packed and jammed with tons of alfalfa and cow pea hay, although the crop has been gathered for several months. What has been used in feeding the stock has hardly made an impression upon the big store of forage.

The farm has produced more forage than the stock on it can possibly have use for. The surplus store will be used to help out the immigrants who come to Baldwin County to make a fresh start with nothing ahead.

Behind the spacious barnyard are the naturally rich and the heavily fertilized acres which produced the crops of potatoes, Sweet and Irish, and the string beans and velvet beans. The land has been stripped of the remains of these crops and turned over for an early start in a few weeks on the crop for next year.

SUGARCANE FIELD.

The sugarcane field of twenty-one acres is an imposing sight. The field contains three varieties, the purple, or red cane, the green cane and the Japanese cane. The Japanese cane was

planted as an experiment in sugar cane growing. The experiment has been fairly satisfactory, but it does not match up with its red and green rivals. A modern steam evaporating plant of syrup making machinery has just been installed.

The cane yield is rich and fine. They have some negroes gathering the crop who were brought to Alabama from the sugarcane plantations of Louisiana, and who say that this upland cane is as good as the cane fields of Louisiana show.

A private saw mill has been established and is operated by Dr. Foley. The saw mill is private in that there is no market for its output except in the colony, which its owner has established. The product of the mill is used on the model farm or by the immigrants in the erection of their new, but modest houses.

The predominant feature about the model farm, the thing that most impresses the observant visitor, is the big cassava field. On first glance it looks an old field filled with sassafras bushes from three to six feet high. A closer look shows that the vegetation could not be sassafras bushes because the ground has evidently been cultivated for some purpose, and the second second look shows too that the bushes have been carefully planted in check rows equally distant, even as a peach orchard would be planted.

The cassava bushes are still wearing about half of the leaves of their summer vegetation although the leaves which remain show in their red and yellow covering the evidence of some cold wind, and the trace of nipping frost that has fallen once in Baldwin County.

RICHNESS IN THE ROOTS.

In the cassava field that which is above ground is of little value. In fact except those bushes whose stems are cut up and banked like sugar cane for seed for the next crop, all that part of the cassava field which is above the ground is worth nothing to the grower. The richness of the cassava bush is its roots beneath the ground.

The cassava plant in its way is both like the corn and the sugarcane plant and it is cultivated in much the same way these plants are raised. Cassava is planted in check rows from four to six feet apart. The plant when it is allowed to mature

in a tropical climate or in a climate very near the tropical, bears a pod and a berry which contains its seed for the next year. But in Baldwin County the seed is not depended upon for the next year's crop. It is feared that frost will come before the seed is fully matured.

HARVESTING THE CASSAVA.

The cassava roots are kept in the ground just as they grew until they are needed. The bushes and the roots of the plants are left undisturbed until the succulent roots are needed for stock food. When feed for the horses, the mules, and the cows is needed, the hired man goes out to the cassava field and with a sharp sudden pull jerks the plant from the ground. This is done with little effort.

The amount of roots on a plant is astonishing. It looks like when a plant is jerked from the ground that a whole bushel of roots come with it. The yield of one plant would indicate that the whole field underground was honeycombed with roots. The roots have a thin covering of brown. The appearance of the interior of the root is very like that of a turnip. It is as soft and fully as juicy when the roots are first taken from the ground.

In this state the roots are a great delicacy to stock of all sorts.

If the cassava roots are permitted to remain in the air for several weeks they grow hard and the stock finds them unpalatable. For this reason the roots are pulled from the ground as they are needed. They are run through a specially designed machine which cuts them into small pieces three or four inches in length. These pieces are gathered up and dumped into the feed trough where they are eaten eagerly by horse, mule, cow or sheep.

Cassava has a much higher percentage of strength giving qualities than corn. It is said by its admirers to be the best stock food that can be grown. Conservative men say that its increasing growth in Florida is solving the forage problem in that State, a State where corn and other grain does not grow so well as farther north. It has enthusiastic admirers on the Florida farms.

A BRAZILIAN PRODUCT.

The plant is a Brazilian product, introduced several years ago in Florida to take the place of corn that could not be grown there with any great profit. Its growth has not yet assumed any great proportions in Baldwin County. In fact it has just been introduced by Dr. Foley within the past two years. It is a delicate plant, one that requires the same sort of climate and the same sort of weather as does the tomato plant.

Cassava is widely used for human food, too. Much of the commercial tapioca is made of cassava. Cassava grown in Baldwin County is made into pies all the year around. On its first eating a cassava pie is mistaken for a coconut custard.

The United States Department of Agriculture is encouraging the making of starch from cassava. Experiments by the department have shown that cassava yields 25 per cent. of its own weight in starch. The same bulletin from the Department of Agriculture declares that "doubtless pork can be produced on less cost from cassava than from any other source." The bulletin declares, however, that it is the experience of the experiment stations that cassava cannot be successfully grown in a climate that has not at least eight months absolutely free from frost.

Dr. Foley is of the opinion that the southern portion of Baldwin County is as fine a field for the growing of cassava as any part of Florida. He expects to see the day when there will be cassava mills for the manufacture of starch, glucose and other products of the plant as there are today in Florida.

While the five acre field of cassava is the distinct feature of the Foley Model Farm Dr. Foley and his manager John C. Lehr are almost equally proud of land upon which they raised during the present year three different crops. They point with especial pride to two acres from which they gathered from the first crop enough potatoes to sell for 211.44. The land was then planted in cow peas for the production of cow pea hay. It is said to have produced nearly two tons of this hay to the acre. One of the two acres was then planted again in Irish potatoes and the other was planted in sweet potatoes. A generous crop of each was grown. Just how much the last crop will amount to cannot be estimated as both the Irish and the sweet potatoes are still in the ground and are being dug as they are needed for sale or use.

Growth of the Wiregrass is an Alabama Wonder.

THE man of less than middle age can recall, if he remembers easily, when the counties comprising the rich Wiregrass were almost contemptuously called the "cow counties." He hears in this year 1905, these same counties, this same Wiregrass, termed by its admirers the "richest agricultural section of Alabama."

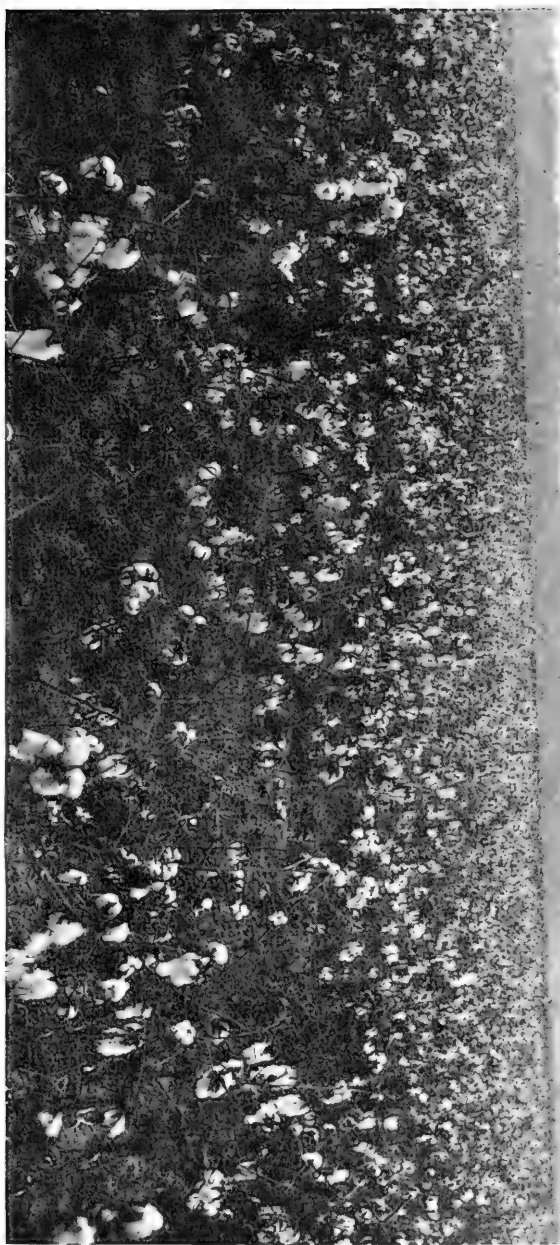
In a bare quarter of a century these counties have risen in the public mind from the low place of the "cow counties" to the high elevation of one of the rich agricultural sections of the State. It was not a sharp, sudden growth. There is no rush of settlers, no hurrying in of farmers, no Oklahoma booming, nothing of that sort about the transformation.

Nor did the railroads make the Wiregrass. Its development was pronounced, its future was assured when the railroads came in. The fulfillment of the Wiregrass's promise was already in sight, when the railroads pushed in, to share the prosperity. It was a long neglected spot, that section of Alabama lying in the southeast corner of the State between the irregular triangle formed by the junction of the Florida and Georgia lines. It was innocent of railroads until twenty years ago, when the Central threw its Eufaula and Clayton branch down to Ozark and when the Alabama Midland was built out from Montgomery to the Georgia line. Then in late years the Louisville and Nashville pierced the Wiregrass through and through with its Georgiana and Graceville.

RAILROADS PUSH IN.

The Central fully appreciating the richness of the field, continued to move forward again with its lines out of Ozark and out of Troy. So that now the Wiregrass is sufficiently intercepted and intersected with transportation facilities to assure maintenance of its prosperity assured for the future.

A COTTON FIELD IN A WIREGRASS COUNTY



A railroad is not a philanthropic institution. It is not given to making experiments, or to developing wildernesses. The only reason a railroad is ever run through a wilderness is to connect two rich sections which may be far or near each other. When branch lines are thrown out, there must be something on which both the branch and the system are to feed.

The agricultural development of the Wiregrass had assumed notable proportions before the surveyors and the track layers went to work. Turpentine men and lumber men were, as they have ever been in the development of South Alabama and South Georgia, the advance guard of progress. The turpentine men were blazing their way through the interminable acres with their short, sharp axes and gathering their harvests of white encrusted pearls from the trees. The lumbermen were leveling the pine forests and shipping out over log roads cargo after cargo of white and shining pine. But these were only industrial caravansaries, which stopped for a night and a day and passed on.

Progress never came to a section on a log road. Nor was it ever brought in cooped up in a turpentine still.

THE SETTLER'S WAGON.

The white canvas wagon cover of the incoming settler is the flag of hope for the County and for the State. Such a wagon with its canvass covering, forming a protection for a half dozen tow-headed children, a couple of 'possum dogs tied with a rope to the rear axle, an assortment of pots and kettles decorating the hind end of the wagon, driven by a man with a bushy beard and cow-hide boots would, in the minds of many people cut but a sorry figure on Dexter Avenue. Yet a replica of this outfit so imperfectly described might well stand for an emblem of Alabama's growth. More than any other single thing, unless it is the locomotive, it has hauled brain and brawn, progress and prosperity into Alabama, and in doing so it surmounted more obstacles than the locomotive, and the locomotive only came along the way the canvas wagon has prepared.

In such a way came the development of the Wiregrass. In such a way was brought the foundation of its prosperity.

For that which made the present pride of the Wiregrass were the farmers who came into Dale, Geneva, Henry, Coffee, Houston, Covington and Crenshaw Counties. Pike might properly be considered a part of the Wiregrass, but its agricultural development, its complete settlement was of an older date. Pike, like Barbour and Henry, furnished many of the settlers. Others came from Middle Alabama, from North Alabama, from Georgia, Carolina, Tennessee and as far north as Kentucky.

WINNING THE COUNTRY.

They were poor men—these settlers. They hadn't much of anything except children, dogs and hope. All they had came in their wagons.

The riches of the Wiregrass were grown within its own limits. Its prosperity is its own product. Its development came from within and from itself. Practically nothing was brought to it. The settlers came in, unhitched their teams, staked out their farms and knocked together some sort of shack that they could occupy for a time. The inviting, comfortable homes, the fertile fields, the bank account, the seven or eight bales patiently waiting for cotton to rise, are the surplus which thrift and energy has wrested from the soil of the Wiregrass.

This thought was impressed upon me by C. C. Johnson, a leading merchant of Geneva.

"All that our farmers have," he said, "was raised and produced right here. You see they had nothing when they came here. Some of them barely had a wagon to move in. Most of them homesteaded their lands. I am speaking particularly of those who came in twenty or twenty-five years ago. Once in here they went to work and now bank accounts are the rule rather than the exception. You would be surprised to see some of the many comfortable homes about Geneva and I hardly know of a farmer who is not holding some cotton for a better price. And all of this belongs to men who came in here with practically nothing."

INCREASE OF LAND VALUES.

The increase of land values, even in the past fifteen years has been nothing short of phenomenal in and around Geneva. Much of this land has increased a thousand per cent. As indications of the ways in which land values are raising in Geneva and adjoining counties the interested visitor comes across various impressive facts. The Geneva Reaper of last week, for instance, carried a local story of the return of Taylor Hutto, who left here over a quarter of a century ago, to move to Talladega. At the time Mr. Hutto moved away the family owned eighty acres of wooded land a few miles from town. When other holdings were sold this land was not considered of enough importance to warrant an effort to sell it. It was thought that probably the land would bring at that time about 75 cents an acre.

Tales of the growth of Southeast Alabama having reached Mr. Hutto, he thought that the eighty acres of land he left in the woods might be worth the trouble of a trip to Geneva. He found on coming here last week that the land was easily worth \$10 an acre. And noting not only the substantial growth of Geneva, but the rapid settlements of the country districts which he had left almost a wilderness Mr. Hutto decided that the land could be well let alone so that it might continue to increase in value.

Small Farms and Their Owners Wealth Producers.

WHY should new and thriving towns dot the face of the earth in the Wiregrass, why should the smoke that ascends from the contented country homes form a chain of signals of satisfaction for miles on miles, why should the country be so markedly contented, the towns so emphatically new and so emphatically prosperous, when the same contentment and the same pronounced prosperity is not so manifest in the rural regions of the Black Belt?

The prairie lands are undeniably richer than the farm lands of the pine woods. The fertilizer needed in the Wiregrass is not needed in the prairie? What is this difference that gives the prize of prosperity to the Wiregrass?

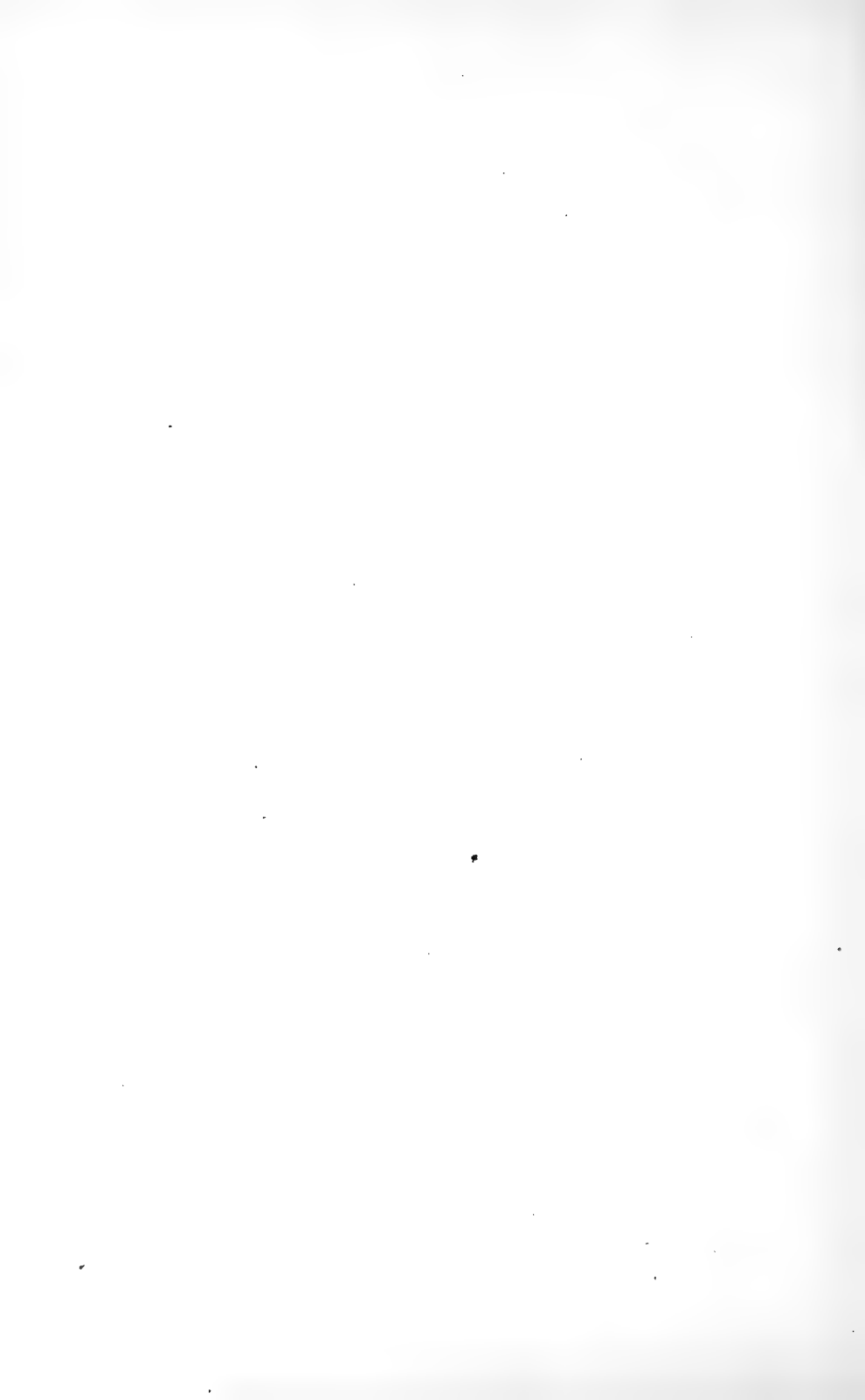
The answer is simple. The small farm is the better thing for the country than the big plantation. The small farm is an infinitely better producer than the negro tenant. The small farmer is a wealth producer. The negro tenant is a wealth destroyer anywhere else on earth except on a Black Belt plantation and even then he barely gives to the community more than he takes from it and this little his landlord and advancer gets. He is not a wealth destroyer on the prairie lands because the prairie acres are practically indestructible. The negro tenant does as much as he can to the Black Belt acres, but they are proof against hard usage. On other soil the negro tenant can do his worst. As a soil impoverisher the average negro, farming on shares, is in a class by himself.

ORIGIN OF WIREGRASS RICHES.

It is the industrious white farmer cultivating his 60 acres, his 80 acres or his 160-acre farm who forges the prosperity of the Wiregrass. He is the man who came in here in the early days and homesteaded his land or who bought it at an insignificant figure when land was selling in the Wiregrass at a dollar and two dollars an acre. This man's farm, closely watched, closely tilled, with its smoke house, its plethoric corn



CORN, SUGAR CANE AND COTTON IN ONE FIELD.



crib, its stock filled stable yard is the basis upon which the prosperity of this section has been erected. He was the predecessor of the railroads and without knowing it or intending it, he made the railroad possible.

He it was who revived Geneva and gave it a healthy expanding life. It was he who built Geneva's rival, Hartford, in the midst of a pine forest and then transformed its country into a farming paradise. He and the lumbermen built the town of Slocumb overnight, a town that jumped into being almost in an instant with 700 people, and he created the new and prosperous towns of Black and Samson as easily as he took the one store of Coffee Springs and transformed it into a commercial center with rich hopes of the future.

It has been before noted that railroads do not scatter farms through a wilderness. The farms must first be there before the railroads can be persuaded to come.

BUILDING OF TOWNS.

But this one thing the railroads will do when the farmers have prepared a way and given a reason for their coming. The railroads scatter towns throughout their territory. They furnish a center for the congestion of the commercial endeavors of the farming sections. They provide a place for the transaction of business, for the selling of farm produce and the buying of dry goods, sugar.

Geneva County, for so many years without a railroad, is now split by two. The Georgiana and Graceville branch of the Louisville and Nashville enters Geneva County near its northwestern corner and after passing through the county goes into Florida. It crosses the line of the Central of Georgia at the lively town of Samson. Samson is a lusty youngster just two years old, but with a population of 400. Within eight miles of Geneva is the town of Black, one year old, and with a population of one hundred. High Note is not far away. It is only a year old, and it, too, has a population of 100.

Through the northern portion of the county runs the Central of Georgia, which is the extension of that company's line from Columbia to Florida. The Central enters Geneva County near its northeastern corner and after intersecting the northern portion dips down and leaves the county near the southwestern corner.

The Central has a wealth of small towns along its line, all grown up in the past five years. The largest town along its line in Geneva County is Hartford with an estimated population of 1,500. Just east of Hartford is Slocumb, a little over three years old, and with a population of 700 souls. West of Hartford is Coffee Springs, five years old as a town and having within its borders 500 people. Other promising stations have sprung up at Malvern and Bellwood, at which latter place a hardwood plant has been established and is now in operation.

It is always to be borne in mind that these places have been born and have attained their growth within the last decade except Geneva. But even Geneva has taken on new life with the coming of the small and industrious farmer and his friend and ally, the railroad. The climate about Geneva is superb. The county's climate is perhaps not exceeded anywhere in the United States. Time was when the opinion was held further north that there was nothing but poor and sandy lands in Geneva County. Sandy the lands are, but the sand is mixed with clay. But poverty stricken the lands are not. Were they poor lands they could not be made to produce the fine crops that they have grown. Were they so poor the industrious farmer could not have established himself and made the money he has. Were they so poor they certainly could not have been brought to their present high state of cultivation as they have been in many instances.

Take, for instance, the farm of Mennice Menefee, a farmer living near the town of Geneva. Mr. Menefee had a brag patch of cotton on which he tried to see just what could be done by the judicious and intelligent use of fertilizer. From this acre he gathered 1,400 pounds of lint cotton or very nearly three bales of cotton. The average yield an acre for his entire cotton crop was decidedly good, for on twenty-eight acres he gathered thirty-four bales averaging in weight 559 pounds. Of course he fertilized, but he had to mix the fertilizer in making his crop with discretion and industry. He grew other things equally as well; for instance, 700 bushels of corn off thirty-two acres, and twelve barrels of cane syrup from three acres, with 20,000 stalks left over, part of which is to be used for seed, the coming farm year. Then he raised hogs and produced nearly everything that he needed for his family's use.

Now Mr. Menefee is pointed out as a sample of the small farmer and his value to his section. A dozen or more similar instances of farmers starting with nothing and prospering could be cited. Living near Geneva is D. W. Johnson who started on nothing, and who has now 700 acres free from debt, a nice bank account; Jack Jones with several hundred acres and money in the bank; Martin Sellers with 580 acres and money ahead. But the list could be prolonged indefinitely, in citing as instances men who come to the county with practically nothing and who have attained a state of financial satisfaction and independence.

Undeniably the most remarkable growth of the county is here at Hartford. On the site of the town ten years ago there was nothing but woods. Nine years ago, the town began with a steam mill and a Methodist parsonage for a circuit rider. Today it is a beautiful and most inviting town.

The Largest Cane Field in State of Alabama.

THE largest cane field in Alabama is in Geneva County and within eight miles of the court house.

The largest syrup producer of the entire State is ex-sheriff George W. Black of this county. Mr. Black is the proprietor of the big cane field. It is on his farm at Black, a station on the Louisville and Nashville railroad, named in his honor. Here on this farm, which is a model of its kind, Mr. Black has nearly fifty acres in cane. Fifty acres to the uninitiated does not seem anything big or important, but when fifty acres are devoted to cane growing and syrup making it means much more than if that much land was in cotton.

Moreover, Mr. Black has introduced the idea of having his tenants grow cane on shares as they would cotton.

Primarily it means more in that the returns from the land will be assuredly larger. And, secondly, it means more trouble in harvesting and in marketing than if cotton had been grown.

The industry of growing cane for sugar or for syrup is yet in its infancy in Alabama. Its real progress has been made in the past two years. It is only within the past two years that modern machinery has been introduced, and it is only within the past two years that syrup has been made to sell in other markets. Heretofore the making and selling of syrup has been purely a local industry. The farmer would plant an acre or a half acre on his bottom land or in the little valley at the head of some branch. The idea was deep-rooted that sugar cane had to be planted on lowland or it would not grow at all. The erroneous idea has been completely dissipated now. It has been proven that the sweetest and the best cane is grown on uplands.

THE STEAM ROLLERS.

The old cane mill, with its rollers five feet from the ground, its lever not unlike that of the old-fashioned cotton gin, and the old mule plodding around and around all day in a never ending circle, is a familiar memory to the man whose boyhood days

was spent on the farm. It was a picturesque sight, this old cane mill, when it was at work in the short cane season, but, like the old style cotton gin it is destined to disappear from the earth. "Efficiency," "utility," the eternal cry for these things has sounded the doom of the old style mule power cane mill and its day is closing.

It did not extract a sufficient amount of juice. That was what was the matter with it. They went to putting up steam rollers for cane mills in Louisiana. These rollers were in three sets and fastened close together. Instead of the mule and his tread mill a puffing and noisy but powerful stationary engine was used.

The boiler of this stationary engine had three or four objects in life. In the first place it operated the close grinding cane rollers, then it furnished the steam to force the cane juice from its tank through a pipe into the boiling vats, the steam then filled the coils of pipe for the cooking of the syrup. This is the sort of machinery that Mr. Black has established on his sugar farm.

OLD VERSUS THE NEW.

The per cent. of juice that the old-fashioned tread mill rollers squeezed out of the cane was the subject of an interesting discussion at the recent meeting of the Interstate Cane Growers Association at Montgomery. Dr. H. W. Wiley, of the National Agricultural Department was of the opinion that the old style rollers extracted 50 per cent. in juice, of the weight of cane. W. B. Roddenberry, the famous syrup raiser of Cairo, Ga., did not concede this. He argued that when the mill started its day's work all screwed up it no doubt got out 50 per cent. of the juice, but before night invariably the screws were loosened and the mill was squeezing out only 30 per cent. in juice, of the weight of the cane.

But there is no room for argument on the advantages of the close set steam operated rollers, as long as they extract 80 per cent. and sometimes more than that.

It is the intelligent use of modern machinery, the steam rollers, the coiled steam pipes and all that which has made ex-Sheriff Black's syrup producing so successful.

POLITICS AND FARMING.

I had a talk with P. C. Black, Probate Judge of Geneva County, a son of ex-Sheriff Black, and interested with him in the production of syrup. Let it be understood that the Black family is a power in Geneva County politics. In the year he finished his term as Sheriff, George W. Black had the gratification of seeing his son elected Probate Judge of the county. The son, P. C. Black, is one of the youngest, if not the youngest, Probate Judge in the United States. He is withal, a frank, sincere and likable young fellow, highly esteemed throughout the whole county.

Judge Black told me how his father became interested in the growing of cane on a small scale, to later take it up as a money crop.

"He, of course, had heard of the marked success of W. B. Roddenberry, in syrup making at Cairo, Ga.," said Judge Black. "Before entering into it extensively he wanted to get in touch with modern methods. He therefore went over to Cairo and spent some time watching the operation of Mr. Roddenberry's modern plant with its late and useful machinery. He came back to Geneva and ordered an exact duplicate of it piece for piece and part for part. At the time the machinery was put up it was the only set in Alabama. I understand that similar machinery has been installed by E. Smith, near Fairhope.

THE MACHINERY'S ADVANTAGE.

"The advantages of this machinery are too plain to need discussion. In the first place, the steam rollers crush out 80 per cent. or more of the weight of the cane in juice. The cane stalks are often run twice through these rollers. The juice is then forced into the vats by steam. From the first vat the juice passes into the skimming vat, where the impurities rise to the surface to be taken off and thrown aside. The juice then passes into the finishing vat where it almost becomes syrup, and where some remaining but final impurities are removed. Finally it enters the last vat and becomes syrup for the market.

