THE RICH KINGDOM OF COTTON

THE DOMINANT INDUSTRY OF THE WORLD—THE VALUE OF THE CROP TO SOUTHERN FARMERS LAST YEAR TWICE THE WHOLE WORLD'S PRODUCT OF GOLD—ITS EXPORT VALUE HALF THE VALUE OF ALL OTHER AGRICULTURAL PRODUCTS, VEGETABLE, ANIMAL, AND FOREST COMBINED—THE STORY OF COTTON FROM PLANTING TO MANUFACTURE—THE SOUTH'S RAPID INCREASE IN PROSPERITY, AND THE MEANING OF IT

BY

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O plant, unless it be wheat, is of so much importance to the human race as cotton. Destroy any fruit in the world, and men would grow other fruits. Let any tree become extinct, and other trees will take its place, and our building would go on as before. Even if either corn or wheat should grow no more, we could grow enough of the other, supplemented by rice, oats, barley, rye, peas, beans, and the like, to feed both man and beast with comfort. But for cotton there is no substitute that can be cultivated cheaply on a large scale—no substitute, animal or vegetable product, which can compare with it for cheapness.

Nor is there any plant with a history more marvellous or more romantic-more suggestive of the legend and mythology of the Orient from whence it came. If Frank Norris had lived in the South instead of in California, what an Epic of Cotton he might have given us! Cotton, whose influence did most to bring us an alien race from Africa, and then did most to perpetuate in America the institution of slavery; Cotton, on which a "Dixie Land, the Land of Cotton," once built its hopes, while it waged a great war; Cotton, which helped the vanquished people to their feet again, and now bids fair to restore them to the proud position in wealth and industry which they held before the Civil War.

THE ENORMOUS VALUE OF THE COTTON CROP

It is hardly too much to say that cotton is now the basis of the dominant industry of the world. In their primary forms, iron and steel products represent a value of only \$1,700,000,000 yearly, while the estimated value of the world's annual output of cotton goods is \$2,000,000,000. Twice as much cot-

ton as wool is produced, and three-fourths of the world's cotton supply is grown in the southern section of the United States. Twice the world's total gold product of last year would have been required to pay southern farmers for lint and seed; three-fourths of the capital stock of all the national banks in the country would have been inadequate. Among our American export crops, cotton towers preëminent with \$350,000,000 in value for the year ending June 30, 1903 (1904 would make a better showing), against less than \$600,-000,000 for all other agricultural exports. In other words, take all other animal and vegetable products exported any year-wheat, corn, barley, oats, rye, flour, meal, oatmeal, fruits, vegetables, liquors, tobacco, wine; cattle, hogs, horses, sheep; beef, pork, mutton; butter, cheese, canned goods, lard, oils, wool; timber, lumber, naval stores, etc.—the entire contribution, except cotton, furnished the outside world by every American farm, ranch and forest, from Maine to California, from Michigan to Texas, from Alaska to Hawaiitake all this, and, with the proceeds of one year's cotton and cotton-seed exports, and a safe mortgage given on the next year's, the southern cotton-grower could buy the whole colossal aggregation and still have a surplus of more than \$100,000,000 left as pin-money and as a margin of safety for the mortgagee.

WHAT COTTON MEANS TO THE SOUTH

For, much as cotton means to the United States, and much as it means to the world, it means infinitely more to the twelve States and Territories of the South, in ten of which it is the chief farm product. Here cotton is the life-blood of commerce, its condition the thermometer of trade. Every man talks cot-

ton; every man has an opinion about the size of the crop; the weather conditions in Texas and throughout the Cotton Belt are subjects of general interest; the government crop report is read with closer attention than anything else in the newspapers. Well and truthfully did Henry W. Grady say in his tribute to the cotton plant:

"The sun that shines on it is tempered by the prayers of all people. The shower that falls whispering on its leaves is heard around the world. The frost that chills it and the dew that descends from the stars are noted, and the trespass of a little worm on its green leaf is more to England than the advance of the Russian army on her Asian posts."

