Published in 1954, this survey of Georgia agriculture is chronologically divided into three sections. “The End of the Golden Age, 1850–1865,” describes the last decade of antebellum agriculture before the overthrow of the plantation system. “The Long Depression, 1865–1900,” tells of the search for new ways to restore prosperity to Georgia’s struggling agricultural system. And “The Revolutionary New Century, 1900–1950,” illustrates how agriculture underwent rapid development due to mechanization, diversification, and application of scientific methods. Range concludes each section with his interpretations, emphasizing the impossibility of separating politics and culture in an economy based predominantly on agriculture, as much of the south was during this century.

“Interestingly and refreshingly told . . . the book possesses a style and readability which are rare in a work of this nature.”
—Journal of Southern History

“A well documented study of Georgia Agriculture . . . The author has skillfully sorted through the mass of available information and presented the more pertinent statistical data.”—Journal of Farm Economics

“An adequate and interesting summary . . . The style is clear and flowing, the interpretations reasonable, and the coverage of all phases of agricultural history nearly complete.”—Agricultural History

“The author has succeeded in what he describes as the first attempt to give the subject a reasonably comprehensive treatment . . . The book is well organized, interestingly written, and the format is excellent.”
—Mississippi Valley Historical Review

Willard Range was a professor in the Department of Political Science at the University of Georgia.
A Century
of Georgia Agriculture

1850
1950
A Century of Georgia Agriculture
1850 - 1950

BY
WILLARD RANGE
Foreword by George H. King

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Foreword

Centuries are convenient measuring sticks of change, and the author is fortunate or unfortunate, as the case may be, in dealing with a century which, in agriculture as in so many areas, has been the century of greatest change. He is fortunate in that the changes give a wealth of material on which to draw; he is unfortunate in that these changes make it an irksome task to sift out those of most significance.

The author of this volume has shown a fine sense of values in the selection of material and has skillfully mixed the woof and the warp in such a way as to make an interesting pattern of the agricultural changes which from 1850 to 1950 have affected the economy of this country so profoundly.

The author has divided his subject into three parts, The End of the Golden Age, The Long Depression, and The Revolutionary New Century. In his description of the Golden Age, he brings to the reader a nostalgia for the Old South of cotton and the leisurely way of life. Should the reader be a dreamer, he brings to him a feeling of indignation that the days of the Golden Age, doomed as they were, should have been brought to a hastier conclusion by war and strife.

The account of the Long Depression (1865-1900) leaves the reader almost with a sense of futility as he sees the struggling agriculture during this period trying to adjust itself to the changing economy of a nation fast becoming industrialized. Yet, during this period the groundwork for the progress of later years was laid through the establishment of Land Grant Colleges (Morrill Act 1863) and the establishment of State Experiment Stations (Hatch Act 1886). During this period, scientific bases of production were developed which were not realized until the next century.

The Revolutionary New Century (1900 to 1950) saw the stimulation of agricultural production. Two world wars making their demands for increased agricultural production, increased industrial production, and increased numbers in the armed forces saw fewer and fewer farmers providing more and more food and fiber until,
in 1950, only 15 per cent of our nation’s population and 25 per cent of Georgia’s population lived on the farm.

During this new century, the Extension Service (Smith-Lever Act 1914) was established, vocational agriculture was taught in high schools through the passage of the Smith-Hughes Act (1916) and, then, during the depressing days of the 1930’s the new agencies S.C.S., P.M.A., and F.H.A. came into being. The Farm Credit Act was passed in 1933. With the service agencies carrying the findings of the Experiment Stations to the people and the liberalized credit policy of public and private credit agencies, practice on the farm is now only a short number of years behind the findings of the Experiment Stations. It is felt by many in research that research may be lagging more than actual practice and if we are to take care of a population which is increasing at a rate of 2,000,000 souls annually, research must find ways and means of going through the present ceilings existing in the production and distribution of agricultural commodities.

In any case, agriculture faces a new era in its economy. Even with only 15 per cent of our population living on the farm, excessive surpluses and attendant declines in prices occur. With the development of newer and more adaptable machinery and the development of new techniques of agricultural production and distribution, the percentage of people needed on the farm to meet the demands of the nation will continue to decline. Populations have a way of siphoning themselves into the various fields of endeavor according to the demands of the total economic picture. Witness the change from a 40 per cent farm population in 1900 to a 15 per cent farm population in 1950. It is not beyond the realm of reason to believe that by 1965 the farm population of this nation will be only 8 per cent of the total population. Such a ratio will avoid the production of surpluses, will assure the farmer a price for his products which will enable him to enjoy a high standard of living, and will obviate the necessity of price support and production controls.

Politically this may not be too desirable since votes mean power, but it may also be assumed that by 1965 the urban dweller will have a fuller appreciation of the part the farm dweller plays in his welfare and that this will be reflected in the laws pertaining to agriculture. The main law should be a natural one. Obviously, if the farm population is reduced to the point where just enough is being
produced for all, then the prices of farm products will be held to a level favorable to the farmer.

The author in his century-scale history has given the background which leads one, on peering into the future, to believe that where agriculture lost its Golden Age in the 1860's, in the 1960's agriculture will be enjoying a prosperity and a way of life which would be the envy of our forefathers who lived in the first Golden Age.

George H. King
Associate Director Agricultural Experiment Stations
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Preface

For more than two centuries most of Georgia's people and the major share of the state's wealth have been devoted to agricultural pursuits. The Georgian's mode of thought, traditions, concepts, and behavior have been so firmly molded by this agricultural influence that the agricultural tradition is likely to remain powerful for many years to come, no matter how industrialized and urbanized the state becomes.

Students of Georgia history are, therefore, quite justified in giving considerable attention to the state's agricultural history. Fortunately, several students have done so. In 1905 Enoch Marvin Banks published *The Economics of Land Tenure in Georgia* and in 1914 R. P. Brooks issued his monograph on *The Agrarian Revolution in Georgia, 1865-1912*. Several of the state's general histories such as those by E. Merton Coulter and Amanda Johnson have also usually included some material on agricultural developments. Historical societies in the state have likewise shown considerable interest in the subject, and in recent years many articles on small segments of Georgia agriculture have been published in such professional journals as *The Georgia Historical Quarterly* and *Agricultural History*. An as yet unpublished doctoral dissertation by James C. Bonner, moreover, has covered the forty-year period from 1820 to 1860.

This book, however, represents the first attempt to give the subject reasonably comprehensive treatment over a period as long as a century.

Its purpose is to provide a historical account of the major developments that took place in Georgia agriculture during the century 1850 to 1950. Emphasis is placed on economic developments and on the educational and political developments that influenced economic events or were involved in them.

The material could have been organized in any one of a number of ways. I have divided it, however, into three major periods: (1) the End of the Golden Age, 1850-1865, wherein is described the ante-bellum agricultural establishment at the peak of its develop-
ment as well as the process and extent of its destruction by the Civil War; (2) the period from 1865 to 1900 which I have referred to as the Long Depression—a period characterized largely by a search for ways to restore to good health the agricultural establishment; and (3) the period from 1900 to 1950, a rather chaotic half-century which finally culminated in several revolutionary developments and which I have referred to as the Revolutionary New Century.

Fortunately, the source material for a historical study of this kind is abundant—so abundant that no one student could ever go through more than a small part of it. Farm journals, records of agricultural societies, and state and national government reports are available for the entire period. Secondary sources, particularly on American agriculture and with occasional references to Georgia, are also plentiful.

It is hoped that the implications of this study will not be limited to Georgia. Agricultural developments have been sufficiently similar in the Southeastern states to give a study in Georgia some regional value and to be useful to students and teachers of agriculture in states where the record has not yet been published.

Credit for whatever value the study may have, however, must be shared with a large number of people. During the course of the study I engaged in many discussions on various points with many specialists attached to the agricultural colleges, experiment stations, and other state and national government agencies located in Georgia. All persons appealed to were sympathetic and helpful and to them must go much of the credit for whatever understanding I acquired of the material I used.

Appreciation for reading the manuscript and making many valuable suggestions must also be given Dr. R. P. Brooks of the University of Georgia who has been observing Georgia agriculture as an economist for nearly half a century, and to Dr. Julian Miller, Professor of Plant Pathology at the University of Georgia.

Mr. George H. King, Research Professor of Agriculture and Associate Director of Experiment Stations of the University of Georgia, has also performed a similar service for which I am greatly indebted. I was teaching at Abraham Baldwin Agricultural College under Mr. King's presidency when I began research on this study, and I have long respected his deep insight and broad understand-
ing of agricultural problems. His willingness to write a Foreword to the book is a source of profound gratification.

Thanks are also due Miss Jean Flanigan and Mr. Jefferson Cobb for the charts and maps, and to the University of Georgia for publication help made available from General Research and Agricultural Research funds.

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PART ONE

The End of the Golden Age, 1850-1865
1. The Last Golden Decade

During the 1850's the agricultural establishment of Georgia presented a scene of considerable variety.

In the mountainous regions to the northeast the people (96 percent of them white) lived on primitive, frontier-like farms each worth a thousand dollars or so. Nearly all their farms were in the fertile valleys. Each farm contained an average of nearly three hundred acres but only about fifty acres per farm were cultivated. On the average farm there were three milch cows, five beef cattle, ten sheep, and twenty-seven swine. But living with gun, fish line, and berry pail was more attractive than plowing, particularly since cotton would not thrive in the mountains.

West of these mountain people, close to Alabama, another group of Georgians lived in a three thousand square-mile weathered limestone valley called simply the Great Valley. Their farms were about the same size as those to the east, but the land was more fertile; about twice as much land per farm was cultivated, and in dollars the average farm was worth about three of those to the east. There was even a sprinkling of large homesteads with slaves and fields of cotton. Moreover, there were more people there than in the mountains, for in the Great Valley were the hustling town of Rome (population 4,010), the village of Dalton, and the new state railroad to Chattanooga that was attracting settlers by the hundreds.

South of the mountains and the valley the Piedmont Plateau rolled for twenty thousand square miles. Its rivers were muddy and its once magnificent forests of pines and hardwoods had given place to red hills streaked with gullies. The plateau had the kind of land on which cotton flourished, and planters had settled upon it in droves. When, however, they had exhausted the thin layer of topsoil, they had moved west, leaving behind denuded fields.
In the northern part of the plateau, farms were small and worth but a few hundred dollars. Because of the cool climate, cotton and slaves were uncommon. Grain was the chief crop, but the production was nothing to boast of. Perhaps had it not been for the presence farther west of the infant railroad center of Atlanta that was struggling to become the third largest town of the state (population 9,554), it would have been correct to say that the glory of the region was vanishing.

It was really in the lower half of the plateau that the Georgia of story and song existed. There were the cotton lands, the plantations, the gangs of Negroes outnumbering whites. There the average farm, with its livestock, was worth nearly $5,000, and each produced an annual average of twenty-three bales of cotton and nearly 800 bushels of corn. There, too, were most of the railroads and the comfortable towns where, particularly during the 'fifties, planters built white-columned mansions and exchanged their cotton for corn, hay, and meat, and the many manufactured items that were brought down from the North. On the southern edge of the plateau, at the Fall Line, where the rivers Savannah, Oconee, Ocmulgee, Flint, and Chattahoochee dropped to the Plain, were the towns of Augusta, Macon, and Columbus — the towns which contained the lion's share of the little manufacturing done in Georgia.

All the rest of Georgia — south to Florida and southeast to the sea — was part of the Atlantic Coastal Plain. The soil was rather sandy, spotted by occasional outcroppings of clay. There were, however, a few strips of fertile soil in the Plain, chiefly along the coast and along the Flint River in the southwest corner. The Red Lands of the southwest, in fact, were the most recently opened parts of Georgia. Slaves were pouring in and cotton was being grown in ever increasing quantities. Indeed, on the red lands of the southwest corner of the state a new "Egypt" was flourishing,
outstripping the old Piedmont cotton belt in the size and value of farms and output of cotton. "Princes of emigrants" were said to be living along the Flint River in "magnificent dwellings" surrounded by highly ornamented yards and gardens. A traveler there in 1860 expecting to see rude cabins, tumble-down fences, rail pens and corn cribs found instead a refined society waxing rich from cotton and corn fields as large as 1,500 acres under a single fence. He saw, also, young orchards of peach trees, herds of fat cattle, and the long tracks of new railroads that already were diverting commerce from the markets of Savannah and New Orleans.²

In addition to the exuberant youth of southwest Georgia, the Plain contained also the old, aristocratic Coastal Strip, or tidewater area, where Georgia was first settled more than a century earlier. Its marshes and river bottoms, its emerald islands and rice swamps were centers of activity and prosperity. There were most of the truly great plantations of Georgia. The average farm comprised nearly 900 acres and was worth more than $12,000. An average of 95 persons lived on each farm. It was there also that the fine long-stapled, incredibly valuable Sea Island cotton flourished. There, too, was Savannah, oldest and largest town of the state (population 22,292), a commercial town where dozens of Northern coastwise ships dropped anchor to carry cotton to New York or Baltimore for shipment to the outside world.

Nearly all the rest of the Coastal Plain was considered, in 1860, of very slight economic value. In a few spots there were some slaves, and a little cotton. But population was sparse and progress almost non-existent. The great heart of the Plain was the least developed of all. It was known as the Rolling Wiregrass country, a gigantic, egg-shaped area of 10,000 square miles. It was covered with a thick forest of magnificent pines, a century old and more, with trunks as large as a mule's belly. But the soil was considered
worthless for plowing, and there were only four people to the square mile, three-fourths of whom were white. Although the average farm contained nearly 1,000 acres (more than in any other region), only small patches were plowed. In fact, the establishments were really livestock ranches, not farms. Vast herds of sheep and cattle, numbering up to 5,000 head, wandered over them unmolested throughout the year until shearing or branding time appeared. Little or no cotton was planted.

Of even less use was the Flat Pine Belt, known as the "pine barrens," where not even wiregrass would thrive under the trees. Only a handful of people lived there, raising a half-wild, tough "razorback" variety of swine.

The People

As varied as the physical regions of Georgia in that last golden decade were the people who lived in them. The 1860 census reported 1,000,000 people in Georgia, nine out of ten living in small villages or on farms. Nearly 600,000 of them were white. At first sight they impressed travelers as being indolent with low physical standards of living. The surroundings of their homes were unkempt, their barns unsightly, their horse lots miry, their houses and fences unpainted. The wonder is that in 1860 a few Southerners were joining Northern visitors in deploring the sight of log kitchens daubed with mud, of dilapidated cow lots, of leaning corn cribs, of much land "badly cultivated," of few appearances of "neatness, by the growth of flowers, the paint or the white wash brush," of the lack of effort to adorn homesteads with luxuries, of families of substantial wealth living like "frontier paupers." However, these criticisms came mostly from a few farm journal editors and little attention was paid to them.

The 1860 census showed that at the bottom of Georgia's economic pyramid were nearly 20,000 farm laborers who worked for wages and board. They were scattered throughout the state, working as shepherders and cowboys in the Wiregrass section, as field hands or mechanics in the plantation belt, or as allround handy men on the small, family-sized farms to the north where slaves were scarce. Their standard of living was little different from that of the slaves, sometimes better, but often worse. Their average monthly wage in 1860 was only $11.95 plus rations, or $124 plus food and
clothing, if working by the year. A thrifty few among them became sufficiently affluent to own a bit of land and a few sticks of furniture. But the majority existed in poverty, ignorance, and disease without the protection or security that slavery bestowed.

The 1860 census showed also that on the next step in the economic pyramid were 5,000 overseers. They were the foremen, managers, major-domos of the plantations. Their salaries ranged usually from $200 to $1,000 a year, plus a living from the land and a home on the land they managed. Thus they had the possibilities of a good life. A few were owners in their own right of a small farm and one or two slaves. Being generally semi-illiterate, overseers who knew how to make the most of their possibilities were rare. In the plantation belt or the rice countries, where most of them lived, neighbors of their own class were often too scattered for much social communion. Thus their lives were dreary and lonely, occupied chiefly by the constant struggle to tame the frontier, or by the jollity of the slaves. Nor has history treated them kindly. Records and stories of the Old South have usually painted the overseers in disreputable colors. But with their wives and children these farm laborers and overseers comprised from 75,000 to 100,000 of Georgia's white rural people. Hence, one of every five rural whites was in this landless class.

Even more unfortunate was the small group of farmers known generally as "white trash." Most of them lived on small farms of their own in the "pine barrens." Some were on the sand hills of the plantation belt on land too poor for the large planters to cultivate, or on land already abandoned. Others squatted in the "piney-woods" of northwest Georgia, or in the mountains to the northeast. But wherever they lived, the soil was too poor to support them. Most of them owned their own worthless patches of ground. But in the Piedmont and Mountain counties some were share-tenants, paying one-fourth or one-third their crop as rent. And the number of tenants was increasing, for as the price of land and labor mounted in the 'fifties it became more costly to move and clear new land. Only the aggressive could do so, and the shiftless stayed home and became tenants.

In pleasant contrast to the farm laborers, overseers, and "white trash" in Georgia in the 1850's was the large body of little farmers whose homesteads consisted of less than 100 acres. Of the 62,000
farms listed by the 1860 census, 31,000 belonged to these resolute, determined folk. They were “poor whites” after a fashion, but they differed from the “white trash” by their possession of ambition, industriousness, intelligence, and the usual variety of traits that reveal good character. They worked by day and read the stars and moon by night for planting or harvesting signs. They held the new science of “book farming” in deep suspicion. Many could not read at all.

Yet they got along somehow. In the spring they followed the prevalent custom of scratching the earth five or six inches deep to plant their vegetables, a little tobacco in some parts, and a few acres of cotton for what little cash they needed. Outside their wriggling split-rail fences they laid claim to a few hogs, a half dozen cattle, a few sheep. For more meat they fished and hunted. The wiser among them raised enough corn to last the winter and some extra to sell to planters, but by January the majority were buying corn in town or from more enterprising neighbors. Generally, however, they were a fairly self-sufficient people, spinning their own thread, weaving their own cloth, making their own clothes. Shoes were made from cowhides held together with pegs of swamp maple. Their little surpluses of cotton, cuts of beef and pork, or a few baskets of poultry and eggs were hauled to the nearest plantation town in oxcarts or rickety wagons drawn by horses bony from poor rations. They bought in exchange a New England bonnet for the wife, a piece of Pennsylvania iron for the plow, a little coffee or molasses for the table.

Usually, these small farmers lived in unpainted log or rough-cut board houses, laying no claim to the elegance or pretentiousness or manners of Savannah, Charleston, or New Orleans. Yet in their fashion, they lived in comfort. At meal time the wide fireplace with its crane holding large kettles gave off the aroma of steaming greens, bacon, or mush. From joists were suspended bags of seed corn, dried fruit, and great strings of red pepper pods. Over the door hung a powder horn and the family firearms.

In the still evenings the family often discussed their dream of owning a plantation or of moving further west to fresh, cheap land; or of seeing a son get through college, as Joseph E. Brown had done from just such a family as theirs. Some owned one, two, or three slaves. But for most, slaveowning was only a hope.
These "little people" lived all over the state. In the three wealthy, aristocratic rice counties of Chatham, Camden, and Liberty along the coast, 400 little farms of less than 100 acres each hovered in the shadows of the great planter estates. Even in the three typical black belt counties of Burke, Oglethorpe, and Putnam, one-fourth of the nearly 1,400 farms were just such humble units.  

Although these little farmers were fifty per cent of all the farm operators of Georgia, they were seldom heard from. They had few spokesmen, few representatives of influence; nor were they writers or preservers of letters or diaries. And it was this group that Hinton Rowan Helper called to revolt in his book *The Impending Crisis of the South*, published in 1857. Helper claimed that the "planting oligarchy" kept these small farmers in ignorance, impotence, and misery, disfranchised and outlawed. But most of them never heard of the book and continued walking behind their plows, more concerned with merely earning their daily bread than with improving their economic status.

On the next step of the economic pyramid in Georgia was the powerful, virile "middle class" of farmers who owned from 100 to 500 acres of land. The census of 1860 reported nearly 19,000 of them. Thus they comprised about thirty per cent of all the farmers in the state. Here again the great majority were independent masters of their own soil; and like the "little farmers" they were scattered all over the state. In plantation counties like Greene, Macon, Oglethorpe, Burke, and Putnam they outnumbered the small farmers as well as the big planters. In the fifteen counties in which there were no farms with more than 500 acres they were the "aristocracy" as well as the "middle class."

A few worked their land with hired labor, but the majority were owners of from one to thirty slaves. Among them were lawyers, doctors, merchants, and preachers. They walked and talked with the great planters, attended church and followed the hounds, and sent their sons to an academy or to college, and married their daughters with an eye to a leisurely future. They saved their money for more slaves and more land. Some of them read William S. Jones' monthly *Southern Cultivator* or the weekly *Field and Fireside*, both published in Augusta, or perhaps the Reverend Charles Wallace Howard's *South Countryman* from Marietta. Occasionally they wrote letters to these farm journals describing their luck with
Schley's new Rust-Proof Wheat Seed, their cure for hog cholera, their system of managing Negroes, or their success or failure with the new-fangled mechanical cotton planter. They talked "shop" in the monthly meetings of their county agricultural societies, "pulled off" county fairs, and rode many miles to Hancock County to see how the famed planter David Dickson produced such wondrous crops.

At the top of the economic pyramid, of course, were the planters. They could be subdivided into small, medium, and large planters. Yet the number of farms consisting of more than 500 acres, a paltry 3,594 (less than six per cent of all farms in the state), was so small that further division is unnecessary. A mere 902 of them consisted of 1,000 acres or more. 14

Nearly all these 3,500 planters owned from 30 to 100 slaves each. Among them, however, was a small group of the "élite," 212 in number, who owned more than 100 slaves. The census showed only twenty-three owners of more than 200 slaves, but seven with more than 300, and only one with more than 500. 15

Almost without exception they lived in one of the three black belt sections; that is, along the coast, in the lower Piedmont Plateau, or on the red lands of southwest Georgia. But wherever they lived, black folk outnumbered whites.

It was along the rice coast, in the vicinity of Savannah, that this class blossomed to its fullest flower. There estates had been handed down through generations and there the people had become accustomed to wealth, to cultivated taste and the gracious living that characterize an aristocracy. There lived the Coopers, Hazzards, Jordans, Kings, Butlers, and Manigaults, the families whose very mention called up magic vistas of "rich foods, fine wines, elegance, urbanity, suavity, Dresden and Sévres china," the "dream stuff" of the plantation way of life. Yet by 1860 the majority of the planters were living in the Piedmont belt or in the region to the southwest where the forest was still rough. And here there was less elegance, with much of the rudeness of the frontier. Here the majority of planters were "self-made" men who had cleared the land and built their first homes with their own hands. "Frontier corns showed through the thin white gloves." 16

Most of them lived in modest country houses of ten or twelve rooms. Some were made of logs or hand-hewn timber cut from the
plantation forest, never painted. A few were painted white and dignified by long porches with two-story columned roofs to provide an air of Greek massiveness and charm. Surroundings were usually neglected, although around a few homes were tall, spreading trees, landscaped gardens, and walks. But evidences of "palatial magnificence" were more common in story than in fact.

Many planters preferred to live in towns, and as the prosperity of the 'fifties increased, a veritable rush to the towns of Georgia ensued. During the decade the urban population of the state increased by ninety per cent. In the winters some families went to southwest Georgia to camp in big one-story log cabins like the Gopher Hill plantation house of Colonel Maxwell, which rambled over nearly an acre of land. Sometimes in summer they moved to watering resorts like Lithia Springs, or Indian Springs, or Catoosa Springs north of Dalton. Often they went to St. Simons or Sea Island where a half dozen distinguished families entertained them, or where they themselves owned summer homes and a club house with quoits and billiards, and where deer hunts, fishing excursions, picnics, regattas, and sumptuous dinners were daily events.

But they were only partially rich in dollars. Only one man in Georgia was reputed to be worth a million dollars. And that was only a rumor. The majority were really small planters who gave daily attention to their business and had but little money to spend on their families at the end of the year. Stories of fabulous wealth were false, a belle of the period reported later. "Comfortably rich" was a better phrase. The chief extravagance was unlimited hospitality to continuous streams of guests.

Yet these planters were the men who ruled Georgia and glorified her plantation tradition. They were the founders and presidents of planters' conventions and agricultural societies, judges, senators, ambassadors. Their thoughts were the laws of the land. And although they were noted neither as readers nor writers of books, they did read agricultural journals, pondered over the writings of scientists like Davy, Liebig, and Gilbert, and reported their own experiments.

The Slaves

Below all these classes of Georgia's nearly 600,000 whites was the massive group of 462,000 slaves, the "mud sill" of the economic
They lived chiefly in one of the three plantation belts where soil and climate were most capable of producing the staples of rice and cotton. In all three belts they outnumbered whites, being from fifty-two to sixty-three per cent of the population. In some counties along the coast, they outnumbered whites as much as four to one. In all these plantation belts the average slaveholder owned from twelve to fourteen Negroes, exceptions, of course, being the large units where there were big gangs. Along the coast the average farm housed ninety-five persons. Outside the plantation belts the little slave cabins were generally rare. In the Great Valley, the Upper Piedmont, the Wiregrass, and the Flat Pine Land areas slaves were outnumbered by whites three to one. In the great plains of wiregrass and flat-woods, in fact, where even whites were scarce and where raising livestock was the chief business, Negroes lived miles apart. In the mountains there were usually not over four Negroes in a hundred people, sometimes not even two. And even around the young, bustling railroad center of Atlanta there were five whites to every Negro.

Of the nearly 500,000 slaves, 150,000 were children under the age of ten; and 10,000 others were gray-haired veterans over seventy. Thus one of every three slaves was practically useless to the master as a laborer. What proportion of the remaining slaves, between ten and seventy, actually worked at farming is not known. Certainly thousands were employed in the homes, warehouses, wharves, and shops of towns and villages. Other thousands were house servants. So it is likely that but slightly more than half the 462,000 slaves were actually engaged in farming.

History has made the lives of Southern slaves seem bleak to later generations. But it must be remembered that in 1860 the working
masses everywhere had the barest necessities. In fact, as farm laborers, the slaves of Georgia were probably getting what was then considered a "normal" share of the income from their labor. They were fed, housed, clothed, cared for in sickness, and buried when they died. Throughout most of the world at that time the earnings of farm laborers were no more than enough to provide them with wretched shelters, shabby clothes, and a meager diet. The editors of the Southern Cultivator were surprised in 1860 with the paltriness of farm wages in several Northern states as revealed by the New York Tribune. They noted that in Onandago County, New York, the wage was only forty-seven cents per day plus board, only fifty cents in Ohio and Michigan, and seventy-five cents in Massachusetts. Negroes hired out in the South received more. In fact, insisted the editors, a clever plantation Negro could lay away more in a year from his private patch of nankeen cotton than the oft-envied free worker of the North.

During the 'fifties Georgia's Negroes increased by more than 80,000. Only Virginia had more. Still there were not enough to quiet pleas for more labor. Thus as the value of land and cotton rose during the decade, the value of slaves jumped accordingly. In 1845 a healthy Negro man could have been had for about $750 or less. But when the crowds gathered at the markets for the annual January sales in 1860 prices were up and bidding was brisk. In Albany a certain Colonel Bond in one day sold 250 slaves for an average price of $1,100 per head. In Crawford County, where the auctioneer offered an undue proportion of old Negroes and children, the average price was $1,113. On a Tuesday sale there the best field hand, a twenty-one year old boy, brought $1,900; a seventeen year old girl and baby, $2,150; and a mere child, age eleven, $1,525. In fact, in 1860 the average value of the nearly half million slaves of the state, old and young, strong and lame, was about $900 per head.

Already nearly half the wealth of Georgia was invested in slaves. Indeed, so profitable was the crop of Negroes considered that in years to come fine theories were spun to the effect that in the days of the old South a farmer's only profit was made on the increase of his slaves rather than from his crops and livestock.

Yet along with all the attention to slaves, the cries for slaves, the soaring of prices, the oratory and writing defending slavery, the
idea was growing that the Southern slave system was too costly. For one thing it led to exhaustion of the soil. Land was considered by a slaveowner to be a perishable investment, to be used and then tossed aside. A Southern planter's "greatest interest is in his laborers — least in his soil," complained an editor of the Southern Cultivator. "I have known many an overseer dismissed for slight abuse to the negro, but never for the most wretched abuse of the land."28

SIGNS OF PROSPERITY

These million people of Georgia, white and black, were busy in the 1850's. There were very few signs that these were the final years of a "golden age." There was a rush to grow, a desire to progress, an impetuous yearning for adulthood. A terrible decade of economic depression, the 'forties, when cotton sold for four and five cents a pound, had been smothered by a decade of flowing prosperity.

During the 'fifties the price of cotton had soared to ten, then eleven cents. Twice as much cotton was being put into dresses, shirts, trousers, wagon tops, the sails of ships, and a myriad assortment of items in 1860 than in 1850. Foreign exports were climbing. The American cotton crop had been doubled to meet the demand.29 In Georgia the census reported an increase of 200,000 bales. In fact, in 1859 the state had produced her first 700,000 bale crop, and only Alabama, Mississippi, and Louisiana surpassed her in cotton production.30

Cotton was everywhere — a great king. More than one-third of all the cropland of the state was devoted to it. Even so, the world was not satisfied, and now the old, despairing prophecies of surpluses were being hushed by urgent pleas for more cloth. To answer this appeal the farmers of middle and southwest Georgia, where nine of every ten bales of cotton in the state were grown, were clearing more land, opening new farms to grow cotton. They were buying more slaves, horses, and mules — to grow cotton. They grew corn only to feed their labor and work-stock — to grow cotton. And daily they were becoming less self-sufficient, buying more supplies from the North and West to free themselves for the supreme task of growing cotton.

Moreover, a new development within the cotton industry was
fanning the cotton fever to a still higher pitch. Ways were being found to use cottonseed, a by-product once left to rot. Experiments of feeding cottonseed to livestock and of crushing it for oil had proved successful. By 1859 seven establishments had gone into the business in the South of making cottonseed products, and other factories were being planned.\textsuperscript{31} Magazines like \textit{DeBow's Review} and the \textit{Southern Cultivator} were spreading the news, proclaiming the value of seed for burning-oil or as feed for hogs.

Land prices also were soaring. Since 1845 the hard-used lands of middle Georgia had jumped from fifty cents and a dollar an acre to an average of fifteen and eighteen dollars.\textsuperscript{32} Down by the sea in the rice counties land was calling for the fabulous price of $150 to $300 per acre. Even in upper Georgia where cotton and slaves were scarce, land had jumped from practically nothing to five dollars per acre.\textsuperscript{33} The completion in 1851 of the state railroad from Atlanta to Chattanooga had begun the transformation of northwest Georgia. There in the fertile, verdant valley of the Etowah many acres were bringing sixty to seventy dollars.\textsuperscript{34} In southwest Georgia, where in 1835 the twenty-five year old, profit-wise Nelson Tift had knocked open the gates of the frontier to reveal vast stretches of pine and oak-covered clay loam and red lime land unequaled in the Eastern coastal plain, a plantation boom was on. The Central of Georgia Railroad had recently been run through. And even though the water was bad and the air was believed to be full of malaria, crops were so dependable and so easily sold that nothing else mattered. In Dougherty, Lee, Terrell, and Calhoun counties the land was fresh and rich, selling for twenty to thirty dollars an acre.

Yet there were millions of other acres, still timbered, fresh, and cheap. All during the 'fifties people had flocked into Georgia to buy it and plow it. Before 1850 whole armies of men and women had marched out of Georgia for "some place better." And many were still going, leaving exhausted fields and yawning gullies in their wake. But the trend had changed. Georgia had become a receiving state. Railroads and stages were unloading passengers by the thousands. Long wagon trains were rolling in with furniture and tools piled high and with gangs of Negroes walking, singing, driving cattle, "toting" their light bundles of "truk." In brief, during the decade the new settlers outnumbered those who left by
Not one of the old states of the East approached Georgia's intake. They came from Tennessee, the Carolinas, and Virginia, a fair-sized band of Irish, Germans, and English coming with them. They scoured the clay hills of the northwest part of the state for small farms within easy reach of the new railroad. They read the columns of sheriffs' sales in the *Milledgeville Southern Recorder* with a quick eye for bargains in the lower Piedmont black belt. Or better still they travelled on to the fresher lands of southwest Georgia where whole plantations, ready made, of from 700 to 2,000 acres, could be bought from agents like W. W. Cheever, who advertised in the *Cultivator*. Down in Dougherty and Baker counties 35,000 acres of unimproved land were awaiting the onward rush of the cotton kingdom.  

Ten thousand new farms were opened during the 'fifties. Nearly four million acres were taken from the frontier and turned into farms. 1,700,000 acres were cleared and plowed into improved land. Apparently the men of Georgia in that day saw the frontier as an irresistible challenge. In 1860 they owned in farms 26,650,000 acres, an area larger than all Ohio, and the largest area in farms that Georgia was to have, except during a brief period a half century later. Meanwhile the value of the average farm had risen twenty-five per cent, from $2,400 in 1850 to $3,200 at the end of the decade. 

Needless to say, all this flurry of endeavor was a great tribute to the soil. Georgia's men were steering a course directly toward a thriving agricultural empire. They believed with Thomas Jefferson that people who tilled the soil were the chosen people of God. Cities were corrupt. Factories were ugly. Industry with its smoke and steam and slums was the harbinger of degeneracy. In all only $10,000,000 was invested in the state's 1,890 manufacturing establishments compared to a probable $500,000,000 invested in the agricultural essentials such as land, buildings, implements, fences, livestock, and slaves. Her factories employed but 11,500 hands compared to a probable 350,000 hands who were planting and harvesting. The value of all city property was only $35,000-000. In fact, about seventy-five cents of every dollar of real and personal property in Georgia was invested in agriculture, to say nothing of the dollars put into the agricultural tributaries of cotton and grain carrying railroads, cotton shipping wharves, feed
stores, grist mills, factors' supply houses, implement agencies, printing and publishing houses of farm papers and journals, slave markets, blacksmith shops, and so on.

Here certainly was faith in the land. "Shall we build cities," cried one Georgian, "while the forest is untouched by man? . . . Shall we erect factories, those parents of hollow cheeks, and sunken eyes and hectic coughs and short lives" while the cheerful land "invites us to healthful and remunerative labor?" That was the attitude of many of Georgia's farmers.

There were still other signs that Georgia was prospering. The state's railroad mileage doubled during the 'fifties. By 1860 cotton was being shipped by rail from Thomasville, Albany, Columbus, Rome, and even from Tennessee direct to ships tugging at their moorings in Augusta, Savannah, and Brunswick. Of the thirty-four states in the Union only six claimed to surpass Georgia in railroad mileage. There was a mile of track for every 714 inhabitants, while in the rest of the nation there was only a mile of track for every 1,084 inhabitants. Only the red hills of the Northeast and the plains of the Wiregrass region were untapped by these arteries of empire.

The value of the state's real and personal property also had nearly doubled, soaring from $335,000,000 in 1850 to $645,000,000 in 1860. This meant there was $611 worth of property for each man, woman, and child, black and white, in the state. In Pennsylvania the figure was only $487; in New York, only $475. Even the proud folk of Massachusetts, the chief attackers of slavery, could boast but slightly more, $662. In terms of total wealth Georgia ranked eighth among the thirty-four states. And topping this was the cold fact that in terms of the total value of personal property assessed at $438,000,000 Georgia appeared to be the richest state in the richest nation of a rich, new world.

Weaknesses of the System

This facade of wealth was not as sound as it seemed at first sight. Forty-seven cents of every dollar of this wealth was invested in slaves. That meant there was too little left for investments in homes, furniture, books, schools, implements, banks, machinery, ships, wagons, clothes, and the items of life that eased man's labor and comforted his existence in the free states. Of course, a high
“standard of living” in material things was not considered essential in Southern philosophy. Rather, the Southerner was concerned with a high “standard” in spiritual and moral things. But this low standard in material things resulted inevitably in an equally low standard of farming. Slovenly and destructive practices in agriculture were visible on all sides.

Probably the most evident shortcoming was general disrespect for land and the abuse of it. This abuse was attributed to many things, but chiefly to the excessive respect paid to slavery. The general practice of the day was to exhaust and then abandon the soil. Red gullies and gulches were multiplying over the landscape. Unsightly undergrowths of briars and old-field pines were returning once fertile and productive fields to their primeval state.

Another evil was the general disrespect for grasses. Most grasses were abhorred, even crab grass, the “poor man’s hay.” The swift, deep-running Bermuda grass was looked upon as a pest, the enemy of cotton choppers and corn hoers. With flashes of anger at the sight of the first green sprigs in the rows, planters and overseers commanded their hands heading to the fields to “Kill the Grass!” or “Go for General Green!” Obviously, the objection to the interference of grass with crops was understandable. But this aversion had led to a general disrespect for all grass almost everywhere, with utter disregard for its value to the soil and to stock. 39

Along with this was a third evil — a widespread lack of interest in livestock. Of course, with 4,000,000 head of domesticated animals, livestock was abundant. But they were pitiable animals. Georgia’s 500,000 sheep were a ragged, underfed lot. Her 1,000,000 head of beef cattle turned lean and bony rumps into the wind. Her 2,000,000 swine were chiefly long-headed, long-legged, fleet-footed “piney woods rooters” used to depending on providence for food. Her 300,000 milch cows were mostly starvelings, producing less than a third as much milk per head as the national average. In fact, so poor were most of Georgia’s beasts in 1860 that for every acre of farm land there was but $1.44 worth of livestock while elsewhere in the Republic the value was $3.68 — with Georgia ranking third from the bottom among the states.

So, ranking seventh in the number of swine and eighth in the number of beef cattle was little consolation. Even the increase in the value of Georgia’s livestock since 1850 from $25,000,000 to
$38,000,000 was mere paper arithmetic caused by a general rise in prices. Actually, livestock production in Georgia was declining. During the 'fifties the number of cattle and milch cows declined more than 100,000 head; hogs by 150,000; and sheep by 50,000. Wool and cheese production dropped also. The rise in cotton prices was doing an evil work.

Of course there were reasons other than the general preoccupation with cotton for the low quality of Georgia's animals. A popular belief prevailed that profits were greater on animals when the expense of raising them was least. There was plenty of free range land for grazing. And in sparsely settled counties in the Plain, like Appling, Coffee, Emanuel, or Telfair, ranges in large tracts were available for 50¢ to $1.00 an acre. Animals were cheap also. Sheep could be bought for $1.50 a head. Thus any increase at all in the herd, even if only a fraction of its possibility, was almost clear profit. And many men declared they had proved it. In the Wiregrass area herds of cattle and sheep, sometimes numbering 5,000 head, wandered unmolested all the year, never fed, never "salted," until shearing and marking time. In north Georgia sheep were penned only in winter, and cattle rarely at all. Except for brief seasons the grass was rank and tough, often providing little more nutrition than was needed to ward off starvation. Yet the owners insisted there was profit. What, then, was the advantage of fat stock or fine breeds? Only in a few isolated spots like Brooks County, deep in the Plain, where a band of Scotch-Irish had introduced a high standard of hog raising, did livestock production approach the level of a science.40

A fourth evil was the haphazard and unscientific method of preparing land and cultivating crops. Whole forests of stumps and rocks were left in the fields year on end. Land was plowed up and down hill, inviting the swift growth of gullies. Field hands plodded laboriously behind a "gopher" plow that rarely turned up more than five or six inches of soil. And an editor of the Cultivator complained: "Two-horse ploughs [for deep plowing] were rarely used, and manure was seldom applied to any crop except cotton seed on corn and wheat."41 Yet when cultivating time arrived the same "gopher" plow was driven into the soil to its utmost depth, cutting and tearing wholesale the growing roots. The ancient practice of sowing cotton seed by hand was still a general habit. Wheat was
often sowed and plowed in with no previous preparation of the soil. In good wheat years there were fair crops; in bad, none. But little was expected, for Georgia was not considered a wheat country and the cost of seed was small.42

An equally slipshod method was applied to the great staple of corn to which the Georgia farmer devoted forty per cent of all his improved acres. The surface of the ground was scratched three or four inches deep with a "one-horse coulter plough." Roots were torn to shreds in cultivation. Manure was rarely applied. And the result: an average yield for the state as a whole of eleven bushels per acre while the national average was twenty-five bushels.43

Successful farming appeared to depend mainly on pushing the crop forward rapidly. If grass was prevented from taking it, there was a little profit. The rest depended on current market prices. An unscientific rotation system of cotton and corn, plus a little small grain was followed almost without variation over the widest area possible.44 Tools were crude, consisting chiefly of hoes and inefficient plows with homemade stocks. Wagons were generally homemade, lumbering contraptions and the ironwork on both plows and wagons was wrought by the local or plantation blacksmith, often with an undue amount of bungling. Indeed, in 1860 but few American farmers had more than a handful of implements and machinery to symbolize the new era of steel and oil. In all the nation there was but sixty cents worth of such equipment per farm acre. But in Georgia the figure was less than half that, or twenty-six cents worth per acre. Only the farmers of North Carolina and Texas were worse off for tools to ease their labor.

A fifth evil was the tendency of more and more planters to look to the North and West for their supplies — for their corn, hay, butter, cheese, potatoes, flour, pork, beef, and dozens of other items while they devoted their own labor and land more and more to the homage of King Cotton. Every year during the 'fifties as the price of cotton rose this practice spread. Northbound travelers on the highways, the railroads, and coastal and river steamers saw ever larger cargoes of supplies, droves of mules and steers winding Southward. It was a good thing, said David Christy, the great defender of the Southern way of life, for it allowed increased specialization, intensified the modern movement toward division of labor, which was increasing production and wealth the world over. Buy-
ing more supplies from the West, he argued, opened vast markets needed by up-and-coming Western farmers and in turn released land, labor, brains, and time in the South that could be devoted to greater cotton production. Thereby the wealth of all parts of the nation was augmented.\(^{45}\)

Of course, there were points of truth in Christy’s arguments. But the indirect evils of the “all cotton” economy were vicious. The declining interest in grain, grasses, and livestock was promoting soil erosion as well as preventing scientific systems of crop rotation. The “all cotton” system also drained the South’s scarce money more and more into the North through freight rates, brokerage fees, commissions, tariffs, and fat profits. For it was the North that owned the ships and railroads, the merchandising houses and the factories, the banks and loan companies. The planters were but the temporary custodians of the produce of their labor.

There were, however, two reasons other than the glorification of cotton for the decreasing self-sufficiency of Georgia’s people: (1) The increasing scarcity of fertile soil, particularly in the plantation belts, was forcing corn and grain producing land to be abandoned; (2) the near tripling of the nation’s railroad mileage during the ’fifties (in Georgia the mileage doubled) was now providing the cheap transportation necessary to get Western and Northern supplies into the deep South at low cost. It was during the ’fifties that Georgia’s iron-horse network became connected with the rails of the Middle West through her state-owned Atlantic and Western line to Chattanooga.\(^{46}\) Before this, Southern farmers had been largely self-sufficient from necessity. The small carrying capacity of wagons and steamers had limited the South’s importation of such bulky produce as hay, corn, and meat. But as puffing engines pulled longer and longer columns of cars over the new rails, the flood dykes opened. By 1859 nearly $5,000,000 worth of provisions a year were pouring into Georgia over this one line southward from Chattanooga.\(^{47}\) Obviously, the South was becoming more and more an economic colony of the North.

**The Reformers**

Although the band of unhappy reformers crying against the evils of Georgia’s agriculture was small, it was persistent. The economic depression of the ’thirties and ’forties had awakened farmers to
their backwardness and they had then begun to revive their farmers' societies, fairs, and journals; to establish chairs of agricultural science in their colleges; and to bring forth new leaders.

In Georgia in the 1850's strange words and phrases from the lexicon of the New Agricultural Science imported from Europe were cropping up in the roadside conversation of farmers — superphosphate, nitrate of soda, ammoniated bone — all referring to the odd conglomeration of fertilizers being produced by the wizardry of that new science, agricultural chemistry. Tales were being swapped of the success or failure of new-fangled inventions — mechanical cotton planters, fertilizer distributors, corn huskers and shellers, riding cultivators, hay loaders and presses, steam engines, or the "marvelous" Dickson "sweeps." Revived again were long neglected articles in farm journals on "Grasses for the South," "Fruits and Vegetables for the South," "Horizontal Plowing," "Hillside Ditching," "Direct Trade," "State Aid to Agriculture," "Raising Home Supplies." Breeds of stock comparatively new in the South were being publicized. Through the generosity of Dr. William Terrell, a distinguished political leader who had turned to scientific farming, the University received $20,000 in 1853 to support an agricultural professorship; and from that chair Dr. Daniel Lee lectured to both students and the public on a variety of agricultural subjects throughout the remainder of the decade. Above all there were renewed pleas throughout the state for a sounder attitude toward the soil, for more preservation of fertility, for new methods of land preparation and crop cultivation.

Leader of the reformers in Georgia in the 'fifties was David Dickson of Hancock County. He was the living example that the New Science paid profits. He was born in Hancock County in 1809, son of a fairly large planter, and even during his boyhood while plowing and hoeing in the fields he had begun questioning the Southern system of farming. Soon he had decided deep plowing was needed, and shallow cultivation, "a mere scratching of the surface," was essential; also that humus and minerals somehow must be returned to the soil continuously. From there he began to insist on a scientific system of rotation, the use of cover crops, grasses, livestock, and commercial fertilizers.

The beauty of Dickson's revolutionary theories was that they worked. He had begun farming in 1845 with 266 acres of ex-
hausted, eroded land in Hancock County, a few slaves, and a few crude implements. In 1846 he began using Peruvian guano and thus became the first man in the cotton states ever to try concentrated commercial fertilizer on growing crops, and the first man in the world, according to record, ever to use it on cotton. 48 Within a few years he had developed his own fertilizer, the famous "Dickson Compound," a mixture of dissolved bones and guano, plus land plaster, salt, and potash. He invented a broad shallow plow called a "sweep" to replace hoes in cultivating. He stocked his land with hundreds of animals, and he taught his slaves some of the elements of land care and efficient workmanship.

By 1860 Dickson had proof that his system produced profits at the "rate of eighty per cent per annum." By then he owned 13,000 acres of land and 250 slaves and estimated his wealth at half a million dollars. Visitors dubbed him "Prince of Southern Farmers."

In addition to his demand for deep plowing, shallow cultivation, heavy manuring, and rotating, Dickson also preached strenuously the value of a "live-at-home" program. Moreover, he preached a new doctrine of land care, arguing that a landowner was but a temporary tenant with no right to abuse the land.

Dickson also bluntly attacked the inefficient Southern method of labor management. He preached and practiced detailed education of all hands, not only to develop good work with their hands but to provide them a scientific understanding of what they were doing.

Dickson also preached the value of reading farm journals, of studying books on agricultural chemistry, of selecting and improving seed, of planting grass for livestock, of developing and using labor-saving implements, and of keeping accurate farm records.

Dickson's significance in 1860 was that he was one of the few agricultural reformers in the South who really had men listening. His plantation near Sparta became a mecca visited by hundreds of farmers per year. From all parts of the South "wagon loads" of letters poured in asking for details on the "Dickson System." At the annual fairs of the Hancock County Planters' Club he was surrounded by men who had come by train and cart to besiege him with hundreds of questions. And never an issue of the Southern Cultivator appeared in 1860 without his name being scattered through its pages." 49

Perhaps the second most important reformer in Georgia was
the Reverend Charles Wallace Howard of Kingston. As publisher and editor of his own farm journal, the South Countryman, it was Howard who had discovered Dickson and boosted him to fame. But in 1859 he had sold both himself and paper to the Southern Cultivator and in 1860 was carrying on, with Dickson's help, a fiery crusade in behalf of the New Science. 60

Howard's primary anxiety was over the general disrespect for land. Land abuse was becoming an increasing evil. In his report to the Cotton Planters' Convention of 1860, Dr. Joseph Jones, professor of chemistry at the medical college in Augusta, pointed to the formerly rich middle Georgia black belt, once clothed with magnificent forests and the mould of ages and once yielding luxuriant crops of corn and cotton. But now, he said, it presented "the monotonous and dreary spectacle of bald, barren, red clay hills, marred by deep furrows and yawning gullies." Then Jones called attention to a point in economics: Crops had not increased in proportion to the population. 61 From other parts of Georgia came the same complaints. "The crystal waters of the Etowah are turbid with the fat soil which they are bearing away to the ocean. . . . Deterioration is everywhere visible." 62 And dozens of farmers every year were selling their homesteads and moving West from the wasted, gullied areas of Georgia.

Here was meat for Howard. Despite the land boom attending the rising price of cotton, the average acre in Georgia was still valued on the tax books at less than five dollars. Of all states in the East, only Florida had cheaper land, while only six states in the nation showed a lower value. 63 With these facts, Howard condemned the whole "Defective System of Southern Agriculture." "In no part of Christendom," he declared, "does land sell at so contemptible a price as in the Plantation States." The 1860 report of the Federal Commissioner of Patents carried an article by Howard. He pointed to five defects: (1) Planters too often consider land merely a temporary investment, to be worn out and sold as scrap. (2) Large parts of plantations are worn out and lying idle — dead capital — while interest on their value goes on. (3) Land is considered worthless without Negroes to work it; the Negro is the investment; his value is determined by the price of cotton. (4) Constant successions of cotton and corn are exhausting the land. (5) These crops require an exorbitant amount of labor; "the
amount of labor used on an ordinary southern plantation is greater per productive acre than the amount of labor used in the most perfectly cultivated portions of Europe." 54

Through the *Cultivator* Howard broadcast his pleas for reform. He revived interest in "horizontal plowing" and terracing to prevent erosion; appealed to farmers to improve their land rather than move West, arguing that establishing a new farm was more expensive than improving the old. He advocated use of the new "artificial manures," boosted the value of livestock for land care, and railed against the lack of attention to grasses. Everywhere in the world, he declared, the regions growing grasses invariably place a higher valuation on their acres than the regions that are grassless. 55 In an article on "Grasses for the South," printed in the Report of the United States Commissioner of Patents for 1860, Howard listed thirty-one varieties of grasses and forage plants suited to the South.

Fortunately for Howard there were men in Georgia already proving the possibilities of grass and livestock. In Hancock County, A. J. Lane was broadcasting his success at stock raising and general farming with the aid of Bermuda grass. At Athens, Henry Hull, Jr., was experiencing notable results with new strains of clover and orchard grass. In Gordon County, the already famed stock-raiser, Richard Peters, had ended his ten-year futile search for grasses in the hills and valleys of Europe and Asia and was announcing happy results with native varieties of clover, orchard, Stanford, Hungarian, and Terrell grasses, and with wild rye. And near LaGrange, A. T. Dallis was growing extensively and successfully a new grass, imported from Uruguay or Argentina, that eventually bore his name. 56

By far the most important advocate of scientific production of livestock in Georgia was Richard Peters. He was a Pennsylvania railroad engineer who had finally settled in Georgia and had inherited from his father and grandfather a hobby of experimenting with livestock. In those days so little was known about animal selection in the South that livestock often died like flies. Texas fever (tick fever) was then abroad in the South and was neither understood nor identified until nearly a half century later.

Despite the odds against him Peters had already by 1860 tried Durham and Devon cattle, Brahmin bulls, Ayrshire dairy cows,
Cashmere goats, Spanish merino sheep, Black Essex hogs, Morgan horses, and several other breeds of stock, including Angora goats. His "Devon Farm" in Gordon County was the first notable breeding farm in Georgia and one of the first, perhaps even the first, in the South. There he also tried grasses and forage crops imported from the ends of the earth.

The significance of Peters' work was that he had proved that some kinds of stock could thrive in the South and that scientific feeding and breeding were profitable. Moreover, his full-blooded stock was being sold to all parts of the Southeast by 1860. A small livestock boom was even in the making. In fact, in 1860 many cotton planters withdrew from active participation in the Georgia State Agricultural Society because of the "disgusting" spectacle made by that eminent body in giving "too little" attention to cotton and cereals and "too great" attention to stock.57

The New Science was also invading and promoting the field of horticulture, led by such men as William N. White, Jarvis Van Buren, and Prosper Jules Berckmans. Of course, with cotton prices spiraling, the times were against the advocates of fruits and vegetables. Reformers in Georgia complained universally that fruit and vegetable production was looked upon as a business "that won't pay."58 In Torch Hill, Georgia, Dr. F. O. Ticknor had proved that in middle Georgia he could produce the "finest quality" fruit. "Yet our Middle Georgian will," he moaned, "continue to plant Fruit trees, as though it was a thing to be ashamed of!"59 He could well be sad, for in 1860 all the orchard products of the state were worth but $176,000 while the cotton crop was worth more than $30,000,000.

Of the three men then blazing pioneer paths toward a profitable fruit industry in the South, Jarvis Van Buren was probably the oldest and most experienced. He had already made a collection of native apples in the old Cherokee Indian country around Clarkesville and in his "Gloaming Nursery" there was experimenting with all manner of fruits, especially native and imported varieties of apples, peaches, pears, grapes, and berries. His most notable work was in improving and popularizing the scuppernong grape, long common in Georgia; and by 1860 his articles to farm journals had marked him as the South's leading authority on scuppernong culture and its wine.60
Like Van Buren, William N. White of Athens had also collected native apples that thrived in Georgia. But his significance lay in a book he published in 1856 called *Gardening for the South or How to Grow Fruits and Vegetables*. He listed scores of foods he had seen or tried himself in Georgia or had reason to believe would thrive there. A half century later his book still was being read, with minor changes, in new editions.

By far the greatest horticulturist in Georgia in 1860, however, was Prosper Jules Berckmans. He was born in Belgium and educated in that country. He emigrated to America, and at his Fruitland Nurseries, near Augusta, in 1857, he was importing, experimenting, introducing, and distributing the greatest variety of fruits and plants ever seen in the South. Two hundred varieties of peach trees alone were ready for sale. By then also he had become the first distributor in the South of the Southern Chinese or Honey peach. For another half century to come Berckmans was to be the leader in the life and progress of the Georgia fruit industry.  

Meanwhile a few lesser men were stirring interest in horticulture. Only two years before 1860, R. J. Moses, who lived near Columbus, had opened the North to Southern fruit with a shipment of two champagne baskets filled with peaches and plums. His receipts of thirty dollars per basket had startled other men to action.  

Already, also, a small truck gardening business had sprung up around Savannah, and some men, notably A. Oemler and E. B. Barstow of Wilmington Island, and W. R. Pritchard of Skidaway, were selling vegetables in Northern markets. At Milledgeville, John S. Thomas boasted “the finest” peach orchard in the cotton states, with 60,000 bearing trees. In north Georgia, Richard Peters was dealing in plants and trees with people in all corners of the earth, importing from Europe and Asia, spending eight or nine thousand dollars a year on experiments, shipping peach trees around the Horn to begin the young industry in California, and sending to New Zealand some of the first fruit trees ever planted there by white settlers. Throughout the Piedmont nurseries were being established — D. Redmond’s “Vineland,” and Fleming and Nelson in Augusta; R. C. Johnson’s “Atlanta Nursery,” and Peters, Harden & Company of Atlanta, and others. In Athens a pomological society had been organized which at its meeting in 1860 showed more than 300 lots of fruit consisting of 200 varieties.
The Debate Concerning Self-Sufficiency

The attack on Georgia's lack of self-sufficiency during the 'fifties was important not so much because it achieved results but because it pointed toward certain fundamental defects in Georgia agriculture. The South was an economic colony of both the manufacturing East and the grain and livestock West, claimed the reformers, and that was an evil.

For example, after comparing the 1850 and 1860 reports, the state's comptroller-general was disturbed. Aside from wheat and rice, he said, the farmers of Georgia were "every day becoming more dependent upon those 'not of us.'" Despite more farms and more plowed acres, the corn crop had not increased and the oat crop had declined by more than half. Livestock, as already noted, was slipping fast. The comptroller-general concluded that cotton should be returned to a more sensible status.68

Likewise the Southern Cultivator declared: "We must have mixed husbandry."69 On every page there were appeals for farmers to begin raising livestock, grass, grain, fruit, and vegetables. Moreover, the political signs in the air demanded it. DeBow's Review from New Orleans cried out the same doctrine. Therein lay the only hope of economic independence.70 Even Isaac Newton, the United States Superintendent of Agriculture, appealed to the South to diversify.71 Howard, especially, was disturbed; for he could see no sense in importing hay at twenty-five dollars a ton that sold in the North for nine dollars.72

The Impending Crisis of the South appeared to be the most bitter and passionate attack ever made on this lack of self-sufficiency in the South. In the very first chapter Helper tried to show that even the manufacturing North was ahead of the South in agriculture. He made long lists of manufactured items which the South imported from the North alongside agricultural products.

Unfortunately, there were kernels of truth amid Helper's jugged statistics and vehement language. For Georgia and the South did import hay from Maine, potatoes from Nova Scotia, apples from Massachusetts, butter and cheese from New York, pork from Ohio, and beef from Illinois.73

The refusal of the mass of farmers to heed these appeals was due, perhaps, to the fact that their lack of self-sufficiency had not yet reached a tragic state. The majority of the little farmers were
still largely self-sufficient. In north Georgia climate forbade an "all cotton" economy; and in southeast Georgia the soil forbade it. Moreover, the Great West beyond the Mississippi was not yet the huge granary of cheap supplies it was to become in a few years. Nor had the railroads connecting Georgia with the West yet reached their full carrying power. In addition there was the fact that ever since colonial days, the farmers of Georgia and the South had been importing many foods and a few more imported supplies could hardly be alarming. Indeed, it was chiefly the planters who were responsible for the increased imports of the 'fifties. But their exports had increased likewise; they were richer. And it was hardly worth while to insist that they should worry about dire consequences that seemed so far distant.

As a matter of fact, there were too many suggestions that the South was self-sufficient for more than a few "radicals" to be alarmed. Census figures for 1850 and 1860 showed that rye, wheat, and hay production in Georgia had doubled. Georgia also ranked first as a grower of sweet potatoes and third in beans and cowpeas. Farmers also produced at least some wool, sugar, syrup, cheese, butter, honey, wine, vegetables, fruits, and livestock.

An even more rosy picture was presented in a book issued in 1860 called *Southern Wealth and Northern Profits*. The author, Thomas Prentice Kettell, a Northerner, showed with an impressive array of figures that the South produced more food per head than any other section of the Republic. Drawing his figures from the 1850 census (before the trend had shifted), Kettell declared the South and West each produced about thirty dollars worth of food per head while the North could show only half as much. And in production per farm hand, he listed $481 worth of food for the South as against $359 for the North and $335 for the West. Furthermore, the South had more cattle than the other two sections combined. In the face of such evidence it was hardly to be expected that a crusade for greater self-sufficiency should take root.

**The Quest for New Implements**

The hopeful quest for new implements and tools during the 'fifties also had small effect, but it showed that the New Science was abroad. Imaginations were being stirred, for instance, by the work that steam was doing in the world. In the journals of the
day advertisements and pictures of steam plows, steam sawmills, steam cotton gins, and steam grist mills roused thoughts that a new era of agriculture might be at hand. In the hills of north Georgia an adventurous farmer, John G. B. Erwin, was startling his neighbors with such contraptions as a combined mower and reaper, a two-horse cultivator, a mechanical corn planter, and a hay loader. In southwest Georgia the general practice of planting cotton by hand was gradually being routed by new mechanical cotton planters. In middle Georgia at least one farmer was trying the Dow Law Cotton Planter. The great rice planter Louis Manigault was trying “double horse ploughs” (for deep plowing) and announcing them as successful. Greatest of all sensations was David Dickson’s “celebrated corn and cotton ‘sweep’” for shallow cultivating. John T. Martin of Sparta and others were beginning to manufacture it, and countless visitors to the Hancock County Fair and to Dickson’s plantation were taking home patterns of the cultivator. Moreover, in 1860 more than two dozen Patent Office certificates were issued to Georgia inventors for new cultivators, plows, churns, corn huskers, fertilizer distributors, cotton planters, cotton presses, sowing machines, and gadgets to improve threshers.