"The syrup is put in the tin cans piping hot and thus sealed. The cans have first been sterilized and there is no danger of the syrup either fermenting on the other hand or sugaring on

the other. As an additional precaution against fermenting and sugaring the syrup is carefully tested by a Bohme thermometer as it proceeds through the vats. Each of these vats as I have before stated, have their bottoms filled with galvanized iron steam pipes and the heat of each vat can be graduated when it is found necessary to increase or decrease the heat.

"Most of our syrup is sold in barrels, but a good deal goes out in the market in sealed cans. The sealed syrup brings a much better price than the syrup in barrels. We sold last season the sealed syrup for 50 cents a gallon. Some of the barrelled syrup sold as low as 28 cents. Our price, therefore, ranged from 28 to 50 cents a gallon."

WORK FOR A MARKET.

"How did you get a market for your syrup?" I asked Judge Black. This was thought to be an important question inasmuch as the Cane Growers at their Montgomery meeting, devoted much of their time to its discussion and all of them agreed that the successful marketing of their product was the greatest problem which confronted the cane growers.

"Well, we didn't sit still and wait for the market to come to us," replied Judge Black, "syrup from Alabama is comparatively a new sort of merchandise and it needing pushing. We found buyers mostly through correspondence. We wrote many letters in urging our goods upon the merchants and these letters were successful in bringing results in the main. Moreover, my brother and I took the road several times to open up new markets and again we were successful. The letters and the personal talks were so effective that we have sold as high as two carloads of barrelled syrup at one time."

"What sort of yield did you have from your cane fields?" was the next question.

"Satisfactory, very satisfactory," replied Judge Black. "We had something over forty-five acres in cane and we got upwards of 6,000 gallons of syrup. I should say that we averaged 360 gallons to the acre. We probably got an average price of 40 cents a gallon. So, you see, the financial returns from our syrup crop were much better than cotton and altogether satisfying."

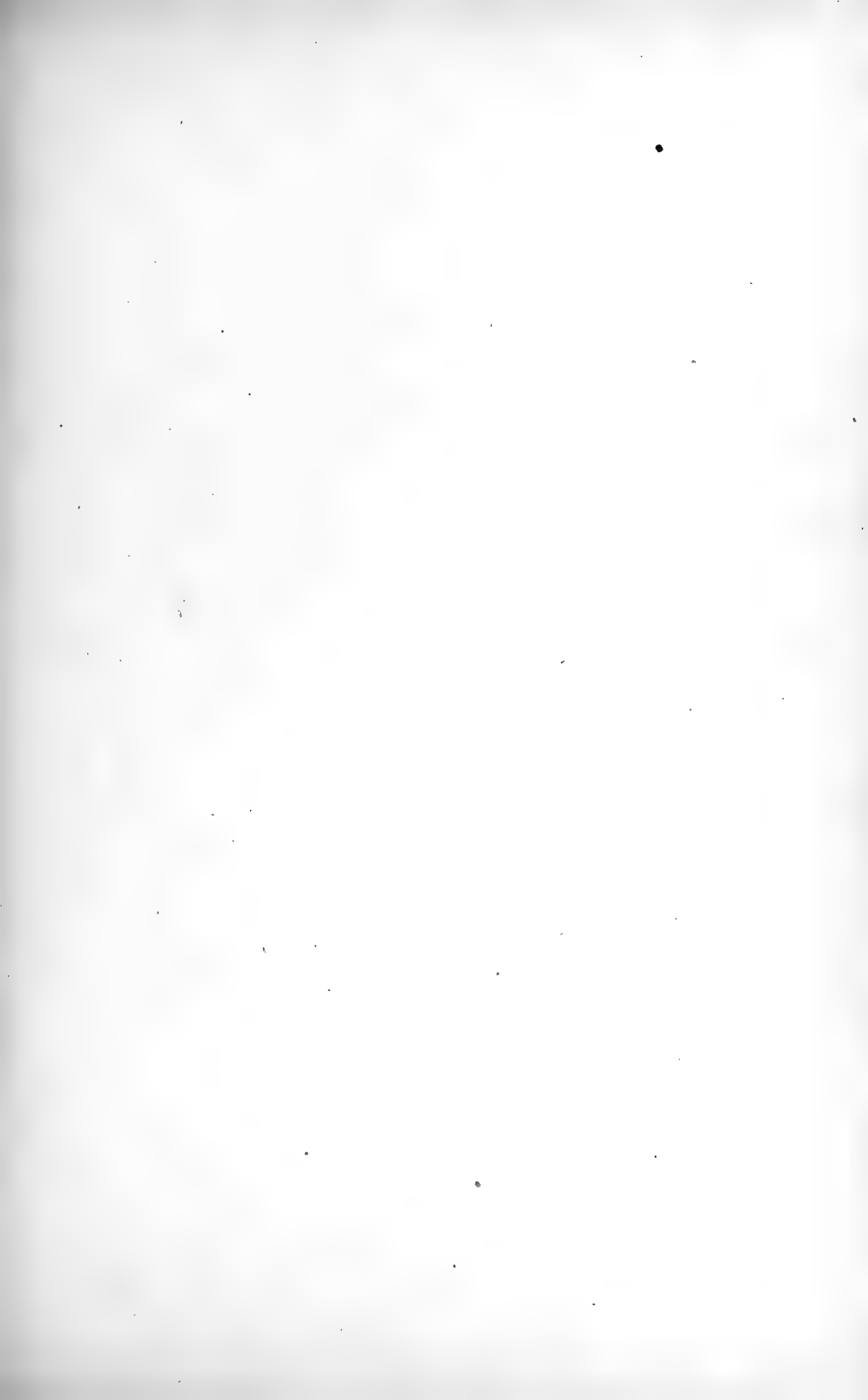
"How did you fertilize?" he was asked.

HEAVY FERTILIZATION.

"We fertilized heavily, responded Judge Black. "Heavy fertilization is needed in these sandy lands where cane is grown. We used from 600 to 1,200 pounds of fertilizer which is heavy fertilization even for this section, but we found it paid. In fertilizing we used cotton seed and cotton seed meal."

On the Black farm a much longer grinding season was had than is usual in Alabama. They were grinding cane there for sixty days. This was done by windrowing a large part of the crop, that is by cutting down the stalks and covering them with the tops to guard them from the early frosts.

The Black farm is unusual, too, in that cane is grown on shares by the tenants like cotton is grown on other farms and plantations. The tenants are furnished with seed and after they have cultivated it with their labor the profits are divided when the expenses have been shared. The cultivation of cane, however, is only given to the better of the tenants on the Black place. These are encouraged to plant six acres of cane to the mule. The tenants have found that cane growing on shares is a better thing than cotton growing on shares, when it comes to monetary returns.





ALFALFA FARM OF CAPT. JNO. C. WEBB, DEMOPOLIS, ALA

CAPT. JOHN C. WEBB'S EXPERIENCE WITH ALFALFA.

Capt. John C. Webb, of Demopolis, Ala., writes us concerning his Alfalfa field as follows: (the field mentioned is shown in the photograph). "That field of Alfalfa was cut April 19th, some twenty-five acres, an average of 2 1-2 tons per acre first cutting. I cut it seven times that year. I cut my Alfalfa from six to eight times each year, and on that field I have never made less than \$100.00 per acre per year, and sometimes \$150.00 clear. I have never sold any Alfalfa hay for less than \$15.00 per ton. This is the greatest forage feed on the face of the earth. I am now seeding sixty acres and each year will increase my acreage. Anything will eat it greedily; grown as hay I have made a crop of corn and cotton and other farm crops, feeding only on this hay, not feeding a grain of anything else on my place. Year before last this occurred with me and I did six weeks of plowing in the summer on this feed without one grain of corn or oats, and my team of twenty-two mules looked as well or better when I laid by my crop in August as when I cut off the grain ration. I wish to say that the land above referred to was made very rich and of course this is the key to all good crops."

JOHN C. WEBB, Demopolis, Ala.

Alfalfa May be the South's Salvation.

“If cotton remains at 6 cents, the salvation of this country will be the growing of alfalfa.”

I got this new thought from a successful Montgomery County farmer, a man who raises both alfalfa and stock. And it might be incidentally mentioned that wherever alfalfa is there, too, is stock and cattle, and wherever good stock and cattle are being raised for profit, there, too, will quickly come the growing of alfalfa. The two seem inseparable.

But the possibilities of alfalfa, the remarks to its value as a substitute for cotton, interested a man whose business it is to ask questions, to gather information and set it down as accurately as he may. There has been much written about alfalfa in Southern newspapers in recent months, but the average man, the average newspaper reader, has a hazy idea of what it is. He is not quite sure whether it is a new breakfast food, or the name of a town in which the Japanese and Russians fought a bloody battle. The well-informed farmer, and, by the way, it is not generally known that the intelligent farmer has a wider store of general information than the average intelligent business man, the well informed farmer knows that alfalfa is one of the richest, one of the most fruitful of all forage plants.

It is a Western plant, a sort of a Mormon product, for it is said to thrive best in the states like Idaho and Utah, where the Mormons are numerous, thrifty and poverful, and it is also vigorous, prolific and profitable in the far Western States of California. In those sections out West where irrigation is an important agricultural factor, alfalfa does especially well, so well that it has been said that this forage plant does best on irrigated land. The yield of alfalfa hay on irrigated acres in the West runs between eight and ten tons.

GROWING OF ALFALFA.

It is one of the several experimental ideas of agriculture that has gained a footing in Montgomery County in the very recent past. It has not been grown in the county longer than three

or four years. Albert Dillard, an ex-newspaper man and a successful farmer, was the pioneer alfalfa grower, so far as this county is concerned. Mr. Dillard first planted it, and he sang its praises so convincingly to his neighbors that many became deeply interested in the growing of this fine forage. Every year the alfalfa acreage about Montgomery has been practically doubled. The largest grower is J. A. Barnes on the Woodley Road. Mr. Barnes this year has about 100 acres in alfalfa. He has been steadily increasing his acreage of alfalfa, and in doing this, steadily increasing the number of cattle and their importance to their owner.

This forage is now being grown on all the farms southeast of the city where stock and cattle are being raised. It is the forage plant on the Barnes place, the Brooks place, the Jones place and the Hagan stock farm. It is a fine help in stock raising.

Mr. Barnes, like Mr. Dillard is a great admirer of the western forage plant. He is thoroughly versed in its nature, its habits and the conditions under which it prospers best. He is too, a great believer in its ultimate benefit to middle Alabama.

"The advantages of alfalfa over Johnson grass and other hay," says Mr. Barnes, "are numerous and convincing. In the first place it requires practically no cultivation. Once plowed in, one sowing of alfalfa will last for twenty years with an occasional harrowing. Johnson grass has to be plowed every two or three years.

"Then the yield of alfalfa is at least 33 per cent greater than the yield from the same amount of land planted in Johnson grass. In fact the increase will almost average one-half more than the yield of Johnson grass. An acre of land that makes a ton and a half of hay from Johnson grass will make three tons of alfalfa hay.

MUCH LARGER YIELD.

"A ton of Johnson grass hay is worth now \$10 to \$11 a ton. Alfalfa hay can be sold for \$15 a ton easily. It is not difficult to figure out which is the best money proposition.

"It is not generally known, but it is a fact that alfalfa thrives when planted on the same land with Johnson grass. The two combined make an extremely fine stock food. When the

two are grown together the yield of an acre of land is increased at least a third. In my opinion a farmer could get rid of overplus of Johnson grass by sowing the land with alfalfa.

“One of the strongest and best reasons why alfalfa should be grown in this section is the fact that it ripens for cutting about May 1. This gives the farmer the chance to feed his stock during the plowing season with a forage raised during the same year. If his corn supply is running short along the first of May when his heaviest plowing season is upon him his alfalfa hay will meet the difficulty. In a report sent out from the Uniontown Experiment Station, Professor Duggar stated that he had fed the work stock during the heaviest plowing season on alfalfa to the exclusion of corn. This same thing I did last spring for three weeks. For three weeks the stock that did the plowing was fed on nothing but alfalfa and they thrived upon it.

“It is a well known and accepted fact that alfalfa is the best food for dairy cattle. It has more milk producing properties than any other forage known to us. It makes a magnificent winter pasturage for hogs. In our climate the stock and cattle can feed upon it in the winter months. Chickens eat it eagerly and it is a healthy food for them.

FINE SOIL RENOVATOR.

“But one of its most valuable properties has almost escaped notice. It is a splendid soil renovator. It is as effective in renovating and restoring an acre of soil as if the land had been planted in pea vines. It renders its benefits to the soil by storing up nitrogen, a most expensive and valuable fertilizer property. This is what is most needed on our lands which have been exhausted by cotton growing. In an official bulletin Professor Duggar has declared that to plant an acre in alfalfa would confer the same value upon the land as would \$5 worth of nitrogen fertilizer.

“I think so well of alfalfa that I have been steadily increasing my acreage. This year I will put a hundred acres in that forage. I grew last year sixty acres of alfalfa. Part of this I mixed with Johnson grass, the two growing together on the same land. The mixture increased the yield at least one-third and I got a better price for the mixed hay than I would have received for Johnson grass.

“The farmers about here who grow alfalfa and raise stock are compelled to grow some cotton. They are obliged to grow

cotton to control labor. We can not get negroes to stay on the place if they are not allowed to raise cotton. This situation is not generally understood by people who have not had the experience. The lack of labor is the thing that most handicaps us in hay raising. Why, last season during the cutting season I was paying a dollar a day and board to field hands and I could not get all I needed at that price.

REDUCING COTTON ACREAGE.

"I have, however, reduced the cotton acreage to the lowest possible limit. The negroes who live upon and work on the place are not allowed to plant but twenty acres of cotton to the mule. If I had my choice about it, if it was so I could get all the labor I needed, I would not plant any cotton.

"The land about here is especially good for raising corn, too. I have gotten a yield of forty bushels to the acre with but little trouble. Of the three years I have farmed here I have sold home-raised corn in the Montgomery market every year except the last. I would have sold corn this last fall except that I bought an additional five head of horses and mules. My stock of Berkshire hogs has largely increased. They now number about fifty and by next fall I expect to have 200 head. Moreover, on my place we put up 2,000 pounds of meat last year from home-raised hogs.

"By the way, I have started an experiment in raising onions. There was such a fine yield of onions in my garden last year that I was impressed with their possibilities. I am confident that from the one acre of onions that I have planted I will make at least 150 bushels. I expect to sell these onions from this acre for at least a dollar a bushel."

The Kansas farm of Jesse Jones is a mile southeast on the Woodley Road. It is somewhat different from that of his neighbors, because Mr. Jones has introduced some of the distinctly Kansas methods in his farming operations. Mr. Jones was educated in the science of agriculture and the education was coupled with a thoroughly practical experience. He has been an assistant in the Agricultural Department of the Alabama Polytechnic Institute. He will be recalled by many farmers of Alabama who met him at various institutes held under the auspices of the Auburn faculty. Mr. Jones was reared in Kansas but came to Auburn to assist in the demonstration of the science of agriculture.

THE KANSAS METHODS.

A year ago he bought the old Farlet place and brought his father and brothers from Kansas to help him in his Montgomery County farming operations. His barn yard after one year of farming is good to look upon. It is filled with hay and fodder stacks, and the corn cribs and the barns are bursting with hay and corn. The stalls are full of fine bred stock for he will raise horses and cattle as well as form products. Of his thirteen head of horses, eight of the mare strong and powerful Percherons and there are two fine head of mules with the horses.

"I am going to put in a large acreage of corn this year," said Mr. Jones. Last year we did not get our corn in until the 23d of April, still the yield was very satisfactory. Of course I am going to plant some cotton. We will have to do that, but cotton will be of secondary importance with us.

"In planting our corn we are going to use a pure bred seed. We are going to devote particular and special attention to the selection of seed and only the best will be permitted to go in the ground. This is an important detail and we propose to attend to it carefully. For that matter, however, we try to have pure bred seed of all sorts as well as cattle and chickens of the best breed.

"Our plowing is done a little differently from that usually seen about here. We use gang plows with three and four horses. One of these plows cut twelve inches and the other sixteen inches. We have been accustomed to break up the land deeper than is usually done.

"I am a great believer in alfalfa. I think that is the best forage that can be grown in this country, either for use on the farm or for sale in the market. We planted some alfalfa last year and got a surprisingly good yield. This year we will put in quite an acreage of it. We expect to grow large quantities of it."

Mr. Jones is a chicken fancier and is going extensively into chicken raising. He has three first-class modern incubators. These incubators when doing their full work as substitutes for hens can turn out 500 chickens a month. As a starter for his chicken farm for the coming year Mr. Jones has 100 chickens on his place. They are the pure blooded Langshang.

Farmers About Ozark Teach Art of Living at Home.

○ZARK is the capital city of the hog and hominy country." This is the distinguishing characteristic, the thing of which the thoughtful business man of the Dale County city is proudest. The first Ozark man I talked with made the boast. The farming territory about Ozark is the territory of those who live at home. Its people have no smoke houses in the West. There are no wagons going daily out of Ozark weighted down with store-bought corn and store-bought bacon. They have these things to sell, these farmers of Dale. Wagons in other towns of Alabama, too many other towns of Alabama, drive out with their loads of Western corn and of Western meat. They drive into Ozark, wagons from the country around, loaded with home-raised corn and home-raised meat.

Why, Ozark has shipped meat on the cars, on many cars to Montgomery and other cities. Not in one year only has this been done, but it has been done in several successive years. The farmers about Ozark have loaned and shipped cars of Dale raised corn to other towns and sections of Alabama.

There were said to be farmers, a few of them, and they were named to me, who from year's end to year's end never found it necessary to pay money for anything their families had to have to eat or to wear. No Alabama farmer can grow cloaks and hats, or Java coffee and Oolong tea. But some few farmers around Ozark have reduced the art of living at home to such a science that they do not find it necessary to pay out money for these household needs, half necessities and half luxuries. They raise and bring to town vegetables and other products which the merchants need and for which he is willing to exchange, without the passing of money, part of the stock he keeps for sale.

ART OF LIVING AT HOME.

And the things he so exchanges are but side issues to the Dale County farmer. His own corn is bursting through the cracks of his crib, his own home-raised and home-cured meat

is hanging by beargrass withes from the roof of his smoke-house like an array of stalactites in some dark cave, his own syrup is barrelled and headed in his kitchen or in his smoke house, his hogs and cattle roam the hill sides and hammocks of his big pasture and in the spring his two and three acre garden is rich alike in fruit and in vegetables.

The class of farmers who have to buy nothing for which they pay money is of course small, but the class who have bursting corn cribs, plethoric smoke houses, sleek and snug mules and horses, well fed and valuable cattle, is by no means small in Dale County about Ozark. They are numerous enough to give Ozark and this section a pride and a distinction. Upon every road that leads from Ozark these contented and prosperous farms are found. And on every farm is found a man who doesn't permit his fences and farm buildings to become ragged or run down at the heel, who pays his debts and his taxes, supports his church, takes his County papers with some big Southern weekly and sends his children to school.

THE INDEPENDENT FARMER.

He doesn't find it necessary to have a painful interview with his merchant in the merchant's office when he goes to buy his goods, nor does he have to stand the merchant's telling him that his family is demanding too many clothes and too much food. Nearly all that he has to have he can pay for from the remains of last year's crop and when he finds it expedient to buy goods on a credit he doesn't have to mortgage the family sewing machine and his little daughter's pet calf to get the money. And at the end of the year, selling his cotton means more to him than driving it to a warehouse, throwing it off and taking the receipt around to his merchant.

That a condition so fraught with good for the County, so fraught with value to the State should be so rare in Alabama with all its fertility of soil, with all its richness of agricultural resources, is a thing of sorrow to thoughtful Alabamians. That it is pronounced and emphatic in and about Ozark as to call for extended notice and comment is a thing of creditable pride to Ozark.

But its existence means more than the inspiring sentiment of pride to Ozark. It has an undeniable commercial and finan-

cial value to Ozark. It has given to Ozark a substantial and continued prosperity. It has given the town a contented past and an assured future. It has brought Ozark through the crucial periods of its history, periods which every town has, when it booms for awhile and the inevitable reaction sets in, periods when the town suffers from some financial depression that chills and sickens the whole country. Its diversified farm interests were as a sheet anchor to the windward in time of storm for Ozark during the continued panic of the '90's. In time of panic the man who doesn't owe anything is the man who is going to suffer least.

A THING OF PRIDE.

"I honestly believe," said Joe Adams, of The Ozark Star, and Manager of an Ozark oil mill, "I honestly believe, that the most prosperous time for the farmers about Ozark was during the financial troubles of the early '90's. Their way of living at home, their way of diversified farming made them independent of any demands from frightened and alarmed creditors. The financial troubles helped them in a way for they gave the farmers a better price for the many things that were raised on Dale County farms, besides cotton."

And the agricultural conditions which exist about Ozark have given the place not only firm and stable business conditions, but they have given the town vigorous and prosperous banks, excellent schools, costly churches with large congregations, a wide circle of men who began life with nothing and who have independent fortunes and they have given the town a healthy and wholesome social life. It means much to be "the capital of the hog and hominy county." There are many, many sections of Alabama which could learn things of value and importance from Ozark's agricultural section.

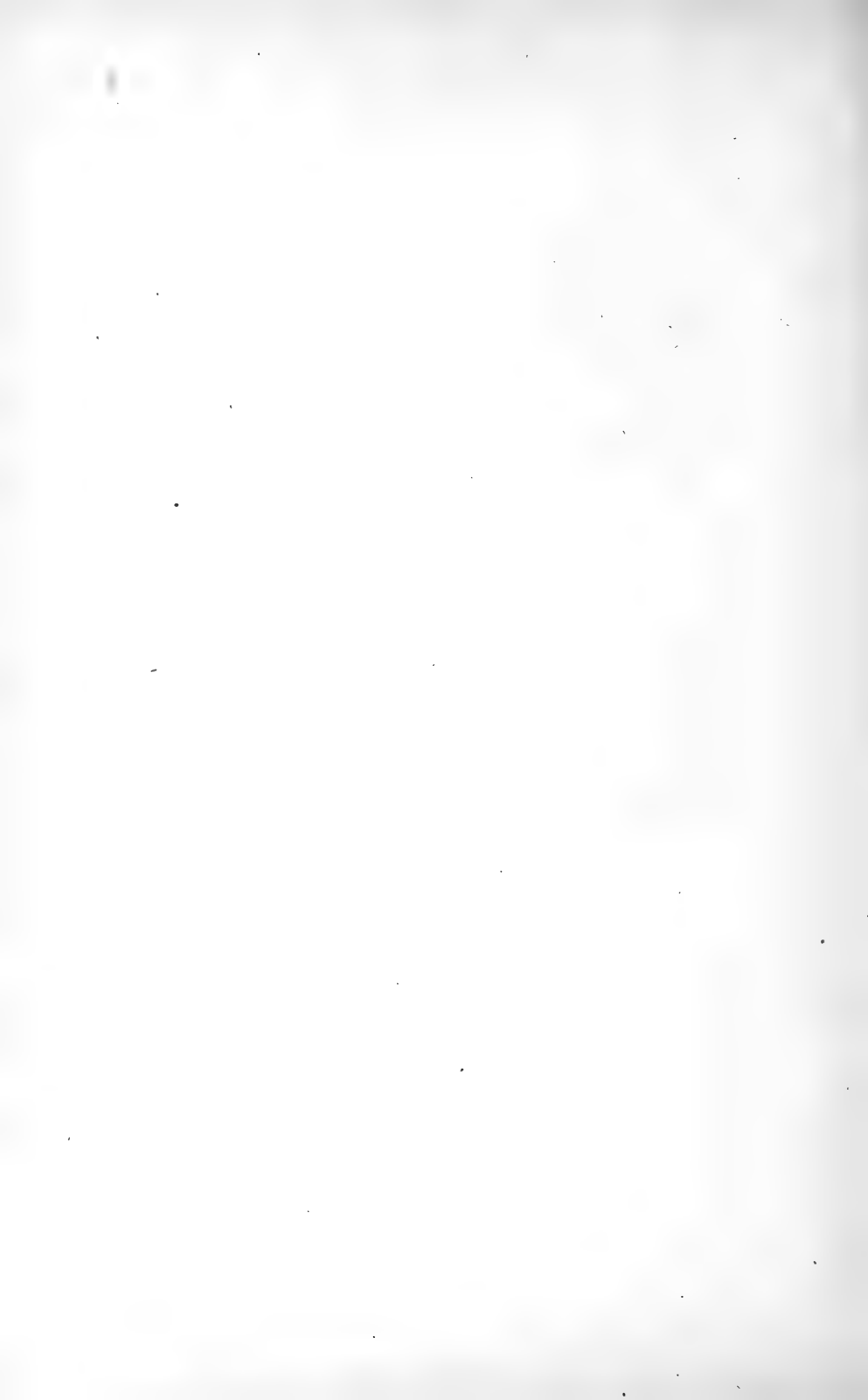
DECLINE OF "ADVANCING."

One significant difference between Ozark and other towns of its size in Alabama, a difference brought about by the live at home policy of its farmers, is the slight importance of the advancing business in Ozark as compared to the other towns. The business of advancing money to farmers by merchants

upon crop mortgages to be collected at the end of the year has not of course, disappeared, but it has been significantly minimized. This does not mean that the town has a small or insignificant business. On the contrary it has a much larger business than of many other towns of its size. And being less of a business of a year's credit to it, it is a healthier and stronger commerce.



COW PEAS AND VELVET BEANS



"A Little Empire" is County of Covington.

COVINGTON County I heard described as "a little empire," when I had been in its capital city of Andalusia a bare five minutes.

A proud citizen so termed it, averring in the next breath that next to Baldwin County it was the largest county in Alabama. He furthermore went on record as saying that its expanse of territory was equal to that cultured but corruption-ridden state, Rhode Island.

But coming down to arbitrary facts, I learned that this big county had a territory of 1,012 square miles—a territory that is almost twice as large as some other counties of the State. Now each square mile contains 640 acres of timber or farm lands. The county therefore has the enormous total of 647,680 acres of land and the most of it is the sort of soil that would delight the heart of any thrifty intelligent farmer.

These figures may be troublesome, but they are nevertheless to be borne in mind if one cares to get a true and adequate conception of existing conditions in this big and promising South Alabama county.

Man for man, Covington County increased between the census of 1890 and the census of 1900 faster than did Jefferson County. And its percentage of increase, being larger than that of Jefferson County, was larger than that of any other county in Alabama.

I have heard it declared that the percentage of increase of population of Covington County was larger than that of any other county in the United States. There was no official bulletin of the census department to back up this statement and fortify it against any attack of doubt, and is therefore set down here with a degree of qualification.

FASTEST INCREASE HERE.

But the other Covington County assertion, namely, that the county increased faster than any other Alabama County, stands for itself and needs no restriction or qualification. The

cold, census figures show that the population of the county more than doubled in the ten years between 1890 and 1900. These figures show that the percentage of increase was more than 100.

If any man who is the fortunate possessor of one of these excellent Alabama maps The Advertiser is now sending out should turn to its margin, so rich in statistical information, he will find the census figures of 1890 and of 1900 as they relate to the counties of the State so carefully set down that they may be easily compared.

If he puts his finger on Covington County he will see that in 1900 the county only had 7,536 people and that in 1900 that population had increased to 15,346—more than doubled.

Suppose that Georgia County of Fulton in which is located the timid, shrinking city of Atlanta, had been given so brave or dear a compliment by the census people; those conservative papers which have so praised Atlanta year in and year out would have been speechless with pleased astonishment and would have used, when they recovered, page after page in explaining just how it happened.

Fancy that rapid growth County of Jefferson in Alabama had more than doubled its population. Then consider what the papers and the people of Birmingham would have—but such a thing as that is beyond the flight of imagination.

Even dignified Montgomery would have temporarily lost her poise had so fine a thing come her way from the census bureau.

THE RAILROAD CAME IN.

This same census was over four years ago. The railroad had just come in a couple of years previous. The census takers were doing their work in the first flush of the County's rejuvenation. This growth so remarkable has more than held its own. For instance the same census shows Andalusia with a population of 500, which was accurate enough over four years ago. But to-day Andalusia is over four times as large as it was when the census was taken. The County itself is claimed to have a population of 20,000 which may not be far of the mark.