When cotton prices drop, every southern man feels the blow; when cotton prices advance, every industry throbs with new vigor. For the last five crops the South has received nearly \$800,000,000 more than for the preceding five crops—nearly twice as much money as is invested in all our American For the crop of 1903 alone she cotton mills. received \$325,000,000 more than for the crop of 1898—a sum which, if equally divided, would give a surplus of \$225 to each of the 1,418,000 farms growing cotton, or \$20 each to every one of the 16,000,000 inhabitants of the Cotton States. Small wonder that southern railways report heavier increases in earnings than lines in any other section of the country. Small wonder that the assessed valuation of southern property is now increasing three times as rapidly as in the decade 1800-1000. Small wonder that bank deposits in the southern States from 1896 to 1903 increased 153 per cent., while the increase for the rest of the United States was only 90 per cent.; and a preliminary statement, which the Comptroller of the Currency has just sent me, shows that the increase during the last twelve months has been more than two and one-half times as rapid in the South as in the rest of the country.

It is, in fact, a new South that we have. The factory, the bank, the church, the school, the newspaper—all are benefited by the increase in prices paid for the South's great staple crop. The architect will tell you that he is building better houses than ever before; the furniture dealer will tell you that he is shipping more furniture than ever before; the manufacturer of implements and machinery will acknowledge that southern progress astounds him; the schools report greatly

increasing numbers of pupils; and even the preacher says that, for once, his salary is paid promptly and in full, and that a sermon on foreign missions is now unprecedentedly effective.

The social changes that prosperity will bring will remodel southern life. It will restore the country life again to its dignified place of the old time. For years, the countryman has been in the townsman's debt. Now the farmer has money to lend. This will, in time, bring a complete social change.

"If cotton brings about 10 cents for the next ten years," said a thoughtful business man in North Carolina to me the other day, "the South will again become, as it was before the war, the most prosperous section of our country. I know of no industry in the world that will yield larger returns, in proportion to the capital and the intelligence required, than cotton-growing at 10 cents a pound."

And the price bids fair to remain near the 10-cent mark. Excepting the two periods 1840-50 and 1891-1901, it has never been less. If a 5,000,000-bale crop, in 1859, was marketed at 11 cents, why should not a 12,000,000 crop now bring 10 cents? With the increased demand for labor from railways and factories, there is now little prospect of pushing the production beyond 12,000,000 bales.

But before we begin a discussion of the larger cotton problems, it may be well to follow briefly the story of a cotton plant.

HOW COTTON GROWS

Cotton is planted throughout the South just as soon as danger of frost passes, this time varying from March 10th in Texas and Louisiana to May 1st in North Carolina. Except in Texas, the guano bill is enormous, commercial fertilizers costing North Carolina cotton growers alone nearly \$5,000,000 each Of late years there has been more season. improvement in methods of planting than in any other phase of cotton farming. Formerly, one man and one horse opened the furrow; another man strewed the fertilizer; another man dropped the seeds; and another man with a horse covered them. Now one machine, with one man and one horse, does all this work at once. A few days after planting, the long green line of two-leaved plants in each row begins its battle with grass—a long, thin line, for the cotton seeds are dropped only one inch

apart, though later the plants are thinned out so as to stand 12 inches apart. Cotton begins to bloom when the plant is from five to eight weeks old-beautiful white blooms the first day, pink the next, and the third day comes the tiny green boll. Opening gradually, the boll shows four or five distinct lobes of cotton. Picking or harvesting begins in August in Texas and in September in the latitude of North Carolina. This work must be done entirely by hand labor, just as it was done in India a thousand years ago. In this part of the South, from 40 to 50 cents per hundredweight is paid for picking, while in Texas as much as one dollar is sometimes paid. At seventy-five cents per hundredweight of seed cotton—two-thirds of the weight being seed and one-third lint or fibre—the cost of picking is 21 cents per pound of lint, and this, a few years ago, was more than one-third the selling price. Now, however, the seeds sell for enough to pay the entire expense of picking.