The Introduction of Commercial Fertilizer

At least one campaign for reform in the 'fifties, however, kindled widespread interest in Georgia. It was the move to introduce the new commercial fertilizers. By the 1840's the experiments by agricultural chemists like Davy and Liebig had spread throughout the Western world the possibilities of adding plant food to the soil by means of “artificial manures.” In 1841 Peruvian guano had been discovered on Pacific islands and in 1845 a small boat load of it reached Virginia. The next year David Dickson bought three sacks of guano and thereby launched the Guano Era in the cotton South. Then in 1850 a new type of fertilizer — made through chemistry — had been introduced to the world by a factory in Germany. In the same year, Dr. P. S. Chappell and William Davidson had produced experimentally the first chemical manures ever made in the United States. From then on both guano and chemical manures spread in use throughout the nation until by 1860 forty-seven factories were busy making the chemical type alone, most of them having been established that year.
In Georgia the news of Dickson's fertilizer trials and his amazing results promoted an intellectual ferment, causing experiments to spread like wild fire. Other farmers also began reporting fabulous results, crops of 1500 to 2000 pounds of seed cotton per acre compared to a fraction of that for unfertilized land. Soon a craze was in the making. Along the Georgia Railroad, declared the *Southern Cultivator*, were a half million acres of poor land in cultivation—a great opportunity for fertilizer dealers! Professor Joseph Jones of the state medical college went before the Cotton Planters' Convention of 1860 to spread the blessings of the new compounds, "several hundred thousand dollars worth" of which had been bought in Georgia last year. In February, 1860, the Milledgeville *Southern Recorder* announced that lectures would be given on the magic fertilizers at Sparta, Milledgeville, Eatonton, and Sandersville by a "Professor Barr" of Maryland. And with him the erudite gentleman carried a chart that would teach planters who knew their subsoil the kinds of fertilizers to use.

Agents for manufacturers of the new compounds were appearing in Augusta, Savannah, and Atlanta and opening shop for their wares—J. C. Dawson, Daniel H. Wilcox, I. A. Ansley, D'Antignac, Evans & Company, Thomas P. Stovall & Company, and others—all with extravagant claims for their products and dire warnings that all other manures were frauds. Disrespectful names such as humbug, charlatan, quack, and fraud were thrown by the "doubting Thomases" at the host of new "advisors," "councillors," "analyzers," "experts," and experimenters. And those of great faith retorted in kind. Intriguing names of the new mixtures were advertised with genuine pride—L. S. Hoyt's Ammoniated Bone and Super-Phosphate of Lime, Kettlewell's Manipulated Guano, Rhodes' Super-Phosphate, Columbian Phosphate, Brown Mexican A. A. Guano, and scores of others.

Tragically, however, the fertilizer craze and all the other developments promoted by the New Science were soon cut short by the advent of the Civil War—a catastrophe that almost destroyed the agricultural establishment of Georgia.
Tears of War

In January, 1861, Georgia withdrew from the Union and prepared to join the Southern Confederacy—a republic wherein, it was believed, slavery would no longer be threatened, protective tariffs would be unthought of, and agriculture would be called blessed.

Among many people there was a belief that economic independence from the North would be an inevitable result of secession. Southern manufacturing would flourish. Local banking would prosper. And above all, Southern agriculture would come into its own. The North would beg for Southern cotton, rice, tobacco, and foodstuffs. A new and higher type of Southern agriculture, dominated by “mixed husbandry” would rise from the land. The “chronic dependence on the great West” that had “long blinded the cotton region to the value of the hog crop” and grains, and that resulted in “fabulous prices” for provisions, would be ended. No longer would Southern farmers have to use their cotton to pay for “eight-tenths of the imports into Northern states.” The South would become self-sufficient. The one-crop system would perish. “We are glad of it,” declared the Rev. C. W. Howard, even though it may take a war to do it. “Loss of life is indeed to be deplored. But if this war shall cost us millions, it will have been money well spent, if it have the effect of so developing our resources as to render us commercially an independent people.” King Cotton would be put in its proper place as one of many good and profitable crops. Here was the opportunity for the South to free herself of Northern fruit stock—trees, grapevines, berries—which had so often disappointed Southern buyers because of their failure to adapt to Southern soil and climate.

At last the South would become independent in all respects. She would raise all her own livestock and cereals, conquer “Aboli-
tionism in its own dens” and then become the “richest people in the world.” Let the joking, ridiculing press in “Lincolndom” rant and rave, let them declare that the South cannot feed herself, that she can be starved! “We’ll show ’em.” As some Yankee editors already knew, the South could never be starved.

And what if war did come? It would be short—a few weeks, a few months—a glorious adventure. Europe would aid the South. Manufacturing in the North would be paralyzed. Unemployment and poverty would stalk the industrial cities of the East, hungry for raw cotton. Western farmers, cut off from their Southern markets, would revolt. Northern ships would rot in their harbors. And the whole South would rise as one man in an heroic crusade for independence, smothering Yankee armies in a series of quick defeats.

Yet in the midst of all these sanguine expectations a few people were gripped by dark fears. To them the clouds of war were terribly thick and close. Beyond the first horizon men like Georgia’s little, potent, thin-voiced Alexander H. Stephens saw a conflict of great magnitude, tremendous in its length and breadth, bloody, perhaps even futile and disastrous.

But such pessimists were few. In that flush of romanticism there was no room for the thought that the golden age of the South might pass away, that heroism and courage were not enough to win wars, that the war would be an industrial war for which the South was not equipped, that Europe would not intervene, that forty-three per cent of Georgia’s electorate voting against secession delegates showed that not all Southerners were prepared to give their all for independence. Most men could not see that agriculture would suffer from speculation, inflation, and the disorganization of labor. They could not see that their agricultural clubs and societies would die; that their farmers’ fairs and journals would disappear; that most of their nurseries would close; that their new help-meet, fertilizer, would be unavailable; or that the New Science with its new implements, better breeds of stock, grasses, and new methods would be hidden by the dust of marching columns; or that in the end a great and powerful army would invade their land, destroy their crops, fences, homes, and stock, and lay waste the richest part of the state from the Great Valley to the sea. Nor could they see that King Cotton was not invincible.
Moreover, these men, under the spell of their romantic thinking, could not see that their fighting, if it should come to that, would be a fight to defend a system of labor, of government, and of society that the compelling and inexorable forces of the Industrial Revolution had already made outmoded.

**The Basis of the South’s Faith**

The people of Georgia and the South had a firmly constructed theory based on facts and figures which had led them into this state of happy faith in their own invincibility.

They believed in four seemingly irrefutable facts: (1) that Europe could not survive without Southern cotton and therefore the South had the power to force Europe to her side against the North; (2) that the North could not survive without Southern cotton and trade and the buying of Western supplies and therefore the North for her own sake must let the South go her own way or suffer the consequences; (3) that if war came the South could fight a defensive war with sufficient power to hold off the North until independence was granted; and (4) that the South had the capacity to become almost entirely self-sufficient.

The first belief, that since Southern cotton ruled the world Europe would be forced to aid the South, was especially plausible. It had been nurtured in Southern breasts for thirty years. “The Yankee press and Yankee writers at home and abroad told us this.” The tone of foreign journals seemed to foreshadow such an eventuality if war should come.

Had not England herself for the past dozen years supported this theory that cotton was king, that neither she nor the rest of the industrial nations could do without Southern cotton? From one-third to one-fourth of England’s people were dependent on cotton for their livelihood; one-tenth of her wealth was invested in cotton; nearly one-half of her export trade was derived from it. In France the figures were somewhat smaller, but there, too, textiles were the leading industry. And where else could these nations get the raw cotton? Since 1840 England had made countless attempts to supply herself from her colonies, without success. For the last twenty years the South had supplied Europe with from three-fourths to five-sixths of her raw cotton, while India, Egypt, Brazil, and other “amateur” cotton producers had sent driblets.
All during the 'fifties journals in England like *Blackwood's Magazine*, the *London Times*, and the *London Economist* were studded with vivid phrases describing what would happen if ever the supply of Southern cotton should be denied England.

Said the *London Economist* during the 'fifties: "... should any dire calamity befall the land of cotton, a thousand of our merchant ships would rot idly in dock; ten thousand mills would stop their busy looms; two thousand thousand mouths would starve, for lack of food to feed them.""7

In similar vein "English statesmen, manufacturers, and merchants in Parliament and at Cotton Associations' debates" spoke their fears and warnings of what would happen at the failure to secure Southern cotton. If the governments of Europe failed to aid the South, the people of these nations would riot; revolutions would break loose.

Thus the idea was ridiculed that the Yankees could successfully blockade the South. In the first place they did not have the ships for doing it.8 In the second place there was assurance in Georgia and the South that Europe would break any blockade the Yankees established. "Europe, we are fully satisfied," said the *Southern Cultivator*, "will send her own ships freighted with manufactures, to be exchanged for cotton and other products." And those ships would heave across the seas fully convoyed by the military might of England. Even after the war commenced, the *Savannah Republican* said: "We are of the opinion that the close of the year 1861 will also terminate the present conflict between North and South; if not by the breakdown of the North, it will be closed by European intervention."9

Not for nothing had Georgia's Senator Iverson in his parting speech to his Northern colleagues warned, "We can live, if need be, without commerce, but when you shut out our cotton from the looms of Europe, we shall see whether other nations will not have something to do on that subject. Cotton is king and will find means to raise your blockade and disperse your ships."10 And other Georgians, Benjamin Hill, J. E. Ward, Governor Joe Brown, were preaching the same gospel.

With equal cocksureness Georgian and Southern drum beaters for independence insisted that the Yankee North and West were also within the devastating point-blank range of the guns of South-
ern agriculture. The bulk of the North's foreign trade was in Southern rice, tobacco, cotton, and naval stores. The North could not buy anything from Europe without these Southern products to exchange. In 1859 the total United States exports amounted to $278,000,000, and $198,000,000 worth of this was in Southern products. Also, like France and England, Yankee mills needed Southern cotton. Yankee bankers, shippers, railroads, and manufacturers needed Southern markets and commerce. And Western farmers could not exist without markets in the South for their meat and grains.

All the South needed to do was to stop growing cotton for three years. Then "England would topple headlong and carry the whole civilized world with her." Cotton was King. "No power on earth dares to make war upon it."

In similar vein Senator Robert M. T. Hunter of Virginia in 1860 had shown that between three and four million people in the North, and more in the West, owed their daily subsistence to Southern agriculture.

Even Northerners had given vent to the same warning. Kettell's cold, analytical book, *Southern Wealth and Northern Profits*, issued in 1860, contended that any disruption of cotton production would destroy the economic welfare of all the Western World.

The Cincinnatian, ex-newspaper editor, and one-time agent of the American Colonization Society, David Christy, had formulated this whole thesis in its most powerful form. It had been Christy (in his 1855 article previously cited) who had coined the phrase "Cotton is King." From what had the United States acquired her great wealth? he asked. From cotton! What supported the industries of New England? Cotton! Where in recent years had Western growers of corn, hay, hogs, and beef found the markets that sustained them? On cotton plantations! What was the chief cargo that brought profits into the pockets of Eastern ship-owners? Cotton! On what did the stability of the industries of England, France, and other European nations depend? American cotton! And lest his readers should think him prejudiced, he marshalled witnesses — English journals and magazines, American and European statesmen, economists, manufacturers, and shippers. And there were piles of statistics to support him.¹¹

And concerning the South's ability to be self-sufficient, was there
any doubt about it? Had not Kettell shown that the South produced more food per hand than any other section of the Republic? Would not Lincoln's silly blockade be a mere paper fantasy that the Yankees could never enforce? Would not supplies and even military aid flow in from Europe? And would not the valor of Southern manhood on the field of battle hold off with ease any attempt of weak-witted Yankee scoundrels to invade the land?

How, then, could the future of the Georgia farmer seem anything but glorious?

**Inauguration of the Cotton Famine**

Thus, when the first shots of the American Civil War were fired Georgia's farmers were ready with a well defined strategy for agriculture. Their task was two-fold: (1) to starve Europe and the North for cotton; (2) to raise enough food to make both Southern soldiers and civilians independent of the outside world.

Immediately the great weapon agriculture went into action. A propaganda crusade to create a cotton famine in the North and Europe was launched. During 1861, the first year of war, the chief emphasis was placed on keeping the cotton already on hand from being shipped. Newspapers, agricultural journals, cotton factors, insurance men and warehousemen, legislatures, planters' conventions, farmers' clubs and societies, governors, and Confederate officials all urged that cotton be held on the plantations, away from the coast, and out of reach of Yankee invaders and unpatriotic exporters. The Confederate Congress prohibited all shipments of cotton to the North. There "can be no higher act of treason against the Confederate Government," declared a Cotton Planters' Convention in Macon, "than the shipping of a bale of cotton through Northern markets to Europe, over Northern railroads, and through Northern capital." In Georgia, Governor Brown ordered the state railroad to carry no cotton for fear speculators might sell it to the enemy. In local communities everywhere citizens' organizations, called committees of public safety, were created to stop cotton movements through the force of public opinion, appeals to patriotism, and threats of retaliation against offenders. And notice was served to British consuls that no cotton would go out in British ships running the blockade. The result was that practically no cotton reached Southern seaports.
When, however, the year 1861 ended and it was seen that the North had not yet collapsed and Europe had not been forced to aid the South, the technique of creating a cotton famine was changed. Instead of preventing the export of cotton the crusade veered to demand a reduction of the crop by burning stocks on hand and restricting plantings. As Federal armies moved southward the Confederate Congress ordered the destruction of all cotton likely to fall into enemy hands. Near the coast, where fears of a Yankee naval invasion were ever in mind, flames from burning piles brightened the night skies. And in Augusta in the sultry days of May, it was reported, a hundred hands were feverishly arranging warehouse supplies for sacrifice by fire.

From all parts of the state appeals were heard for farmers to help put the fear of God in Northern and European hearts by refusing to plant cotton. “From a quarter to a half a crop of cotton will be sufficient for this year,” proclaimed the Cultivator. (The nearly normal 1861 crop was still on hand.) Warehouse and commission merchants joined the cry. In Warren and other counties planters resolved that no true patriot would plant a full crop of cotton. A planters’ convention in Memphis recommended a tax of $20 a bale to discourage planting. Representative Holt of Georgia pushed through the Confederate Congress a resolution that no cotton be planted in 1862. Late in the year the Georgia Legislature, prodded by Governor Brown, limited the planting of cotton to three acres per hand, imposing a $500 fine for violation. In Hancock and Clarke counties farmers agreed to grow only half an acre per hand. Planters who refused to comply were scorned in public. “Anarchists” like Bob Toombs, who protested, were accused of “avarice” and suffered the wrath of local committees of public safety.

Result for 1862: Cotton was dethroned. Instead of the usual 700,000-bale crop, reports gathered by the comptroller-general of Georgia showed a crop for the state of only 60,000 bales.

THE CAMPAIGN FOR FOOD

Meanwhile, in an effort to force the world to its knees by means of a cotton famine, an equally feverish crusade was moving throughout the South to make the Confederacy economically self-sufficient. The same newspapers, farm journals, and orators that
were busy dethroning cotton were beseeching all farmers to raise provisions. Even before the first shots of war were heard, C. W. Howard had warned his readers that the South faced a greater deficiency than want of arms: "It is the want of bread." With the terrible prospect of blockade in the offing, he wailed, Georgia had not the grain to feed her people and animals until the next crop was gathered. "We are caught unprepared. We have much (cotton) to sell, nobody to buy and little to eat and wear." Reform must begin at once. "Reconcile . . . yourselves," the Cultivator added later, "to get along with as little money as is possible for a year or two, or three to come . . . put your infirm female slaves to spinning and weaving . . . make bread and meat." And thereby Southerners would become independent, and eventually the "richest people in the world."

People everywhere joined the crusade with patriotic zeal. From the Georgia senate came a resolution that the entire agricultural force of the South be turned from the production of cotton to provisions. At sight of the Sumter Light Guards leaving Americus for battle a farmer went home and plowed up fifty acres of cotton to make way for corn. In county meetings farmers resolved to devote all land and labor to provision crops and appointed agents to persuade all others to follow suit. "It behooves us all to avert the evil that might befall our young Confederacy in the way of provisions," said the Macon County Grand Jury, "by planting three or four times as much corn, peas, potatoes, rice, sugar cane, all sorts of vegetables, as we have ever before planted. In short, that we plant no cotton, except what we want to spin and weave at home, that we pay more attention to stock of all kinds and have them fat and fine, especially the pigs, calves, and lambs, that we make our own clothes at home, tan our own leather and make our own shoes — make our own hats and weave our own blankets." In fact, said the Cultivator, the South must resolve to raise not only bread and meat but also hay, apples, butter, cheese, Irish potatoes, cabbages, and all foods formerly got from the North. Moreover, the South must establish tanneries, factories for boots, shoes, caps, soap, candles, starch, glue, iron, furniture, plows, harrows, threshers, seed sowers, brooms, kerosene, and cottonseed oil. And forthwith a planters' convention was called in Memphis to take steps to that end.
In this drive for self-sufficiency grains became the chief items of farm products. Corn was crowned king in place of cotton. Newspapers advertised the high price of corn to encourage planting. Farmers were urged to plant corn early and late, on hillsides and in bottoms, to “leave no waste spot that will produce a single stalk,” for “if you have plenty of Corn you have everything.” “Let ‘King Cotton’ stand aside for a while, until his worthier brother, Corn, receives our attention,” said the Cultivator. For once corn became abundant, it was believed, other industries, especially livestock, would flourish. Corn would be the basis of a new era in Southern agriculture. Corn was to be the “all in all,” “the staff of life” for the South, the weapon that would “feed our armies and help vanquish our foes!” “Hurrah for the reign of King Corn,” cried the Macon Telegraph. “May he rule a thousand years, and never suffer an empty crib or a hungry subject in all his dominions. When does the ‘Corn Planters’ Convention’ meet?”

After corn, wheat was enthroned. It was boosted as a winter crop that would not interfere with corn. Schley’s Rust Proof seed was boosted in blatant advertisements along with other varieties and new methods designed to insure good crops. Especially after the border states were overrun by Union armies and the West was cut off by Grant’s final conquest of the Mississippi Valley did the press of Georgia and the Southeast beseech farmers to raise more grains to prevent starvation and subjugation.

The result of these appeals was a tremendous increase in the production of grains. In southwest Georgia where it was believed wheat could not be grown because of rust, the crop appeared on thousands of acres. In middle Georgia, planters who had usually gathered 300 bushels of wheat per year were soon gathering 2,000 bushels. Corn likewise sprouted on thousands of acres that never before had held a seed of it, thereby producing a crop of fifty-five to sixty million bushels in a state which for years had averaged no more than 30,000,000 bushels. In fact, in Georgia in 1862, over 5,000,000 acres were devoted to corn and other grains and the practice continued throughout the war. 21

The same voices that called for self-sufficiency in grains also begged for greater production of fruits and vegetables. Nurserymen dinned the need of fruit trees into planters’ ears, advertising “at war prices” in “Confederate monies or city acceptances” an in-
triguing variety of peach, pear, fig, apple, plum, and apricot trees, berry plants, and grape cuttings. "Cheers for the Buckners" went up from the *Cultivator* in praise of a family of apple growers in middle Georgia. "Between an apple dumpling and a cotton bale a half starved soldier would not be long in choosing. . . ." Vegetables were boosted as a means of preventing scurvy among the troops. Onions were lauded as the delight of the soldiers, who pilfered them. The sweet potato, "eaten by our glorious Marion in the Revolution," was fit for an emperor, and a great luxury to soldiers in camp as well as prime feed for horses. From hospital associations came appeals for dried fruits and vegetables, for tomatoes, okra, peppers, beets, pumpkins, peaches, apples, and especially for molasses and syrup. To strengthen the campaign, a telegram was dispatched in mid-1862 to all papers by General Beauregard declaring, "Our sick soldiers must have vegetables." Even the once contemptible ground pea, formerly only "fit to be munched by children and Negroes, and the lobby and indolent members of the Legislature," came in for much attention and widespread planting.

To prevent the dissipation of these precious food supplies into non-essential channels Governor Brown, in February, 1862, issued a "No more whiskey" proclamation, prohibiting the distillation of corn. A year later the legislature forbade distillation of fruits also; indeed, of nearly "everything under the sun." Apparently large supplies of food were being used to make this "vile poison that is destroying the bread of the poor." Unfortunately, however, the repeated efforts of Brown and the legislature all during the war failed to interfere seriously with bootlegging. The cutting off of drinking supplies from the border states by invading Union armies caused a bootleg liquor boom. Stills flourished in every valley, several score in some counties. Operators bought up surplus corn and fruits at fancy prices. Sheriffs and courts alike winked at the law and the bootleggers brazenly defied the scorn of the press and the protests of grand juries. In such a manner the "Whiskey Boys" served the Cause.

In the crusade to make the South self-sufficient in food, meat naturally was not overlooked. As the "greatest meat consuming people in the world" farmers and slaves alike were loath to see meat rations reduced. Thus the loss of supplies from North and
West were grievous blows. The needs of the army further augmented the shortage. Forthwith, Richard Peters issued a catalog of improved stock acclimated and adapted to the South. The *Cultivator* pleaded that no heifer calves or ewe lambs be killed and that farmers turn to raising horses for the army. A rock salt trade was promoted, with agents selling it from Augusta. Vigorous appeals went out for larger beef and hog crops and growers were “assured that crab-grass, when properly cured, has no superior as nutritious provender.” To increase sheep production a violent but futile campaign was waged to reduce the number of dogs in the state, the chief obstacle to sheep-raising, it was said. A bill hammered through the legislature to force owners to return dogs with their taxes revealed more than 81,000 dogs in 108 counties, and the dismal fact that 31,000 sheep had been killed by them in one year. Moreover, the dogs were said to eat as much precious food as hogs. They should be taxed out of existence, said the sheepmen, and their hides used to make shoes. However, no dog laws were passed. The “politicians of Georgia have not nerve enough to run counter to their . . . ‘dogery’ constituents,” and although several members of the legislature turned up shod in “dog skin leather” it was finally considered “useless to expect enough wisdom in the Georgia Legislature to frame a law intended to diminish the number of worthless curs.”

To aid the Confederacy in the production of her own medicine, Dr. Francis Payre Porcher, an army surgeon, appealed to farmers to raise a large variety of medicinal herbs, plants, and trees such as castor oil beans, black and white mustard, rape, and poppies, and promised to buy them at highest market prices. He listed four hundred substances which the South could produce from her rich flora, including textile fibres, grains, seeds, oils, gums, resins, dyes, acids, starches, liquors, burning fluids, cordage, bark, paper, chemical agents for treating timber, for ship-building, for engraving, and so on.

Moreover, in the nationalistic fervor of the day, farmers were urged to manufacture all articles formerly procured from the North — candles and cottonseed oil for burning, spades, hoes, shovels, harness, chairs, clothing. Barrels and kegs for syrup and molasses and oaken water-buckets especially were recommended for home manufacture. “A good old-fashioned cedar or pine ‘piggin’
or 'pail' is worth half a dozen cheap Yankee painted white pine affairs." Wives and daughters were implored to "go back to the old hand-loom."

Despite the zeal and heroic efforts that went into the reorganization of Georgia agriculture, the conquest of the Mississippi Valley and the ever-tightening blockade forced farmers everywhere to find substitutes for countless little items that were common fixtures of their daily existence. To replace horses taken by the army, a planters' meeting in southwest Georgia recommended that the European practice of using cows for plowing be adopted. From H. C. Peek of Greensboro came a recipe for making cotton bale rope out of bear grass. Wooden-soled shoes with oilcloth tops became common on slaves. Chinese sugar cane, turnips, cottonseed oil cake, and sunflowers became newly accepted feed for livestock and poultry. Chinese sugar cane or sorgho, first introduced during the 'fifties by D. Redmond of the Cultivator, and then neglected, soared swiftly to a staple on nearly every farm to replace molasses and sugar. It was also a substitute for fodder and yeast, and a source of vinegar and beer. Almost endless were the substitutes for coffee, made from rye, wheat, potatoes, peanuts, Indian meal, okra, and beets. Dried raspberry and blackberry leaves and sassafras roots were used for tea while a few ingenious farmers boasted success at raising and curing their own "genuine" Chinese tea. The bread and molasses ration for slaves was increased on many plantations in lieu of the "greasy bacon" that was hard to get. What bacon could be had was often cured with ashes instead of salt. Salt itself, soon almost impossible to get, and selling by late 1862 for three and four dollars a quart, was often retrieved by leaching the smokehouse floor and boiling the salted earth in barrels of water. The sweet potato became the "staff of life" in the war diet — roasted, baked, fried, boiled, and even "puddinged" for dessert. And as wheat flour became scarce, many kinds of corn cake were contrived from the "ash cake" of the cabin to the "Dixie cake" of the big house.29

Although the campaign to spread the New Science of agriculture lost most of its force after the first few months of war, agricultural leaders shouted frantically for more intensive cultivation and a better use of farming knowledge already available. Cries for a well-rounded agriculture incorporating livestock, grasses, and
grains were perpetual. "Mixed husbandry" was suggested to bring about a wider, year-round use of fields and woodlands and as an aid to using the 18,000,000 acres of unimproved farm land that lay dormant. Prejudice against winter crops was attacked with pleas for grains and winter root crops that could be harvested before spring planting. "Let every field patch, and if need be fence-corner, be sown in Wheat, Rye, Barley, Turnips, Carrots, Winter grass . . . ." cried the Cultivator. Since there was not a single dairy in all Georgia, dairying was suggested as a lucrative opportunity, especially for small farmers and planters near the railroads whose milk, butter, and cheese could be shipped easily. In Field and Fireside Dr. Lee announced, after twenty years of experimenting, that he had discovered how to make Bluegrass live in Georgia, a discovery which would open the gates, he prophesied, of a new era. And from Athens, Henry Hull, Jr., continued to broadcast the value of clover for stock. Crab grass, also, formerly considered a pest, was now proclaimed a farmer's best friend. And seeds for many grasses were made plentiful. William N. White obligingly passed on his method of cultivating indigo, once a Georgia staple. And as crop demands shifted, there was a shift from the demand for old style cotton plantation overseers to overseers capable of managing farms with diversified crops.

RESULTS OF THE COTTON FAMINE

What were the results of the efforts of Southern agriculture to help win the war?

The simplest answer is that the strategy succeeded sufficiently to keep the South fighting against great odds for four years, but it also failed sufficiently to be considered a major cause of the South's final defeat.

It is well known that the great hope of forcing European intervention by means of a cotton famine failed utterly. Why? Before the reasons for the failure of the King Cotton Theory are listed, however, it is only fair to Southern farmers and planters to insist that they did succeed in creating a cotton famine. As already noted, almost no Southern cotton was exported during 1861. During 1862 farmers and planters refused to produce cotton and no more than a dribble of bales reached Europe either in that year or in 1863 and 1864. Indeed, by the end of 1862 the collapse
of the European textile industry was evident everywhere; magazines and newspapers there were alarmed; destitution and unemployment were reaching a climax. By December, 1862, a half million persons were on government relief in England alone while thousands of others were scratching out a miserable existence by using up their insurance, selling their household goods, grasping relief from cities, the cotton barons, and private agencies. Altogether, probably 2,000,000 persons in England were without means of subsistence. Dozens of factories were closed and scores of others were operating only part time. The governments of both England and France were seriously considering intervention.

Yet for all the hope and all the desperate efforts of the South, the cotton famine never "quite" became unbearable to England and France. For this there were a variety of reasons: (1) English and French mills had bought up extra huge stocks of cotton at low prices during the bumper crop year of 1859. This helped tide them over the first two years of war. (2) After 1862 increased cotton supplies began to appear from China, Brazil, India, Egypt, and on blockade runners from the South as well as from the North whose agents and armies in the South were buying or capturing cotton. (3) The shortage of cotton goods stimulated European woolen and linen industries, which helped replace cotton profits and cotton employment. (4) England found new profits and new jobs for her unemployed by capturing nearly all American foreign markets and shipping business, by selling munitions, ships, and supplies to both North and South. These war profits produced prosperity and relieved unemployment in England and France, especially after 1862. (5) The unemployed workers in Europe, who did all the suffering during 1861-1862, were politically impotent to do anything about intervention. (6) The refusal of the Confederacy to ship cotton to Europe, when both sides knew that blockade running was easily possible, created anger in Europe against the Confederacy. (7) The dire need of the South after 1862 for ships, munitions, and supplies forced her to ship as much cotton as possible through the blockade, since cotton was the only medium of exchange she possessed. (8) England looked upon the shortage of American cotton as a splendid opportunity to develop cotton plantations in her own empire, and thereby break the American monopoly. (9) Union propagandists promoted a fear in
Europe that if England and France aided the South, American
wheat would be cut off from Europe, thereby causing a wheat
famine. (The argument was weak since Europe could get enough
wheat from her own Eastern countries, but it was effective propa­
ganda among the masses.)

Similar reasons, declared the famed Massachusetts cotton manu­
ufacturer, Edward Atkinson, prevented the cotton famine from
subduing the Yankee North. There, too, the mills had laid in
extra supplies from the bumper crop of 1859-1860 and larger sup­
plies were imported from India, Siam, Haiti, Jamaica, Brazil, Peru,
Honduras, and China. There, too, government contracts for war
supplies gradually turned mill towns into beehives of activity, joy­
ous in a boom of war prosperity. There, too, war prosperity in
Eastern and English cities replaced the market lost by Western
farmers when the South seceded.

This disastrous turn of events, which the drum beaters of the
King Cotton Theory had never envisioned, settled a dark cloud of
gloom on the faces of Georgia’s farmers. By the spring of 1862
many people were abandoning hope of aid from Europe. Fears
that the South might lose her cotton monopoly to other nations
dampened the fires of patriotism, resulting in widespread pleas
that at least a fair crop of cotton be planted. Blockade running to
move cotton to Europe was soon promoted with all possible speed.
In 1863 with all hope of intervention gone, disillusioned Governor
Brown put the state government of Georgia itself into the block­
ade running business by chartering a little fleet of ships. By late
1864 he was paying as much as eighty cents a pound for cotton to
send out in order to supply the state’s troops with war materials.
Confederate commanders and civil officials were soon winking
openly at the wide stream of cotton flowing through their lines to
the North via the hands of speculators. Eventually, even the Con­
federate government itself was taking a hand in the trade. But by
1863 the blockade was too tight for these shipments to be of great
aid to the Confederacy.

Indeed, after 1863 the King Cotton Theory practically disap­
peared, though there was still some hope that a cotton famine
might bankrupt the North. From then on the cotton crop was
kept small chiefly because of the need for food. Through the
months that followed Georgia’s farmers and planters slowly came
to accept the belief that they were more dependent on the commercial and manufacturing interests of the outside world than that world was dependent on them.\textsuperscript{32} It was a disconsolate realization, but it was true. The appetite of war for ships, munitions, and other manufactured supplies proved to be far greater than they had expected.

\textbf{Results of the Campaign for Food}

The results of the campaign to keep the South from starving were much brighter. Yet here, too, the theorists had miscalculated. They had not dreamed that they would be cut off from the bountiful food basket west of the Mississippi. Nor had they figured on the states of Kentucky and Tennessee being overrun so quickly by the foe. Probably also, in those happy years before 1861, they had not realized what vast stores of food they were in the habit of importing from the North. Nor had they calculated correctly on the length of the war, on the extent to which their transportation system would be taxed or destroyed, or their labor supply disorganized, or on the fact that the rice coast of Georgia would be thrown out of production in the first months of war by Yankee raiders, or that so many of their horses and oxen would be taken by the army, or that so many thousands of refugees, both black and white, all begging bread, would pour into quiet Georgia from lost territory. And not reckoning all these matters correctly made the job of preventing starvation greater than they had expected.

The net result was that throughout the war all the people did not have all they wanted to eat, especially in the towns. Stories of want existed alongside stories of feasting and plenty. At times, in sections like northeast Georgia where transportation facilities were few, where frosts often damaged crops, where slaves were rare and the white men had gone to battle, there were occasional stories of distress, compelling the legislators to supply relief.\textsuperscript{33}

During 1862 a drought in the old Cherokee Indian country of northwest Georgia caused the corn crop to fail, thereby promoting much suffering and forcing the state government to ship in provisions from southwest Georgia.\textsuperscript{34} Probably the greatest shortage of foods in the towns and in the army was due to the unwise impressment policies of the government, which will be discussed later. At any rate, complaints were numerous that food was being
hoarded and hidden on the farms for fear of its being taken at below market prices by military impressment officers. Thus too often only products of low quality reached the markets, a situation bringing a complaint from the Macon Telegraph in 1862 that “Beef and mutton are now sold which all the fires of Nebuchadnezzar, or the pressure of a compound hydraulic press, could not extract a drop of oil from. Fowls of a skinny sort are selling from sixty to eighty cents a pound.” Often, too, confusion in the transportation system and the inefficiency of negligent military authorities caused whole trainloads of food to rot at freight stations.35

A story also exists of the death of many slaves along the Savannah River in the summer of 1862 because of the unavailability of corn, meat, and molasses and the use of rice as the sole food. There the slaves could not even catch the fish abounding in the river because of the lack of fishhooks and lead weights for nets. And, of course, a severe shortage of such products as butter, sugar, salt, and coffee was inevitable.

But on the whole the majority of the people of Georgia were rarely in serious want until the last few months of war when Sherman’s blue columns swept across the state to the sea. Bountiful crops were the rule, revealing on farms achievements as heroic as the military achievements of the battlefield. The spectacular increase in grain production has already been noted. Thousands of farmers also followed the example of David Dickson and others in Hancock County of abandoning all cotton after the first year of war, and devoting time, land, and labor from then on to provisions.36 Especially in the rich farming areas of southwest Georgia, remote from military operations throughout the war and the favorite resort of refugees, food shortages were rarely mentioned and the whirl of social life and gatherings around sumptuous tables were almost commonplace. Arriving in Macon for a long visit in 1863 a young wife could not help contrasting the burdened tables of Georgia with those of hungry Virginia. “Why does not the President . . . order on from here and other wealthy towns . . . the thousands of provisions that fill the land?” she wrote to her husband. “Monopolists and misers hold enough meat and grain in their clutches to feed our army and Lincoln’s!”37 Along the railroad in northwest Georgia in the spring of 1864 another reporter saw in the fields great promises of cereals and a large variety of
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fruit trees in full bloom. Even after the Battle of Atlanta in July, 1864, the justices of the Inferior Court of Macon County set aside a day for thanking God because so much of the state had been “blessed with good crops.” By August of that year the Cultivator was noting with glee that even the Yankee press was realizing the utter impossibility of ever starving the South.

Apparently, then, this task of agriculture in the war strategy—becoming self-sufficient in food—was at least partially successful in Georgia.

Inflation and Speculation

Meanwhile, however, numerous other distressing problems were gradually being saddled on the backs of Georgia’s farmers and planters—many of their own making, but many not.

Inflation and speculation were among the first of these plaguing problems to appear. The blockade by Lincoln suddenly put a stop to the wide rivers of goods formerly imported from the North and Europe. The shortages of food and manufactured items that resulted from the blockade swiftly boosted prices. What if between 500 and 700 ships had run through Lincoln’s “paper” blockade during the first year of war? What they brought into the South were mere drops in the bucket of need. By early 1862 Georgia’s comptroller-general noted that prices of such items as corn, meat, flour, groceries, shoes, and clothing—items usually imported—were from two to ten times above their pre-war level. Farmers and planters who had reorganized their production to emphasize food crops were reaping a temporary bonanza, albeit cries of “extortioner” were bandied round their ears. On the other hand, debts were piling up on the ledgers of planters who had been caught with nothing to sell but cotton, bringing many to such a pass that Governor Brown was forced to recommend stay laws lest creditors and speculators gobble up cotton property. While hordes of the innocent curtailed luxuries and railed against high prices, a band of greedy, ruthless speculators was moving into action, buying and holding scarce commodities for profiteering. The Savannah Republican was provoked into snorting, “There are cormorants amongst us who would sell their country for gain, who would barter the liberties of their posterity for ‘filthy lucre’.” “Anything that will appease the hunger of man or beast brings any price that
is asked," declared an Atlanta paper by late 1862. To make matters worse, many loyal and patriotic Southerners were already losing hope of winning the war, and thereby losing faith in the value of Confederate money. So the value of Confederate money was tobogganing swiftly.

Both state and national governments, of course, were wrestling with these economic problems. The first shots of the war had cut off the South's credit as well as her imports. Southern planters and factors had been in the habit of using New York or European financial houses for nearly all their loans. And now New Yorkers could not loan, and Europeans were skittish about loaning money to a people or a government that either would not or could not ship out cotton and other produce to pay them back. What little cash the South had on hand was soon exhausted by the purchase of ships, munitions, and supplies from Europe. Indeed, by the end of 1862 there was practically no gold left in the South.

As early as the spring of 1861 Southern financiers, however, had hit upon the happy idea of using agricultural produce as money. And immediately they had inaugurated the so-called "Produce Loan" whereby farm produce, especially cotton, was given to the government in return for certificates. It was hoped these certificates would be acceptable in Europe in place of money and that the cotton and other products backing them would be shipped when the blockade was broken or the war ended.

With apostolic zeal for the Cause, Georgia's members of Congress hastily had sent out circulars begging farmers to subscribe to the Confederacy all the cotton, wheat, corn, tobacco, sugar, and rice they did not need for themselves. Such eloquent spokesmen as Alexander Stephens, Ben Hill, J. E. Ward, and Howell Cobb stumped the state appealing with passionate oratory for subscriptions of large parts of everyone's crop, insisting that large stores of agricultural products in government hands would hasten the intervention of European nations then hungering for Southern products. From the Confederate Treasury, Secretary Memminger dispatched agents to scurry over Georgia begging for cotton for his department, and corn, flour, bacon, pork, beef, and other products for the army commissary. Late in June, 1861, Georgia's cotton planters gathered in Macon and with an outburst of patriotism on the Fourth of July pledged the government whatever part of their
crops it wished, recommending that each planter subscribe at least half his crop.\textsuperscript{43} In county meetings the war spirit flowed through farmers like evangelical emotionalism, resulting in on-the-spot subscriptions of hundreds and even thousands of bales of cotton, occasionally including a planter’s entire crop. In Bibb County, for example, in one day subscriptions amounted to $125,000 worth of farm produce; in Hancock, 1,600 bales of cotton.

Yet with all the fanfare, results were only partially gratifying. By the end of 1861 Confederate agents had collected throughout the whole South only 400,000 bales of cotton, 1,000 hogsheads of tobacco, 5,000 bushels of wheat, 270,000 bushels of rice, 1,000 hogsheads of sugar and molasses, plus handfuls of other produce—all a mere fraction of the total produce available. Irked by subscriptions of hundreds rather than thousands of dollars worth of produce in Baldwin County, the \textit{Milledgeville Union} poured fire and brimstone on rich planters, and then shrieked, “Wake up from your slumber, before the rafters fall upon your unconscious heads.” But shrieking was of no use. The government was not offering as high prices as could be had elsewhere. Moreover, too many Southerners had expected squadrons of British warships to come to their aid during the first few months of the war, and when they had failed to appear, many had lost hope. Also, the fresh successes of Yankee armies in the Mississippi Valley during 1862 further dampened many hopes. The result was that subscriptions were evaded wholesale. A paltry 30,000 bales of cotton were subscribed during the rest of the war. And by 1863 the whole “Produce Loan” scheme was practically dead.\textsuperscript{44}

Other efforts to bolster Confederate currency and control inflation and speculation proved equally futile. Both buyers and sellers organized price conventions in attempts to browbeat each other. Military authorities, where martial law was declared, attempted to fix prices. In some counties like Monroe, there were rare cases of farmers agreeing to sell produce to the government at less than market prices. State commissioners and impressment officers also tried to check the spiral of soaring costs. But all efforts failed.

From the end of 1862 on, everyone who could, cast all caution to the winds and indulged in the wild orgy of speculation. Even patriotic farmers who had tried to keep prices down, noted the \textit{Augusta Chronicle and Sentinel}, were by then so “fed up” with
paying exorbitant prices for what they bought that they, too, were beginning to hike prices. In southwest Georgia where land was still fresh and the cost of production low, speculators swarmed, buying land and Negroes to raise provisions for sale at fantastic prices. And fortunes were made. Speculators hurried through the country contracting for forthcoming crops to hold for still higher prices.

With the increasing effectiveness of Lincoln's blockade, the fall of Vicksburg (the last avenue of supplies from the Southwest), the failure of Lee to pierce the North at Gettysburg, and the gradual loss of the border states, shortages became ever more acute.

Even more vicious than the rise in prices caused by shortages was the rise in prices caused by loss of faith in eventual Southern victory. "How much," asked Georgia's farmers, "would a Confederate dollar be worth if the Confederacy itself were destroyed?" The extent to which Southern hopes were dashed after Vicksburg and Gettysburg was manifest during 1863 by a precipitous drop in the value of Confederate currency. Before the end of the year it took twenty-one such dollars to equal one dollar in gold.

Georgia's farmers and planters knew, of course, that the flood of new money pouring over the land was, or some day might be, worthless. Perhaps some thought they were getting rich; for the prices they received for corn, hay, beans, potatoes, and bacon were four to five times above the high prices of 1862. But they were also paying eighty Confederate dollars for a once five-dollar barrel of flour, ten to fifteen dollars for once two-dollar shoes, and five dollars instead of one for their yearly subscription to the Southern Cultivator. Their wives were buying muslin "like hot-cakes" for $2.50 per yard which once had sold for fifteen cents, and calico for ten dollars per yard. Greed for gain was clutching even old super-patriots of three years ago, declared the Cultivator at the beginning of 1864.

But the worst was yet to come. In the shambles and despair left in the wake of Sherman's columns, the economic ceiling burst. Annual subscriptions to the Cultivator leaped to fifteen Confederate dollars a year. The price of a hat became several hundred Confederate dollars; a horse, a thousand. Wheat and corn soared to fifteen, then thirty, and finally fifty and sixty dollars per bushel. A drink of poor whiskey sold for five dollars; good whiskey, ten dollars;
butter, four to ten dollars a pound; sweet potatoes, six to forty dollars a bushel; sorghum syrup, twenty dollars a gallon; bacon, six dollars a pound; flour, four hundred dollars a barrel; beef and veal, four to ten dollars a pound.45

Meanwhile, taxes on farmers and planters also were going up. Although taxes had been raised slightly during 1862, it is safe to say that during the first two years of war the Confederate government had imposed only a few light taxes to finance the war. But beginning with 1863, the Confederate government was forced to bear down. Property taxes went up; income taxes and taxes on profits were imposed. In April, 1863, a tax in kind of one-tenth a farmer's produce above what was needed for home use was passed by Congress. Only extremely small farmers, poor discharged wounded soldiers, and the poor widows of veterans were exempt. All others were forced to send to the army quartermaster within the year their tithe of wheat, corn, oats, rye, rice, potatoes, hay, molasses, cotton, peas, beans, wool, tobacco, and so on. By the end of the first year of this tax in kind, Georgia farmers and planters had paid $22,000,000 to the Confederate government. Despite the opposition of farmers, who claimed an unfair burden had been imposed on them, the tax was re-enacted in 1864, albeit with less demand upon the poor. And by 1865, everything taxable was being burdened to the limit.46

**IMPRESSMENT**

No complaints made by Georgia farmers during the war, however, compared to the vituperative contempt that farmers and planters hurled at the practice of impressment to which the Confederate government was forced to resort in March, 1863. By that time the efforts of the army to buy provisions at a "just price" were failing everywhere. So long as prices were leaping upward at every new break of day the holders of farm produce were refusing to sell supplies to the government which either could not or would not pay as much as civilians were willing to pay. "No one would sell to the government . . .," complained General Joseph E. Johnston, "when he could get from his neighbors twice the government price for his horses and grain." Needless to say, the government believed that high prices could be avoided and that farmers as well as speculators had turned Shylocks and were withholding produce
from the army for higher prices. On the other hand, the farmers complained that prices offered by the army were below the cost of production, which also had soared.

At any rate, the government disregarded the farmers' arguments and forthwith created boards to set prices and impress whatever supplies were needed. Prices were published in newspapers, invariably below the regular market, and often as much as seventy-five per cent below.47 As impressment officers fanned out over the state taking food and livestock at low prices, a noisome furor of complaint greeted them and followed them after they left. To Bob Toombs the whole affair was a wanton attack on the right of property. To little Alex Stephens, suspicion that Jefferson Davis was marching toward dictatorship was augmented. In Georgia, both Governor Brown and the members of the state Supreme Court were certain that the act was a flagrant, unconstitutional violation of states' rights; and a burning letter was dispatched to the War Department expressing their views. Others complained that it threw the whole burden of supporting the army upon farmers. Why did not impressing officers go first to the warehouses of speculators rather than to the barns and smokehouses of farmers? asked the Cultivator. By the autumn of 1863 reports were reaching Governor Brown that in some sections impressment officers had left farmers with so few provisions and so little work stock that many had been forced to sell out and move elsewhere. By the spring of 1864, it was said, so many horses had been taken for the cavalry and so many oxen for beef that people were hungry for lack of means to haul supplies from the railroad in northeastern counties. Moreover, in upper Georgia corn supplies were so depleted that state agents had to rush to Alabama to buy corn to feed stock and people. From William N. White, by then part-owner of the Cultivator, came the complaint that impressing officers had used bad judgment by taking skinny year-old calves and breeding stock needed for future production. The whole system, White went on, discouraged a farmer's best efforts, ruined production, promoted further shortages, higher prices for goods not impressed, and starvation. There was resentment also because of the principle involved in impressment. In a state where the states' rights doctrine was a fetish, people's feelings were wounded by having their goods commandeered by agents not natives of their own soil.
Within a few months after impressment began, the anger of farmers and planters was fanned by stories that the impressment system was being abused by rascally government agents, bands of army deserters, and small bodies of cavalry. Impressment officers were accused of going beyond their powers, sometimes taking not only surpluses, but part of the family food stock as well—not only pleasure horses, but work horses needed to make crops. Even after milk cows and breeding stock were exempted from impressment there were many reports of violation of the order. Gangs of deserters and unscrupulous groups of cavalry were said to be harassing the farmers, robbing and plundering stock and provisions under pretense of impressing for the army. Some farmers complained that agents rarely bothered their personal friends. And there were frequent stories that impressed supplies were being wasted by being heaped up at inaccessible points, of whole depots of provisions being destroyed by neglect or exposure and the inefficiency or carelessness of the railroads in moving them. All of which led to tales that the army was starving in the midst of plenty.

With anger came action. Farmers and planters, infuriated at low impressment prices, to say nothing of their fear that Confederate paper money being paid them would be worthless, began hoarding and hiding their supplies. Despite appearances of want in north Georgia counties, commissary officers suspected the people of having vast hidden treasures. Eventually, also, the farmers refused to accept paper money, demanding gold. Prices of what few provisions did reach the markets were raised sky high. Many farmers began curing all their meat in order to classify it as part of their home supplies. And some farmers even stopped producing in protest against the impressment system.

Cries rose from government officials and townspeople that the farmers were extortioners. Sermons were preached against grasping farmers and their greed, selfishness, covetousness. But the farmers stood unmoved, insisting they were the abused, the mistreated, the cheated, the over-burdened. Only in rare instances, like the pledge of fifty-six Washington County farmers in January, 1864, to sell provisions at "reasonable prices" and even low prices to soldiers' families, did farmers and planters soften.48

Indeed, everywhere throughout Georgia from the beginning of 1863 on, it seemed that the only desire of the men of the soil was
to hold their own. By then the patriotism, crusading zeal, and ardor for the Cause of the first two years of war were being diluted by the natural human urge for individual survival. Campaigns to reorganize agriculture so as to pour strength into the Confederacy were being proposed no more, excepting the campaign for more food, and even that had quieted to a whisper. The germs of internecine strife as opposed to unity, of individualism as opposed to cooperation, from which more than one society has died, were infecting the body of the Confederacy.

**The Disorganization of Labor**

Another evil that plagued Georgia agriculture during those years of war was the disorganization of labor. Fortunately, in one sense, probably eighty-five to ninety per cent of the more than 350,000 persons tilling Georgia's soil in 1860 were black slaves. Here was the vast reservoir of permanent manpower for the home front which the government was not expected to disturb. For fighting men, there were the 119,000 whites between the ages of eighteen and forty-five.

On the unfortunate side there were two disturbing factors. (1) Southern agriculture was geared to hand labor, operating with a minimum of machinery and implements, possessing no facilities for replacing men with machinery as the North could do, and thus required more hand labor per acre than other sections. (2) Nearly half of Georgia's 62,000 farms were operated by slaveless white families whose men, when taken into the army, were not replaceable.

Yet in the blithe optimism and high spirits of those first few months of war, the farmers and planters of Georgia were not alarmed. Expectations of quick victory and quick aid from Europe muffled most fears. Confederate leaders believed that the 100,000 volunteers they had called for one year of service plus the state militias called for six months would soon do the job and be home in triumph by the next planting. Forthwith the war began. Leaving their plows in the red furrows, the sons of Georgia's little farmers marched away with shouldered muskets. By September, 1861, Governor Brown announced that 30,000 of Georgia's men were in the army, 20,000 of whom were already gathered on the battlefields of Virginia.
Before the end of that very year labor troubles had come. For all the pitiful insignificance of the Union navy, for all the tall talk that Lincoln's fleet and the blockade were the "laughing stock of Europe," and the chiding in advertisements of "Lincoln Outwitted" or the "Blockade Raised" by runners, the rice coast of Georgia was in panic. News of Yankee attacks on the Carolina coast and of the capture of Port Royal in November was spreading terror among whites and murmurings among slaves. Already slaves had been taken from the fields to throw up earthworks on St. Simons Island. Now by December, with most of the white men gone, plantations were being evacuated by women and slaves, family silver was buried, and household goods piled on rafts and boats and paddled inland up the rivers. On some plantations Negroes trying to escape and those suspected of wanting to join the Yankees had to be handcuffed and moved inland. By the following March all the golden isles of Georgia had been abandoned at the threshold of the planting season and scores of plantations on the mainland were vacant.

During 1862 there were 2,500 Negroes requisitioned by General Mercer to fortify Savannah; while on the Altamaha, General Beauregard had drawn 300 more from the fields for similar work. As the year progressed the labor shortage was worsened by Negroes running away. News of Yankee gunboats and small inland raids along the coast made many slaves feel that "their deliverers had come." From as far as a hundred miles inland black folk straggled into Yankee camps to join the Federals in ravishing abandoned plantations of livestock, tools, wagons, and stores of provisions. By the fall of the year 500 slaves were in a Federal contraband camp on St. Simons Island. A few others had wandered northward out of Georgia to plague the heels of Union columns.

The result was that many rice planters like Blake, Barclay, Izard, Manigault, Heyward, and others were forced to discontinue operations during the year. On famous "Colerain" plantation, a unit of 4,000 acres, only 170 "tierces" of rice were grown, much of which was damaged. "This war has taught us," said Louis Manigault, in disillusionment, "the perfect impossibility of placing the least confidence in any Negro. In too numerous instances those we have esteemed the most have been the first to desert us." Nor was the rest of the state, despite its peace and quiet, free
from dislocated labor. By April, 1862, hope of fighting the war with volunteers had been given up and all men from eighteen to thirty-five were subjected to conscription for military service for a term of three years. Within the brief period of a month, Governor Brown declared there was not enough labor left in the fields to raise the needed crops. In some cases planters left at home were charged with caring for the fields of their neighbors gone to the army. From a few communities came reports that so few white men were left the patrols which usually rode up and down the road at night to enforce the slave code were fearfully weakened; outsiders and insurgents were tempted to stir up a Negro revolt. On some plantations masters were forced to leave their slaves entirely by themselves with standing instructions to work the land as best they could under black foremen. In those areas of north Georgia where slaves were scarce, conscription of white men depleted the labor force so much that there were tales of wholesale avoidance of conscription, of desertion, and of opposition to the politicians who had favored conscription. Verily, by the end of 1862, with about 75,000 of Georgia's sons in the army, at least half of all the state's white men from eighteen to forty-five were in uniform, no longer available to plant and harvest. Obviously, the non-slave-holding little farmers were in a squeeze. No wonder the editor of the *Griffin Union* wrote of fields abandoned and full of weeds. And no wonder he was irritated by that minor but irresponsible group of farmers who were so fascinated by the war that instead of keeping at work they loafed in town around the railroad station to catch war rumors and news.

During the year 1863, only two bright spots appeared in the labor picture. One was the reappearance of slaves and planters in the coastal rice fields from whence they had fled the year before at the approach of the Yankees. Gradually, after this temporary Federal occupation of the coast, people straggled back to their weedy fields and ravished homes.

The other bright spot was that white people in the South were by now discovering that there was some dignity to labor. Slowly they were forgetting John C. Calhoun's cry of thirty years before that no Southern white person of "respectability" should submit to menial labor. A new kind of thinking was cropping up in the columns of the *Southern Cultivator*. "The prime duty of every
non-combatant is physical labor.” “Contempt for manual labor . . . must be adjourned to a future day . . . .” “An idler now is a public burden.” Negro boys and women ministering to “ease and gentility” in private homes and hotels should be in the fields, it said. And “none of our citizens, however cultivated, should consider it beneath their dignity to lay hold of the hoe or plow-handles.” Indeed, on thousands of farms, hundreds of white men, women, girls, and boys with tender hands were already putting callouses on their palms. “God bless the girls,” said an observer; “they wear homespun, and plow and hoe to make corn.”

But the rest of the picture was still dark. Perhaps ninety per cent of Georgia’s slaves continued to labor faithfully. Perhaps Lincoln’s long delayed Emancipation Proclamation finally put into effect on New Year’s Day, 1863, was little heard and little heeded. Yet a growing restlessness among the blacks was visible. “Abolition seducers” and “traitors” were spreading tracts and newspapers abroad, insisted the Cultivator, drawing Negroes to the North in hordes with lies and false promises, breaking up slave families, causing wives and children to be abandoned and fields to be neglected.53

Worse still, the drafting of men up to the age of forty-five, which began after Lee’s defeat at Gettysburg, further harassed the non-slaveholders and agitated the class conflict between rich and poor. By harvest time Governor Brown was appealing to President Davis to let the state’s militia go home to help get in the crops and plant the wheat crop which was not yet in the ground for want of labor. Crops were being wasted, he declared, for lack of hands to gather them. But apparently Davis was too desperate to listen to Brown’s pleas. The militia did not come home.

As time passed on into the disastrous, harrowing year, 1864, the labor situation went from bad to worse. Conscription of white men from the fields continued unabated. Around Macon an observer noted that many farms already were without a white male over ten years old. The surrender of Chattanooga during the peak of the 1863 harvest season had put Georgia in dire peril. Shortly, in February, 1864, the age limits for conscription were lowered to seventeen and upped to fifty. Protests against the act by newspaper editors or by “anarchists” like Brown and Stephens, and warnings that agriculture would be left in woeful state were now mere peb-
bles tossed against the resolute stone wall of the President's determination. Appeals that older farmers and owners of slaves be returned home or deferred to produce food likewise fell on the deaf ears of a government too harried and too used to grumbling to listen. Now, moreover, with the Yankee "deliverers" threatening the borders of Georgia, Negro slaves were daily becoming more useless, less dependable, more demoralized, more inclined to pilfer, shirk work, run away, or disobey the slave code. From every direction came stories that the shortage of white men for "patrolling" was leaving the slaves free to live, to work or not work, as they pleased, and few examples of quick justice or speedy retribution were visible. But the worst was yet to come.
3.

Invasion and the Wreckage

Despite all the hardships spawned by inflation, speculation, impressment, increased taxes, and disorganized labor, the farmers and planters of Georgia were, in the spring of 1864, still fighting vigorously and producing abundantly. The state had not yet tasted the blood and smoke of battle. Worries, sorrows, deflated hopes there had been. But not destruction!

Then suddenly on May 5, 1864, an invading army of nearly 100,000 Union troops under General William Tecumseh Sherman moved into Georgia. Southward from Chattanooga it moved, through Dalton, Resaca, New Hope Church. Before it people fled in every direction, crowding the highways in search of hiding places, huddling in box cars and railroad stations—whites, Negroes, dogs, household goods all together. Behind the marching army were left burned towns, some with not a house standing. A few towns, like Rome, escaped destruction because Sherman fore­saw their usefulness to the army. Anarchy spread in the army’s wake like a contagious disease, with both Yankee and Confederate guerrillas, deserters, and plain thieves plundering farms and plantations of all that the army left.

At Kennesaw Mountain the invading army was whipped but not stopped. Its monstrous bulk moved on to Atlanta licking its wounds, continuously pressing against the Confederates with the inexorable force of a glacier. By then July had come. In south Georgia the crops were already “laid by.” Quickly the Governor ordered all men and boys in the reserve militia south of Macon out of the fields and up to Atlanta for battle. Two weeks later those in north Georgia reported. All other able-bodied men from sixteen to fifty-five were recruited into the county militia. Even the editors and staff of the Cultivator dropped their pens and scissors and reported for military duty. And as this “Joe Brown Malish,” 10,000
A CENTURY OF GEORGIA AGRICULTURE

strong, armed with pikes, ancient flintlocks, shotguns, and a few modern rifles, all converged in Atlanta, farming came to almost a complete stop. Around Milledgeville slaves were drawn from the fields to dig trenches for protection of the state Capitol. The Confederates changed generals. The siege of Atlanta began. For two sultry, bloody months the invaders were fought to a standstill. But then the Confederates began to pay for their long neglect, indeed, their contempt, of industry. On September 3rd, Sherman moved into Atlanta.

The ragged, forlorn, defeated "Joe Brown Malish" obediently straggled home to gather their crops. All northwest Georgia, one-quarter of the state, the haven of the little, independent, non-slaveholding farmers, was in the grip of the Yankee army. At Rome the military commandant was already "unionizing" the region by setting maximum prices in Federal money for farm produce and by ordering the people to bring in all surplus supplies to be exchanged for vouchers. He threatened that if his orders were disobeyed, foragers would be sent to confiscate the guilty farmer's entire stock.1 There, surely, Georgians had tasted the smoke and blood of war.

But the conqueror Sherman was not yet satisfied. During his nights in Atlanta while the sky was bright with hundreds of fence rail fires over which his troops were roasting captured corn, the general was scheming. So far he had reached only the fringe of the great plantation belt of Georgia. Around him he saw abundance, lavish stocks of food, few signs of want or suffering. His army was gorging itself in this area of plenty. "Even now," he wrote, "our poor mules laugh at the fine corn-fields and our soldiers riot on chestnuts, sweet-potatoes, pigs and chickens." The "rich planters," the "planting oligarchy" against whom the North was fighting, he mused, did not yet know what the war meant. They must be crushed, made hungry. And then when their fences, corn, hogs, and sheep vanished before their eyes they would have "something more than a mean opinion of the Yanks." By marching to the sea, he concluded, and devastating the country far and wide, he could knock Georgia and the Confederacy out of the war. He could "make Georgia howl."2

Finally, on November 15th, his plan went into action. In the chill dawn of that day his army moved slowly out of Atlanta in
four columns headed southeast to cut a wide, double-pronged swath of destruction to the coast.

Fear and panic swept over the land in the path of the oncoming invaders. Around Macon and Milledgeville every horse, ox, mule, and wagon was impressed to move government stores to safer places. In the counties around Washington, although many miles from the line of march, people got in a frenzy, hid their silver, and drove their cattle into the thick forests along Kettle Creek. Trains and roads became cluttered with refugees pouring into southwest Georgia.

Having cut itself off from its line of supply with Chattanooga, the army was forced to live off the country. There was no difficulty in getting food from the surrounding rich plantations so long as the columns continued moving. Every morning companies of about fifty foragers fanned out from each brigade on foot with orders to forage liberally — but with orders also to discriminate between the “rich who are usually hostile, and the poor and industrious, usually neutral and friendly.” Moreover, they were commanded to leave sufficient provisions on all places to maintain life in the victims. From farms and plantations the foragers took wagons and carriages, loaded them with bacon, corn, meal, turkeys, chickens, ducks, molasses, sweet potatoes — everything within reach, working their way back to the main columns by nightfall.

Only during halts and camps were men in the regular columns allowed to gather provisions or drive in stock within sight. But thousands of men never heard of these limitations, and as the columns moved, mob action replaced order and discipline. “Bummers” from the ranks raided far and wide, turning themselves into plunderers and thieves, burning houses, stealing jewelry, furniture, clothing. Many were shot or hanged in the woods by people of the country or by Confederate soldiers. But most looted as they pleased.

The night the conquering general camped at Howell Cobb’s plantation, huge bonfires of fence rails lighted the sky. On special orders of Sherman, nothing belonging to this “arch rebel” was spared. The rich larders of corn, beans, peanuts, and molasses were carried away. On David Dickson’s famous plantation at Sparta the flames of 400 burning bales of cotton seared the air. All stock was driven off. As the army approached Covington the widow Burge ordered her slaves to hide the barrels of salt in the Negroes’ garden
under leached ashes. Meat was stored in the fodder. Wagons, mules, hogs, and cattle were driven into the swamp. Lard was buried in jars. China, silver, and soap were cached under bricks. The white folks' "silk dresses, challis, muslins, and merinos, linens, and hosiery, all found their way into the chests of the [Negro] women and under their beds" in hope the slave cabins would not be disturbed. Everyone slept in their clothes at night while rumors of plundering disturbed their slumber.