This wide expanse of territory, Covington's 647,680 acres of land, and a population of 20,000 people are to be considered

together as co-related facts. Then they are to be considered in the light of the fact that altogether the soil is the fine farm land that characterizes the Wiregrass, and although no County of South or South East Alabama is better equipped with railroads than is Covington, fine farm lands can be bought for from \$5 to \$12 an acre. As a whole I found lands in no South or Southeast Alabama County so moderate in price. What a fine field for development, therefore, does the big County hold!

It is pierced by two branches of the Central of Georgia. It is cut from end to end by the Louisville and Nashville. The land is the clay and sand so suitable for farming, so fruitful and so sure of fine crops. And thousands and thousands of acres to be had for from \$5 to \$12 an acre. These conditions in themselves are assurances of the truth of the claim of the Covington County people that just as the county doubled its population in the past ten years even so would it double its population in the next ten years.

WIDE FIELD FOR PROGRESS.

The cheap lands, the railroad facilities, the fertile soil, the climate, which is that of South Alabama—and that is to say it is as fine as any climate in the world—are impressive in their possibilities of the country's future. So wide a field is this county for progress one fancies that civilization could never become crowded. So fine is the soil that one wonders why other Southeast Alabama counties are so thickly settled, and the wonder grows that in other counties land like those in Covington sell for \$20 and \$25 an acre.

A national movement of immigration is setting towards the South. The movement is too obvious, too manifest, to be unnoted. It needed not the telegraphic dispatch so widely published the other day that 487 white immigrants left Chicago on one train to come to one Alabama county to convince the observing man of the existence of this movement. From the Northwest people are moving from the snow and ice fields to the sunny and cordial pine lands of Alabama. The tide of European immigration is turning, slowly, but nevertheless turning, from the North and the Northwest to the land of sunshine and Gulf breezes. The best that is in the movement

Alabama has not yet been able to avail herself of, for she has no immigration bureau, no organized effort to carry into the North and into Europe the recorded richness of her soil and the beauties and delights of her climate.

When Alabama gets her share, or only a part of her share of the immigrants, whether they be European new comers, Northern or Southern farmers the county of Covington, and her sister counties, will each become a political sub-division of pride and of riches.

With its soil and its climate Covington's agricultural resources are undivided. Plain farming is the rule now—the growing of corn and cotton. The farmers who people Covington County are Southern born and Southern bred. They were originally small farmers who came from Mobile and Southeast Alabama counties where they grew up in the cotton rows. They can grow cotton here, a bale to the acre, if they so choose. But as to truck farming they have never done it and they have never seen it done.

LACK OF TRUCK FARMERS.

I talked with L. J. Salter as to the land's possibilities for other things besides the staple articles of cotton and corn. Mr. Salter is an old citizen who knows the county from end to end as he knows the way from his home to the public square of Andalusia.

"It's as fine a truck farming country as there is in the State and yet there is not a truck farm in the whole county," said Mr. Salter. "It's as fine a county for raising strawberries as that country about the big strawberry field at Castleberry; yet there was not enough strawberries raised about Andalusia last year to supply the tables of the town's two hotels.

"Why shouldn't it be a fine truck country. We are on a line with the truck raising section of Conecuh County and our climate and our railroad facilities are as good. As for strawberries, our soil and our climate is the same as that of Castleberry.

"But our people don't know about truck farming. They will have to be shown how it is to be done and where the money will come in."

The Covington County farmer knows, however, how to raise cotton according to the bale to the acre plan. The bale to the acre farmer here is no rare individual. There is no prominent citizen of Andalusia but who can on a moment's notice reel off the names of half a dozen men who grow a bale or very nearly a bale on every acre of their land.

Such a farmer is Jesse Jones, a few miles out from Andalusia and who came to Covington County from Montgomery County, being of that sturdy and reliant family of Jones who live about Pike Road.

The possibilities of the Covington County lands are shown by the farm of Sam Spicer, another independent farmer, who got two bales from one acre last year.

LANDS LIE WELL.

The lands of Covington County, for the benefit of those who are or who should be interested in them, are similar to the lands of other Southeast Alabama counties. "They lie well," is the every-day expression used to describe them, which means that they are rolling, with no sharp hills and no pronounced valleys and level enough to hold and store up the fertilizers that may be entrusted to them.

J. M. Snead, one of the original settlers and builders of Dothan, but now a citizen of Andalusia, is a great admirer of these same lands. He thinks highly of their possibilities. Having been identified with Andalusia and with Covington County for the past six years Mr. Snead is thoroughly conversant not only with the merits of the soil, but with the remarkable development of his town and county.

The county is peculiarly adapted to the lumber business. It was not only naturally rich in virgin timber but it is well equipped with convenient running streams for the rafting of logs and the transportation of timber. Considered as helpers to the lumber industry are Conecuh River, Yellow River and Five Runs—all free running streams.

Largest Pecan Orchard in Alabama.

A dream came true—such is the Reed Pecan Orchard—the largest in the State of Alabama. E. B. Reed, the dreamer twelve years ago dreamed that pecan trees would draw a fortune from the hills of Alabama.

The Reed Pecan Company was organized last year. The man who dreamed the dream sold some \$18,000 worth of the stock, retaining for himself a controlling interest in the \$50,000 capitalization. Moreover, he gathered some several thousand dollars from his pecan orchard for the one year. Mr. Reed if he chose to do so could sit quietly, and without lifting a hand gather this fall \$8,000 or \$9,000 or maybe \$10,000. With no worry, no anxiety, no uneasiness about the weather Mr. Reed could sit upon the front porch of his residence and watch his fifty acre pecan orchard bring him a small fortune of eight or ten thousand dollars.

Experimenters are not failures all the time. Some of them make good. All dreamers do not go through the world with empty pockets. Some of them gather gear even as they had expected they would.

The man who had visions of money coming out of a big pecan orchard is one of the exceptions to the rule. His neighbors smiled at him in a knowing way when he planted fifty acres in pecan nuts. It was the rankest sort of an experiment. It would be years before he could draw a cent from the orchard, eight years, at the very least. The idea of such an experiment.

But the man with the idea had faith—and he had patience. Patience was infinitely more needed than faith. And so the man went ahead with his work and with his ideas.

To make expenses he grew a cotton crop among the young and tender trees. For one reason, he did this because cultivation of cotton helped the trees. If the cultivation of cotton had interfered with his idea Mr. Reed would not have grown any cotton. For eight years he planted cotton. Then he quit, for his orchard was bearing pecans and the wholesale mer-

chants in New Orleans began firing in five times as many orders as he could fill.

That was three years ago. Mr. Reed owns one of the finest homes on the highest hill in Lanett, with a big flower yard, a spacious green lawn and big water-oak trees. He sold the stock in his company with ease and the neighbors who laughed at him are buying young pecan trees to set out on their own farms.

CARRYING OUT AN IDEA.

There have been more failures in agriculture than any other field of endeavor. The industry offers and has offered through all the ages an interesting field to the experimenter. It is full of temptation, the business of farming and its corollary industries. There seems to be so many different methods of doing an old thing in a new way, or doing some new thing in a new way. Therefore, as has been before, remarked, agriculture has more failures marked up to its credit or discredit than any other line of industry.

For which same reason the man with a new idea, the man with an experiment, is regarded always with suspicion by his neighbors. It is easier for a man with an idea to convince people with money that gold can be distilled from sea water by a process of which he only knows, than it is for a man with a new agricultural idea to win the faith and confidence of his neighbors. That typical American character, the sanguine boomer, Colonel Mulberry Sellers, had a much easier task of convincing would-be investors that there were millions in his patented eye-water, than he would have had if he had undertaken to solicit some new idea about growing corn or cotton.

The success of Mr. Reed's venture, however, did not depend upon the faith his neighbors put in the undertaking. It was his money, his time and his faith that he had put in the enterprise. He was to reap the result, whatever it was, success or failure.

To be sure pecans had been grown for profit and with success in Texas, Louisiana and other states. But in East Alabama and West Georgia such a thing had never been before undertaken. There were some pecan trees scattered here and there, but they were there more as curiosities or accidents than anything else.

One of these trees which stands in the suburbs of West Point, is a remarkable specimen. It was planted forty-eight years ago and to-day it measures from furthestest bough to furthestest bough, eighty feet. The trunk of this tree is said to be eight feet in circumference. This tree is an enormous bearer. From its branches last fall no less than \$65 worth of pecans were sold, to say nothing of quantities of them being given away. This tree had an important bearing upon Mr. Reed's determination to go into pecan culture as an investment.

BIRTH OF THE IDEA.

"Twelve years ago," said Mr. Reed, "this tree was a giant bearer. Its nuts were of a peculiar rich flavor. The strength, age and productiveness of this tree convinced me that the soil and climate about here were adapted to the culture of pecans. I didn't want to go into the business, however, before I learned something about it. So I took a trip to Louisiana and Texas where I visited some of the largest pecan orchards in the country. When I had gotten all the information I could get without experience I came back to Lanett and pitched my orchard."

Mr. Reed's orchard is on Alabama soil, but it is just right up against the Georgia line. The orchard lies along the Chattahoochee river on an angle formed by the river and the line of the Western Railroad. One gets a good view of it in going to Atlanta just before the train reaches West Point. At the orchard the Chattahoochee River is well within the State of Georgia. The Georgia line runs down from the north, skirts the Reed pecan orchard and strikes the Chattahoochee River a little below. This same line divides the two towns of West Point and Lanett, there being perhaps as many people on the Alabama side of the line as on the Georgia side. Some of the suburbs of West Point are well within the State of Alabama.

The land on which Mr. Reed planted his orchard is of sandy loam. The trees were put down in 1893.

"I planted the trees in check rows forty feet apart," said Mr. Reed. "This had been done at the orchards I visited in Louisiana and Texas and correspondents in various parts of the country had advised me to plant the trees at that distance, This proved to be a mistake. a small one, however. Forty feet

might do in other sections of the country, but with our climate and with our soil the trees grow bigger and more room is demanded. The trees I have planted since then I have planted fifty feet apart."

THE OLD ORCHARD.

The fifty acres which comprise the old orchard were all planted in 1893. For seven years I cultivated the ground by the side of the young trees. The cultivation of the ground I found was of material benefit to the young trees. I looked, too, after the fertilization of the trees. The best fertilizer is undoubtedly dried blood placed at the roots of the trees. This is difficult to obtain, however, and I was able to get some for only a few years. I have since used as tree fertilizers bone dust and cotton seed meal and from these I have gotten good results.

"The trees demand no care. Any growing thing, does better for a little attention. I give the water oaks on my lawn some care and attendance and they are all the better for it. This is true of the pecan trees."

"The chief thing demanded by pecan culture is patience. My trees were eight years of age before they began bearing. A man has to be well supplied with patience to wait eight years for the first crop. Still it is to be remembered that the ground underneath can be cultivated until the trees begin bearing, and even later to the advantage of the trees, if their foliage did not so shade the ground that a full crop cannot be grown.

"There are many advantages to the growing of pecans. In the first place the trees are not tender and sickly like the average fruit tree. They are so hardy and vigorous that the death of one of them is rare enough to be remarkable. The tree is sometimes troubled by the insect known as the "sawbug," an insect that goes industriously to work sawing off some of the limbs. The "sawbug" at his worst, however, is never a serious menace to the life of the tree and in a small way only does it affect the tree's yield.

THE HARDY TREE.

"Last year when my trees were eleven years old some of the best trees bore each a bushel. This year I expect the yield to

be much larger. It is possible that we may get an average of a bushel a tree throughout the fifty acre orchard.

"The nuts ripen between the first of October and fifteenth of November. Gathering them is a very simple process. A sheet is spread under the trees and a boy climbs the trees and shakes them down, just as you gathered hickory nuts or chestnuts when you were a boy.

"The market for pecans is always good. Last fall I could not fill one-fifth of the orders that came in. The yield of our orchard is sold in New Orleans which is the best market in the world for pecans. Our nuts brought the uniform price of \$4.20 a bushel. There are approximately 2,000 trees in the old orchard of fifty acres, so, if we get a yield of a bushel to the tree, you can easily see that our returns will be satisfactory."

The fifty acres so frequently alluded to, by no means represents the entire holdings of pecan orchards by Mr. Reed. This fifty acres be put into the stock company, of which he has sold over \$18,000 worth of stock. Over and beyond this he has sixty-five acres of pecan trees. The most of these trees are, however, yet too young to bear.

The company which now controls the old orchard is composed of E. B. Reed of Lanett, president; F. M. Coker, of Atlanta, vice-president; L. S. Turner, of West Point, treasurer and T. J. Eady, of Atlanta, secretary.

The interest in pecan growing is steadily increasing. Mr. Reed adds considerably to his income by selling young trees. In his mail that came to him while he was being interviewed was a check for \$45 from Joel Hurt, a well known citizen of Atlanta for a shipment of young trees. He grows a number of varieties of pecans on his place, practically all that are known to do well on the soil of the Southern States. He has just planted several acres in the Russell pecan, a variety of which was bred in southern Mississippi and of which only two bearing trees are known. In their native soil near the gulf these Russell pecans grow with a shell so thin that if they are allowed to fall upon the ground they burst open. It is a peculiar fact that on the gulf coast pecans grow with a thinner shell, but their flavor is not near so good as the pecans raised on Alabama soil.

"Would you advise the general growing of pecans as a money crop?" I asked Mr. Reed.

"Assuredly, I would," he replied. "No crop is so certain as the pecan crop. Bad weather does not destroy it and insects do not kill it. Disease never breaks out among the trees and they require but little care. When they once begin bearing the yield each year shows a large and steady increase. The trees are good for at least a hundred years. Moreover, there is always a fine market for the yield. It is one of the best money crops that can be planted. Only patience is required to pass the seven or eight years waiting for the first crop."

"The Ranch," a Great Black Belt, 1100- Head Cattle Farm.

THE Ranch" is just what its name signifies. It is two thousand acres of Western life set down in the heart of the Black Belt. It is rural Montana in rural Alabama. It is a cotton plantation transformed into a rich stretch of grazing land on which 1,100 head of cattle are fattening for the market. It is today, although it was but yesterday wide expanses of cotton fields cultivated by negro tenants, a Western ranch with cow ponies, fence riders, cow punchers, lasso throwers, with big goat skin spurs and huge stringy saddles.

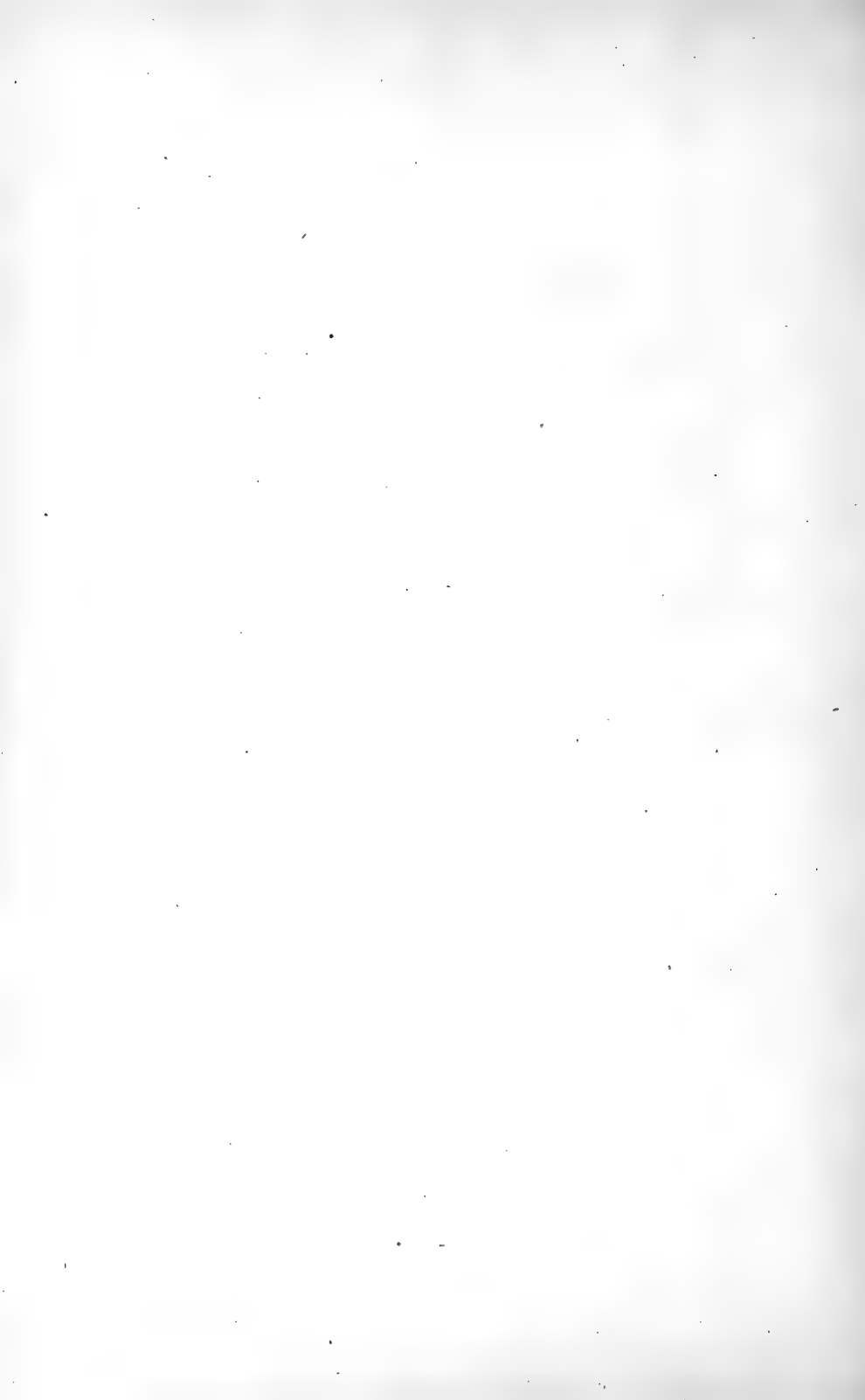
On the back porch of the farm house on the hill, there no longer hang scooter plows, sweeps, steel yards and cotton baskets. Instead of these emblems of the cotton plantation there hangs suspended two long slender branding irons, the emblem of the new order that has pitched its camp on this spot in Hale County. The brand upon the irons is the "Flying E," the brand of W. M. Murphy, who left Hale County as a youth, and after accumulating a great fortune in the cattle business returned to make his home in Greensboro and incidentally to introduce cattle raising on a large scale in Hale County.

THE CATTLE RANCH.

The place he selected is ten miles south of Greensboro. It is only two miles from the old ante bellum village of Cedarville, which still survives but which shows the dilapidation which time and adverse circumstances have brought about. A half mile to the west of "The Ranch" is the old plantation of that strong and able Alabamian, Sydenham Moore, who was a member of Congress when the war broke out and who fell while bravely leading a regiment of Alabama soldiers. "The Ranch" was three years ago the Hill Place, a plantation that was for perhaps seventy-five years given over to the growth and cultivation of cotton. It is in the very heart of the conservative cotton producing center of Alabama.



SHEEP ON FARM OF HON. J. CRAIG SMITH,
DALLAS COUNTY.



An old-fashioned, wooden screw, with a heavy cap of shingles, out of which runs long black beams, stands across the road a hundred yards in front of the ranch house. The gin house, its companion of other years, has rotted and gone and the old wooden screw is fast following it into oblivion. It has pressed its last bale of cotton; its heavy wooden beams have made their last circuit. The scenes that it knew for so many years, it will never know again. It will never hear the laughter and the shouts of the negroes at work in the gin house on a crisp fall morning, or the crack of the mule driver's whip when the box is full of lint, nor give forth again a protesting creak when the mules tug at the long lever.

THE CHANGED SCENE.

It is a lonesome symbol of an era that is past and gone on the old plantation. In the years past the old screw overlooked a thousand acres of green and vigorous cotton waving in the June breeze. Today not a stalk of cotton is in sight. The old screw is surrounded by a wilderness of verdant grass; as far as the eye can reach, nothing but grass may be seen. The old plantation has been crossed and criss-crossed with wire fences. Cotton fields have become cattle pastures. In this one the mellilotus is higher than a horse's back, in that one is Johnson grass almost as high and a little ways off is the bright green of a bermuda grass pasture.

Behind the house the big lot of the old plantation is still in use, but it no longer shelters a little army of work mules. It is now filled with horses and cattle ponies brought from the plains of Texas. For each of the riders according to the Western customs must have at least four or five ponies for his work of rounding up the cattle, inspecting them at regular intervals and keeping a general supervision of the grazing cattle.

And like a Western ranch, this Alabama ranch has with the exception of the cook no negroes at work upon it. What labor is done is done by white men, for the labor is only the labor of riding and of performance of certain duties accurately and exactly. The men who do the work are young men of good Greensboro families, who find the open air work to their liking. The whole is under the management of W. M. Murphy Jr., a young man of stalwart stature who came from the law school

of the University of Minnesota to assume charge of his father's Alabama venture and is enthusiastic for its success.

THE RANCH OWNER.

The owner of this important enterprise and the pioneer of the cattle business on such a scale in Alabama has had a most interesting career. He is a member of a prominent West Alabama family and has a large company of relatives in the various towns of the Black Belt. He left Greensboro thirty-five years ago on horseback and rode to St. Paul, Minn. The ride was taken at that time principally for his health. He later drifted to the Southwest and became a Texas ranger, having in charge at one time a company of those famous keepers of the peace.

He went into the cattle business on the Texas plains and succeeded from the first. A few years later he went to Wyoming and was one of the first if not the very first, large cattle raisers of that State. For many years he had a great ranch in Montana. At one time he had under lease 800,000 acres of grazing land with cattle to the number of 80,000. For several years he leased the entire reservation of the Crow Indians from the Government and had 1,200 head of horses under saddle.

On his ranch the battle of the Little Big Horn was fought and Custer and his command was massacred to a man. Some of the scenes of Owen Wister's fascinating story of Western life are said to have been laid upon the Murphy ranch.

THE HALE COUNTY RANCH.

Some three years ago Mr. Murphy visited his relatives in his boyhood home at Greensboro. He found the home life of the old Southern town most attractive. He had then retired from an active connection with the cattle business, although he owned and still owns a ranch in Montana, which had been satisfactorily leased. His family were living in Minnesota, where they have a fine summer home. The Greensboro visit resulted in the removal of Mr. Murphy from Minnesota to Hale county, where the family makes its home in the fine old Walton place in Greensboro. It resulted, too, in the establishment of the first big cattle ranch in Alabama, for there is no other in the State

which approaches the Murphy ranch in size and importance, no other that has 1,100 head of cattle.

"I went into cattle-raising in Hale county because it is the best grass county in the world," said Mr. Murphy. "I have visited all the great grazing sections of our country. I have raised cattle in what is considered the greatest grazing fields of the West, but I have never seen a section where grass grows so luxuriantly as it does here. A section where the grass is so rich is a section where cattle can be raised profitably.

"There is but one problem that the cattle raiser here has to solve, that is the growing of a winter grass. This is not absolutely essential, for cattle in West Alabama can be pastured in the canebrakes throughout the winter. Our cattle, for instance, we drive in the winter from our ranch in Hale county to the canebrakes of the Green county place. But cattle brought from Texas are not acquainted with a diet of cane, and it requires some time for them to become accustomed to it.

"The feeding of cattle through the winter months, say for three months, will cut too deep into the profits. The finding of a winter grass for Alabama is a thing that will mean a great deal for the future of the cattle business. I think I have solved that problem with the burr clover. I believe that burr clover will thrive in Alabama in the worst winters the State has. We experimented with burr clover last winter, but the seed we got from the dealers were admittedly defective. Next fall we will plant the best seed that can be secured anywhere for the successful growth of burr clover means much to us, and to the future cattle interests of the State. As for mellilotus, Johnson grass and bermuda grass, I do not believe that they do better anywhere in the world than right here in Hale county.

GRAZING CATTLE.

"On our place in Hale county," continued Mr. Murphy, "we follow a different plan in grazing our cattle than the one which is usually followed in this section. The practice here of keeping cattle continuously in one pasture is an error. The best results are secured by changing pastures, by moving the cattle from one pasture to another. We have divided the Hale county place into eleven different pastures, all of which are sowed in grass, and the cattle are moved from one to another."

I had the experience of a night spent at the ranch. In the late afternoon of the warmest day of the hot spell, I made the ten mile trip with Tom Murphy, the younger, who is displaying great zeal and energy in making the Hale county ranch a complete success. We made the journey in a four-wheeled buckboard, a Western institution, whose advantages for rough work Mr. Murphy knew, and because of which he had the buckboard imported from Texas.

The motive power was a pair of gray Texas ponies, loosely hitched up. They were remarkable travelers. They struck a trot in the business portion of Greensboro, and the trot, notwithstanding the heat of the evening, was not broken until we pulled up in front of the ranch house, ten miles away. The journey both going and returning was made in less than an hour over roads that were rather rough.

At the ranch we met the riders, they would be called cowboys out West, Gervin, Duggar and Miller, all mounted on Texas ponies, with big saddles, quirts and lassoes. The two of us from Greensboro saddled mustangs and galloped over the ranch for a look at the pastures and the big herd.

The 2,000 acres embrace what was really three old plantations, the Hill, the Moore and the Robinson places. The land came into Mr. Murphy's possession three years ago. Last February two years ago he broke up the old cotton fields and sowed them in mellilotus, Johnson grass, hairy vetch and Bermuda grass.

THE LUXURIANT GRASS.

The way grass thrives on this place is, to say the least, remarkable. In one of the pastures we visited the mellilotus and the Johnson were so high that the fat and handsome Herefords grazing in it were all but hid. The herd was in magnificent condition.

"We have in all, including calves, about 1,100 head," said Murphy. "Some of them are registered Herefords and Short Horns of the purest breed. As we have some Polled Angus, but we believe that the best beef cattle are the Herefords, with the Short Horns next. The Herefords use better, they stand the hardships better and they are better shippers than cows of other breeds. All of our cattle of course are not of pure blood. We bought a number of scrub cattle and many of our herd are of graded stock.

"We have had no trouble whatever with Texas fever, for our registered cattle were shipped from below the infection line. They came in from the neighborhood of Corpus Christi, Texas, and were not therefore subject to Texas fever. Of the 500 we had shipped in, notwithstanding a severe winter, I am satisfied we did not lose 2 per cent

"Most of our cattle will be sold in the Northern markets. The Northern markets afford a larger demand and a better price than the Southern markets. Some of them, the pure blood stock, will go for breeding purposes. The graded stock will be sold for beef cattle. We figure that a graded yearling from our place here can be put on the market weighing 1,200 pounds and sold at 6 cents a pound on the hoof. We shipped last winter a large number of graded cattle to the New Orleans market. We will next January make our first big shipment to the Chicago market."

In our rounds we made a call upon the aristocratic and dignified head of the heard, Royal Choice. Royal Choice a magnificent Hereford bull is champion of the south. Before Mr. Murphy bought him he won the sweepstakes prizes for all classes at Fort Worth, Purcell and at other cattle fairs where he was exhibited.

A BOVINE ARISTOCRAT.

Royal Choice, as a yearling weighed 1,500 pounds when he was bought by Mr. Murphy. From the top of its withers to the ground is only four feet, two inches, but he is seven feet, four inches long and has a chest measurement of seven feet, one inch. From his breast to the ground is only seven inches. In spite of his long ancestry and his many claims to distinction Royal Choice is quite amiable.

The question of a sufficient water supply sometimes a serious one in the prairies is by no means serious on the ranch. Mr. Murphy has eight bored wells, all of them overflowing. Notwithstanding that he has a supply of water adequate for all the needs of his 1,100 head of cattle he is having three additional wells bored.