Three acres is considered a fair day's plowing, and the following account, given me by a farmer, will indicate the work required in cultivating this area:

THE COST OF CULTIVATING THREE ACRES
To break ground \$3.00
To open rows
To 3 sacks guano 6.00
To scatter guano
To make ridges 1.00
To plant 1.00
To seed
To three hoeings
To four plowings 4.00
To picking 1,800 pounds 6.00
To hauling 2.00
To ginning 2.00
\$31.25
By 600 pounds lint @ 9c \$54.00
By 36 bushels seed 9.00
Selling price
Cost
Profit\$31.75

DIFFERENT SYSTEMS OF COTTON FARMING

Of the farms in the ten Cotton States, in 1900, 48 per cent. were worked by owners, 20 per cent. by cash tenants, and 31 per cent. by share tenants—showing a decrease for the decade of 15 per cent. in the percentage of

farms managed by owners, a gain of 12 per cent. in the proportion worked by share tenants, and a gain of 33 per cent. in the percentage operated by cash tenants. Of share tenants there are several classes. Some rent land only, paying therefor one-fourth of the farm product; others, with land, stock, tools, and one-half of the fertilizer furnished, receive one-half the crop; while still others are content to give labor only for one-third of the yield.

The relative decrease in the number of farms worked by owners during the last census decade must be attributed to the emigration of farm-owners to towns, as a result of the depression in cotton prices. With the turn in the tide in prices, one now finds abundant evidence of a similar turn in the tide of emigration. Young men of executive ability cannot overlook the new opportunities for money-making in cotton growing, and many will endeavor to revive the old plantation system of farming. On the other hand, farm lands have as yet advanced but little in value in proportion to their increased earning capacity, and many small farmers and tenants are seizing the opportunity to buy. "I can take any farm in my county and pay for it with two cotton crops," says a member of the North Carolina Board of Agriculture; and one farmer within a few miles of the writer's home has paid for his farm with one year's product, though this, of course, must have been done at a sacrifice of all home comforts. Under these conditions, the proportion of tenants is likely to decrease during this decade, and the proportion of farms worked by owners-now 19 per cent. for Negroes and 58 per cent. for whites—to be correspondingly increased. Tenants will buy land, and non-resident owners will return and conduct their own estates.

A FEW TYPICAL COTTON FARMS

One of the largest cotton farms in North Carolina is owned by Crossland & Everett, in Richmond County. This is conducted by share tenants, who furnish labor, pay one-half the cost of the fertilizer, and receive one half the crop.

"Two-thirds of our croppers are white men with their families as labor," Mr. Everett tells me. "We make it a point to secure tenants who have families of boys, thereby having labor under their control. We specify in our agreement with tenants that the crop is to be planted, worked, and gathered under



HOEING YOUNG COTTON

Photographed by George Stark

our direction. We stipulate also the amount of supplies they are to have each month, being careful that they do not consume as much as their labor is worth, thereby causing them to feel that, if they fail to comply with their contracts, they will be the losers. Thus they have an interest in the crop in excess of the advances made. We provide our croppers with comfortable houses; allow them to have garden, potato, and other vegetable crops for the use of their families; encourage them to keep cows, pigs, etc.; and thus have them feel that they are at home. Last year, they cleared, after paying all their crop expenses, from \$100 to \$200 to the horse; hence they are contented and work well. We have a good school, and the children, when not in the farm work, are in school from three to six months in the year. We have churches also, and they attend services and ", Sunday school regularly."

Messrs. Crossland & Everett have kept accurate farm accounts for the past fourteen years, and the story told by their books shows the profit of cotton growing on ordinary farm land. Estimating the value of a good one-horse farm, with improvements, at \$1,000, the following is the average yearly expense as they find it:

Six per cent. interest on farm	
value, per year	\$60.00
Taxes on same	10.00
Wear and tear of mule	15.00
Interest on value of mule	10.00
One-half cost of fertilizer	110.00
Tools, and keeping same in repair	15.00
Repairs on buildings, etc	10.00
Share of Superintendent's ex-	
pense	25.00
Ginning one-half of cotton	13.00
Total	\$268.00

To offset this, Messrs. Crossland & Everett find that the average production of cotton on each one-horse farm during the last fourteen years has been 6,850 pounds of lint, and the average price $7\frac{3}{4}$ cents. They receive one-half the crop; therefore, against expense of \$268, including 6 per cent. interest, they have had—

$3,425$ pounds of lint @ $7\frac{3}{4}$ cents. One-half value of seed	
Total	\$328.00

This shows a profit of 12 per cent. for the last fourteen years. Suppose, however, that cotton had averaged 10 cents per pound. Then we should have more than 19 per cent. on the investment. And the cotton crop of Crossland & Everett last year was sold for more than \$40,000.