Then suddenly one morning the Yankees came. "Like demons they rush in! My yards are full. To my smoke-house, my dairy, pantry, kitchen, and cellar, like famished wolves they come, breaking locks and whatever is in the way. The thousand pounds of meat in my smoke-house is gone in a twinkling, my flour, my meat, my lard, butter, eggs, pickles . . . wine, jars, and jugs all gone. My eighteen fat turkeys, my hens, chickens, and fowls, my young pigs are shot down in my yard and hunted as if they were rebels themselves." Horses, mules, colts were captured. Even the Negro cabins were plundered of Sunday clothes in the belief they belonged to the whites. Ovens, skillets, coffee-mills, coffee pots were carried away. Fences were torn down. Outbuildings were burned. And finally the soldiers forced "my boys [slaves] from home at the point of the bayonet. For two days the invaders marched by. By the second evening there was nothing left to eat, even for supper." The widow Burge was left $30,000 poorer. 

And so it went in Georgia wherever the army appeared. The smouldering chimneys of destroyed houses studded the landscape. In the devastated country around the little village of Jonesboro, Confederate officials received a thousand applications a day for rations from hungry victims of the march. In many places people chewed bushes and roots or gathered corn from the ground where the invaders' horses had fed. Countless families found shelter in huts and shacks alongside which the slaves' cabins were comfortable homes.

But even yet there were romanticists in Georgia — government officials and newspaper editors — declaring that Sherman, by cutting himself off from his base, had got himself into a precarious position, was harassed, defeated, starving, and fleeing to the coast for safety. Vain appeals for the people to starve the army by a "scorched earth" policy were sent out. Jefferson Davis rushed into
the state to assure the people that Sherman was in desperate straits. In Augusta, Macon, and southwest Georgia, Negroes were still selling at from three to five thousand dollars a head as if slavery would go on forever.

But the army moved on relentlessly. Herds of livestock swelled to almost unmanageable proportions. Ten thousand cattle were soon being driven along. Fifteen thousands mules and scores of horses were finally in the line of march, each officer leading three or four remounts. Behind every regiment half a hundred Negroes and foot-sore soldiers rode on mules. Hundreds of animals were ordered shot to keep "too many idlers" from being mounted. Indeed, 65,000 men and 35,000 animals were being fed by supplies from the countryside.

Still the loot piled up until great stores of it had to be thrown away for want of means to carry it. "Dead horses, cows, sheep, hogs, chickens, corn, wheat, books, paper, broken vehicles, coffee-mills, and fragments of nearly every species of property that adorned the beautiful farms of this country, strew the wayside . . . ," reported a news-writer from Augusta.

Behind the marching columns thousands of slaves followed their "deliverers." "Every day," wrote one of Sherman's generals, "as we marched we could see on each side of our line of march, crowds of these people coming to us through roads and across the fields, bringing with them all their earthly goods, and many goods which were not theirs. Horses, mules, cows, dogs, old family carriages, carts, and whatever they thought might be of use . . . They were allowed to follow in rear of our columns, and at times they were almost equal in numbers to the army they were following." What slaves remained at home hung around their cabins, surly, refusing to work, waiting in a planless vacuum for the day when their masters' land would be theirs. By November, the North claimed that 154,000 of Georgia's slaves had been freed. 4

While Sherman was in the "pine barrens," food for his army became scarcer. But soon the rice fields of the coast and the Savannah and Ogeechee rivers were reached. Foraging took on fresh vigor. The islands of the coast were swept clean. Before Christmas Day the invaders were camped in Savannah. There a half million bushels of rice and warehouses glutted with cotton fell into the conqueror's hands.
On the march nearly 10,000,000 pounds of grain and more than 10,000,000 pounds of fodder were captured, not counting the forage consumed along the way. "I estimate," reported Sherman, "the damage done to the State of Georgia and its military resources at $100,000,000, at least, $20,000,000 of which has inured to our advantage, and the remainder is simple waste and destruction." Riding through the "Burnt Country" between Sparta and Gordon in the wake of the army, a young girl saw hardly a fence left. Fields were trampled, the roads lined with the carcasses of horses, hogs, and cattle. The stench forced travelers to hold their noses. Homes and gin-houses were charred rubble. Hay ricks and fodder stacks were demolished, corn cribs empty, cotton burned, no grain left except where the horses had eaten. Not a chicken was in sight. Crowds of weary, hungry Confederate soldiers wandered on foot over the roads in both directions, or squatted on the roadside gnawing raw turnips, meat skins, and parched corn to ward off starvation.

By Christmas Day, 1864, the war, for all practical purposes, was over in Georgia. In the short space of eight harrowing months Georgia's farmers and planters had been given all the war they could stand. In forty days, as the target of one of the modern world's first experiments in "total war," the state had been reduced from a land of peace and comparative strength and plenty to a land of weakness, poverty, and turmoil.

**AMOUNT OF WEALTH LOST**

At the end of the war the agricultural establishment of Georgia was prostrate. All Confederate money and bonds held by her farmers and planters were worthless. Her 1860 banking capital of about $9,000,000 had been invested during the war in Confederate bonds and state securities and now her twenty-five banks were nearly ruined. Her $18,000,000 worth of state war bonds was declared valueless and the state was forbidden by the national government to redeem them. Thus the life savings of many a farmer and planter had melted away.

In like manner, the greatest of all the people's investments — the $302,694,000 invested in slaves — vanished with emancipation. To David Dickson alone, the loss amounted to $300,000.

During the war and the five years of disorganization following,
the state's livestock was decimated. At the end of the decade of the 'sixties the census reports revealed that the planters and farmers of Georgia owned 1,000,000 fewer swine, 68,000 fewer dairy cows, 103,000 fewer sheep, 219,000 fewer beef cattle, 49,000 fewer horses, 14,000 fewer mules, and 20,000 fewer work oxen than they had owned in 1860.

On the once fabulously rich and productive rice coast many plantations were almost beyond repair. "Dams and flood-gates, quarter drains and canals, mills, barns, and houses were either dilapidated or destroyed, and the power to compel the laborers to go into the rice swamps was utterly broken."

With the labor supply disorganized, buildings destroyed, and work-stock and implements depleted, farming became such a risky and difficult venture that thousands of landowners decided to give it up altogether. By 1870, in fact, the amount of land in farms declined by 3,000,000 acres. Farms and plantations of all kinds were a drug on the market and were sold for a song to the few buyers available. The 1870 census noted that the value of all the state's farm land, buildings, implements, machinery, and livestock had dropped $98,000,000 or 48 per cent below what it had been worth in 1860, while in the nation as a whole the value of such property had risen 12 per cent. Reports from fifty counties in 1867 showed a decline ranging from 50 to 90 per cent in the value of farm lands.

Although many landowners were eager to sell their supposedly worthless holdings and the Macon Gazette warned discouraged planters that their land might be bought up by "sharpers for a song" who stood to make enormous fortunes when the tide of emigration turned South, there is little evidence that many speculators appeared. More often it was the sheriff who showed up to sell at auction the vast quantities of land he was obliged to confiscate in lieu of taxes or to satisfy a court judgment. In spite of the ads in all the newspapers, however, neither sheriffs, lawyers, nor landowners were able to find many buyers.

Even so, the national government was still far from satisfied. Thirsting for vengeance as well as for money to pay the costs of Reconstruction, Treasury agents were sent scurrying over the state to collect the tax that had been imposed on cotton during the war but which the Treasury had been unable to collect heretofore. In three years, 1866-1868, the agents squeezed $11,800,000 out of
Georgia pockets. In 1867 one-fifth of a grower's income from a bale of cotton was required to pay this tax. Where the tax could not be paid the cotton itself was confiscated. Under such conditions cotton planting was unprofitable and many a farmer refused to plant cotton while some even plowed up what had been planted. Fortunately the agricultural officials of the national government and Northern chambers of commerce were soon as aware as were Southerners of the evil effects of the tax. Northern millers and shippers needed Southern cotton, and fear that such a tax might turn the American cotton monopoly over to India, Brazil, and China soon put an end to the Act. But by the time of its demise in 1868 the agricultural establishment of Georgia was poorer and more disorganized than ever.¹⁰

Equally costly and vicious was the national Confiscation Act of 1862 which made the property of all rebels liable to seizure. It was under this act that Sherman began distributing 40-acre farms to heads of Negro families in the coastal area in January, 1865. Plantations found unoccupied — even if only because of flight before the invaders or because of a family vacation — were seized as abandoned property. Thousands of bales of cotton were seized on the grounds that they were owned by the Confederacy. In Savannah alone $21,000,000 worth of confiscated cotton was sold by Treasury Agents. To be sure, all confiscations were stopped in 1866, and after 1872 claims against the government were allowed for most of the property that had been seized. But by then the damage had been done. Millions of dollars worth of property had been stolen by villainous agents, receipts proving confiscation had been lost, and many planters had abandoned farming.¹¹

To make matters worse, even those who held on to their property found themselves so short of the most elementary supplies needed for farming that making a new start required unusual exertion. The new commercial fertilizers that had come into use just before the war were so costly that most planters could do no more than dream about them for a year or two. Grain for feeding work stock was scarce. Seeds of all sorts were short in quantity and their quality had deteriorated during the war from lack of care. The Cultivator urged farmers to plant only three or four instead of the usual six or eight corn grains in a hill, and vegetable seeds especially were not to be wasted. In 1866 the Cultivator estimated that
enough cottonseed was on hand for only about one-fourth a normal crop and much of it was so poor that two or three plantings were required to get a good stand. In 1867, after two years of crop failure because of drought, the national government distributed $50,000 worth of seeds in the South, but such aid was a mere drop in the bucket of need.

If any further evidence was needed of the wreckage of the Georgia agricultural establishment it was visible in the destitution that could be seen on every hand. For even though 90 per cent of the people of the state lived on farms or in rural villages, thousands of them remained hungry for as long as three years after the war. Starvation itself was warded off only by the intervention of both state and national governments and by quickly organized relief societies in the South and the North. In the winter of 1865 alone 35,000 people around Atlanta were dependent on a Federal government food distributing office; and all through 1866 and 1867 government appropriations, grain supplies from the West, and army surpluses had to be used to prevent acute suffering. In fifteen months the Freedmen's Bureau issued rations to nearly 850,000 people. Nor was it uncommon for many a once comfortable planter's family to sleep on the floor, use boxes and barrels for furniture, and spend many hours a day fishing, or hunting a wild duck or rabbit for the next meal.

As noted previously, the agricultural establishment of Georgia was worth about $500,000,000 before the war. After the war it probably was not worth more than $100,000,000. Thus the agricultural wealth of Georgia in real and personal property was depressed about 80 per cent, while in the victorious and unscarred North it was rising steadily.

It was the disorganization of the labor supply wrought by the war, however, that was to prove more destructive than the losses in money and real property. For had Georgia's labor supply remained intact, her fields could have been replanted productively, her buildings and fences could have been rebuilt, and her financial losses could have been recovered. But this reconstruction was prevented by the disorganization of both her white and Negro manpower.

The extent to which the war crippled the state's white labor and management is impossible to determine. By 1870 the state's white
population had been augmented by newcomers from Virginia and the Carolinas and was larger by 47,000 than it had been in 1860. It is worth remembering, however, that virtually the entire population of white men aged 18 to 45 was called into military service at some time or other during the war and about 40,000 — a full one-third — were dead or missing by the war's end. In some communities, moreover, one-third of the veterans who managed to return home had lost a leg or arm and were, thereby, less productive than formerly. 12

In addition to this loss of white manpower through death or maiming there was further loss through emigration to the West, to Europe, and to Latin America. The Homestead Act of 1862 and blatant appeals from Western states for settlers lured away thousands of Georgians after the war. By 1870 approximately 150,000 white Georgians were living in Southwestern states and Florida. How many of them had arrived there as a result of the war is not known, but the numbers must have been large.

The exodus to Europe was extremely small. Nor do there appear to have been outstanding results from the meeting of Georgia planters called by William H. Norris, who advised his friends to accept the invitation of the Emperor of Brazil to open settlements on land at 10¢ an acre. 13 The expense of moving to distant lands was too great for farmers in poverty; and Southern journals, particularly the Cultivator, discouraged such moves, warning of the perils of strange lands, unfamiliar crops and farming methods, and calling the attention of all to their duty to remain at home and rebuild their own country.

Nevertheless, the many who moved West and the few who went abroad were probably, as the Cultivator noted, the aggressive and the adventurous, those Georgia could least afford to lose. Through misfortunes and the lure of new fields, therefore, many a Georgia plantation was bereft of supervision and many a small-farm family was without the father or sons whose services were needed for reconstruction.

It was the disorganization of the state's black labor supply, however, that broke the back of the agricultural establishment. Tens of thousands of ex-slaves joined the Westward exodus, enticed thither by rumors of high wages and appeals by labor agents. Whole gangs were hired away from Georgia by Western planters,
the national government sometimes helping with the cost of trans­
portation. As many as 1,000 a day were seen crowded on West­
bound railroad cars passing through Atlanta. Other thousands
wandered up and down Georgia, pouring particularly out of the
Black Belt counties and into the Coastal Plain. Many fled as quick­
ly as they could from the arduous labor of the rice plantations
along the coast. Most disturbing of all in this ebb and flow of black
population was the wretched crowding of great numbers of freed­
men into the towns. From 1860 to 1870 the Negro population of
Fulton County (Atlanta) increased 425 per cent; Bibb County
(Macon), 80 per cent; and Chatham County (Savannah), 60 per
cent. In all this aimless wandering thousands of Negroes of all
ages died of exposure and disease. In their eagerness to enjoy their
new freedom many ex-slaves deserted their families and practiced
infanticide to release themselves from unwanted burdens.

Even when the ex-slaves remained in one place long enough to
accept jobs their productive efficiency generally appeared to be
from a third to a half less than when working under the pre-war
system which provided for a division of labor and close supervision.

Freedom for many Negroes meant license to work as and when
they pleased at what they pleased — or not to work at all. Women
and children, the mainspring of the old cotton picking squads,
withdrawed from the fields by the thousands. Women “want to go
into society and have a piano” complained DeBow’s Review. The
men also eschewed hard labor, often refusing to cut timber, split
rails, or ditch bottom land. “The labor is too heavy for Cuffy, now
that he is his own master,” sneered the Cultivator. Nor was it pos­
sible to persuade the freedmen to work the long hours required
during slavery. “The North is agitated about making 8 hours a
laboring day,” said an observer. “At the South Sambo practically
settled that question long ago. . . .” Many freedmen appeared quite
content to work half a day or less and reap half a crop. “With the
slightest pretext . . . he will quit the crop at the very time every­
thing should be moving, and ramble for hours with dog and gun
. . .,” declared a Pike County planter. After totaling up a $10,000
loss of hogs, sheep, and cattle that had died or been killed during
1867, David Dickson complained that indiscriminate hunting had
become a mania among the Negroes.

Saturdays, the Christmas season, periods of political campaign-
ing, and "paying off" time at the end of the year were especially
demoralizing and almost too much for many freedmen. A coastal
planter complained that as much as two or three months of a year
were lost while the Negroes made up their minds whether or not
to work.\textsuperscript{16} To a Sumter County overseer the excessive excuses of
sickness that virtually cut his labor force in half were attributed to
nothing more than "freedom sickness," and the overseer yearned
for the old authority to use the whip.

Of all the demoralizing influences probably none was more dis­
turbing than the widely held belief of the freedmen that the lands
of their former masters were going to be distributed to ex-slaves
by the national government. Although Lincoln had refused to en­
force the Confiscation Act of 1862, Radical Republicans in Wash­
ington like Thaddeus Stevens kept alive the rumor that each freed­
man would soon have a 40-acre plot of his own, and the act estab­
lishing the Freedmen's Bureau in 1865 seemed to substantiate this
dream. The Bureau was made custodian of all abandoned and con­
fiscated land and authorized to rent it in 40-acre plots for three
years after which it could be purchased by freedmen at low cost.
But the Bureau confiscated very little land, the Negro was too poor
to buy at any price, and the very thought of the government confis­
cating property appeared so unconstitutional and "un-American"
that practically nothing was achieved. Nevertheless, the continuous
expectation of land discouraged freedmen from settling down to
work for someone else; and some, more tired of waiting and more
frustrated than others, resorted to violence, joining in gangs and
seizing property to such an extent that troops had to be called to
subdue them.\textsuperscript{17}

Under the circumstances it was not at all unnatural that thievery
and all sorts of licentious practices should become common and
even be abetted by the frolicking that went on with "carpet­
bag" adventurers and the more mischievous of the Union soldiers.
Horse stealing became so common that it was soon made a state
felony punishable by death. Rice, corn, cotton, vegetables, meat,
and even cows and pigs were stolen by moonlight and hidden in
the woods and behind fence rows or bartered away at little cross­
road "grog shops." So "nocturnal" an animal did the freedman
become that it was made illegal for farm produce to be bought or
sold between sunset and sunrise. Attempts were also made to get
under control vagrancy, arson, weapon carrying, the driving of overseers from plantations, and many other undesirable practices. Unfortunately, however, such legal prohibitions did little good. Negro sheriffs too often were disinclined to arrest offenders, and even if arrested and convicted, landowners short of labor were all too ready to pay the required fine to get back a desperately needed plough-boy or hoe-hand. 18

Whether or not the Freedmen's Bureau added to or restrained the demoralization of labor is debatable. What the farmers and planters might have done to the former slaves had not the agents of the Bureau been on the scene can never be known. Unquestionably many white people were willing to treat the Negroes fairly and try to work out a new labor system mutually advantageous to both landowner and laborer — and some managed to do so. On the other hand, the record of those years of wreckage indicates that most Southern whites were reluctant to change the master-slave relationship and might have kept the Negroes as slaves in all but name had it not been for the exertions of the national government. There is also impressive evidence that both military authorities and the Freedmen's Bureau rendered considerable service in helping to enforce the new apprentice laws, appealing to and warning labor to remain on the plantations, aiding in the making and enforcing of labor contracts, establishing fair wage rates, restraining misconduct, and distributing relief supplies of food and clothing. 19

Nevertheless, the Bureau soon became known among Georgia's white population as the "pet nuisance of the nineteenth century," a "vast monster" intent on "grasping power." White people charged that the very relief work of the Bureau was encouraging more Negro idleness and that Bureau Agents were moving about holding political meetings among the Negroes, organizing mutinous Negro societies like the Sons of Benevolence, prodding the freedmen to demand more political and social "rights," encouraging them to leave the plantations and crowd into the towns, and doing a hundred other things that were disturbing an already troubled labor situation. There is no doubt that many of the Bureau's leaders and agents were misguided missionaries or unscrupulous and vindictive rascals. 20

Thus with literally thousands of Negroes, particularly women and children, withdrawn entirely from the fields of Georgia, with
those remaining working fewer hours and days per year, and with their pre-war efficiency suffering from lack of adequate supervision, it was little wonder that productivity declined decisively. Even as able a manager as David Dickson found himself in an almost hopeless situation in 1866 and 1867. Whereas his slaves had usually produced ten to fifteen bales of cotton per hand plus 800 to 1200 pounds of pork, his hired freedmen were producing only three to five bales of cotton and almost no meat.21 One planter after three crop failures offered a $50 reward to anyone who could tell him how to make a living with free Negro labor.22

To be sure, there were some Georgians in those days, particularly among the younger generation, who had faith in the Negro's capacity to develop as a free laborer after his intoxication with freedom wore off. Doubtless, however, Governor Charles J. Jenkins expressed the more prevailing mood of the white farmers and planters when he told the legislature in 1866 that planting in Georgia could never again be what it had been before the war.23 So great had been the wreckage that many people believed the commercial production of the great staples of cotton and rice was done for. "Agriculture will be diversified," prophesied the Cultivator. The Negro as a laborer will be a "dull, senseless machine." The plantations will be cut into small family-sized parcels and only enough cotton will be raised for home use plus a little to pay taxes and buy a few family comforts.24

Such gloom, of course, was unjustifiable and Georgia's agricultural establishment was eventually reconstructed. Yet to achieve pre-war levels the cotton crop required fifteen years and the corn crop nearly twenty. The total number of cattle and swine did not equal pre-war figures for forty or fifty years. Certainly it was not until the thriving years of 1900-1920 that anything approaching the golden hue of the 1850's reappeared.
PART TWO

The Long Depression, 1865 to 1900
4.  

Reorganization of Labor and Management

The Civil War did more than put an end to slavery and wreck the agricultural establishment of Georgia. It ended also the predominance of agriculture in the United States. The Civil War left Georgia's farmers, planters, and field hands in poverty; post-war industrial advances tended to keep them there. The higher wages, and greater profits and prestige that soon become identified with urban industry and commerce lured away from the state's farms capital, labor, and managers sorely needed to rebuild the agricultural establishment. Control of the nation's economy also passed from the hands of the farming classes into the hands of the new captains of industry and finance. The national government, financial circles, and even educational institutions thereupon concentrated their efforts on the problems of industrial expansion and neglected the pressing problems of agriculture.

During the thirty-five years from 1865 to 1900, however, Georgia's agricultural people engaged in four major efforts to extricate themselves from this unhappy situation: (1) the effort to develop a new system of labor and management; (2) the effort to develop a new land-use system wherein cotton would be subordinated to diversified commercial products and home supplies; (3) the effort to apply science to management and production; and (4) the effort to get control of the instruments of credit, marketing, prices, etc., by means of organized pressure groups.

The successes and failures of these efforts—campaigns they might be called—form the story of Georgia agriculture during the last third of the nineteenth century.

The Effort to Replace the Freedmen

Emancipation of the slaves forced Georgians to evolve a new system of farm labor and management. Naturally, the 31,000 small
family-sized farms of less than 100 acres, which comprised about half of all the farms in the state, were not beset by this problem. But nearly all of the 31,000 farms, comprising most of the farm acreage of the state and having been dependent upon slaves, were compelled to reorganize their system of labor and management.

The common belief that free Negroes would never be worth much as laborers led some Georgians into efforts to rid farming of dependence on the former slaves. Those who worked in this direction seemed to feel that if white people would go to work, if some foreign laborers could be imported, if labor-saving machinery could be introduced, and if intensive farming were adopted in place of the old extensive system, then farmers and planters would no longer be at the mercy of the shiftless freedmen.

The appeal to white Georgians to go to work with their hands was heard chiefly during the years immediately after the war. The sight of able-bodied white men bemoaning their lot while at the same time they sat around cross-roads stores spitting tobacco juice, swapping jokes, and abusing Yankees and Negroes irritated the more industrious whites. All during 1865, 1866, and 1867 the pages of the *Southern Cultivator* commanded, cajoled, and pleaded for an end to the old tradition of idleness. “The age of idleness is past,” declared one issue. “Young man . . . pull off that coat and go to work,” ordered another issue. To those dreaming of a soft life in Brazil or some other foreign land W. N. White cried, “Shame on your patriotism and manliness. . . . There is no land on this broad earth where man can get his daily bread except by his daily labor.” And another editor wondered why in all the talk of labor troubles “no one talks of doing the work ourselves.”

Against the predilection of many whites to “superintend,” farm owners were urged to work alongside their laborers as Northern farmers did in the hope that the Negro might thus be made more efficient. Benjamin C. Yancey, president of the Georgia Agricultural Society, appealed for a glorification of agriculture as a noble calling by pointing to great farmers like Cincinnatus and Washington and he appealed for an end to the habit of rearing children to shun labor. By this means he hoped to check the drift of farmers to the supposedly easier life of the towns.

The success of this appeal to whites is not known. Certainly many a once comfortable planter and his family took up toiling
for their daily bread. But the fact that many whites were untrained for manual labor, that they had been reared to shun labor, and that managers had been trained to a routine difficult to change militated against much reform. Those who went to work did so probably from economic necessity rather than from a desire to become less dependent on the Negro. And even had all whites gone to work with a will there were too few of them, particularly in the Black Belt areas, to make more than a small dent in the general reliance on the freedman for labor.

The campaign to replace the ex-slaves with foreign immigrants seemed to offer greater promise. The use of Oriental and European immigrants to build the transcontinental railroads was going along successfully at the very moment and was a venture that many a Southern planter thought he might copy. It was expected that as soon as the Union Pacific Railroad was completed in 1869 thousands of Chinese would be available who would be willing to work for six or seven dollars a month — far less than the wages being demanded by the Negro. Not only would the labor supply be augmented, it was thought, but the competition between Negroes and immigrants might bring the ex-slaves to their senses and cause them to "quit stealing and going to the legislature, and go to work in the cotton fields where they belong."

During the 'sixties, 'seventies, and early 'eighties, therefore, numerous efforts were made to attract immigrant labor. At the Putnam County Fair in 1868 a local immigration society was formed and steps were taken to expand it into a state-wide organization. The same year the state Agricultural Society persuaded the legislature to appoint immigration commissioners, at least one of whom later operated in Europe. Private immigration agents like A. C. Bell and Company of Americus and P. Bonfort of New York advertised their services as importers of European laborers. Jones County planters established an agent in Scandinavia.

The results of the campaign were pathetic, however. To be sure, the Jones County planters declared that the Scandinavians they received were the best workers they had ever seen. But such comments were rare. English, Irish, and Chinese were tried on the rice coast with poor results. On Frances Butler Leigh's coastal plantations the immigrants proved unadaptable and shirked work as much as did the Negroes.
Even more disappointing was the fact that the South was not very attractive to immigrants, and of 3,300,000 who landed in New York from 1855 to 1873, only 23,600 came Southward. The reasons for their not coming South were varied. Agents sent abroad to contract with immigrant labor often found themselves hampered by restrictive European laws. Many Europeans, moreover, had only an "Uncle Tom's Cabin" concept of the South and pictured it as a land where it was a dishonor for whites to work, where foreigners were tarred and feathered and driven over state lines by dogs, or where all the white settlers were half civilized wielders of pistols and bowie knives. Worse still, Southern advertisements in Northern seaport newspapers often tended to confirm the immigrants' suspicions of the South. Like the old slave ads, they appealed for so many "head" of healthy, industrious men at so much per head. Southern landowners erred, also, in thinking the old slave diet and slave cabin were acceptable to white immigrants. The lack of relatives in the South, unfamiliarity with Southern crops, and rumors of an unhealthy Southern climate also hindered immigration. Equally important was the fact that land in many parts of the nation was so cheap and so many millions of acres were being granted under the Homestead Act of 1862 that large numbers of immigrants had no occasion at all to work for anyone but themselves. Thus it was little wonder that even the Chinese simply smiled at the idea of coming South to work for Negro wages.

During the same years in which efforts were being made to replace the ex-slaves by the labor of white Southerners and immigrants, an equally vigorous campaign was being conducted to relieve dependence on the freedmen by the adoption of labor-saving machinery. Farm journals established "mechanical departments" shortly after the war and urged both Southern and Northern manufacturers to advertise and display their products more widely. Cotton planters, guano distributors, and gang plows were boosted as implements capable of cutting in half the need for both man and beast. Steel plows, spike-tooth cultivators, scrapers, grain drills, stump pullers, rice planters, pulverizers, and improved hay presses were promoted and many were tried. Even such "ridiculous Yankee novelties" as "riding" plows, cultivators, threshing machines, mowers, and binders received serious attention along with curiosity and laughter. Experiments with mechanical cotton pickers, which had
begun before the war, were renewed and portable engines had a ready sale. As early as 1868 an observer noted that when Southern whites discovered they must work or starve, a mania arose for labor-saving devices and Georgia farmers readily tried anything Northerners sent them.\textsuperscript{12} The owner of Butler's Island claimed that drills, horse-hoes, and carts had replaced hand-sowing, picking, and "toting" so that field hands were managing twice as many acres per man as in slave days. For lack of capital, however, the owner merely dreamed of some day acquiring a "steam plow which was to accomplish everything."\textsuperscript{13}

The great International Cotton Exposition, held in Atlanta in 1881, promoted further interest in labor-saving machinery. Within a few months after the Exposition, Director-General H. I. Kimball boasted that Georgia farmers had purchased 1,500 cotton planters, 500 carloads of engines, plows, harrows, cultivators, and other implements plus $36,000 worth of manure spreaders.\textsuperscript{14} In the 'eighties an Atlanta firm advertised "something entirely new" — a cotton chopper capable of chopping eight acres a day with one mule, while the Georgia Department of Agriculture called attention to a screw pulverizer capable of working strips eight and a half feet wide and covering twenty acres a day — a feat which experimenters assured the department had allowed six Georgia plantations to dispense with 76 hands at an annual saving of $11,400.\textsuperscript{15}

Unfortunately, the Georgia agricultural establishment was in no position to adopt machinery on any large scale. Few farmers could afford any but the most inexpensive implements. The land-tenantry system that was developing tended to create operating units too small for the use of large machinery; and even in the Coastal Plain, where large farms and flat fields were more common, the land was still so full of rocks and stumps that machines could not be run over it. Nor were there enough mechanically trained laborers to operate and keep the machines in repair.

Needless to say, many of the labor-saving devices turned out to be impracticable. The steam plow had an engine nearly as large as that of a small locomotive, requiring much wood, water, and labor. Some reapers were huge, cumbersome machines that nearly killed the animals hitched to them, and the spike-tooth harrows easily became clogged with rubbish.\textsuperscript{16} Of all the implements designed especially for the cotton crop, only the cotton planter at-
tained considerable use. Thus it seems probable that most Georgia farms had no more labor-saving devices in 1900 than they had in 1860.17

The fourth effort to reduce dependence on Negro labor was the campaign for intensive farming. Many progressive agriculturalists argued all during the period that emancipation had ended the economic feasibility of large farms devoted to "hoed" crops like corn and cotton that required an abundance of cheap labor. They argued that intensive farming required fewer field hands, less land, less capital, less credit, and less taxes than the extensive system demanded.

Intensive farming was the secret of the success of agriculture on the tiny farms of France and Japan, insisted men like Agricultural Commissioner R. T. Nesbit and William McKinley of Milledgeville.18 "The hope of the South," declared Nesbit, "is smaller farms and diversified crops. Is it not better to prepare and cultivate thoroughly fifty acres than to scratch over a hundred? Does it not seem folly to pay taxes on land that brings a bale to three acres, when we can get a bale from one acre?"19

To promote the intensive system, farm journals and clubs offered prizes for essays on "intensive farming" and the Cultivator opened a special department on the subject. During the 'nineties the state commissioner of agriculture was equally zealous. "Every paper sent out from the Department," he declared, "every talk I have had with farmers, every article I have written, has emphasized the imperative need of this change."20

Nor did the campaigners have any difficulty finding farmers who had succeeded at intensive farming. Every decade produced heroes who made fabulously profitable yields on small farms. During the 'seventies T. C. Warthen of Washington County gained fame throughout the South for raising nearly five bales of cotton (6,891 lbs. of seed cotton) on one acre and netting $2,213 (excluding stock) on 126 acres;21 J. S. Boynton of Calhoun County netted $2,500 on a one horse farm;22 and R. H. Hardaway became almost a legend for his achievements on fifteen acres of once poor land.23 During the 'eighties the leading hero was Judge Parish C. Furman of Milledgeville who in five years built a sixty-five acre farm into a net profit-maker of $2,000 per year and acquired enough renown to be cited in the United States Census.24
Like all the other campaigns to diminish the need for Negro labor, however, the campaign for intensive farming proved futile. Those who defended the extensive system pointed out that scientific management and high yields were just as possible on big farms as on little ones. They pointed to the great planter David Dickson who was again making enormous yields and rich profits from thousands of acres; to B. W. Bellamy of Brooks County who profitably employed over 1,000 Negroes; to John P. Fort of Macon who ran 150 plows; and to James M. Smith of Oglethorpe County who, during the latter part of the period, was the master planter of them all, operating a great industrialized plantation of 20,000 acres with more than 1,000 hands — at a profit. And it was these great planters the little farmers preferred to emulate, if they could.

Establishment of the Tenant System

Actually there had never been much room for hope that Georgia agriculture could be resurrected without the labor of freedmen. The major problem facing landowners after the war was that of working out the best possible system for using the emancipated Negro.

In the first years after the war a contract wage system was imposed almost universally by the Freedmen's Bureau. Under this system minimum wages were set by the Bureau, and written contracts, with many stipulations concerning time off for illness, bad weather, rations, etc., were approved and could be enforced by the Bureau. Laborers worked under a variety of plans — individually, in squads, by tasks, with and without drivers — most of them still going to the fields at the clang of a bell, however, and most of them being paid in cash weekly, monthly, or yearly, or paid annually with a share of the crop, and being rationed from the plantation smokehouse in the usual ante-bellum fashion.

However, objections to the contract wage system developed rapidly. The shortage of labor caused wages to rise beyond the resources of many farmers and it caused a widespread "stealing" of workers by those able to pay the most. The written contracts were found to be virtually unenforceable. The freedmen had little sense of responsibility and almost no understanding of their contractual obligations. Whole gangs often disappeared in the night, and getting them back often cost as much as $20 per head. The making
of contracts frequently involved endless haggling, each hand often wanting different terms and special stipulations regarding holidays and different kinds of work. Disputes arose at paying-off time concerning the amount due the worker. The crop failures of 1865, 1866, and 1867, moreover, left most farmers so short of cash that money payments soon became utterly impossible; and since many of the former overseers had died in the war or had become landowners, providing adequate supervision had become almost an impossible task.

Even more important, however, were the objections of the Negro. With some accuracy he viewed the wage system as a modified form of slavery, and he rebelled against it. Continuing to work under the white man's control and supervision was completely contrary to his concept of freedom. Unaware of his own inefficiency and unable to understand the landlord's bookkeeping, the Negro was often sure at the end of the year that he had been cheated. He wanted as much control as possible over his own time, the land he worked, his methods of labor, and the materials and supplies he used. If he could not be a landowner he wanted to be at least a renter with his own “patch of taters and collards,” his own wood and water and “watermillions,” his own time to do as he pleased, and his own mule on which he could ride about nights and Sundays visiting and attending revivals and lodge meetings.26 And if he could not be a renter he wanted to be at least a sharecropper working his family plot with a minimum of supervision and control by the white man. Anything, apparently, was better than working in a gang for wages. Thus it was little wonder that within five years after the war sharing and renting were fast becoming established institutions in the South and the old plantation system was largely on the way out.

However, the share system was adopted without either the landlord or the renter and cropper having a clear idea as to what it was. Both landlords and laborers believed that sharing made them partners and that it virtually ended the authority of the landlord to control or supervise the sharer once the contract between them was made.27 Nor was there any established pattern for dividing the shares. Suppose the landlord furnished only the land. What part of the crop was it worth? One-fourth, one-third, or one-half? And what was a mule worth, or feed, rations, seed, fertilizer, imple-
ments? The distinction between a renter and a sharecropper was extremely vague to many and utterly unknown to some.

For more than a decade after 1865, all sorts of sharing systems were in effect and the division of the shares was determined largely by the bargaining power of the parties, the fertility of the soil, and the equipment and supplies furnished. At first the laborer's share was often so low that the Freedmen's Bureau forced it upward. In 1865 a Bureau agent in south Georgia found some laborers getting as little as one-tenth of the crop for their labor, and a payment of only one-sixth of the crop was not uncommon. By 1867, however, third and half divisions were becoming general. Under the "thirds" system land, labor, and equipment and supplies were each considered to be worth a third of the crop. A worker who supplied nothing but his labor earned only one-third of the crop he produced. The half system was applied where the landlord and the worker divided equally the expenses of raising the crop or where the worker furnished his own rations and half the feed for the stock. In 1876, however, the Georgia Department of Agriculture was surprised to hear from sixty per cent of its correspondents that one-half rather than one-third of the crop was then being given for labor alone, so great was the competition for good producers.

In 1872 the Georgia Supreme Court handed down the first of a series of decisions clarifying the distinction between sharecropping and renting. The decision was that "croppers" were only day laborers with no "possession of the premises," with "only a right to go on the land to plant, work and gather the crop," and the share coming to them was only a form of wage. The decision implied, moreover, that under the sharecropping system the landlord retained authority to supervise the activities of the cropper. A tenant or renter, on the other hand, had temporary possession of the premises and was not subject to the supervision of the landlord.

The result of these legal decisions was that many Negroes began insisting on renting land. "Den all de balance be mine," they reasoned, and they would not get "cussed" for sleeping or fishing. "If I'm gwine for to be free, me wants to be free" was the argument.

Throughout most of the state under the renting system the rent was paid with a fixed amount of produce although cash was used occasionally. The amount of rent charged varied, depending on the section of the state and the fertility of the soil. On the poor
land of southwest Georgia, for example, one 500-pound bale of cotton was considered adequate rent in 1880 for a one-horse farm (about thirty-five acres) while in more fertile sections one and a half to two bales was charged. Renting for a share of the crop was not infrequent, however, and in such cases the landlord generally received one-third the grain and one-fourth the cotton — a system which persisted in the mountain sections until after the turn of the century and which indicated some continued confusion between renters and croppers. When called a "renter," the tenant "furnished" himself and the landlord exercised no supervision.

On some large plantations all three systems — wages, cropping, and renting — were practiced simultaneously. In 1885, for instance, W. O. Wadley of Bolingbroke was operating his 1,500-acre plantation with third and fourth renters, half and half croppers, and some wage hands paid eight to ten dollars per month.

Only a few years' experience with the new labor systems was necessary to convince most landowners that the wage labor system was far superior to sharecropping and renting, for under the wage system the landlord continued with his usual supervision and was in a position to see that necessary farm repairs and improvements were made. Under the cropping and renting systems, however, despite the court judgment that croppers were only wage laborers, supervision was generally relaxed or given up entirely. The result was that croppers and renters farmed as they pleased, usually in a slovenly, unscientific manner; they neglected to keep buildings, fences, ditches, or terraces in repair; they did little or nothing to improve the land, develop attractive farm homes, plant fruit trees or grapevines, or do any of those things which landowners find to their best interest. Poor crops and a decline in land values were inevitable results. The sharing and renting system made it difficult for a landowner to discharge inefficient or "hard-to-handle" workers until the end of the year. In surveys made by the Georgia State Department of Agriculture in the late 1870's it was found that wage hands worked more days per week and produced more per man than croppers and renters. Ninety-six per cent of the Department's correspondents declared that croppers and renters exhausted and gullied the land faster than wage laborers; and in the 1877 survey, 88 per cent of the correspondents replied that they preferred the wage system for both Negro and white labor.35
Apparently the views of the landowners meant little to either the white or Negro landless classes; for both white and black labor preferred independence to efficiency and they proceeded to force the owners to accept them as croppers and renters or not at all. By 1875 when the Georgia Department of Agriculture made its first survey of the situation it found that of 177,000 non-landowning farm workers covered in the survey, about 70 per cent were croppers or renters. When in 1880 the United States Census Bureau first looked into the matter it found that 45 per cent of all the farms in the state were operated by tenants of one kind or another, and from then on the growth of tenancy was steady until the end of the period in 1900 when 60 per cent of Georgia’s farms were worked by tenants.

In all fairness, however, it must be noted that in the case of superior workers tenancy proved to be a desirable and profitable system for both tenant and owner, and it was so recognized at the time by some landowners who declared they preferred it. Nor should it be forgotten that more than half of what the Census Bureau called tenant farms were actually share-cropping units over which the landowner could, and often did, exercise considerable supervision. Never during the period were more than about one-fourth of Georgia’s farms operated by standing renters completely beyond the control of the landlord. Nevertheless, very few of the new tenant class were competent managers. Very few of the croppers would permit themselves to be supervised and too few of the owners were successful in overcoming this resistance. Many owners took the line of least resistance and resigned themselves to the common Negro belief that the freedom that went with being a cropper as opposed to a wage hand “was worth $50 a year.” With the breakdown of the ante-bellum system of supervision, therefore, a train of serious evils ensued, and it is difficult to escape the conclusion that the vast mismanagement of Georgia farms that developed was the greatest single cause of the rural poverty that persisted in Georgia during years of agricultural prosperity elsewhere.

RESULTS OF THE TENANT SYSTEM

One of the results of the widespread acceptance of farm tenancy was an increase in “absenteeism” — a development which caused a
further breakdown in the supervision and productivity of labor. To be sure, the movement of landowners to the towns had become noticeable before the Civil War and it must be admitted that the post-war urbanization movement was caused by many factors in addition to the rise of tenancy. But when the ante-bellum planter had moved to town he had usually left an overseer to manage his lands, and production had not suffered. Under the new tenant system, however, renters were not legally subject to such supervision and the croppers had become largely unmanageable. Since it was so easy for an aggressive man to become either a landowner or a renter, competent overseers were almost impossible to hire at a price the impoverished landlords could afford. To make matters worse, the many urban merchants, lawyers, and doctors who bought large plantations at depressed prices during the harrowing years after the war had neither time nor interest sufficient to provide adequate supervision. To them the purchase of a plantation was often a speculative investment that would be resold when prices rose; and although many were doomed to disappointment, little interest ever developed in making the plantation an efficient production unit. The lien laws of the time also caused the landlord to leave supervision to the merchant who was able to make only an occasional visit by buggy or horseback to his numerous tenants. With many a once well-managed farm left to ignorant and indolent tenants, deterioration and low productivity were inevitable.

So disturbed did the editor of the *Wesleyan Christian Advocate* become that he penned a vigorous sermon entitled “Farmers, Stand by your Farms” and warned that the current of absenteeism was “so strong and wide as to threaten whole sections of our country with desolation.” The editor saw houses decaying, once productive farms giving a meager living, Negroes sleeping in the shade of weed-covered yards, fence palings burned for fire-wood, abandoned churches, and a leaderless group of farm laborers. 37

Certainly when compared to agricultural output in other parts of the nation the productivity of the Georgian appeared pitiable. From 1870 on, the census reports showed that the average Georgia worker rarely produced more than half as much as workers in the country as a whole, and when compared to laborers in such states as Illinois or California his record was extremely dismal. 38 In 1880, he was out-produced by the laborers of all but five other states.
It would not be fair, however, to blame all the incompetent management and the low productivity of Georgia's lands and workers on either the Negro or the new system of tenancy. Slovenly farm management had existed in pre-war days. Of the 134,000 tenants operating farms by 1900, moreover, 63,000 or 47 per cent of them were white. Nor were all the poor producers tenants. Of the 174,000 farms in the state that in 1900 raised less than $500 worth of products, 55,000 or 37 per cent of them were operated by their owners. Certainly the record of the tenants was worse than that of the owners, for 83 per cent of the tenants produced less than $500 worth as compared with only 62 per cent of the owners. The fact that nearly two-thirds of the state's farm owners were in this meagerly productive class is evidence, however, that the state's low productivity probably was not due to tenancy quite so much as the writers of the period believed.

A scrutiny of the amounts paid wage-laborers during the period makes one wonder whether the wage-labor system was very much superior to the renting and cropping system. The myriad statements of the day by landowners testifying to the superior productivity of the wage system are overwhelming and they are well documented from data on plantation ledgers. Nevertheless, the well established fact that farm wages reflect the value of a laborer's productivity would indicate that a Georgia wage hand in those days was only slightly more productive than a tenant worker. From 1866 to 1895, for example, Georgia's wage hands were paid an average of about ten to fifteen dollars per month without board — a wage that was consistently about one-third below the national average and from a half to three-fourths less than was paid in some other sections of the nation. During most of the period, in fact, no more than two to four states paid lower wages than did Georgia.
5.

The Cotton Controversy

With the end of the Civil War and the destruction of the ante-bellum plantation system many of Georgia’s agricultural leaders were convinced that the state’s land should and would be turned to new uses. They felt that the practice of devoting such large portions of the land to cotton (and corn to feed mules to raise cotton) had produced an evil agricultural system that eventually would cause the complete economic exhaustion of the state. A diversification of commercial crops, the development of a livestock industry, and more attention to the raising of home supplies, they reasoned, were changes that were necessary to the restoration and maintenance of agricultural prosperity. And since during the war the cotton crop had been reduced from about 700,000 bales to considerably less than 100,000, the time to launch the new land-use system was opportune. During the war, in fact, such a system had been begun and it had flourished until the moment of invasion. The wise course should be, therefore, to expand and improve the war-born system.

By the opening of 1866, signs of a revival of the old cotton madness were multiplying. The long starved cotton mills of New England, Britain, and France were calling for cotton as never before and they appeared willing to pay fantastic prices for it — $83 in 1865, $43 in 1866, $31 in 1867 and $24 as late as 1870 — exorbitant prices when compared to the eight, ten, and eleven cents on which many a planter had reaped a fortune during the ’fifties. The response was almost automatic. Even the Southern Cultivator, a leader in the diversification campaign, appealed to farmers in February, 1866, to plant as much cotton as possible, and it noted that many people were planting cotton who had never seen it before. By 1869 great numbers of people were again accepting the belief that the South was fit for nothing but cotton. "The idea seems yet to
prevail," declared a writer in Albany, "that cotton is king, and all wisdom can't root it out." 2 "The high price of cotton has put everybody to killing grass," lamented another observer who also saw virgin forests being cleared for cotton and "depots full of guano and bacon." 3 It seemed agreed that as long as cotton was 25¢ people would "talk cotton, dream cotton, and eat cotton." By 1870 it appeared that the farmer had almost forgotten the value of corn, wheat, oats, potatoes, peas, and grass, and his life was "a dream — a feverish dream of Cotton! Cotton! Cotton!"

Despite this reaction, the anti-cotton campaign continued. All during the years from 1870 to 1900 the State Department of Agriculture, the Georgia Agricultural Society, farm journals, and many farmers and planters dinned the need for change into the ears of everyone who would listen. Unfortunately their arguments were weakened by their internal disagreement as to the extent that cotton should be subjugated. Some wanted cotton abolished altogether; some wanted it to become merely one of several commercial crops; and others wanted it curbed only enough to make way for the raising of home supplies.

The antagonism of the campaigners to cotton rested largely on four major arguments, each of which they bolstered with much personal testimony and an imposing array of facts. They argued: (1) that cotton prevented self-sufficiency in home supplies, and the consequent purchase of these supplies outside the state drained off the people's wealth; (2) that the usual great cotton crops actually flooded the world market and caused low prices; (3) that cotton was more expensive to produce than many other crops and that this high cost of production coupled with low prices made the crop automatically unprofitable; and (4) that the overemphasis on cotton was responsible for the misuse of land and many other bad farming practices.

The argument against Georgia's dependence on other states for all sorts of products was similar to the argument used before the war. The campaigners complained that Georgia produced only a fraction of the mules, horses, pork, hay, butter, corn, eggs, poultry, vegetables, fruit, harness, and many other things used daily. The practice of buying plow lines at forty cents a pound that could be made for fifteen, and of ordering fertilizer from Baltimore at thirty per cent interest while making no fertilizer at home was con-
demned by Alfred Colquitt, President of the Agricultural Society. Even old fashioned corn-shuckings were rarely held, it was noted, for lack of corn.

During the severe depression of the 'nineties the appeals were almost evangelistic. In 1891 the Georgia Department of Agriculture asked the farmers to keep their money at home, and stop circulating it for cheese in Wisconsin, for mules in Kentucky, and for bacon in Ohio. "We buy everything from an engine down to a toothpick, and some have to buy their teeth before they have any to pick...," wrote a Thomaston farmer in disgust. And the Tifton Gazette noted "that Georgians buy from Tennessee 'everything but children' and hire 'niggers' to kill grass so they can buy it from Tennessee already baled."

Thus "we deserve to be poor," said a south Georgian. One or two more years of importing supplies like the preceding year, said an observer in 1871, would turn the "Sunny South" into a "howling wilderness with everything dear to us snatched from us by those mighty... provision and guano dealers."

On the other hand, farmers who diversified their crops or raised their own supplies were said to be happy and prosperous. "There is not a shadow of a doubt," declared the Cultivator in 1875, "that those farmers who have raised enough provisions for home consumption, are the only ones who have prospered since the war."

A second argument of the campaigners — that large cotton crops were flooding the world market and depressing prices — was well borne out by the facts. By 1870 it was apparent that the world cotton famine was over, for the crop of that year produced a surplus of 16,000 bales — the first carry-over experienced since the war. Nevertheless, the American crop continued to increase to about 6,000,000 bales in 1880; to more than 7,000,000 bales in 1890; and to more than 9,000,000 bales in 1900. In 1898 a record crop of more than 11,000,000 bales was produced. Similar increases were also reported from abroad. As early as 1866 the Cotton Supply Association of England declared that Britain should never again allow herself to become entirely dependent on Southern cotton but should continue promoting the crop, as she did during the war, in Africa, Asia, Latin America, and even in the Pacific Islands. And apparently this advice was followed. High post-war prices also stimulated foreign production. By 1875 the Cultivator noted that
foreign production was running 2,000,000 bales per year above the pre-war crop and by the end of the period in 1900 about 7,000,000 bales were being produced abroad annually. During the twenty years prior to 1900 India had increased her crop 73 per cent and Egypt, 79 per cent.

Of course, the world's consumption of cotton was increasing also; but not as fast as production. Agricultural Commissioner Nesbitt noted that the 16,000-bale carry-over of 1870 was only a beginning. By 1880 the surplus was up to 98,000 bales and by 1890 it was up to 236,000. Nesbitt noticed that the larger the crop, the lower the price. The 9,000,000 bale crop of 1891, for example, brought in less money than the 6,000,000 bale crop of 1880 and very little more than the 1870 crop which was only half as large. The price dropped steadily—to fifteen cents a pound by 1873, eight to ten cents during the 'eighties, and as low as four and a half cents during the 'nineties. The low price of cotton, he insisted, is "beyond question, due to overproduction." Worse still, a bigger cotton crop also meant bigger bills for guano and supplies.12

"Are our farmers stark mad?" asked Robert E. Park of Holsten; "will they never listen to reason?"13 And similar, if more measured, complaints against the large crops were voiced by the United States Commissioner of Agriculture and even by Northern firms and journals who were usually charged with encouraging large crops that they could buy for a song.

A third argument against too much devotion to cotton was that cotton was so expensive to produce that when prices were low there was no profit in it. Immediately after the war when prices were high, perhaps there was some excuse for journals like DeBow's Review reporting fantastic profits being made from cotton, although many such reports were estimates of what planters hoped to achieve and some were concerned with purely imaginary plantations.14 By the 'seventies, however, evidence of profit was difficult to find.

From 1870 on, diligent efforts to discover the cost of producing cotton were made by both the state and national departments of agriculture, agricultural societies, and by thousands of farmers, many of whom submitted their findings to government departments and to journals like the Southern Cultivator. The great majority of the reports insisted that cotton was being raised either at
a loss or at such a small profit that only the most meagre living for
the grower's family was obtained. In 1874, for example, the Report
of the United States Commissioner of Agriculture included a study
of cotton costs made by C. W. Howard wherein it was shown that
Dr. J. S. Lavender, one of Georgia's best farmers, had lost four
cents a pound on his cotton in 1873. David Dickson reported that
with the price below sixteen cents only the most progressive farm­
ers made a profit and that four out of five landlords and tenants
showed a loss. Even a better-than-average grower making four and
a half bales per hand (the average was three bales) and nine bush­
els of corn per acre still lost $33.90 per hand. Howard concluded
that most of the time since the war, "the South has grown cotton
at a positive and serious loss." 15

During the 'eighties and 'nineties the reports were similar. The
1880 census showed that cotton production in Georgia cost about
eight cents to nine and a half cents a pound and with a selling
price in that year of ten to eleven cents a grower made only a bare
livelihood. In 1886 the story was worse, said the Cultivator, with
the cost of production at eight cents and the price at eight cents. 16

In due time Georgia was learning that she could not compete
with the West; for despite Georgia's spending of several millions
of dollars on fertilizer, her yields per acre were averaging only
about 150 pounds while in Louisiana and Texas yields of 200
pounds and more per acre were being made without any expendi­
ture for fertilizer. 17

It was well known, of course, that the high cost of cotton pro­
duction was due largely to the great amount of manual labor re­
quired for hoeing and picking. To have sufficient laborers avail­
able, especially at picking time, they had to be kept all the year
and provided with houses, firewood, and perhaps rations. Then
there was the cost of the land, work stock, feed, supervision, tools,
and fertilizer. The increased use of fertilizer in the state from 48,-
000 tons in 1874 to over 400,000 tons per year in the late 'nineties
also added to the cost of production without resulting in any ap­
preciable increase in the per acre yield. 18

Not least of the factors that made the cost of producing cotton
high was the fact that cotton was generally made with borrowed
money, and credit in those days was expensive. Fertilizer, seed,
feed for the work stock, and rations for the workers were purchased
largely on credit in a day when rural credit was costly everywhere and in a day when Georgia was extremely short of credit facilities. Even as late as 1884 only fourteen Georgia counties had incorporated banks and the aggregate capital of the thirty-seven state and national banks in those counties amounted to only about $6,600,000—less than half the capital that had been available in 1860. Nor would the banks often accept land as security. Thus the cotton crop was virtually the only security accepted and since its value was always in doubt, out-of-state money lenders required high interest rates to protect their loans to merchants and landlords. In their turn, therefore, both merchants and landlords had to charge tenants and laborers high credit fees whether they wished to do so or not. High credit rates were also often justified on the grounds that since tenants bought about three-fourths of what they ate and wore “on time” and there was no adequate collection law to secure payment if the crop was not adequate, debts were often difficult or impossible to collect. Thus in 1880 the Georgia Department of Agriculture noted that with the cash price of corn at seventy-eight cents a bushel and the credit price at $1.02, farmers were paying thirty per cent for the use of money for six months—or sixty per cent interest per year. The interest on bacon was forty per cent. Six years later a similar study by the Department showed corn selling at an annual interest rate of 104 per cent and bacon at 120 per cent. “Think of this, farmers of Georgia,” said another report; “$160 worth of cotton buys only $100 worth of corn.” Such a “practice is suicidal.”

Here certainly was evidence, declared the campaigners, that cotton should be subjugated at least sufficiently to make room for home supplies. Where supplies were raised along with cotton, the cost of cotton production was reduced two to four cents per pound. And verification of this point was available from farmers like “H” in McBean, Georgia, who reported to the Cultivator in 1870 that his profit from his 200-acre all-cotton farm was only $450 while from his mixed-crop farm of the same size he netted $3,943.

The fourth argument of the all-cotton opponents was that the over-emphasis on cotton resulted in bad farming practices—wasted grass, lack of pastures, improper rotation, lack of winter cover crops, unterraced and gullied fields, idle land, mules, and labor during several months of the year, and so on. After the Civil War
C. W. Howard returned to his old attack on those who misused land, particularly by failing to grow grasses and grains. He argued that even though an acre of Georgia cotton land produced more cash than an acre of Massachusetts potato land, the New England soil was valued at five times as much as Georgia's and produced more per hand. It took two and a half hands to work the same amount of land worked by one hand in Massachusetts entirely because the Northern state grew grasses and small grains requiring little hand labor. Here, too, was the reason why a New England laborer earned twice as much as a Georgia laborer. All during the period the campaigners talked and wrote in this vein and appeared quite happy to make use of national government statistics in the 'nineties which showed that of all farms sold under mortgage, 98 per cent were in one-crop areas.

Obstacles to Diversification

All the efforts to reduce the over-emphasis on cotton were beset, however, with a variety of difficulties. Most landlords, tenants, croppers, and laborers were, in the first place, imbued with a sense of conservatism and traditionalism which militated against experimenting with new ventures. "The average farmer," said Georgia's Agricultural Commissioner J. T. Henderson in 1885, "is ready enough to adopt an improved variety of cotton or Indian corn; but slow to give place to a plant of a different species, or yielding a different product." Even progressive farmers who inquired how to grow hemp, broom corn, castor oil beans, and other untried crops were advised by their friends not "to fly from the evils they know to those they know nothing of."

Illiteracy and the general ignorance of the farm workers and managers concerning many crops and livestock also handicapped new developments. When emancipated, the Negro population was probably 95 per cent illiterate and as late as 1890 about 40 per cent of the entire population of the state was still unable to read or write. In this category, moreover, were about 114,000 whites. Skilled managers and laborers competent to handle dairies, orchards, or new crops were rare and hard to train. Ventures like dairying which require a steady supply of skilled labor and incessant routine were particularly handicapped. "Not one boy in a hundred on a Southern farm knows anything about milking,"
complained William J. Northen. "Teach the boys something else besides making cotton." The feeding and milking every day in the year required in dairying, moreover, were not attractive to a labor force used to considerable time off during the year. "The work is too hard and just a little too regular," it was said. "There does not seem to be any lay-by time."  

The result was that even when efforts were made to replace cotton with new crops or livestock the new venture was often abused by ignorant or indolent labor and management. Orchards, for example, were often set out with trees too close together, fertilized improperly or not at all, budded by inexperienced workers, often by children, and diseases and insects were not controlled. Vineyards were ruined by improper cultivation and lack of fertilization. In 1871 John C. Carmichael reported he learned belatedly that he had lost a thirty-four acre crop of apples from lack of manuring. Many a farmer who turned to truck-farming also suffered financial losses due to inexperience in growing, harvesting, and packing his produce.

Nor could workers used to doing a slovenly job of growing cotton be expected to do well on products less familiar. Consequently, the yields on new ventures were generally poor. The census reports from 1870 on, showed that Georgia's per acre yield in such grains as corn, oats, rye, and wheat was only from one-third to one-half the national average. The same was true of tobacco until well after 1900. Milk production per cow was even worse, for during most of the period before 1900 the average Georgia milk cow — an "old scrub with horns as long as her tail, a body as out of shape as a burst balloon, and a temper like an injured hornet" — gave only about 30 per cent as much milk as the average milk cow in the nation. Although by 1899 Georgia ranked first among the states in the number of acres devoted to cowpeas, her yield of only 6.8 bushels per acre was miserable compared to the seventeen to twenty-eight bushel yields in some of the Western states. With all its faults, therefore, the value of an acre of cotton was preferable to the value of an acre of most other crops in Georgia and was generally surpassed only by hay, potatoes, barley, and nursery stock.

Those who tried to produce something other than cotton also often found their new crops beset by diseases and insects to such
an extent that their losses were sometimes greater than when growing cotton—a crop that in those days was largely free of disease and insect troubles. Pear orchards were damaged by blight. Some farmers who went into horse-raising found their stock depleted by an epidemic of "glanders," brought in from Texas. Hogs by the thousands died of cholera, with some communities losing as much as 80 per cent of their swine in a single year by this disease alone. While swine losses in the United States were only six per cent in 1879, in Georgia they were twenty-one per cent and only three states exceeded Georgia in losses that year. Those who turned to cattle-raising or dairying were plagued even more by the Texas tick fever, which went by many names—Mexican fever, Black Water, Red Water, Dry Murrain, Bovine Malaria—and was not identified until 1879 and not attacked until 1885. Imported cattle died like flies, half a herd dropping in a matter of months, and sometimes as much as ninety per cent of a grower's breeding stock died of the disease. Efforts to eradicate it had little effect until years after the turn of the century. In 1883 it was noted that Georgia was among the seven states that had lost as much as seven per cent of all its cattle that year, largely from disease.

Another drawback to the raising of fruits, vegetables, hogs, stock, and corn, said the *Cultivator* in 1867, was the thieving habit of the Negro who—it was said—got nearly everything grown in some sections. "How can we have a good hog raising system," asked an observer, "when Sambo will not give up his love for bacon, or his love for ease?" And another correspondent insisted that if a dozen farmers were asked why they didn't raise hogs, eleven would say "the hogs will be stolen." There was a popular philosophy that

> When a hog and an African stand opposite to view,  
> The hog's dissolution is apt to ensue.  

Nor were hogs the only thing coveted; for sheep, poultry, grain and feed crops, and everything to eat were temptations to the light fingered. Cotton, on the other hand, was hard to steal, inedible by man or beast, and was protected by lien laws.

Those who tried to raise sheep also never ceased complaining that the chief obstacle to their success was the state's great population of sheep-killing dogs. In 1875 the Georgia Department of Agriculture reported there were about 100,000 dogs in the state...
and in one year they had killed nearly 29,000 sheep. Whereas Massachusetts' sheep losses in 1879 were only four per cent, those in Georgia were nineteen per cent. In 1875 ninety per cent of the Department's correspondents reporting on sheep declared the ravages of dogs to be the chief obstacle to the development of the industry. Dogs were also accused of destroying turkey flocks. Yet all efforts to get rid of the dogs by law or even to impose a tax on them were frustrated, it was said, by the "nigger vote" and the "fox hunters' influence" until 1898, and even then only an ineffective tax was levied.

Many farmers and planters who turned away from cotton also ran into many difficulties when they tried to market their produce. Dairymen, truck-gardeners, and fruit growers were handicapped by the fact that Georgia had few cities and no large urban consuming population near at hand ready to buy perishable products. Most of Georgia's towns were small, and many a family had its own cow, chickens, and vegetable garden. As late as 1900 only 347,000 of Georgia's 2,200,000 people lived in towns larger than 2,500, and there were only six towns in the state with a population of more than 10,000. Adequate local markets for perishables, therefore, were practically non-existent. Farmers had either to ship their produce long distances to the commercial markets or they were forced to limit their production to a scale small enough to fit the local market. Although refrigerated cars for perishables began to appear after 1875, refrigeration methods were crude, trains were slow, and spoilage was considerable. And not until 1894 did Georgia allow freight trains to move on Sunday—a delay that often destroyed tons of perishables.