On the Greene county place which is fifteen miles away there are only 200 head of cattle at present but during the winter the big heard of cattle from "The Ranch," will be driven down there for winter pasturage in the cane. This place was formerly

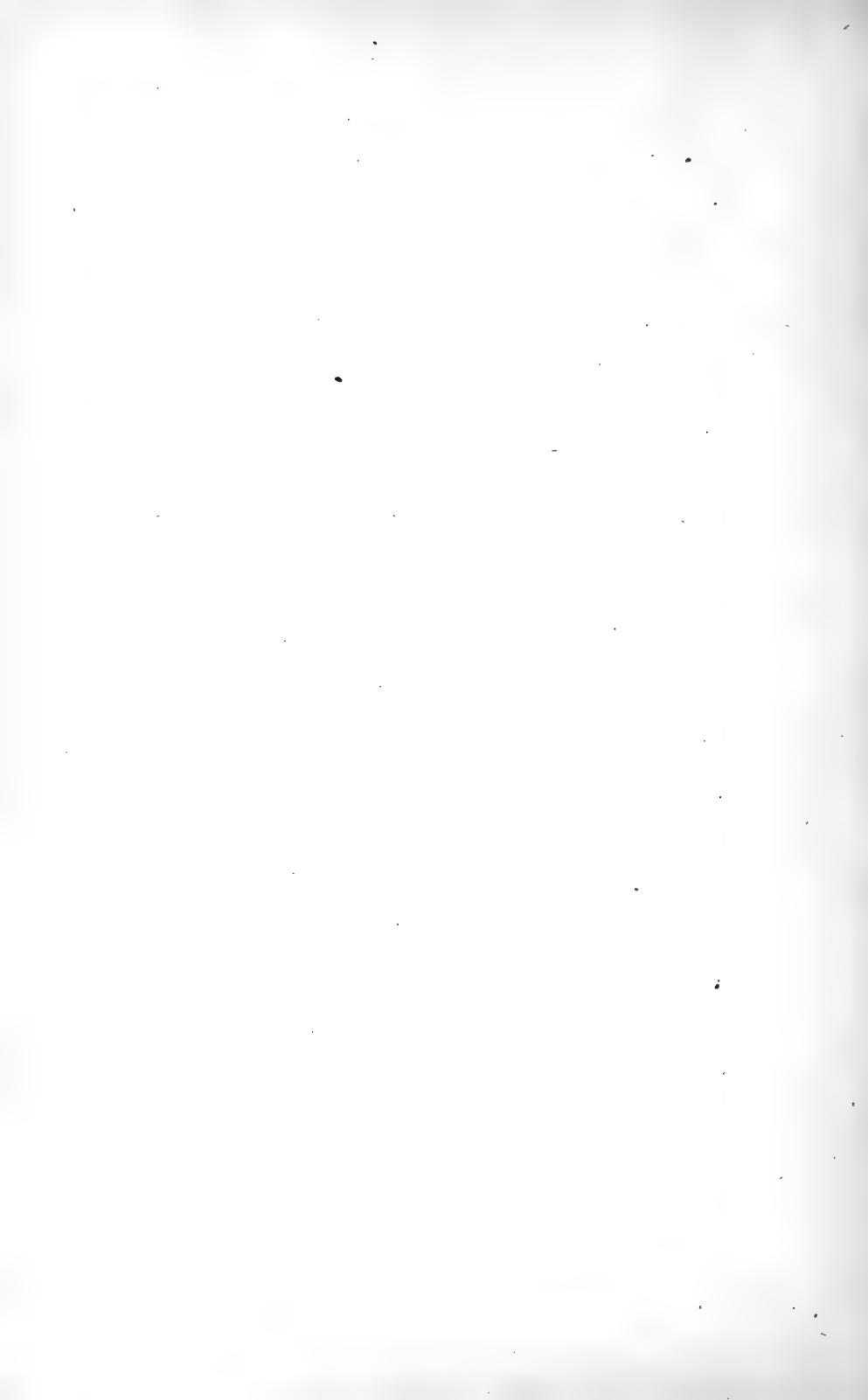
the fine hunting preserve of the Eutaw Gun Club and it still abounds in deer and other game. It is an enormous place, embracing 7,000 acres fronting for nearly fifteen miles on the Warrior River and all of it fenced in.

On "The Ranch" Mr. Murphy now has 250 acres in hay from which the cattle have been kept. This is in mellilotus and Johnson grass for winter feed. For pea vine hay during the winter he has planted 200 hundred acres in peas. He is another ardent believer in the great possibilities of Alfalfa and it is his purpose to put in 200 hundred acres of that promising forage. "The Ranch" boasts a fine drove of Berkshire hogs and a good collection of poultry but these are side issues to the main business of the big institution.

In the fall Mr. Murphy, the younger, the manager of "The Ranch" will put in 500 Angora goats and raise mutton for Northern and Southern markets.



ANTE-BELLUM HOME IN MARENGO COUNTY. "GATESWOOD."



Canebrake an Ideal Field For Farming Operations.

A SOIL so productive, and a climate that so harmonizes with it makes the canebrake an ideal field for the working out of agricultural problems.

If there is anything grown in the temperate zone of America that will not grow in the fertile fields of the Canebrake, the enthusiastic friends of that section say that it has never been found. Cotton, of course, is, as it has been for half a century, the center of the industrial system of this section, even as the sun is the center of the solar system. So many excursions into other fields are being undertaken, so many experiments in the culture and growth of other crops are being made, so many arguments as to the possibility of other crops are being aimed at the thinking farmers, so many demonstrations of the financial possibilities of other crops are under way, that the planter and the farmer are being led away from their old methods, slowly it is true, but nevertheless they are being led away.

In the eternal fitness of things it was only proper that the fertile acres of the Canebrake should become the theatre of these experiments and demonstrations. In spite of the conservatism of this section, in spite of the ancient allegiance to cotton, which in truth has kept the country prosperous through good times and bad times, one is impressed with the new ideas, with the demonstrations of changes that are being made. The Canebrake, the Black Belt, is the natural home of the cotton plant even as the river bottoms of Texas, Louisiana and Mississippi are also its natural element. All who came to the Canebrake, knew cotton culture, or learned to know it, Even the French refugees who came into the Canebrake in the State's pioneer days, to grow "the vine and the olive," abandoned their French crops, that is those of them who remained, and went into the growing of cotton. Land is so naturally rich, and land that requires so little of fertilizer has always made money for its owners, even when the sun of cotton was obscured by the dark clouds of adverse financial conditions.

New ideas are coming now. New thoughts are shaping the plans and the labors of the planters of the Canebrake. Hard by the prosperous town of Uniontown, the Agricultural Experiment Farm, through its agent Prof. Spillman, is demonstrating the wisdom of diverse crops and the short-sighted policy of the man who pins his faith to one crop and only one. In the barbecue recently given at the place of General T. T. Munford Professor Spillman, in the course of a forceful address told the assembled farmers:

ONE CROP UNWISE.

"The cotton crop this year in Texas will be a million bales short. The boll weevil has widely increased his field of activity in Texas. In places where he has never been seen before the boll weevil is today sitting on the weeds and waiting the time when the cotton plants will have squares on them and he can begin his destructive work. It is only a question of time when he will make his way into Alabama. Nothing can stop him. He is as certain to come as the sun is to rise."

This statement of Professor Spillman reflects one phase of the reasoning which is leading planters and farmers into other lines of agricultural endeavors and bringing them to the study of other crops besides cotton. The interest and enthusiasm with which the growth of alfalfa has been met and the way in which its field is widening has been alluded to in a previous letter. Something is to be said here not only for the diversification farm on the Munford place and the work of the agricultural experiment station at Uniontown and incidentally of a rather unusual and unique plan of farming that is being followed by several planters in and around Uniontown.

The farming interest of E. R. Glass, of the prosperous Farmers' Bank of Uniontown, illustrates this unusual way of farming. Mr. Glass, for instance, does not own the land on which he farms. He rents it and pays a good rental for it. Moreover, his labor is strictly upon the wage system. There are no shares, no lease, no tenant system upon any of the several farms which he operates. The negro laborer is hired as though he was to work in a store, and he is paid at the end of every week as a store porter would be paid. And in addition to all this Mr. Glass raises nothing but cotton. All of his land except some small hay fields is devoted to cotton and his feed crops are bought from his neighbors.

In discussing his unique farming methods, Mr. Glass said:

At present we have about 1,500 acres in cultivation, all of it in cotton. Of all the land we cultivate we only own the Pitts place, a farm of sixty acres in Uniontown. The rest of it we rent from its owners. For this land we pay in cash a yearly rental of from \$2 to \$2.50. Our regular labor, we make contracts with, paying a good negro hand this year \$12 a month. The negro laborers under their contracts are paid off every Saturday night. This method we have found saves considerable trouble and annoyance.

THE WAGE SYSTEM.

"On the various places we run we ordinarily employ enough labor at \$12 a month to cultivate the crops, but sometimes the necessity arises for additional hands as in May and June of the present crop season. Because of the lack of labor and the pressing need for workers in the grassy crops about here we had to pay our extra labor this season in June as high as \$1 a day, an unheard of price in this section.

"On the places we cultivate we work this year seventy horses and mules. We buy the corn and oats for our live stock in car load lots. Being extensively engaged in the mercantile business in Uniontown we have found it to our interest to follow this plan. A little of the land we rent is devoted to hay, but it is raised in no considerable quantities.

"We have found this system of raising cotton satisfactory and profitable. We began it some eight or nine years ago as a side issue to our Uniontown business and to give us some sort of our activity and occupation during the dull months of summer. We have since then increased our farming interests very materially and I do not mind saying that they have brought us very satisfactory financial results; although the system may be very different from what is ordinarily followed in the growing of cotton in Alabama.

"Outside of the money returns we have found the system more advantageous in other ways. We have but little trouble with the wages negro. His accounts never get so involved that he doesn't understand them. He knows exactly what he is getting and he usually knows exactly how he stands. At the end of the year there are no involved accounts to straighten out

and the result of the year's business is known at a glance. The expenses of farming, of raising cotton in this way, have grown, however, since we started nine years ago. For the first three years we were able to get labor for \$8 a month, but the farm hand demands and receives \$12 a month now.

"Our yield from the cotton lands worked by the wages system is to say the least very satisfactory. Now from the old Tisdale place, near here, which is the richest we have under cultivation, we got last year an average of seventeen bales to the mule. From the Stollenwerck, the Pitts, the Kennedy places, we got an average yield of fifteen bales to the plow, which is a very good showing for the negro laborers. We only employ four or five white men who have the general supervision of the wages hands."

Others in Uniontown who have found the same style of farming profitable are R. A. Comer and Son and Adair Brothers. All of them have made money at it and will continue to follow it

The Canebroke experiment station is only a little ways out of Uniontown. A little over three miles out on the same road is the fine Black Belt plantation of General T. T. Munford, where the Agricultural Department at Washington is conducting its well known demonstration of the advantage of diversified crops. It is on this road leading by the Experiment Station that the National Government is just now giving a demonstration in road building. The government will superintend the building of this road and furnish the machinery for its construction. The planters who will be benefitted by its construction will furnish the material for the road and the labor and the teams necessary for its construction.

GOVERNMENT AID.

The machinery for the building of the road has already arrived in Uniontown and the work has actually begun. General Munford, himself, is the possessor of some improved road machinery and with it he has at his own cost and voluntarily, graded and kept in excellent condition a large portion of the road leading from Uniontown to his plantation.

The experiment station is upon forty acres of land, on the side of what was a cedar hammock. Originally the land was

not as rich as that in its immediate neighborhood, and years of cultivation by negro tenants had reduced to a degree of poverty rarely reached by the Canebrake soil. This was considered all the better by the experiment station, because the work of the station could not be as instructive or as valuable, if the land on which the agricultural problems were worked on was the richest in the Canebrake.

It is a state work, this Canebrake experiment station. The appropriation from the State of Alabama for its maintenance is only \$2,500 a year, but the farmers and planters in this section of the Canebrake laud the work which the station is doing. It is meeting fully the purpose for which it was established, the demonstration of the possibilities of Canebrake soil and the exploitation of the methods of farming that will bring in the best results. It is under the general supervision of Professor J. F. Duggar, the Agriculturist at the main experiment station in Auburn.

The State was fortunate in securing two practical and energetic men to assume charge of the Uniontown station.

The Director is J. M. Richeson. Mr. Richeson was a practical and successful farmer in the Canebrake before he was called to the head of the station. A course in agriculture at Auburn had put him in touch with both the theory and the practice of agriculture. His management of the station has been successful and of value to his section.

He has a most valuable assistant in the veterinarian of the station, Dr. J. F. Conner, a graduate in veterinary science in one of the largest colleges of the north. Dr. Conner, twelve years ago came to Uniontown with the express purpose of remaining only a year. He became so impressed with the country and so attached to the people that the twelve months grew into twelve years; he married one of the fair daughters of the Canebrake, and has settled down for his life work in this rich agricultural section of the state.

Dr. Conner has materially assisted in the growing movement in the Canebrake for high class cattle of every sort. He not only gives instruction in veterinary science to the numerous farmers who come to the station for instruction by which they may combat the more common diseases to which horses and cattle are heirs, but his services are to be had without cost to the farmers for a wide radius about Uniontown. Numerous hurry

calls are made upon him for miles out in the country, and in every case a quick response is given.

THE EXPERIMENT WORK.

On the forty acres of land with its attractive farm house and modern, spacious barns and lots in the center very nearly three hundred experiments are now in course of being worked out. At times in one year over three hundred experiments have been conducted.

The experiments deal with the adaptability of the soil of the State for all manners of crops, with especial reference to the soil of the Canebrake. In the past the large number of experiments have dealt with the growth of cotton, its proper fertilization, its cultivation and the reliability of that are advertised for sale. The experiments have been worked out with a view, too, of ascertaining what was lacking in some of the favorite soils of the Black Belt whenever such deficiency was found.

The experiments made at the station in forage plants have been especially valuable. The station has done perhaps more than any other agency towards arousing the great interest in alfalfa now manifested around Uniontown. It is said, too, that in Alabama the Uniontown station was the first to ascertain by practical experiments that alfalfa was very near a perfect ration. The experiment station people were first to demonstrate in Alabama that work animals on the farm could be fed throughout the entire working season upon nothing else but alfalfa. Since April 12, the work animals on the experiment farm have no other feed than alfalfa.

The demonstration of the possibilities of alfalfa made at the experiment farm have had a quickening and inspiring effect upon its status in the Canebrake. Take, for instance, the showing that three-fourths of an acre of alfalfa has made at the station farm. From this three-fourth of an acre, 6,850 pounds of alfalfa hay has been taken and it has been sold in the open market for \$39 and there will be other cuttings.

They are doing something, too, at the experiment station in the way of arousing an interest in truck farming. This year they had one acre of cabbage from which \$40 worth of cabbage was sold to the people of Uniontown.

The diversification farm located on the place of general Munford and worked under the supervision of the Washington Agricultural department came to the Canebrake through the interest and public spirit of Judge W. H. Tayloe, who, when he ascertained that the Agricultural Department was making diversified experiments throughout the country wrote the department and suggested to it the suitability of establishing such a farm in the Canebrake. As a result of that correspondence Professor Spillman, one of the department experts, came to Uniontown. He was met by William Munford, a son of General Munford, and agent for the fine place of 2,500 acres near Uniontown, and offered the use of a part of the Munford place for such land as might be needed for the diversification farm.

The Government's policy in regard to these farms is to furnish the planter with the seed and half the fertilizer for the first of the year and to give the farmer the benefit of all returns from the farm. On his part the farmer furnishes the soil and the labor and in addition he keeps a close record not only of every lick of work struck on the farm, but of matters which relate to the diversification farm.

DIVERSIFIED CROPS.

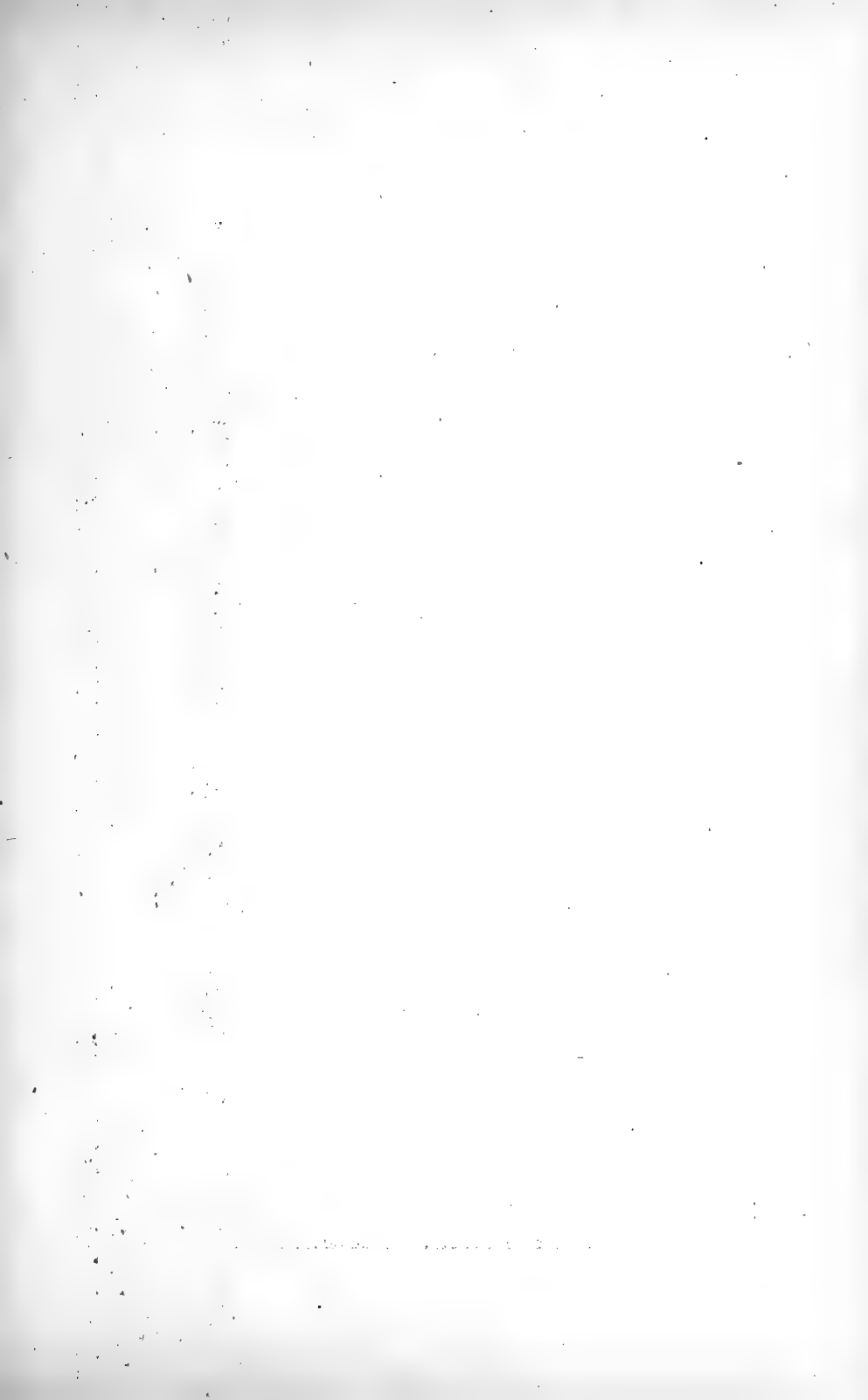
The farm on the Munford place embraces forty-four acres. It is an object lesson in opposition to the policy of one crop. The Authorities of the Agricultural Department at Washington have gone on record in opposition to the one crop idea, whether it be of corn, of wheat or of cotton. They think the policy of a farmer, putting all his eggs in one basket is unwise to say the least of it.

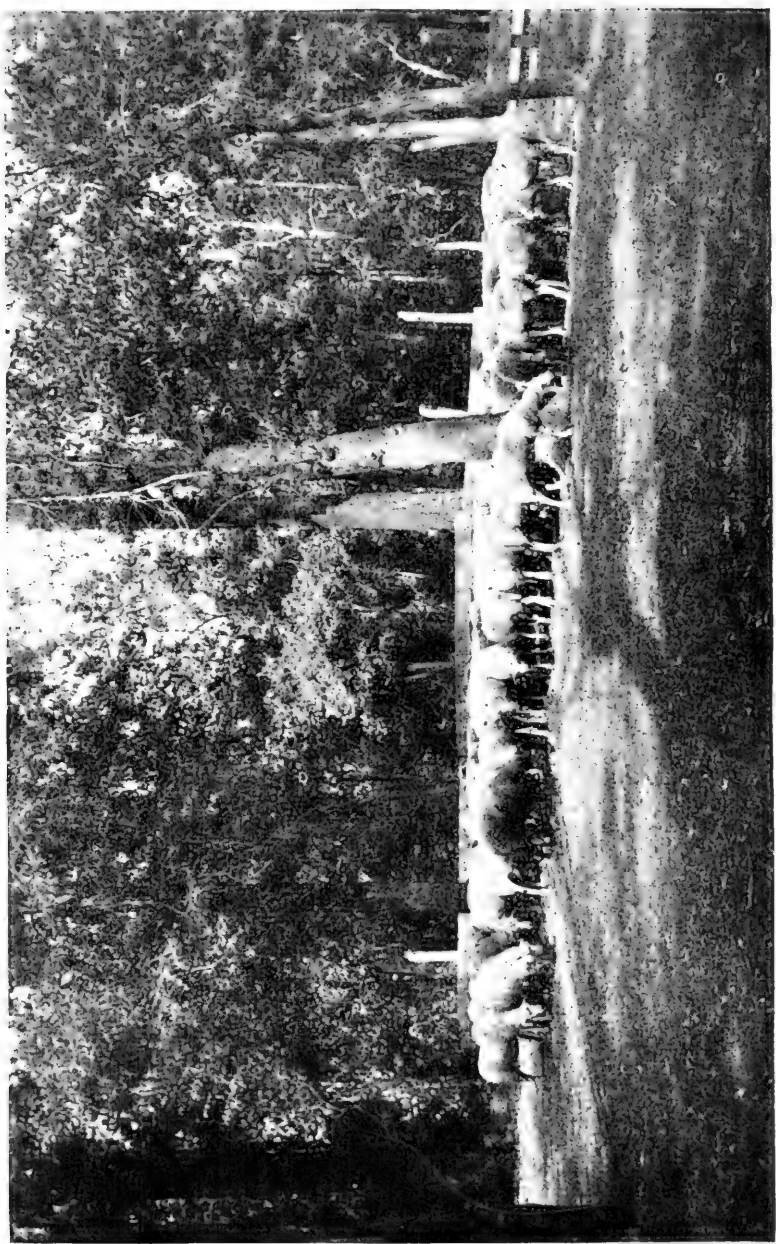
The forty-four acres which are devoted to the diversification are largely given over to forage crops. Here, too, alfalfa has the call. Nearly half the farm, or twenty acres, is planted in alfalfa. The diversification farm has shown not only that alfalfa may be grown profitably but it has demonstrated the fact that hogs can be pastured upon alfalfa without destroying its hay producing capacities. In one small field of alfalfa on which fourteen hogs have been pastured, five tons of fine hay have been cut. Mr. Munford has on his place forty-three fine Berkshire hogs. Of these fifteen are pastured and fed on the diversification farm as a part of its work.

Alfalfa is only the principle not the exclusive interest. Corn, oats, sorgum, Johnson grass and other forage crops are produced. The corn is cultivated according to Western ideas in check rows and is plowed instead of hoed, and improved farm machinery is used.

The plantation under the supervision of Mr. Munford, both the diversification farm and the regular farm, is cleanly and intelligently cultivated. Mr. Munford is increasing his stock interests and will in the future raise a considerable number of mules as well as of fine Berkshire hogs. Mr. Munford recently bought from the famous Vanderbilt farm at Biltmore a Berkshire sow for which he paid \$125, but he has already found the investment a profitable one.

With such a splendid farming country surrounding it, Uniontown could not be other than a solid and prosperous little business center. This commercial and financial solidity is convincingly manifested in many ways which impresses the *visitors*. The high standing of the merchants of the little Canebrake city on the ridge needs no comment.





SHEEP IN MONTGOMERY COUNTY.

Raising Hay and Stock in Montgomery County.

THE Tennessee Valley is fair to look upon, whether it be that its hills and hollows are clothed in verdure or bedecked with the gayer dress of ripening grain; a beautiful sight is the grain country of Tennessee, the big barns on the undulating hills filled to overflowing with the rich harvest of the fertile acres, the spirited, slender-limbed animals looking disdainfully from the aristocratic barn yards in the pride of their long ancestry, and the blue grass meadows of Kentucky, whose beauty has been perpetuated in song and story—a beautiful sight they are in spring or in summer.

The most enthusiastic admirers of the rich and the beautiful grain country are Montgomerians who whirl through its beauties in upholstered Pullmans or who count themselves fortunate if chance gives them an opportunity of spending a few days among the swaying grain, the pedigreed stock and the rural beauties which surround them. And well worthy of praise and admiration is it all.

The Montgomerians whose commendation of it all has been so enthusiastically expressed have no call for explanation and apology, nor has their discernment left an opening for criticism.

MONTGOMERY STOCK RAISING.

And yet in their own County, in the County of Montgomery, there is a "grain country," a "stock country" that is at once beautiful and inspiring, a stretch of country upon which the eye falls with the same delight as that with which it greets the rural graces of Tennessee and Kentucky. A grain country, a stock country in Alabama—it is a new thought. Still within a few miles of Montgomery, within sight of the Capitol, hundreds of acres are given to the growing of hay, both of alfalfa and of Johnson grass, of oats, of corn, and within sight of the Capitol there are barn yards full of cattle with a lineage as

proud and a pedigree as long as that of a Chinese nobleman. There are barns filled to bursting with hay and grain, quick-action, labor-saving machinery hard by, while wind mills whirling in the breeze, fat and lazy hogs, impatient horses, high caste chickens, ducks and geese. It is almost a new country, this old country in its new dress.

It lies southeast of Montgomery along the Carter Hill and the Woodley roads, two of the magnificent thoroughfares, broad, hard and smooth, which radiate from Alabama's capital through the rich agricultural paradise known as the prairies. It is pierced, too, by the Montgomery and Eufaula division of the Central of Georgia Railroad.

HUNTER VAUGHAN PLACE.

Perhaps the richest thing in this grain section is the famous Hunter Vaughan place, where the single item of hay foots up to 1,500 tons a year, and where they plow the land with a traction engine and gang plows. Most of those who are growing grain and raising stock have come from Kentucky or other distinctly grain countries, but Mr. Vaughan is a native product, born and reared on Montgomery soil, one of these men with intelligence enough and industrious enough to raise big crops of cotton at a profit and courageous enough to cut loose from old traditions and make money through the growing of hay and the raising of sheep and cattle. Near neighbors of his are native Montgomerians, F. S. Holt and W. D. Peck, both of whom run model hay farms, and both of whom make money out of the raising and the selling of hay.

THE KENTUCKY METHOD.

Just beyond the Vaughan farm is the stock farm of Mrs. F. J. Hagan, late of Kentucky, who has within her barn yards thirty-three fine short horns with long pedigrees, and who are registered as the best of their breed.

A mile away is the new country home of Dr. W. M. Brooks. He, too, is from Kentucky. And coming from Kentucky, he is raising stock and grain. Dr. Brooks is only a year in Alabama.



HAIRY VETCH IN MONTGOMERY COUNTY,

Engaged in the same sort of agricultural endeavor is William Deitchmeyer. His place is across the Central Railroad adjoining that of Hunter Vaughan. He is to engage in stock-raising and the growing of cotton. Mr. Deitchmeyer only took possession of his present places the first of January. He proposes to raise both mules and horses. He also comes from Kentucky.

A KANSAS FARMER.

A Kansas man has bought the old Farley place, on the Woodley Road, in the same neighborhood. He has built himself a two-story home with round white posts on the veranda. This is Jesse Jones, a young man, who is farming on the Kansas plan and who has a barn yard full of Percheron horses, strong and heavy wagons and shining harness. He, too, is raising grain and stock as well as some cotton.

Hard by on the Woodley Road and closer to town is the fine farm of J. A. Barnes. Mr. Barnes is a great raiser of alfalfa and is an authority upon that fine forage.