Another successful cotton grower, in spite of the low average price for the last ten years, is the president of the North Carolina Farmers' Convention, Mr. E. L. Daughtridge. He raises live stock, uses the best farm implements, and practises a well-planned system of crop rotation. Although two or three of

There are cotton plantations in Alabama, the delta of Mississippi, and portions of Texas and Georgia that include as much as 30,000 acres under one management. These large plantations are conducted with perfect system, and, necessarily, in the most business-like manner. Every item of expense, even to the wear and tear of a wagon or the life of a mule or a horse, is accounted for by a system of bookkeeping. Perhaps several commissaries are maintained, where the laborers get their necessities. One of these great farms employs a small army of men and women, and the year's profits, if the price



A COTTON FIELD READY FOR THE PICKERS

Photographed by Herbert Coleman

his crops these last eight years have been sold for only 5 cents a pound, he has made an average annual profit of from \$5,000 to \$10,000 on his 3,000-acre plantation.

On one of the best cotton farms near Raleigh—Waverly Farm, owned by Mrs. R. S. Tucker—no tenants are employed. The white manager and his family do much of the work, and this is supplemented with hired labor. On eighty acres, last year, with a total labor cost of \$2,872 and a fertilizer expense of \$600, the manager, Mr. Bagwell, raised 144 bales of cotton, which, sold at 15 cents per

for the staple is good, would provoke the envy of successful business men of the large cities.

From what has been said, however, the reader should not infer that the bulk of our cotton crop is grown on great plantations, as such is not the case. The average southern farmer produces only about ten bales per year. Other crops are grown, of course, in addition to cotton. It is this small farmer, with 50 to 200 acres to call his own, living under his own vine and figtree, working himself, and with children large enough to

wealth in cotton growing that means so much to the prosperity of the South.

Probably most persons outside the South think that Negroes grow most of our cotton crop; but this is by no means true. Of the 1,418,000 cotton farms reported in 1900, 849,000 were operated by whites. White

each season he mortgages his yet unplanted crop to the merchant in order to get supplies to live on through the year. Then his recklessness, coupled with the exorbitant rate of interest, leads him to buy more than his crop pays for; and the usual condition of the merchants' books at marketing time has been



Photographed by George Stark

PICKING COTTON

farmers cultivated 14,616,000 acres, and Negro farmers 9,650,000 acres. The whites owned 58 per cent. of the farms operated by them, while the percentage of colored owners was only 19. "Clearly, the central feature of the southern farm life of the Negro race," says Prof. W. E. DuBois, "is the tenant class—this half-million black men who hire farms on various terms, and a large proportion of whom stand about midway between slavery and ownership."

The average Negro farmer of the more thriftless sort can hardly be said to be even "half way between slavery and ownership." Under the crop-lien law, at the beginning of pretty accurately set forth in the popular Negro couplet:

"Naught's a naught; figger's a figger:
All for the white man, and none for the nigger."

The next year this story is repeated, and the next, and the next. But now the crop mortgage is disappearing rapidly before the advancing prices of cotton. Many white farmers, as well as colored, have been the slaves of this crop-lien system. "And the pathos of the lien-farmer," as has been well said, "is that he is always only twelve months from freedom. Better that he should eat one coarse meal a day, and wear his cheap clothes



Photographed by Julian A. Dimock

STAPLES OF (1) WILD, (2) UPLAND, AND (3) SEA ISLAND COTTON SHOWN CLINGING TO THE SEED The value depends on the length of the fibre

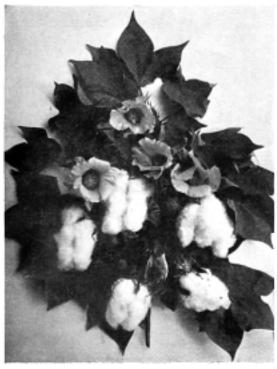
to the last frazzle of decency, and, by one unremitting struggle, break his chains."

But not all the Negroes are of the improvident class. The first bale of cotton marketed in North Carolina this year was grown by a Negro, and, for the last seven years, the first bale of Georgia cotton has come from the farm of Deal Jackson, Dougherty County's leading Negro cotton grower. His story is an interesting one. Eighteen years ago, he borrowed \$1,000 to buy a run-down farm,

giving a mortgage on the place as security. He has since made purchases of adjacent farms, and now has 2,000 acres of the most fertile land in Georgia. He and his family run nine plows, and his tenants thirty-six.