Shipping rates were also generally high during the period. And worse still, distribution was poor and speculative. The lack of information covering marketing and a shortage of organizations with marketing experts caused each grower to handle his own crop and generally he shipped to a familiar town or a commission merchant he already knew. Southern perishables piled up in such major centers as Cincinnati, Philadelphia, and New York where the market was already glutted, while other distributing points like Boston, Baltimore, Buffalo, Cleveland, Pittsburgh, and St. Paul received nothing. Because of the prevalence of tick fever in the South, moreover, Southern cattle were not allowed into the North-
ern markets at all until 1884 and even after that only under severe restrictions.

Despite extensive railroad building throughout the state during the period, thousands of "backwoods" farmers still lacked shipping facilities. The country store was really the only outlet for their small driblets of produce and it was able to market for them little more than a few chickens and eggs. Cotton was far easier for such farmers to handle and dispose of to a local merchant.

Then there was a variety of other marketing obstacles. The American diet did not include fruits to any large extent. Former cotton farmers knew little about packaging and shipping. Southern grain growers found it difficult to compete with the grains of the West and Northwest. Dairymen found themselves being ruined by competition from cheap and fraudulent compounds of butterine. Apparently Georgia's laws concerning butter were not enforced as well as in some other states, and Georgia became a dumping ground for butter bootleggers. The Georgia tobacco boom of the 'nineties was not large enough to attract buyers to the state and often the crop had to be sent to Richmond or other markets where the grower lost control of it. The rice boom of the 'nineties also met an ignominious end, due partly to the lack of mills for cleaning.

Another important obstacle to diversification and the raising of home supplies was the prevailing credit system—a system that obliged a farmer to plant cotton or virtually be without credit. Before the Civil War factors and merchants had accepted crops, land, and slaves as security for loans to planters, but after the war there were no slaves and land was too low in value to be acceptable. Thus crops provided almost the only security available. After 1866 there ensued legislation which recognized this fact and aimed at establishing a satisfactory lien law.

However, the difficulty was that cotton was the only crop on which bankers, merchants, or landlords were willing to extend credit. Perishables might spoil and become worthless; livestock was too subject to thievery and death; and grains could be turned into cash in the South only with difficulty. Only cotton had the qualities desired as security for credit. A farmer's credit, therefore, was measured by the number of acres of cotton he intended to plant, and because most farmers had been in dire poverty since the
war and had to have credit for almost everything—even for clothes, medicines, and rations, to say nothing of feed, seed, fertilizer, tools and stock—an excessive proportion of land had to be devoted to cotton. In 1876 Georgia’s Commissioner of Agriculture Thomas P. Janes declared that eighty per cent of the state’s farmers were buying their supplies on credit. Three years later the Department found that sixty per cent of all the farm supplies in the state were so purchased. During the ’seventies and ’eighties generally seventy-five to eighty-five per cent of all fertilizer was sold “on time” and in some periods the proportion was declared to be as high as ninety-five per cent.

It was well known in his county, declared a correspondent of the ’eighties, that “one acre of oats or clover will bring three times as much clear money . . . as cotton.” But the “only excuse for the cotton crop is that on it merchants give credit.” And Bill Arp lamented, “but what better can the tenant do” than “sweat and toil and starve on cotton. His landlord wants him to plant cotton, for cotton is money while corn and oats are not and are too troublesome to handle and take care of.” Paradoxical as it may seem, therefore, when cotton prices were low farmers were often obliged to plant more cotton than ever to keep going.

Another development which proved to be an obstacle to diversification and the production of home supplies during the period was the increased use of commercial fertilizers. As noted previously, David Dickson had introduced the new fertilizers into Georgia before the Civil War, but the war had put an end to their use. When, however, in 1867-68 the Southern Cultivator published a series of letters by Dickson on the new compounds, a veritable “guano era” burst upon the South. Farmers looked upon the new manures as labor-savers, as restorers of their exhausted lands, and as magic keys for the production of highly profitable crops.

Obviously, fertilizer was usable on many things besides cotton. But credit to buy the new magical compounds could be secured only by planting cotton. Thus as consumption of fertilizer increased in Georgia from 48,000 tons in 1874 to 478,000 tons in 1900 the planting of cotton also increased. By hastening the growth of the plants, the use of fertilizer extended the cotton line fifty miles farther north, and by enriching the soil it brought cotton into the whole vast area of the Coastal Plain. Even though cotton
might not be the most profitable crop available, it was assumed that cotton raised with fertilizer might change the picture. And it was not until after many years of bitter experiences that the assumption was abandoned.

In spite, therefore, of all the logical arguments the anti-cotton campaigners were able to muster, the obstacles to diversification and production of home supplies were tremendous and they handicapped even those who desired to change.
6.

Attempts at Diversification

The movement for diversification that was promoted in Georgia after the Civil War inspired many a farmer, in spite of all the obstacles involved, to attempt the production of livestock, grasses and grains, or horticultural products.

Of these three agricultural categories, livestock was the first to arouse considerable interest, partly because of the prevailing labor problem and the fact that livestock production required fewer hands than most field crops or fruits and vegetables. In all its appeals for settlers the state agricultural department never ceased praising Georgia's suitability for livestock; and by the late 'eighties the Southern Cultivator, with its departments on dairying, livestock, and poultry, was giving fully as much attention to animals as to crops. In some counties stock-breeders' associations were organized and annual exhibits of horses, mules, cattle, hogs, sheep, and poultry were staged. By 1882 Richard Peters reported that his famed Gordon County stock farm was being overrun with orders for Essex hogs, Jersey cattle, Merino sheep, and Angora goats. In the same decade E. L. Dennard reported he was making money with a "genuine" stock farm near Perry. In Bibb County, Robert E. Park gained fame during the period with his Holsten Stock Farm, which he established in 1877 and from which he was soon selling Shetland ponies, the diminutive Guinea cattle, Jersey cattle, and Berkshire and Poland China pigs. Grant S. Schofield in Lowndes County, and C. H. Phinizy and W. H. Warren near Augusta were also later reported as successful stockmen, Schofield stating that even in such depressed years as 1895-98 he was netting $10,000 or ten per cent profit on his investment per year.¹

During the period Georgians tested a variety of breeds of cattle — Shorthorn, Devon, Ayrshire, Hereford, Brahmin, and Jersey — the tests being limited largely to crossing blooded bulls with native
cows. Gradually, also, the number of cattle was increased from about 700,000 head in 1870 to about 900,000 head in 1880 and thereafter. Not until after the turn of the century, however, was the million mark of 1850 and 1860 again reached. Nor did much improvement in quality take place except on the better farms. For the most part the Georgia cow remained a runt weighing an average of about 550 pounds, while those in Iowa and Illinois were achieving an average weight of about 1,100 pounds. Generally the ante-bellum belief prevailed that it was cheaper to raise cattle entirely unattended throughout the year on the open range; and in south Georgia where most of them were, the cost of maintenance was zero. The result was that as late as 1890, of the nearly 900,000 head of cattle in the state, fewer than 4,000 were estimated to be pure-bred and only about 28,000 were high-grade (half or more pure-blooded). During the late 'nineties, however, Georgia stockmen had the pleasure of seeing buyers swarm into the state from the North and West and even from England to purchase thousands of head of cattle to replenish depleted herds.

Accompanying the efforts to develop a beef industry were similar efforts by venturesome men to establish dairies. The lack of urban milk markets and the lack of a satisfactory milch cow had limited dairying in Georgia to a few small dairies of six to a dozen cows located near a few towns like Atlanta and Augusta. With the rise of cities and the introduction of the Jersey cow into Georgia in 1870 by Richard Peters, it was believed the possibilities for successful dairying were enhanced. In 1876 Benjamin W. Hunt of Pennsylvania brought the first registered herd of Jerseys into Georgia and a veritable Jersey "boom" was soon under way. In 1883 it was estimated that there were about thirty-five or forty Jersey herds in the state totalling about 800 head of pure-blooded and about 2,000 head of high-grade animals. In 1883 Judge John L. Hopkins of Macon organized a Jersey cattle breeders' association and shortly thereafter the state's agricultural commissioner was co-operating in a move to promote Jersey breeding, hold public sales, and establish Jerseys in every section of the state; and in the early 'nineties the Georgia Dairymen's Association was organized. "Atlanta will soon be surrounded with Jersey farms," declared the Cultivator in 1884; and it was noted that fancy prices were being paid for bulls and calves, $150 to $1,000 being only average.
The absence of creameries at first obliged the new dairymen to process their own butter; and Robert E. Park, Richard Peters, William J. Northen, and others insisted they had found dairying and butter making profitable. By the 'nineties creameries and cheese factories began to appear, stimulated by successful cheese making experiments at the Griffin Experiment Station and by encouragement from the state agricultural department. The output of the factories remained very small, however, with less than 50,000 pounds of creamery butter being produced in 1900 plus a few thousand pounds of cheese.

More significant during the period was the increased production per cow that was achieved by improved handling and the introduction of better breeds. The Georgia cow's production rose from an annual average of fifty-eight gallons per head in 1870 to nearly 300 gallons per head in 1900. Despite the fact that the total number of dairy cows remained at about 300,000 from 1850 to 1900, milk production from the whole state increased every decade from about 13,600,000 gallons in 1870, when the Jersey was introduced, to over 82,000,000 gallons in 1900. The amount of butter made on farms, moreover, increased over 300 per cent— from less than 5,000,000 pounds in 1870 to over 15,000,000 pounds in 1900.5

During the 'eighties a minor increase in horse and mule raising also developed, promoted largely by William J. Northen who had been successful since 1874 in raising all his own work stock. Decrying Georgia's practice of sending three to four million dollars out of the state every year for mules and horses, Northen and such followers as Robert E. Park, Harry J. Hill, John C. Hart, and Hoke Smith organized "Colt Shows" in many counties. Exhibits of fine Percheron, Clydesdale, Norman, English Shire, and Cleveland Bay mares and stallions were reported from many towns. At one show in Randolph County in 1889 over 200 colts were exhibited along with three fine jacks, two stallions, and county-raised horses and mules.6 Robert E. Park and Hoke Smith became known as successful breeders of Shetland ponies. By no means, however, did work-stock production become a major industry in Georgia.

The diversification movement also achieved a slightly quickened interest in poultry. In the early 'seventies the Southern Cultivator established a "Poultry Yard" department in its pages; and by 1874 Georgia had joined other states in shipping eggs to New York.7 In
1883 the state department of agriculture issued a *Poultry Manual*, and by 1887 poultry breeding associations were organized in both Atlanta and Macon. By then Marietta had become the leading poultry shipping point in north Georgia and during the busiest seasons a carload of poultry was being shipped per day. In 1887 a national poultry show was held in Atlanta. Although poultry production remained small, egg production for the state more than doubled in twenty years, rising from 7,000,000 dozen in 1880 to more than 15,000,000 dozen in 1900.

Despite these livestock developments, the attempts to develop a livestock industry in Georgia made no more than a small dent on the state's land-use system in the years 1865 to 1900. Movements for increased production of beef cattle, dairying, horses, and poultry were actually very small or very temporary. The 1890 census showed that 77 counties in Georgia had fewer dairy cows than in 1880. The census of 1900 noted also that about 66,000 of Georgia's 224,000 farms had no cattle or milk cows at all and about 30,000 farms were without poultry. The result of the horse raising program is evident from the fact that while in ante-bellum days Georgia had generally raised most of its own work stock, by 1900 the state was producing only seven per cent of its horses and three per cent of its mules.

During the period practically nothing was done in regard to swine beyond building up the total number. The Civil War had cut Georgia's 2,000,000 swine population in half. Within a few years it had been increased to about 1,500,000. But except for a brief period in the very depressed years of the 'nineties, no further increase occurred. In 1877 the state department of agriculture issued 10,000 copies of a *Manual on the Hog* and efforts were made by stockmen like R. T. Young of Columbus, R. H. Knapp of Atlanta, and others to popularize purebred Berkshires. But little came of the endeavor and in 1900 more than 50,000 farms still had no hogs at all.

Despite strenuous efforts by Richard Peters, C. W. Howard, Commissioner of Agriculture Janes, and others, sheep actually declined during the period—a fact well known in Georgia agricultural history. The state department of agriculture's *Manual of Sheep Husbandry in Georgia* issued in 1875, Peters' announcement in 1877 that Merinos were well suited to the South, advertisements...
of cheap land and inexpensive stock in south Georgia, and appeals by the press for more sheep, all failed to keep Georgia's sheep population from declining from over 500,000 in 1880 (to which point it had been rebuilt after the war) to only half that number in 1900. All sorts of reasons were given for the decline—dogs, thievery, careless methods of preparing wool for market, an increasing quantity of black wool, and so forth. More influential, probably, was the fact that as crop farming spread in south Georgia, sheep were deprived of the large areas of free range they needed. Competition from newly opened sheep fields in the West, in Canada, Australia, and the Argentine probably was too great for Georgia, despite testimonies of rich profits from a few men like David Ayers, who declared in 1876 that his 3,500 head of sheep, unattended and feeding on free range, produced an annual net of ninety per cent on his investment.11

GRASS AND GRAINS

Attempts in Georgia during the Long Depression of 1865 to 1900 to develop grasses and grains were accompanied, as were attempts to develop livestock, with optimistic ventures and disappointing failures.

Immediately after the war the periodic attempts to destroy the general hostility to grasses and hay crops were renewed with the usual vigor. Farmers were assured that millet, red clover, timothy, herdsgrass, bluegrass, and Bermuda had been thoroughly tested and had proved successful; clover, in particular, was promoted. In 1868-69 C. W. Howard's famous essays on "Grasses for the South" were republished in the Cultivator and a few testimonials from growers like B. D. Lundeen ("The Hay Man") of Bibb County and Dr. Thomas P. Janes of Greene County convinced some farmers that such ventures were profitable.12 The result was that 40,000 to 60,000 acres of Georgia's land were devoted to tame hay each year immediately after the war.

In 1871, however, the planting of tame hay dropped precipitately to about 12,000 acres. Not until the late 'eighties was interest in grasses and hay revived, but by then new interest in livestock demanded pastures and forage crops. New fence laws in some counties forced stockmen to develop pastures for the first time, and cotton was by that time becoming so worthless that many farmers
felt obliged to turn to something else. By 1890 about 169,000 acres were being devoted to tame hay—a 1400 per cent increase over 1871. Newspapers like the Americus Recorder were carrying articles on grasses in almost every issue; and the state department of agriculture was distributing the largest amount of grasses for trial ever sent out. Farmers around Albany became especially aroused during the 'nineties, inaugurating in 1895 an annual Hay Day Carnival that was continued for several years. Prizes were given for the best hay exhibited and for the largest yields.

To make the state more self-sufficient in feed for work stock, agricultural leaders boosted German millet, kafir, sorghum, Milo maize, and peanuts. Both North Carolina and Virginia varieties of peanuts became popular after the Civil War, and by 1882 "Uncle Remus" was reporting in the Atlanta Constitution that Georgians could no more get along without their "goobers" than Germans could get along without their daily allowance of lager beer. Velvet beans and cowpeas were promoted for both their soil building and food qualities. "For heaven's sake," declared Georgia's agricultural commissioner in 1889, "if you are a farmer and without peas, get them, get them without delay . . . and never be caught without them again."

During the 'nineties many farmers in middle and south Georgia attempted to develop the cane sugar and sorghum industries to replace cotton. From 1875 to 1900 the acreage in sugar cane tripled from about 8,000 acres to more than 26,000; and in the thirty years from 1870 to 1900 the production of cane syrup increased more than six-fold, by 1880 surpassing the production of sorghum syrup which had long been a Georgia stand-by. By 1895 about 6,000 barrels of cane syrup were being shipped each year from Cairo and by 1899 that figure had been doubled. In 1899 W. O. Tift shipped a carload of sugar cane syrup from Tifton and talk of establishing a refinery was in the wind. However, no Georgia refinery appeared and difficulties of refining, packing, and marketing nipped the project in the bud.

Oats also attracted considerable attention immediately after the war. The cotton craze which developed snuffed out that early interest and it was not until the late 'seventies that declining cotton prices caused interest in oats to revive. About 1875 the state department of agriculture began to popularize a rust-proof seed
which was a boon to Georgia's low yield per acre. Farmers were also reminded that oats required little labor, provided an ideal crop to rotate with cotton, and prevented erosion in winter. From 1879 to the mid-'nineties well over half a million acres were planted in oats each year, and oat plantings of as much as 600 acres on a single farm were not rare. During the late 'nineties, however, another decline of production set in.

Interest in wheat also fluctuated during the period. Before railroads connected the deep South with the West, Georgia had been forced to grow her own wheat, but by the opening of the Civil War wheat had been shunted aside. The wartime resurrection of grain production produced an interest in wheat that lingered on and rose and fell, depending on the attention given cotton. In 1868 a wheat club was organized by about 26 farmers around Athens, and this one inspired clubs in Oglethorpe, DeKalb, and other counties. In some years prior to 1885 probably close to 500,000 acres in Georgia were planted in wheat. During the late 'eighties and early 'nineties, however, when oats were on the increase, wheat production declined. The next wheat revival occurred in the late 'nineties when cotton had plummeted to less than five cents. The state department of agriculture and the Macon Telegraph pushed wheat production, the latter offering prizes for the best wheat yields in middle and south Georgia. In 1898 Irwin and Worth counties were reported to have planted one hundred times as much wheat as formerly, replacing 1,000 acres of cotton; in Macon a wheat growers' convention was held, and several new flour mills were opened.

Rice was another grain that received some attention during the campaign to replace cotton. Although an effort had been made immediately after the Civil War to revive the rice coast, little came of it and by 1889 rice was planted on only 18,000 acres of Georgia soil—a decline of forty per cent in the decade since the 1880 census. During the 'nineties, however, efforts were made, particularly in southwest Georgia, to grow upland rice. In 1892 it was reported that nearly 3,000 barrels of rice were produced in Worth County alone and that millers were promising farmers that if rice were grown they would furnish the means for cleaning it, but little came of the effort.
Attempts of Georgia farmers to diversify by means of livestock or grasses and grains during the Long Depression never quite matched the achievements in horticulture in either quantity or permanency.

Several orchard fruits were tried during the period. In 1873 Frances Butler Leigh reported that she expected to have 100 barrels of oranges ready for market; and in 1895 the ancient Georgia urge to grow oranges was still evident in Tift County where forty trees were set out. During the 'eighties the *Southern Cultivator* reported that several farmers were trying to grow bananas. Apples achieved somewhat wider success and were sold in wagon loads in such centers as Columbus, Albany, and Atlanta. Thomas County became the center for the LeConte pear, introduced there in 1869 by L. L. Varnadoe, and in 1885 the county was said to have about 100,000 trees. Plums, figs, and quinces were also being tried.

But it was the peach that became the queen of Georgia orchard fruits. Although peaches had long been grown in Georgia, as late as 1870 the forty-acre orchard of Judge J. D. Cunningham of Atlanta was probably the only commercial orchard in the state. After 1870 peaches began to become a commercial crop throughout the United States, and Georgia moved rapidly with the current. In 1871 the Alexander peach was introduced from Missouri, and other varieties came thick and fast, 300 being originated between 1873 and 1878 by Dr. L. E. Berckmans at his summer orchard near Rome. From these, Georgia acquired several varieties that matured in time to reach Northern markets when other sections were not selling. In 1872 Samuel Rumph of Marshallville began developing his famous Elberta peach and in 1881 he was ready to exhibit it. Lewis H. Rumph, also of Marshallville, developed the Georgia Belle; and around 1889 Eugene W. Hiley of Fort Valley, along with other members of his family, produced the Hiley or Early Belle peach. With this variety of large, attractive, solid peaches, and particularly with the Elberta, Georgia was in a position to compete favorably with other sections in peach growing.

Nor were these the only developments that contributed to the commercialization of peaches in Georgia. Improved methods of packing and shipping appeared. As early as 1878 some Georgia peaches were shipped in refrigerated chests, and during the
ATTEMPTS AT DIVERSIFICATION

'eighties refrigerated railroad cars and ship compartments came into use.

The Elberta peach and refrigerated transport furnished the pillars Georgia needed for a peach industry and by 1890 both were available. From then on progress was reasonably rapid. After his success with a bumper crop in 1889, J. B. James of Fort Valley began organizing fruit companies, and peach tree planting was soon going on at such a clip from Atlanta south to Marshallville that by 1892 some newspapers felt obliged to warn investors not to overdo it; and fear of a speculative land boom was abroad. 27 By 1893 a score or more of fruit companies had been established around Fort Valley, largely with Northern capital, and 1,250,000 young trees were said to be in the ground. Largest of these firms was the Ohio Fruit Land Company, whose orchard with 150,000 trees was said to be the largest in the world. 28 In Tift County, farther to the south, H. H. Tift and L. A. Snow also organized a fruit farm. By 1895 they owned 40,000 peach trees and by 1898 growers around Tifton were shipping a car of peaches a day during the season. In 1895 John P. Fort pioneered in the planting of peach orchards in the hills of north Georgia. By the end of the period there probably were about 8,000,000 peach trees in the state and with the shipment of 3,000 cars of peaches from Georgia in 1898 it was evident that a new commercial crop had developed.

At the same time that peach growing was prospering a few adventurous farmers were also trying to commercialize grapes. The Civil War was hardly over before Jarvis Van Buren revived his campaign to develop vineyards. "Let us make the State of Georgia," he appealed in 1867, "one grand vineyard such as the world has never yet seen." 29 To Van Buren, a wine industry would be an ideal substitute for cotton — a substitute that he declared required no Negro labor. Within a year the Cultivator noted that "Scupper-nong fever seems to be increasing." 30 No doubt, the word "fever" was an exaggeration, but by 1880 vineyards were in existence around Columbus, Griffin, Thomasville, and Augusta. During the 'eighties the W. W. Woodruff Fruit Farm of Griffin and the Schneider and Starowski Farm of Hawkinsville became known for their vineyards and their Delaware and Concord wines, and others around Macon and Savannah were in the business. In the early 'nineties the Tift brothers took up grape culture and wine mak-
ing, their vineyard near Tifton containing 40,000 vines. John P. Fort also made efforts to develop vineyards in north Georgia. By the end of the period grapes were being grown virtually all over Georgia.\(^{31}\)

Truck gardening was another endeavor into which some Georgia farmers ventured during the years 1865 to 1900. Some trucking had existed before the war near the cities, and small quantities of produce had been shipped by boat to Northern towns. The belief, after the Civil War, that the plantation system was doomed and that farming henceforth must be done on small acreages naturally caused the agricultural press to encourage farmers to try growing fruits and vegetables. The flourishing trucking business that existed around most Northern cities was pointed to as an example the South would do well to copy. Farmers located along railroads and highways were also assured that markets would be accessible.

As early as 1867 a farmer near Augusta began shipping watermelons to New York packed with straw in crockery crates. His profit was so great, it was said, that others were inspired and within ten years Augusta was shipping 60,000 watermelons a season.\(^{32}\) A display at a fair in 1871 of twenty-four vegetables raised by General Toombs was construed as a sign vegetable growing was on the way. Many gardens were soon reported around Thomasville, and by the late 'seventies truck gardening was said to be flourishing around Savannah. There one could see five steamers a week, each carrying from 4,000 to 8,000 crates of vegetables to Northern cities. Near the town there were English pea fields as large as thirty acres, and farms producing annually as many as 250 barrels of Irish potatoes.\(^{33}\) By 1876 John W. Nixon of Augusta had begun shipping muskmelons, and others, using seed obtained from Cincinnati commission merchants, followed suit.\(^{34}\) In 1877 nearly 43,000 packages of fruit and vegetables and more than 26,000 melons were shipped from Savannah.

It was during the 'eighties and 'nineties that trucking received the most attention. In 1880, near Savannah, Garland M. T. Ryals began what was soon to become and remain for many years the largest truck farm in the state. In 1882 truckers near Savannah organized a Vegetable and Fruit Growers Association, and in 1883 fifty truck farmers there were reported to have raised $300,000 worth of produce. By 1883 trucking had spread to all parts of
Georgia, and some communities were establishing agents in Cincinnati to market their wares. In 1890 Francis A. Exley united three coastal plantations into a 3,700-acre truck farm that turned out what were then considered enormous crops of Irish potatoes, cabbage, and beets. In 1895 Griffin staged a Strawberry Festival; and by then the watermelon was considered king of the Wiregrass country.

It was also during this period that commercial nut growing was born. In 1886 the *Cultivator* reported that several men had been successful in growing and marketing pecans on a small scale near Savannah. In 1887 Nelson Tift began an orchard of 500 trees near Albany; and within two years he had not only 2,500 pecan trees, but also seventy-five acres in black walnuts and fifty acres in hickory nuts. Although in 1889 Georgia had only 97 acres planted in pecans compared to 1,000 acres in Mississippi and 2,000 acres in Louisiana, by the end of the period there were about 30,000 bearing trees in the state and a beginning had been made in an industry that was destined to flourish.

Another venture of the period was the establishment of nurseries and seed farms. Most of the nurseries that had existed before the war had been forced to close during the conflict. P. J. Berckmans' Fruitland Nursery was one of the few that survived the war and it flourished for many years, importing plants from the ends of the earth, selecting, testing, and originating all sorts of fruit trees, grape vines, ornamental trees, shrubs, and flowers, and filling orders not only from all over the United States but from such remote places as Japan, New Zealand, and Madagascar as well. So large did Berckmans' business become that as early as 1886 he was sending out 25,000 catalogues a year. During the period Samuel H. Rumph established his Willow Lake Nursery at Marshallville; in 1888 the Piney Park Nursery was begun in Worth County; and by the time the 1890 census was taken sixteen nurseries were in existence, all but three of which had been established since the war. Although some states had literally hundreds of nurseries, the American Association of Nurserymen was persuaded to hold its national convention in Atlanta in 1892 and the members who came (a disappointing crowd of only 150 showed up) and toured the state were said to be impressed with Georgia's progress.

Seed farming got a somewhat slower start, the first seed farm
being established by an ex-surgeon, Dr. William B. Jones, in Burke County about 1880. By 1890 the census takers were able to find thirty-one seed farms in the state and others followed during the 'nineties.

Tobacco growing appeared late in the diversification movement. Tobacco had been grown in Georgia since colonial times, and the 1880 census reported its presence in ninety-six of Georgia’s 137 counties, but practically none was grown for the commercial market.

About this time G. L. Foreacre and W. J. Houston of the Atlanta and Charlotte Airline Railroad distributed tobacco seed among farmers along the line in north Georgia. Difficulties of curing and marketing prevented rapid development, however. In 1886 when the search for new cash crops was in full swing, Georgia’s Agricultural Commissioner J. T. Henderson also took steps to promote tobacco by distributing forty pounds of seed for trial and by publishing *A Manual of Tobacco Culture for Beginners*. But it was not until 1892 that tobacco got a foothold. Pioneering the movement were H. H. and W. O. Tift of Tifton who imported from North Carolina W. H. Snow, the inventor of the Snow curing process. Five Snow curing barns were erected and fifty acres of tobacco were set out by the Tifts that year. At Cycloneta (an experimental farm operated by the Georgia Southern and Florida Railroad a few miles north of Tifton), a similar experiment was attempted. Scores of other farmers followed suit in south Georgia, particularly in Decatur County where 3,500 acres of the Sumatra (cigar leaf) variety were planted. Northern firms also entered the south Georgia Sumatra ventures, at least one firm going so far in 1892 as to cable Cuba for laborers. At Waycross twenty persons formed a stock company both to grow the leaf and to manufacture cigars; and small twist or cigar manufacturing appeared in a few other places. By the end of the period something like a million pounds of tobacco were being grown on 2,000 of Georgia’s acres—a fact which presented more than a doubling of acreage and a quadrupling of production in one decade.

**Results of the Diversification Movement**

But what, after all, was the net result of the efforts to de-emphasize cotton by means of home supplies and other cash crops?
Unfortunately, the answer to this question is complicated by conflicting statistics issued during the period by the state and national governments, newspapers, and farm journals.

A fair answer probably is that while no appreciable dent was made in the devotion to cotton during the period, small advances were made in home-supply production, especially during the most depressed years, and the foundations were laid for some new cash crops such as peaches and vegetables.

All during the period Georgia produced most of her farm supplies, the proportion being a good ninety per cent in the northern part of the state but dropping to as low as fifty to sixty per cent in the cotton belt. No doubt, the anti-cotton campaigners were asking something economically impractical when they appealed to farmers to produce all or nearly all of their supplies. Surveys by the Georgia Department of Agriculture in 1878, 1879, and again in 1880 showed that the home-supply campaign had gotten the Georgia farmers to raise about three-fourths of the supplies needed on the state’s farms. The 1880 census stated that twenty-one counties in extreme northern and southern parts of the state raised virtually everything they needed and in seventy-five other counties most of the supplies were raised. In 1882 farmers in north Georgia were amazing “Bill Arp,” the famed humorist, by actually shipping oats to Ohio; and Cartersville reported 1,500 bushels of grain shipped in one day.

It was during the ’nineties, when the bottom dropped out of cotton prices, that Georgia farmers were almost forced to become self-sufficient. And particularly during 1890-1895, when many merchants refused to extend credit even to grow cotton, self-sufficiency and diversification became inevitable for large numbers of farmers. In the Sycamore community of south Georgia, for example, the importation of Western supplies dropped from about forty carloads in 1889 to fifteen in 1892 and to still fewer in 1893. By then Thomas, Brooks, and Lowndes counties in south Georgia were marketing wagon loads of bacon, lard, and corn and very few supplies were being imported. When the price of cotton began to recover, however, imports increased and attention to home supplies declined proportionately.

Strangely enough, the home-supply movement seems to have had almost no effect on the corn crop. To be sure, the acreage planted
in corn increased steadily from 1,770,000 acres in 1866 to 3,570,000 acres in 1900 — almost entirely without the fluctuations attending other crops. But this steady increase was due, probably, to the increase in the farm population and the expansion of the state’s farming area rather than to the movement for home supplies. Otherwise, cotton prices would have caused the corn crop to fluctuate as they did other crops.

Unfortunately the movement for other cash crops achieved little. As already mentioned, dairying, truck farming, and growing orchard fruits (peaches) each got a foothold that remained permanent. The efforts to develop other livestock, tobacco, small grains, small fruits, nurseries, seed farms, and many other things proved to be premature.

An indication of the extent to which diversification developed may be gained from the 1900 census which classified Georgia’s farms according to their principal source of income as follows:

- 160,865 cotton farms
- 28,657 general farms
- 17,995 hay and grain farms
- 10,706 livestock farms
- 3,355 vegetable farms
- 1,353 dairy farms
- 723 fruit farms
- 624 rice farms
- 186 tobacco farms
- 165 sugar farms
- 33 flower and plant farms
- 29 nurseries

The noteworthy point here is that after an intensified anti-cotton campaign running over a period of thirty-five years about seventy per cent of Georgia’s farms were still cotton farms. Throughout the period there was a steady increase in the proportion of the state’s cropland used for cotton. The following figures show the proportion of Georgia’s cropland in cotton for five-year periods:

<table>
<thead>
<tr>
<th>Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1867-71</td>
<td>30.8%</td>
</tr>
<tr>
<td>1872-76</td>
<td>34.9%</td>
</tr>
<tr>
<td>1877-81</td>
<td>41.6%</td>
</tr>
<tr>
<td>1882-86</td>
<td>41.9%</td>
</tr>
<tr>
<td>1887-91</td>
<td>42.5%</td>
</tr>
<tr>
<td>1892-96</td>
<td>44.0%</td>
</tr>
<tr>
<td>1897-01</td>
<td>47.0%</td>
</tr>
</tbody>
</table>

During the ’eighties, in spite of all appeals to the contrary, Georgia increased her cotton production by fifty-four per cent. The acreage devoted to cotton was increased in 113 counties in that decade and was accompanied by a decrease of more than 300,000 acres de-
voted to cereals. Even when other things were tried, some observers noted, the best land was still reserved for cotton and the experiments with grain were made on the poorest land.45

How close any of the new ventures came to challenging the supremacy of cotton may be seen also by the value of various Georgia products in 1900.46

<table>
<thead>
<tr>
<th>Product</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits and nuts</td>
<td>$672,000</td>
</tr>
<tr>
<td>Hay and Forage crops</td>
<td>3,034,000</td>
</tr>
<tr>
<td>Vegetables</td>
<td>5,735,000</td>
</tr>
<tr>
<td>Dairy products</td>
<td>5,954,000</td>
</tr>
<tr>
<td>All cereals</td>
<td>20,481,000</td>
</tr>
<tr>
<td>Cotton</td>
<td>57,171,000</td>
</tr>
</tbody>
</table>

Even the most intensified campaigns to limit the planting of cotton were relatively ineffective. During the 'seventies the upward spiral was checked only in the year 1871. The record 3,000,000-acre planting of 1881 was surpassed in all but three years of that decade despite the admonitions of the Grange, the warnings of cotton factors and commission merchants, and the Alliance appeals for a twenty-five to thirty per cent reduction in the crop.

During the 'nineties the campaign to limit the crop became particularly feverish. Cotton growers' conventions popped up all over the South and virtually all recommended a twenty per cent reduction in the crop. Pledges were circulated for farmers to sign. Associations were organized to secure pledges and hold growers to them. State and national departments of agriculture appealed for acreage limitation. Meetings were held in many counties to discuss the situation. And most unusual of all, some farmers began to argue for state laws to restrain cotton planting.47 But all such efforts were fruitless and the campaigners might as well have sung "psalms to a dead horse." To be sure, some cuts were made below the record planting of 1890, the 1892 crop actually covering 600,000 fewer of Georgia’s acres. But the crops of 1894 and 1896 were almost as large as the all-time record, and in the late 'nineties no restraint at all was evident.

Apparently much more than depression, poverty, and low cotton prices was needed to make Georgia a diversified and reasonably self-sufficient agricultural empire.
In addition to the efforts to develop a new system of labor and management and the efforts to achieve a new land-use system of diversification and self-sufficiency, Georgia’s farm people also beckoned science and book-learning to their aid in their efforts to extricate themselves from the Long Depression of 1865-1900.

The fact that Georgians in general did an inadequate job of applying mankind’s accumulated knowledge to farming was apparent to the state’s agricultural leaders; nor was there anything new about it except that with the breakdown of the supervised plantation system the situation had become worse. The “let alone” system of stock raising produced an extremely poor quality of sheep, cattle, and hogs. Even dairy animals were ill fed and otherwise managed uneconomically. Most farmers were helpless against the ravages of the cotton caterpillar (which caused great devastation in 1868 and 1869), curculio, cholera, and other insects and diseases that attacked plant and beast.

Georgia’s low per acre yields also revealed the need of science. Few farmers produced more than half a bale of cotton to the acre and the yields of corn, oats, wheat, and other crops were pathetic when compared with what good farmers produced. Georgia’s farmers, declared the *Cultivator* in 1882, have “unbounded faith in poor land, poorly cultivated” and little faith in land improvement despite the well-advertised achievements of men like Dickson, Hardaway, and Furman. Stumps remained in fields year on year. Vast parts of a farm had to be allowed to “lie out” years to recuperate. Ditching and terracing were visible on only a few farms. Sub-soiling and crop rotation were rare or poorly done. Great quantities of produce were never gathered or were wasted after being gathered; corn was left to stand in the fields too long, allowed to get wet, or stored without rat protection; and vegetables rotted
in gardens. After looking over correspondents' reports for 1875 Agricultural Commissioner Janes declared it was astonishing "that the whole agricultural interest of the State is not bankrupt."²

As is well-known, of course, the whole "sorry" system was worsened by the general distrust many farm people had for books, schools, science, knowledge, and progress. As late as 1880 illiteracy in Georgia was nearly 50 per cent as compared to 17 per cent for the nation.³ Of the Negroes 81 per cent were illiterate and for the whites the figure was 23 per cent. Among the 45 states in the Union only five ranked below Georgia in white illiteracy; and when the Negroes were included only one state appeared worse. Even among those who could read, farm journals found few subscribers and book farming was often looked upon as humbug. Thus it was difficult to get agricultural science from the laboratory to the fields. "We cling to the old and ancient system of 'animalism,' " declared a reporter in 1880, "— just enough to live on — and let science go." And in his county he knew of only fourteen farmers using modern methods.⁴

Nevertheless, the years 1865-95 witnessed a vigorous effort to put agricultural science to use on farms. Declining soil fertility, increasing labor costs, depressed prices, and other factors forced attention on agricultural education, research, and scientific inventions. Appeals for deep plowing, hillside ditching, soil testing, crop rotation, and cover crops — all long advocated before the war — were revived immediately after Lee's surrender. Great admiration was expressed for the European care of the land, and Georgians were exhorted to follow suit, particularly by establishing permanent pastures for stock, rotating a considerable variety of crops, and green manuring.⁵ By the middle 'seventies drainage by means of hillside ditching was being abandoned for the superior system of terracing. An improved system of terracing outlined by David Nickols of Allatoona in 1883 and another developed by George Paterson of Lincoln in 1889 caused terrace reform on a considerable scale.⁶ During the 'nineties irrigation received considerable attention and in 1895 a Southern Irrigation Congress met in Atlanta. All through the period, moreover, the need of bookkeeping on the farm was publicized on the basis of the newly developing theory that the farmer was a business entrepreneur and, like any commercial manager, should apply business methods and strike "a balance at the end of
every year." These and scores of other reforms were advocated by agricultural clubs and societies of many kinds, by government departments, by pressure groups like the Grange and Alliance, by farm journals that came and went, and by agricultural colleges and experiment stations that were established during the period.

THE GUANO CRAZE

Probably the most exciting effort in Georgia history to apply science to the state's agriculture was the "guano craze" that swept through the state like wildfire during the years 1867-1880. The enthusiasm which David Dickson and others had aroused for fertilizer before the war had been extinguished during the conflict. But now that the war had swept away virtually everything but exhausted and impoverished land, some restorative for Southern agriculture was imperative. When, therefore, in 1867-68 the Cultivator published a series of letters by Dickson on the value and use of fertilizers, farmers throughout the South accepted the new manures as the ideal curative for their poor soil, poverty, and labor troubles. Here was the answer, it was thought, to all the deficiencies of Southern agriculture. With fertilizer all a farmer had to do was "roll out the cotton bags, and roll in the greenbacks." Here was "something to enable parents to send their daughters to High Schools and sons to Colleges. Something to enable the country to endow Colleges, and the churches . . . [and] fill Sambo's pockets."

To the Cultivator Dickson's opening of this "guano era" seemed equivalent to such great scientific discoveries as the circulation of blood or the formulation of the Copernican theory of the universe. In a year the Cultivator's circulation jumped from less than 3,000 to over 14,000 copies and in 1869 a special edition of Dickson's letters was published. Thousands of farmers, literate and illiterate alike, began experimenting. Testimonials of wondrous crops resulting from the use of fertilizer soon appeared from countless farmers, and by 1870 newspapers and agricultural journals were cluttered with fertilizer ads. In 1874 Georgia's first Commissioner of Agriculture, Thomas P. Janes, felt sufficiently convinced to declare solemnly that almost any reasonably good fertilizer would increase a farmer's yields at least 25 per cent.

Soon the use of fertilizer became almost a mania. In 1867 Georgians had spent, probably, no more than about $80,000 on fertiliz-
ers, half of which was used by Dickson and his friends in Hancock County. By 1879, however, Georgians were buying over 100,000 tons a year at a cost of more than $4,000,000 — twice the amount spent in any other state. All during the remainder of the period Georgia continued in this first rank. By the late 'nineties, the state was consuming well over 400,000 tons annually — nearly a fourth of all the fertilizer used in the nation.

To meet these great demands fertilizer factories soon appeared. By 1868 George W. Scott had made his phosphate discoveries in Florida and had established a factory in Decatur with a capacity of 8,000 tons of fertilizer per year. The scarcity of capital in Georgia brought the state to 1880 with only three factories; but after that developments were more rapid. By 1890 forty-four factories were in operation and by 1900 there were more than 100. Never during the period, however, were these factories able to supply more than a quarter to a half of the state's demands.

Naturally, many of the compounds that were put on the market in the early years of the "guano craze" were spurious and many a farmer was forced to conclude that they "did not benefit me one dime." In 1868, "Gemes Monro," the rustic jester of the Cultivator, claimed that his experiment with manipulated manure had caused him to be "manipulated out of 100$ and 8 akers of kotton . . . [and] I ain't manipulated nothin since." Later he poked fun at the extravagant claims of fertilizer dealers by declaring that he, too, had for sale some "Pure Genuine Georgy Joanner," good for all "Krops and Komplaints"; and he sold it with a $50 bill hidden in every dozen bags or more. He guaranteed it to grow crops on rocks and keep crops fruiting several years without replanting. All he needed was "agents . . . in every kounty, who kan talk peart and spin er top."10

And another observer noted in 1870, "The people of Georgia are out several millions of dollars for vile nostrums — quack remedies . . . and their savageness against the humbugs is quite natural and pardonable."11 The result was that many farmers often refused to pay for what proved to be worthless fertilizers, and court dockets were soon crowded with "guano cases."

By 1874, therefore, it was realized that something more than the weak inspection law of 1868 was needed, and in 1874 the legislature established a state department of agriculture with fertilizer
analysis and inspection as its major function. Shortly, fraudulent manufacturers and agents were driven out of business; reputable producers improved their formulas, and prices were reduced.

The scientific study of the proper use and composition of fertilizers continued, of course, throughout the period. Literally thousands of farmers — in the days before experiment stations were established — experimented and reported their findings in newspapers, farm journals, and at agricultural club meetings. In 1869 David Dickson introduced his famous compound for cotton consisting of salt, dissolved bone, Peruvian guano, and land plaster; and from it he rarely deviated. At Sparta also Dr. E. M. Pendleton tested various fertilizers, while at the University in Athens Dr. William L. Jones, Terrell Professor of Chemistry, Geology, and Agriculture; W. LeRoy Broun, professor of physics; and later Henry Clay White, professor of chemistry, did much investigating. Geological surveys were popularized as a means of aiding soil analysis. The value of cottonseed as a fertilizer was tested and debated widely, and the argument concerning the value of home composted manures as compared to commercial fertilizers seemed never ending. In the early years, Liebig’s emphasis on ammonia was followed, but with the opening of phosphate beds in South Carolina and Florida, the emphasis shifted to phosphates. Methods of applying the new manures also received considerable study.

The results of this “guano craze” are not completely clear, but a few conclusions seem justifiable: (1) Without doubt, the new fertilizers extended the crop area of Georgia, moving the cotton limit fifty miles northward and opening the whole vast Wiregrass area to cotton and other crops which formerly had not flourished there. (2) The new fertilizers probably made it possible for the South’s otherwise exhausted lands to continue in production at a time and under circumstances (i.e., disorganized labor conditions) in which production might have been virtually impossible without such aid. This conclusion is not provable, however. (3) The mania for fertilizers and the necessity of buying them on credit secured by cotton forced more and more farmers into cotton culture and contributed to glutting the market. (4) While a few intelligent farmers appear to have used the new fertilizers wisely and profited from them, the great majority were “injudicious and extravagant” in applying them, thereby deriving little or no profit. Many seemed
to believe that fertilizers did away with the need for proper tillage, rotation, cover crops, composting, terracing, and other essentials. Soil analysis was ignored by all but a few. Cotton and corn, the two crops that got most of the fertilizers, showed no appreciable increase in yields per acre during the period.\textsuperscript{12}

In short, the new fertilizers did not bring prosperity. Thus it was no wonder that during the 'eighties an actual antagonism to fertilizer set in; and while the farmers continued to consider fertilizer necessary, they turned from it as a panacea and began to pour what hope they had left into an agrarian crusade.

**Societies, Clubs, and Fairs**

The "fertilizer craze," even at its highest, fortunately did not absorb all the energies of Georgia's farmers, and after the Civil War they revived their agricultural societies, clubs, fairs, and so on, which in ante-bellum days had been important media for disseminating scientific know-how.

Shortly after the war the Georgia State Agricultural Society was revived at a meeting in Macon wherein three other organizations — the Cotton Planters' Convention, the Georgia Mechanical and Manufacturing Association, and the Georgia Immigration Society — merged with it. The Society sent agents throughout the state to revive local organizations, and more than 100 local clubs were soon in existence in ninety-two counties.\textsuperscript{13} The Society also provided leadership in research by issuing lists of projects and appealing to local clubs to work on at least one project.\textsuperscript{14} In 1869 the Society also revived its custom of holding a state fair.

The Society was handicapped after the war, however, by the reluctance of the legislature to subsidize the fair and by the growing reluctance of the railroads, as the years went by, to issue free passes to delegates to the state convention. Gradually, therefore, the fairs were forced to degenerate into carnivals with agricultural science as a side line, and attendance at the conventions declined from an average of 250-300 to less than a quorum. Finally, politics invaded the organization. Candidates for state office used it as a stepping-stone to fame, turned the conventions into political rallies, and virtually ended the usefulness of the organization to agriculture. After the turn of the century the Society became a comparatively weak organization.\textsuperscript{15}
More successful during the Long Depression was the Georgia State Horticultural Society that was organized in 1876 by John M. Stubbs, Prosper J. Berckmans, and Dr. J. S. Newman. The aim of the organization was to promote the science of horticulture and promote horticultural education among farm people through the schools, by means of fairs, exhibits, and so on. Berckmans, Georgia's most prominent horticulturalist in his day, remained president of the organization from its establishment until his death in 1910. The Society promoted the creation of county societies, tested and recommended suitable varieties of trees, plants, and vines, and distributed information on culture, shipping, preparation for marketing, etc.16

Like its sister organization the Horticultural Society ran into difficulties during the 'nineties in getting free railroad passes for its delegates and free express for its exhibits. Until well after the turn of the century, however, it remained a forceful institution.

Another organization of state-wide (and South-wide) importance was the Young Farmers' Club that was organized in 1884 at Macon by Sidney Herbert, H. H. Parks, William J. Northen, R. A. Nisbet, and others interested in developing an organization for the South's new generation of progressive farmers. By 1885 more than 500 members were enrolled throughout the South, and through farm journals, circulars, pamphlets, conventions, and other means efforts were made to promote more scientific management and progressive farm practices. While a Georgian was usually president (both William J. Northen and Robert E. Park served terms), there was a vice president in each of the other states; and women were admitted as associate members — an unusual development for those days.17 Most of the members were "young" only in comparison with the Old Guard of ante-bellum planters who continued to dominate the State Agricultural Society. The club flourished until the early 'nineties, but then began to decline.

In addition to these three major agricultural organizations interested in the application of science many local clubs and societies appeared and disappeared during the period. Although a survey by the national government in 1867 turned up only three such local clubs, the evidence indicated that several others had been revived even by that early date. As already noted, more than 100 were in operation in ninety-two counties within a few years. Most
of them were community or county organizations with from about 25 to 150 members. They held monthly meetings, some lasting all day and accompanied by a barbecue. Most of them staged fairs and special exhibits, sponsored experiments, discussed varied questions pertaining to farming, and a few published papers in cooperation with neighboring clubs. Some local organizations such as the Atlanta Pomological Society or the Tifton Horticultural Society limited themselves to specialties, but most organizations were interested in all phases of agriculture. For all of them, however, the greatest problem was that of keeping their members interested, and life for many clubs was ephemeral.

Since fairs and exhibits were tried and tested means of spreading agricultural knowledge it was not unusual that such ventures were also revived almost as soon as the Civil War ended. By 1869 both local and state fairs were again in operation in Georgia. In spite of the legislature’s refusal to subsidize the state fair in 1869, the State Agricultural Society held one anyway and drew 50,000 people to its Macon grounds. 18 By 1870 fairs were again popular all over Georgia and in that year alone, it was reported, fair premiums worth $50,000 were awarded. 19 A few serious minded farmers objected to so many premiums being offered by fertilizer dealers for the best yields made with commercial fertilizer rather than for good yields resulting from composting, subsoiling, the use of cover crops, and other progressive practices. Others complained against the emphasis on monkey-shows, horse-racing, the “learned pig,” and other such “tom foolery” which seemed more and more essential to attract crowds. With all their faults, however, the fairs long continued as considerable educational influences, particularly with soil demonstrations, methods of disease control, and so on. In the early ‘nineties William J. Northen introduced the Chatauqua idea to Georgia’s fairs by staging lectures and demonstrations by college professors and school teachers—a practice Northen hoped would open the eyes of backwoods children to the need for education. 20

Fertilizer dealers, the regular press, farm journals, and many agricultural societies also attempted to stimulate the application of science by contests and prizes. Most of them were limited to field crops like corn, cotton, tobacco, sweet potatoes or watermelons, however—rarely for livestock—and were aimed only at stimulating per-acre yields.
Another important means of getting scientific knowledge into the fields of Georgia were the books, manuals, and many farm journals that were published during the Long Depression. While the reading of books was not too popular a pastime among the state's farmers, a few books on agricultural subjects were published. In 1868 William N. White brought out a second edition of his *Gardening for the South*. In 1870 David Dickson was prevailed upon to bring together some of his many contributions to agricultural journals which he published as *A Practical Treatise on Agriculture*. Later editions of the *Treatise* or Dickson's letters were still being published as late as 1908. About the same time Miss E. L. Howard, daughter of C. W. Howard, translated and published a series of lectures on agricultural chemistry and fertilization delivered in Paris in 1867 by M. George Ville, a French professor of plant physiology who was then in high repute in the United States. During the 'eighties the state department of agriculture republished the Ville lectures with its monthly crop reports. In 1875 E. M. Pendleton, professor of agriculture at the state university, also published a *Text-Book of Scientific Agriculture* for use in schools and colleges.

Pamphlet literature also appeared, largely in the form of manuals published by the State Department of Agriculture. Among the earliest manuals (beginning in 1875) designed to awaken an interest in livestock were those on sheep, cattle, poultry, and hogs. In 1878 the department published *The Farmer's Scientific Manual* and the following year saw the beginning of annual issues of circulars and bulletins of considerable variety. The annual *Transactions* of the state Agricultural Society, beginning in 1871, and the yearly *Proceedings* of the State Horticultural Society, beginning in 1877, also were used to broadcast scientific information. In 1890 the newly established experiment station at Griffin began to issue published information, and in 1894 George W. Truitt of LaGrange, one of the model farmers of the day, published a pamphlet entitled *Talks to the Farmers of Dixie* in which he described his methods of fertilizing and raising oats, wheat, corn, and cotton.

Then, of course, there were the farm journals. Although the *Southern Cultivator* was the only such paper hardy enough to survive the Civil War, others soon appeared. How many appeared
and disappeared during the Long Depression probably will never be known. While the United States Commissioner of Agriculture found ten in 1870 the Census Bureau found only six (with a total circulation of 29,500). The confusion resulted from the fact, probably, that some doubled as both farm journals and newspapers. The panic of 1873 seems to have cut the number down to only two or three, and there it appears to have remained until about 1895 when eight or ten were again being published.

Few farm journals in the nation, however, have ever had a life comparable to the long and fitful career of Georgia's *Southern Cultivator*. In 1867 William Jones and Dr. William Louis Jones took over the journal and with the assistance of Dickson's letters plus various contributions from D. Redmond and P. J. Berckmans circulation was soon up to about 25,000 where it remained until the panic of 1873. During the period circulation varied from as low as 3,000 to more than 30,000. Although adequate circulation was a constant problem, the *Cultivator* maintained a solution for it—namely, that of swallowing its rivals. In the one year 1882, for example, it absorbed no less than three Southern agricultural periodicals, and this "literary cannibalism" never abated during the period. Circulation problems were also solved on occasion by the paper's success in getting itself accepted as the official organ of organizations such as the Grange, the Alliance, the Young Farmers' Club, the Georgia State Agricultural Society, or the State Department of Agriculture. Politics in organizations like the Alliance often turned eventually into liabilities and when that occurred, the *Cultivator* usually severed its connection and returned to its first love of disseminating agricultural information. During most of the period the *Cultivator* remained one of the two or three leading farm journals of the South, using its pages to report thousands of farm practices, experiments, and developments carried on by progressive farmers.

**Government Aid to Agriculture**

During and after the Civil War some of Georgia's farm people began to agree with people in other parts of the nation that something more than agricultural societies, fairs, and journals was needed if science were ever to be applied on a wide scale. State and national governments, they concluded, ought to do more than
provide a small subsidy for fairs and collect a few statistics. Their
government, they began to reason, should maintain regular depart­
ments of agriculture, promote agricultural education in schools
and colleges, and take the impossible burden of research off the
backs of individual farmers by establishing experiment stations.

To be sure, the idea of government-expanded agricultural
science was not popular everywhere and probably there was as
much resistance to it in Georgia as could be found in any state.
The Cultivator announced in 1870 that it had no sympathy with
the cry for state aid, state experiment farms, or state departments
of agriculture. The chances were, insisted the editors, “99 in 100
that under state management, incompetent or inefficient persons
would be placed at the head of them” and nothing worthwhile
would be done.22

The idea of compulsory education, whether agricultural or
any other kind, was particularly repulsive to many farmers. Said
one Georgia farmer of an advocate of compulsory schooling: “It
is no part of his business whether we send our children to school
or not. . . . It is a sacred right of our own. . . . Hands off other
people’s business, Mr. P. . . .”23 Nevertheless, the advocates of
expanded government service to agriculture finally prevailed and
many government agricultural institutions were established dur­
ing the period, most of which were concerned primarily with the
problem of applying science to farming.

In 1874, after much agitation and by a margin of only one
vote in the House, the Georgia legislature passed a bill creating
a state department of agriculture. Its purposes were to promote
agricultural improvements, gather and dispense information on
the acreage in crops, markets, and prices, inspect oil and fertilizer
sold in the state, and maintain an experimental farm.24 For many
years opponents of the idea of such a government department
continued vigorous assaults on the department. In 1879 the
legislature put a stop to the geological survey the department had
been conducting for five years. In almost every session of the
state legislature efforts were made to abolish the department, cut
its appropriations, repeal the fertilizer inspection laws, or make
the commissioner elective. In 1889 the office of commissioner
was made elective and in 1890 oil and fertilizer inspectors were
put on salaries. But the department remained alive.25
Under its first commissioner, Thomas P. Janes (1874-78), the department was used as a weapon for an economic and social crusade designed to revolutionize Georgia rural life. Three hundred volunteer correspondents were recruited in rural areas to gather statistics on many phases of farming life, manuals on livestock raising were issued, appeals for immigrants were made, circulars were broadcast concerning soil testing, fertilizer formulas, and composting, and monthly crop reports were issued. Janes worked hard to break down prejudice against science and "book-farming" and tried to explain the intricacies of agricultural chemistry, agronomy, and plant pathology in elementary terms.

After Janes, the department lost most of its concern for the social and general economic welfare of rural people and devoted itself almost wholly to such scientific matters as fertilizer inspection, diseases, and soil analysis. Nevertheless, efforts to get information to the farmers continued to increase. During the 'nineties Commissioner Nesbit hit upon the idea of reaching farmers through their weekly press and soon 150 newspapers in the state were carrying his "Monthly Talks" (some nearly a full page) which contained answers to practical questions on everything from selecting seed to marketing.

The same agitation that produced Georgia's State Department of Agriculture was working simultaneously on a national scale to get the office of United States Commissioner of Agriculture, then a mere bureau in the Patent Office, elevated into a regular executive department. Many Georgians joined in the agitation and in 1887 an Interstate Convention of Farmers meeting in Atlanta added a powerful voice to the chorus. When, in 1889, moreover, the agitators succeeded in getting an executive department established for agriculture, many Northern and Southern farm journals recommended Georgia's P. J. Berckmans to be the first secretary—a recommendation which was not accepted. All during the period the department worked toward the application of science by its contributions in chemistry, entomology, statistics, crop reporting, and weather information.

Accompanying the demand for government departments of agriculture was the equally insistent demand for colleges of agriculture. Discontent with the classical curriculum as preparation for farming became widespread after the Civil War. Studying
Homer, Euripides, and Virgil provided few instructions in crop rotation, land preparation, or subsoiling, it was charged. Some universities, including Georgia's, provided occasional lectures on agriculture; and the University of Georgia maintained a chair of agriculture—the Terrell Professorship established in 1853. From this chair Dr. Daniel Lee lectured to both students and public until 1862 when the Trustees voted to vacate it. In 1866 the Trustees reactivated the chair and appointed Dr. William L. Jones to fill it. But little more was done concerning farming.

In 1862 Congress passed the Morrill Act, which provided each state with Western land it might sell to establish agricultural and mechanical schools and colleges. In 1866 Georgia accepted her share and in 1872 sold her landscript for $243,000. Immediately the Georgia State College of Agriculture and Mechanic Arts was established within the University at Athens with William LeRoy Broun as president. Three departments—agriculture, engineering, and applied chemistry—were created and in its first year of operation (1873) 151 students were enrolled, 106 of whom were studying agricultural subjects.

This encouraging start was short lived, however. Throughout the nation, many difficulties were encountered in getting agricultural colleges on their feet. The institutions were plagued with politics; qualified teachers in agricultural subjects were rare; most available textbooks were of European origin; entrance requirements were low; most farmers were apathetic to the whole idea; and most American boys seemed to want to get away from farming rather than learn more about it.

In Georgia enrollment began to decline the second year of the college's life; and until after the turn of the century the industrial and mechanical arts students almost invariably outnumbered those studying agriculture. By 1877 enrollment was down to 63 students and by the 'nineties only about 16 or 17 were studying agriculture. Suspicion that the college's income was being diverted to support liberal arts prompted the Agricultural Society to urge an investigation, and charges were made that the college was doing "precious little in teaching agriculture."

Although by the 'nineties (and despite increased federal aid after 1890) the agricultural college appeared to be dying a natural death, some experimental work on the college farm was continued;
an occasional “short course” lasting a few weeks or months was offered, and farmers’ institutes were inaugurated. Although farmers’ institutes had been held elsewhere as early as the ’seventies, the first were carried on throughout Georgia in 1891 by Henry Clay White and J. B. Hunnicutt, president and professor respectively of the college at that time. Generally the institutes lasted three or four days, were held in various towns throughout the state, and provided lectures and demonstrations on all sorts of agricultural subjects from dairying to intensive farming. For the most part, however, they were spasmodic and only partially successful.

In addition to the school at Athens, several other land-grant agricultural and mechanical colleges were established—in 1873 in the old United States Mint at Dahlonega, in 1874 in the old state Capitol at Milledgeville, in 1879 at Thomasville and Cuthbert, and in 1882 at Hamilton. In 1891, moreover, as a result of the second Morrill Act of 1890, a similar institution was established for Negroes at Savannah.

In these institutions—all of which were really high schools rather than colleges—some practical instruction in farming was given. In spite of the word “agriculture” in their names it was generally agreed that the schools had few characteristics that were distinctly agricultural. By 1896 even the college at Dahlonega, the foremost school of the lot, had no agricultural faculty members; and although the schools enrolled hundreds of pupils, most of them seemed to agree with their teachers that the study of farming was a thing to be avoided.

Perhaps the most fruitful development of the period concerning the application of science occurred in the establishment of agricultural experiment stations and the beginning of organized research. Agricultural experimentation had been going on in the United States and Georgia since colonial times, but generally on an unorganized, private, and inadequate basis. Outstanding soil tillers like David Dickson, E. M. Pendleton, and P. J. Berckmans were more or less continuous researchers. But such work was impossible for most farmers. In the early ’seventies L. J. Thomas operated a private experiment station in Houston County and made reports on his findings concerning fertilizers, cottonseeds, implements, and so on. In 1873 Dr. E. M. Pendleton, then pro-
fessor of chemistry at the state university in Athens, revived his love for research on a small experimental farm provided by the university. With its establishment in 1874, the state department of agriculture also encouraged many studies by distributing seeds, plants, and fertilizers to be tested by outstanding farmers; and their results were published in the department's bulletins. In 1880 the department also acquired national renown by initiating a national organization of agricultural chemists and calling for the systematizing of their research methods. As already mentioned, other research work was promoted by both the state agricultural and horticultural societies. For the latter society, J. E. Wilbett did considerable work on insects in Georgia during the 'eighties.

A short lived experimental farm was also operated about 1890-95 by H. H. Tift and the Georgia Southern Florida Railroad at Cycloneta, a few miles north of Tifton. There experimentation was carried on with fruits, vegetables, grain, cotton, and livestock; and the farm was visited by thousands of curious farmers during its brief life.