A circle with its center in the proper place and with a radius of about a mile and a half would touch each and every one of these grain stock farms. While especial stress is being laid upon the growing of grain upon these farms it is not to be forgotten that there is not one of these farms mentioned which do not support and feed hogs and cattle of the proudest birth.

ON OLD COTTON FARM.

The new idea, the idea of this neighborhood is a thing of recent birth. These farms are established on old cotton plantations, on the rich and hardy prairie acres, acres upon which time seems hardly to make an impression. Hard by these hay and grain fields are prairie lands which this last year, without a hint of fertilizer produced a bale of cotton to the acre. The native Alabamians have been upon the farms thereabouts for several years, but the growing of hay is a thing of recent history. That which most impresses, however, is the influx of the new idea farmers who have come in and settled down in this one neighborhood.

There must be some inherent richness, some inherent adaptability in this land to draw these immigrants to Montgomery

County, all of them with money and all of them with energy.

There must have been something about the land which has heretofore been undiscovered, or which if discovered has remained unappreciated. It must give not only one manifest promise of richness to the grain grower and the cattle raiser, but proofs that the promises have come to fulfillment at the command of industry.

The prairie land for immemorial years has been the typical cotton land. Cotton and prairie land have ever been linked together in the minds of the people of Alabama. Black prairie land and a bale to the acre—these things have been the talk of the Montgomery farmer when he was in a boastful mood. But land that raises a bale to the acre and a climate that materially assists in the producing of a bale of cotton off one acre of land must be of some good for other things. Why should it not be good for the growing of hay and the raising of stock?

UNEXCELLED FOR STOCK:

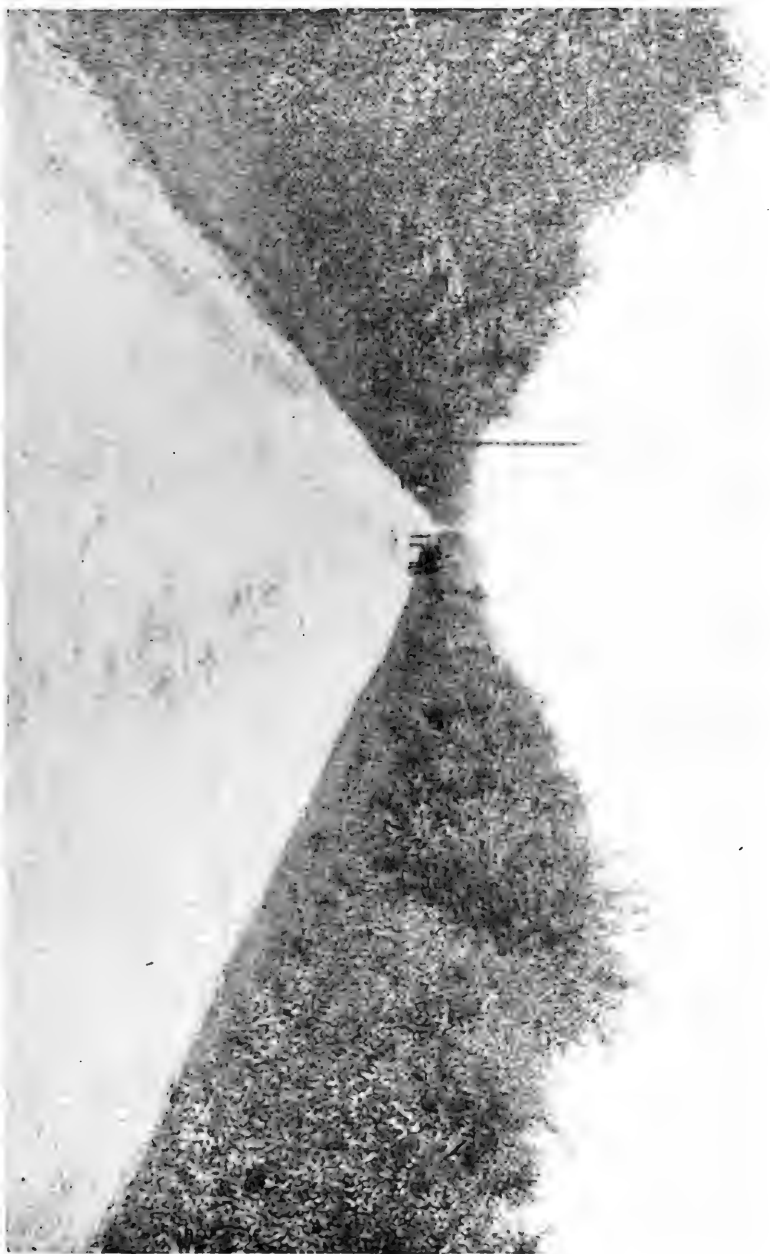
R. S. H. SAUL, an experienced horseman, a man whose profession is the constant study of horses, cattle and of the conditions which best suit them, and of the food which most benefits them, had this to say of that section of Montgomery County extending from the suburbs of Montgomery along the Carter Hill Road for ten miles:

"It is the best hay country, the best cattle country I ever saw. I am familiar with the famous grain countries of Tennessee and Kentucky. I know other stock raising sections of the United States. I have never seen any superior to this section right here for the growing of hay and the raising of horses, sheep and cattle. The finest pastures I ever saw were right here.

"The chief advantage of this section over Kentucky and Tennessee is that we have practically ten months of open grazing for horses, cows and sheep. In Kentucky and Tennessee snow is on the ground for several weeks. They have had to build stalls and cattle sheds for the housing of their stock, and they have to feed their cattle from their store of hay and grain for four and five months.

"Look at that pasture over there. Notice that green growth of rich clover, and here it is in January. Why, there are

GOOD ROADS IN MONTGOMERY COUNTY.



thousands and thousands of head of stock in Alabama pastures that never get a feed from year's end to year's end, and they remain strong and hearty throughout the winter. And the best stock, the stock the owner wants to take the best care of, he never has to feed them more than two or three months, if that long, in the winter. And, then, the stock raiser does not have to build any big and costly sheds and barns for the housing of his cattle. All this goes to show that I am right when I say that stock and cattle can be raised cheaper right here than anywhere else.

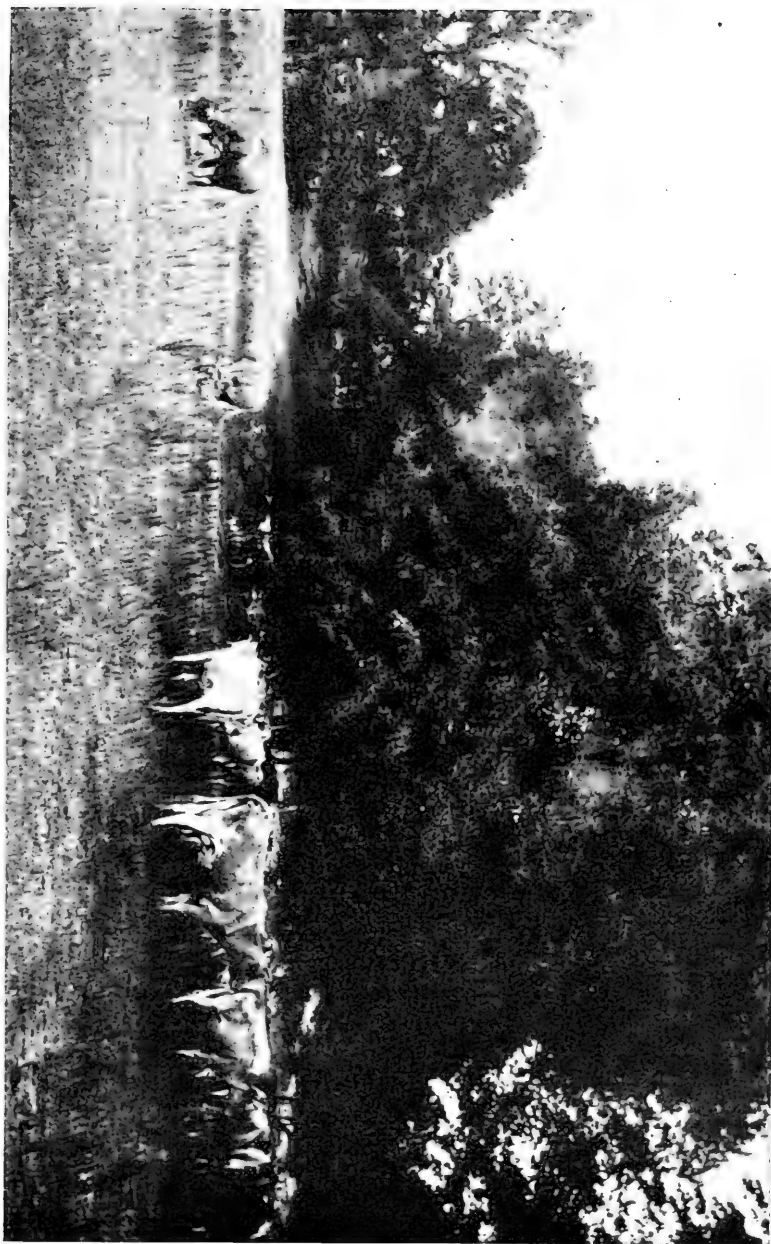
"As for the hay, no better hay is grown anywhere. It does not make any difference whether a man wants to grow Alfalfa or Johnson grass, he can not do any better anywhere than right here. There is an unwarranted prejudice in some sections against Johnson grass. Now, you take the bulletins from any experiment station, from any agricultural college, and they will tell you that Johnson grass is more nutritious; that it has more elements of fat in it than any other hay. You hear some people say, 'Well, if Johnson grass once gets in, you can never get rid of it.' Who wants to get rid of it? What does anybody want to get rid of it for? There is more money in raising Johnson grass than there is in raising cotton. If there was not money in Johnson grass hay, do you suppose farmers like W. D. Peck, Hunter Vaughan and Frank Holt would be devoting their time, their farms and their money to it?"

THREE CUTTINGS OF HAY.

"You see, it is possible to get three cuttings of hay a year off a Johnson grass hay field in Montgomery County. It has been frequently done. These men that are raising hay always get two crops off the land. And both crops are not always hay crops. More frequently the first crop is an oat crop. We have passed a number of hay fields which have been harrowed and sowed in oats. But even if the oats are planted later, they are cut in June and the field is allowed to grow up in Johnson grass, and it never fails to make a fine crop. But if it is allowed to remain in Johnson grass, one crop of hay is cut in the early summer and a second crop is cut in August or September."

“Practically all the hay grown in that section is Johnson grass, although J. A. Barnes, on the Woodley Road, is raising alfalfa easily and profitably. Cattle raising is yet in its infancy. With its growth will come, too, the growth of alfalfa, and much of the Hagan place will be devoted to the same crop. One of the new-comers, who has a valuable herd of cattle, said convincingly: “The solution of the agricultural questions in this section is the growing of alfalfa.”

JERSEY HERD OF M. C. SCOTT, MONTGOMERY.



The Strawberry Country

THE strawberry country, what is it?

The newest, the latest thing in agricultural Alabama. Less than four years old, the section known to the general public in only a vague way is attracting attention, not only in Alabama, but throughout the Southern States. It has had a marvellous growth in its four years of life. The land is the yellow pine land, the famous timber lands of Alabama of a quarter of a century ago. It is "cut over" land, which means that the big lumber mills have done their work and moved on.

What to do with the thousands and thousands of acres of "cut over" lands throughout the pine belt of Alabama is an acute and pressing question in South Alabama. Truck farming and strawberry raising mean the bringing of immigrants to Alabama. The immigrants come as a consequence of this sort of farming. They are never cotton raisers.

The strawberry business down here has passed beyond the experimental stage. Its phenomenal growth in four years is a sufficient proof of that. For one thing, there is so little of risk in it. In the four years they have been growing strawberries on these pine lands no crop failures have been recorded, and in the year of 1905, when a frost fell in April, the first since 1849, was about as trying a year as an Alabama farmer is called upon to experience, and yet the strawberry crop did well.

For one thing, the profits in growing and selling strawberries are way above those that come from other sort of farming.

STRAWBERRY PROFITS.

A strawberry raiser stood at his fence looking over his field and showing his crops to a wool hat native who had spent a long life in the pine lands. The old man viewed the strawberry proposition of his friend with obvious disapproval.

"Why," he said, "it's such a pity to put that land in strawberries. That land is good for a bale of cotton to the acre. I have seen a bale to the acre crop grown on it."

"No doubt, no doubt," said the strawberry man. "And when the acre produces a bale, you get \$50 from the acre. Now, let me tell you, I got more than \$250 in cash from every acre in this field last year, and if I should get less than \$250 this year I would be mightily disappointed."

"Sure 'nough," was the admiring comment of the pine land native, to whom, as to thousands and thousands of Alabamians, the yield of a bale to the acre, or a gross income from the acre of \$50, was the climax, the summit of agricultural ambition.

The land hereabouts is held cheaply, as agricultural lands go. It is a light sandy soil, with a heavy clay subsoil, the sort of land that is capable of a high degree of fertilization. It is a fine site for truck farming and, as in the growing and production of big, luscious strawberries, it is without a superior in all the country.

Outside of the land, much of the excellence of the country is in its magnificent climate. The Gulf of Mexico is only sixty miles away from this old sawmill town of Bolling. It is within easy reach of the daily breezes from the Gulf, which means that the heat of the summer days are not intense, and that the nights are breezy and comfortable. They have longer summers here than the Northern States have, but the summers are not so sudden and the mercury does not run so high up in the tube, or often up and down it.

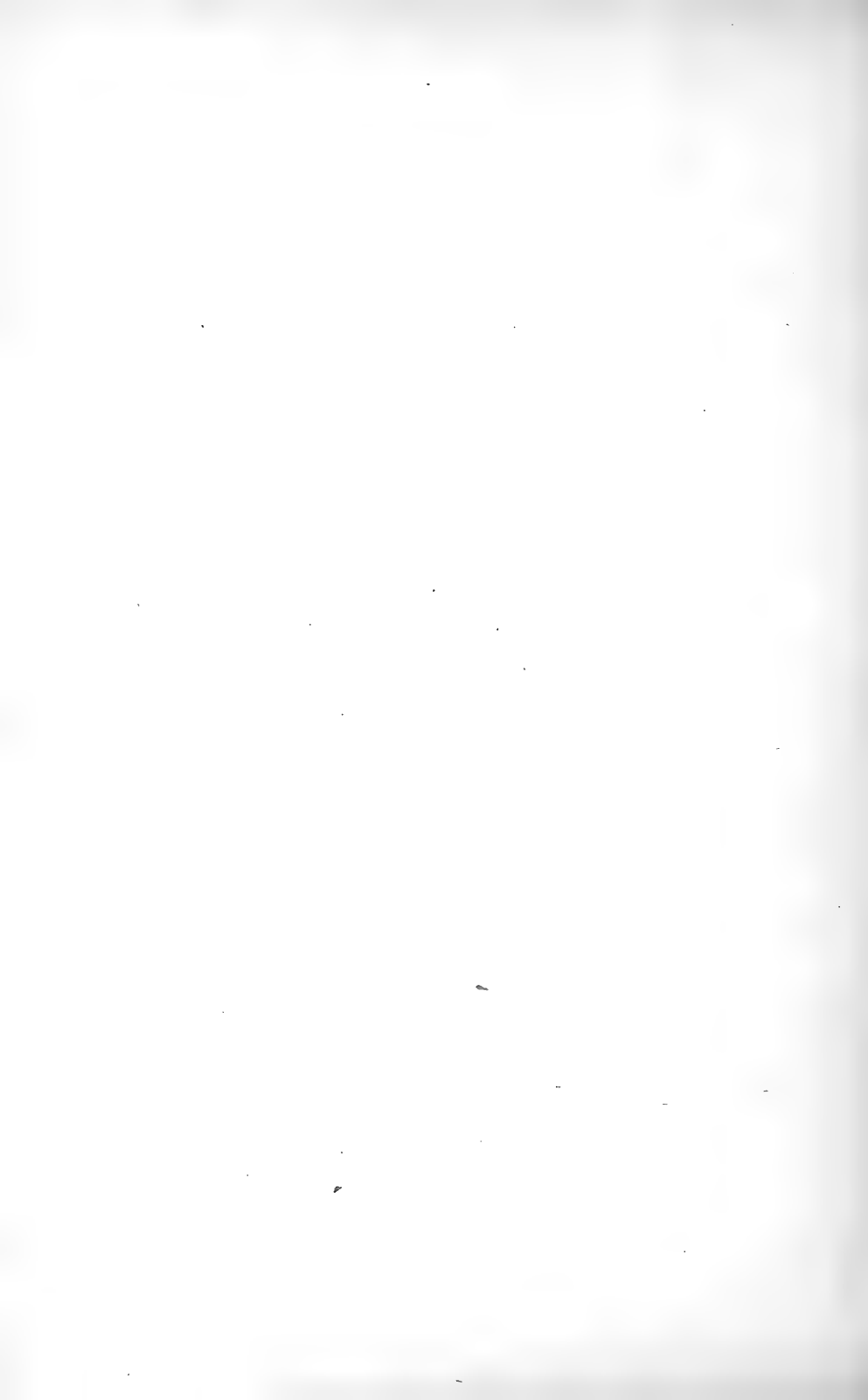
The agreeable and climatic conditions have had an important bearing upon the unprecedented growth of the strawberry industry. The pioneers in the business were the men who formed the North Castleberry Strawberry Company four years ago. These men were in the main men who had some sort of connection with the Louisville & Nashville Railroad. The venture was a go and a success from its incipiency. Its success was an eloquent persuader to others to go in for a share of the manifest profits.

CONDITIONS AT BOLLING.

The conditions here at Bolling are especially agreeable to the growth and development of these and kindred branches of farming. It is the heart of the old sawmill country. Here at Bolling for a full forty years was operated one of the big lumber mills of the Flowers family.



"THE FIRST OF THE SEASON."



In late years it was run under the company name of Milner, Caldwell & Flowers, the two former being well-known Birmingham capitalists and the latter the late John J. Flowers, who retired from the lumber business with a large fortune at the end of an active and successful life.

But six years ago the mills were moved. The timber in this section had been cut away and there was no longer food for the insatiable saws. The mill men had cut over some 60,000 acres of yellow pine land. What was to be done with it?

It was good farming land. It is of the nature of the mixed clay and sandy lands of East Alabama, which have been made to yield such fine returns and upon which has been built perhaps the richest farming section of Alabama. The strip of land, so we are told, upon which Bolling is located runs through Crenshaw County and the prosperous country about Luverne on to the farming counties farther east. The yellow pine lands of South Alabama are much the same everywhere.

There was but one thing to do to make a farming country of what had been a lumber country. But how? That was no easy question. It was to be made a farming country by bringing in farmers and selling them land on easy terms, but bringing in farmers to a new country is a task that demands time, brains and energy. All South Alabama is interested in this question, and the hope of a successful solution of it in the coming of immigrants in considerable numbers grows bright.

NEED OF COLONISTS.

A company was formed to exploit and sell the lands here at Bolling. The company bought in a body of 23,000 acres of the "cut over" lands of the Milner, Caldwell & Flowers Company. The moving spirits of the company were Capt. R. F. Kolb, Syd Jones and W. C. Shackelford, all of Birmingham, and the company was organized and did business under the name of the Sydney Colony Company. In time the company dissolved and Mr. Shackelford became the owner of the 23,000 acres of land. Mr. Shackelford is one of the leading capitalists of Birmingham. He is at the head of the well-known Ivy Coal and Coke Company.

Joseph L. Lee, well known in Montgomery, is the local manager for Mr. Shackelford. The movement now on is to

sell the lands about Bolling to industrious and thrifty newcomers. A strawberry farm and a truck farm have been pitched to show the investigators what can be done on the yellow pine lands.

"What we have here," said Mr. Lee, "is a demonstration. We want to show the man who comes down in South Alabama just what can be done on these lands. While we know what we tell him about these lands is true, he does not know it. We propose to show him, through his own personal inspection, that we have as fine, if not a finer, truck farming country than he can find anywhere. And to do this we are growing the truck.

"We are, moreover, keeping a close record on every bit of work and every cent of expense put in our demonstrations. The books are open for his inspection. When we get to talking figures, costs, expenses and returns we propose to show him just what each acre has cost us in money and work."

Mr. Lee has had experience in real estate dealings in Birmingham and Sheffield, and is therefore conversant with what is necessary for the conduct of the business of selling land. In selling the South Alabama lands, they are a little particular as to who the purchasers shall be.

THE BOLLING DEMONSTRATION.

"You see," said Mr. Lee, "we are not looking for any and everybody. We don't want a man to come down here who made a failure in his old home. Naturally we do not want a pauper, a man whom we or the community will have to carry. When a man has lived to 40 or 50 years of age and farmed since he was a boy, and is not able to pay for his land or pay to establish himself in a new country, we think he is a poor sort of immigrant.

"Nor are we advertising that a man can live here without working. We do make the claim that a man can get equal or greater return for his labor in this section than in almost any other section of the country. We are prepared to show that from labor and brains on the lands here, with the excellent conditions that surround him, the intelligent and industrious man can do much better than make a living on a truck farm where the soil and climate are so suitable and where his markets are so easy of access.

"This is the intent and purpose of the demonstrations we are carrying on. Just now we are giving special prominence to strawberry culture. When we make a claim of a return of \$200 each year from each acre of strawberries, we are prepared to prove the claim. We are growing the proof on our own lands. We have here sixty acres of this "cut over" land set in strawberries. The plants were set out last November. They are vigorous and hardy, and the first crop will be yielded next year. We have an expert in charge of this strawberry farm, Mr. Guice, of Brewton, and we believe that we have one of the most promising strawberry farms in South Alabama.

"The other strawberry growers of our neighborhood have proved that a \$200 income from an acre of strawberries is a very conservative yield to expect.

"An acre of berries will yield certainly 150 crates of berries, and in all probability 200 crates. The berry crop in most instances sells for \$2.25 a crate. Two dollars a crate is regarded as a very low price for them. For instance, there is G. W. Ethridge, of Castleberry, who has two acres in strawberries. These two acres last year netted him \$302 apiece."

"But we grow other things here besides strawberries," continued Mr. Lee. "This spring we had fifteen acres in tomatoes. From these fifteen acres we sold not less than \$3,200 worth of tomatoes. The careful bookkeeping record showed that we netted the sum of \$1,200. In fact, the profit from the tomato field amounted to \$1,700, for we spent \$500 in putting in permanent improvements that we might grow tomatoes each year.

"But strawberries and tomatoes are only a few of the things that can be grown with profit and with success. We have, for instance, as fine a cane field as you can find in the State. This pine land beyond doubt is specially adapted for cane growing, for syrup or for sugar. And potatoes do splendidly. We have been fortunate with our potato crop, but for that matter we have been fortunate with all we have attempted to grow here.

"In short, the land about here is suitable for any sort of farming. Why, the cotton patches around here grow from a bale to one and three-quarters of a bale to the acre crops. It is a natural farming soil, the sort that responds readily to fertilizer, and which cherishes and stores up the fertilizer put into the soil.

“This and the other towns in this section have another great advantage to truck farmers. We are right on the main line of the Louisville & Nashville, and a score of trains pass each day. Why, last spring we started to load a car of tomatoes after 4 o'clock in the afternoon. The next morning that car was in Birmingham ready for unloading when the produce houses opened for business. The same afternoon the car could have been put in Nashville and the following morning could have been unloaded in Louisville. And every day the truck farmer along the main line has the same sort of a chance at the more northern markets.”

An Interesting Study in Agricultural Fields

It had been a busy morning in Clayton. It might well be that, for it was a day in the heart of the cotton gathering and cotton selling season. For two weeks no rain had fallen, and the sun had beaten fiercely down upon cotton farm and cotton plantation.

In the dry heat, in the white sunshine of an ideal September, day the cotton bolls had burst open, each with its own fleecy cloud of white had burst open so rapidly that the farmer might not gather it all, nor find sufficient cotton pickers to keep pace with the rapid volunteer work of the September sun. Every gin house was an ant hill of industry; each and every one was surrounded by wagons with double-decked bodies packed to the top with gathered seed cotton, and the loaded cotton was ornamented, more or less so, with a negro sprawled peacefully sleeping in the sun and contentedly waiting his proper place at the gin under the time-honored policy of "first come, first served."

Cotton caravansaries were climbing the red hills that lead to the town of Clayton, the center and capital of Barbour County. Cotton wagons were standing in the old square, or pulled up against the sidewalk and cotton buyers, knife in hand, were busy as bees in a fresh flower yard. It was a busy day in Clayton.

This trip through Barbour County was to find out how strong, how persuasive an invitation the County of Barbour could offer to white immigrants. It is, from the nature of things as they now exist in the county, a most propitious time for the inviting and for the coming of white immigrants for the farms.

A line cut through the county from east to west, and very near the towns of Eufaula and Clayton, would separate the white belt of Barbour, on the south, from the section on the north where in the past the negro predominated, but from which he has been rapidly moving in later years. It is the

northern portion, the section near the line of the Central of Georgia, which offers the most persuasive invitation. The white section is already strong and contented, and lands are held at a higher figure.

BARBOUR'S INVITATION.

But in the northern portion lands are cheap, roads are good, railroad facilities are convenient, the social life is already made and of a high order, and the climate is nothing short of a beneficent smile of nature. For periods as long as four and five years no snow has fallen upon these hills, and it is a rare thing for this section of Alabama to have two snows in two successive years. Cattle can be pastured out in the open the whole year round. Man himself might live an outdoors and tented life the year round and suffer no great hardship. The days in winter when water freezes are seldom and rare. Even the summers are not so exacting as those of States further north, for the heat is not so intense and sudden, although the summer may be longer and the breezes from the Gulf, only a few miles away, tempers the most trying summer the State ever has.

Rich as are the State's mineral deposits, as fertile as are its farming acres, its splendid climate is probably its best exhibit.

It was a busy day in the building of the Clayton Banking Company, a wide and roomy building and a building that one would think was too spacious for a bank in a town the size of Clayton. But it was a place of no little business. A steady stream of cotton buyers and cotton sellers poured through the doors and eddied up against the cashier's window. The cotton buyer pays for the Southern staple in checks and the cotton seller has a trip to the bank after he has thrown his bales off at the warehouses and had them weighed.

Each of the units that formed the stream at the cashier's window had one of these cotton buyer's checks. I had been at the window for a talk with Cashier Browder Pruett. I was taking the interview in broken doses, inasmuch as I was constantly giving place to the man with the check at the window. It was a fortunate circumstance withal. I not only was getting information upon Barbour County conditions, but I was getting information on the man with the check, who was the central figure, the "Exhibit A" in these same conditions.

THE MODEST CAPITALISTS.

They were the white farmers, the possessors and the workers of the small farms, these modest capitalists with the checks. They came in the main from the clustered farms of prosperity and fertility to the south of Clayton, the southern section and the white section of the county, the section from which the towns and the county draw most of their life blood and vitality. They were from the hills and valleys of Central and South Barbour, for in those sections of the county the white farmer has taken his stand and made his abiding place. And in doing it he has done what the white farmer has always done—he has made his community and his section happy and prosperous. He has made them valuable assets of the State, assurances of community prosperity and contributory sources of urban commerce.

An occasional negro had a place in the procession. He was a rare party in the cotton parade, however, just frequent enough to display the example of negro thrift which is the exception rather than the rule, no matter where the negro is located. All the more credit, of course, is due the negro who lifts himself above the level of his fellows, but he does not mitigate the fearful indictment of industrial inefficiency brought against the race as a whole. There be but few negroes who make regular trips to the bank, and there be fewer who carry away money when they leave.

White man and negro in the stream, the former frequent, the latter seldom, were arguments, as they did business with bank, in the eternal race question—arguments of the superiority of the man with the straight hair under whatever conditions might prevail, if any such arguments were needed, and such are not needed or wanted in this. And they were furthermore exhibits and illustrations of conditions which exist in the southern portion of the county. It is a wonderful contrast that they represent, the negro-inhabited northern portion and the white-inhabited southern portion. It is the sort of stinging contrast that Hamlet pointed out when he showed his mother the difference between the brow of his murdered father and the lowering features of the man who succeeded to his throne and bed.