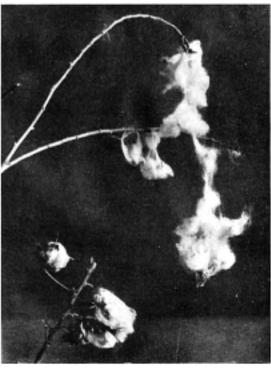
GINNING AND BALING METHODS

Until Eli Whitney invented the cotton-gin in 1793, the work of separating the seed of upland cotton from the lint was done entirely by hand; and it is said that the most expert



Photographed by Wilson, Savannah, Ga.

COTTON BLOSSOMS, UNRIPE BOLLS, AND OPEN BOLLS
ON A STALK AT THE SAME TIME



Photographed by Julian A. Dimock WILD COTTON IN SOUTHERN FLORIDA

picker could not clean more than three to five pounds of seed cotton a day. The essential features of the Whitney gin have never been supplanted or improved upon; but, in recent years, gin manufacturers have perfected the machinery, until the modern gin sucks the seed cotton from the farm wagon, divides the lint and the seed, and returns the lint cotton baled, with its seed separated, to the same wagon within an hour. These new gins have an average capacity of thirty bales a day.

"the most barbarously handled commercial product in the world." Besides the lack of uniformity in the size of the bales, gins at present are able to pack cotton to the average density of only fourteen pounds per cubic foot. Every bale not sold to local mills, therefore, must be sent to some cotton compress and the size reduced two-thirds before it can be exported.

The round-lap cylindrical bale, introduced a few years ago, was hailed by many as



WEIGHING THE DAY'S PICKING

Photographed by George Stark

Under the old system, the completion of two bales in a day was regarded as an achievement.

After the lint cotton is separated from the seed, it is packed in bales of an average weight of about 500 pounds. Endless trouble to shippers and exporters has been caused by the utter lack of uniformity in the size of cotton bales. There is a great need of a better baling system. Mr. Edward Atkinson, one of our highest American authorities on cotton subjects, has declared that cotton is

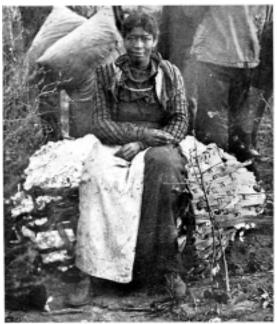
filling the long-felt want for a better system; but the beginning of the end came recently when the company that owns the patent was thrown into the hands of a receiver, with liabilities much in excess of the assets. The round bale failed, partly because the world had been too long accustomed to the square form to take kindly to a change; partly because round bales do not pack so compactly as square bales, just as logs require more space than plank; and partly because the company which owned the round-bale



A TYPICAL COTTON PLANT

presses threatened to create a monopoly, only leasing its machinery, and refusing to sell it outright on any terms.

Just now another baling system—the



Photographed by George Stark

A PICKER WAITING TO HAVE HER BASKETFUL WEIGHED

Whitman—is coming into prominence, but not enough is known of it as yet to justify a final word as to its merits. Its promoters claim that it packs cotton at the gin to such density as to do away with the necessity for recompressing. This company proposes to sell its machinery outright, thus avoiding the blunder of the round-lap promoters.

MARKETING AND EXPORTING THE CROP

In marketing the cotton crop, there has been in recent years a marvelous gain in directness and economy. Formerly, the farmer sold to his merchant at the nearest town; the merchant sold to the commission merchant



Photographed by George Stark

A GINNERY
The raw cotton is fed into the gins automatically; the picked cotton (the lint) is separated by the gins from the seed

in the city; the commission merchant sold to the dealer at the seaport; the seaport dealer sold to the New York exporter; the New York exporter sold to Liverpool; and Liverpool sold to Manchester. Now all this is changed—how greatly changed will be seen from the report of a cotton-exporting house which handles more than 300,000 bales each season

"The old method of the planters, of consigning their cotton to factors for sale," said the manager of an exporting house, "is almost wholly abolished, intermediary charges having been gradually overcome through competition, and the producer and the consumer are thus brought closer together; and the farmer gets the benefit of this advantage. The cotton is now bought on the plantations, or at the railway stations, throughout the whole cotton belt, by the representatives of large exporting houses and by the mills. Our firm employs more than one hundred buyers for this purpose, and the cotton is shipped daily to the port, where it is expeditiously sampled, classified, weighed, compressed, and loaded upon ships for foreign ports, with almost incredible swiftness. We have had a train loaded with cotton fifty miles from port at seven in the morning, and by seven o'clock of the same day—in the evening—it has been stowed on board a foreign ship and bills of exchange drawn and negotiated!"