Most of these efforts, however, were weak endeavors to imitate Northern and European practices, and throughout the period Georgia's farmers remained largely dependent on what scientific knowledge they could get from the North and Europe—knowledge which too often was not adaptable to conditions in Georgia and the South.

When in 1887 Congress passed the Hatch Act to help states operate experiment stations, a long felt need began to be fulfilled in Georgia. From this act Georgia received $15,000 per year. The intention of the national government was that the experiment stations were to be operated with the agricultural colleges, and in most states that is what occurred, but such a howl of protest against putting the station in Athens was heard that it remained there only one year. Towns were permitted to bid for it—and Griffin won. However, the legislature virtually starved the new station financially by providing a paltry $15,000 during 1888-92 for buildings and by leaving maintenance entirely to the national government's contribution and the sale of products.

Despite many handicaps, the station began studying a variety of field crops and fertilizers, tested new implements, and tried to
find varieties of small fruits suitable to Georgia. Within two years work was begun with tobacco, dairying, and cheese making. Most useful for the future was the work of Gustave Speth, who began the first systematic and continuous attempts to improve cotton by hybridization. By the end of the period, Speth's successors (H. N. Starnes and J. M. Kimbrough) had produced cotton varieties leading toward considerably higher yields.

Within less than a decade the station's bulletins were being distributed to nearly 10,000 of Georgia's farmers, and much information was being broadcast through the newspapers of the state.

Perhaps the final development of the period with regard to the application of science in Georgia was the belated recognition of the need for state attention to be directed to plant and animal diseases and insects. Plant pathologists and entomologists were rare in the United States until well after the turn of the century, and the national government's agricultural program did little to study these problems until the 'eighties. For a few years the Georgia Department of Agriculture had employed an entomologist but lack of appreciation for his efforts put an end to the office by 1890. About 1886 San Jose scale was brought into the East from California and three years later it came into Georgia via nursery stock imported from New Jersey. Within eight years more than 1,000,000 peach trees in 24 counties were infested and 100,000 trees had to be destroyed. This attack plus growing trouble with the codling moth, fungus diseases, and various insects and even cattle diseases caused an immediate demand in Georgia for a state entomologist. In 1898 this demand was answered (with the usual inadequate funds for operation), imports of diseased plants were stopped, and inspection and condemnation procedures were established.

**Results of the Efforts to Apply Science**

But what was the net result of these efforts to apply science to Georgia agriculture?

The answer must be that the revival of agricultural societies, the publication of farm journals, the establishment of government supported departments, colleges, schools, and experiment stations very definitely laid the foundation for the application of science
in Georgia; but virtually no concrete results became visible from these efforts until well after the arrival of the new century. In practically no respect did these efforts help Georgia's farmers extricate themselves from the Long Depression of 1865-1900.

It must be remembered that the primary aim of the campaign had been to learn through experimentation and then to teach farmers how to increase their productivity—or more exactly, their per-acre yields. In 1894, however, Commissioner Nesbitt wrote: "We regret to say . . . that, beginning with 1850 and up to the present time, no improvement in yield has taken place." In spite of the millions of dollars being spent on fertilizer, farmers continued to use manures improperly—not more than one farmer in ten doing it correctly, declared one dealer. Farming practices continued in their usual slovenly pattern and the director of the experiment station noted in 1895 a "chronic indisposition to real effort along lines of improvement."

Apparently one reason for the failure of the campaign to achieve results was that the application of science to farming simply required more effort and trouble than most of Georgia's farmers were willing to give it. The story was told of a Georgia farmer showing a visitor to the state some fine pears and bragging, "We can raise such pears without any trouble"; whereupon the visitor replied, "I do not doubt that, for, from what I have seen here, if they cost you any trouble, you would not have them." Thus the traditional Southern love of ease militated against reform.

A more important reason for so few results was the fact that most of Georgia's farmers were not educationally qualified to absorb and practice the new teachings. Not only was illiteracy widespread all during the period, but even those who were able to read and write had so elementary an education (generally not more than a year or two of schooling) that newspaper articles, bulletins, and much other printed information meant little. Certainly a meagre knowledge of the three R's was not enough to enable farmers to make wise use of experiment station reports or understand the intricacies of agricultural chemistry. As noted, no more than a handful of boys ever reached the agricultural courses of the university; only the larger or more progressive owners belonged to the agricultural societies or subscribed to farm journals, or were on the mailing lists for bulletins. Thousands of
farmers "went broke" trying to copy David Dickson's methods, it was said, largely because they never understood his principles.44

It was finally concluded that mass education was needed. Nor could this be achieved by a few conventions "considering co-operation, co-ordination, stifilization, concatenation, exhortation, eradication, and damnation."45

Mass agricultural education was to come, of course, based on the foundations established during the Long Depression. But it was not to come until after the arrival of the new century.
8.

The Agrarian Revolt

In addition to the three aforesaid campaigns, Georgia farmers participated vigorously in a fourth campaign, known to American history as the Agrarian Revolt; it too was designed to enable the farmer to escape the depressed economic plight of the period.¹

The Revolt was a movement in which the farmers primarily of the South and West organized themselves into a variety of pressure groups with the avowed purpose of getting control of the institutions of government, credit, transportation, and buying and selling which they believed determined their economic welfare and were then controlled by groups of men hostile to farming interests — greedy and dishonest beyond measure.

The Revolt was a reaction against the evils which the Industrial Revolution accentuated severely in America after the Civil War. With nineteenth century theories of socialism and trade unionism abroad in the land it was not unnatural that even anti-socialist farmers should come to feel, often unconsciously, that not only the South but the agricultural interests as well had lost the Civil War.

As the economic depression of the period worsened for the agricultural classes, in spite of varied efforts to overcome it, farmers began to believe that their failures must be due to causes outside themselves. Forthwith they searched for the villains and in short order they were sure they had found them in the form of trusts, railroads, the tariff, “middle-men,” legislatures indifferent to agriculture, and so on. The lien system, which had made virtually all farmers dependent on urban merchants at high interest rates, was attacked right and left.² Railroad financiers were charged with thievery, rate discrimination against the farmer, charging high freight rates, corruption of state officials, watering stock, and many
other unsavory practices. Railroad commission men who handled fruit and truck crops were accused of stealing or manipulating shipments in a manner that lined their own pockets while fleecing the grower. Wall Street speculation and gambling on crop futures was condemned. Banks were censored for their high interest rates, reluctance to make loans on land, and their willingness to extend more credit to industry than to agriculture.

The rebellious farmers also railed against the shortage of currency in the nation resulting from the demonetization of silver in 1873—a development which, they charged, reduced the income and purchasing power of farmers and cost cotton farmers alone $200,000,000 in one season. The almost complete dependence of government on the property tax was said to work an injustice on farmers, particularly since it was paid without regard to income from the property; and personal and intangible property of city dwellers often escaped taxation. Farmers were also angered because the prices of things they bought and sold were regulated more and more by "infernal monopolies" and the protective tariff.

Since their enemies had organized themselves into trusts, pools, exchanges, and various other associations, the farmers had no choice, they declared, but to defend themselves by counter associations.

Naturally, the Revolt was opposed by such Georgia leaders as Henry Grady, John B. Gordon, Ben Hill, and Alfred Colquitt. Enamoured as they were of the New South philosophy which called for industrialization and a mimicry of the financial practices which had made the industrial North rich and powerful, they considered the Revolt nothing less than a menace to all that was desirable in American life. Yet the tripling of the value of Georgia's manufactured products from $31,000,000 in 1870 to more than $106,000,000 in 1900 proved no panacea to the farmer's plight and the New South philosophy fell largely on deaf ears in many rural sections.

**The Grange and the Alliance**

As is well known, the first stage of the Revolt took the form of the Granger movement. The National Grange of the Patrons of Husbandry was the brain child of O. H. Kelly, a clerk in the United States Department of Agriculture, who discovered on a
Southern tour in 1866 that not only Southern farmers but all the nation's farmers were disorganized and distressed; and he decided that they needed co-operative action for revival. In 1867, therefore, Kelly and a few friends created a national organization and thereafter state and local Granges began to appear.

As early as 1868, H. M. Hunter of Eufala, Alabama, stirred a controversy among readers of the *Cultivator* by appealing to them to buy and sell co-operatively and unite to free themselves from the "detestable bureaus." To another observer the idea of "co-operation among farmers" was so ridiculous that one might as well "whistle jigs to a mill stone." Scarcely a sign of the Grange appeared in Georgia until 1872 and even then the *Cultivator* warned its readers to beware of such "entangling alliances" with the North, particularly with an organization like the Grange whose headquarters were in Washington and whose "centralizing" influence should be resisted.

During 1872, however, the first local Granges were organized in Georgia and in 1873 a state Grange was established. By the end of another year 684 Granges had been established in the state with a membership of nearly 20,000.

The Granges were actually schools, political pressure groups, commercial firms, and social fraternities all rolled into one. They operated crop reporting services, organized community social activities, managed co-operative buying and selling exchanges, sponsored "experience meetings," and fought monopolies, political rings, class discrimination, and a variety of other ills. In some communities they owned their own lodge halls and warehouses and a few even operated small factories.

During 1874 the Grange reached its peak in Georgia and elsewhere and the decline began. Internal dissensions, the failure of many exchanges, and the infiltration into the organization of all sorts of people—lawyers, merchants, politicians, bankers—not in complete sympathy with the movement's objectives almost caused the fire to flicker out. By the 'eighties membership in Georgia had dwindled to a small brigade and hundreds of sub-Granges had disappeared. In 1890 the national convention of the organization was held in Atlanta, and frequent, but futile, efforts were made to revive the movement. By 1900 the national department of agriculture listed no Granges at all in Georgia.
During the 'eighties it became apparent that the Granger movement was only a prelude to the second stage of the Revolt. In 1874 a few farmers in a frontier county in Texas began what later became known as the Farmers’ Alliance. Gradually it moved North and East, mobilizing discontented farmers into the most revolutionary campaign ever experienced in American agriculture. In the spring of 1887 organizers arrived in Georgia from Texas and soon hundreds of lodges sprang up. In 1888 a State Alliance was formed and by 1889 Georgia had over 2,000 Alliance lodges scattered throughout 134 of her 137 counties, enrolling more than 100,000 members. To avoid difficulties experienced by the Granges, the Alliance refused membership to bank cashiers, cotton mill agents, store helpers, grain merchants, warehouse operators, lawyers, mercantile clerks—to virtually all but farmers, the only exceptions being a “mechanic, county school teacher, county physician, or a minister of the gospel. . . .” Negroes organized their own Alliance and although little heard from, eight Negro sub-alliances were known to exist in Screven County alone. Farm journals and weekly newspapers were soon printing an “Alliance Page” and many groups issued their own journals, maintained a lecturer, and co-operated with the “organizers” in spreading the movement.

At first the Alliance appeared to be a harmless and feeble organization appealing for nothing more than “progressive farm legislation” and better educational advantages for rural children. And while it remained in this form men like Henry Grady and his conservative political friends gave it their blessing. But when by 1890 the angered Alliancemen meeting in their county churches, stores, or school houses became convinced the “infernal monopolies,” corrupt lawyers, and thieving lobbyists were responsible for the farmers’ sufferings and that political reforms were needed more than seed selection, the movement burst into an evangelical, radical, and frightening crusade. Lodge “reading rooms” circulated papers, magazines, tracts, pamphlets, and books; slogans were coined and poetry was composed to call all farmers to arms.

By 1890 the Alliancemen had a long list of grievances. They wanted taxes shifted from the poor man’s income to the swollen incomes of the rich; they asked for government control of the railroads, the direct election of senators, a reduction of the tariff, the
The suppression of gambling in futures, an increase in the amount of currency in circulation, and government loans to farmers at low interest rates. They demanded the abolition of national banks and the reclamation of the excessive lots of land the government had granted or sold to corporations and aliens.

As is well known, the Alliancemen made the fatal mistake in 1890-92 of participating too directly in politics. With the organization of the Populist Party, Alliance ranks split asunder. The strong traditional ties of many members to the older Democratic Party refused to give way and the political activities of the Alliance in 1892 degenerated into a fiasco. Before the end of the year the membership in Georgia had dwindled to less than 20,000 and the Alliance Farmer, the official organ of the Georgia Alliance, was in the hands of the sheriff, unable to pay its debts. By the end of another year membership had dropped to less than 10,000 and the brief life of the organization in the state was nearly ended.

The War Against the Trusts

All during the period of the Revolt the “war upon the trusts” was one of the most popular pastimes of the rebels. Georgia farmers were surrounded, said their leaders, by ravenous and greedy trusts “in steel rails, nails, iron nuts, barbed wire, lead, slate, nickel, zinc, oil cloth, jute bagging, cordage, envelopes, gutta-percha, castor oil, linseed oil, cotton seed oil” and so on ad infinitum. The meat trust was charged with making $30 net profit on every head of cattle while prices to the farmers declined; and the sugar trust was reported to be making $3,500,000 profit per month. “All these ill-gotten gains,” cried Wm. J. Northen, “are making barren our fields. . . .” Farmers were begged to make their own supplies and to stop buying even guano unless the trusts came to terms by reducing prices or meeting a variety of demands such as selling fertilizer only in cotton sacking.

It was the fight against the jute trust, however, which proved that farmers could combine effectively even though for only a short while. The news in the late 'eighties that a jute trust had been organized in St. Louis was one of the sparks that kindled the Southern Alliance fire. As the trust advanced the price of jute week after week during 1888 until it had more than doubled, the South’s farmers rose to the challenge. Immediately the Georgia
Department of Agriculture declared war on the trust which "stands, robber-like, with lips compressed, and cries, your money or your life." A frantic search for a substitute for jute bagging began and pine straw, palmetto, cotton bark, and okra plant bagging were tested. Mass meetings rose spontaneously and Granges and Alliances resolved regarding jute to "touch not, handle not the unclean thing." Soon it was decided that cotton bagging was the only feasible substitute, and although it cost more than jute, the use of it would not only destroy the trust but increase the consumption of cotton as well. Throughout 1888-1890 jute was largely boycotted. Grange and Alliance members signed pledges to use nothing but cotton bagging to pack their bales; some lodges imposed fines or expelled members who violated the resolutions or did business with a gin that used jute; and in 1889 only one Alliance lodge in Georgia refused to join the campaign. In that year 53 per cent of Georgia's cotton was wrapped in cotton bagging, despite the opposition of the Liverpool exchanges, and it was announced that "farmers will no longer be dominated by trusts and combinations." Unfortunately the trust was beaten only temporarily. By 1894 trust price-rigging was again evident and in 1896 the price of bagging was increased and the price of ties was doubled. By then the zest for concerted action among farmers was nearly spent and it was evident that something else was needed for permanent relief.

In addition to the boycott device, farmers engaged in the Revolt established many co-operative business enterprises designed not only to fight trusts and middlemen but to provide themselves as well with the advantages that they thought would accrue from large-scale and business-like methods of buying and selling.

In 1876 the Grange in Washington County established one of the earliest of these co-operatives, with a capital of $25,000. During the 'eighties and 'nineties the Grange and Alliance established scores of co-operatives. In Barnesville a co-operative store sold over 1,200 tons of guano in one year; and at Griffin, where the Alliance had a warehouse, oil mill, ginner, and guano factory, it was reported that dividends of $21,500 were paid in 1890 from just the warehouse and guano factory. In DeKalb County two Alliance co-operatives carried on such varied activities as manufacturing cotton bagging, cottonseed meal, guano, and farm im-
implements; held fairs; bought and sold produce; dried, evaporated, and pickled fruits and vegetables; and operated a storage warehouse. In 1888 the State Alliance established a state-wide exchange to engage in both buying and selling for farmers. Whereas shares in the local co-operatives generally were about $5 or $10 each, shares in the state exchange sold for $100. In its first year the exchange boasted that it had saved its patrons $200,000 on fertilizer alone.

Other co-operatives were operated by some of the traditional agricultural clubs, such as the one at Goshen which bought fertilizer and gave a joint club note to the merchant. Still others were organized in the form of exchanges by fruit and vegetable growers, dairymen, and livestockmen for mutual marketing and group action concerning such problems as high freight rates or uniform packaging.

Unfortunately, the co-operatives suffered from a lack of business talent among their members, the hostility of bankers who often refused to accept joint notes, the enmity of competing business men who labeled the movement as socialistic, and the apathy of their rank and file, who often refused to support the very co-operative they had helped establish. As failures multiplied the difficulties increased and the movement in Georgia nearly withered away by the end of the century.

An important handicap for the co-operatives was that they had to operate largely on a cash basis—a fact which prevented many farmers from using them. The leaders of the Revolt appealed repeatedly to farmers to pay cash for their supplies and cut loose the chains binding them to the lien system and high interest charges. But such appeals were wasted on the thousands of farmers who had no cash. For them the great need, it appeared, was an increase in credit facilities and the free coinage of silver. All during the 'eighties and 'nineties farmers railed against the national banks for refusing to accept their land as security for loans, and the establishment of a Cotton Bank was proposed wherein land would be accepted. Eventually this proposal developed into the sub-treasury plan whereby loans would have been made on cotton stored in warehouses. So far as free silver was concerned, Georgians were divided. Tom Watson, the state's most vigorous personality in the Revolt, thought free coinage would prove only a
mild sedative and he agitated for $50 per capita in circulation. With the defeat of Bryan in 1896, however, the "easy money" campaigners resigned themselves to defeat.

Another pet peeve of the rebels, particularly by 1890, was the high freight rate required, especially for fruits and vegetables. Shipments from South to North were at a higher rate than those moving from North to South; and Southern farmers, unwilling to concede the argument that the North gave the railroads more business, were indignant at the discrimination. Railroad combinations, pools, and evasions of even the Interstate Commerce Act of 1887 angered growers still more. Demands for state railroad legislation poured in on Georgia's General Assembly. Georgia's representatives in Congress took up the fight for lower rates. In 1895 the Georgia Fruit Growers Association was organized for concerted action on the issue, and in 1896 the Georgia Railroad Commission cut the rate on fruit from 81¢ to 65¢ per hundred. But this was of little use for produce shipped beyond the state's borders. P. J. Berckmans, after observing California fruit marketing methods, urged Georgians to circumvent the usual commission merchants who worked hand in glove with the railroads, and to maintain their own co-operative agents in Northern cities. But at the end of the period melon growers were still complaining that freight and commission fees were taking 60¢ out of every $1 they got and little hope for change was in sight.

Another favorite target of the rebels was the protective tariff. All the traditional Southern arguments against it were proclaimed repeatedly. Few Georgia speakers seemed aware that much of the money Southern farmers sent North was to buy supplies not protected by the tariff and that it was not just, therefore, to lodge at that door the blame for draining off all Southern wealth. Nor were all the rebel leaders aware that their fight against the tariff in these years was being blunted by the fact that conditions in the South were changing and more and more Southern interests were actually desirous of tariff protection. As early as 1882 Georgia's Senator Joe Brown was calling for the protection of the New South's infant industries. Rice planters and merchants were by then also anxious to maintain protection for their commodity, and were declaring with tongue in cheek that they did not believe their views conflicted with Democratic principles.
The fact that the McKinley Tariff of 1890 included protection for some agricultural products and the Ocala Platform of the Alliance was not militant against the tariff were further signs that change was in the wind. Coal and iron senators from Alabama, sugar senators from Louisiana, and marble representatives from Georgia all helped to nullify the effort to lower the tariff in 1894. And by 1897 Georgia's own growers of Sea Island cotton were meeting in convention to ask for protection. Obviously, these defections from traditional Southern opposition to the tariff were only minor, but they prevented a solid front and forestalled what, at least during Cleveland's second administration, might have been victory.

Another reform that provoked interest every decade was the movement for direct trade between the South and Europe. This was an old perennial for Southerners. Both the Grange and the Alliance were attracted to the idea of direct trade, however, because they were convinced that all Southern exports and imports which moved through Northern channels were controlled by their old enemies on Wall Street and in Liverpool and were equally convinced that Southern independence and prosperity could never be achieved until that hostile grip was broken. The direct trade movement of the Long Depression was peculiar, however, in that the rebel Granges, Alliancemen, and Southern conservatives cooperated to achieve it.

As early as 1871 Hannibal I. Kimball and his Brunswick and Albany Railroad completed direct trade agreements with firms in Liverpool, Glasgow, and London. But before any goods were shipped from Brunswick the railroad enterprise collapsed. By 1873 the Grange in Georgia was promoting the movement anew; the State Agricultural Society was studying the matter, and another direct trade organization was in existence. But again little came of the effort.

In 1882 a Thomasville firm made a shipment of cotton direct to Liverpool and during 1882-86 meetings and other efforts ensued in Savannah and Brunswick to establish direct lines. Again the old problems arose. Ships were often unable to get sufficient cargoes of imports for the South for the return trip from Europe. Immigrant passengers from Europe would not buy passage on ships going to the South. And virtually no import firms could be
found in Southern ports with sufficient capital to finance a whole shipload of imports.35

Nevertheless, all during the 'nineties the matter was again agitated and was backed by Southern state governments, the Alliance, and such individuals as C. P. Goodyear, Thomas P. Stovall, and I. W. Avery. The result this time was that some direct trade was achieved between Georgia and Liverpool, Bremen, and a few Mediterranean ports; but the value was never sufficient to move more than a small fraction of the state's cotton and timber crops or bring in more than a small proportion of her imports. Thus the Georgia farmer's dependence on Northern financial centers remained substantially the same.

Another matter which agitated the waters of Revolt was the dealing in futures, which became widespread during the period. Although there was no doubt that the cotton exchanges that were set up after the Civil War were economically useful, evidence of rampant speculation, of price manipulation, and unwarranted forecasts concerning the size of a future crop made it clear that the system was being abused to the detriment of the growers. Speculators customarily forecast a large crop to beat down the price, it was charged; and then by spring, when the actual size of the crop was known and it was seen to be smaller than forecast, the price rose. But most farmers had been obliged to sell before then at the low price and only the speculators reaped the high price. Unless weather or pests interfered to actually reduce the crop and cause the speculators to lose, the farmer was fleeced.

As early as 1866 and 1868 growers and cotton manufacturers had organized associations to make forecasts, but it was not until many years later when the national government took over the task and developed improved procedures that satisfactory results were achieved.

All during the period Georgia's farmers railed against the speculators. As early as 1868 writers to the Cultivator were appealing for a declaration of war against false crop reports and dealing in futures. In 1873 the editor of the Cultivator blurted, "Just now speculation rings, illegitimate banking operations, and the host of other abominations which center in New York, have depressed the price of cotton," and he charged the "gamblers" with trying to get hold of the crop before letting the price up.36 In 1881 a
National Cotton Planters Convention in Atlanta appealed for the selling of cotton by grade to break the clutches of the speculators and in 1892 the Georgia State Agricultural Society urged Congress to suppress all dealing in futures. But it was many years before adequate reforms were achieved and it may be said that the general suspicion that dealing in futures is evil has not yet disappeared.

During the Revolt farmers made strenuous efforts to circumvent the speculators by schemes designed to allow growers to hold crops off the market and sell them in their own good time when prices were advantageous. As early as 1868 a Lexington, Georgia, farmer proposed a huge co-operative of Southern cotton growers with its own banks and branches authorized to issue notes with cotton as security. The panic of 1873 also precipitated a considerable campaign led by the Grange, urging farmers to hold their crops until a favorable selling season. "Banks have suspended," declared the Cultivator, "merchants have asked indulgence, manufacturers have discharged their operatives—in other words everybody but the farmer has suspended: let him suspend too."

Such proposals invariably ran headlong into seemingly insurmountable obstacles. The State Department of Agriculture reported in 1875, for example, that 38 per cent of Georgia's cotton was sold and paid for (by advances) before it was made, and to advise farmers to hold what they no longer owned was useless. Poor farmers, moreover, and particularly Negroes, were restless when they had a crop ready to sell, and to ask them to restrain their yearning to turn it into cash was asking too much of human nature.

With the rise of the Farmers' Alliance new schemes gave the "crop holding idea" new impetus. By 1888 several local lodges in Georgia were operating warehouses in which to hold cotton. But this largely helped those farmers who were able to wait for their money, since adequate financing had not yet been achieved.

In 1889 the Alliance, with Georgia's Lon F. Livingston in the vanguard, evolved the sub-treasury plan whereby the national government would be called upon to establish warehouses and make loans (really negotiable certificates) to farmers on the crops stored in them. A farmer would be able to borrow up to 80 per cent of the value of his stored produce and the loans were to run
for twelve months. This government service, said the Alliance-
men, was nothing more than had long been provided for holders
of negotiable government bonds, and, unlike these privileged
groups, farmers were willing to pay interest (1%) on their loans.
Such a scheme, it was alleged, would prevent speculation as well
as peg or stabilize prices.\textsuperscript{41}

In the early 'nineties the campaign for the sub-treasury idea
was feverish. To the conservatives the idea was too radical, too
fraught with socialism, and generally they opposed it. Conserva-
tive Alliancemen, including William J. Northen, also spoke
against it. To Northen the scheme smacked too much of govern-
ment paternalism and departed too far from Jeffersonian prin-
ciples.\textsuperscript{42} In the end Congress refused the proposal and farmers
were obliged to revert to dependence on a few locally established
warehouses and on futile appeals to their friends somehow, some-
way to hold their crops on the farm. Farmers in the new century,
however, were to see the scheme adopted \textit{in toto}.

The rebellious farmers were generally aware that many of their
desired reforms could be achieved only if farmers had friendly ad-
vocates in the seats of governmental power. As early as 1872 the
State Agricultural Society was discussing resolutions stating that
farmers should support only candidates for office who would do
something for agriculture.\textsuperscript{43} In 1874 the well-known independent
revolt of small farmers against the conservatives was begun by
William H. Felton in north Georgia.

For many years farmers as a class remained confused and polit-
ically ineffective. White farmers were reluctant to split ranks
with other whites for fear of opening the political door to Negroes
and a revival of the evils of Reconstruction politics. White farm-
ers were also divided among themselves, some being radical, some
conservative, and agreement on a common program of action was
forestalled. For the most part, the distressed farmers who needed
help the most were largely leaderless, ignorant, and unaware of
the means of solving the problems posed by the new industrialized
society that had risen to compete with them. The conservatives
found little difficulty, therefore, in leading the farming classes by
the nose. Conservative candidates like Alfred Colquitt, John B.
Gordon, and Joe Brown were all actually farmers as well as cap-
tains of industry and it was comparatively easy for them to assure
the men from the fields of their sympathy by emphasizing their agricultural interests and playing down their industrial interests. Thus the Grange saw nothing odd in supporting Colquitt, and many Alliancemen were aware of no inconsistency when they, even as late as 1890, helped send Gordon to the United States Senate. Even when the legislature was predominantly filled with farmers these difficulties prevailed; most of the members were from the conservative wing, and the conservative leaders had little difficulty with them.

By 1890, however, thousands of farmers had become at least partially aware that something was wrong. Although some members of the conservative wing of the Alliance had refused to accept the sub-treasury proposal, the Alliance very definitely had gotten reasonably general agreement on a program; the radical wing had found an effective leader in Tom Watson, and the continued economic decline had made the conservatives less conservative and had swelled the ranks of the radicals. Flushed with their victory over the jute trust the Alliance and its friends moved directly into politics, elected Wm. J. Northen as governor, won a majority of seats in both houses of the state legislature, filled six of Georgia's ten seats in Congress with Alliancemen, and forced the Democratic Party throughout the nation to move leftward. Although by 1892 the Populist Party had risen to complicate matters by splitting partially the Democratic Party, farmers repeated their performance. Their control over the government of Georgia was complete and the influence of farmers on national affairs remained powerful, even though not dominant, through the election of 1896.

Although the political revolt of the farmers was virtually futile, the agitation of the period laid the foundations for twentieth century agricultural reforms, but by 1900 practically nothing of importance in the program of the Alliance or of the Populist Party had been achieved. A few minor reforms were accomplished, such as providing more funds for schools, and slightly enlarging the powers of the railroad commission. But the problems of farm credit, regulation of big business, reduction of the tariff, and the easing of taxes on rural property were left almost untouched.

What had happened apparently was that the radicals had written the political platforms but, for the most part, conservatives
not entirely in sympathy with the platforms had been elected to office. Leadership also gravitated to conservatives in the state legislature, and the radicals had been relegated to a noisy, innocuous fringe. Many Alliance political leaders, moreover, had never really been Alliancemen at heart and had embraced the Alliance only as a means of getting into office.

Futhermore, there was the prevailing Jeffersonian attitude toward government in America which often caused many farmers to wonder whether the solution of their problems should or could be sought through government action at all. In 1896 the United States Secretary of Agriculture expressed this view: "Legislation can neither plow nor plant." "Good farmers," he continued, "do not need government aid and the ignorant, impractical, and indolent farmer deserves none." It was not the business of government to legislate for one class and it was impossible for government to change the laws of supply and demand or nature's laws concerning weather and insects.44

Not least of the causes for the failure of the Agrarian Revolt, was the fact later recalled by Tom Watson that most farmers were so individualistic that only rarely could one be found willing to bear the idea of "bending his stiff neck to the yoke of organization." Most farmers would rather go to "industrial Hades" by themselves than go into the "Promised Land of Prosperity" led by Moses.45

More important than all these factors put together was the fact that the farmers had not correctly diagnosed their ills. Unquestionably, the rise of finance capitalism and monopolies had created evils calling for reform. But had all the evils of the American capitalistic system been removed it is still doubtful that the economic collapses of 1873 or 1893 could have been prevented thereby, or that the rising power of industry over agriculture could have been stemmed.

Economists now claim that the general agricultural depression of the era was due to two factors: (1) the overexpansion of American agricultural production which resulted in flooded markets, and (2) world economic depressions resulting from the failure of the gold supply to keep up with the world demand.46 From 1860 to 1900, for example, aided by the Homestead Law and the Westward movement, the total acreage of farms in the
United States increased by 400,000,000 acres. In the same period vast expanses of land in Canada, Australia, and Latin America came under the plow. Georgia's farmers had to face this greater competition, and the world simply was not able to absorb the increased production at prices profitable to the growers. At the same time the world was being deluged with agricultural products, gold was becoming more scarce. The panics of 1873 and 1893 were felt in England and on the Continent before they were felt in America; so for the Georgia farmer to blame his troubles on the Machiavellis of Wall Street or on his local merchant or banker was to misplace the blame.

The inevitability of the victory of the industrial interests over the agricultural interests arose from the well-known fact that industrial organization and its urban environment are far more conducive to efficiency, progress, and the winning of political battles than is agricultural organization with its rural environment.
9. Evaluation of the Long Depression

The foregoing chapters indicate that all four of the major campaigns of 1865-1900 to restore prosperity to Georgia's agricultural establishment failed to achieve the goals set for them. From 1870 to 1900 the annual value of production for agricultural workers declined from $239 per head to $199, despite a slight rise in prices. The value of the average farm (including implements, machinery, and stock) dropped from $1,849 to $1,016 and in only four states was the value lower.

Nor were these declines due only to the depressed decade of the 'nineties. In 1871, six years after the Civil War, the *Cultivator* declared that Southern agriculture had tried to rise but "fortune has withheld her smiles."¹ In the mid-'eighties Georgia's Agricultural Commissioner J. T. Henderson and such eminent observers as Alexander Stephens and Bob Toombs discounted claims of rising prosperity made by the Comptroller-General and the *Atlanta Constitution* and stated flatly that every time the sun rose in Georgia it shone on poorer farmers. The increased wealth indicated on the tax books, they averred, was largely in the cities.² So depressed was the great class of tenants that "Bill Arp," Tom Watson, and others arose as spokesmen for them—a development that occurs usually only when such an inarticulate group reaches a point of considerable misery. The average tenant, declared "Arp," received for his labor only about $10 per month and "he has been working around here for ten years and has just been able to live and buy a one-eyed mule."³ In 1887 the *Cultivator* declared that "there are twenty farmers belonging to the debtor class to every farmer belonging to the creditor class."⁴ And in the same year it was noticed that land and loan associations that had been operating in Georgia about five years were rapidly foreclosing mortgages.⁵
The catastrophe of the 'nineties, therefore, merely worsened an already ill agricultural establishment. By 1892 landowners and debtors alike were unable to pay debts. Forced sales were becoming numerous. Within months the price of mules declined from $130 to $40; land went from $12 per acre to $2. The president of the Burke County Alliance wrote, “Our county is in a terrible, terrible condition. Out of fifteen hundred customers at one store only fourteen paid out; five hundred paid less than 50 cents on the dollar.” Then in 1893 disaster struck in all its fury. Nearly every county showed decreases in taxable property. From 1892 to 1895 tax values on the Comptroller-General’s books shrank $52,000,000. Urban industry was suffering also, and this worsened the agricultural situation by throwing unemployed textile and foundry workers on the shoulders of their rural kinfolk. Thousands of urban Negroes, too, roamed the country roads living on what they could filch from farmers’ fields. Then in 1896 there was a drought and the agricultural depression got worse.

Thus it was no wonder that when in 1899 fifteen hundred Georgia farmers were asked to report on the condition of the state’s agriculture, the person who examined the seven hundred replies declared, “the tale of woe that they unfolded was enough to break a stout-heart.” Thus ended three and a half decades of economic frustration.

Some of both the alleged and real causes of this Long Depression have already been noted. Perhaps, boiled down, it might be said that the trouble with Georgia agriculture was due half to an incompetent job of farming and half to the economic and political impotence and lack of foresight of the farmers. Perhaps this can be condensed further by saying that the Georgia farmer was an incompetent manager—concerning both his own farm and his society. There may have been little he could do to control the world economy; but outstanding Georgia farmers like David Dickson, James M. Smith, John Dent, and many others were good enough managers to adjust themselves to the world economy, to their new post-war society of the South, and to the era of industrialism—and they made money. The vast bulk of Georgia’s farmers, however, simply appeared incompetent to do that. They retained too long a contempt for book-farming and education; they persisted in slovenly agricultural practices, refused to main-
tain their organized pressure groups, and continued in many old ruts which aggravated an already bad situation. In his *Economics of Land Tenure in Georgia* Banks enlarges considerably on the lack of wants or desires among the great body of farmers, especially among white and Negro croppers, who seemed to care only for the bare necessities of existence. This led them, Banks contends, to put forth only enough physical and mental energy to satisfy these simple wants; and this in turn made them poor credit risks and, therefore, victims of the landlord-merchant-lien system which so long afflicted Georgia agriculture. Quite possibly Banks is on solid ground. The tradition of industry and thrift so characteristic of New England and Pennsylvania farmers cannot be found in the history of Georgia agriculture no matter how far back one looks. Only a few groups, like the Salzburgers in the colonial period, exhibit this characteristic. To be sure, industry and thrift would not have kept the Georgia farmer's wealth from being drained off to pay Confederate and Union soldiers' pensions or by the tariff; nor would it have solved many other problems. But industry, thrift, and competent management might have allowed him to develop a far more profitable agricultural economy than he did develop.

**Increase in Aggregate Wealth**

In spite of the economic difficulties of the period the Georgia scene was not all dismal. During each decade the population of the state increased until by 1900 it stood at about 2,000,000—more than twice what it had been in 1860. Although the proportion of people living in rural areas declined slightly, at the end of the period 85 per cent of the state's people were still living in the country or in villages. True, only 60 per cent of those working were engaged in agriculture as compared to 72 per cent in 1870. But in actual numbers the force of farm workers had increased—from about 336,000 in 1870 to more than 500,000 at the end of the period. Nor could all these increases be attributed only to the Georgian's propensity for reproducing his kind. For, as shall be discussed later, a few people also found their way to Georgia farms from North Carolina, Ohio, Indiana, and other states.

Quite naturally, this doubling of the population resulted in the division of the old plantations, the construction of thousands of
new homes, barns, and other out-buildings, and produced a demand for land that forced prices up. By 1890 the value of the state's land and buildings had again reached the 1860 figure of $150,000,000 and by 1900 it had risen to $183,000,000. An even greater increase occurred in the value of implements and machinery in the state—their worth in 1900 being three times what it had been in 1870 after the devastation of war, and a third higher than in 1860. The per-acre value of land, buildings, and implements increased every decade also, from $3.20 in 1870 to $6.95 in 1900; and the total value of all farm property per acre had doubled also—from $4.38 in 1870 to $8.65. In 1870 the value of all the state's farm property was at low ebb ($103,000,000), and indicated that the Civil War had demolished or devalued by half what had existed in 1860. But by rebuilding and by new building required to serve the increased population, the figure climbed every decade until by 1900 it stood at $228,000,000, thereby slightly surpassing what had existed in 1860. If, therefore, the individual person who lived on Georgia's farms was remaining poor or getting poorer, at least the aggregate wealth of the agricultural establishment was rising—and to many of the speechmakers of the day that was often the only consideration worth noting.9

Another notable fact is the rise of the Negro as a landowner. The rise of the Negro landowner was slow and most of those who became owners were able to accumulate only small patches of 20 acres or so. Nevertheless, by 1902 the average size of Negro holdings (in 31 counties) was 64 acres and in those counties surveyed by Banks, 59 Negroes had farms of over 500 acres and nine had lordly domains of more than 1,000 acres.10 Every decade showed an increase in Negro ownership for the state as a whole, and by 1900 Negroes owned more than 1,000,000 acres.

The Search for Industries

The New South philosophy preached during the Long Depression convinced many Georgians that the state's agricultural establishment would never really be prosperous unless some complementary industry existed alongside it. Industry was needed not only for urban and aggregate prosperity but for agricultural prosperity as well. Truck gardening and dairying, for example, could not prosper without industrial centers as markets. Cottonseed oil
mills, textile mills, railroads, and canneries were needed if farmers were to diversify, find nearby markets, experience an increased circulation of money, and avoid the long transportation costs required in shipping everything to Northern or European markets. In 1883 the United States Department of Agriculture had pointed out that the prosperous agricultural states were those with a considerable amount of manufacturing and many cities. Those states with less than 30 per cent of the population engaged in agriculture contained the most prosperous farmers. But unfortunately, Georgia ranked among the poorest group of states, and therein over 70 per cent of the population was engaged in agriculture. Thus it was no wonder that some farmers were induced to participate in the New South industrialization campaign.

The most feasible industry for Georgians to develop after the Civil War was that of lumber and naval stores. The state had been producing forest products since the days of Oglethorpe, and although the Civil War had virtually ruined the industry vast stretches of forest land still covered the state. The great demand for lumber to replace war-destroyed buildings also provided a golden opportunity, and many a great planter gave up farming altogether for lumbering. By the end of 1866, all mills around Brunswick were operating full-tilt, and John B. Gordon was the leading spirit working to get twelve more established. Soon every planter in Chatham County had a part of his timber "boxed" for turpentine. By the early 'seventies, it was said, Darien had turned itself from a cotton town into a lumber town with as many as 60 vessels at a time waiting for cargoes of timber.

With the development of the state's railroad network during the period, sawmills and turpentine distilleries moved into southwest Georgia. In 1872 H. H. Tift opened the industry around what became Tifton; about 1875 Wiley Clements appeared from North Carolina to build the first distillery in Worth County; and shortly thereafter Poulan was settled by sawmill operators. In due time the State Department of Agriculture was advocating the lumber industry as a means of diversification.

It was during the 'nineties, however, that the industry had its greatest expansion. Declining North Carolina forest resources caused many of her operators to scurry into southwest Georgia. In 1892 the pine forests of Colquitt County were first cut, and by
then the three Tift brothers were working 100,000 acres of timber. \(^2\) Tracts as large as 10,000 acres were sold to lumbermen for $2 and $3 per acre and large lumber corporations were making their appearance. By the end of the decade Georgia ranked seventh among the states with a production of 1,309,000,000 board feet of lumber; 300 sawmills had organized the Georgia Saw Mill Association; and the state's farmers were receiving more than $3,000,000 per year for the forest products of their farms. Only two major defects of this development were noted by farmers: the industry was competing with farmers for labor and the state's great capital of trees was being mutilated without any consideration for conservation.

Two agricultural tributaries also grew out of the cotton crop during the period—a cottonseed oil industry and a cotton textile industry. Uses for cottonseed had been discovered before the Civil War, and both oil cake and meal had been manufactured on a small scale, but most cottonseed was simply heaped into piles and used for fertilizer. What little oil was produced was considered non-edible and was sold largely in Europe. When in 1881 it was found that cottonseed oil mixed with certain animal fats made a good substitute for lard, the oil industry developed rapidly. \(^3\) By 1882 mills were operating in both Albany and Atlanta and others were getting started in Macon. By 1895 Georgia had 20 mills which, even in that depressed year, paid farmers $1,400,000 for seed formerly left to rot. \(^4\) By the end of the period about 60 per cent of the once wasted cottonseed crop was being milled for one use or another.

As is well known, no Southern industrial development came close to matching the rise of the cotton textile industry that occurred during the period. With 33 mills and 85,000 spindles in the state in 1860, this was, of course, not a new post-war industry. But the war destroyed many plants and when Georgia began rebuilding she had to start not far from "scratch." Apparently the aim now was to have mills in the South so that farmers, by selling directly to local spinners, could circumvent the merchants and transportation lines that were thought to be getting all the profit from the cotton crop. By 1870 the industry was up again to its 1860 stature and by 1876 the number of spindles had more than doubled. Even so, the mills in the state were using only
10 per cent of Georgia’s huge crop—a mere 50,000 bales. After
the famed Atlanta Exposition of 1881, however, the industry
grew fast, spurred by an almost evangelical campaign to sell stock
in new mills to everyone from sharecroppers to bishops. In many
cases farmers were persuaded to buy stock, paying for it in cotton
or with cash payments as low as 25¢ per week. Soon Georgia
became the leading textile state in the South, and by 1900 within
her borders were 75 mills and more than 1,000,000 spindles—a
fourteen-fold increase in spindles during the period.

Not all efforts to supplement Georgia agriculture with allied
industries were successful. During the ’nineties, for example, con-
siderable energy was directed toward the establishment of a can-
nery industry in the hope that fruit and vegetable growers might
develop a more adequate market and keep huge surpluses from
spoiling. Both the Alliance and Northern investors put money
into establishing canneries. By 1892 Quitman was said to be
shipping carloads of Brooks County fruits and vegetables. Tifton,
Fitzgerald, Dalton, and many other towns soon had canneries
“putting up” tomatoes, peaches, pickles, peas, beans, corn, berries,
and other things. Unfortunately, those depression years were not
conducive to the firm establishment of new businesses; many
canneries were backed by insufficient capital; new firms found
difficulty getting into the established markets; and in some com-
munities insufficient fruits and vegetables were grown to keep
the canneries running. After a yield of 12,400 cases of canned
tomatoes in 1892, for example, Georgia’s production declined
until by 1900 it was near the vanishing point. By the end of the
decade the whole industry was nearly dormant.

There were, of course, many other industrial developments
more or less related to agriculture. The state’s banking system
expanded considerably during the period with incorporated banks
spreading from 14 to 63 counties in the decade 1884 to 1894.
Although the war had destroyed most of the state’s 25 banks, by
1894 Georgia had 118 state banks and 27 national banks. And
although the capital in all of them was little more than had
existed in 1860, the spread of banks to the rural sections, particu-
larly after 1890, somewhat eased the credit difficulties that had
aroused the Agrarian Revolt.

Another industrial development of considerable significance to
agriculture was the enlargement of the state's railroad network. By 1860, although Georgia was one of the nation's leading states in railroad facilities, northeast Georgia and vast expanses of the Coastal Plain were almost entirely without tracks. By 1880, however, this situation had been remedied and more direct lines to Cincinnati and other Western cities had been built. During the 'nineties, moreover, truck gardeners along the coast saw develop a direct line from Darien to Savannah; and with the Florida Central and Peninsular line, every county along the coast was given transportation. The repeal in that decade of the law prohibiting freight cars to move on Sunday, the use of refrigerated cars, and the reduction of some rates also were contributions to the state's agriculture. Be it said to the credit of the railroads that many of them played no small part as missionaries—broadcasting appeals for diversification, distributing seeds and plants, maintaining expert advisors to consult with farmers along their lines, and promoting the immigration of new farmers. By 1900 the state had a network of 5,730 miles of track—more than three times the mileage of 1860; and their use was limited only by the fact that in many seasons of the year farmers found it hard to get their produce through Georgia's red gullies to a depot.

This latter fact led naturally to a movement for better roads. During the 'seventies the State Agricultural Society had noted that in order for farmers to reduce their production costs they needed roads that would require less time, fewer animals, and less wear and tear on buggies and wagons to get products from the farm to the gin, mill, depot, or town. The state's roads remained in bad shape, however, with mud-holes, gullies, creeks, and fallen trees obstructing them in stormy weather. By the late 'eighties, the Alliance was yelling for action and road congresses began popping out all over the nation. In 1889 Georgia became the first state to hold a road congress; but it failed to impress the legislature with the need for state attention to what was largely considered a county problem. Other congresses in 1891 and 1893 backed by the state's press achieved a few reforms. Counties were authorized to levy a special road tax and to use convicts or hired labor on the roads instead of relying on the ancient practice of free labor supplied by the citizenry. By the end of the period some road improvement was visible in the coastal counties
and in Floyd and Fulton counties; and everywhere the importance of good roads to the farmer was being recognized even though action was slow.

These developments in industry, finance, and transportation were only indirectly connected with agriculture; but their influence on the state's agricultural establishment was, in due time, to become great and to a certain extent was felt even during the Long Depression (i.e., the influence of railroad developments on the peach industry).

**Population Movements**

Needless to say, these varied agricultural and industrial developments were carried out by a population that seemed restless and ever on the move. Large numbers of tenants moved yearly from farm to farm in search of "something better." Owners and substantial renters moved hither and yon in search of fresh land or land suitable for new ventures in livestock, fruit, or truck crops. As has been noted, the development of chemical fertilizers and the clearing of land by sawmills opened the vast Wiregrass Plain to settlers—and during the decade of the 'nineties alone 100,000 people poured into them.\(^{21}\) Settlers also followed the new railroad tracks into all parts of the state. Sawmills and turpentine distilleries attracted labor from farms by higher wages, much to the indignation of landowners; and the rising textile mills were soon surrounded with whole villages of ex-farm laborers—more than 56,000 workers being employed in them by 1890. Urbanization was also an inevitable consequence of these developments; the largest growth occurred in the 'eighties when the population of Georgia's towns increased 77 per cent. However, no population movement in the state quite compared with the vast influx of people into the Coastal Plain after 1880. Although land near the towns there often sold for as much as $100 per acre, most of the Plain area was available at from 25¢ to $5 per acre; pine timber land was usually available for as little as 60¢ per acre.\(^{22}\) So anxious was the Georgia Southern and Florida Railroad to attract settlers along its lines run through almost unbroken forest that it hauled in lumber cutting machinery without charge and built free side-tracks for settlers promising to grow melons.\(^{23}\) So vast was the exodus to the Wiregrass Plain that between 1870 and 1910 its
population increased by 445 per cent—a growth unparalleled in any other forty years of Georgia history.

In all these developments Georgians were doing no more than participating in the great national movement of building up the nation by pushing back the frontier and augmenting the population. For it was a popular notion then as well as now that there was a close correlation between economic and social welfare and a great number of people. Throughout the entire period, therefore, vigorous efforts were made to attract new settlers to Georgia. Northerners seeking new farm land in the first years after the war had many of the same objections to coming South that European laborers had, and all but a few were attracted to Western homesteads rather than to Georgia and her sister states. C. W. Howard noted, moreover, that the few who settled in Georgia in the 'sixties "were for the most part sutlers, quartermasters, or federal army men . . . who knew nothing of the Negro, and yet hired him—who knew nothing of Southern soil, climate, and products, and yet sought no advice from those who did." And their failure as cotton planters discouraged others.

With the establishment of the State Department of Agriculture in 1874, the campaign for settlers took on renewed vigor. In 1876 Commissioner Janes published a handbook about Georgia to attract settlers from both the North and Europe. Germans were assured that Georgia was much like the Prussian countryside around Berlin, and all were assured of a "salubrious climate" and a "range of food crops for man and beast" unsurpassed—"cereals in their perfection . . . vegetables of the most varied sort . . . fruits of the finest flavor . . . ," an endless variety of meats—and cotton. This handbook was followed in 1879 by a publication entitled Georgia: From the Immigrant Settlers' Stand-Point, containing accounts of the experience of successful settlers who had come from the North and Europe, and designed to counteract unfavorable stories about Georgia. However, most of the happy settlers turned out to be teachers, doctors, merchants, manufacturers, and millers rather than farmers. In this decade of the 'seventies many counties also began advertising their resources and many railroads carried on immigration movements. The railroads advertised land for sale along their line and boasted of the healthful characteristics and agricultural possibilities of the
area. In spite of these efforts, in 1880 Georgia's 1,500,000 population still contained only about 10,000 people born in Northern states.27

During the 'eighties the campaign for settlers was stepped up slightly by excursions at reduced fares run into Georgia and sponsored by the State Agricultural Society and some of the railroads. In 1888 Georgia also joined other states in a Southern Inter-State Immigration Convention designed to coordinate Southern efforts to attract settlers from abroad.

However, it was the 'nineties that proved to be the decade of most vigorous action. By then the attractions of Georgia were better known, and thousands of farmers suffering from the depression in other parts of the nation were searching for new homes. During the decade every facility in Georgia seemed to join the campaign. The state's newspapers were flooded with advertisements of cheap land and articles giving glowing descriptions of the countryside. Every county appeared to insist that it was in the heart of the best farming section of the state. The General Assembly and the Southern governors issued invitations to settlers; landowners held conventions and organized land associations to advertise and market their real estate. The State Department of Agriculture stepped up its appeals, beseeching Northern farmers to come and show Georgians how to farm and grow something besides cotton. Railroads multiplied their excursion trains, bringing hundreds of Northerners on tours of the state to see its prospects, particularly for fruit. An excursion ("Georgia on Wheels") was organized for Georgia farmers to travel to the Northwest to inform people personally in that "blizzard swept" country of the state's good things and to convince them that Georgians, too, were attractive people. Businessmen and farmers were aroused in courthouse meetings to join the campaign. The Cotton States Exposition of 1895 was designed partly to advertise Georgia's resources and attract settlers. Under the leadership of C. J. Haden, efforts were made to flood England and Germany with advertising as Minnesota had done to attract settlers from Scandinavia a score of years before. Under the leadership of William J. Northen, after he left the governor's chair, the Georgia Immigration and Investment Bureau sent agents to every county to gather data, list land for sale, and picture the resources of the region. Even some North-
ern newspapers like the *Cleveland Plain Dealer* and the Springfield, Ohio, *Farm News* joined the crusade.

In all this, of course, Georgia was portrayed as a land far superior to the Garden of Eden. Assurances were given that white men could not only work well in the climate but were not likely even to die in it. Georgia had a lower death rate in 1890, said the State Department of Agriculture, than Massachusetts, New York, Illinois, or California. The pine forest around Tifton was so healthful that even with a population of as many as 1,000 there had, by 1896, been no need for a cemetery. There had been only five deaths in five years, two of which had been caused by the railroad. Many advertisements also assured settlers of fabulous profits—of from $100 to $1,000 per acre on fruit—and of an abundance of cheap land. Then, too, there were such considerations as cheap transportation, cheap labor, and no worry about cold and blizzards.

Out of this grew a variety of colonization projects—and even a few colonies. Most famous of these ventures was the “American Tribune” or “Old Soldiers’ Colony,” which soon became known as Fitzgerald in honor of its founder, the editor of the official organ of the Union veterans’ Grand Army of the Republic. Stirred by distress in the Midwest in the winter of 1893, by Georgia’s advertisements, and by a train load of provisions sent the sufferers by Georgia’s Governor Northen, Phylander H. Fitzgerald organized an association to settle 100,000 acres in Irwin County. In a short time the association had sold 45,000 shares of stock ($10 each) to 10,000 heads of families representing about 40,000 people. Farms were to vary from 5 to 100 acres and were to be selected by lot. By the fall of 1895 the settlers were converging on the colony by wagon, horseback, bicycle, train, and foot. In eight months 8,000 people appeared and others were on the way.

Lesser known projects were the Union City Colony in Cherokee County, Pennsylvania colonies in both Twiggs and Tift counties, the Ruskin Commonwealth near Waycross, a colony of Illinois farmers in Wilkes County, and an Ohio Colony in Worth County.

The only trouble was that the campaign for settlers never attracted more than a fraction of the thousands of immigrants expected, and vast numbers of those who came refused to stay. Georgia’s advertising, apparently, failed to rid Northern minds of the notion that the climate was bad and that the people were
"indolent and thriftless," to say nothing of discourteous to outsiders. Some Northern newspapers continued waving the "bloody shirt" and insisted that the South was a barbaric country of crime, heat, ignorance, and poverty. Many Northerners, moreover, remained undecided after reading Georgia's advertising as to whether Georgia was the finest land on the earth or merely had the biggest liars on the earth. The labor and expense of clearing land in south Georgia's forests also deterred settlers, many of whom preferred land already cleared. Also, too many settlers sent home news of Georgia's insects, swamps, poor land needing fertilizer, low yields per acre, bad roads, and other matters the advertisers had neglected to mention. Many Northerners wishing to come South, moreover, simply could not sell their homesteads during the depression.

By the end of the decade, at any rate, the influx had come to a stop, thousands had left, and even the association that had founded Fitzgerald had gone bankrupt. When the Census Bureau finished its work for 1900 it declared that among Georgia's 2,200,000 people there were only about 16,500 born in Northern states. Apparently, many a settler had agreed with the poet who wrote:

To you, the South, we bid a fond adieu,
We may emigrate to hell, but never again to you.

STRUCTURAL CHANGES IN THE AGRICULTURAL ESTABLISHMENT

Despite the failure of the campaign for settlers to turn Georgia into a lovely, contented land of family-sized, owner-occupied farms, forces already discussed had considerable effect on the structure of the agricultural establishment. The size of the state's farms, the number of farm acres available to support each farm person, and the number of acres of land improved were all affected, for example, by the rapid population growth, by the credit system and tenancy, by the opening of the Wiregrass section, and by other forces operating during the Long Depression.

Unfortunately, a clear picture of the change in the size of Georgia's farms is difficult to get because the United States Census Bureau since 1880 has been counting all types of tenant plots as separate farms—even those whereon the tenant is hardly more than a wage hand. Students of the subject like Brooks and Banks did not agree that the plantation system was broken up.
According to the census reports, for example, the number of Georgia's farms increased from about 70,000 in 1870 to about 224,000 in 1900—more than a three-fold increase. From tax digests, Banks decided that Georgia had about 140,000 landowners in 1900. Thus the number of farms had at least doubled. But the 134,500 farms listed by the census as operated by tenants probably did not by any means represent that many separate farms. Certainly, there was a two or two-and-a-half-fold increase in the number of farms—and that fact is impressive.

This increase was achieved chiefly by two means: (1) the breaking up of old plantations and (2) the opening of new land to farms. Along the coast virtually all the large ante-bellum plantations disappeared even before 1870 and were replaced by hundreds of small farms. The desire of other planters to sell out after the cotton price drop of 1871 also caused old plantations all over the state to be broken up.

It is well known that this increase in the number of farms—no matter how counted—was accompanied by a decline in the size of farms. To be sure, at least half of Georgia's farms even in 1860 consisted of less than a hundred acres. But the situation seems to have been accentuated after the Civil War. Here again the picture is blurred by the Census Bureau's method of counting. But when Banks studied 31 typical counties for the years 1873-1902 he found that farms owned by whites had declined in average size from 388 acres to 264 acres. Every census figure available also shows the same trend. The size of the average farm in Georgia declined from 338 acres in 1870 to 117 acres in 1900. The number of improved acres per farm declined from 97 in 1870 to 47 in 1900. More important is the fact that the number of farm acres per farm person declined also from 30 in 1860 to 19 in 1900. Thus a person living on a Georgia farm in 1900 had only one-third as much farm land from which to derive a living as his forebears had had at the outbreak of the Civil War. Fortunately, his forebears had much unused and unimproved land, and from 1860 to 1900 about 2,600,000 acres of this was put into cultivation. Still there is no way to avoid the fact that pressure on the land was increasing during a period when yields per acre were not increasing—this may account for some of the distress of the period.

None of this means, however, that large farms were disappear-
ing from Georgia, for many a grand plantation continued to exist and many a new farm of large area was established to replace the old plantations that were broken up. Throughout the period Georgia contained from 1,500 to 7,000 farms of five hundred to a thousand acres and from 400 to 3,500 farms of more than 1,000 acres. All the state’s farms of more than 500 acres never amounted to more than seven per cent of all the farms in the state, but it was these farms that produced a vast proportion of the state’s agricultural products.

However, the changes of the times did not turn Georgia into a state with a handful of baronial domains and a myriad of tiny peasant holdings. The middle-sized farm of 100 to 500 acres continued to hold its own, increasing in number as the others increased and remaining at somewhere near a third of all the farms in the state.

CONCLUSION

It is now apparent that a balance sheet of Georgia agriculture during the Long Depression will show more of failure than success. On the debit side it is clear that the state’s farmers failed to develop a satisfactory labor-management system, to subjugate cotton by diversification, to apply science effectively, to achieve the goals of their pressure groups, to attract settlers, or even to diagnose adequately their troubles. The result was that the recovery of the state’s agricultural establishment from the crushing blows of the Civil War and the adjustment of agriculture to the conditions of the new era were exasperatingly slow; and while a few able men achieved prosperity, the great mass of farmers, black and white alike, got only a meagre living and many gave up farming altogether. Many evil developments, moreover, such as the new credit system and the unsupervised tenant or share system, became so completely fastened onto the agricultural establishment that they had not been entirely eradicated even by 1950.

On the credit side of the balance sheet it is equally clear that foundations were laid which helped farmers in the new century even though little resulted from them during the Long Depression. Vegetables, peaches, and nuts, for example, became commercially successful, later becoming important agricultural ventures. The schools, colleges, and experiment stations established
brought organized agricultural research and education to Georgia and served as foundations for twentieth century developments. The ideas promoted by the Agrarian Revolt, while not achieved at the time, remained current, and between 1913 and 1938 action was achieved on virtually all of them in one form or another. Allied industries, urban markets, and better roads grew out of the developments largely begun in that period.

If from this a moral is worth drawing it must be that progress is often so slow that a whole generation must work, agitate, and campaign without any reward other than the hope that a future generation may reap the benefits.
PART

THREE

The Revolutionary New Century, 1900 to 1950
10. The Subjugation of Cotton

When Georgia agriculture turned into the twentieth century a variety of signs indicated that a new era was unfolding. It was not immediately apparent that Georgia's farmers were destined to witness within the next fifty years the subjugation of their King Cotton. Nor was it apparent to any but a few that they would see the development of a considerable degree of diversification, an intensification of the commercialism of agriculture, a vast expansion of agricultural education, an unprecedented degree of government intervention, and a considerable change in rural life produced by electrification, the motor vehicle, and the mechanization of farm labor. But there was at least a widespread feeling that new forces were at work. It was obvious that the Long Depression was over and Georgia agriculture was moving into an era of comparative economic prosperity.

In 1898, during the Spanish-American War, long-depressed prices began moving upward. In 1899 the Cultivator noted "Hope, encouragement, cheer, push, energy . . . upon every face." And a year later the Moultrie Observer declared, "cotton is up, syrup is bringing a good price, spirits and rosin are higher than they have been for ten years, lumber is high . . . labor is bringing a good price. . . . God is surely smiling on this country." After thirty-five years of depression, observers were convinced that prosperity had returned; and as the years passed prosperity mounted. In 1904 an Atlanta banker declared, "Now you can see prosperity on every hand . . . new barns and outhouses . . . better stock and improved farm implements." And a year later the president of the State Agricultural Society insisted that "today agriculture in Georgia stands upon the highest pinnacle yet reached." By 1905 Georgia ranked next to Texas in the cotton states with an increase of $77,000,000 in the value of her cotton farms.

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Yet there were still higher "pinnacles" to come. By the end of the first decade of the new century the value of the state's cotton crop had more than doubled, land values had increased 100 per cent and more, and prices were still rising. Even the Wall Street Panic of 1907 was no more than a slight and temporary obstacle to the new wave of prosperity. Over-production of cotton resulting from bumper crops in 1911 and 1914 and the coming of the European war in 1914, which closed some European markets,

**Average Yield in Pounds of Cotton Per Acre in Georgia by Five-Year Periods, 1866-1949.**


also proved but temporary set-backs in the rapidly rising spiral. By 1916 the state's cotton crop was worth three times what it had been worth in 1900 and even that record was to be shattered by the war-boom years of 1917-18. So prosperous a hue covered Georgia agriculture by 1918 that the president of the Agriculture College declared the state's farmers were suffering an "embarrassment of riches." And another observer noted that even "The Negro tenants are rolling in wealth. It is a curious sight, those in the country districts of Georgia report, to see them come to town
with their pockets stuffed with paper money. . . . One country storekeeper in Georgia states that since the last harvest he has taken in over twenty-thousand dollars in cash that he had charged off the books." Census reports also verified the trend. In 1899 the gross value of Georgia’s farm production had been only $104,-000,000; but by 1919 it had increased six-fold—to $638,000,000.