THE TWO SECTIONS.

The northern end is black belt territory, the southern end is the white man's country. And the white man's country is the abode of peace and plenty, the negro section—well, the negro section is not doing so well.

And why not? It was originally the goal, the admired land of the owner of slaves and of wealth. Beyond doubt the most productive acres of Barbour County were along the valleys of the three Cowikees. And hardly less fertile were the hills and plains, not far off. It was here that the rich planter brought his slaves, bought his acre and built his home. It was then the best land in the county. The fact that the wealthy farmer—the rich man who could go where he listed—bought it, is sufficient proof of the statement. Go where you will in Alabama, you will find that the slave-holding planter bought and settled no land but the very best in his section. The northern end of Barbour County was the promised land to the agricultural emigrant of wealth, when the country hereabouts was settled.

Today it would be the richest but for that difference between the white man and the negro. And even now there are big plantations which shame the fertility of the soil of the white man's section. They are the plantations where the negro predominates, it is true, but where they are made to work industriously and closely under the scrutinizing eye of the white man. Such a one is the wide domain of President B. B. Comer, located in this same section of Barbour County, and which is probably the largest farm in the State and in the South, for it contains, so it is said, 30,000 acres of creek, hill and level land. There are other farms, other plantations, here and there, in the Cowikee neighborhood, at Batesville and at Hawkinsville, of which the same thing is true, but in the aggregate they form only the smaller portion of the section.

On the whole, the blight of the negro has been put for the time being. He has not killed the land; he has only temporarily dwarfed its usefulness. As an agricultural Vandal, as a farming Goth, the negro is in a class by himself. He has been the pawn of fate, unfortunate himself and a misfortune to the land and to the white man.

In the days of slavery the northern section was the section of wealth and of prosperity. In the days of reconstruction the sun of its prosperity grew dim. A higeria from the country to the town set in. White family after white family left the farm and the plantation for the town and the city. The 'white folk's house' on the hill was left untenanted or given over to the corroding uses of the negro. The tenant system was triumphant and the land decayed.

The white man was in the town or city learning unfamiliar occupations, but in town where his family might have associates and friends, and where his children might have chance and opportunity at an education. The negro plowed, tilled and gathered the crops. On the surface, but only on the surface, the farm and the plantation grew poorer when the negro was at work upon and in charge of them. In the true sense of the word the lands were not impoverished.

Their fertility was only arrested. The restoration to their former glory is no difficult matter. It is a thing only of a year or two's careful cultivation. And the lands which are under cultivation are the lands upon the plains and the hills. The bottom lands, the valley lands, are as rich today as they have always been.

It is the conviction of the thoughtful Alabamian that such a section—and there are many others of its kind throughout Alabama—is the true place for agricultural immigrants. Because of their history since the war, the lands may be bought for a cheaper figure than any other lands of the State. They have only been mishandled. And because of their mishandling their market value has been placed at a low figure.

By all means they should be attractive to the intelligent and the industrious immigrant. He is not set down in a pine forest and made to clear his land. It lies open and ready for him. The highways to the city have been built. An intelligent and cultured people surround him in the towns and villages. The thoroughfares to his markets have been built and kept in repair. There are schools and churches not far off.

He needs only to apply thought and energy to his ready-made farm to have it as fertile as any of the fields of Alabama. To care and attention the lands respond most quickly. He may come in with the assurance that the people of Alabama are not selling him their poorest land, as is sometimes done to the

immigrant, but they are selling him their best lands, if he treats them right. They are cheap lands, cheaper lands, perhaps, than he can buy anywhere else. Some splendid farms can be bought as low as \$10 an acre. Other acres, and rich ones, too, when a man cultivates them right, can be bought at even a lower figure.

A hearty welcome, a Southern welcome, awaits them. The people want them and will appreciate them. For them the latch hangs outside, the door is open and the hand is outstretched. The people want a white section in North Barbour, even as they have it in South Barbour. The negro continues to leave rapidly, and the white people want his place supplied with the white land owner and the white producer. They want the immigrant in colonies, in communities, and they are willing to sell their lands cheaply and help the new-comer where he wants or needs help.

THE NEED OF FARMERS.

"We need the white farmer, and we need him badly," said Major J. N. Williams, of Clayton. "The negro is passing as an industrial or agricultural factor. The few of them that are left and are at work want to rent the lands on their own terms, and they want to cultivate it free from any supervision by the white man. We need the white man as the West has him, the man who rides and plows. We need the white man who knows how to use the agricultural implements as they are used in the West. The negro is rapidly deserting the farms, and his successor should be the white farmer, such as have made great the agricultural communities of the West."

Cashier Browder Pruitt of the Clayton Banking Company was firmly of the opinion that Barbour County, the northern portion of it, offers perhaps a more inviting field to the immigrant than any other section of the State.

"The cheapness of the land should certainly be an incentive to them," said Mr. Pruitt. "It was the best land in the county. I dare say that it would be the best land now with proper care. The white people have in a large degree abandoned these farms and plantations, not because they were not fertile and productive, but because of the preponderance of the negro and the longing for the more social life of the towns and cities.

"The hope of that section, I take it, is the securing of intelligent and industrious new-comers. The better results would come if the immigrants settled in sufficient number to form communities. Cheap lands, lands suitable for any sort of crops—truck farming, straight-away farming, as it is done today, and an unrivalled climate, easy railroad facilities—should be sufficient inducements to bring immigrants to the lands in North Barbour."

He talked of the great thing that it would be to have Northern Barbour dotted with the homes of the white farmers, with the well-kept and fertile acres of the white farmer as one might find about Alston, Baker Hill, Texasville and the Clio country.

Among the check holders that came to the bank window, he pointed out the men who were making money and success in farming in South and West Barbour. Here was Jessie Morrison, from the white country, who farmed with only "two mustang ponies." He had a check for \$55.50. It was explained that the check was pay for the seventeenth bale of cotton he had already marketed during the year. By his "two mustang ponies" he expected to get some thirty bales, in all, this year. That's good farming, any farmer will tell you. But Mr. Morrison was only one example out of the white section. There were many others.

This County of Barbour is the home county of Governor Jelks, and in thinking of it I was reminded of his admiration of, and his pride in, the fertile farms—the white section about Lodi, Alston, Texasville, Reeder's Mill and other places. I was reminded that he thought these farms, dotting a section of peace and plenty, formed a veritable garden spot of Alabama. Having it in mind one day, and tired with State cares, he said:

"It's a great country, that part of Barbour. Do you know I'd like to be there? I'd like to drop everything and luxuriate in that section a week. I'd like to spend a week in going from farm to farm and from place to place in this section of plenty."

The Twin Sources of Bibb County's Prosperous Growth

Two fountain heads there are, two sources of the stream of the State's commerce. And they differ as one star differs from another in glory.

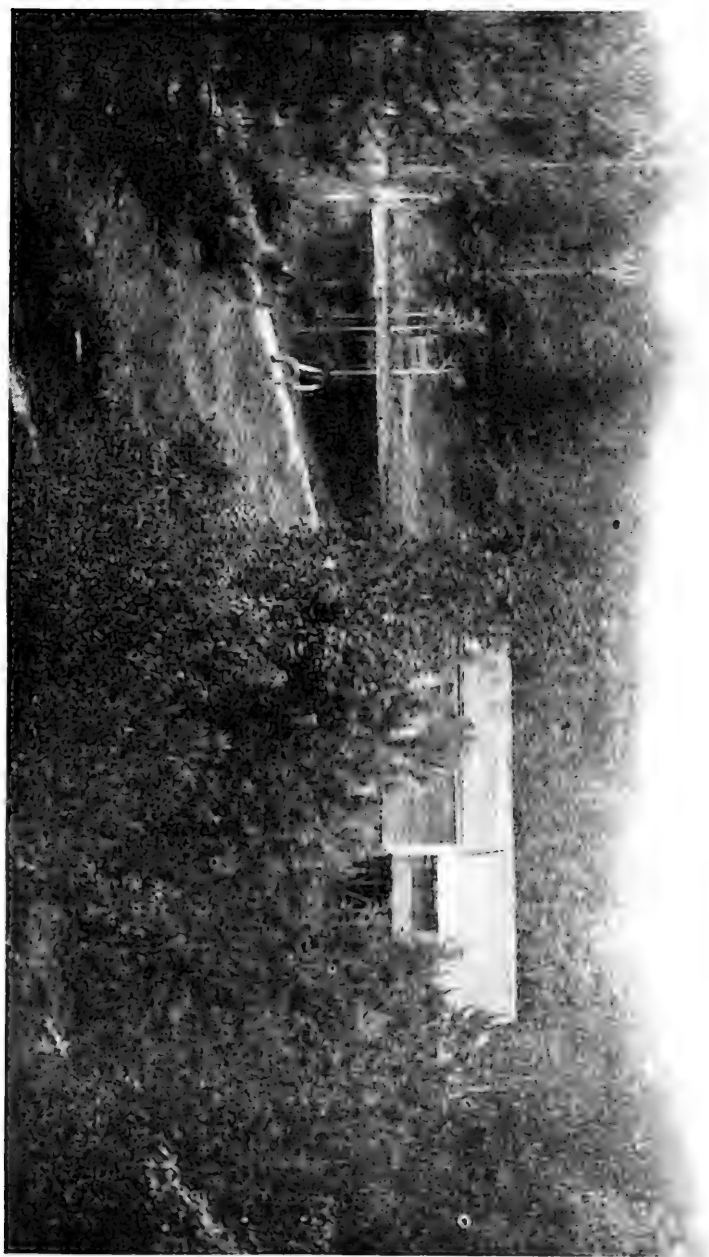
The mine and the farm are the heads of the two streams which unite further down and make the volume of the State's commerce. The factory grows more and more important. It looms up larger each day. Time will be when the factory will be as vital to the commerce of the State as the farm and the mine, but that time is not now. There be millions and millions of dollars turned over each year in Alabama's commerce, but most of these millions are turned over in business streams that flow forth from mine and farm.

There must be a ridge, a watershed, dividing these two commercial streams, a something which stands between and connects.

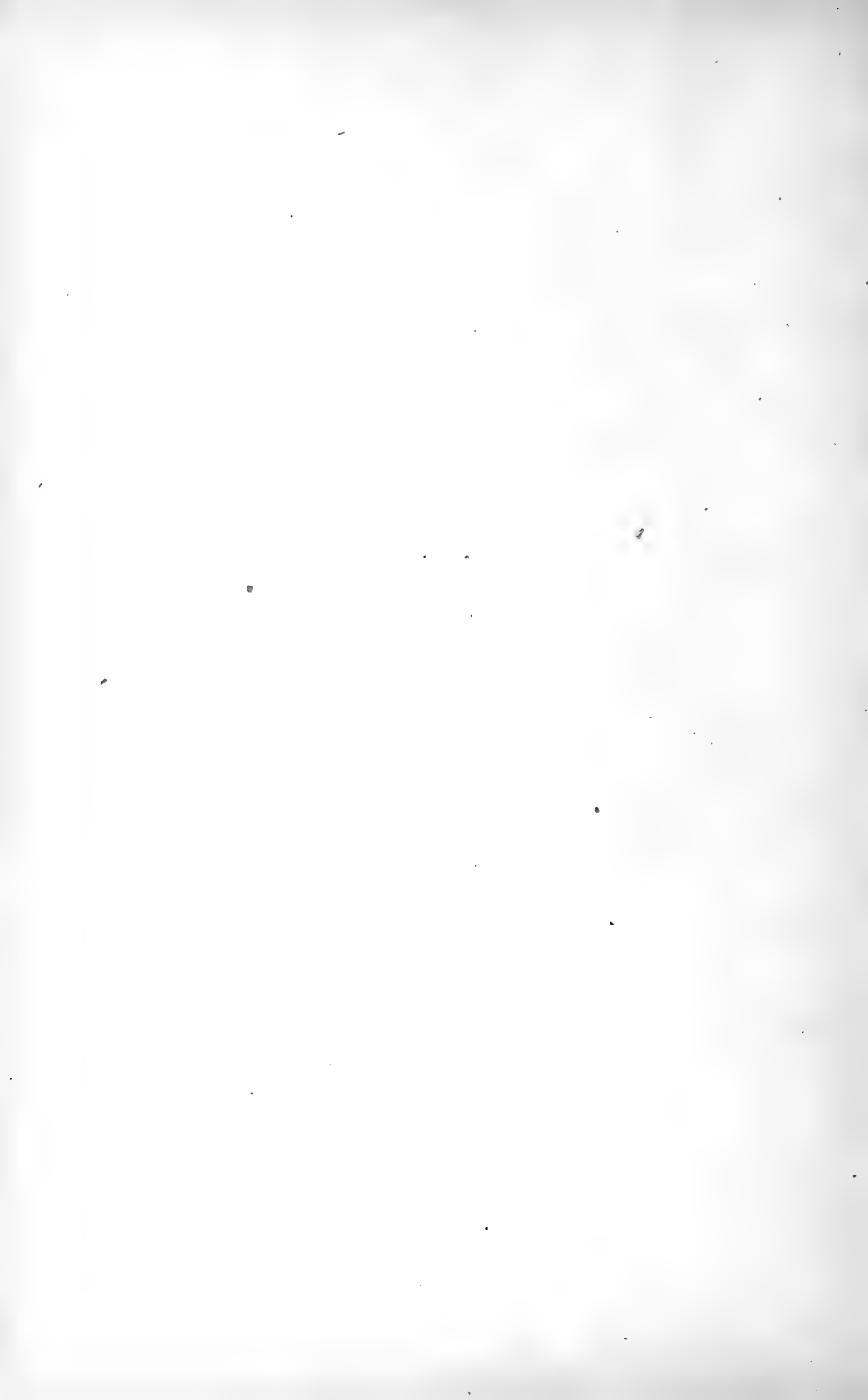
In the rejuvenated town of Andalusia, a good many miles away from here, the courthouse stands in the middle of the public square. It is the crest of the dividing ridge between two watersheds. The Andalusian visitor is invariably shown the courthouse and told how the water which runs off one side of the roof flows to one river and makes its way to the sea while the water which flows off the other side of the roof flows to another river and takes another route to the sea.

THE MINE AND THE FARM.

A short distance from Centerville, a distance so short that Centerville itself might be identified as the place in mind, is the crest of the ridge which divides mineral and agricultural Alabama. To the north is the mine, to the south is the farm. And here, on this spot, mine and farm dove-tail into each other. It is all within the County of Bibb, and Centerville is all but upon the line of demarkation.



A GOLD MINE SCENE IN CENTRAL ALABAMA.



North of this, the county seat, within the County of Bibb, is the astonishing town of Blocton, a place which might be called a huge mine. A dozen mines there have formed a nucleus of four separate towns. Two of them are incorporated. All are one settlement and practically one town. There are probably some four or five thousand people living in or around the mining town of Blocton.

It is famous for the excellence of its fuel coal, the Blocton and Cahaba brands. The Cahaba coal fields have made it, and the outcroppings of these same Cahaba coal fields have run down to within six miles of Centerville, and the veins and seams come even closer to the town.

The Cahaba River runs along the coal seams, past and close to Centerville, through Dallas County, into the Alabama. And on the other side of Centerville and alongside of the Cahaba River are the big plantations and the rich farms. And here again, within sight of each other, are found the civilization of plains and the civilization of the hills. One can stand upon the farm of the hill dweller and sweep his eye over the plantation of the big land owner as it slopes gradually to the river. Here again is found the source for speculation upon the strange natural law which leads the small farmer to the hills for the building of his home and the establishment of his small farm; the law which persuades the planter with means to dwell upon the plains and widen his holdings through the years until in time he becomes the holder of thousands of acres.

THE PLAINS AND HILLS.

It is not to be considered strange that in the younger days of the State the plains were the richer and the plantations were the more prosperous. It is hardly to be doubted that on the cotton plantations the richer and the fuller life was lived. The plantation decayed in later years in the same proportion as the white man left it. In agriculture, supposedly the strong suit of the negro, he has only partially met his trust.

The small farms of the white man have grown faster than the plantations have increased. The small farm and its white owner have always been prosperous. The small farmer has not only widened the field he formerly occupied, but he has pitched his camp in the new counties, the new section.

It is deeply significant that the big plantations, with the negro tenant system, are unknown in the "new" sections of Alabama, the sections of Alabama which have so developed and which have become so prosperous, such as the wiregrass county and the counties to the south of the Black Belt.

But here is Centerville, with the men of the hills and the mines on one side and the old, but ever rich and fertile plantations on the other. And in the best of trade that is in the two comes to Centerville.

Centerville, if it wasn't in Alabama, might be an Alpine village. It is that hilly. There is no way to get to Centerville except to go up and down hills. The site of the town itself could have been the citadel of an ancient fortress. If it were a time of marauders, trouble breeders and fighters the hill on which Centerville stands could be fortified for any sort of defense.

The way to it is steep, and it is just round with other pine covered eminences.

COAL AND IRON.

There is a world of coal in Alabama, because the Appalachian chain of mountains come to an end within the State. They break off rather suddenly in the Birmingham and Gadsden districts, and according to their geological ways the coal and iron deposits break rather suddenly out of the earth convenient to the hand of man.

But the foot hills continue further south—a connecting circuit between the mountains and the plains. In a gathering of these hills along the Cahaba, Centerville was planned and founded years and years before the war. The most commanding hill was selected for the town. Here the town was founded according to the old style with a public square and the courthouse in the center.

The hill is just large enough and none too large for the square. The square, with its courthouse and encircling business stores, fits snugly upon the top of the hill. Over the other hills the residence portion has been built in a rather desultory way. After the square is left behind, the streets become county roads curved and winding, and bordered for a space with the homes of Centerville.



ANOTHER GOLD MINE.

Down a hill—in whichever way one goes, he has to go down a hill—and across the railroad is the fine old home of Lieutenant-Governor Moren, one of the few Lieutenant-Governors Alabama has ever had. And, like the present Lieutenant-Governor, Dr. Cunningham, Dr. Moren was a physician. He was a strong man, a man with ability and force of character. A special interest attaches to him because his term as a Democratic State official was sandwiched in between two Radical Reconstruction administrations. And during a crisis in these trying times, as a Democratic official he held the reins of government over the Senate with a strong hand and in imminent danger of personal violence. It was one of the many dramatic incidents in Alabama's history of which the people of the State are only too ignorant.

HIS OLD HOME.

The old home of the Lieutenant-Governor is still in a fair state of preservation, at the foot of the hills, with the Cahaba River running behind it not so many yards away. It sits in an old-fashioned flower yard shaded with oaks and mock orange trees, and surrounded by fertile acres of corn and cotton.

It is one of the rich plantations of the whole section. The whole of it is on the river, and that which is in sight of the home is almost as level as a floor. It is a beautiful place for farming. And the place has been prosperous throughout all its years.

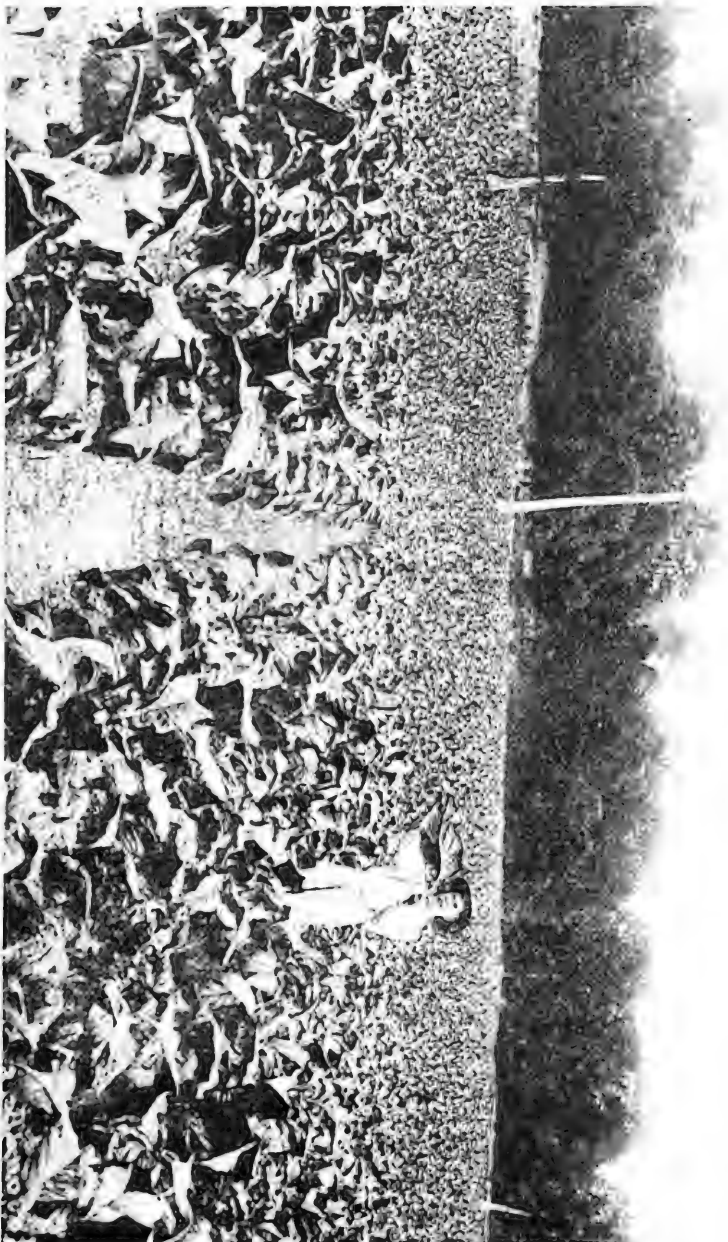
"It is a fine place, a very fine place," said F. H. Nunnellee, of The Centreville Press, who had pointed it out. "It is, however, a fair sample of the fertility of the land which lies along the river and in the southwestern portion of the county. All the Moren acres would total up about 2,000. The Howison place has 5,000 acres in it, the Davidson place 3,000 acres, the Cooper place 1,000 acres, the Avery place probably 2,000. So you see we have some big plantations here in Bibb, as well as the Black Belt folks. In the best farming country of Bibb County, across the river, and in the western portion of the county, the land is as rich as that of the big cotton section to the south of us. I dare say our crops will equal the best of theirs. In this section of which I speak the land is held at too high a figure. Some of it, I dare say, could not be bought

at all. For other acres \$20 would be asked. Much land, and good farming land, too, can be bought at cheaper figures, but our farming lands about here are not going abegging for purchasers.

THE SMALL FARMERS.

"To the north of the city, and within sight, are the hills. The farms among them are small but prosperous. The white farmer always manages to get along and do well for his community.

"The mines about Blocton have started some of the farmers in the northwestern part of the county in truck farming. The mines increased the demand for garden truck, and the farmers nearby quickly saw the money there was to be made in the business. Some of these farmers have no other interest. Growing vegetables where there is such a demand as there is in these mining towns brings in much more money than the farmer could get from cotton and corn crops. There are many of them who might be named who grow no cotton or corn at all.



GROWING TOBACCO IN LEE COUNTY.

The Tennessee Valley

A FEDERAL General, when asked after the war between the States which section of the South he most admired, promptly replied, "There is no section of the South or North which, for the happy and prosperous habitation of man, equals that beautiful section known as the Tennessee Valley, in North Alabama." This wisdom of the lamented Gen. John A. Logan is verified not only by the casual observer, but by the student of those things most calculated to make life prosperous and fruitful of contentment. The Tennessee Valley, in the common acceptance of the term, embraces a section of eight counties, four of which lie between the Tennessee River and the Tennessee State line, and four south of the Tennessee River. The two tiers of counties extending across the State from the Georgia to the Mississippi line. This matchless section presents a variety of soil which is incident to the topography of the land—a county which represents picturesque mountains and fertile plains. The eastern counties, primarily Jackson and Marshall, are broken with rich hills and valleys which evinced their fertility in the opening up of the country by a magnificent forest. The hills were the chosen home of cedar giants, oak, hickory, chestnut, poplar and other favorite lumber, and today many of the towering cedar telephone poles in our cities claim their growth in Jackson and Marshall. But the valleys in these counties were the attraction. Rich deep soil, a soil which first produced the deep forest, now yields the finest golden grain in the land. It is claimed, and the claim substantiated, that the Paint Rock Valley, in Jackson County, and similar valleys in Marshall, not infrequently produced one hundred bushels of corn to the acre, and produced wheat, oats and rye in similar abundance. West of these two counties, divided by the Tennessee River, are the Counties of Madison and Morgan—Madison for years past, by reason of her great fertility and the enterprise of her citizens, has been the banner agricultural county of the State, winning in every competitive State fair exhibit, and at the Nashville Exposition the variety and perfection of her agricultural products won the plaudits of the world.

IMPRESS OF PIONEERS.

Morgan County, along the river and the rich valleys receding from the hills, presents some of the most productive and beautiful fields in Alabama. Right here population, the character of the tillers of the soil is a proper matter of inquiry. The pioneers of this country left their impress upon succeeding generations and did much to mould the class and character of the people. For illustration, there were but few original large land owners in Jackson County in the early days, hence but few negroes, as negroes were the creatures of the wealthy. Perhaps more than three-fifths of that population is white, and an equal percentage in Marshal. The percentage of races as originally established seem to hold its own. If anything, the decrease is upon the negro side. The white people of Jackson and Marshal are a hardy, virtuous, self-reliant, law-abiding, hospitable, excellent citizenship, the best neighbors and friends on earth. These counties offer some wonderful attractions to the home seeker. The County of Madison, the first and leading home of wealth and culture in the valley, was populated by the finer haired aristocratic element of the South, a refined, elegant people, and they owned and established large plantations and populated them with negroes. Thus, in Madison you find much culture, an advanced condition, and now, that negro labor is becoming scarce from numerous causes, much fine productive soil is offered to the Northern prospector at reasonable prices.

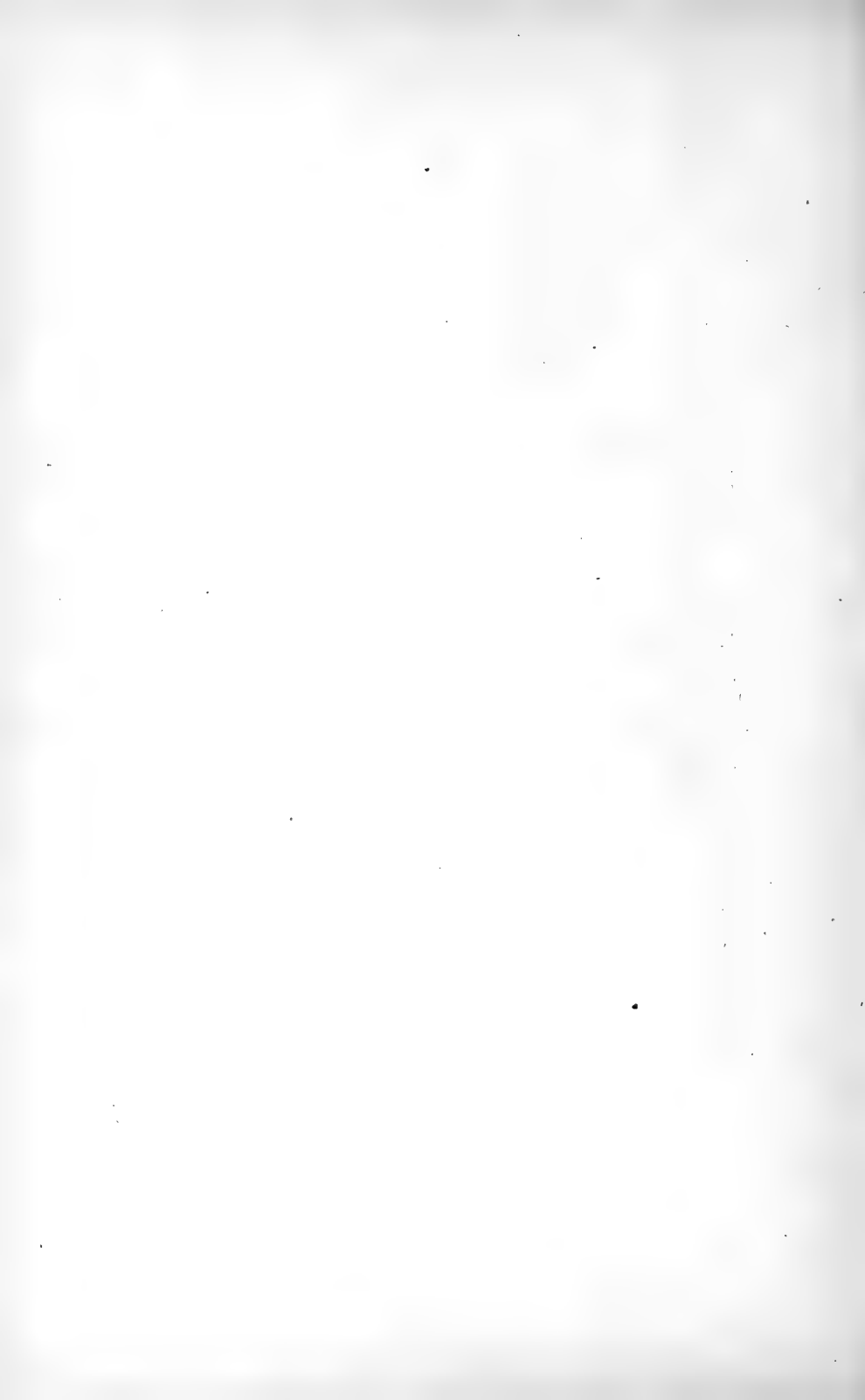
The Counties of Limestone, Lauderdale, Colbert and Lawrence present both of the original first settler class. One portion of each of these counties are settled almost exclusively by whites, and the other portion the old plantation system remains. The whites represent the labor on the smaller farms, the negro the larger old-time ante bellum plantations. The counties of Limestone and Lauderdale, north of the river, Colbert and Lawrence, south of the river, present to the home-seeker attractions equal to those of their eastern sister counties. Indeed, North Colbert and Lawrence cannot be excelled in fields of matchless fertility.