THE WAREHOUSING SYSTEM

Just now a great deal is said in the newspapers about the proposed warehousing system of the Southern Cotton Corporation. Undoubtedly, the custom of rushing the cotton on the market during the three or four



Photographed by Herbert Coleman BRINGING BALES TO THE COMPRESS

months of the picking season has a tendency to depress prices, and a system of gradual marketing through a period of ten months would do much to avoid wild fluctuations; but whether or not the farmers will look with favor on the great Sully warehousing scheme remains to be seen. One of the favorite arguments of this company is worth reprinting:

"With scarcely 10 per cent. change in any recent years in the production of cotton, prices have fluctuated more than 200 per cent. In 1898, with a crop of 11,270,000 bales, the average New York price was 6 cents, though in many places in the South cotton sold as low as 4 and 5 cents a pound. During the present season, with a crop of little more than 10,000,000 bales, or a difference of only about 10 per cent., cotton has sold as high as 17 to 18 cents, and may average for the year 12 cents. These changes in prices are more rapid than the prices of



Photographed by Herbert Coleman ROUND BALES AFTER COMPRESSING, CONTAINING AS MUCH COTTON AS THE LARGER BALES BELOW

any other product. Between the time a farmer starts from his home to sell his cotton in his nearest market, and the time he gets there, prices may change \$5 to \$10 a bale. Under such conditions the planters' interests can never be on a thoroughly sound basis, nor can manufacturing expand as it would under more stable conditions."

The general opinion in the South is that we have now entered on a long era of high prices for cotton, and that the supply is not likely to become large enough to depress them to their former level. The South might increase its acreage, but the scarcity of labor makes this impracticable. Texas and Mexico might add much to the total supply, but the boll-weevil now stands in the way of any considerable increase there. Mr. Edward Atkinson predicts that, for fifty years to come, the South will have a virtual monopoly of the world's cotton supply.



Photographed by George Stark COMPRESSING THE BALES

During the Civil War Mr. Atkinson imported cotton from every foreign country now mentioned as a probable competitor of the South, and his verdict is that all were found wanting.

There are yet many wastes in cotton culture. One waste, which went on for a full century and has not yet been completely stopped, was the waste of cotton seed. The farmers used to realize only \$5,000,000 a year from their cotton seed; now they receive \$100,000,000. Another waste is in the reckless use of commercial fertilizers, and another the even more reckless selection of seed for planting. Still another waste, likely to have attention now, is the total loss of unopened bolls. By threshing these in parts of Texas last year nearly \$2,000,000 was added to the value of the crop. If it is possible to invent an effective cotton-picker, then it is fair to assume that we are wasting \$50,000,000 yearly in depending on hand labor for this work. Millions, too, are wasted by the use of inefficient tools, and millions more through unwise methods of cultivation and failure to rotate crops. The cotton bollweevil also threatens a loss of hundreds of

millions if not checked. Lastly, we are still shipping 60 per cent. of our cotton to Europe—almost as uneconomic, as has been said, as it would be to ship our iron ore instead of turning it into the finished product here.

The market for cotton products will continue to increase. They will probably increase till every acre of tillable land in the South may be profitably cultivated; and these States will realize, in a different way, the kingship of cotton that the Old South dreamed of. Fifty years ago, the whole world produced only about 3,000,000 bales (little more than the present product of Texas!). This year, the world's product is 15,000,000 bales. This 15,000,000 will become 20,000,000 within a few decades; and half this vast product will probably be grown, spun, and woven in the South. The economic significance of this reasonable prediction is simply this—that no other part of the world will become so rich from an agricultural product.

In this article, nothing has been said about the enormous value of the by-products of the cotton plant. Nor have the southern cotton mills been described: yet more cotton is now spun in the South than in the North.



Photographed by Herbert Coleman

THE MARKET IN MONTGOMERY, ALABAMA