To some people, the new prosperity was the result of more scientific farming methods. The Republican administration in Washington claimed it was due to government action. The Cultivator was quick to give credit, however, to the Spanish-American, South African, and China wars. And later historians declared that the increase in the world’s gold supply following new discoveries in the Klondike and South America, and the growth of the American population at a rate exceeding the increase of agricultural production were decisive factors.
But whatever the causes of the new prosperity might have been, Georgia's farmers responded by returning to worship at the feet of King Cotton. As early as 1899 the editor of the Tifton Gazette predicted that if cotton went up to eight cents all Georgia would be planted with it; and two years later the editor noted that "this year the cotton planter is driving farther than usual into the endless chain of buying more mules and guano to raise more cotton to buy more mules and guano to raise more cotton."\textsuperscript{12}

Apparently the high price of cotton was irresistible. "Just think of it," declared a North Georgia farmer in 1904, "$80.00 for a 500 pound bale."\textsuperscript{13} "We hear no talk of anything except cotton . . .," declared an editor.\textsuperscript{14} And a speaker before the Agricultural Society in that year proclaimed: "And now, from the sun-kissed South, a song of plenty is heard. . . . Over thirty millions of its acres King Cotton is now spreading his mantle of ermine; and when his royal hand beckons, the coffers of the world empty their gold into his imperial lap."\textsuperscript{15} Negro wage hands who were granted an acre of ground for a garden became prone to plant every foot of it in cotton; and cotton farmers who had gone into dairying during the days of five cent cotton were soon deserting the cow barn for the cotton patch.\textsuperscript{16}

Statistics confirmed the renewed attention to cotton. Almost every year the acreage devoted to cotton broke a new record, rising from about 3,500,000 acres in 1900 to more than 4,000,000 in 1906 and to a peak of more than 5,000,000 in 1914 and 1916. From 1900 to 1920 the proportion of the state's farm land devoted to cotton rose from about 14 per cent to about 20 per cent and in some counties the proportion rose as high as 70 per cent. In the first two decades of the twentieth century, therefore, the campaigners against the all-cotton economy found little solace.

The Boll Weevil

But the days of Georgia's all-cotton economy were numbered. During the three decades following 1920 the Georgia cotton crop was attacked by the boll weevil, by the economic depression of the thirties, by the New Deal agricultural programs, and by World War II—all of which conspired to topple King Cotton from his throne in Georgia and make cotton growing merely one of several agricultural enterprises.
The boll weevil was the first of these attackers to strike. It appeared in Texas in 1894 and began moving eastward at the rate of 75 to 100 miles per year. The United States Department of Agriculture was soon making efforts to check its spread, but little was accomplished for several years. In 1904 Georgia was prematurely frightened by false rumors that the weevil had arrived in the state, and the legislature quickly authorized the State Board of Entomology to apply quarantine measures. Farmers' institutes and planters' meetings discussed the problem, and in 1906 the state entomologist went to Texas and Louisiana to study the weevil at first hand. By 1913, when the weevil actually arrived in southeast Georgia, a considerable educational campaign had been carried out.17

During the years 1913-18, however, when the boll weevil was spreading over the whole state, the warnings of agricultural leaders produced little response among the bulk of farmers. The high price of cotton during World War I encouraged farmers to continue planting cotton at near normal levels despite all appeals to them to turn to something else. Boll weevil damage, moreover, remained rather slight for several years, causing only a 3 per cent loss by 1916 and only a 10 per cent loss by 1918.18 Apathy toward the impending disaster was encouraged by the announcement of the United States Department of Agriculture that effective weevil control measures (dusting with calcium arsenate) had been discovered.19

Beginning with the crop of 1919, however, boll weevil damage became serious; and during 1921-23 it became disastrous when Georgia's yield fell 30 per cent to 45 per cent below normal each year. In some counties the yield dropped from around 200 pounds to 80 pounds per acre. The state's total crop dropped from an average of about 1,500,000 to 2,000,000 bales per year to a low in 1923 of less than 600,000 bales. Greene County, which in 1919 had produced more than 20,000 bales, produced only 333 bales in 1923. For the years 1920-1924 Georgia's cotton yield per acre averaged only 133 pounds, the lowest five-year average recorded since the 1870's and one of the lowest in the state's history.20

With this turn of events, Georgia's general apathy toward the "winged demon" turned into panic.21 The State Department of Entomology annually loaded "Peddler Cars" with calcium arse-
nate, sidetracked a car at virtually every important railroad station, and begged farmers to buy the poison. In 1923, 150 cars of poison were sold. Newspapers also broadcast control measures and bankers appealed to their debtors to accept the proffered advice.

Apparently, however, growing cotton under boll weevil conditions required more scientific management than most farmers were able or willing to give. In 1923 only 38 per cent of the state's crop was poisoned. By then the production of Sea Island Cotton had been nearly wiped out; many upland cotton farmers were turning to peanuts, tobacco, and livestock; and thousands of landlords, tenants, and wage hands were deserting farming entirely, leaving the land to weeds and gullies. During 1920-25 Georgia's farm population declined by about 375,000 and nearly 3,500,000 acres of land were taken out of farming.

By 1924, fortunately, the worst was over and the cotton crop began recovering. Weevil damage was reduced considerably by droughts and by poisoning. But never again during the period of this study was it to attain its pre-boll weevil status. In 1926 the crop again covered 3,500,000 acres, but the days in which cotton was planted on four to five millions of Georgia's acres were gone. In 1930 a production of 1,500,000 bales was again achieved; but gone, too, were the days of 2,000,000-bale crops. Whereas in pre-boll weevil years cotton had accounted for about 66 per cent of the value of all Georgia's crops, in 1929 it accounted for only 47 per cent. Thus the boll weevil's effect was long-term, compelling farmers to produce cotton under scientific control measures which most of them mastered slowly or not at all; and many were forced to shift to other products or were driven entirely out of agriculture.

**THE HIGH COST OF PRODUCTION**

Also working toward the dethronement of King Cotton in Georgia were high costs of production and competition with the West—factors that were accentuated by the coming of the boll weevil but which already existed and would have hurt Georgia as a cotton producer even if the boll weevil had never come. Some cotton growers in Georgia made money on cotton, of course, throughout the entire period. A 1913 survey of 534 cotton farms in Georgia
showed, however, that the average profit on cotton was less than a cent a pound; and a similar survey in 1918 showed that 44 percent of the farms studied actually lost money on cotton despite the high prices accompanying the war boom. Similarly, a survey in 1925 showed the average Georgia cotton grower losing $4.80 per acre. Studies in 1928, 1932, and 1933 only served to confirm these dismal facts. Thus the golden hue of prosperity that appeared to be covering Georgia in the first decade of the new century was not so real as it seemed to be, and the costs incurred fighting the boll weevil after 1918 made more severe an already bad situation.

Georgia's competitors on the western side of the Mississippi seemed to be experiencing less difficulty. In Texas and Oklahoma the expense of hand labor to grow cotton was being reduced much faster than in the Eastern states. In the West the higher altitudes and drier climate made the boll weevil less dangerous and produced fewer weeds; and the large flat, fields of the West were more conducive to the use of the new machinery that was being introduced. By the late 'twenties one farm hand in the West was handling 100 acres of cotton (except for picking) while his Georgia competitor was still handling only about 35 acres. After Georgians learned to control the boll-weevil and after they too began adopting cotton machinery, the state's producers held their own with Western growers. But by then additional thousands of Georgia's farmers had given up cotton culture.

THE EFFECT OF THE DEPRESSION

It was, however, the world economic depression of the 'thirties, World War II, and the consequent reluctant acceptance by cotton growers of the necessity for government control of the cotton crop that completed the dethronement of King Cotton in Georgia.

The conditions leading up to the world economic depression and the philosophy and measures adopted by the New Deal to combat these conditions have been so adequately reported elsewhere that there is no need to repeat them here. Suffice it to say that during the early years of the economic depression, 1929-1933, the world's cotton producers simply produced more cotton than could be absorbed in the world's markets at a fair price or at any price at all. Approximately fifty nations were by then raising cot-
ton in competition with United States growers, and because of the decentralized nature of agricultural organization, all efforts to restrict the cotton crop to fit the market had failed. Consequently, by 1932, cotton prices had dropped to about five cents and unsaleable surpluses had piled up to a world carry-over of 13,000,000 bales, about two and one-half times the usual carry-over.

The necessity of restricting cotton to fit the market was obvious, and campaigns to achieve this restriction were not new to the South. Virtually every serious drop in the price of cotton had produced cries for crop limitation. Pleas for reduction were still being made as the twentieth century began. The Cotton Growers' Protective Association, organized in Atlanta in 1900, begged farmers continuously to regulate their production. The record-breaking crop of 1904 was followed by a vigorous campaign, led by the Southern Cotton Association, to restrict cotton 25 per cent. The campaign was marked by courthouse meetings and appeals by the Farmers' Union, the farm journals, the press, and local bankers. The 1914 bumper crop and price drop provoked a similar campaign which even went so far as to consider the possibility of having the state legislature limit acreage, as was done in some states during the Civil War. The price drop of 1920 also precipitated a campaign wherein Georgia growers were canvassed from farm to farm and asked to pledge themselves to a one-third acreage reduction—a reduction which was made unnecessary, however, by the boll weevil. Similar efforts to restrict the crop were tried again in 1927 after the 1926 bumper crop caused a price drop, and campaigns were repeated in various forms throughout the early years of the depression.

During 1920-32 the Republican administration in Washington had also been wrestling with the problem and had gone so far as to establish the Federal Farm Board and the Cotton Stabilization Corporation, both of which were authorized by various means to withdraw excess cotton from the channels of trade. But the effort had not been effective. Surpluses had continued piling up and prices had continued dropping. To make matters worse, agriculture in general had never recovered fully from the 1920 slump, and the depression that began in 1929 produced a graver situation. In 1929 the gross per capita farm income for Georgia was only $145—
little enough and certainly small for a so-called period of pros­perity. But by 1932 the figure had dropped to a mere $74 and in many Georgia counties farmers were actually being fed and clothed by welfare agencies and the Red Cross. To all appeals for national legislation limiting production the Republican Secretary of Agriculture said that such measures would be "Repugnant to our Constitution and certainly repugnant to . . . our economic system."34

Yet by 1933, when the Roosevelt administration took the helm in Washington, national compulsory limitations on the cotton crop were exactly what the bulk of the South's cotton growers seemed to want—or accepted in their desperation. By then the South's cotton growers had lost all faith in the possibility of limiting the crop by voluntary pledges, growers' conventions, courthouse meetings, and exhortations. The states not only questioned their constitutional power to act but also hesitated to do so for fear that a limitation by one state might work to the advantage of other states.35 Thus when the Agricultural Adjustment Act of 1933 was passed, opposition to it in Georgia was virtually non-existent. It was accepted by the state's cotton growers as the only practicable way out of their dilemma, and it was endorsed not only by the Georgia Commissioner of Agriculture but even by textile manufacturers, who traditionally were accused of wanting large and low-priced crops.36

According to the hastily prepared 1933 act, farmers were asked to rent voluntarily part of their cotton land to the Secretary of Agriculture who promised to pay them three and a half cents per pound for the cotton they would not grow. A farmer whose average yield in the previous five years had been 200 pounds per acre was thus paid seven dollars for each acre taken out of cotton production. In addition, growers were paid a subsidy or parity payment on a portion of the cotton they grew in order to bring the purchasing power of cotton up more nearly to what it had been in the generally favorable years 1909-14. In September, 1933, the government decided to help insure the growers a good price for their cotton by having a new Commodity Credit Corporation buy or make loans of ten cents per pound on any unsold surplus, provided the grower agreed to participate in the next year's pro­gram.
During 1933, the first year of the AAA experiment, 97,000 of Georgia's farmers plowed up about 700,000 acres of cotton in return for government payments of about $8,000,000—thereby cutting production by about 360,000 bales. This was an acreage reduction of about 25 per cent below the previous year and it cut Georgia's cotton acreage down to only about 45 per cent of what it had been in the great cotton producing years of 1910-14. Over the years no other cotton state made such a drastic cut. Yet the program, assisted by the devaluation of the dollar in January, 1934, had raised the price of cotton from six cents to ten cents and Georgia's growers generally were pleased. From a meeting of farmers from Meriwether, Pike, and Upson counties went a resolution thanking President Roosevelt for this effort in behalf of the "forgotten man," and sentiment seemed strongly in favor of continuing the program.

By this time, however, it had been discovered that a non-cooperating minority had reaped the benefits of the price rise without any crop reduction; and that with favorable weather, ingenuity in the use of fertilizer, and the use of only the best land for cotton, acreage limitation was not enough. Thus, upon the demand of the farmers themselves, the Bankhead Act was passed which added marketing quotas to the program of acreage limitation. Then even those who refused to cut their acreage were limited in the quantity of cotton they could sell without paying a special penalty. In a referendum held early in 1934, 86.4 per cent of 146,000 Georgia cotton growers approved the proposal for compulsory marketing quotas. The result was that 10,000 additional Georgia growers joined in the program, a total of about a million acres were diverted to other uses, and growers received as compensation about $10,000,000 in government payments and another rise in the price of cotton to 12 cents.

And so it went until January 6, 1936, when the Supreme Court invalidated some of the key provisions of the AAA and brought the greater part of the program to a stop. Georgia's Governor Eugene Talmadge said, "I congratulate the American people on having a real Supreme Court." In South Georgia, it was rumored, people were "blowing gin whistles" while happy farmers were hauling excess cotton to the gins. And the Macon Evening News was delighted to see such "mischievous legislation" wiped out.
However, this rejoicing over the death of the AAA apparently did not represent majority opinion in Georgia. Within three days a group of Dooly County farmers had a petition on the way to Washington appealing for further efforts to control production;\(^{43}\) and within a matter of weeks the Roosevelt administration had produced a new program under the Soil Conservation and Domestic Allotment Act, which 125,000 to 145,000 Georgia farmers joined.\(^ {44}\)

According to this act growers were simply paid so much per acre for diverting land from cotton to soil-conserving crops and for carrying out soil-building practices. Both parity subsidies and commodity loans or purchases were continued with modification. Since the new act contained no compulsory marketing provisions, however, it was not nearly so successful as the 1933 and 1934 legislation had been in restricting the crop. By 1937 Georgia's farmers were again noticeably returning to cotton, planting about 500,000 acres more than in the earlier AAA days and reaping that year (with a record 270-pound yield) the second largest crop since 1918. A drop in price from twelve cents to eight cents quickly caused a wave of repentance to sweep the South, and the clamor for effective controls was renewed.

Having meanwhile "reinvigorated" the Supreme Court, the Roosevelt administration in 1938 produced a new AAA program which not only continued and strengthened the provisions of the 1936 Soil Conservation and Domestic Allotment Act but which also provided adequate compulsory authority (provided two-thirds of the growers agreed) to limit the amount of cotton a grower could market without being penalized. With minor alterations this program was still in force in 1950.

The new program was adopted with alacrity by the bulk of Georgia's cotton growers. Every year for five years beginning in 1938, from 78 per cent to 92 per cent of those voting favored marketing quotas.\(^ {45}\) In each of those years Georgia's cotton acreage allotment was approximately 2,200,000 acres.

But before the 1938 AAA program was two years old, World War II burst upon Europe and brought into play a variety of factors that further limited the production of cotton in Georgia. Cotton exports practically stopped; labor for work in the fields became increasingly difficult to get; and the government an-
nounced early in 1942 that edible crops were needed far more than cotton. Thus cotton became the "unwanted old-man of the war." During the five years 1938-43, in fact, the number of cotton farms in Georgia declined from 166,000 to 141,000—a reduction of 25,000 farms that either went out of operation or shifted to some other type of production; and in not even one of those years did Georgia plant as many acres in cotton as was allowed by her allotment.46

National restrictions on cotton planting were abolished in 1943, and by the end of the war Georgia's cotton acreage was down to about 1,200,000 acres—the smallest "cotton patch" the state had planted since 1869. Nor did any inclination to return to cotton appear after the war (except in 1949). To make certain, however, that there be no return to old habits (as appeared might happen in 1949), 87.9 per cent of Georgia's cotton growers, voting in a referendum on the 1950 crop, approved a return of government restrictions, and they were re-imposed that year.

Meanwhile Georgia's cotton farmers had been losing their foreign markets. Throughout the late 'twenties the United States had sold abroad about 8,000,000 bales of cotton annually; and even during the early years of the depressed 'thirties foreign purchasers had continued buying 7,000,000 or more bales per year. In both 1931 and 1932, in fact, the United States had exported about 9,000,000 bales each year, and even in the "terrible" year of 1933 approximately 8,000,000 bales had been shipped abroad.

When, however, the New Deal program raised cotton prices, American growers found themselves unable to compete favorably in the world market with the growers of India, Egypt, Brazil, Argentina, and other countries. The inability of many of our former cotton purchasers, such as England, Japan, Germany, France, and so on, to break through our tariff and other barriers and sell their manufactured wares in the United States also finally caused many of those nations to buy their cotton from countries with which they could exchange their products for cotton.

The result was that in 1934 American cotton exports declined rapidly, to only 5,000,000 bales; and although during the next fifteen years the export of American cotton was fitful—fluctuating from a high of 6,500,000 bales in 1939 to a low of slightly more than 1,000,000 bales annually during World War II evidence up
to 1950 indicated that Georgia's cotton growers had lost a large part of their foreign market. Here was another incentive to dethrone cotton.

Thus during the first half of the twentieth century King Cotton in Georgia rose to unprecedented heights and then declined. By 1950 the state's cotton acreage was 80 per cent lower than in the peak year of 1916. During the same period the proportion of the state's farms growing cotton declined from about 87 per cent to about 50 per cent. The number of bales produced dropped about three-fourths below the peak years of 1911 and 1914. Whereas in earlier years a good two-thirds of Georgia's cash farm income came from cotton, by 1945 cotton was producing only 20 per cent of that income.

However by 1950 cotton had not yet disappeared from Georgia as completely as the great predecessor staples—indigo and rice—had disappeared. For all his loss of glamour and attention, at the end of the first half of the twentieth century King Cotton was still the number one cash income producer for Georgia agriculture. Cotton was still a good crop in many respects—non-perishable, easily turned into cash, good security for credit—and during the half century Georgia's farmers had raised their per-acre yield from an average of 175 pounds to 240-250 pounds, thereby showing that they were learning how to produce it efficiently despite the boll weevil.

At mid-century, however, the future of cotton in Georgia was unpredictable. At that moment cotton's newest "enemies" in the state were 61,000 tractors, most of which had been brought into Georgia since 1940. Experience thus far had shown that when landowners had bought tractors they had been obliged to get rid of their sharecroppers—and without a considerable force of crop­pers available at picking time, little cotton could be grown. Only a cotton picking machine adaptable to the Eastern cotton belt could remedy that situation.
11.

The Realization of Diversification

The subjugation of King Cotton in Georgia during the thirty years 1920-50 was accompanied by a considerable re-adjustment in the use of the state's land, resulting eventually in what might be called the triumph of diversification. In the years 1900-20, during which cotton acquired more allegiance in Georgia than ever before, the traditional campaign for diversification had little chance of success. A few campaigners against the “all cotton” economy continued issuing pleas for “hogs and hominy” and for “corn and oat carnivals, wheat and rye feasts, hay and fodder festivals,” and at least one farmer assured his neighbors that “it don’t take near so much work to raise a pig as to raise 5¢ cotton.”¹ But during those years cotton rarely sold for as little as five cents and few farmers paid attention to the campaigners. A census investigator figured in 1910 that the average Georgia farm produced for each of its inhabitants only a very meagre supply of food—2/3 a pint of milk a day, 2 eggs and 2/3 an ounce of butter a week, and 1/3 a hog, 1/12 a beef, and 1/100 a sheep per year. And those farms were importing vast quantities of grain and meat.²

In fact, in those years when cotton was in its glory, diversification actually received a setback in Georgia. Many farmers who, near the turn of the century, had gone into trucking, dairying, or general farming were unable to resist the appeal of the rising price of cotton which by 1910 was fifteen cents and during World War I rose to nearly forty cents. “You can . . . ride a hundred miles,” said an observer in Georgia in 1914, “without seeing a herd of cattle. When you do see cattle they are little tick infested creatures that no more resemble real cows than a tubercular cotton factory operator resembles an athlete. . . . I have young men in my employ twenty-five years of age, born and raised in Georgia,
who have never seen a mule colt. There is no grain, no hay, no poultry, no vegetable gardens, no orchards—except the peach orchards belonging to non-resident corporations—nothing that goes to make up a real farmer’s home.” An exaggerated picture, perhaps, but not far from correct.

For a brief time during World War I it looked as if diversification might be achieved in Georgia. The low prices received for the excessively large 1914 cotton crop and the loss of Germany as a market caused Georgia farmers to reduce the following year’s crop 30 per cent. All during the war special food production campaigns in the South were promoted by the United States Department of Agriculture aided by the agricultural colleges, extension services, farmers’ associations, agricultural journals, business men, and the press. Bulletins, circulars, and a quickly expanded army of “demonstration agents” pleaded for home gardens, corn enough for each farm family and animals, and for more meat, poultry, and dairy products. The Food Production Act of 1917 was also designed to stimulate food production and distribution by aiding in the control of plant and animal diseases and insects, assisting in labor and marketing problems, and expanding the extension service. The result was that during the war years Georgia’s farmers increased the production of corn, wheat, hay, Irish potatoes, sweet potatoes, tobacco, and oats from 23 per cent (corn) to 114 per cent (wheat). Peanuts were increased most of all—290 per cent during the years 1910-18.

While these wartime developments toward diversification made some observers look upon the war as a blessing to Georgia, it was soon evident that they were hardly making dents in the state’s all-cotton economy. With America’s entry into the war in 1917, cotton prices recovered rapidly and in 1918 Georgia produced one of the largest cotton crops in her history.

During the boll weevil depression after World War I the movement for diversification was given fresh impetus. “Cow, Hog, and Hen” programs were begun in counties all over the state, and civic clubs, loan associations, the press, and railroads joined in the campaign. In Wilkes County a local newspaper donated to farmers space to advertise produce for sale. Even after the boll weevil crisis passed, the movement for diversification continued. In 1924 the Central of Georgia Railroad began a program to promote
pasture development along its line, and other railroads performed similar services. In 1930 the Georgia State Bankers' Association resolved to require farmers to have a live-at-home program as a condition for a loan; and in the same year the United States Department of Agriculture, spurred by the collapse of cotton prices, instituted another live-at-home program in the South.

Anyone glancing through the bulletins of the Georgia State College of Agriculture, the Blue Book of Southern Progress, and the agricultural bulletins of various railroads issued during the 1920's may very well get the impression that the diversification movement of those years was as vast and profound as the reorganization of agriculture after the Civil War. Optimism abounded, and Dr. Andrew M. Soule, president of the state agricultural college, was continually citing statistics showing the great progress of diversification in the state. By 1930 there was no question that some progress had been made; for cotton then made up less than 50 per cent of the value of all the state's crops as compared to about 66 per cent in the years before the 'twenties. Peanuts, tobacco, and livestock were unquestionably getting more attention. But in 1929 tobacco and peanuts still accounted for only 11.5 per cent of the value of all the state's crops, and livestock still produced only 16 per cent of the state's cash farm income. In the 1930 census 67 per cent of all Georgia's farms were listed as cotton farms while 7.7 per cent were listed as crop-specialty farms and 6.5 per cent were listed as general farms. Only 1.4 per cent of the state's farms specialized in fruit or truck crops and 2 per cent were listed as specializing in livestock. About 57 per cent of the state's agricultural investment, moreover, was in the land, buildings, implements, and machinery of those farms which were listed as cotton farms. If, therefore, diversification in Georgia was achieving permanent growth, it was, by 1930, still in its infancy.

By 1940, after seven years of prodding toward further diversification by the New Deal and with the help of compulsory controls on cotton, the picture looked somewhat better. Cotton was producing not more than 40 per cent of the state's cash farm income while livestock was producing about 23 per cent and tobacco and peanuts combined accounted for about 19 per cent. The diversification movement in Georgia was in its adolescence.
During the decade of the 1940's this "growth into variety" con­tinued and by the end of the decade there was little doubt that the "miracle" had been achieved in Georgia. The intensified World War II campaigns for food and the seemingly permanent loss of interest in cotton resulted in considerable increases in production in peanuts, tobacco, oats, hay, Irish potatoes, and in some branches of livestock, particularly poultry. By 1947 Georgia was able to boast of twelve major sources of cash farm income, each producing more than $10,000,000.\textsuperscript{14} A year later, the Crop Reporting Service in Georgia noted that livestock was bringing in 32 per cent of Georgia's cash farm income, making it twice as important a source of cash to Georgia's farmers as it had been thirty years before. Cotton, of course, still led the list, but the once top-ranking crop produced only 24 per cent of the state's cash farm income, and it was beginning to feel the challenge of peanuts, which in 1948 produced 14.6 per cent of that income.\textsuperscript{15}

The Development of Other Field Crops

All Georgia's diversification movements have posed for farmers the problem of finding a suitable replacement for cotton as a cash crop; the campaign during the twentieth century was no ex­ception. Many agricultural experts, leaders, prophets, and coun­selors have usually been on hand, however, and there has never been a shortage of suggestions as to what farmers ought to do. All during the twentieth century campaign farmers were urged to pay more attention to hay, seeds, and a variety of minor field crops in the hope that some would become sources of cash income, some might become the basis of a livestock industry, and some might be used for making the soil a better producer of cash.

Unsuitable Northern, European, and Asiatic varieties of plants, too much moisture during the curing season, and too little live­stock long prevented Georgia from becoming a hay state in spite of "Hay Special" issues of farm journals and newspapers and elaborate displays at fairs. Efforts of the State College of Agricul­ture during the 'twenties to make Georgia the "Alfalfa state of the South" failed completely.\textsuperscript{16} Strenuous efforts in behalf of hay after the boll weevil scourge of the early 'twenties resulted, however, in a three-fold increase in both acreage and production of hay in the state. Thus by the late 'forties Georgia was devoting approximate-
ly 1,500,000 acres to hay production each year. In those years the acreage devoted to lespedeza harvested for hay increased from 8,000 acres to more than 202,000. The production of lespedeza seed also became an established industry during the period with an average of about 40 acres harvested each year during 1939-48 and a peak harvest from 85,000 acres occurring in 1949. During the same years the long undeveloped soybean also came to the attention of Georgia's farmers and was grown not only for its hay but for its industrial uses and forage value as well. At first only a few thousand acres were planted, but during 1937-46 Georgia averaged 133,000 acres in soybeans each year. Similar results were achieved with cowpeas which, while long grown in Georgia, received little concentrated effort until the 'twenties. In 1941 the cowpea received its greatest attention, being planted on more than 500,000 acres. The velvet bean also experienced phenomenal development. In 1909 only 12,500 acres of velvet beans were grown in the entire United States, but by 1917 the beans were growing on 1,300,000 acres in Georgia alone. In the years thereafter 500,000 to 1,000,000 acres were devoted to this crop.

Less successful was the attempt to turn Georgia into a great grain state. Corn had always been grown in large quantities but had never shown itself able to compete as a cash crop with the corn from other parts of the nation. Thus there was no point in increasing production beyond what was needed for local use and the size of the crop fluctuated only moderately, from 3,500,000 to 4,500,000 acres throughout all five decades. Nor did wheat, rye, barley, or sorghum arouse any unusual enthusiasm. Wheat actually suffered a decline during the twentieth century, dropping from a planting of 420,000 acres in 1900 to a mere 28,000 in 1930; and although wheat recovered later, it never again, during the period of this study, covered more than half as much land as it covered during the "wheat crusades" of the nineteenth century.

Among the grain crops only oats were given any appreciable additional attention. Gradually the oat yield per acre was doubled above the approximately 12-bushel per acre yield that prevailed before the turn of the century. During the 'thirties and 'forties a definite increase in acreage occurred until by the late 'forties oats were being seeded on more than 700,000 acres per year.

None of the crops just mentioned proved to be suitable sub-
stitutes for cotton as a cash crop. Many of them contributed to the development of the livestock industry, but of all the hay, grain, and minor field crops grown in Georgia only the old stand-by corn brought in enough cash to be listed among the state's major sources of cash income, and in 1948 even corn was producing directly only 2.3 per cent of the state's cash farm income.

However, two other field crops—tobacco and peanuts—were at last found to be satisfactory substitutes for cotton, particularly in south Georgia.

Tobacco was the first of these two new income producers to win attention. As noted earlier, small quantities of tobacco had been grown in Georgia for home use since colonial days; and at the turn of the century a small, premature "tobacco boom" had just ended. Apparently, the only permanent result of that "boom" of the 'nineties had been the development of the cigar-type Sumatra tobacco industry in Decatur County that by 1907 employed 3,500 people and included the largest shade tobacco plantation in the world. 20

News of the approaching boll weevil, however, caused both railroads and a few progressive farmers to give tobacco another try. In 1911, W. O. Robeson of Jesup made what was probably the first shipment out of Georgia of bright leaf tobacco, and several neighbors followed suit. In 1913 W. A. Johnson and W. L. Gignilliat decided to try tobacco in Effingham County, and in 1914 the Central of Georgia Railroad provided $600 to bring a tobacco demonstrator into the county. In the same year Johnson and Gignilliat built Georgia's first bright leaf warehouse and held the state's first sale. Low prices caused both warehousemen and farmers to abandon the effort. Meanwhile similar efforts were being pursued by other railroads and by farmers in Early, Stewart, Coffee, and Wilcox counties; but here, too, the endeavor was premature. 21

As World War I progressed the outlook for tobacco took a new turn. By 1917 prices were up, experienced growers from the Carolinas were moving into Georgia and proving the state's possibilities, and a soil survey and experiments made by the State College of Agriculture were indicating the outlines of a good tobacco belt. During 1917 railroads donated seed and demonstrators to farmers along their lines in south Georgia, and two tobacco warehouses
A CENTURY OF GEORGIA AGRICULTURE

were opened in Douglas. Within a year fifteen counties were in the tobacco business and warehouses were multiplying. In 1919, the first year of considerable boll weevil damage, 25,000 acres were devoted to the crop, and there was little doubt that the industry had come to stay, particularly since it proved an ideal crop for the small family-sized farm so common to Georgia and fitted in well with the "cow, hen, and hog program" then under way.

By 1927 tobacco had become Georgia's second most important cash crop and was planted on 77,000 acres. Thereafter Georgia's tobacco acreage fluctuated considerably from a low of 23,000 acres in 1932 to a peak of 126,000 acres in 1939. Generally about 80,000 to 100,000 acres were devoted to the crop. Yields also fluctuated considerably, ranging all the way from 535 pounds per acre in 1932, when growers were too poor to buy fertilizer, to a peak of 1,254 pounds per acre in 1949. By the late 'forties, however, it appeared that Georgia's farmers had learned to produce consistently about 1,000 pounds per acre.

Since tobacco was one of the nation's major cash crops, it suf-

![Tobacco Production in Georgia, 1899-1950.](image-url)

fered considerably from the price drops experienced during the years of depression after 1929. The New Deal agricultural programs, therefore, included it as one of the crops that needed to be controlled to fit the market, and in 1934 Congress passed the Kerr-Smith Tobacco Control Act, which provided that if two-thirds of the growers voting agreed, marketing quotas would be applied. The result was that in all the years 1934-50, with the exception of 1939, the tobacco crop was restricted; but profit was assured through price supports and government payments.25

Despite Georgia's great strides in tobacco growing, Georgia's Commissioner of Agriculture was obliged to admit in 1946 that Georgia was still "not really a major factor in the tobacco industry." Her production was still only about 5 per cent of the nation's crop, her warehouses were operated generally by men from the Carolinas who spent only a few weeks a year in Georgia, and future development of the crop was still handicapped by a shortage of redrying plants and storage warehouses.26

Equally spectacular was the rise of peanuts as a source of cash income for the farmers of southwest Georgia. As already noted, some interest in peanuts had been aroused during Reconstruction and again during the 'nineties. Many of Georgia's hog producers, moreover, had long grown considerable acreages of peanuts for grazing, and in 1899 about 100,000 acres were planted largely for that purpose. By the time of World War I peanuts had developed into an important commercial crop in some sections of the nation as a result of the development of improved machinery for growing and handling, increased knowledge of their food value to man and beast, and the development of new uses for them, particularly in the food industry.27

As in the case of tobacco, it was the arrival of the boll weevil in southwest Georgia that precipitated the planting of peanuts for commercial purposes. This factor plus high prices offered for vegetable oils during World War I actually caused peanut production in Georgia to increase nearly ten-fold during the years 1916-19, and several oil mills were built in south Georgia to handle the product.28 During the two succeeding decades the state's acreage of peanuts (not including that grown for forage) increased steadily to more than 300,000 acres in the late 'twenties and then to more than 500,000 acres before the end of the 'thirties, and in most of
those years Georgia was the nation's largest producer of that crop.  

During World War II the necessity of replacing vegetable oils usually imported from the South Pacific and the need for more food prompted the national government to request Georgia's farmers to grow more peanuts than ever. Thus a further increase in production occurred, and from 1942 on a total of about 1,500,000 acres were devoted to peanuts, the larger part of which were picked and threshed. By mid-century peanuts had supplanted tobacco as Georgia's second most important crop.

PEANUT PRODUCTION IN GEORGIA, 1919-1950.


Fortunately for the development of this new industry in Georgia, peanut prices suffered less and were more easily supported by the national government than was the case with cotton and tobacco. In 1934 Congress added peanuts to the list of basic agricultural commodities to be regulated and from then on growers were aided by the AAA programs. But production controls were applied in only four of the seventeen years of the AAA's operations (1941, 1942, 1949, 1950).

The state's efforts to develop other field crops into substantial
sources of cash income fared less well. Despite diligent efforts during the new century to develop sugar cane and sorghum industries by establishing growers' associations and holding conventions, the production of those crops remained small;\textsuperscript{32} and in 1950 no additional cash field crops of importance were in sight.

**HORTICULTURAL DEVELOPMENTS**

During the five decades, 1900-1950, there were also some developments worth noting in the general field of horticulture; but at mid-century there was still little indication that Georgia was on the way to becoming a great horticultural state. Statistics indicated that in some important fruit and truck crops, Georgia production had, by 1950, passed its peak and was experiencing a decline. Fruits, nuts, vegetables, and nursery products were still, even in the late 'forties, producing only 5 per cent to 8 per cent of the state's cash farm income; and while that amount indicated considerable achievement since the days when such products produced practically no cash at all, it was a small contribution when compared with livestock or with the state's massive field crops of cotton, peanuts, and tobacco.

In the realm of horticulture orchard fruits held the leading place in Georgia throughout the period. Peaches continued to attract interest in the new century, despite occasional failures, and it was estimated in 1903 and 1904 that as many as 3,000,000 trees were being planted each year.\textsuperscript{33} In 1904 it was noted that the cost of setting out a peach orchard in Georgia was only half the usual cost in the United States and that with trees available at only two or three cents each, some cotton planters were growing them among their cotton until the trees were three or four years old, and they were fertilized and cultivated as part of the cotton crop.\textsuperscript{34} Georgia's, as well as the world's, largest peach orchard in those days was that of J. H. Hale of Fort Valley. It contained about 350,000 trees, covered a land area of 2,160 acres, and employed about 800 persons during the picking season.\textsuperscript{35} In 1906 the state agricultural department inspected 382 orchards, most of which were devoted to peaches; and the only important obstacle to further development then noted was the widespread existence of San Jose scale.\textsuperscript{36} By 1910 the census reported more than 12,000,000 peach trees in the state—a figure that was not surpassed until the early 'twenties
when the boll weevil drove more farmers into peach growing, especially around Manchester, and a peak of about 15,000,000 trees was reached. By 1929 the number of commercial peach orchards in the state had increased to 1,703.37

Unfortunately for Georgia, similar expansion in the growing of peach trees had been taking place during these same years in other parts of the nation, and by the late 'twenties overproduction and low prices were forcing readjustments in Georgia's production.38 The depression which began in 1929 merely made matters worse. The spread of the phony disease in old orchards, particularly around Fort Valley, also struck the industry a hard blow, driving many growers out of business. After 1929, therefore, peach production in Georgia declined. By 1935 the state had only half the number of trees counted in the peak years a decade earlier, and production was also down about 50 per cent. In 1943 Georgia suffered the humiliation of being pushed from second to fourth place among the states as a peach producer, and though she recovered, she was again demoted in the late 'forties. By then a

Peach Trees in Georgia (all ages), 1900-1950.

Source: U.S. Census.
series of bad crop years, due largely to unfavorable weather, had crippled the state's peach industry, and in 1950 the Georgia Crop Reporting Service estimated a yield for the year of only 845,000 bushels—less than a tenth of the great 10,000,000-bushel crops of 1926 and 1928 and the smallest crop known to the Reporting Service since it began its work in 1909.

Apple production in Georgia experienced a similar rise and decline in the years 1900-1950, but the whole movement was on a much smaller scale. Commercial apple growing had to wait for the opening of railroads in north Georgia, but H. R. Staight of Cornelia had established the first commercial orchard in the state in 1895; and in 1908-09 apple growing in that area enjoyed a flash of fame after Col. J. P. Fort of Rabun County won prizes for apples he entered in the national apple show at Spokane, Washington. In 1907-08 the Yonah Orchard of 400 acres was established. Many other orchards were then planted. The 1910 census showed about 2,700,000 trees in the state, but during the twenty-five years following, the number declined about 50 per cent—to 1,400,000 in 1935. Production during good years of about 1,500,000 bushels remained more or less constant, despite the decline in the number of trees. But Georgia's production remained confined to a few counties in the northern part of the state and only a small part of her crop ever got into the commercial market. Such orchard fruits as plums, pears, and cherries were of even less importance, although grown in small quantities. The 1920 census reported 262,000 pear trees in Georgia, but this number dropped later to about 200,000, and the state's production of pears never became commercially significant.

The effort to develop pecans into a cash crop was more permanently successful. In 1902 Georgia's growers organized a National Nut Growers' Association; and by 1905, with several thousand acres in trees, a solid foundation existed for the development of the pecan industry—an industry in which Georgia was destined to hold first place until about mid-century when her production was only slightly superseded by that of Texas. By 1910 the state had about 450,000 trees, growing largely around Albany and the Flint River section. Plantings thereafter were continuous, reaching a figure of more than 1,000,000 trees by 1920 and more than 2,000,000 by 1925—a number maintained rather
consistently since. Production likewise increased from about 27,-
000 pounds in 1900 to 2,500,000 pounds in 1920, to 23,000,000
pounds in 1940, and to nearly 40,000,000 pounds in 1948. At
mid-century no decline in the industry was visible.

A novel orchard development of minor note during the period
was the appearance of the tung oil industry in south Georgia.
The first tung oil trees were imported from China around 1905,
and it was not long before a few growers in Grady County were
experimenting with them. But developments were slow, and as
late as 1930 there were only about 3,000 trees in the state. The
depression precipitated rapid expansion of the industry, however,
and within seven years an additional 300,000 trees were planted in
Georgia and an oil mill was constructed at Cairo. Nevertheless,
Georgia's production remained small in comparison with that of
Florida, Mississippi, and Louisiana, and census reports after 1935
showed a decline in the number of trees.

Next to these orchard developments, Georgia's most significant
horticultural experience during the first half of the twentieth cen­
tury was the growth of a substantial commercial truck farming
industry. As stated previously, the efforts to develop truck garden­
ing in Georgia during the Long Depression resulted, with few
exceptions, in little more than disappointment. The revival of
cotton interest after 1900 destroyed what little had been accom­
plished toward trucking; and in 1907 the horticultural editor of
the Southern Cultivator complained that "The market gardener
seems . . . to be dead—or to have emigrated." Melons continued
to be grown in fairly large quantities, but as late as 1910 less than
25,000 acres were devoted to vegetables for sale (exclusive of Irish
and sweet potatoes). World War I and the fear of impending boll
weevil damage stimulated trucking somewhat during the ensuing
decade, but in 1920 less than 12,000 of Georgia's 310,000 farms
were raising vegetables for the commercial market. Here again
the catastrophe caused by the boll weevil during the early 'twen­
ties forced many farmers into other endeavors. By 1930 the acre­
age in vegetables was up to 109,000, and in 1935 a peak of 147,000
acres devoted to commercial vegetables was reached. Thereafter
a decline in acreage was noted, but 100,000 acres or more in truck
crops was maintained, and in 1948, 3.7 per cent of the state's farm
cash income was derived from this source. Considering the small
space required for trucking, this acreage represented a considerable achievement, and in 1947 Georgia ranked eleventh among the 48 states in the amount of land devoted to such crops. Watermelons have always occupied the lion's share of Georgia's trucking acres, and in 1935 they were planted on a record 81,000 acres—a record not maintained, however. During the war the growing of watermelons was actually discouraged by the national government. In the period after 1924 increased acreages and higher yields were noted for lima beans, snap beans, and cabbage. Increased acreages but not increased yields were also noted for cantaloupes, cucumbers, lettuce, onions, tomatoes, English peas, and Irish potatoes. Tomato production enjoyed spectacular expansion during the worst of the boll weevil years with car-lot shipments soaring from one car in 1920 to 176 cars in 1924. During the ensuing ten years production fluctuated considerably, rising to a high of 150,000 bushels in 1930 and then declining again by two-thirds to a low of 47,000 bushels in 1933. Thereafter commercial tomato growing increased substantially (although still fitfully) until by the late 'forties the crop amounted to more than 400,000 bushels each year.

Most unusual of the trucking developments in Georgia was the pimiento pepper production in the central part of the state. In 1912, S. D. Riegel of the Griffin Experiment Station found a superior pepper plant among several imported from Spain. He named it "Perfection" and its seed became the basis of the new industry. An additional impetus was the development of canning equipment for the rapid preservation of large quantities of peppers. By 1928 about 6,000 acres of pimientos were being grown under contract to six commercial canneries. Expansion continued until 1938 when a record 25,000 acres were planted. Thereafter a noticeable decline set in, but another increase in plantings in the late 'forties indicated that the pimiento "boom" was not over at mid-century.

Nurseries—or what the Census Bureau later referred to as farms devoted to such horticultural specialties as bulbs, seeds, vegetable and flower plants, trees, and shrubs, grown under glass or in fields—also had their "ups and downs" during the five decades 1900-1950. Seed farms and nurseries developed somewhat during the latter part of the nineteenth century, but only with moderate
results. At the turn of the century, H. G. Hastings and Company of Atlanta and P. J. Berckmans' Fruitlands Nursery in Augusta were probably the best known of all those in Georgia; each trying to break the South's dependence on stock from the North. By 1904 Berckmans' Nursery was world famous and made many shipments abroad. It occupied 500 acres, had 60,000 square feet under glass, and devoted considerable space to roses, ornamental shrubs, grape vines, and fruit and nut trees.

In 1904 when the planting of peach orchards was at fever pitch, 210 nurseries were reported in Georgia. In the same year the American Association of Nurserymen met in Atlanta and from there toured the state. By 1909 nurseries were waning in number and the Commissioner of Agriculture complained that 96 outsiders were selling stock in Georgia as compared to only 60 nurseries left inside the state.

At the very moment the Commissioner of Agriculture was complaining, a nursery movement of major importance was coming to life in south Georgia. In 1907 a seventeen-year-old youngster in Tifton named Paul Dearing Fulwood began growing vegetable plants for resetting in Northern fields. When large canning corporations such as Campbell Soup and Stokely-Van Camp discovered that Fulwood's tomato plants were hardier, could be harvested earlier, and cost only a third of what they were then spending to grow them in their own greenhouses in the North, a rich market opened for Georgia's plant growers. Within a few years several large growers were in business around Tifton, and despite three successive freezes that almost bankrupted the young venture in the early 'twenties, the new industry grew rapidly. By 1946 south Georgia's farmers were annually shipping North by railroad, truck, and airplane a billion tomato plants and hundreds of millions of onion, broccoli, cabbage, pepper, lettuce, and other seedlings. In that year Fulwood himself had 1,800 acres in cultivation; the Campbell Soup Company alone bought 80,000,000 tomato plants; and the industry brought $10,000,000 into the pockets of south Georgia farmers.

This development plus the growth of an urban demand for trees, shrubbery, bulbs, and flower plants stimulated horticultural specialties throughout the state, and by 1945 there were 282 horticultural specialty farms in operation.
Livestock

In the twentieth century search for a substitute for cotton, probably no development in Georgia was as significant and revolutionary as that which occurred in the general realm of livestock. After all, tobacco and peanuts were simply other field crops, and while tobacco required more skilled labor, neither crop demanded a change in farmers' attitudes, a new type of farm, or a different system of farm management. The developments in horticulture, moreover, were never participated in by more than a small proportion of the state's vast farm population. But the production of beef, poultry, and dairy products forced a considerable readjustment in land use, required skills never before common in Georgia, forced upon farmers the revolutionary view that grass was their friend rather than their enemy, reduced the need for so much hand labor, and helped eliminate from agriculture a large number of sharecroppers.

The nineteenth century campaign to develop livestock had done little more than produce a few small, short-lived "booms." Even as late as 1905 the Georgia Livestock Association and the Georgia Dairy Association were so weak that it was necessary to combine them, and even then scarcely enough members could be gathered together to hold a convention.51 Livestock auctions were poorly attended and the showing of animals at fairs was neglected.52 In 1917 Georgia's Commissioner of Agriculture noted that while Georgia was among the first six greatest crop producers among the states, she ranked twentieth in the number of livestock.63 During the first two decades of the new century the number of animals on Georgia's farms increased considerably, particularly during World War I when meat prices rose to very profitable heights. But everything else was also rising—prices, acres in cotton, number of farms—and during those years it appears that the state's farmers got only about 15 per cent of their gross income from livestock.54

The quick decline of livestock prices after 1920, the gradual disappearance of the open range in south Georgia, and the abandonment of thousands of farms in the wake of the boll weevil catastrophe caused during the 'twenties a 25-30 per cent drop in the number of livestock in the state. Since the slump in cotton was greater, livestock became relatively more important and pro-
duced about 20 per cent of the state's gross farm income in that decade.

However, it was the great depression of the 'thirties, the New Deal programs, and World War II that caused Georgians to give really serious attention to animals—and by mid-century livestock was producing nearly 40 per cent of the state's gross farm income and about a third of her cash income. In the seventeen years from 1933 to 1950, during which Georgia's agricultural income increased five-fold, the state's income from animals increased ten-fold. But in 1950 Georgia still ranked among the lowest of the Southern states in the number of animals.

Probably the most spectacular livestock development in Georgia during the period was the rise of the lowly chicken to a place of prominence in the state's agricultural establishment. During the nineteenth century attempts had been made to develop a commercial poultry industry, and in 1874 Georgia had joined other states in shipping eggs to New York, but the industry never became commercially important. In 1900 Georgia's 4,500,000 chickens produced 15,500,000 dozen eggs, but they were used largely on the farms where they were produced, or were marketed in small quantities. During World War I, however, a minor poultry "boom" occurred in the state and by 1920 Georgia's flock and egg production increased by more than a third.

It was during the 'twenties and in the wake of the boll weevil that a foundation was laid for a commercial poultry industry. During the early 'twenties co-operative selling facilities were established by the simple expedient of having poultry cars sidetracked in various communities where, on stated days, farmers were able to sell for cash their eggs and chickens. During 1922 about 100 such car-lot sales were made, and the shipping of car lots to the Eastern states became a permanent practice.

The state's commercial poultry possibilities were still hampered by the fact that market men said Georgia's eggs were of poor quality and would not keep well in storage. And there was also the undeniable fact that the state's chicken flock was composed largely of mixed breeds with a low production of about 60 eggs a year per hen. Georgia's climate, it was assumed, was unsuited to blooded stock and high egg production. An annual National Egg Laying Contest inaugurated by the state college of agriculture
in 1927 soon proved, however, that Georgia's climate was suitable. In the first contest, an average of 201 eggs per bird was achieved and in the second year a Georgia white leghorn broke the national record by laying 339 eggs. The quality of Georgia's eggs was also indicated by the prizes they won in other parts of the country.58

By mid-century (1948) Georgia's egg production per hen was up to 114 a year—far below the national average of 162 and third lowest among all the states, but nearly double the state average of twenty years before. Total egg production was also up to

**Egg Production in Georgia, 1880-1950**

![Graph showing egg production in Georgia, 1880-1950.](image)

Source: Arthur Gannon, "Georgia Broiler Industry," *Georgia Review, VI, 3* (Fall, 1952), 308.

50,000,000 dozen per year—or more than triple what it had been in 1900.

It was in the production of broilers, however, that Georgia achieved almost astounding results.59 For many years farmers in the neighborhood of Hall County had raised small lots of "fryers" or "spring chickens" which they marketed in nearby towns. During the 'twenties some poultrymen also began adding broilers to their hen and egg production which they marketed in the car-lot sales popular in that decade.

The discovery in the early 'twenties that cod liver oil in poultry
PRODUCTION of GEORGIA BROILERS
1935—1951

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Source: Arthur Cannon, "Georgia Broiler Industry," Georgia Review, VI, 3 (Fall, 1952), 308.
mash could provide the essential Vitamin D for young chicks, making broiler production on a commercial scale practicable. Thereafter open runs in the sun were unnecessary. Thousands of chicks could be raised in inexpensive buildings without fear of developing rickets.

As early as 1924, M. E. Murphy of Jackson County began large scale production, and in the ensuing years the production of broilers spread to other counties. By 1935 production was up to 500,000 broilers per year and the "boom" was only beginning. During World War II and its aftermath production jumped to nearly 63,000,000 birds by 1950. This was a 126-fold increase in the fifteen years 1935-50, and it boosted Georgia to the rank of the second largest broiler producing state in the nation.

Probably the most unusual characteristic of the new industry was that the chickens were raised on what might be called the "putting out" system, whereby feed dealers or other entrepreneurs supplied the credit, chicks, feed, marketing services, and so on to hundreds of relatively small operating farmers. Thus the work of the farmer was simplified and limited largely to "feeding out" the chicks brought to him.

It is worth noting also that a great variety of tributaries grew out of the new industry—processing plants, feed dealers, hatcheries, poultry supply houses, feed mills, and so on. And it is worth noting that by 1950 the once lowly Georgia chicken had become the fourth largest source of cash income for the state's farmers, being exceeded only by cotton, peanuts, tobacco, and hogs.

Less spectacular but of some importance during the period was the effort to develop beef and dairy cattle. Aside from the general lack of interest in cattle, the greatest obstacle to advancing the industry came from the splenetic or Texas fever which was spread by ticks. For years Southern cattlemen had been plagued by these parasites which killed off blooded stock imported from the North and abroad and sometimes caused the death of almost entire herds. And not until about 1890, after years of experimentation by the United States Department of Agriculture, were the cause and cure discovered. With this discovery the entire South was placed under quarantine in 1891, and all Northern markets were thus closed to Southern producers at least nine months per year until infected areas were made tick free. In 1899 Georgia
began a small campaign to wipe out the disease in the mountainous sections of the state, but little was accomplished. After a 1905 survey in seven counties showed 40 per cent of the cattle infected, Commissioner of Agriculture T. G. Hudson held mass meetings in several counties to educate farmers concerning the problem; and in 1907 the national government began to assist the states in this educational program. Since few farmers believed anything practical could be done, the results of the campaign were discouraging. The establishment in 1910 of a state veterinary office designed to eradicate tick fever, together with increased state and federal appropriations in 1912, finally got an effective program under way. Further legislation in 1917 and 1918 prohibited the movement of infected stock from one area to another and also imposed on county governments the responsibility for constructing dipping vats, providing chemicals, and hiring inspectors, supervisors, and agents.62

Unfortunately, the eradication program was hindered by public apathy, by uninformed farmers who insisted the "ticks are so small they can't hurt much," and by the violent opposition of people who believed the program was useless, expensive, unnecessary, or an infringement on private property. Even the state's press held up to scorn the "moral and mental status" of the eradicators.63 State legislation had to run the gauntlet of heated opposition. Most violent of all the anti-eradicators was a "small Bolsheviki contingent" in Lowndes and Echols counties which, over a period of about five years, dynamited vats as fast as they could be built, set fire to cattle pens, beat up and terrorized state and national agents, and in one instance killed a federal employee and wounded several others—all with the apparent sympathetic approval of the local sheriffs, county commissioners, grand jurors, and judges.64 Infected cattle wandering north from Florida also hindered Georgia's program until Georgia built cattle proof fences and guards along the state boundary.65 Despite these obstacles, the eradication program succeeded. While in 1911 only three Georgia counties were out of quarantine, by 1925 a hundred forty-nine had been released; and by the end of the decade the disease had ceased to be an important problem.66

The eradication of tick fever opened the way for the improvement of Georgia's beef and dairy cattle. At last it was possible
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* = 100,000 CATTLE

* = 50,000 MILK COWS

* = 100,000 SWINE

* = 25,000 SHEEP
to bring blooded stock into the state without fear that premature death would overtake them. And at last, therefore, it became possible to begin in this "glory haven of scrubdom" an effective effort to "grade-up" Georgia's beef and dairy cattle so that even if the number of animals did not rise appreciably, the production of beef and dairy products would show considerable increase. And that is what happened. Almost every year after 1914 the Agricultural Extension Service, railroads, and banks co-operated in bringing several hundred head of purebred or high grade bulls and cows into Georgia.67

Campaigns for more pasture land, for silos, and for forage crops also began meeting with more success than formerly. In the twenty years from 1925 to 1945 the total pasture land in the state was increased from 3,800,000 acres to approximately 6,000,000 acres—an increase of about 36 per cent. One of the most significant developments of the era was the change of the Georgia farmer's attitude toward grass. Gradually his hostility toward it disappeared and by mid-century Georgia was developing pasture land rapidly. While in 1930 only 12,000 acres were sown or set to perennial forage crops, by 1950 they had increased almost twenty-four-fold—to 286,000 acres. Lespedeza plantings for grazing and hay were doubled in the years 1945-50. Ladino clover, or mixtures established or sown, and Crimson Clover, sown or volunteer, both skyrocketed in use in the late 'forties, as did fescue and several other grasses. In 1937 Dr. Glenn W. Burton began work at the Coastal Plain Experiment Station to develop an improved Bermuda grass, and by mid-century, the Coastal Bermuda that he had produced was making a sensational record in the state as an outstanding beef producer.

It was not until the 'forties that these efforts began to show results. For nearly two decades before 1940 Georgia's production of beef hovered around 85,000,000 to 100,000,000 pounds annually. But after 1940 a gradual increase occurred until by the end of the decade a rise of 80-100 per cent was recorded.68 By no means, however, had Georgia achieved the goal of supplying more than a small part of her own beef; and too large a proportion of the beef she produced was still coming from worn-out dairy cows rather than from cattle raised for meat.

Georgia's twentieth century efforts to develop dairying were
THE REALIZATION OF DIVERSIFICATION

also long handicapped by the cattle tick, by low productivity per cow, by a poor quality of cream which prevented Georgia's butter from competing with that of other states, and by competition—some of which was unscrupulous—with the producers of oleo and powdered milk. Dairying also suffered, as noted previously, from a general lack of interest, inexperienced and incompetent dairy and creamery management, and a shortage of skilled labor willing to work 365 days a year. In 1905 the United States Department of Agriculture began to help the states develop dairying, but creameries failed almost as fast as they were opened, and as late as 1917 there were said to be only three creameries in the state, all of which were operating at a loss for want of raw materials. By 1918 one dairy herd improvement association had been established (as compared with 112 in Wisconsin), but by 1931 even that was gone. Throughout the half century the number of cows milked in Georgia showed no appreciable increase, and between 1920 and 1940, the amount of butter churned diminished slightly.

Milk Production in Georgia, 1850-1950.

Source: U. S. Census.
One dairy development of note occurred, however. After 1920 dairying became commercially successful; and while most of Georgia's milk and butter production continued to be kept for use on the farm, a modest commercial dairy and creamery industry became permanent.

Here again it was the boll weevil that produced action. During the early 'twenties local business men began co-operating in Macon, Augusta, Athens, Atlanta, in Greene and Turner counties, and elsewhere to establish creameries and promote dairying. During 1923 about 10,000 purebred or more or less highly graded dairy cows were brought into the state. In four years the amount of creamery butter produced in Georgia rose from about 7,000 pounds to 1,826,000 pounds. By 1927 fifteen creameries were in operation and a few cheese factories had reappeared.

Thereafter, the growth of dairies and creameries was steady, and under commercial management the quality of the Georgia cow improved. The entire industry was given some economic security and considerable stimulus when the state legislature created a Milk Control Board in 1937. The industry had been hampered by a variety of unethical practices among which was the peddling of inferior and unsanitary milk at "cut-throat" prices. The Board was given power to license all dairies and creameries and fix prices; and although the Board continued to be a center of controversy and there were charges that the whole idea was fascist, socialist, or both, there seemed to be no doubt at mid-century that it served as a great protector of the industry in its efforts to become firmly established. By 1940 the state had 2,000 dairy farms within its borders and ten years later an additional 914 were counted. By the end of the period, moreover, the average Georgia milk cow was producing more than 400 gallons per year—still far below the national average, but considerably more than the 250-300-gallon yield at the turn of the century and a long way from the fifty-four-gallon yield of 1860. Although the state's total milk production increased only about 50 per cent during the half century, the quantity of milk sold commercially increased nine-fold.

Naturally the effort to diversify Georgia agriculture also caused many of the state's farmers to take another look at the possibilities of raising hogs and pigs profitably. Georgia's swine herd had always been comparatively large, fluctuating in number from
about 1,500,000 to 2,500,000 in all the century from 1850 to 1950—the peak years being those of World War I and II. But as with cattle, the number of swine on farms at a given time each year does not tell much concerning production. Other facts indicate, however, that during the twentieth century the state's swine herd improved considerably. The fleet-footed razorback lost his popularity, and blooded stock competent to produce large and healthy litters began to get serious attention. Boys' Pig Clubs, county agents, high wartime meat prices, packing plants opened during World War I in Moultrie, Statesboro, Macon, Tifton, and Waycross, and the boll weevil, all played a part in stimulating this interest. Livestock conventions, the efforts of the state veterinarian, ton-litter contests, organized community sales, and the development of peanuts and other legumes useful for forage also contributed to improvements. The result was that even though Georgia never achieved the goal of producing all her own pork, nor maintained her World War I record for the number of hogs and pigs butchered, the number of pounds produced and marketed increased steadily. From 1924 to 1949, for example, Georgia's annual production increased from about 225,000,000 pounds to nearly 390,000,000 pounds—an increase of more than 57 per cent. And in the same years the number of pounds of hogs marketed increased five-fold—from 36,000,000 to 194,000,000.

Little need be said about sheep during the twentieth century other than that in spite of all campaigns to the contrary, the fleecy animal continued to disappear from Georgia's hills and Coastal Plain. Improper handling, neglect, parasites, predatory animals, and a poor quality of wool gradually reduced Georgia's flock of nearly 300,000 sheep at the turn of the century to 9,700 in 1950. At mid-century Georgia had not yet become a great livestock state comparable, for example, to Iowa. Only in hog and poultry production (provided broilers are included) did she rate among the ten leading states. Her 1,000,000-odd cattle were less than a fourth the number to be found in Iowa, a great agricultural state of similar size; and in sheep Georgia ranked 37th, trailing all Southern states except Florida and South Carolina. But with livestock producing nearly a third of the state's cash farm income there was no question but that it had gained an important place in a reasonably mature and successful diversified program.
The most significant development in forestry during the new century was that the trees of the state gradually came to be looked upon as a crop—as something that, if properly managed, could be planted and harvested and made permanently productive both for industrial operators and for farmers.