THE EVIDENCES OF FERTILITY.

The home seeker, being a man of reason, will naturally look to the substantial evidences of fertility, health, social and educational surroundings. Any man of intelligence knows that



"THE GREAT SOIL BUILDER."



forest giants of ash, oak, hickory, poplar and walnut do not grow on soil lacking in elements of fertility, hence we first invite attention to the present remaining silent witnesses as to the great fertility of the soil.

The Tennessee river drains this section from east to west, it is a river of great beauty, rapid current, and many shoals and falls. The celebrated Muscle shoals, lying between Colbert and Lauderdale. We refer to this as an evidence of rapid drainage, and beg to state that the conclave slope is towards this river from North and South, and that emptying into it are many swift and beautiful large streams of clear crystal water, passing over shoals and white gravel beds. Owing to the topography of the country there are no sluggish streams possible in this section, hence but little if any local cause for malarial. The beautiful crystal streams the outlet of innumerable springs are entitled to a place in the evidences of the grandeur of this section. The waters are clear, cold and sparkling, they mirror the beauties of heaven and smile when touched by the wing of a pleasure seeking bird. No malaria finds place in these swift, bubbling laughing waters. In their bosom can be found the bass, sun perch and game salmon in abundance. To those who have lived in flat countries with sluggish streams, the banks of our little rivers present a picture of health restoring virtues. The reader must understand that our lowest point is six hundred feet above the Ohio Valley, if this were not true, our beautiful Tennessee, with its picturesque falls, would be running up hill to Paducah, Ky., where it empties its crystal waters into the Ohio. The magnificent drainage of the Tennessee Valley makes it the homes of the most robust vigorous manhood and loveliest type of womanhood. It is said to be the natural nursery for teething babies, that fewer die in this climate than elsewhere on earth and they are brought here from Texas, Louisiana, Mississippi, often in a dying condition, to recover their health. This is but an evidence we cite of the health conditions of this country. There may be a narrow strip of land subject to overflow along the banks of the Tennessee, but there are no swamps possible.

CHEAP LANDS.

The lands in the Valley are cheap, but not because of lack of fertility, but because of scarcity of labor, the negro having swarmed to cities, the mineral fields and government works. Therefore lands can be bought here, fine lands, which produce in great abundance either wheat, oats, rye, corn, cotton, sugar cane, from eight to twenty-five dollars an acre, according to improvements. We here clip from a letter written by a former citizen of Minnesota for publication a man of character and intelligence.

SMALL GRAINS.

"Small grains of every description will do well here. It may be a surprise to our readers to know that the average yield of winter wheat in Madison County will equal the Spring wheat yield of Minnesota,—that with proper cultivation we raise as much corn to the acre as Illinois, that our broom corn yield is equal to that of Wisconsin; that our yield of tobacco will equal the far famed Connecticut Valley, while our tame grasses of every description when well cared for, will equal those of Ohio and Indiana."

MARKETS.

The limited space compels the writer to avoid detail, but convenient markets are matters of great consideration to producers. The Southern railway passes through this valley from east to west, traversing every county in it, excepting Marshall. This county has the N. C. & St. L. railroad pass through it. The L. & N. crosses the Southern at Decatur, near the central of the valley, hence we find, that Memphis, Nashville, Chattanooga, Birmingham, four great cities of consumers of farm products are in four hours run from the centre of this section and of course nearer the outer limits. These cities can and should be fed from this garden of fertility, and furnish a ready market for all produce. Then for local markets. There are the cities of Bridgeport, Scottsboro, Huntsville, Decatur, New Decatur, Courtland, Tuscumbia, Florence, Sheffield and Athens, with populations ranging from two

thousand to twenty thousand as well as many minor country towns. The Nashville, Chattanooga and St. Louis Railway passes through Madison County from North to South, crossing the great main line of the Southern at Huntsville and thence south passing through Marshall. It also enters Jackson county connecting with the Southern at Stevenson. The L. & N. connects also with the Southern at Florence in Lauderdale. The North Alabama and Birmingham Mineral railway traverses the county of Colbert from the famous city of Sheffield, crossing the Southern at Tusculumbia. Limestone County has both the L. & N. main line and Southern. So railroads abound and freight rates are very low.

FREE PIKES ABOUND.

The condition of beautiful pikes, free pikes, adds a wonderful attraction to our country. Being a country of natural picturesque surroundings, it is by no means strange that this garden spot of fertility and beauty should be greatly enhanced as the home of man by splendid public roads. These beautiful hard macadamized pikes, are specially an attraction to the enterprising, as no man likes to bury his family in the country beyond impassable mud-holes. Therefore it is with pride that the people of this country point to their free pike system, and say to their Northern brethren, you see we are not unmindful of the blessings nature has showered upon us, and we have shown our appreciation by building a road system which would justly excite the admiration and envy of the world. Perhaps to many Northern people it is a surprise to know that four counties in the Tennessee valley have perfect hard stone macadamized free pikes. The Counties of Madison, Jackson, Colbert and Lauderdale have free and beautiful macadamized pikes. There is more free pikeage in the Tennessee Valley than in any similar section south of the Mason and Dixon line. These roads are beautifully kept up by honest labor. While the public roads in the other counties are not so fine as those mentioned, still for nine months in the year they are splendid.

EDUCATIONAL FACILITIES.

The educational facilities have been greatly advanced in the last six years, Alabama having greatly increased her school

appropriations. In every neighborhood in the Tennessee Valley, you can find a good public school. High grade certificates are required and state examination of teachers made. Hence you have every facility for educating your children. In addition to this advance in appropriation for educational purposes, it is now invited by our Constitution that a local taxation for school purposes be enjoyed in each county independent of the others, that is, you can now have schools according to your own notion provided three fifths of the voters favor it. Practically only whites vote: so the spirit of self-government stimulated by self interest, will bring about this local taxation. But without it, you still have a fine school system in the valley, which now under our advanced system have the best of rural educational advantages.

SOCIAL AND BUSINESS RELATIONS.

The people of this country are a well bred people, they are courteous, hospitable, they realize that we are land poor, and that it is essential to our prosperity that we have the sturdy industrious Northern farmer locate with us. When he comes here, we endeavor to make him contented, so that his good influence will induce others. We have thousands of Northern farmers in the Tennessee Valley. They represent every state in the North, and every one who comes here, becomes a friend of our country and a helper in building it up, here he finds rich soil, cheap from lack of demand, here he finds a genial climate, never too hot, never cold, going to neither extreme, a sun stroke or a frozen person being unknown. He finds a law abiding people, a refined, polite and accommodating class, good neighbors in sickness and health, people who are not eternally in pursuit of the dollar, but who act from a neighborly standpoint. Owing to climatic and soil conditions, the minimum labor here produces the maximum result. For twelve months in the year you can work out doors and during that time not suffer a moments loss of sleep from a warm night, for we have no hot nights in the Valley—and but few cold ones. 60 is our mean temperature, giving us from 90 to 30 as our average, although we have had extreme cases, where the temperature dropped to zero. These are few and far between spells and last but a few hours.

LANDS.

Now we present to you that lands are very cheap, their productivity considered. Think of buying lands for ten dollars which will produce without fertilizer 35 bushels of corn and subject to great improvement. The foundation of our soil is red clay. If the soil has washed away, you could take a disc plow, break the clay deep, harrow with a disc and plant in field peas, and in two years you have as fertile a field as you ever saw and a crop of peas each year which will compensate you for your labor and rent.

STOCK COUNTRY.

As a stock producing country this section will equal the blue grass region of Kentucky. In fact blue grass grows here luxuriantly, and the Bermuda grass, a hardy nutritious grazing grass grows most luxuriantly. The oats of the Tennessee Valley like the corn and clover cannot be excelled. The stock water from free stone springs is at hand every where. The climate is most favorable, in fact it is seductive, many placing so great reliance on climate, that they make no winter provision for young stock. This is a mistake, as young stock should be protected from weather and not left dependent upon old fields for winter support. We once heard a successful farmer living near Athens, in Limestone county, say, ("When a farmer is equipped with sheds for his stock in winter, and provides suitable feed to carry them through December, January, February and March, they grow up around him spontaneously. He cited his own success in raising, mules, colts, sheep, cattle and hogs. Hog raising here is easy.) A hog can be raised at a nominal cost, we asked M. C. Cobb, of Madison county, who was offering four hogs weighing on average three hundred and eighty pounds, what it cost to raise them. He said, "They are eleven months old, and they have cost me nothing except a lot of refuse corn, corn that I did not desire putting in the trough for the horses, especially when I had an abundance of sound corn—in short." said he, "They saved what I would have thrown away." The reader must not deceive himself with the idea, that we have no fine stock hogs here, and no enterprising spirits who raise them, for while they are not frequent, still we have them.

PROGRESS IN STOCK BREEDING.

We will here remind him, that in two miles of the City of Huntsville the world beating butter producing Jersey, Lilly Flag, was calved and developed. The three finest cows, taking first premium at Chicago Exposition came from Madison County. There are imported jacks here, and some of the standard bred stallions of the world claim their home in Madison, Lawrence and Jackson Counties. Many car loads of cattle, sheep and hogs are shipped from the Valley. When you find a country where four out of eight counties have a magnificent system of free macadamized public roads, you need not expect to catch it slip shod or down at the heel. It is not a good country for missionary work, it takes a pretty live man to keep step with the music of our progress. Still we do not disguise the fact that we have a surplus of land, that it is owing to the fact that our negro labor is unreliable. In short we have more land than white men can cultivate, and we want reliable home owners, men who will take care of the lands. If the reader will divest himself of the idea that he knows more about it than we do, who have been on the ground, will come here and take in the situation intelligently, he will find why existing conditions prevail—and why lands are sold very cheap, their productiveness considered. All these are questions which address themselves to the intelligent Northern man who does not look at the conditions with a telescope but comes here and absorbs information.

SHEEP RAISING.

We would hardly presume that a man would use Valley land which would produce sixty bushels of corn to the acre for pasturing sheep. It is true it would produce clover, timothy, peas, bermuda, so luxuriantly that he might lose his herd in its thickness, but our third rate lands afford the finest range for sheep, lands that could be bought for five dollars. There is a class of land which produces a tough hardy oak, "post oak lands," this land can be found in spots in the Northern tier of counties near the Tennessee line. Fine water abounds and good grazing here withers and dies without use. Such spots are noted for their healthfulness, in fact so great is it that a

funeral of a native in such sections attract wide spread attention. A physician who resided near Pettusville in the North east corner of Limestone county, a few miles south of the Tennessee line, said, he had practiced medicine in that country thirty years, and never lost a patient under eighty years of age. In this remarkable scope of country which we admire for many reasons other than its fertility, there are many springs of wonderful medicinal quality. Springs which have produced cures, which would have rendered a less obscure country famous, still this section is in eighteen miles at most remote point from the L. & N. R. R. on the west, and perhaps twenty from the Southern on the South. So the reader must be persuaded that we have many kinds of soil and country in this Northern tier of Alabama Counties.

THE MOUNTAIN TOP.

We would do violence to Marshall, Morgan and Lawrence were we to omit that now famous section known as the top of Sand Mountain, a section lying south of the Tennessee and back beyond the valley, perhaps a distance ranging from five to twenty miles from the river, the width of the fertile valley being governed by the windings of the river or Mountain. Before the war a man was regarded as a mere squatter who built his cabin and who hunted bear, deer and turkey on Sand Mountain. The soil while producing tall pines and other Sand Mountain growth, was regarded by comparison as too poor for cultivation, this is not so to-day. The fact has been revealed that this sandy soil with a little fertilizer, produces the finest staple of cotton grown in this section. From a wilderness at a cost of from one to two dollars an acre, it has become the site of many beautiful and prosperous farms. A new and industrious class have settled here, some of the best of Georgia's enterprising farmers making it their home. This section now has railroad conveniences and those who want to reside on a mountain top can find here soil which will produce the finest of potatoes, anything in the line of truck gardening, beautiful grapes, peaches, apples and pears, and the best water melons on earth. There is considerable acreage here unoccupied. We, however, do not insist that the conveniences of life abound back on the Mountain as they do in the beautiful

Valley north of it, still this section has grown in villages, schools, churches, taxable wealth, more than any section we recall.

RELIGION AND SOCIETY.

It is claimed that there is a larger percentage of church membership in the Tennessee Valley than elsewhere in the South, and it is asserted by the highest authority that churches are better kept up in the Valley than in any section of the Union. The writer is scarcely an authority upon this subject further than a practical observation goes, but taking the claim of those in position to know what they are talking about, substantiated as it is by our observation, we can but conclude in line of the thinking men of the country, that virtue, good morals, good society and all the higher elements of manhood must ensue from or follow this large church membership condition. It is claimed that to be a Methodist Circuit Rider, or presiding elder in the Huntsville circuit which embraces the Valley, is to hold a position which for fine dinners, elegant places to lodge, cannot be excelled by the crowned heads of the world. This speaks well for the country, shows that good society abounds. In fact any man would do violence to his family who would locate where he could not hear a church bell ring. He can hear them in the Valley and hear them often, for our people are a law-abiding God-loving people, the class it is nice to live with and wise to die by.

Sketch of the Mineral Resources of Alabama.

BY EUGENE A. SMITH, STATE GEOLOGIST.

For the consideration of its mineral resources, the State of Alabama may conveniently be divided into two unequal parts, separated by a curving line drawn from the northwestern corner of the State around by Tuscaloosa, Centreville, and Montgomery, to Columbus, Ga. To the northwestward of this line lies the so-called Mineral Belt or District, comprising about two-fifths of the area of the state; to the southwestward is the Agricultural or Timber Belt, embracing the remaining three-fifths of the area. In the last named division the useful minerals are confined, practically, to the clays, the ochres, the marls and the phosphates, while the great bulk of the minerals of economic value are to be found in the first named division.

THE MINERAL BELT.

For our purpose we may divide the Mineral District into three regions, which are: 1, the Gold Region; 2, the Valley Region; and 3, the Coal Measures.

I. **THE GOLD REGION.**—This is embraced in a triangular area, taking in parts or all of the following counties: Cleburne, Clay, Talladega, Coosa, Chilton, Elmore, Tallapoosa, Randolph, Chambers and Lee. The mineral productions which are characteristic of this section are the gold ores, copper ores, pyrites, mica, and kaolin, corundum, and asbestos.

Gold.—In Cleburne county there are several places where a large amount of gold has been obtained in the past. The best known of these localities are Arbacoochee and Chulafinnee. At the first named place the gravels at Dine creek have yielded the greater part of the gold, but a year or two ago a quartz vein was exposed which carried a very large amount of free gold. This place is now in litigation, and nothing has been done with it since its first discovery. From the great quantity of gold obtained from the placers about Arbacoochee,

it is reasonable to infer the existence of rich veins here. In the Turkey Haven Mountain and along its flanks, are many places where some developments have been made for gold, but at none of these, at this time, is any active work going on.

In Clay county there are several localities where gold mining has been conducted with more or less success, viz., in the Goldberg district near the eastern line of Clay, bordering on Randolph; at the Franklin mines near Idaho; and at the Ivey mines in the same neighborhood.

In Randolph county is one of the oldest of the gold mines of the state, viz., the Pinetucky mine, which has been in continuous operation for forty years or more.

In Tallapoosa county we find two belts of gold-bearing rocks running northeast and southwest; 1. the Goldville-Hog Mountain belt, and 2. the Silver Hill belt. Both of these were the scenes of active mining operations before the discovery of the California gold, and at the present time some work is going on in both districts.

In the Goldville district cyanide plants have been put in operation at the Ulrich mine and at Hog Mountain, and the result has been to demonstrate beyond question that the extraction of gold by this process from comparatively low grade ores can be effected with profit. Near Hog Mountain on the site of the old Ealy mines, the Messrs. Hood have sunk a shaft and a slope and are now putting in the machinery for work on a large scale.

In the Silver Hill district some mining work has been going on for many years at Blue Hill, Gregory Hill, etc., but the recent purchase of some of these properties by parties who are intending to introduce the cyanide process, will probably soon be followed by increased activity in this district.

Across the Coosa river in Elmore and Chilton counties there are several places well known to the gold miners in the early days, and worked for gold in a small way even in recent times.

Many of the failures attending the attempts at gold mining in this State, especially after the rich placers of Arbacoochee and Chulafinnee and the Goldville and Silver Hill regions had been well worked over are to be attributed to bad management, and the use of methods which were ill adapted to the character of the ore. The success of the Hillabee Company at Hog Mountain has demonstrated in this state what the Theiss

mines has in South Carolina, viz: that with suitable methods of extraction the low grade ores can be mined and milled with profit, and we look confidently forward to the time when paying gold mines will be in operation in all of the counties named, and perhaps in others.

While small traces of gold may be found in the strata of almost all of the geological formations of Alabama (since these have derived from ancient rocks which carry the gold veins), yet it would be folly to expend any money in the search for gold outside of the region above defined, and for that matter no paying deposit of gold ore has been known to occur in the southeastern half of this region of the crystalline rocks, commonly spoken of as the gold region. All the gold worth mentioning from this region occurs to the north and west of a line passing northeast and southwest through Dadeville in Tallapoosa county. Reports of discoveries of gold mines outside of the gold region are common enough, but when sifted down they may always be shown to be based on the mistaking of iron pyrites or some other mineral for gold, or upon fraud. We have had notable cases of the latter in the Tennessee Valley, near Gunter'sville, and in the DeSoto mines on the Coosa river.

Copper.—Twenty years ago there was much interest in copper, and hundreds of test pits were made at various points in Cleburne, Clay, Coosa, Tallapoosa and other counties of this region. At only one point, however, viz: at Wood's Copper Mine, near Stonehill P. O. in Cleburne county, was any considerable amount of copper won. Here, under the direction of Capt. Adolph Thiess, work was carried on for several years, and a large amount of copper ore raised and shipped to Baltimore. These operations were carried on till all the richer surface ores had been exhausted, and the mining of the body of the vein, a superfluous pyrites, had become unprofitable because of the low grade of the ore and the difficulties of transportation. Nothing has been done here since 1876 or 1877 until about 1895, when a company has again opened up the mine and raised a considerable amount of ore, which still lies piled about the mouth of the shaft, awaiting transportation facilities.

At intervals along the pyrite belt next to be considered, the ore contains a notable percentage of copper, but this metal has

not, so far as I am aware, been profitably mined at any place except at Stone Hill and vicinity.

Pyrites.—Along the eastern flank of the Talladega Mountain there is a narrow outcrop of a green schist, which may be followed almost without interruption from Chilton county to the Georgia line. This is known throughout this section as the *Copper-lead*, although, as above stated, very little copper has been extracted from any part of it. On the other hand beds of pyrites of very considerable importance occur at several places along this outcrop. Near Gold Branch, in Coosa county, and in the vicinity of Dean P. O. in Clay county, especially the latter, mining operations of considerable magnitude have been carried on. The old Montgomery Copper Works were upon this lead, and further to the southwest the McGhee copper mine, although from neither was any great amount of copper ever obtained.

This pyrite bed has recently been reopened at Pyriton, near the site of the old Montgomery Copper Works, and the ore is now being shipped to the chemical works at Graselli and to other points. The extension of the Eastern R. R. of Alabama from Talladega to these mines has made this development a possibility.

Below the McGhee mine, and apparently not connected geologically with the copper lead, are the Hatchett creek mines, under the direction of Capt. Lewis. The Pyrite of the Hatchett creek deposit seems to be free from sand and impurities, and the same is true of that of the copper lead at many points, although in places it is mixed with quartz sand. Near Graphite, in Clay county, there is an occurrence of magnetic pyrite, which contains also a small percentage of copper.

There seems to be no reason why some of these deposits of pyrite should not, with better facilities for transportation, and especially if plants were established for the manufacture of sulphuric acid on the spot, be of economic importance. The copper ores of Cleburne county, above mentioned, might well be used in the same way, in addition to their use as sources of copper.

Pyrite is one of the commonest of minerals, occurring in geological formations of all ages, and even now in process of formation wherever the conditions are suitable. But unless it is in large bodies it is one of the most useless. As above

noted it is very commonly mistaken for gold, hence the popular name of fools' gold applied to it.

Mica.—In the northwestern part of Randolph and the adjacent parts of Cleburne and Clay, occur veins of coarse-grained granite, technically known as *pegmatite*, in which the constituents of granite, viz., quartz, mica and feldspar, usually in small grains here assume gigantic proportions, often making masses a foot or more in dimensions. From the mica boulders, as they are termed, sheets of marketable size and quality may be obtained. Mr. J. M. Phillips and others in the vicinity of Pinetucky, and at Pinetucky itself, have pretty thoroughly tested these veins, but the want of railroad facilities will for some time act as a bar to the profitable mining of this mineral. At many other places from Pinetucky towards the southwest as far as Chilton county, these coarse-grained granite veins have been tested and are known to contain mica of good quality.

Kaolin.—In these coarse-grained granite veins, the feldspar, especially above the water level, is generally far progressed towards disintegration and decay, and in many places converted into kaolin. Every locality in which the mica occurs might also be cited as a locality for kaolin, but nowhere has this material been actually mined for commercial purposes, although when the region is traversed by railroads its development will certainly follow. The northwestern part of Randolph county and adjacent parts of Clay and Cleburne are particularly rich in kaolin deposits.

Corundum and asbestos.—Some of the rocks of this region yield upon exposure to atmospheric agencies, as decomposition products, both asbestos and corundum, but in no place as yet have either of these minerals been found in Alabama in deposits of commercial value, nor does there seem to be any good reason for thinking that such deposits will be found.

Graphite.—This substance is very generally distributed among the metamorphic or crystalline rocks, and it occurs in two modes. In the feeble crystalline schists or slates which we have called the Talladega, and which in part, at least are paleozoic sediments, of as late age as the Coal Measures, the graphite is very often found as a sort of black graphitic clay free from grit and is frequently used as a lubricant. In this condition the graphite is very difficult to separate from the other

matters with which it is mixed. Examples of this mode of occurrence are to be seen near Millerville, in Clay county, and about Blue-Hill and Gregory Hill, in Tallapoosa.

In the mica schists and other fully crystalline rocks of this region the graphite is present in the form of thin flakes, or *lamellae*, and is comparatively easy to separate from the enclosing rock. This variety of graphite has been worked at several points in Clay, Coosa, and Chilton counties.

Some of the graphitic schists hold as much as 20 per cent. of graphite, but the average content is less. The belt of graphitic rocks extend from Chilton county northeastward into Georgia.

In Tallapoosa county a mile below Tallassee there is a third mode of occurrence, or perhaps a modification of the second above described. Here a belt of garnetiferous schist crosses the river in an outcrop of about 100 yards width. In this schist the graphite is found in lenses or flakes which sometimes attain a diameter of two inches. As the rock disintegrates the graphite lenses weather out and are scattered loose over the surface. The same belt or a similar one is to be seen where it crosses Wolf creek in the northern portion of Macon county.

II. THE VALLEY REGION.—This region, or rather the Coosa Valley, which is its chief division, occupies a strip some forty miles wide, running northeast and southwest between the Gold region on the one side and the Coal measures on the other. Beyond the Coosa Valley to the northwest, interpolated between the different coal fields, are the outlying valleys, Cahaba, Jones', Wills', Murphree's and Blountsville, or Big Spring Valley, with the great Tennessee Valley lying to the north and west of the Warrior Coal Field. This Valley region is the southwestern prolongation of the Valley of East Tennessee and the Valley of Virginia, and it is based generally upon calcareous or limestone rocks, though great mountain forming masses of sandstone and shale occur in it.

Associated with the limestones of these valleys are the brown iron ores and ochres, the kaolins and the beauxites, while in many of the ridges bordering, especially Wills', Murphree's and Jones' Valleys, are the great beds of red hematite or fossiliferous iron ore, upon which, in large measure, the prominence of Alabama as a producer of iron depends. Important in the manufacture of iron are also the beds of limestone and dolomite which are used as fluxes; these likewise are products of the valleys.

Brown hematite or limonite.—This most valuable ore of iron is found in largest quantity in the Coosa, Murphree's and Jones' Valleys, though deposits of it also occur in the Tennessee Valley, notably in the vicinity of Russellville in Franklin county.

Some of the most important of these ore banks are to be found about Baker Hill, Bluffton, Rock Run, Langdon City, etc., in Cherokee county; near Piedmont, Jacksonville, Aniston, Talladega, Ironaton, in Calhoun; near Shelby and Montevallo in Shelby; about Tannehill and Woodstock near the borders of Jefferson, Bibb, and Tuscaloosa counties; and near Oneonto in Blount county. This ore has been worked at the places named, but there are numerous other localities where the ore is known to occur in quantity, though as yet undeveloped.

Ochre.—In connection with some of the banks of brown ore, are beds of yellow and red ochre, none of which, however, in Alabama, have come into notice by actual use. There is one bed of red ochre of remarkably fine color and measurably free from impurities, near Talladega, from which a considerable quantity has been obtained by way of samples, but as yet not for commercial purposes. The price paid even for the best ochres is small, and this circumstance has deterred the owners of ochre beds from making any expensive developments in this direction.

Kaolins and Porcelain Clays.—Associated with the brown iron ores in Cherokee and Calhoun counties, there are some beds of soft white clay very closely approaching kaolin in composition and quality. These have not as yet been utilized in the manufacture of fine stone ware, though apparently well suited thereto both in regard to quantity and quality.

Near Valley Head in DeKalb county there is a bed of hard white porcelain clay, close to the mineral *halloysite* in composition, which has been worked for a number of years. Some china ware made from it has taken prizes at many of the exhibitions of recent years. This is the best known and most thoroughly tested of any of the deposits of fine clay in the State. In the Tennessee Valley near the Mississippi line there are great beds of white clay which have also been used in the manufacture of fine stone ware as well as of fire brick and tiles, but there is no systematic work now being carried on at any place in this section.

Bauxite.—At this time, bauxite, which is the ore of aluminum, is known to occur in this State only in DeKalb, Cherokee, Calhoun and Talladega counties. Near Rock Run in Cherokee are located the main mines of this mineral in the United States, which lie mostly in Alabama though partly in Georgia. This locality furnishes practically all the bauxite now mined in this country. It is in very close association with the banks of brown iron ore and kaolin or white clays already mentioned.

In Calhoun county several occurrences of bauxite have been discovered, but they have not been opened up and the quality of the bauxite is therefore unknown. In composition this mineral is essentially a hydrated oxide of alumina, corresponding to the hydrated oxide of iron, which constitutes the brown hematite iron ore. Most of the bauxite sent from this State is used in the manufacture of alum, and not for the manufacture of the metal aluminum.

Red Hematite Ore.—This, the most important ore of iron in this State, occurs in beds of varying thickness and of varying degrees of purity in the Red Mountain ridges which are found usually on both sides of the long narrow valleys which lie to the northwest of the Coosa Valley, *i. e.*, in Wills', Murphree's, Jones' and in some small degree in the Cahaba Valley. The ore is very unevenly distributed along these ridges, being at some points near Birmingham over thirty feet in thickness, but dwindling down to inconsiderable dimensions both towards the northeast and the southwest. In similar way the red ore ridges on the two sides of the valleys are seldom of equal value. The main localities along the Red Mountain ranges where the ore is mined are in the vicinity of Birmingham and Bessemer, where for several miles mining operations are practically continuous. Here the ore is also at its thickest, being in places over thirty feet thick, though at this time only a fourth or a fifth is mined, the rest being too high in silica for profitable use at the prevailing low prices of iron. In time, however, and probably at no distant date, the whole of this immense bed of ore will be utilized, since experiments recently carried out by the Tennessee Coal and Iron Company have practically demonstrated the fact that by the use of magnetic concentrators, after first rendering the ore magnetic by heating it in a furnace in contact with producer gas, the low grade ores can be so far freed from silica as to make them available.

Another important center of red ore production is about Attalla and Gadsden, but the ore is also mined at intervals between Springville and Attalla, and all along Wills' Valley, from Attalla to the Georgia line, and also east of Lookout Mountain, at Round Mountain and near Gaylesville.

The red ore is now, and probably always will be, the main dependance of the iron makers of the State, though a certain proportion of the brown ore is always desirable, and, so far as I am aware, always added in making up the furnace burdens. Some of the furnaces in the Coosa Valley region, Shelby, Ironaton, Tecumseh, Rock Run, etc., use the Brown ore exclusively.

"Gray" or Magnetite Ore.—This ore occurs in Talladega county near Sylacauga, and though its existence has been long known, the great extent of the deposits and the richness of some of the ore have only recently been demonstrated. The ore occurs in several stratified seams of variable thickness, aggregating in some places more than 100 feet. The ore is really a *hematite* with a slight admixture of the magnetite and it is associated with the Weisner quartzite of the Cambrian formation.

The furnaces at Ironaton have demonstrated by practical tests the value of this ore which often runs as high as 40-50 per cent of metallic iron. The ore being also a *siliceous* ore acquires thereby an additional value in furnace practice. The vast quantity of available ore thus added to our resources insures the pre-eminence of Alabama in this connection for many years to come.

The Fluxes.—Until recently the rock universally used as flux in our furnaces has been limestone, either of the Lower Silurian (Trenton) formation, of the Mountain Limestone division of the Sub-carboniferous; the principal quarries of the first named being at Gate City and near the Shelby Iron Works, and of the second at Blount Springs, at Trussville; and near Village Springs. These limestones are quite pure, *i. e.*, free from silica, and of reasonably uniform quality. Recently, however, in the vicinity of Birmingham, quarries have been opened in the dolomite or magnesian limestone of the Lower Silurian formation, and this rock has been gradually coming into use in some of the furnaces instead of limestone.

Lead Ore.—The only occurrence of galena of any consequence thus far known in Alabama, is in the Trenton limestone about five miles west of Jacksonville, in Calhoun county, where much work was done by the Confederate government during the Civil war. Traces of the old quarries are still to be seen, and fairly good specimens of the ore may be picked up around them. With the present perfected machines for concentrating ores it would seem that this deposit might yet be profitably worked, if only the quantity of the ore were sufficient to justify the erection of suitable plant. This can be ascertained only by the expenditure of much money. Very much of the lead ore of Southeastern Missouri is no richer than some which can be obtained from the Calhoun county mines. The subject is well worth testing, and attention is now being directed to this deposit.

Some small veins with galena have also been observed in the Knox Dolomite.

Loose pieces of pure galena may be found on the surface over the entire state, in localities where it could not possibly be in place. The fact that similar occurrences are noted in all the other states adjacent, has led to the inference that these loose specimens have been dropped by Indians and others who have brought them from Missouri or other lead-producing states. There is not a county in Alabama where there is not a tradition of a "lead mine," said to have been worked by the Indians or early settlers, and the details of these traditions are infinitely varied.

Materials for Portland Cement.—The Trenton limestone and the subcarboniferous shales are now coming into use in the manufacture of Portland cement. Plants are in course of erection at Leeds and at Ragland for this important industry.

III. THE COAL MEASURES.—The Alabama coal fields were named long ago by Prof. Tuomey, from the streams which drain them, the Warrior, the Cahaba, and the Coosa. The Warrior field is still further divided into a Plateau region and a Basin region. The Plateau region extends from the Georgia and Tennessee line down toward the southwest as far as the meridian of Birmingham, while the basin proper includes that part of the field lying beyond this meridian towards the south and west. The Lookout Mountain, while draining into the Coosa river, has most of the characteristics of the Plateau di-

vision of the Warrior field, *i. e.*, its coal beds are chiefly the lower beds of the series, and are elevated above the general drainage level of the bordering valleys.

Coal.—Bituminous coal and the coke made from it are about the only mineral products of the Coal Measures in Alabama, though in other states black band iron ore, clay iron stone, and five clays are obtained from this formation. These materials are well known to occur at various points in our coal fields, but they have not yet come into commercial use.

At the present time there is very little coal mined in the Plateau region of the Warrior field or in Lookout Mountain, though workable seams, which have at times been mined, occur in both.

Between Murphree's Valley and the Coosa Valley there is a long narrow field called the Blount Mountain, which partakes of both plateau and basin characters. In this field there are several good seams of coal at this time in a fair way of being opened up on an extensive scale. The main basin of the Warrior field is now the chief producer of Alabama coal, and large collieries are in operation at many points in Jefferson, Walker, and Tuscaloosa counties.

Mining operations in the Cahaba field are now mainly grouped about four or five points, *viz.*, Henry-Ellen in the upper part of the field, and Helena, Montevallo and Blocton in the lower part.

In the Coosa field work is confined to the vicinities of Ragland and Coal City.

The coal from all three of the Alabama fields makes coke, the quality of which has been too well demonstrated by years of actual use to need any comment. The most extensive coking plants in the state are in Birmingham, Bessemer, Coalburg, Pratt City, Johns, Brookwood, Holt, Blocton, Ensley, Thomas, and Woodward's, but smaller plants are to be found at most of the mines not here enumerated.

In addition to the above described productions of the mineral regions, we may speak in general terms of materials for building and ornamental purposes, and for construction, which occur in the various divisions of this region.

There is, of course, no lack of good building stone in nearly all parts of the mineral district, but it is in most places quarried for local use only. The localities are too numerous to

be enumerated, but a few may be specifically named where quarries and dressing works have been regularly opened.

Granite.—In the Gold Region there are many occurrences of good granite, but so far as I am aware, it has not been quarried in any systematic way anywhere, though it has been utilized along railroad lines traversing this region in building culverts and other rough structures.

Sandstones.—The Coal Measures furnish all the sandstones as yet used in Alabama for purposes of construction, and dressed stone is furnished from Cullman, from the Jasper Stone and Coal Company at Jasper, and at Tuscaloosa sandstone quarried and dressed on the spot has been used in the construction of the three magnificent locks recently built there by the United States Government.

Limestones.—In all the Valley Region, limestones are common, and from two of the formations already alluded to as furnishing material for fluxes in the iron furnaces, viz: the Lower Silurian and the Sub-carboniferous, have also yielded rock for building purposes. The best known quarries are those of the Brothers Fossick in the Tennessee Valley, near Sheffield. The Government locks at Muscle Shoals on the Tennessee River are built of the same material. The Trenton limestone has also been extensively used in the construction of some of the locks on the Coosa River below Greensport.

Marbles.—This name has been applied to crystalline limestones and also to any form of limestone which takes a good polish and which may be used for ornamental purposes. White crystalline marble exists along the northwestern border of the Gold Region, and at several points, notably about Taylor's Mill and near Sylacauga in Talladega county, it has been quarried to some extent in the past.

After many years of neglect this marble has recently been brought into notice and the quarries about Sylacauga have been reopened on a large scale and a great and growing industry has been established. In its best varieties this marble is of pure white color, of even fine grain, and equal to the finest of the white marble imported from Italy. Some parts of it are beautifully clouded and specially adapted to ornamental work, as may be seen in many of the fine buildings now in course of construction in Birmingham and elsewhere.

The fitness of the white granular variety for statuary has been amply demonstrated by the Italian sculptor, Moretti, who uses it in his work to the exclusion of the imported material.

Of the non-crystalline marbles we have a goodly variety, though our resources in this, as in so many other particulars, are practically undeveloped. Much of the limestone quarried for building purposes in the Tennessee Valley by Messrs. Fossick & Co., takes a good polish, and might well be used for ornamental purposes. In Jones' Valley, a few miles below Bessemer, there is an occurrence of limestone of Trenton age, which is beautifully variegated with reddish spots and streaks. Small pieces of this, taken from the surface outcrops, have been dressed and polished and show as beautiful markings as the most valued of Tennessee marbles, which it entirely resembles. Near Pratt's Ferry in Bibb county, a few miles from Centerville, there are immense bluffs of limestone forming the river banks for a mile or two. Much of this rock is variegated in color, takes a fine polish and makes a beautiful marble. The quarries which have been opened on this rock are far from railroads, and hence have not been worked on any extensive scale.

Near Opelika, in Lee county, there is a quarry in a white crystalline dolomite or magnesian limestone, which would undoubtedly take a good polish and be of use as a white marble, but it has never, to my knowledge, been used for any other purpose than for lime burning.

Material for Lime Manufacture.—Any of the Limestones and marbles above named may be used for this purpose, and the lime kilns of the state utilize nearly all of them. The main lime furnishing formations are the Trenton, about Longview, Siluria, Calera, etc., in Shelby county, Rock Springs in Etowah county, and the Crystalline dolomite at Chewacla Kilns in Lee county; but lime has been made at many other localities.

THE AGRICULTURAL AND TIMBER DISTRICT.

As stated above, about three-fifths of the area of the State are here included. This part of the State holds very little of what are usually included among the mineral resources, yet from one point of view it is of equal importance with the

Mineral District. It is the main farming region of the State and contains besides a good proportion of the timber resources. The only mineral products likely to be of economic importance are the *clays*, *limestones for Portland cement*, *ochres* and the *marls*, including the phosphatic marls.

Clays and Ochres.—Along the line which divides the Mineral from the Agricultural districts, are some important deposits of clays which have the same physical characteristics as well as the same geological position as the clays of New Jersey, which have a world-wide reputation. As yet there are no openings in these clays except in one or two places, near Woodstock in Bibb county, near Coosada in Elmore, about Tuscaloosa, and a point or two along the Kansas City road in Fayette and Lamar. At best very little has been done towards proving up the quality of the clays. Those taken from near Woodstock are sent to Bessemer for mixing with imported clays in the making of fire-brick. Several days ago the clays from the vicinity of Tuscaloosa were used in the manufacture of wares of various kinds. There are also similar pottery works in Fayette and Lamar counties, but the systematic and thorough proving of the capabilities of these clays remains yet to be done. Near Coosada station on the L. & N. R. R., not far north of Montgomery, clay has been worked for several years and, along with the clays, a yellow ochre.

In Bulletin No. 6 of the Geological Survey will be found a fairly adequate account of the clays of the State by Dr. H. Ries of Cornell University, one of the leading clay experts of the country.

Marls and Phosphates.—Along both the northern and southern border of the Prairie region or Black Belt of the central part of the State, where the limestones come in contact with the sandy lands, there are beds of phosphatic marl averaging some five or six feet in thickness, and having a percentage of phosphoric acid running up as high as 5 per cent.

These marls are precisely like those of New Jersey, both as to chemical and physical qualities, and as to geological position, and there is no reason, except the apathy of our farmers, why these marls should not in Alabama work the miracle that they have in New Jersey, *i. e.*, turn our wornout fields into garden spots. Some little testing has been done at Coatopa,

and at Furman, and at Eutaw, but nothing adequate. A test with these marls to be worth much should be made on a large scale, and the lands should receive a heavy dressing as they do in New Jersey. With such a dressing once applied the fields will certainly show the effects for years to come.

There are many other parts of South Alabama where good calcareous marls occur in great quantity and are easy of access, especially along the rivers, at Prairie Bluff, Claiborne, on the Alabama, and at Nanafalia and Ward's Bluff on the Tombigbee, but it is very doubtful if our farmers will ever be brought to see the value of these marls, or induced to give them a fair trial.

Chimney Rock.—In many places in Choctaw, Clarke, Washington and other lower counties of the State, there is a bed of soft white limestone which is used wherever it occurs as material for chimneys, pillars, and similar rough work. This rock when somewhat protected from the weather is fairly durable, but exposure to frost causes it to crumble. The same rock underlies a large proportion of the peninsular of Florida and finds similar application there.

Materials for Portland Cement Manufacture.—The Trenton limestone and carboniferous shales of the Mineral District have already been mentioned in connection with the Portland cement industry.

In the Agricultural District of South Alabama there are two limestone formations which furnish most excellent material for cement, viz: the Selma Chalk or Rotten Limestone of the Cretaceous and the St. Stephens limestone of the Tertiary. In close proximity to each of these limestones are clays of suitable composition and in sufficient quantity.

A six-kiln plant for the manufacture of this cement has been in successful operation in Demopolis for a number of years; all the materials being obtained on the spot. Arrangements are now in progress for the erection of a similar plant at Epes on the Tombigbee river where the same rock occurs. Much of the limestone of the Selma chalk belt has very nearly the cement composition naturally, and requires very little addition of clay. It is present in practically unlimited quantity over a very great extent of country from the Mississippi line eastward.

Up to the present time no developments have been made of the St. Stephens limestone in this connection, but as it is a very pure limestone soft and easily crushed and in great quantity along the rivers and railroads, it seems to be only a question of time when it will come into use.

Bulletin No. 8 recently issued by the Geological Survey contains many analyses of the raw materials for cement manufacture from all parts of the State, together with references to the occurrence and an account of the manufacture of this most important product.

GEOLOGICAL REPORTS.

The reports of the Geological Survey, which give details concerning the mineral resources above enumerated, are, so far as they still remain on hand, the following:

On the Gold Region.—Bulletin No. 3, on the Lower Gold Belt of Alabama, by Dr. Wm. B. Phillips; Bulletin No. 5, on the Upper Gold Belt, by W. M. Brewer, Eugene A. Smith and others.

On the Valley Region.—Reports of Progress for the years 1875 and 1876, dealing with Jones' Valley chiefly. Report on Murfree's Valley, by A. M. Gibson. Report on Iron Making in Alabama, by W. B. Phillips. Report on the Valley Regions of Alabama, Part I, Tennessee Valley, by Henry McCalley; Part II, dealing with the Coosa and other Valleys.

On the Coal Measures.—Report on the Cahaba Coal Field, with map and illustrations, by Joseph Squire; Report on the Plateau Region of the Warrior Field, by Henry McCalley; on the Blount Mountain Coal Field, by A. M. Gibson, on the Coosa Field, by A. M. Gibson, and on the Warrior Basin, by Henry McCalley.

On the Agricultural District.—Report on the Coastal Plain of Alabama, by Eugene A. Smith and others.

Bulletin No. 8 on the Cement Resources of the State, by Eugene A. Smith and E. C. Eckel.

Index to the Mineral Resources of Alabama, by Eugene A. Smith and Henry McCalley.

These reports will be sent to any one desiring further information on the subjects treated in them, and a full list of the publications of the Survey may also be had upon application to the State Geologist at the University of Alabama.



VINEYARD AT THORSBY, CHILTON COUNTY.



SCHOOL GARDEN AT WETUMPKA, ELMORE COUNTY.

ALABAMA'S INVITATION.

If, for any reason, you are contemplating a change of residence and wish to come to Alabama, leaving the rigors and shivering winds of your present abode, and are seeking a more congenial and pleasant place of residence, your earnest attention is invited to the many advantages that Alabama can offer you.

The story of Alabama's growth and rapid progress in the past decade is one of real, every-day, practical life, and does not need the touch of the artist's pencil or the imagination of some extravagant writer to attract those who are acquainted with it; to you who do not know the wonders it possesses and what it offers, these few pages are dedicated. The value of all classes of property has increased many fold, and the population has grown so rapidly that it is almost like a fairy tale to hear of it, and to contemplate the wonderful transformation that has been made. In all branches of industry, in all trades and professions, the busy, bustling air that has pervaded her people, has pushed aside all drones and idlers, and life and activity are the watchwords.

Are you in search of a milder climate and desire to come where you can spend the whole or most of the year in the open air in comfort, and escape the cold of winter and the dangers of the heat and the hot, scorching suns of summer? If you do, just what you want can be found in Alabama. Situated as it is on about half-way ground between the freezing and heating points, we have an equitable and salubrious climate—not too cold in winter nor too hot in summer, where the thermometer scarcely ever gets to the freezing point, and where there is ice not more than a dozen times during the year, and where sun-strokes are unknown, the cool breezes of the Gulf fanning away the dangers from that source. Here in Alabama we have the purest and most delightful drinking water; mild and pleasant weather all the time, and health and happiness assured; laws that are just and fair to all alike, and

the enjoyment of life, liberty and property absolutely made secure to all; churches and school houses in every neighborhood and society, not only thoroughly established, but its rules strictly observed as to the vicious and the outcasts.

THE SITUATION.

The geographical situation of the State can be seen at a glance at the map,—in the Southeastern portion of the United States. It is bounded on the north by Tennessee; on the east by Georgia; on the south by Florida and the Gulf of Mexico; and on the west by Mississippi; lying between latitude 30.10 and 35 north, and longitude 84.53 and 88.30 west. The length of the State is 336 miles, and its breadth 200 miles, with an area of 52,250 square miles; 710 square miles being water surface. There are 32,460,080 square acres, with four grand divisions, viz.:—cereal, mineral, cotton, and timber belts. In the northeast and center of the State is situated the Allegheny Mountains, which cause the water-shed in the northern portion to empty into the Mississippi through the Tennessee River, while those below the range of mountains flow into the Gulf of Mexico. The Cereal Belt is in the northwestern portion of the fertile Tennessee Valley; the Mineral Belt lies to the south of the first, consisting of more than one-third of the total area, and having vast and inexhaustible deposits of minerals, the development of which has opened new and valuable industries; the coal fields cover an area of 8,000 square miles, with beds of rich ore which rival any in the world, and there are also boundless supply of limestone, sandstone, white marble, soapstone, flagstone, graphite, and granite; then comes the Cotton Belt, made up of broad, rolling prairies, diversified by timber lands, and abundantly supplied with water; it is composed of one-third of the total area, and possesses a stiff, black, fertile soil, and is the most productive portion of the State and of the South; then, last is the Timber Belt, which is nearly fifty miles in width and has a uniform surface slightly above the level of the Gulf. The prevailing growth is the yellow, or long leaf pine, but there is also oak, cypress, hickory, beech, magnolia, walnut, sweet gum; all of which are inviting the investor and the capitalists, and the home-seeker to come and develop them, and make their homes, and aid us in bringing them

into full blossom and use, for which Nature intended and gave them to us.

The climate is ideal, and the State is as free from diseases, from local climatic causes, as is any portion of the country. The death rate last year for the whole State was amazingly small, and epidemics were unknown. The summers here are long, but not as oppressive as in higher latitudes, there being almost continual refreshing breezes from the coast. Miasma is found only in the low, bottom lands, where fevers are little known, but the rosin in the pine belt have a most soothing and healthful effect. The mean temperature in the northern part of the State is 75 in summer, and 42 in winter; and in the central part 81 in summer, and 49 in winter; while in the southern portion it is 80 for summer and 52 for winter; the average rainfall is 52.5 inches, and there is not much variation in the different sections.

THE WEATHER.

The weather reports give figures and facts that are not disputed. The snowfall for the year is very small—an inch or two for an entire season being very rare. Read the following figures and compare with reports for your own section.

For the month of June for 34 years the weather has been as follows:

Temperature.—Mean or normal temperature, 80. The warmest month was that of 1897, with an average of 83. The coldest month was that of 1884, with an average of 76. The highest temperature was 100, on 27th, 1881. The lowest temperature was 48 deg., on 1st, 1889.

The earliest date on which first “killing” frost occurred in Autumn, October 21st. Average date on which first “killing” frost occurred in Autumn, November 8th. Average date on which last “killing” frost occurred in spring, April 5th.

Participation.—(Rain or melted snow.)—Average for the month, 4.46 inches. Average number of days with .01 of an inch or more, 12. The greatest monthly precipitation was 11.05 inches, in 1876. The least monthly precipitation was 0.90 inches, in 1880. The greatest amount of precipitation recorded in 24 consecutive hours was 4.20 inches, on 12th and 13th, 1884.

Clouds and Weather.—Average number of clear days, 8; partly cloudy days, 13; cloudy days, 9.

Wind.—The prevailing winds have been from the southwest. The average hourly velocity of the wind is 7 miles. The highest velocity of the wind was 54 miles from the northwest.

THE STATE'S RESOURCES.

The taxable property of the State has most perceptibly increased in the past five years, and now the real estate is made up of 31,804,153 acres of land, and city lots and homes valued at \$179,959,552; personal property, valued at \$127,693,112; with a total valuation of \$307,643,704, paying a tax of \$770,743.14. The wagons are valued at \$1,623,409; mechanical tools, \$269,309; there are 95,091 sheep, valued at \$152,252; 44,198 goats, valued at \$28,706; cattle, 176,840, valued at \$1,648,769; horses, 96,793, valued at \$28,755.44; mules, 131,774, valued at \$8,093,786; studs, jacks and jennies 1,167, valued at \$105,478; hogs, 19,858, valued at \$40,113. The tax rate is comparatively low, ranging from 75 cents on the hundred in 1876, to 65 cents on the hundred now, that being the maximum constitutional limit. That for general purposes is now only 25 cents on the hundred, the balance being made up in special appropriations for the public schools, pensions, etc.

THE MINERALS.

Alabama is third in iron ore production among the States of the Union. In 1902 the product was 3,574,474 long tons, which was a little over 10 per cent. of the iron ore mined in the United States; valued at the mines at \$1.10 per ton, or \$3,936,812. There are 42 coke furnaces and 6 charcoal furnaces in operation; charcoal furnaces gradually going out of blast. In pig iron production, the State ranks fourth; this high rank is due greatly to the close proximity of the ore, the stone, and the coal needed for the production of the iron.

The mineral region of the State is being rapidly developed, and explorations show the resources of this section to be almost without limit. The smoke from the smokestacks and the glare from the furnaces show that life and activity have again sprung up, and that man is fast taking advantage of

SCENES ON ALABAMA RIVER.





STEAMBOAT ON ALABAMA RIVER.



ALABAMA RIVER SCENE.

the great wealth nature has placed at his disposal. There are vast beds of iron ore, and coal measures of great thickness which underly the entire central portion, with a maximum thickness of 4,000 feet—11,700,733 tons produced in 1903, valued at \$15,000,000, placing the State fifth among the coal producing States; 12,876 miners and 5,230 day men being employed. The coal is of that bituminous character so well adapted to the purposes of industries requiring steam power, all of which make the cheapest iron-making region in all the world. There are also large deposits of lead ore, magnese, mica, graphite, phosphates, slates, granite, limestone, marble, ochre, carbonate of lead, calc-spar, and sulphate of barytes. Marble quarries are very extensive, the best marble being found in Calhoun and Talladega counties, and on Cahaba River. There are the white craystalline, with shades of green; full colored with organic remains; there are also iron mineral springs to be found.

The coke production in 1903 was 2,568,185 tons. Clays and cements, and chalk also abound. Gold has been found in northeast counties, and is being mined. Copper is also found.

THE TIMBER.

The entire wooden area consists of more than 38,000 square miles, nearly three-fourths of the total area; the great Southern pine belt traverses the State from east to west, streams being utilized for floating timber to market. A recent estimate places the standing timber fit for market at twenty-one million feet. Besides the pines in the Southern low lands, there are the bald black cypress, live oak, water oak, magnolia, hickory, beech, walnut, sweet gum, cedar, and other trees. In the northward, the long leaf pine is less common, there being red and black oak and chestnut, locust, and hickory, with the scrub pine. In the Tennessee Valley are to be found elm, walnut, beech, white poplar, and tulip trees.

AGRICULTURE.

Alabama is strictly an agricultural State, and upon farming is its foundation structure. The land surface is employed 60 per cent. in farm lands; the value of farm property ex-

ceeded \$179,000,000 in 1900. Negroes owned or operated 94,000 farms, representing one-fourth of the entire value. Elevation controls the soil and vegetation of the different sections. The Tennessee Valley has a deep, red, calcareous soil; the mineral belt a red or gray loam, with a heavy clay subsoil; the cotton belt the deep black loam, and besides cotton, are well adapted to corn, tobacco, wheat, potatoes, and green forage for cattle. The last census puts Alabama fourth among the cotton-producing States, with 511,900,000 pounds of cotton, valued at \$43,768,000; which, with cotton seed, \$7,808,000; a total of \$51,756,000. Cotton is grown in every county, and 35 per cent. of improved lands is devoted to its cultivation. Corn is the most important cereal, 90 per cent. of the area devoted to grain being given to it. The hay, sweet potatoes, sugar-cane, rice, oat and wheat crops are also of much importance. Rice is now being extensively raised in the southern portion of the State, and is an industry that is rapidly on the increase.

MANUFACTURING.

Manufacturing enterprises are coming to the raw material, and they find it in the fields and forests and beneath the surface in Alabama. From 1890 to 1900 there was a gain of nearly 90 per cent. in manufacturing establishments, and in 1900 there were 5,600 in the State, where less than 3 per cent. of the population is employed. The gross value of manufactures was nearly \$83,000,000, of which leading industries showed an output of 80 per cent., or \$67,000,000; pig iron is the main product of iron and steel, and in 1860 the value of the pig iron output was less than \$65,000; in 1880 it was \$1,405,000; and in 1900 it had reached the enormous amount of more than \$13,465,000, supplying most of the pig iron used by English manufacturers. Alabama is the largest producer of foundry iron, making railway cars and car wheels, cast iron pipes, stoves, engines, and boilers. In 1900 Alabama had more than one-tenth of the whole number of active blast furnaces in the United States. The annual cut of lumber is several hundred million feet; Mobile exporting 140,000,000 feet alone. The tanning and finishing of leather has increased tenfold in the past ten years, and Alabama is destined to be one of the fore-

most manufacturing States in the near future. Commercial fertilizers are also one of the leading industries, being manufactured in large quantities to meet demands of cotton growers.



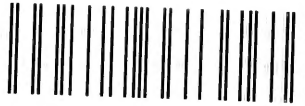
COTTON.

Cotton is the main crop, and is grown over the entire State; the State has 56 cotton mills, 25 of which make cloth of some kind, the remainder being confined to making of yarn; the value of the cotton mills is nine and a half million dollars, employing six thousand laborers, their daily wages being about \$3,900, or \$1,200,000 a year. The mills of the State spin about three hundred thousand bales of cotton, of which one hundred thousand bales are made into cloth. The manufactured cotton products are valued at \$28,000,000 a year. If the total crop of eleven million bales were manufactured here, the total value would be increased to over one hundred million dollars; bringing forty million dollars more into the State than now comes from the sale and manufacture of the staple in Alabama. The quality of the staple made here is good, and commands the highest market prices.





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