It took more than two decades of the new century for this view to become widely accepted, however. The exploitation of forests which we noted in Chapter Nine as being under way at the turn of the century was characterized by such a wanton and reckless destruction of the State’s virgin timber that by 1904 both the lumber and naval stores industries experienced distressing days. Hundreds of sawmills moved westward in search of fresh timber lands and scores of naval stores operators ceased producing. The renewed mania for cotton also drew farmers and laborers away from forestry activities. After 1904, therefore, lumber production dropped from more than a billion board feet a year to only 712 million board feet in 1905, and for eighteen years thereafter lumber production in Georgia remained moderate, reaching more than a billion board feet only in the three years of 1909, 1910, and 1914. During World War I when labor was unavailable, production reached even a lower ebb—only 463 million board feet being produced in 1918.81

In 1920 the United States Forest Service stated that almost all Georgia’s virgin timber was gone. Second growth wood was being cut, and the Service predicted that within ten years all of the state’s big sawmills would be out of existence.82

The production of gum naval stores declined also, dropping to a mere trickle of only 54,000 barrels in 1918-19. By 1920 the center of the naval stores industry had moved as far west as Texas and the Capper Committee of the United States Senate, appointed to investigate the problem, reported that the naval stores industry in the nation “is commonly regarded as a dying industry.”83

Despite all these laments and dire predictions, forestry in Georgia made a comeback after 1920, and during the ensuing thirty years forestry in the state experienced a minor revolution. By 1920 at least a few influential people and several forestry corporations had become conscious of the need of adopting scientific forest management practices and a few steps had been taken in
that direction. The cries for conservation by the Georgia Lumbermen's Association and many newspapers from the 'nineties on, and the conservation program begun by the federal government in 1891 had won some adherents. The establishment of the George Foster Peabody School of Forestry at the University in 1906 and the organization of the Georgia Forestry Association in 1907 had aroused further interest. And although in 1910 the passage by the legislature of a Forest Fire Law limiting the setting of woods fires to winter months did little good, it signified an awakening interest in conservation.

When about 1901 Charles H. Herty, a chemist at the University of Georgia, introduced the cup-and-gutter system of extracting gum in place of the wasteful "box" system, the naval stores industry was given a chance for renewed life. For this system, once it became widespread, prolonged the life of millions of trees, made it possible to work smaller trees, and left the used trees still usable as lumber.84

It was not until after 1920, however, that these and other even more important developments had any positive effect. In 1921 the state government took a hand in the conservation problem by creating the Georgia State Board of Forestry; and although it was many years before this agency had any appreciable financial resources, it worked diligently to organize in local timber areas protective associations to control fires and promote reforestation. After 1920 the agricultural agencies of the University stepped up considerably their work in forestry. During the 'twenties the federal government also increased its co-operative work with the states, and then the New Deal inaugurated its vast program of conservation, reforestation, and research.85

The boll weevil scourge of the early 'twenties also proved a boon to forestry by compelling farmers to turn their attention to their woodlots and by forcing laborers into the lumber and naval stores industries. Many a farmer was saved from bankruptcy during the "plague" by the revenue from his woodlot. Also, during the years after 1920 more and better roads were built which provided access to millions of trees hitherto unavailable.86 The development of a method of distilling gum from stumps further helped the industry. And finally, forestry in the state was aided by the development of more and better power-driven tools, hauling
equipment, and tree planters, and by a market which, with the exception of a few years during the depression of the 'thirties, expanded apace.

The result of all these developments was that after 1920 both lumber and naval stores production increased steadily. From 1923 until the economic crash of 1929 Georgia's lumber production again averaged more than a billion board feet a year. Gum production rose also from 73,000 barrels in 1919-20 to a record high of 318,000 barrels in 1929-30.

The depression of the 'thirties caused a temporary slump in lumber production, but recovery began immediately after the low point of 1932, and by the beginning of World War II another prosperous era was under way. Before the mid-century mark, lumber cutting in Georgia was buzzing along at a record high of two billion board feet per year—and this time there were no disturbing prophecies that the state's timber stand was being depleted. For by that time reforestation was going on at such a pace that state-owned and private nurseries were having to provide 100 million pine seedlings a year to keep up with it. The United States Soil Conservation Service also reported that in all the years of its program through 1950 it had sponsored tree planting on 173,000 acres—a planting equal to the combined total of thirty-five other states. And thousands of other acres had been reforested without the aid of the federal government. The result of this reforestation and improved management practice was that Georgia's resources of saw timber increased while those in neighboring states were continuing to show a decrease.

Unfortunately, naval stores production never again attained its 1929-30 record of 318,000 barrels of gum turpentine, and during World War II production dropped as low as 168,000 barrels. But by mid-century production was up again to 242,000 barrels, and the industry was in a relatively healthy condition. Between 1928-50 Georgia's share in the nation's production of naval stores increased from 46 per cent to 75 per cent.

Meanwhile Georgia's woodland areas were aided by the development of a new market for trees—pulp paper mills. Although several pulp mills appeared in the South after the turn of the century, the pulp paper industry experienced almost no growth until Dr. Charles H. Herty aroused interest in it in the 'thirties.
In 1927 Dr. Herty, already famed among chemists and in semi-retirement at the age of 60, developed a vision of great commercial possibilities for the manufacture of newsprint from the South's pine forests. After some preliminary investigations, he returned to his native state of Georgia in 1932 and began experiments in a small laboratory in Savannah. In due time he produced a white newsprint, but his dreams of producing it on a commercial scale large enough to replace Canadian and Swedish spruce failed, as of 1950, to materialize.

Nevertheless, Herty carried on such a vigorous campaign extolling the commercial possibilities of the Southern pine for paper-making that he finally stimulated several kraft paper mills to locate in the South, and he popularized more than did any other one man the idea that trees could be grown and harvested repeatedly like any other crop.88

In 1936 the Union Bag and Paper Corporation built in Savannah the first pulp paper mill in Georgia, and in the years before 1950 six more mills appeared. Thus the Georgia market for pulpwood grew rapidly and production responded, jumping from 47,000 cords in 1935 to more than 2,300,000 cords in 1950. In the latter year $30,000,000 was paid for this pulpwod—a raw forest product that had had no market in the state fifteen years earlier.

As of 1950 the woodlot was still for most farmers little more than a source of firewood, fence posts, and rough lumber for crude farm buildings. Nevertheless, crop and livestock farms were yielding about half of all the forest products produced for the commercial market, while "forest-product farms"—including those operated by industrial producers, who in a few cases operated as many as 200,000 acres—produced the remaining 50 per cent. Altogether Georgia was producing a sizable quantity of raw forest products—a quantity valued in 1950 at $167,000,000 and which in dollar value at least made the forests of the state equally as valuable a crop as cotton. They were also becoming an important element in the movement for diversification.
12.

The Problem of Marketing

The diversification of Georgia's agricultural production very naturally brought with it the old problem of how to dispose of the new products at a profit. The nineteenth century diversification movement, it will be remembered, failed partly because efforts to develop marketing facilities were unsuccessful. Most of the efforts of governments, societies, clubs, journals, and leaders to aid agriculture were aimed at the goal of greater production and the problem of marketing was largely neglected until about the time of World War I. During the Agrarian Revolt, of course, the Grange and Alliance had made some attacks on the problem of distribution; and in 1894 the United States Department of Agriculture had established a Section of Foreign Markets devoted to gathering and disseminating information. But little had come of these endeavors.

Yet the need for attention to marketing was great. By the turn of the century, for example, the grading, packing, and transporting of Georgia's peach crop had become a major problem. Unwise handling and the poor condition of Georgia produce made many Georgia products unfit to compete even in the Atlanta market with Northern products. Unorganized fruit and truck farmers, by shipping too much to one or two markets, caused a glut, while some towns got no produce at all. Statistics showing demand and production were virtually non-existent. Thus the venture into a new crop was almost purely speculative and, for most new products, several years would generally elapse before marketing organizations were formed. There was a common complaint that the farmer received too small a share of the consumer's dollar and that this was due to waste and inefficiency in marketing. Nor did many people know how to solve these problems. As late as 1914, it was claimed, there were probably not
more than a dozen expert agricultural economists in the nation. 6

The distressing price collapse of 1920 dramatized this need for attention to marketing. During World War I the costs of distribution—the cost of containers, twine, wages, freight rates, etc.—rose quickly and failed to come down with the post-war drop of farm produce prices. 7 The spread between the price of farm produce and manufactured articles also widened. Farmers, moreover, who were forced by the boll weevil into other ventures found they knew nothing about marketing their new products. Consequently, losses were heavy. 8 Thus it was little wonder that Georgia’s Commissioner of Agriculture bemoaned the fact that while the state had spent millions of dollars teaching her farmers how to produce, she had spent almost nothing teaching them how to distribute. 9

It so happened that the Wilson administration was keenly aware of this problem and shortly after Wilson took office as President, the United States Department of Agriculture proceeded to concern itself with the dilemma. In 1913 a federal office of Markets and Rural Organization was created. 10 In 1914 the Cotton Futures Act was enacted which, with later amendments, established standards for cotton grades and provided for supervision of future exchanges in the hope that the speculators’ grip on the cotton crop might be broken. 11 In 1915 a market news service was established to inform growers of market conditions throughout the nation. 12 In 1917 a wartime Food Administration was established primarily to regulate the commercial distribution of the food and feed supply in a manner that would prevent waste. 13 And in 1919 the Cotton Division of the national department began a cotton quotation service designed to give growers weekly data on cotton prices and other market conditions. 14

Probably more significant in the long run than any of these developments was the Warehouse Act enacted by Congress in 1916. A system of bonded warehouses issuing negotiable certificates usable as security for loans had been among the leading demands of the Grange and Alliance. With such facilities, it was assumed, growers could hold crops off the market until a favorable selling time, credit would be secured, and orderly marketing throughout the year would replace seasonal scarcities and gluts. Despite these obvious advantages, farmers were required to wage a quarter cen-
tury campaign to get their proposals adopted. Even then the law remained a dead letter in Georgia because warehouses declared they could not afford to hire cotton classifiers—a condition required for being bonded. Beginning in 1919, however, the Georgia Bureau of Markets began providing grading experts; bankers began to appreciate the security thus offered for loans, and the warehouses began to be used on a wide scale—particularly after the disastrous marketing season of 1920.15

In subsequent years many other federal laws were enacted to help the marketing problem—the Agricultural Marketing Act of 1929 establishing the Federal Farm Board, the acts creating the New Deal AAA programs, special legislation concerning tobacco and cotton, the Research and Marketing Service Act of 1946 emphasizing marketing research and coordination, and others.

These initial steps of the national government to help solve the problem of distribution were accompanied by similar activities on the part of the state government of Georgia. In 1914 Commissioner of Agriculture J. D. Price inaugurated a minor marketing service by hiring a marketing expert whose responsibility it was to help farmers sell their crops.16 In the election campaign of 1916 J. J. Brown promised farmers that if they would favor him with their votes for Commissioner of Agriculture, he would establish a Bureau of Markets—a promise he fulfilled as soon as he took office in 1917. The chief objective of the new bureau was to develop cash markets for produce other than cotton so that farmers who joined the diversification movement would have an outlet for their produce. Within a few months the Bureau enlisted the aid of a correspondent in each of the state's 1800-odd militia districts whose duty it was to keep the central office in touch with local marketing possibilities; a field agent was sent throughout the state to encourage the erection of feed mills, sweet potato curing barns, warehouses for assembling corn, and other marketing facilities; and a $15,000 appropriation was secured from the legislature to finance the program. Efforts were also made to establish at every trading point a marketing depot where produce could be sold for cash by the "car load, wagon-load, or wheel-barrow load."17 The legislature also imposed on the Bureau the task of studying transportation charges for agricultural produce and of investigating complaints of overcharges.18
Although the new bureau found it impossible to do all the jobs expected of it, it was soon a reasonably effective agency. By 1920 it had brought 140 cotton warehouses into the federal bonding system and in that year it graded 50,000 bales of cotton. By the late 'twenties farmers were selling through the bureau hogs, corn, poultry, sweet potatoes, hay, and velvet beans in carload lots—an achievement that had seemed impossible a decade before.

To facilitate produce sales, the Bureau also established a weekly Market Bulletin wherein farmers were able to advertise their wares. By 1918 the Bulletin was being sent to 20,000 farmers. By 1923 it had been expanded to 16 pages with separate sections for advertising syrup, sweet potatoes, grain, livestock, and so on. By then, too, 100,000 copies were being printed each week, despite sporadic efforts to have it abolished. Although, unfortunately, the Bulletin degenerated in later years under some commissioners into a sheet of political vituperation, it continued functioning, and by the late 'forties its weekly circulation was more than 200,000.

These developments represented, however, only the beginnings of federal and Georgia governmental efforts to solve the problem of agricultural distribution.

Co-operatives

During the same years that the above steps were being taken, other efforts were being made to solve the problem of distribution through co-operatives. The co-operative idea was based upon two widely accepted assumptions: (1) that co-operatives were a means of circumventing middle-men who controlled markets to the disadvantage of producers, and (2) that co-operatives provided facilities for large scale marketing wherein waste and inefficiency might be eliminated as had been done in the case of the large scale marketing of industrial products.

By the turn of the century considerable experience had resulted in much disappointment concerning co-operatives in the United States. Failures had far outnumbered successes in Georgia, and the situation had not been much better in most parts of the nation. Advocates of co-operatives were dogged by charges of socialism, and courts seemed ever willing to restrain their actions as violations of anti-trust statutes. Not until after the enactment of the Clayton Act in 1913 and the Capper-Volstead Act of 1922
were legal difficulties swept away and freedom of action for co-operatives assured.  

This exemption from anti-trust legislation stimulated the co-operative movement considerably. The general agricultural depression which began in 1920 also gave impetus to combined action. The Federal Farm Board established in 1929 and the system of twelve banks for co-operatives created in 1933 further stimulated the movement by providing for closer integration of existing co-operatives and by enlarging credit facilities available to them. By 1936 there were in the United States nearly 12,000 farmers' co-operatives with 2,000,000 members selling from 15 per cent to 25 per cent of all the nation's farm produce.

As is well known, the co-operative movement never attained in the South the vigor it achieved in some other parts of the nation. Cotton factors, merchants, fertilizer dealers, buyers, and absentee landlords often opposed the movement and kept tenants and debtors from joining. Negroes and whites, moreover, found it hard to work together in the same organization. Many farmers were unable to get interested in the complicated details of co-operative marketing and were impatient concerning its problems. Nevertheless, the co-operative movement took hold in the South, growing from 37,000 members in 1915 (in the South Atlantic States) to 280,000 members in 1925. The number of cotton co-operatives increased from 13 in 1900 to 249 in 1930.

In Georgia co-operative marketing was tried first with fruits and nuts. Disastrous results in marketing a bumper peach crop in 1908 prompted growers in the same year to organize the Georgia Fruit Exchange with limited authority to maintain warehouses and market the crop. In 1915, the ten-year-old Georgia-Florida Pecan Growers' Association and the National Pecan Growers' Association joined hands at Albany to establish a marketing co-operative for their crop, which by then had grown to commercial proportions. The latter co-operative was probably the first such marketing association established in Georgia based on the Sapiro or California plan—a plan which gave the co-operative reasonably effective control of the crop and which, under the leadership of Aaron Sapiro, a marketing expert, had already proved successful in California.

Although no cotton co-operatives were established in this early
period, many group activities were carried on which paved the way for them. In 1900 Troup County farmers organized the Southern Cotton producers’ Association; and Harvie Jordan, president of a new Georgia Cotton Growers' Protective Association, made efforts to establish local organizations in each of the state's cotton counties.\(^{32}\) An unfavorable marketing situation also precipitated much activity and several cotton growers' associations during 1905-1907.\(^{33}\)

It was the sudden price collapse in the summer of 1920, however, that prompted many Georgia farmers to devote really serious attention to the possibilities of co-operative marketing not only for cotton but for many other products as well. Before the end of that distressing year the state legislature authorized farmers to organize co-operatives without “individual responsibility” and the State Bureau of Markets began a campaign to organize co-operatives on the principles followed in California.\(^{34}\) Immediately several marketing co-operatives were established in the state; and in 1923 Aaron Sapiro was brought to Georgia to further the movement. By 1924 forty-six farmers' selling associations in Georgia were marketing cotton, dairy products, fruits and vegetables, livestock, nuts, tobacco, cane products, melons, and a miscellany of other products.\(^{35}\) In five years the number of Georgia farms selling through co-operatives increased from 210 to 13,776; and 12 per cent of the state's cotton crop of 1923-1924 was co-operatively marketed.\(^{36}\)

By 1930 the state had 68 farmers' marketing and purchasing associations doing ten to fifteen million dollars' worth of business per year, and additional co-operatives were established from time to time thereafter. From 1930 to 1950, moreover, the membership of Georgia's co-operatives increased from 27,200 to 181,000; and the amount of their business in the latter years was up to $90,100,000 (including purchases as well as marketings).\(^{37}\)

Unfortunately, many of Georgia's so-called co-operatives were that only in name, and even many of those originally organized upon real co-operative principles were transformed in time into little more than private enterprises operated for profit by a handful of stockholders rather than by the producers themselves. In no year of the half century was more than about 6 per cent of the state's total production for market sold through co-operatives.
The tenant system, lack of the co-operative spirit, general ignorance and apathy concerning business methods, and a variety of other factors prevented Georgians from achieving anything comparable to the co-operative movement that occurred in some middle-Western states where as much as 40 per cent of a state's marketed produce was sold through co-operatives. For all the effort to promote co-operatives in Georgia, therefore, the movement remained comparatively small.

**STORAGE AND SALES FACILITIES**

Meanwhile other steps were taken to solve the problem of distribution by the establishment of storage and sales facilities. In 1916 the United States Department of Agriculture and the Georgia Extension Service began a campaign to promote the establishment of curing and storage warehouses for sweet potatoes—a product the state was then trying to promote in Northern markets. By 1921 the state had facilities for curing and storing about 2,000,000 bushels of sweet potatoes and, as of 1946, 44 curing houses were still in operation. With these facilities the marketing of sweet potatoes throughout the entire year was made possible. During these years, also, facilities for storing grain were developed so that by the early 'forties the state possessed 57 storage establishments (elevators, warehouses, processing plant, etc.) with a grain storage capacity of 2,600,000 bushels.

Sales facilities through which farmers might dispose of a variety of products were also developed during the period. As already noted, attempts to establish tobacco warehouses as early as 1914 had proved premature. By 1918-19, however, the crop was of sufficient size to demand small marketing facilities and in those two years eleven bright-leaf warehouses were established in Douglas, Tifton, Blackshear, Nashville, Fitzgerald, and other towns in south Georgia. By 1930 between 50 and 60 tobacco warehouses were being operated in more than twenty towns, but this represented, apparently, a slight degree of over-expansion, and by 1946 warehouses were flourishing in only 17 centers. As other crops developed in the tobacco areas the warehouses became utilized also as facilities for marketing pecans and for packing and shipping plants, vegetables, and other horticultural specialties.

It was not until the middle of the depression of the 'thirties
that adequate facilities began to appear for marketing livestock and perishable products grown in small quantities. Prior to 1935 farmers living many miles from abattoirs or packing plants had difficulty disposing of animals, and the incentive to produce livestock was thus lessened. In 1935 Georgia's first permanent livestock auction market was established and within three years thirty others appeared, largely in the southeastern part of the state. For several years the auction barns were operated under unsanitary conditions without any state regulation, but as the number increased and livestock sales rose, regulatory legislation was enacted and the task of supervision was imposed on the State Department of Agriculture. By 1946 nearly 50 livestock auction barns and several other stockyards or sales barns were in operation in the state. Thus by mid-century all but the most remote farmers were within reasonable distance of a marketing outlet for hogs, sheep, and cattle.

Centrally located markets for perishable products grown on a small scale were first developed by the women's curb market movement of the 'twenties and 'thirties. In 1918 the Georgia Extension Service established in Rome the first curb market where farm women and 4-H Club girls were able to sell fruits, vegetables, and small quantities of home-processed foods. Similar experiments followed in other towns and in 1937 the state agricultural department inaugurated a short-lived Women's Division to push the movement. By 1939 thirty-five such markets were in existence and sales in that year amounted to $574,000. With the rise in farm incomes during World War II and the consequent lessened need for farm women and girls to earn "pin money," the movement declined and most of the curb markets either vanished or were taken over as enterprises wherein producers had little or no part.

More important was the establishment of facilities where truck crops could be sold wholesale in truck lots to the many roving truckers who were coming into the state in ever-increasing numbers. In the early 'thirties an information system was established whereby growers or county agents reported to Atlanta the location of truck loads of available produce, and this information was passed on to truckers by the simple expedient of posting a daily report on a bulletin board near the state Capitol.
The successful operation of a farmers' wholesale market in Columbus after 1910 indicated the possibilities of similar facilities throughout the state. In 1935, therefore, the legislature authorized the Department of Agriculture to construct farmers' wholesale markets to be operated by the state on a self-sustaining basis. The program was designed to provide low cost, convenient marketing facilities where buyers and sellers could be brought together and where growers would receive immediate cash payment for their produce. The first such market was opened at Thomasville in 1935, and by 1940 six others were in operation. By 1946 the number of markets had increased to twelve; and the Atlanta market, which recorded gross sales in that year of $24,000,000, was reported to be the largest market of its kind in the nation. With these successes the movement continued to flourish so that by 1949 there were 17 state markets in operation and others were in the planning stage. By that year also there were in the state nearly 50 other markets operated by private owners or as cooperatives. Thus by mid-century virtually every farmer in the state had reasonably adequate facilities for disposing of all the fruits and vegetables he could grow.

**Processing Plants**

Equally necessary for the distribution of diversified production were the many processing plants that were developed in Georgia after 1900. The state's large number of cotton warehouses, gins, and textile mills coupled with outside cotton markets had long been sufficient for handling Georgia's great cotton crop. Also, sporadic efforts and a few successes had been made before 1900 in establishing abattoirs, cheese factories and creameries, oil mills, flour mills, and canning plants. The revival of cotton after 1900 practically annihilated the few processing plants that had been able to survive the turn of the century, and the opening of the World War in 1914 found Georgia farmers nearly destitute of such facilities—a fact which further discouraged producers from venturing into products which had to be shipped long distances for processing or had to be processed at home. Most livestock was home killed and had to be fed until favorable killing weather—a delay that often eliminated all profit. Much meat also spoiled each year from lack of facilities for preserving it. What few proc-
The processing plants existed were generally small, poorly managed, unsanitary, and operated with inadequate capital. Of 37 slaughter houses inspected by the state food inspector in 1913 all but eight were condemned for unsanitary conditions.

The beginning of World War I and the consequent increased demand for meat stimulated considerably the establishment of killing and packing plants in Georgia. Within a year Georgia had modern packing plants in operation in Moultrie and Atlanta and three modern killing plants in Augusta, Savannah, and Atlanta. In 1915 Albany established the first municipal slaughter house in the Southeast. Other towns, including Macon, Waycross, and Tifton, were soon also boasting of small packing plants, some of which were under federal inspection and were thus authorized to ship products out of the state.

During the following three decades meat processing plants continued to multiply. By 1942 there were in Georgia 22 packing plants, seven of which were reasonably large establishments operating under federal inspection. In addition, about 20 municipal or private abattoirs were in business. The 1946 *Marketing Facilities Survey* of the Georgia Agricultural Extension Service reported nearly 200 abattoirs and meat curing plants. Many of these were merely ice plants with freezing or preservation facilities, but by 1950 there was little cause for the Georgia farmer to worry about what he would do with his livestock after he produced it.

Similar success was achieved with efforts to develop canning plants—facilities that were considered necessary for the development of perishable crops, particularly fruits and vegetables. By the turn of the century a few canning plants had succeeded in Georgia, but many others had failed; and because of improper preparation, adulteration, and misbranding, consumers were suspicious of canned foods.

The National Pure Foods Act of 1906 and the development of better preservation methods served as a stimulant to the development of the canning industry. By 1909 Georgia was canning both sweet potatoes and peaches in small commercial quantities, nearly 100,000 cases being produced that year; and by the early 'twenties that figure had doubled. During that decade, moreover, a few large canning firms began to show an interest in devel-
oping plants in Georgia, attracted particularly by the pimiento production around Griffin. By 1930 eight to ten million cans of pimientos were being preserved each year; and other products were beginning to receive attention. As the diversification movement spread and production became sufficient to supply canneries, new establishments appeared almost as a matter of course. By 1949 there were in Georgia 57 commercial canneries holding membership in the National Canners' Association. By then, too, sea foods, meats, and sauces were being preserved in addition to a growing variety of fruits and vegetables. Meanwhile frozen-food locker plants had also come into existence, and in 1949 the more than 150 freezer plants in the state processed over 33,000,000 pounds of food.

The community canning plant movement also came to Georgia during the new century, particularly during the depression of the 'thirties and the Victory Garden years of World War II. Under the guidance of vocational agriculture and home economics teachers, community canneries available to farm families at a nominal fee in kind popped up all over the state until by 1935 there were more than 300. During the ensuing years dehydrating plants and freezer lockers appeared also. During 1943 a peak number of 70,000 families used the plants, and Georgia gained national recognition for the extent to which the program had been carried out. By 1950, there were 410 community preservation plants in the state, one at least within twenty miles of every rural family—a record of which no other state could boast.

Nor were these all the processing plants developed during the first half of the twentieth century. As the livestock industry developed, surplus corn and other grains were absorbed by an increasing number of feed mills. Flour mills were also established or enlarged in a few instances to process wheat for the expanding bakery industry. Eggs and chickens also were eventually finding markets in the approximately 25 poultry dressing plants and nearly two hundred hatcheries which were operating by 1946. The Georgia Agricultural Extension Service Marketing Facilities Survey of 1946 also listed more than 80 plants processing dairy products; approximately 70 peanut shelling and crushing plants; 28 pecan cracking plants; and a miscellany of other establishments making syrup, wine, or other products.
By no means did these developments solve all the problems included in marketing Georgia's diversified agricultural produce. The fight for lower freight rates continued long after the Agrarian Revolt of the 'nineties, was particularly vigorous during the 'twenties when rates went up and farm prices went down, and by 1950 was still not resolved to the satisfaction of the Georgia grower. The need for better "farm to market" roads also continued to be pressing all through the period despite the great progress made in highway development after Georgia began state aid to counties in 1908 and after the national government began to assist the states in 1916. As late as 1930 only 6 per cent of Georgia's farms were located on hard-surfaced roads; and as late as 1950 more than 70 per cent of Georgia's farms were on dirt and unimproved roads.

Poor quality products, inadequate standards for grading and packing, and even inadequate enforcement of the standardization laws that existed often prevented Georgia's products from competing favorably with those of other states. To correct these evils the state legislature enacted a variety of standardization laws; the Agricultural Extension Service carried out a campaign to develop "one variety cotton" communities; education on grading and packing was provided by several agencies, and in 1937 the legislature established a Milk Control Board to standardize and protect the dairy industry. But at mid-century much more remained to be done.

Nor did any of the above developments solve the eternal problem of low prices for farm products. During three decades of the new half-century Georgia's farmers received relatively satisfactory prices for their wares. But during the two decades 1920-1940 the price return was generally either bad or disastrous. As for this problem, however, Georgia agriculture was only a small segment in the national and world economy of the twentieth century and the state's agricultural people were in no position to do much about the vast economic forces swirling about them.
The Revolution in Agricultural Education

As indicated in chapter seven, Georgia's nineteenth century efforts to apply science to agriculture produced no appreciable immediate results in improved agriculture, but they did succeed in laying the foundations for later developments, and produced, by the turn of the century, the conclusion that more drastic measures, and particularly mass education, were essential if science was to be put into everyday use.

In spite of improved economic well-being during the first years of the new century, complaints multiplied concerning prevailing inefficient farm practices and the failure of the state's educational agencies to meet the challenge. Low per-acre yields, unskilled labor, lax supervision, the mis-handling of livestock, the mis-use of expensive fertilizers, the continued abuse of the land, and many other evidences of inept farming were criticized by more progressive leaders. The failure of the state to provide sufficient funds for the education of rural children—and worse still—the failure of even the state's agricultural schools and colleges to give more than lip-service to the study of agriculture were both censored with vigor.

Whether for good or ill, the State Department of Agriculture refused to move into the breach and become a powerful educational agency. No doubt the political turmoil surrounding the department would have prevented such a development even had it been attempted. Even before the turn of the century the crusading educational spirit of the department had dwindled away, and its commissioners from then on looked upon the department primarily as an administrative agency charged with the enforcement of state laws.

During the twentieth century, nevertheless, the department developed in directions wherein education was a by-product even
if not a major intent. In 1906 the department was authorized to inspect food and drugs. In 1910 the office of state veterinarian was created to get animal diseases under control; and through the years this office did considerable work with hog cholera, tuberculosis and Bang's disease in cattle, pullorum in chickens, and other diseases handicapping the livestock industry. In 1917, as noted previously, the Bureau of Markets was established. Divisions to enforce laws concerning weights and measures, pure seed, fertilizers, dairy products, insecticides, and so on were added also. Obviously, administration in these fields necessitated the dissemination of much information and resulted in higher standards in those fields where the standards were enforced. From time to time the department published pamphlets of educational value and helped distribute printed material published by the United States Department of Agriculture. Despite the lack of emphasis on the department as an educational agency and despite the blight of politics and insufficient funds that frequently weakened it, the department did much throughout the period to put science into the fields of the state.

Throughout the half century the State Department of Entomology, created in 1898, also served partly as an educational agency in its efforts to control plant diseases and insects. Early in the century the reports of the agricultural department noted that the state entomologist was carrying on experiments and issuing bulletins concerning a wide variety of diseases and pests—peach leaf curl, root borer, peach and plum curculio, brown rot, codlin moth, and San Jose scale. Such problems as cotton wilt, the boll weevil, and cotton anthracnose kept the department busy after 1910. In 1913, the state entomologist began working on truck crop pests, and during the 'twenties much attention was given to the "phony" disease which threatened Georgia's reputation as a peach-growing state. Although by mid-century the experiment stations were doing most of the research once done by the entomologist, the multiplication of diseases and pests in modern agriculture and increasing legislation concerning them still left that department much to do.

The new century also witnessed vigorous attempts by the state to apply science to Georgia's woodlots and forests. The gradual disappearance of the timber lands of the state finally alarmed the
legislature sufficiently to cause it in 1921 to establish a State Board of Forestry to study the problem and make recommendations for further action. True to its tradition, the legislature provided no money for the new board; but the report submitted pictured the decline of the state's forest after 1909 so vividly that in 1925 the legislature was moved to create a small operating State Forestry Department and authorize $1,800 for its activities. With additional funds supplied by the federal government under the Clarke-McNary Act, the fledgling Forestry Department immediately began a lively program of fire protection and reforestation. Timber owners were organized into local Timber Protection Organizations and were aided with federal and state funds to construct fire and telephone lines, purchase firefighting equipment, and carry on patrol work—a unique system of local organization that was noted throughout the nation. Counties with county police organizations were also organized on the "County Plan" for protective work. Within a year the fourteen TPO's and eleven County Organizations were reported to have under protection nearly 3,000,000 acres, or 12 per cent of all the forest land of the state. As the legislature became financially more liberal, the department also launched a considerable educational project, urging forestry courses into high schools, issuing leaflets and bulletins, establishing demonstration forests, holding a "Forest Fair," showing motion pictures throughout the state, and doing many other things to promote sound forest care. Expenditures for the department soared each year, reaching a total of $139,000 in 1930.

Although the depression of the early 'thirties at first curtailed some of these activities, the establishment of the Civilian Conservation Corps by the New Deal in 1933 soon stimulated forestry programs, in co-operation with the department, to an unprecedented peak. Miles of firebreaks and trails were built, look-out towers were constructed, radio equipment was put into common use, two seedling nurseries were established, a summer camp was operated for youths, and the "Forest Fair" gave way to more effective and more numerous exhibits.

Even during World War II, when the department was handicapped by a labor shortage and other problems, it continued to report progress. Although the original Timber Protective Organization system had failed to develop as had been hoped and
although even the county organizations were not all they should have been, nearly 5,000,000 acres in the state were under protection in 1941-42. With the aid of funds provided through the federal Norris-Doxey Act the department also launched an enlarged program to aid smaller landowners with such forest management problems as timber cruising, marking the proper trees for cutting, and finding good markets. Expenditures also increased steadily, reaching more than $439,000 in 1944-45.

Nevertheless, these efforts were far from satisfactory to many people engrossed in the problem of transforming Georgia's woodlands into an even more productive resource. A survey of the situation made by the State Agricultural and Industrial Development Board in 1946 showed, for example, that Georgia's legislature was lagging behind Florida, South Carolina, and Louisiana in making state funds available even though Georgia had a larger forest acreage than any of those states. Even after twenty years of effort the department's fire protection program was providing protection for only 26 per cent of the state's forest acreage. Only 33 of the state's 159 counties were co-operating to provide protection, and these voluntary organizations were too dependent on the whims of county commissioners and local politics. The old TPO's had virtually disappeared. What was needed, concluded the report, was a state-wide system of protection administered directly by the Department of Forestry. More reforestation was needed; nursery production needed to be increased, and funds for research were inadequate. The result was that Georgia's forests were producing at less than half their capacity.

Once these facts were impressed upon the legislature, that body acted. In 1949 the Forestry Department was reorganized for the third time and strenuous efforts were made to appropriate enough money to match all the federal funds available. The state's appropriation of $173,000 was increased in 1950 to $890,000, and with other funds available the department's expenditures in the year ending in mid-1950 were $1,359,000. The fire protection program meanwhile was doubled so that by mid-century 86 counties were co-operating and nearly 15,000,000 acres, or 62 per cent of the state's forest land, were under the protection of the department. Also, the department had 311 full-time employees and an equal number of temporary workers; it operated three seedling
nurseries, 209 lookout towers, 1,644 miles of telephone lines, 511 radios, hundreds of trucks, tractors, and other vehicles; and it was assisting hundreds of landowners with marketing and harvesting problems and carrying on a vast educational program via radio, movies, exhibits, newspapers, and so on. Here, certainly, the state government was achieving a revolution.

THE STATE COLLEGE OF AGRICULTURE

The main target of those calling for educational reform at the turn of the century was the state university. Nineteenth century efforts to develop an agricultural college at the university in Athens had not resulted in any substantial permanent achievement, and by the 'nineties the little agricultural teaching that had been inaugurated had almost disappeared. Similar failure had also been experienced in most other states in the nation, including even such states as Pennsylvania and Wisconsin. The demand for agricultural education instigated during the Agrarian Revolt refused to die, however, and by the turn of the century a second crusade was in the making.

James B. Hunnicutt, a disgruntled former professor of the university, who in 1899 had become editor of the Cultivator, probably deserves credit for arousing the second campaign for educational reform in Georgia. In 1901 he began one of the most bitter attacks ever made against the university, charging that the authorities there had purposely discouraged students from studying agriculture and were diverting most of the $50,000 annual federal subsidy for agricultural and mechanical study into the liberal arts program of Franklin College. During the nearly thirty years of its existence, declared Hunnicutt, the agricultural college had granted the bachelor degree to only 15 students and virtually no agricultural students had been enrolled in recent years. He demanded that all land-grant funds be taken away from the university and that a separate college of agriculture be established in connection with the Georgia Experiment Station at Griffin. Since the state, moreover, rarely provided any funds for the university, for the agricultural college, or for institutes, he insisted that Georgia led "in stinginess towards higher education."

Although at practically the same time, the new university chancellor, Walter B. Hill, was taking steps to reawaken the agricul-
tural college, the reformers were not satisfied. In 1902 J. J. Conner of Bartow County introduced into the legislature a bill calling for the establishment of a separate agricultural college, and soon thereafter demands for an agricultural college in each congressional district began to be heard. With the death of the elder Hunnicutt in 1904 and the assumption of the editorship of the *Cultivator* by his son, G. F. Hunnicutt, the campaign became more vigorous and more vitriolic. The upshot was that in 1906 the legislature passed two bills: one, the Conner Act authorizing the establishment of a semi-separate agricultural college in Athens; and the other, the Perry Act, authorizing the establishment of agricultural and mechanical schools in the congressional districts.

With a whirlwind promoter, Andrew M. Soule, brought in to direct the new institution and with $100,000 from the legislature for buildings, the reorganized agricultural college at Athens developed quickly into a vigorous educational establishment with far-flung activities. Enrollment increased virtually every year—to 200 by 1916 and to a more or less permanent figure of about 700 by the early 'twenties, not counting the hundreds of others enrolled in the many short courses developed for persons unable to attend for more than a few days or weeks per year. By the end of World War I women had been admitted and Georgians were able to go to Athens to study for degrees not only in the usual agricultural subjects but also in forestry, home economics, and veterinary medicine as well. By then, also, graduate work had been added and a four-year course designed to train agricultural teachers for secondary schools was in operation. Seed and soil testing laboratories, demonstrations and exhibits, and a variety of advisory services had also become a part of the college's program.

Thereafter the program of agricultural education in Athens went through many administrative changes, and the financial support supplied by the state was never equal to the demands of many agricultural leaders. But a headquarters for agricultural education in Georgia had been developed which surpassed even the dreams of the nineteenth century advocates. Unfortunately, few of the college's graduates returned to farming. But a sensible view developed that the major function of the college was not to train farmers but to train agricultural teachers, researchers, and leaders who in turn could instruct the great mass of farmers.
While the agricultural college was developing, a school of forestry was also growing in Athens. In 1905, George Foster Peabody, a native Georgian who had made a fortune elsewhere and had become sensitive to the problem of conservation, offered the University $2,000 a year for three years to pay the salary of a professor of forestry, and $500 additional per year toward the expenses of a forestry school. The result was that in 1906 Georgia opened the first forestry school in the South (named after its donor); and within a year a considerable quantity of forestry literature was being sent to farmers.

The independence of the new school was short-lived, however; for in 1907 it was incorporated as a division of the newly invigorated College of Agriculture. Strangely enough, very little of the exuberant life of the College of Agriculture flowed into the Division of Forestry and the growth of that division remained stunted for many years. In 1909 a degree course and a system of summer camps were begun. About 1916 a nursery was started, and during World War I a few men were trained in forestry engineering. But as late as 1921-22 the division had only one instructor and fifteen students, all but two of whom were war-rehabilitation men taking the two year ranger course.

After 1922 a newly aroused interest in forestry and conservation awakened life in the school and enrollment began to rise. By 1929 thirty-five four-year students were in attendance; and under the stimulus of the Civilian Conservation Corps and other New Deal programs, enrollment rose to 246 by 1937.

Nevertheless, a Carnegie Foundation survey of twenty forestry schools during the 'thirties resulted in only fourteen of the schools being rated as offering first-class training—and the school in Georgia was not one of them. The report concluded that the Division of Forestry in the University of Georgia had insufficient floor space, a poor library, and a faculty that was too small and too inexperienced. Also, insufficient research was being done, and the faculty was the lowest paid of all the twenty schools studied.

To remedy these weaknesses, the division was again made an independent school of the University in 1935, an adequate building was constructed, accreditation was achieved, and except during the years of World War II, the school made steady progress toward overcoming its earlier defects.
Meanwhile, facilities for the agricultural education of Negroes were developing also. Unfortunately, many years were required to put the agricultural courses of the Negro schools on a college level. Also, the state land-grant college for Negroes at Savannah long promoted agricultural courses reluctantly, responding only to continuous prodding by the national government and by philanthropic funds and leaving the work largely to private or denominational schools at Albany, Forsyth, and Fort Valley. During the 'twenties, however, the state improved the agricultural work at Savannah and made that institution the headquarters for Negro "extension" work. Beginning with the college at Albany in 1917, the state began subsidizing the institutions at the above named places, eventually taking them over entirely. And while the Board of Regents long had difficulty making up its mind as to which college should be the center of agricultural education for Negroes, all the state's Negro colleges engaged in agricultural education at various times and by mid-century were doing creditable work, particularly at Fort Valley where the work was finally centered.

Agricultural and Mechanical Schools

The response to the Perry Act of 1906 authorizing the establishment of agricultural and mechanical schools in each of the state's congressional districts was in some respects as enthusiastic as the response to the new college in Athens. Towns and counties bid vigorously against one another for the schools, offering 300-acre plots of land as required and cash or equipment worth from $25,000 to $60,000 plus free lights, water, and sewage disposal for five years. Altogether, about $850,000 worth of cash, land, and equipment was accepted for the schools, and by 1908 an institution was operating in each of the state's eleven districts. Enrollment increased gradually until a peak of more than 2,000 was reached in 1924.

Although the schools were often called "colleges" they were, in reality, junior and senior high schools wherein the usual secondary subjects were taught. They differed from the usual secondary school largely in that agricultural subjects replaced the study of foreign languages; training was given in such industrial arts as bricklaying, plumbing, or painting, and students were required to work on the farm or at housekeeping.
Enthusiastic public interest in the schools was not long sustained and their over-all success was limited. During the years of their existence the schools were handicapped by insufficient financial support, by a shortage of suitable textbooks and teachers for the agricultural subjects, by the lack of desire among Georgia's farm youth to study agriculture and to go into farming, and by general public apathy.\textsuperscript{15} At least one headmaster discovered the futility of trying to instill in white youths the idea of the "dignity of labor" in a region where Negroes were doing most of the farm work. For all these reasons enrollments were small.\textsuperscript{16}

A far greater cause for the limited success of the schools was the fact that the need for them began to disappear at almost the very time they were created. The movement to develop a regular system of high schools was then under way in Georgia, particularly after 1910. Then in 1917 the federal Smith-Hughes Act provided funds for the teaching of agriculture and other vocational subjects in the regular high schools. With the development of these programs the district agricultural and mechanical schools became unnecessary. Between 1924 and 1933, therefore, each of the schools was abolished or transformed into a unit of the state's higher educational system.\textsuperscript{17} In the latter year the institution at Tifton became Abraham Baldwin Agricultural College, a junior college in the University System offering a two-year program in agriculture and home economics; and throughout the remaining 17 years of the period under study it continued that function. Many of her students transferred to the Agricultural College at Athens at the end of their second year and the junior college became, therefore, a kind of branch institution for training future agricultural leaders for the state.

**The Teaching of Agriculture in the Public Schools**

The twentieth century effort to get agricultural subjects into the curriculum of Georgia's regular public schools was no easy matter, and it was really not until the third decade of the century that appreciable results were visible. As noted previously, a vigorous campaign for the teaching of nature study in the elementary schools and agricultural subjects in secondary schools developed during the last two decades of the nineteenth century. In 1892 the Association of American Agricultural Colleges and Experi-
ment Stations met in Atlanta and outlined a number of agricultural courses suitable for rural high schools.18 O. B. Stevens, Georgia's Commissioner of Agriculture at the turn of the century, appealed repeatedly for such courses. About 1902 George Peabody, the philanthropist, began supplying nature study leaflets to Georgia's schools; and in 1903 the state legislature passed a bill requiring the teaching of elementary agricultural principles in the rural public schools.19

Little concrete action was visible for several years, however. As late as 1910 the state school commissioner complained that agricultural teaching in the rural schools was done usually by "lady teachers from the towns" who knew little about agriculture or country life and were not sympathetic, or it was done by teachers from the country who knew only enough about agriculture to dislike it.20 As late as 1912 only nine of Georgia's high schools (not counting the state agricultural and mechanical schools) were actually teaching agricultural subjects.21

The event that provided considerable impetus to the movement was the passage in 1917 of the federal Smith-Hughes Act—an act sponsored largely by Georgia's Representative Dudley M. Hughes and Senator Hoke Smith. It provided federal financial aid for the teaching of vocational subjects, including agriculture, in high schools. Unfortunately, for several years Georgia failed to provide sufficient funds to match all the federal grants available and the program developed slowly.22 The shortage of trained teachers also continued to hamper the effort. Gradually both white and Negro high schools came into the program with established four-year agricultural courses. By 1926 nearly 5,000 boys were studying such subjects as farm crops, animal husbandry, horticulture, and farm management under 137 teachers in 117 of the state's high schools.23 Better still, the method of teaching had become less academic and was based more on actual problems and projects in which the students were involved on their own farms.24

The economic depression of the 'thirties and the New Deal programs expanded considerably this agricultural teaching. Adults were also brought into the program. In 1935-36, for example, Georgia's vocational agriculture teachers enrolled 35,000 adult farmers in short courses in connection with the Federal Soil Conservation Program. By 1940 nearly 42,000 youth and adults were
studying agriculture under the public school program; community
canning plants had been established; the Future Farmers of Am­
erica (a youth organization) had been founded, and the results
of the effort in terms of better looking farms, better livestock,
and better production were becoming apparent.25

By no means could these remarkable advances toward mass agri­
cultural education be taken to mean that by 1950 the bulk of
Georgia's farmers knew how to apply the principles of scientific
agriculture. For thousands of Georgia’s farm youth did not study
agriculture and many of those who studied it did not become
farmers. The 1940 census showed that of Georgia’s 583,000 rural-
farm people over 25 years of age, 80 per cent had not gone beyond
the eighth grade of school. Thus only a small fraction of the
state’s farm youth came in contact with the high schools in which
agriculture was taught and only a fraction of those studied the
agricultural courses. A survey near mid-century showed that only
8 per cent of the Piedmont section cotton farmers of South Caro­
lina and Georgia had any formal agricultural training.26 Since it
is quite probable that only an equally small fraction of urban
industrial and commercial workers have any formal training for
their jobs and since it is largely the supervisors and managers who
are most in need of formal training and most often get it, this
figure is by no means an indication of the failure of the agricul­
tural education movement. It does indicate, however, that though
the teaching of agriculture is now firmly established in Georgia’s
schools, there is still much room for expansion.

Agricultural Extension Work

Meanwhile Georgia was also developing an “extension” pro­
gram to supplement the agricultural work of the public schools.
This program was designed not only for boys and girls but it
aimed also at taking agricultural education directly to the many
thousands of adults who were unable for one reason or another
to get school or college training in agriculture.

For many years before and after 1900 efforts were made through­
out the nation to take the school and college classroom to adults
by means of farmers’ institutes—one- to three-day educational ses­
sions that were organized in key towns in a state, generally by the
agricultural college. In Georgia the effort moved with exasperat-
ing slowness. Most farmers showed little interest in attending the institutes, and several attempts to get appropriations for them from the legislature failed. Continuous agitation by agricultural journals, agricultural societies, and the Georgia Experiment Station resulted, however, in persuading the university in 1903 to create a special department to hold institutes. In the first year, 1903, the university held forty-four institutes with an attendance of 150 to 200 persons at each one. Lectures were given on corn and cotton culture, fertilization, forage crops and grasses, business methods for the farm, fruit and vegetable culture, livestock production, and so on. From then until the outbreak of World War I, farmers' institutes were reasonably popular in Georgia, particularly during those years in which the legislature provided money for them. In 1913, for example, 109 institutes were held with a total attendance of nearly 32,000 people.

It was the reorganization of the Agricultural College in Athens in 1907, however, and the establishment there of a lively headquarters for agricultural education in the state that provided the stimulus for a vast expansion of the "extension" program. The college immediately secured financial assistance from the General Education Board, the Georgia Legislature, and the United States Department of Agriculture for a many-pronged program.

Each year from 1908 through 1911 the college sent an "educational train" throughout the state. It carried exhibits of pure-blooded livestock, new types of farm machinery, and results of fertilizer tests, soil analyses, pest control devices, etc. Lectures were given on agricultural chemistry, crop diversification, boll weevil control, and other pertinent topics. The trains stopped usually at about 150 towns, and each year they attracted from 150,000 to 400,000 curious people who carried off thousands of pieces of literature.

Meanwhile efforts were being made to develop a more effective program than that provided by the brief contact farmers made with the institutes and trains. This took the form of permanently established "demonstration" work wherein "demonstrators" were employed to live among the farmers and work permanently in a county, showing adults on their own farms how to do their tasks better and training boys and girls through organized clubs how to apply scientific knowledge to farming.
The idea of each county having a local demonstrator grew out of the work of Dr. Seaman A. Knapp. Knapp was aware of the fact that most agricultural bulletins were too technical and data were too scattered for most farmers to use. He believed that farmers must be shown how to do their work properly and must be convinced by demonstration that correct farming practices and diversification were both practical and profitable. The success of his ideas in the fight against the boll weevil in Texas, beginning in 1903, aroused immediate demands for "demonstrators" in other states. 31

With financial aid from the General Education Board and the United States Department of Agriculture, demonstration work was commenced in Georgia in 1907. Dramatically publicized by means of the educational trains, the endeavor found immediate favor in Georgia. In 1909, therefore, the legislature gave the College of Agriculture $10,000 to expand the work; and in two years that amount was quadrupled to $40,000. By 1913 there were 50 part-time agents (demonstrators) working in 70 counties plus 28 home demonstration agents working two months per year to teach farm women and girls the art of home-making. By that time also the federal government was contributing nearly $60,000 per year to Georgia's program. 32

The passage by Congress in 1914 of the Smith-Lever Act further stimulated the program. This act provided additional financial aid to state agricultural extension programs on a "matching" basis, and the Georgia legislature responded in the very first year of operation by contributing $71,000. Until 1914 the program had concerned itself largely with cotton. But now experts in livestock, dairying, poultry, and other fields were added to the headquarters staff in Athens; more county agents were employed, and work among boys and girls was expanded. 33 Within a decade federal, state, and county governments were pouring more than $500,000 into Georgia's program annually; and during 1929-30 Georgia's total agricultural extension budget from all sources amounted to $762,000. By that latter year, moreover, the program in Georgia was manned by a staff of 286 white and Negro agricultural county agents, home demonstration agents, subject matter specialists, and supervisors. 34 Working with these agents were also a large number of county agricultural boards, advisory committees, commod-
ity committees, home demonstration councils, and the like, composed of farmers and rural housewives.

By mid-century more than 500 persons were employed in the program, and nearly 34,000 men, women, boys, and girls were participating in the planning of the program's many activities. Certainly mass agricultural education had come to Georgia.

Although Georgia's "extension" program was concerned largely with cotton in its earliest years, some attention was given to nearly every phase of agriculture and rural life. As early as 1909 "demonstrators" were teaching farmers something about better drainage, deep plowing, seed selection and storage, proper cultivation, fertilization, rotation, the use of winter cover crops, the use of machinery, the techniques of livestock production, the ways of developing a live-at-home program, the keeping of accounts, and so on.35 Corn and cotton growing contests also became regular features in the program. Assistance was soon being given also in the establishment of farmers' organizations—poultry and dairy associations, co-operatives, farm bureaus, etc. Long before mid-century, projects concerned with home improvements, soil conservation, marketing, nutrition, and health had gained as important a place in the "extension" program as projects concerned directly with crop and livestock production.36

Particularly noteworthy for the future welfare of Georgia agriculture were the "extension" efforts directed at farm boys and girls. As early as 1904 boys' corn clubs were organized in Georgia; in 1906 the state government got behind the movement, and in 1909 the national government began co-operating. Girls' canning and poultry clubs were developed immediately, and in 1914 pig clubs were established to teach boys how to market their corn in the form of animal products. Here the aim was not only to teach something about the science of agriculture, but also to stimulate rivalry in production of crops and livestock, and to inspire a love of rural life, to show that much more could be done with a farm than was usually done.37 Cotton, potato, peanut, sheep, calf, wheat, and other clubs were added subsequently;38 and in due time all clubs were merged into what became known as 4-H Clubs. For some years the movement grew somewhat slowly. Of the 300,000 white boys and girls of club age living in rural Georgia in 1920, less than 10 per cent were members of such clubs; but
the movement grew considerably under New Deal sponsorship during the two decades 1930-1950. By 1939 membership was over 80,000 and by 1949 it had risen to more than 115,000. In 1928 another farm youth organization—The Future Farmers of America—began to develop in Georgia under the sponsorship of vocational agricultural teachers in the high schools. By 1948 it had a membership of more than 12,000.

At mid-century Georgia's agricultural leaders were still complaining that the state was not providing adequate financial support for this varied assortment of agricultural institutions and activities. But no longer could anyone claim that Georgia's farmers lacked facilities and programs. A veritable revolution in agricultural education had been achieved.

Agricultural Research

This twentieth century expansion of the means for distributing agricultural knowledge was accompanied in Georgia by a similar expansion of facilities for agricultural research. The establishment of the Georgia Experiment Station at Griffin in 1888 and the small amount of research developed in Athens and elsewhere had, by the turn of the century, done little more than lay a foundation for organized experimental work in the state. The full value of scientific research was not appreciated by Georgia's people until well into the twentieth century. Consequently, the Georgia Experiment Station remained a stunted starving for many years, depending for support almost entirely on federal funds and the sale of produce. After contributing about $15,000 to the work in its first three years of life, the legislature lost interest and from 1892 until 1914 contributed practically nothing. Fortunately, the federal Adams Act of 1906 doubled the federal grant from $15,000 to $30,000 annually. But such money was legally usable only for experimental projects and could not be used for buildings or other permanent facilities. In 1915 the director of the station told the state horticultural society, "Georgia has the sorriest experiment station in the United States,"—a plant composed of little more than a barn, a treasury that had not received any state money for 23 years—an institution in such low esteem that it was impossible to get a committee of the legislature to visit it. Political enemies also harassed the administra-
tion by threatening to abolish the station for failing to perform miracles, by threatening to move it elsewhere, and, during 1917, by getting federal funds withheld for a few months. 43

But the federal government continued to provide additional financial support despite the reluctance of Georgia to co-operate. The Purnell Act of 1925, the Bankhead-Jones Act of 1935, and the Research and Marketing Act of 1946 considerably increased funds for agricultural research. Continuous agitation for state action also produced some results from time to time. At both Valdosta and Thomasville the State Board of Entomology engaged in some experimental work. In 1919 the state established at Tifton the Coastal Plain Experiment Station for research particularly suited to that area. During the 'twenties and 'thirties the legislature was persuaded to make ever larger contributions for buildings, land, and equipment, as well as for operation. In 1930 the Griffin Station established a small sub-station in the mountains near Blairsville, the Georgia Mountain Experiment Station; and other sub-stations appeared elsewhere in the state subsequently. As of 1950 a third main station was established at the University in Athens and three new branch stations were authorized in Sumter, Burke, and Gordon counties to study problems on soil types under climatic conditions not covered by the work of the three major stations.

By mid-century approximately $1,200,000 was being spent on agricultural research in the state each year, about one-third of which was being contributed by the state. In financial terms alone this meant that agricultural research in the state during the half century had been expanded eighty-fold. And while few agricultural leaders were satisfied, it was clear that here too an educational revolution had been achieved.

Of significance also is the fact that during all these years, the subject matter of agricultural research was being widened considerably. At the turn of the century and for some years thereafter virtually all experimental work was devoted to finding better techniques of production; and because of limited facilities, even this type of work was restricted to a very few crops and to two or three types of livestock. In due time, however, the variety of plants and animals given attention was greatly enlarged.

It was the national Purnell Act of 1925 that opened the way for
extensive investigation of problems not directly bearing on tech­
niques of production. That act provided each of the several states
with $50,000 per year for “economic and sociological investiga­
tions”; and from then on Georgia had researchers busy studying
rural farm habits, farm record-keeping, marketing problems, etc.
The federal Bankhead-Jones Act of 1935 also provided additional
funds for broad studies concerning conservation, land use, water
resources, new uses for agricultural products, and other problems
underlying the agricultural establishment.44

In 1905 only about half a dozen persons in Georgia were de­
voting full time to such work, but by mid-century more than 100
researchers were busy in the state investigating every major field
of agriculture.

Farmers' Organizations

As facilities for agricultural education and research were devel­
oped by government agencies, farmers' clubs and societies estab­
lished for these purposes gradually found themselves with almost
nothing to do. It was natural, therefore, for them either to die a
natural death or turn their energies in new directions.

Until World War I the Georgia State Agricultural Society and
the Georgia State Horticultural Society retained enough vigor to
make themselves heard from time to time. The fruit catalog of
the Horticultural Society continued to be especially useful during
those years when the peach industry was expanding. After World
War I, however, both organizations became in effect dormant.
County agricultural clubs and societies had never been robust, and
after World War I, those modeled along nineteenth century lines
disappeared almost entirely.

A brief attempt to establish a nineteenth-century-model farmers' organization similar to the Alliance occurred in 1903 when the
Farmers’ Union movement entered Georgia from Texas. Al­
though the Farmers’ Union was designed largely as a pressure
group to control the price of cotton, and secure favorable agricul­
tural legislation, it was also an educational organization that en­
deavored to promote fairs, encourage the reading of agricultural
papers, and otherwise get farmers to adopt scientific practices. By
1907 the Union had 1,085 local chapters and 80,000 members in
Georgia; and in 1908 it was organized in 135 of the state's 147
counties. The comparative prosperity that prevailed from 1909 to 1920 again weakened the co-operative spirit of Georgia's farmers, however, and the Union soon disappeared as an educational force.

Despite these declines and false starts, more reasonably permanent farmers' organizations interested in education appeared in Georgia during the first half of the twentieth century than in any other comparable period of the state's history. Credit for this is due largely to the agricultural extension services of the state and national governments which, in their very beginnings, sponsored the creation of all sorts of educational clubs. The development of clubs for boys and girls has been mentioned previously. Home Demonstration Clubs for rural women were also established in due time and by 1948 they had nearly 50,000 members.

The Agricultural Extension Service also fostered the establishment of county farm bureaus. These bureaus grew out of the need of the new demonstration agents to get the co-operation of the local farmers, or out of the desire of local farmers to get a full-time demonstration agent for their counties. Informal groups began thus to appear about 1910; and when Sears, Roebuck and Company made an offer to give a $1,000 grant-in-aid on a matching basis to any county desiring to have a full-time demonstration agent, the Bibb County Agricultural Association reorganized itself as required and became in 1911 one of the first farm bureaus in the nation. There followed other bureaus, which in a few years were venturing into co-operative buying and selling activities. In 1920 a Georgia state bureau was formed, and it and other state bureaus throughout the nation organized into the American Farm Bureau Federation. The depressions of the 'twenties and 'thirties were too much for the Georgia farmers' co-operative spirit and the movement almost dwindled away. During the late 'thirties the movement was revived under the temporary name of the United Georgia Farmers; but it was not until 1941, when the membership stood at only 1,313, that vigorous life began to flow back into the organization. Thereafter growth was reasonably steady, and by 1948 the bureau had a membership of 73,000 families in 156 counties. By then, too, it had become a powerful legislative pressure group agitating for better rural roads, adequate farm prices, low interest farm credit, and so on.
The decline of such general organizations as the Georgia State Agricultural Society and the Georgia State Horticultural Society was accompanied, moreover, by the rise of a variety of more specialized associations. Fanciers of a particular flower, a particular fruit, a particular branch of livestock or even a particular breed of cattle organized separate groups to study and advance the claims of their favorite plant or animal. Thus during the half century a myriad of organizations came and went—the Georgia Shorthorn Breeders Association, the Georgia Swine Growers Association, the Georgia Branch of the American Poultry Association, and others too numerous to mention.

**The Agricultural Press**

During the new century Georgia’s agricultural press underwent a similar transformation with emphasis shifting from the private press and writings by general practitioners to the government press and publications by specialists.

For several years the *Southern Cultivator* continued to maintain its reputation as the South’s leading farm journal. In 1899 it was taken over by the Hunnicutts, father and son, who again turned it into a lively “experience meeting” type of publication. They reviewed David Dickson’s practices of deep-plowing, shallow cultivation, and heavy manuring; appealed for rotation-systems, diversification, and more livestock; and led the campaign for an educational revolution in agriculture. In 1905 the *Cultivator* was enjoying a circulation of over 50,000 copies monthly, nearly 20,000 of which were circulated in Georgia. But the days of the *Cultivator* were numbered. Since vigorous, alert editors were not always available, circulation went to those journals which had such editors. Free government publications also hurt the circulation of mediocre journals that had to be paid for. For another generation the *Cultivator* continued, but the boll weevil and drought of the 'twenties were too much for it, and in 1928 the century-old paper succumbed.

At no time during the half century did any other private Georgia farm journal achieve anything more than a brief and minor reputation. Circulation gravitated to out-of-state journals such as *The Progressive Farmer*, the *Southern Agriculturist*, *Country Gentlemen*, *Farm Journal* and *Farmer's Wife*, the *Poultry Tri-
bune, Breeder's Gazette, and others. The educational revival stimulated rural interest in reading, and in 1944 eleven farm journals had a circulation in Georgia of approximately 225,000 copies—a considerable improvement over the situation at the turn of the century despite the fact that Georgia's farm population had declined.

By far the most significant development of the period in this connection was the rise of government agencies, state and national, as publishers and distributors of material for farmers to read. In 1903 James B. Hunnicutt published Agriculture for the Common Schools—probably Georgia's first textbook for agricultural courses in the public schools; and it was revised and reissued in 1906, 1913, and 1915. From time to time various railroads anxious to promote the development of agriculture also issued or distributed books, pamphlets, and leaflets. But such private endeavors were insignificant compared to the mass output of state and national government agencies.

Some of this was already under way at the turn of the century. The reorganization of the Georgia State College of Agriculture in 1907 and the establishment of "extension" services vastly multiplied the quantity of material sent to farmers. By 1909 the College of Agriculture had 25,000 names on its mailing list for publications. By 1914 the college claimed its newspaper articles were reaching 350,000 persons per week. In 1907 the college founded the Georgia Agricultural Quarterly, which after 1922 became known as the Georgia Agriculturist—a journal publishing student and faculty articles on varied phases of agriculture. The State Department of Agriculture began publishing in 1917 the Georgia Market Bulletin which eventually achieved a circulation of more than 200,000 copies. By mid-century the Georgia Agricultural Extension Service had issued nearly 600 bulletins; the experiment stations had issued hundreds more; and this count does not include hundreds of leaflets and pamphlets not classed as bulletins. In addition, federal agencies, particularly after the advent of the Roosevelt Administration in 1933, poured out tons of informative material, the quantity of which has not been calculated. The Agricultural Adjustment Administration, the Soil Conservation Service, the Production and Marketing Administration, the Farm Security Administration, and other such federal
agencies all carried on educational programs and distributed great quantities of printed matter.

**THE SOIL CONSERVATION PROGRAM**

The latest but one of the most effective efforts to aid Georgia's farmers in applying science to agriculture during the first half of the twentieth century was the soil and water conservation program inaugurated by the national government in the early years of the Roosevelt administration.

Although some scientific knowledge of land care and land use had existed since the time of ancient China, only the most progressive American farmers showed much interest in it before the twentieth century. Complaints by agricultural leaders concerning land care generally fell on deaf ears in Georgia all through the nineteenth century. By 1907 the United States Department of Agriculture was studying the problem of soil erosion; and in the years immediately thereafter, the department encouraged Georgia's farmers to make greater use of winter legumes, particularly vetch, which experiments had shown useful for soil building. Instead of heeding this advice, most Georgia farmers continued their usual practice of exploiting their land for all it was worth, especially during World War I.

Perhaps this failure to care for the land was not entirely the Georgia farmer's fault. As President Soule of the Agricultural College pointed out in 1916, a satisfactory land-use system requires agricultural implements; and of these the Georgia farmer had few—only $72 worth per farm. Even as late as the 'thirties it was noticed that on most small Georgia farms in one area surveyed, a one-horse turning plow was the largest instrument available for building terraces or turning under rank growths of green manure crops. Disc harrows were non-existent on small farms and only four out of ten farms of more than 90 acres had one. Fences and barns for livestock—also needed in a conservation program—were scarce too. It seems undeniable, however, that the greatest obstacles to proper land-use methods in Georgia were apathy and ignorance of conservation methods rather than lack of implements.

By the early 'thirties the conservation problem had become acute. A variety of surveys in those years showed that 5,000,000 acres in Georgia were largely denuded of topsoil. Wind erosion
had damaged the sandy area of the Coastal Plain; and in one county in the Plain 60,000 acres of once fertile soil were washed and gullied beyond repair. It was estimated that sheet erosion had robbed the major part of upland farms of 25 to 75 per cent of their topsoil; and many power and water supply reservoirs were silted to the brim. Throughout the state as a whole 60 of every 100 acres of farm land were said to be seriously eroded.\textsuperscript{55} Certainly action was needed.

The Roosevelt administration began working on the conservation problem almost as soon as it got into office. In 1933 a Soil Erosion Service was established as an emergency agency in the Department of the Interior. Then in 1935 Congress passed the Soil Conservation Act, transferring the Soil Erosion Service to the Department of Agriculture, renaming it the Soil Conservation Service, and authorizing it to undertake a comprehensive program. Such subsequent acts as the Soil Conservation and Domestic Allotment Act and the Flood Control Act of 1936, the Agricultural Conservation Act of 1937, and the second AAA legislation of 1938 and supplementary legislation put the national government “permanently” into soil conservation activities with a many-sided program participated in by national, state, and local agencies.

In 1937 the state government of Georgia moved into the program with the enactment by the legislature of the Soil Conservation Districts Law, an act that created a State Soil Conservation Committee and authorized the establishment of Soil Conservation Districts wherein locally planned and supervised programs could be carried out. In the same year Georgia won the distinction of organizing the first Soil Conservation District in the United States, a district comprising eight counties around the Coosa River in the northwestern part of the state; and gradually, between 1937 and 1950, twenty-four more districts were created so that by mid-century almost the entire state was covered.

In each district farmers elected a Board of Supervisors charged with planning the district program, obtaining the proper technical assistance, carrying on an education program, and mobilizing local organizations in the work. Although the early work of the Federal Soil Conservation Service had been confined largely to research and demonstrations of new methods of conservation, the Service shifted its emphasis to work through the districts. The
Service provided the District Conservationist and whatever other technicians were required, and this personnel in turn helped the district boards and individual farmers work out and apply detailed plans for the best use of the land and water resources of the district and of each participating farm. Thus for the first time in its history, Georgia had a corps of land-use and land-management experts applying the sciences of agronomy, biology, engineering, hydrology, forestry, and related subjects in co-ordinated fashion to the practical problems of conservation—improper land use, erosion control, drainage, irrigation, flood control, sedimentation of streams and reservoirs, the maintenance of soil fertility, and many other problems.

By 1950 those concerned with soil conservation in the state could boast of many achievements, although much remained to be done. As of the end of 1950 there were 61,926 farms consisting of more than 12,000,000 acres—more than half the farm land in the state—actively carrying out detailed plans prepared by the Soil Conservation Service. Whereas in 1936 only about 160,000 acres in Georgia were covered with winter legumes, in 1949 about 700,000 acres were so covered. By then over 6,000,000 acres had been treated for erosion; crop rotation had been started on 2,400,000 acres; more than 4,400 farm ponds had been built; 101,000 acres had been drained; 25,000 feet of open drains had been cut; and 835,000 acres of pasture had been improved, along with many other accomplishments regarding terracing, forestry, wild life areas, water-shed development, and so on.

For some of these activities farmers were paid incentive payments by the national government. During 1940 Georgia's farmers were paid $12,744,000—for example, $1.50 an acre for seeding winter legumes, $3 an acre for seeding permanent pasture, $7.50 an acre for planting trees. For some farmers these payments probably were nothing but bribes to preserve the land for future generations. For others, however, they were bona fide financial aids without which the conservation practices could not have been carried out. Equally helpful to the program was the decade of prosperity of the 'forties which provided farmers with the money and machinery to apply the methods being taught them.
The Revolutionary changes that occurred during the first half of the twentieth century regarding diversification, marketing, and agricultural education were accompanied in Georgia by equally revolutionary developments regarding agricultural credit.

When Georgia's farmers moved into the new century they were still burdened with a credit system that prevented all but the most competent farmers from making financial progress. National banks were still forbidden by law to accept land as security for loans, and state and private banks continued to look upon land as a risky basis for credit. Most farm mortgages were written by individuals and were payable on demand or were made for short periods of only three to five years. There was also a renewal fee which added to the cost of long term mortgage credit and brought the total charges on mortgage loans to approximately 10 per cent a year.

Short-term credit to finance production was also in a serious condition. It was still available almost solely from landlords, from local merchants, or from men who were both landlords and merchants. Their "time charges" and interest rates often added up to 50 per cent or more a year, and all such lenders continued to require the planting of cotton as security. Under these conditions only the most astute farmers had anything left after paying their debts at the end of the year.

Lending agencies of all sorts were both rare and weak. With few exceptions, the 180 banks the state had in 1900 were of very little use to agriculture. Those in rural areas were feeble institutions with resources entirely inadequate to supply the credit needed. All the stronger banks were concentrated in the cities, and many bankers, even in rural areas, lacked both understanding
of and interest in the credit needs of the farmer. Commercial and industrial loans were looked upon as less risky than agricultural loans, and what small resources the banks had were channeled into these more certain ventures.

**The Development of Banks**

The first sign that the state's old credit structure was headed for a change was visible in the almost amazing number of banks that appeared in Georgia after 1900. Within three years after the turn of the century 87 new state and national banks were established in the state, and it immediately became noticeable that this development was beginning to liberate at least a few landowners from the high-cost loans of the local merchants. It was possible at these banks for landowners to borrow money on "accommodation notes" at a comparatively low rate of interest and then buy supplies for cash without paying the usual exorbitant "time prices" and interest charges. The banks were able to charge less interest than the merchants because they extended credit only to the better farmers and so had less risk than the merchants who loaned to everyone in the community. As land values rose after 1900 some of the new country banks began to show a willingness to accept land as security.

As prosperity mounted, new banks were created all over the state. A peak number of 798 was reached in 1914—an increase of 343 per cent since 1900. However, the new banks were unable to solve the credit problem to any great extent in those early years. Most of them still had inadequate resources, particularly at peak seasons when the demand for money was great; their lending periods were too short; they had little or no connection with commercial houses elsewhere; and a crop failure in their areas often wiped them out. Their practice of making loans mainly to successful landowners meant that they served only a fraction of the farmers who needed credit.

Many of the new banks were too weak to withstand the agricultural collapse that began in 1920. Between 1921 and 1924 a hundred of them failed—more than failed in any other state east of the Mississippi. During the 'twenties 368 banks suspended operations, thereby cutting the number in the state to less than half the number existing during the peak year of 1914.
But despite these difficulties, the new banks eventually became extremely important parts of Georgia's agricultural credit system. During the years 1930-1950 approximately 400 of them operated in the state—more than twice the number in Georgia at the turn of the century. By 1909 there were 589 of them and their resources of $184,000,000 were triple those of 1900. Mergers, reorganizations, and better state and national government regulations strengthened them and made them more useful. During the four decades 1910-1950 the resources of the banks increased more than ten-fold—from $165 million in 1910 to more than $1,800 million in the late 'forties. Many bankers hitherto indifferent to rural credit needs also gradually learned to understand agricultural problems and began to take an active interest in serving farmers. The new banks also played an important part (with government agencies) in eventually nearly abolishing the old high-priced credit system dominated by merchants and landlords; and by mid-century the banks were making approximately one-third of all the agricultural loans in the state.

**MORTGAGE CREDIT**

The story of the twentieth century revolution in agricultural credit is largely that of agricultural credit programs developed by the national government. The story has been told in detail by many other writers. All we need do here is sketch the developments briefly and observe their effects on the credit situation in Georgia.

The general demand that the national government do something to alleviate the agricultural credit situation became noisy during the Agrarian Revolt in the latter part of the nineteenth century. After the turn of the century the demand became louder. As the national domain disappeared, as land prices rose, as agriculture became more intensive, and as production and marketing became more complex, the need for agricultural credit increased. Theodore Roosevelt's Country Life Commission noted in 1910 "the lack of any adequate system of rural credit whereby the farmer may readily secure loans on fair terms." The United States Department of Agriculture began to survey the problem about the same time, and it came to the same conclusion. The Department found, for example, that 77 per cent of all farm
owners and 46 per cent of all tenants were able to give security for loans, but many of them were unable to get loans because of the lack of adequate credit agencies. During 1912 President Taft had his ambassadors examine European credit programs, and Woodrow Wilson sent a commission abroad for further study. Meanwhile a variety of bills on the subject (eventually more than 75) were introduced in Congress, and extended hearings were held on them.

The result of all this was two-fold: the Federal Reserve Act of 1913 took cognizance of the agricultural credit problem by authorizing national banks to make loans on farm land; and three years later, in 1916, the Federal Farm Loan Act was passed which laid down the basic principles for a national agricultural credit system.

It is worth noting that the major concern of the federal program in those early years was mortgage credit. The 1916 act authorized the creation of both Federal Land Banks (with local credit associations) and joint-stock land banks. Little need be said about the joint-stock banks in this study since they were little used in Georgia. Even at the peak of their lending in Georgia in 1929 they held only 8 per cent of the total farm real estate loans in the state; and their liquidation in 1933 put an end to their lending operations entirely.

The Federal Land Bank system exerted great influence on Georgia's mortgage credit throughout the remainder of the half century. The Federal Land Banks were established with government capital but with the intention they would be owned eventually by local farm loan associations composed of farmers. The Federal Land Bank of Columbia, South Carolina, in whose district Georgia was located, was chartered in 1917, and local farm loan associations were soon in operation throughout the state—171 of them existing at one time. The bank pioneered in the development of 33-year loans, low interest rates, and the privilege of payment in full at any time without penalty. By 1920, the bank's interest rate of 5.5 per cent had forced the mortgage rates for the state as a whole down from 7.9 per cent to 7.2 per cent—and a lower rate was yet to come.

The Federal Land Banks were still in their infancy, however, when the agricultural collapse occurred in 1920—a development that placed an unexpected strain on the young system. Thou-
sands of farmers (many of them tenants) who had bought land on credit during the 1915-1920 “boom” years now found themselves forced to re-finance their mortgages—at the same time that individual lenders and banks were forced to curtail their lending. Fortunately, insurance companies were on hand to move into the breach, and for the first time in Georgia history they became important sources of farm mortgage credit. By 1922 the farm real estate debt in the state reached a peak of nearly $150,000,000, of which insurance companies were holding a large part. In some years during the 'twenties they held as much as one-third of all the farm mortgage debts in the state. In 1923 Congress enacted the Federal Agricultural Credit Act which raised the Land Banks' loan limit from $10,000 to $25,000; and within a year the Land Bank was holding 15 per cent of Georgia's farm mortgages.

Since the collapse of 1920 proved to be long-lasting rather than temporary, the rescue efforts of both the insurance companies and the Land Banks were inadequate. Most farmers held on to their property as long as possible. But by the late 'twenties abandoned farms, foreclosures, and sheriffs' sales were common in the state. During 1926 and 1927 forced changes in ownership were about as numerous as voluntary changes in ownership—especially in the plantation belt. The "crash" of 1929 simply made bad matters worse. By 1932 the insurance companies in many counties had, through foreclosures, become the largest landowners; and they were anxious to "get out from under" the unforeseen burden that had fallen on them. Gradually, therefore, borrowers were obliged to look more and more to the Land Bank for credit; but the resources of the Land Bank were far from adequate to meet the challenge, and many of the 171 local loan associations were on their last legs. Too many of them had been organized, often with overlapping territory; and the resources of many of them were too small to employ competent management. Some had been forced to stop making loans entirely.

To alleviate this situation, Congress passed in 1932 the Federal Farm Loan Act which added $125,000,000 to the capital of the Land Banks. Then followed the Emergency Farm Mortgage Act of 1933 which made possible loans direct from the Land Bank Commissioner in Washington, and the Federal Farm Mortgage Co-operation Act of 1934 which made still more funds available.
It was very definitely the agencies of the national government which moved into the farm mortgage breach during the early 'thirties. By 1935 the bank in Columbia held 36.4 per cent of Georgia's farm mortgages, while the proportion held by insurance companies had declined to 15.6 per cent. During 1936 the activities of the bank and the commissioner reached a peak in Georgia with the two together holding 53 per cent of all the state's farm real estate debts. Meanwhile, federal legislation had also provided a temporary moratorium on foreclosure litigation, and a program had been begun to consolidate the many weak local farm loan associations into about 30 strong ones.

After the worst was over, individual lenders and local banks resumed their former role as the chief sources of mortgage credit in Georgia. By 1945 insurance companies held only 9.4 per cent of the state's farm mortgage debt and, for the moment at least, did not appear anxious to repeat their unfortunate experience of the 'twenties. The Land Bank's share of mortgage lending was down also—to 21 per cent of the state's total.

But by mid-century the Federal Land Bank system had proved its worth and had played a major role in revolutionizing the mortgage credit situation in Georgia. By then the bank in Columbia had made loans in the state amounting to nearly $100,000,000. The 29 loan associations remaining in the state were entirely owned by farmers, and the original capital of the Land Bank had been returned to the government. More important, the Land Bank had established standards which, by mid-century, had been generally accepted by other lending agencies. Few lenders yet matched the bank's low interest rates or length of terms, but all were doing better. By 1940, for example, the farm mortgage rate of interest for the state as a whole was down to 5.5 per cent—nearly a third lower than when the Land Bank was organized.

At various times other federal agencies also participated in helping solve Georgia's agricultural mortgage problems. The Resettlement Administration, which later became the Farm Security Administration and then was succeeded in 1946 by the Farmers Home Administration, was active in Georgia after its creation in 1935. During the years 1935-1940, for example, it considered about 7,000 cases of farm debt and achieved adjustments on about 4,300 of them. The Bankhead-Jones tenant purchase program
carried out by these agencies also helped many landless farmers to buy their own land. In 1945 there were 3,628 borrowers active in this program. Beginning in 1944 the Veterans Administration entered the farm mortgage field by guaranteeing and insuring loans for the purchase of farms by veterans. These agencies operated on a comparatively small scale, however, and exerted far less influence on the mortgage credit situation in the state as a whole than did the Land Bank.

Supply Credit

Throughout the century 1850-1950, the short term or supply credit problem was always much worse than the mortgage credit problem. The practice that grew up with the new tenant system after the Civil War whereby landlords and merchants “furnished” tenants and took a lien on the crop was never satisfactory or popular with landlords, merchants, or tenants.

Most landlords and merchants had such small resources that they were in no position to do an efficient and inexpensive job of lending. So many of the borrowers were so shiftless, thriftless, and incompetent that losses on accounts often ran as high as 20 per cent—a heavy risk for any lender to take. The risky character of most loans obliged the merchants or landlords to charge exorbitant interest rates and to add fantastically high charges to the prices of goods sold on time. A survey in 1915 by the editor of the Progressive Farmer showed that this situation caused Georgia’s farmers to pay 69 per cent more for their supplies than if they had bought them with their own cash.

Worse still, the whole system was an open invitation to unscrupulous merchants to milk their borrowers of anything they produced and keep them in debt continuously. The “time charges” were usually whatever the merchant wanted to make them. The merchant or landlord kept the books to suit himself and usually had too much prestige with his ignorant borrowers to be questioned. Detailed statements of accounts were rare—so the account was usually whatever the lender said it was. This does not mean that many merchants got rich from the system, for some were known to “go broke” even when “time prices” and interest charges amounted to 50 per cent. Often there was stiff competition among merchants in a town for the “furnishing” business.
But throughout the system the lender had the advantage over the borrower.

Equally evil was the fact that landlords and merchants almost universally insisted on cotton as security—a demand which forced all borrowers to plant cotton whether they wanted to or not, whether it was profitable or not. Therefore, the short-term credit system forced the Georgia farmer to stay in a one-crop economy even in years when he was tempted to get out of it.

The almost universal condemnation heaped on this supply credit system was long prominent in Southern agricultural literature. After the turn of the century the *Southern Cultivator* continued its usual campaign against it, calling during the bad year of 1907 for the complete repeal of the lien law so that tenants would be forced to grow their own supplies and diversify. In 1909 the President of the Georgia State Agricultural Society called for an attack on the system, saying that for those who did not grow their own supplies there was only one way to get credit—"that is by promising the warehouse-man to plant the bulk of his crop in cotton regardless of conditions. This is the coercive plan, the pernicious plan, the perishing plan. . . . This is the plan by which pauperism is perpetuated. . . . This is the plan by which a farmer really pledges and sells his cotton crop before he plants it. This is the plan by which the Eastern spinners and the Northern speculators combine with the Southern money lender to produce distress cotton to keep the price down. . . . This is the plan by which the rich grow richer, and the poor grow poorer until they finally perish from the face of the earth."25

The only immediate change that took place about this time was that many planters without commissaries began making cash or check advances to their tenants monthly—a practice that permitted the tenant to buy for cash and to do his buying where he pleased. The 1920 price collapse which drastically reduced the credit available from merchants, wholesalers, and banks forced an extension of the use of cash still further. A study of Greene and Macon counties showed that by 1928 half the tenants in those two black belt counties were "furnished" by cash or check—a practice that pleased tenants and helped hold them during periods of labor shortages. However, the shortage of cash that followed the 1929 "crash" forced a return to the old system.26
Certainly reforms were needed in this old-fashioned, inadequate system of providing short-term production credit, and again it was the federal government that took the lead. But it took even the national government nearly twenty years to develop both the heart and the know-how to solve the problem. Before 1933 the national government limited its actions to a series of panaceas designed usually to meet a temporary emergency. During the 1914-1915 cotton price drop the newly created Federal Reserve Board co-operated with member banks in the operation of an emergency cotton loan fund whereby farmers were able to hold their cotton off the market until a more favorable selling time. During ensuing years the Federal Reserve System took an ever increasing interest in agricultural credit and in encouraging its member banks to be more active with production loans. The War Finance Corporation, created during World War I, was also active in those early years, and during the 1920-1922 "recession" it saved many a farmer and many a bank from bankruptcy. By February 1922 it had made loans in Georgia amounting to nearly $4,500,000. The seed loan agency established in the Department of Agriculture in 1921 also made more than 158,000 loans in Georgia, amounting to more than $16,000,000, before its reorganization in 1933. In 1923 the Intermediate Credit Banks were established to make short-term credit more easily available to co-operatives and other organizations. The Federal Farm Board and the Stabilization Corporations established in 1929 were useful during their two years of activity, making about 144,000 small loans in Georgia amounting to $1,258,000—not much in dollars, but enough to enable farmers to do their planting during 1932 and 1933. Most of these actions taken by the federal government were stop-gap measures, and they were only steps toward the development of a rational, nation-wide system of production credit.

It was the Farm Credit Act of 1933 that brought forth a comprehensive system of production credit agencies throughout the nation. Under the sponsorship of the Production Credit Corporation, local production credit associations were organized to finance short-term loans for such things as livestock, dairying, crop production and marketing, the purchase and repair of machinery, and the refinancing of short-term debts. Although the national government furnished the initial capital, it was hoped
that eventually the local associations would be owned by farmers. The local associations themselves were to be allowed to get loans from the Intermediate Credit Banks.

Georgia's farmers took quickly to the new system. During 1933 and 1934 they organized 34 local production credit associations, and in the spring of 1934 the first loans were made. In the fifteen years 1935-1950 the amount of loans closed in Georgia increased steadily from about $3,500,000 in 1935 to more than $25,000,000 in 1950. In the latter year loans were made to more than 15,000 Georgia farmers. At mid-century, 31 of the original 33 associations were still in operation and were well on their way to ownership by their members. Throughout the period 1934-1950 the associations had loaned Georgia farmers nearly $200,000 to finance production, with negligible financial losses.

The new production credit system by no means monopolized the credit market. While conclusive statistics are not available to prove the point, it is probable that private individuals, merchants, and banks continued to make the major portion of Georgia's short-term production loans. But the production credit associations set standards and charged low interest rates that all other lenders were obliged to approach. By the end of World War II there seemed little question that the once dominant position of the merchant no longer existed. Except in the most backward areas, the old plantation commissary had disappeared completely, and the local merchant with his high interest rate and costly "time charges" was reorganizing his business, getting out of the lending field entirely. At mid-century there were still some short-term credit problems to be dealt with, particularly concerning the purchase of farm machinery, fencing, and equipment. But the worst was over and there was little question that the Georgia farmer had a reasonably adequate system of short-term credit available.

From time to time Georgia's farmers were also able to get short-term credit from other federal agencies. The rural rehabilitation program of the national government had by 1941 made loans or grants to 53,700 Georgia farm families—amounting to more than $28,000,000. The Farmers Home Administration, which succeeded the Farm Security Administration in 1946, also made loans to buy supplies and equipment. After 1944 the Veterans Administration
made credit available for the purchase of livestock, machinery, and so on. The problem of financing co-operatives had been dealt with by several pieces of federal legislation and finally by the establishment in 1933 of the Banks for Co-operatives. During 1933-1951, the Columbia Bank for Co-operatives made 183 loans, a total of $172,000,000, to Georgia marketing and purchasing associations—most of it to cotton marketing co-operatives.

All this added up to a revolution in Georgia's agricultural credit system, and at mid-century only minor improvements in the situation appeared essential.
15.

The Landed and the Landless

The five preceding chapters sketch briefly only the most conspicuous or the most significant developments that occurred in Georgia agriculture during the half century before 1950. These revolutionary developments were accompanied by a variety of other developments, some of which were direct outgrowths of the changes already described and some of which were independent of the major developments. In this chapter an attempt will be made to touch upon this miscellany of developments not previously discussed. At the same time, an attempt will be made to evaluate the impact of all these developments on the economic and social well-being of Georgia's farm people. In Chapter Nine we concluded that the Georgia farmer's various attempts to extricate himself during 1865-1900 from his post-Civil War distress were failures. What now can be said of his endeavors during the new century? Has he failed here too? Or have the reforms he attempted finally "paid off?"

Economically, agricultural history in Georgia and throughout most of the United States during 1900-1950 falls into four periods: (1) the two decades 1900-1920 which are generally described as decades of spiraling prosperity and reasonable balance between rural and urban income; (2) the years 1920-33 during which farmers, and particularly Georgia farmers, were in almost constant economic distress; and (3) the era of New Deal reforms, 1933-40, during which remedies were applied to the farmers' economic ills; and (4) the World War II decade of 1940-50 which appears to have produced a degree of prosperity hitherto surpassed in American history. It is in terms of these four periods that the remainder of the story will be told.

1900-1920

A hasty glance at some of the statistics for the first two decades
of the twentieth century forces one to agree with the prevailing opinion that the period was one of spiraling prosperity. Signs of prosperity impressed themselves on almost every observer after the turn of the century. Cotton prices rose in almost a straight line as the awful depression of the 'nineties was forgotten in a new frenzy of worship before King Cotton.

The statistics show also that during this period the number of farms in Georgia increased from 224,000 to 310,000—a rise of 34 per cent. The rural population of the state also increased—by 278,000 people. Even more significant, during the first decade of the new century the number of people who earned their living by farming rose from 522,000 to 734,000—an increase in the Georgia agricultural labor force of 40 per cent, and as late as 1920 there were 77,000 more people working on Georgia farms than at the turn of the century.

The whole period of 1900-20 was one of stringent labor shortage, during which landowners resorted to all sorts of stratagems, even to “labor stealing.” As in previous similar periods, a campaign to import labor from the North and Europe was carried on. In 1905 a certain David Robinson established the Georgia Industrial and Immigration Bureau of New York in the hope of catching immigrants at Ellis Island and steering them toward Georgia. Some farmers appealed also to railroad agents to bring them laborers from the North.

As usual, the campaign for immigrant labor got nowhere. Wages of $15 per month plus a shack and rations of bacon and corn bread were not a sufficient inducement to immigrants who already had their eyes on the “greener pastures” of Illinois or California. Nor did all Georgians agree that the importation of labor was a satisfactory solution to the problem. To some farmers the whole campaign was a scheme of cotton manufacturers who wanted the cotton labor supply kept plentiful and cheap so the price of cotton would be cheap.

During World War I when the labor shortage was at its peak, Agricultural Commissioner J. J. Brown argued that instead of trying to attract outside labor, Georgia’s government should busy itself with legislation that would help tenants buy farms and make rural life more attractive. He argued that the labor shortage was due to the fact that farm workers were flocking to the cities for
gaiety, home conveniences, and better jobs, schools, and roads; and if the legislature would do something about the roads and schools of rural areas and adjust the state's land laws so that tenants could take advantage of the Federal Farm Loan Act, there would be a return to the land. However valid these suggestions might have been in the long run, they were of little value in solving the problem of labor shortage at the moment. The shortage continued, reaching its peak in 1920 when it was noted that the farm labor supply was only 71 per cent of what was needed.

As usual in such situations, wages for farm labor went up steadily. As early as 1901 wages had become so high that naval stores operators in south Georgia were organizing to control many "lazy" Negro laborers who saw no need of working more than three days a week. When by 1905 extra laborers were demanding $1.00 a day and board, some farmers felt obliged to abandon fields that required extra help. But it was not until World War I began that wages rose to unprecedented heights. Between 1910 and 1920 Georgia's farm wages more than doubled, from about $13 to $30 per month (with board), and from $1.00 to $2.10 (with board) for day labor during harvest. Even so, labor was hard to hold and the legislature passed a "Work or Fight Law" to keep production from floundering.

This shortage naturally put wage laborers and tenants into a position in which they were able to force concessions from landowners. The editor of the Southern Cultivator noted in 1906 that many Negroes were bound together in secret societies designed to get as much as possible from the landlords.

One thing wage hands demanded was the privilege of working on "shares." As pointed out previously, most landlords believed that wage hands working under close supervision were more efficient than tenants. E. M. Banks even went so far as to predict in 1905 that sharecropping would decline because of the greater efficiency of hired labor. But just the opposite happened, for hired laborers resisted supervision and insisted more and more on the sharing system wherein they would have more freedom to work as they pleased. In 1906 the Cultivator contradicted Banks with the statement that the wage hand was becoming a thing of the past. While that was not quite true, thousands of wage hands did become sharers. During the twenty years the total number
of tenants increased from 134,000 to 206,000—or 53 per cent—an increase that resulted in a record for the number of tenants in the state. Most significant was the fact that half these tenants had once been wage hands—a fact that verifies the insistence on sharing.

Although a shift from wage hand to cropper status did not legally give a man more freedom, in actual practice it produced this result. Despite repeated court decisions stating that under Georgia law a cropper was merely a wage hand paid with a share of the crop, landlords tended to supervise croppers much less than those paid by day or month. A survey in 1911 showed that 59 per cent of Georgia's tenants farmed independently of any direction from the landlord, and this figure must have included many croppers. It was quite natural for wage hands who valued freedom more than efficiency to take advantage of the labor shortage and insist on working on shares.

Another sign of advancing prosperity was seen in the statistics that showed a steady rise in farm land values. Between 1900 and 1910 the average acre of farm land in Georgia rose in value 161 per cent. Again chamber of commerce and real estate agents issued circulars and pamphlets describing the glories of Georgia. One pamphlet issued in 1911 by Edwin P. Ansley of Atlanta describes Georgia as a "sunny land of promise, profits, and opportunity" and it lists "100 tracts of land at low prices and easy terms that offer unequalled advantages to the home seeker, small investor, and capitalist." But it was during the three years of 1918-20 that a veritable land boom occurred. Thousands of tenants found themselves able at last to satisfy their yearning to buy their own land. Business and professional men in country towns bought farms as investments or for speculative reselling, thereby making it possible for many a land-poor planter to sell even comparatively unproductive land at high prices. In those three years the value of even poor land ran from $20 to $30 per acre while good plow land jumped from $40 to $63 per acre. Or to put it another way, during the first two decades of the new century the per-acre average value of Georgia's farm land and buildings increased more than six-fold—from $6.95 per acre in 1900, to $44.74 per acre in 1920—a phenomenal rise in values for any period and a development unheard of during the half century before 1900.
There were also other signs of prosperity. In a survey made in 1911 nearly every planter questioned in the Wiregrass Plain declared his tenants were making money—even enough to save some. On one plantation, five out of six tenants each cleared $250 in 1910—a feat performed only rarely before the turn of the century. In that area 21 per cent of the Negro farmers had become landowners. Surveys in Sumter County also showed that in the five years of 1913-18 the average farmer's return for his labor leaped from $471 to $1,817 annually, not including such things as a house, fuel, garden stuff, milk, eggs, butter, etc.

Certainly many of the statistics indicate phenomenal gains during the two decades. The total value of all the state's farm land and buildings increased six-fold—from $183,000,000 in 1900 to $1,138,000,000 in 1920. The value of all farm implements and machinery increased similarly, from less than $10,000,000 in 1900 to more than $63,000,000 by 1920. The total value of farm production increased from $104,000,000 in 1900 to $638,000,000 in 1919. At the same time the value of production per agricultural worker multiplied five times from $199 in 1900 to $1,060 in 1920.

But phenomenal as these gains were, many a Georgia farmer remained convinced that his prosperity was much less than that being enjoyed by his urban neighbors. He was convinced that big business was feathering its own nest in ways impossible to farmers—by fixing prices above the cost of production, organizing monopolies, and getting vast protection from the government. During World War I when farmers were called "profiteers," President Soule of the Agricultural College lashed back at the accusers, declaring that the farmer wanted only justice and intended to get it. The "worm has turned," he insisted, and "those who have danced so long and lived in luxury at the expense of the farmer must make up their minds to pay the fiddler in the future." The Department of Agriculture in Washington verified the fact that throughout the period the farmer had remained at a disadvantage, and that his purchasing power had not increased as much as that of his urban neighbor.

R. M. Harper, a careful student of Georgia agriculture during the period, actually scoffed at the idea that the Georgia farmer had made great advances. He insisted that the value of the dollar had declined to about 33 cents during the period and the Georgia
farmer was still living from hand to mouth as he had during the latter half of the nineteenth century, and certainly the average white farmer was poorer than in ante-bellum times. This indictment was too severe. But the fact that all was not a golden glow was verified by a survey of 534 Georgia farms which showed that 44 per cent of them operated at a loss during the great “boom” year of 1919.

Comparisons with other sections of the nation still made Georgia and the South look anything but prosperous, and Northern magazines continued to publish articles describing the poverty of the South's cotton growers. The monthly wage of $30 a month which field hands achieved during and after the war was still only half the $60 and more a month being paid in the corn belt of the Middle West.

In one respect Georgia and the cotton South were still handicapped—they could not mechanize. Since even the genius of America had failed to produce a mechanical cotton picker, cotton growers were obliged to maintain numerous laborers to do the picking, and with such a labor force to keep up, the use of mechanical equipment was impractical. Some mechanization occurred, of course, and in 1913 President Soule of the Agricultural College asserted that the “bull tongue or scooter . . . is giving way rapidly and certainly to the power driven tractor . . . .” But this was really wishful thinking. When the Census Bureau first counted tractors in 1920 they found only 2,083 on all Georgia's 310,000 farms. No doubt many a tractor served more than one farm, particularly on plantations that were cut into cropper holdings. But there was still no real reason for believing the one-horse plow was on the way out.

In this respect the Georgia farmer was far outstripped even by his cotton-raising brother in the West. While virtually all the farmers in Georgia continued plowing and cultivating with one horse, 85-95 per cent of the cotton farmers in Texas, Oklahoma, and Missouri were using two-horse equipment, and while 95 per cent of the Georgians continued walking, 68-76 per cent of the farmers in the West were riding.

The trouble was that the cotton South was caught in an impasse—the lack of a mechanical picker—and this prevented both the mechanization and the progress achieved elsewhere.
Also, virtually all the evils that had developed within the tenant system continued to exist, and some of them got worse. The prone-ness of tenants to move frequently continued to prevail, with its consequent abuse of the soil, neglect of buildings and fences, and lack of interest in planting fruit trees and doing other things that long tenure would have made worthwhile. The 1910 Census revealed that the average tenant had been on the same farm only three years, whereas owner-operators had “stayed put” eleven years. But as is so often the case with averages, the situation was worse than that; 96,000 Georgia tenants—about one-third of the farmers in the state—had actually been on their farms only one year or less. Another 52,700 had operated the same farm less than four years; and in 1920 the census showed the situation had not changed. Thus many permanent improvements were handicapped.

In two respects the situation got worse: (1) supervision declined; and (2) the pressure of population on the land increased.

The credit system had already obliged many landlords to transfer control over tenants to merchants, and the merchants generally exercised less supervision than had the landlords. The urbanization movement which caused Georgia's cities to grow by 55 per cent during 1900-10 and by 35 per cent during 1910-20 also promoted absenteeism and consequently less supervision than was provided by landlords living on the farm.

A few merchants and absentee landlords worked out satisfactory systems for supervising their tenants and wage hands. Dr. R. P. Brooks described a huge black-belt plantation of 22,000 acres operated in 1910 with industrial efficiency. It was divided into eight or ten manageable farms on each of which there was a resident manager, and two “riders” who spent all their time in the saddle and reported to the town office on the progress of the work, the condition of the crops, and so on. Dr. Brooks noted also that the advent of the automobile was making it possible for absentee owners and merchants to run out to see their croppers much more often than formerly. But most landlords were lax about supervision, and a survey of 1911 showed that 59 per cent of all tenants received no direction at all from the landlord. Even merchants often merely insisted that their debtors plant as much cotton as possible and trusted to Mother Nature to do the rest. Since managerial talent is relatively rare in any society, this decline in supervision
probably caused many farmers to do a poorer job of producing than they would have done with closer direction. Another reason for low production was that, despite the steady decline of illiteracy, 17 per cent or 272,000 of Georgia’s 2,000,000 rural people were still illiterate as late as 1920, and many thousands of others had received only two or three years of schooling.

But the efficiency of Georgia farming was improving, if slowly. The steady increases in per-acre yields in some of the most important crops indicated that the vast educational program that had been going on since the 1870’s was having some effect. However, it is quite likely that the increase in tenancy and the insistence by sharecroppers on freedom to farm as they pleased caused progress to be less than it might have been had supervision been stricter.

The second unfavorable situation was the increasing pressure of population on the land. During the years 1900-20 the number of acres of farm land on which each farm person was dependent for a living dropped from 19 to 15 — a continuation of a trend noticeable throughout the years after the Civil War. By 1910 the low point of 15 acres per person was reached and this was only half the amount of land available per person in 1860.

This development was accompanied by the further breakup of larger farms into smaller units, largely tenant holdings. Although no more land was put into farms during the period (except temporarily during 1900-10) the number of farms increased from 224,000 in 1900 to a record 310,000 in 1920 — an increase of 86,000 farms that must have been cut largely out of older ones. This resulted in a decrease in the size of the average farm from 117 acres to a record low of 82 acres.

Much of this change probably was meaningless, indicating nothing more than the fact that the Census Bureau counted every tenant’s holding as a separate farm. Many a farm actually remained the same size and when subdivided for croppers it continued operating as a whole as if nothing had changed except the manner of paying wages. Advocates of intensive farming argued also that no matter how one figured it, the development was not bad. They believed that the European system of intensive farming could be applied in Georgia; a good living could be achieved with a few well-operated acres, and the day of the large landowner was passing.

But, since Georgia’s farmers refused to turn to intensive culti-
vation and since the number of acres available per person had dropped to fifteen, it is impossible to escape the conclusion that most of Georgia’s farms were too small to produce a prosperous living for their occupants. Under the tenant system the usual practice was to determine the size of the farm according to the amount of cotton the family could pick. The typical tenant cotton farm approximated 30 to 50 acres, about half of which was planted in cotton. In 1920 more than half of all the farms in the state, or 161,000, were under 50 acres. These farms cultivated an average of about 21 or 22 acres — and this certainly was not enough to produce more than a meager living. A study made in 1913 estimated that 22½ acres were needed for food and feed alone if an adequate live-at-home program were followed; and that left very little room for commercial crops. It was the commercial crop that was given first priority on the land and the result was that on most farms a live-at-home program could not have been made adequate even had there been the will to do so.

Some of these matters plagued rural dwellers in all parts of the nation and there were many people in both town and country anxious to do something to improve the quality of rural life. This feeling produced President Theodore Roosevelt’s Country Life Movement which flourished until shunted aside by World War I. It also produced a notable awareness of rural life problems in the Wilson administration of 1913-21.

There is great room for debate as to whether the quality of rural life improved much in Georgia during the years 1900-20. On the bright side, Rural Free Delivery of the mails was developed; the percentage of farms with farm gardens increased from 49 per cent in 1900 to 78 per cent in 1920; by the time the 1920 census was taken 47,000 of Georgia’s farms had autos and 31,000 of them had telephones. In his Georgia: Unfinished State, Hal Steed has given in sharecropper language what is probably a typical description of the well-being of Georgia’s tenant and cropper farmer during the war and post-war boom. He tells of one of his cropper friends who declared that “we was all livin’ in clover. White and black alike had money to burn. They bought black wa’nut furnitoor, p’ono- graphs and forty-dollar carpets for their shacks, and spo’ted silk shirts and gold teeth. You’d see black niggers walkin’ along the road in ten-dollar red-silk shirts and fifteen dollar patent leather
shoes, smokin' ten cent seegars. Niggers, by God! You never see sech doods."³⁹

But this wartime boom was not to last; and while "wa'nut furni­
toor, p'onographs and forty-dollar carpets" might have been per­
manent capital investments, the silk shirts, patent leather shoes, and cigars were perishables that disappeared in 1920. Unquestion­
ably, this prosperity lacked a great deal of providing Georgia's
farmers with the permanent improvements, luxuries, and conven­
iences available to people in the cities. Most rural houses remained
unpainted, unsightly dwellings with only dirt roads leading to
them. Despite the advent of the auto, 85 per cent of the farm
people continued to depend on wagons and buggies or their own
two feet for transportation. Ninety-eight per cent of them still used
oil lamps and drew their water from a well by hand, and 70 per
cent of them remained without telephones. In many respects the
prosperity of 1900-20 did not make life much easier for many
people.

1920-1933

The Georgia farmer's days of prosperity were numbered, com­
ing to an abrupt end during the summer of 1920 when there be­
gan two decades during which the farmers experienced the same
economic misery their fathers had known so well before the turn
of the century.

During the years 1920-33 Georgia's farmers were hit triple blows,
and before they were able to recover from one blow, the next one
was upon them. In 1920 agricultural prices dropped precipitately
throughout the nation, spreading consternation and havoc on
farms and in small towns everywhere. The panic was only tem­
porary for many farm areas, but before the farmers of Georgia
could recover, the boll weevil was upon them, destroying acre
upon acre of cotton, reducing literally thousands of rural families
to hunger and destitution, and driving supply merchants and bank­
ers into bankruptcy. Some recovery from this was achieved during
the late twenties; but before it was completed, the Wall Street
crash of 1929 and its subsequent lean years hit the Georgia farmer
a third blow; and from that he did not recover entirely until he
reached the prosperous years of World War II.

The 1920 collapse of farm prices was in itself disastrous to many
farmers. Although the cost of producing cotton in 1920 was as high as in 1919, they found themselves able to get only 16¢ a pound rather than the 35¢ a pound received for their crop the year before—a drop of more than 50 per cent. Cottonseed dropped from $70 a ton in 1919 to $31 a ton in 1920; sweet potato prices declined from $1.06 a bushel to 76¢ a bushel; and corn dropped even more—from $1.07 to 66¢ a bushel. Farmers who had recently begun planting peanuts saw the price decline two years in a row—from 9.8¢ a pound in 1919 to 5.1¢ in 1920, and then to a record low of 2.8¢ in 1921. Tobacco waited a year to drop, but drop it did finally, from 25¢ a pound in 1920 to 16¢ in 1921. And so it went with virtually everything the Georgia farmer produced.

Yet his expenses stayed up and actually rose 11 points during 1920 over the fabulous high they had already reached in 1919. The mule the Georgia farmer bought to make his 1920 crop, for example, cost him about $17 more than he had paid the year before.

These developments were a calamity in themselves, but the worst was yet to come. During the three ensuing years, 1921-23, the boll weevil plague was at its worst. The per-acre yield in those years was 30 per cent to 45 per cent below normal, the state's usual crop of 1,500,000 to 2,000,000 bales dropped by 1923 to 600,000 bales; by 1925 the farm population had declined by about 375,000 and nearly 3,400,000 acres of land had been taken out of farming.

Many writers have insisted that the boll weevil was "only the straw that broke the camel's back"; that the evils of soil erosion, the one-crop economy, the constant moving of tenants, and so on would have eventually punctured Georgia's bubble of prosperity even if the boll weevil had never come. But whatever the cause, the years of the plague and those immediately thereafter put an end to farming as a way of life for thousands of people. By 1922 farm wages in Georgia were down again to pre-World War I levels of $15 to $17 per month (with board). Landlords took whatever they could get as rent and some offered tenants free rent to keep them on the land. The Black Belt was particularly hard hit. By 1924, 35 counties there had reduced their harvested acreage by 40 per cent and many a landlord was selling his timber to make ends meet. Even a bumper crop of cotton in 1926 failed to restore "good times"; rather it depressed prices and the total price re-
received was several million dollars less than was received for the much smaller crop of the year before.

The result was that thousands of landlords were forced to restrict operations; credit at banks and supply firms dried up; thousands of acres of land were abandoned to erosion or wild growth; hundreds of farms were forfeited to mortgage companies or sold for taxes; hundreds of unfortunate landowners who lost their land were forced to become tenants, and thousands of farm families,

**Number of Farms in Georgia, 1850-1950.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>51,759</td>
</tr>
<tr>
<td>1860</td>
<td>62,003</td>
</tr>
<tr>
<td>1870</td>
<td>69,969</td>
</tr>
<tr>
<td>1880</td>
<td>138,626</td>
</tr>
<tr>
<td>1890</td>
<td>171,071</td>
</tr>
<tr>
<td>1900</td>
<td>224,691</td>
</tr>
<tr>
<td>1910</td>
<td>291,027</td>
</tr>
<tr>
<td>1920</td>
<td>310,732</td>
</tr>
<tr>
<td>1930</td>
<td>255,598</td>
</tr>
<tr>
<td>1940</td>
<td>216,033</td>
</tr>
<tr>
<td>1950</td>
<td>198,141</td>
</tr>
</tbody>
</table>

Source: U. S. Census.

particularly Negro families, were pushed off the land entirely and driven into the labor market of the cities.

The exodus of the tenants from the farms of Georgia during the decade was a tragic drama. Fortunately for the migrants, a labor shortage prevailed in the cities when the boll weevil struck and farm hands going there were able to get jobs as common laborers at a wage of $5 a day. Northern agents appeared in the state promising farm hands an attractive life in Chicago, Pittsburgh, and elsewhere, and Negroes left by the trainload for those Eldorados
despite the efforts of local sheriffs to stop them. President Soule of the State Agricultural College estimated that 100,000 farm people left Georgia in the first six months of 1922, and a survey by county agents showed that 11,000 farms had been abandoned. By 1925 there were 61,000 fewer farms and 375,000 fewer farm people in the state.

After 1925 the exodus to the city slowed down considerably. By

**Number of Workers in Georgia Agriculture, 1870-1950.**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER</th>
<th>PERCENTAGE OF ALL WORKERS IN AGRICULTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>336,145</td>
<td>72.5%</td>
</tr>
<tr>
<td>1880</td>
<td>432,204</td>
<td>64.6</td>
</tr>
<tr>
<td>1890</td>
<td>461,222</td>
<td>60.0</td>
</tr>
<tr>
<td>1900</td>
<td>522,848</td>
<td>60.0</td>
</tr>
<tr>
<td>1910</td>
<td>734,366</td>
<td>63.3</td>
</tr>
<tr>
<td>1920</td>
<td>601,827</td>
<td>53.3</td>
</tr>
<tr>
<td>1930</td>
<td>497,716</td>
<td>42.8</td>
</tr>
<tr>
<td>1940</td>
<td>375,543</td>
<td>33.9</td>
</tr>
<tr>
<td>1950</td>
<td>327,698</td>
<td>25.2</td>
</tr>
</tbody>
</table>

that time the labor shortage of the cities had become saturated and many a migrant found himself able to get only irregular work at low pay. Some migrants were cared for temporarily by welfare agencies, but many a sad tale was told also of fathers who had deserted and of children who had run away in the hope of finding life easier without the burden of family ties. By 1925, moreover, the boll weevil scourge was subsiding and the need to leave the land declined with it. The exodus had not only slowed down but there was even a slight movement back to the land. By 1930 the farm population recovered by 100,000 persons. Nevertheless, the census of 1930 showed that 55,000 farms, 3,400,000 acres of farm land, and 266,000 people had disappeared permanently during the decade from Georgia's agricultural establishment.
However, the worst was yet to come. The Great Depression that began with the Wall Street crash in 1929 not only wiped out what slight recovery had been achieved during the late 'twenties but also it plunged the Georgia farmer into a poverty as bad as and perhaps worse than that caused by the boll weevil. Within three years the prices received for Georgia farm products dropped 60 per cent. The price of cotton declined 64 per cent—down to 5¢ a pound for the first time in the new century. The gross income for each farm person in the state dropped from $206 in 1929 to a meager $83 in 1932, and in the next spring many a farmer found himself too poor to buy a mule to make a crop. Thousands of impoverished small owners and tenants sank to the status of sharecroppers, and oxen began to appear in the fields in place of the more expensive mule. On many a farm, production came to a complete standstill for lack of cash or credit to buy seed, fertilizer, work stock, and tools. In some places not even food was being raised and the Red Cross was called in to provide food and clothing to prevent starvation and nakedness—a development that landlords feared might influence their croppers to "never work again." Fifty cents a day or $8 to $10 a month became the prevailing wage for hired farm laborers—and thousands could get no work at all. Cash almost disappeared from the state's agricultural economy and barter became a common practice. In 1932 per capita cash farm income in the state was down to forty-six dollars and thousands of families saw far less than $100 cash during the entire year.

Meanwhile the spread between the prices of farm produce and urban commodities got wider. During the years 1929-32, when the prices received for Georgia's agricultural produce dropped 60 per cent, the prices farmers paid for city-made goods dropped 24 per cent.

Land values sank with everything else after 1920. The value of farm real estate in Georgia was already low because of the setback suffered in the early 'twenties. During 1920-25 the value of the state's farm real estate had declined 40 per cent—a drop exceeded by only three other states in the nation. In areas hard hit by the boll weevil land had become almost worthless. One plantation in Greene County that had sold for $52,000 in 1919 was resold in 1928 for slightly more than $8,000; land in the Black Belt that
had sold in 1919 for $150 an acre was available after the boll-
weevil plague at $35 an acre; and farms that were located off the
roads dropped in value in some cases from $25 to $2 per acre. 39
During the late 'twenties values held steady at an average of about
$26 per acre for the state as a whole. But the year after the crash
of 1929 saw land values drop again — from $26 in 1930 to $17 per
acre in 1935. Thus in fifteen years the value of an acre of Georgia's
farm real estate declined nearly two-thirds, and many a happy
speculator of 1918-20 became a long-faced, land-poor, impover­
ished investor. An epidemic of foreclosures, sheriffs' sales, and bank
and merchant failures spread over the state. Here was a repetition
of the financial disaster that had accompanied the boll weevil a
mere decade earlier and it occurred before any appreciable recov­
ery had been achieved from the first disaster.

**THE NEW DEAL**

Although the Democratic administration in the spring of 1933
acted boldly to rescue the American farmer from his despair, the
New Deal Brain Trust did not come into office with any magic
formula to solve the problem. Until that time the prevailing
American philosophy had been that it was not within the province
of government to render more than slight assistance to the econ­
omy and the whole idea of controlling production and marketing
was, in the words of the Republican Secretary of Agriculture of
1932, "Repugnant to our Constitution and . . . our economic sys­
tem." 40 Such a great demand for drastic federal action developed,
however, that New Dealers were compelled to improvise some­
thing, even if it were no more than a temporary panacea.

The New Dealers plunged into the problem with zeal, develop­
ing one emergency solution after another; and then promoting
for the "long haul" the greatest program of research into the prob­
lems of agriculture and rural life ever performed anywhere on
the earth. Educational foundations, state extension services, col­
leges, experiment stations, and civic organizations joined the na­
tional government in these inquiries; and rural sociologists and
agricultural economists probed into every conceivable aspect of
rural life and labor.

In due time the New Dealers concluded that the depression in
American agriculture was due to accumulated evils, many of which
had become especially accentuated after the Civil War. They were
(1) land speculation which had pushed the price of American land
above the resources of many farmers and had produced tenancy
and all its accompanying evils; (2) the closing of the frontier and
the filling up of all plowable areas; (3) technological improve­
ments in farming which reduced the need for farm labor and
pushed thousands of people from the land; (4) a poor tenure sys­
tem with insecure verbal leases, constant moving, high-cost credit,
neglect of the soil, etc.; (5) under-employment on the land because
of the fact that farming is a seasonal occupation and, therefore,
only a part-time occupation; (6) over-population on the land be­
cause of the high rural birth rate; (7) single cropping for cash;
(8) soil erosion; (9) low prices received for farm produce resulting
in part from the world economic situation but resulting in part
also from the inability of unorganized farmers to control prices as
urban industry can do; and (10) natural catastrophes. 41

In due time also, the improvised measures used by the New
Dealers to overcome these forces evolved into a five-pronged pro­
gram that was still operating at the end of this study in 1950. This
included (1) a system of production and marketing controls ac­
companied by subsidies and price supports designed to guarantee
the farmer a fair return for his production; (2) greatly expanded
credit facilities; (3) a soil conservation program; (4) a rehabilita­
tion program to put depressed farmers back on their feet, reduce
tenancy, improve rural health, and restore dignity to the pursuit
of agriculture; and (5) a program to make rural life easier and
more attractive by bringing to the farm such urban facilities as
electricity and modern appliances.

The programs concerned with production and marketing con­
trols, credit facilities, and soil conservation have already been dis­
cussed elsewhere in this study. Suffice it to say here that while ob­
servers still debate the effectiveness of these programs in lifting
agriculture out of the depression, there is no doubt that they be­
gan a revolution in Georgia agriculture that in 1950 showed no
signs of being completed, nor any signs of slowing down.

It was soon discovered that these programs were, on the whole,
more helpful to "the top third of the farmers" than they were to
the "lower two-thirds" who made up the vast bulk of the agricul­
tural population. The small landowners, tenants, sharecroppers,
wage hands, and migrant workers who composed the majority of the farm population received only indirect benefits and, in some cases, were actually harmed by these programs. The AAA program, for example, that caused land to be withdrawn from such soil depleting crops as cotton, lessened the need for tenants and croppers and drove many of them off the land. The benefit payments program also sometimes made it advantageous for landowners to demote their croppers to wage hands.\textsuperscript{42} Croppers and tenants were still either destitute or at the mercy of landlords and merchants for credit; rural housing for all but owners remained on a slum level; the small owner still lacked the funds to do many of the things the soil conservation experts suggested; and despite a rise in prices, the little one-horse farmer who produced only small quantities of produce was still poor. In other words, the three programs mentioned above largely helped the commercial farmers who produced substantial produce for market. These programs had been their “brain-children” and it was they also who dominated the county, state, and national committees which guided the programs. Whatever benefits the “lower two-thirds” received were indirect benefits of a relatively meager sort. Thus a supplementary program was needed to rehabilitate the “lower two-thirds.”

During the first hectic months of the New Deal direct relief was the only aid made available directly to needy farmers. It was soon decided that a more constructive program was needed. Idle land was abundant and the farmers on the relief rolls were anxious to farm. In Georgia there were 35,000 stranded tenant farmers trying to find places, but neither landlords nor tenants had funds to begin operations.\textsuperscript{43} Complaints that people on relief would not again be willing to work in the fields also led the federal government to agree that relief was not the answer to the problem.

During 1934, therefore, the Georgia Rehabilitation Corporation was created with funds from the Federal Emergency Relief Administration. This first rehabilitation program consisted of loans to farm families to enable them to buy livestock, feed, and supplies. The loans were for three to five years; they could be repaid in cash, in kind, or in work on public works projects; and the borrowers had to operate on a farm-and-home management plan approved and supervised by the Rehabilitation Corporation. A live-at-home program and a soil conservation program were requi-
sites for each borrower. Within a year 14,000 Georgia families had received loans under this program.44

It was soon discovered, however, that the problem of rehabilitation was bigger and more complicated than anyone had anticipated, and that the program was too small. Some of the farmers who received help were on land too poor to produce an adequate living. More than 32,000 farmers in Georgia, three-fourths of them white, were still on relief and thousands of others were still being supported by work on WPA projects.

The result was that in 1935 the federal government created the Resettlement Administration and took complete charge of the problem. The Resettlement Administration bought up vast quantities of sub-marginal land and turned it into pastures, forests, game preserves, and parks. The people removed from the land were employed temporarily on WPA projects and then resettled on usable land. This agency also continued the development of community farming projects that had been begun by the WPA. In Georgia four such projects had been started in Putnam, Irwin, Grady, and Jasper counties, which eventually were to accommodate 300 farm families, each in possession of their own well-equipped, family-size farm. The new agency also continued and expanded the rehabilitation program already begun.

In addition to advancing credit and giving its borrowers training in sound farming and home management methods, the Resettlement Administration also made loans to groups of farmers for such community needs as a combine, a pure-bred sire, spraying equipment, etc. Since many borrowers were overburdened with debt which needed to be reduced before rehabilitation could take place, the agency also helped its borrowers get their old debts adjusted. Within a year 12,000 Georgia families were operating under this program with loans that averaged about $300 each, and several thousand others had received grants to help them over an emergency situation.45

But the new program was still inadequate. The result was that in 1936 President Roosevelt appointed a Committee on Tenancy, which in its report a year later dramatized the desperate plight of many American farmers. “The extreme poverty,” said the report, “of one-fifth to one-fourth of the farm population reflected itself in a standard of living below any level of decency.”
This report produced a third reorganization. In 1937 the Bankhead-Jones Tenant Purchase Act was passed, and the Farm Security Administration was created to replace the Resettlement Administration. The FSA was given the double task of continuing the rural rehabilitation program as well as handling the new program whereby tenants, sharecroppers, and farm laborers could borrow money for 40 years at 3 per cent interest to buy farms of their own.

During its ten years of life (1937-46) the Farm Security Administration was a busy agency. It continued to make standard rehabilitation loans, emergency rehabilitation loans, community service loans, to assist with debt adjustment, and to make relief grants. It also continued operating the idealistic homestead projects started in the early days of the New Deal, and to maintain camps for migrant farm workers. By that time also loans had been inaugurated whereby FSA borrowers in a county could organize group insurance co-operatives to pay for medical care. FSA helped tenants who borrowed from it to develop and carry out sound farm-and-home management plans. It also helped its tenants secure written tenure contracts. The FSA also worked to develop low cost farm homes and buildings to fit low income farmers; and it endeavored to persuade farmers to screen their houses, build sanitary privies, protect their water supplies, and do other things conducive to good health and a more productive farm. Like the AAA, it co-operated with the Soil Conservation Service and other agencies, and had a multitude of local and state committees to guide and advise its programs and agents.

Although these programs were never big enough to meet the demands made upon them, their record of achievement was significant. Most impressive of all the efforts was that of rehabilitation. During 1934-41, nearly 54,000 Georgia families received rehabilitation loans or grants totaling more than $28,000,000; and by 1946, when FSA was abolished, the rehabilitation loans made in Georgia amounted to $41,000,000 — 76 per cent of which had been repaid. By 1946, also, emergency crop and feed loans had been made in Georgia amounting to $40,000,000 — and by 1950, 94 per cent of this had been repaid. Impressive also is the fact that by 1941 more than 82,000 farm people were covered by the group medical insurance programs that had been organized in 121 Georgia counties. By then, also, more than 34,000 people were included
in similar programs for dental care in 54 counties. But in a state which in 1940 had 216,000 farms, nearly 130,000 tenants, and over 1,300,000 farm people, much remained to be done.

The tenant purchase program got off to a slow start. During its first three years (1937-40), 30,000 tenant purchase applications were filed in the 99 Georgia counties approved for loans—but only 1,187 loans were actually granted; and while the nearly $17,000,000 loaned by 1946 sounds impressive, it was enough to cover the purchase of probably fewer than 4,000 farms.\textsuperscript{48}

Not all observers agreed with the prevailing view of the 'thirties that tenancy was an inherently evil institution. As early as 1923 the United States Department of Agriculture pointed out that the alarm over the increase in tenancy in America was unwarranted. While tenancy was rare in pioneering countries, it was a natural development in mature nations where the land had been filled up, said the department—and the United States had simply filled up. Tenancy was not so undesirable as many people supposed, the department reported, noting that some of the most prosperous agricultural states in the nation had a high degree of tenancy. In both Iowa and Illinois, for example, more than 40 per cent of all the farms were operated by tenants; and in the state of Washington 50 per cent or more of the land was operated by tenants.\textsuperscript{49} The department also argued that a man with limited capital could do better as a tenant than as an owner. Land had become so expensive and gave such a small return that it was better for a small operator to put his capital into equipment and operations rather than into land.\textsuperscript{50} Studies made in Newton and Terrell counties in Georgia in 1936-37 verified these arguments. Those surveys showed that many of the "crimes" charged to tenancy (neglect of soil, buildings, fruit trees, etc.) were committed by owners as well as by tenants and that many tenants and sharecroppers had higher incomes than some of their neighbors who owned their own small farms.\textsuperscript{51} These factors contributed to the national government's unwillingness to make an all-out effort to abolish tenancy.

Meanwhile the community resettlement projects had more or less proved themselves to be failures, and as early as 1937 the FSA proceeded to liquidate them through sales of the individual farms to private owners—preferably to their current occupants who thereby were aided in the purchase of their own family-type farm.
The relative prosperity achieved by American farmers during World War II produced a decline in interest in the problems of rehabilitation and tenancy, with the result that in 1946 Congress reorganized the program. This time a Farmers Home Administration was created to take over the work of both the Farm Security Administration and the emergency feed and crop loan program. The FHA continued practically all the rehabilitation program—but without calling it rehabilitation. The old standard rehabilitation loans became operating loans or production and subsistence loans, and more than $12,000,000 was loaned in Georgia under this label during 1946-50. In 1947 FHA began making what it called adjustment loans to help farmers shift into an all-year farming program, reduce the need for seasonal borrowing, and—as usual—strengthen the family-type farm. The Bankhead tenant purchase program was continued, with veterans of World War II given preference—531 of whom in Georgia had secured loans amounting to nearly $3,000,000 by 1950. Since federal funds had never been sufficient to meet the needs of all those who applied to buy farms, the 1946 act authorized the insuring of loans from private sources. The first such guaranteed farm purchase loan in the nation was made in Sumter County, Georgia, in 1947; and by 1950, 225 such loans totaling more than $1,000,000 had been made in the state. Throughout all these years and in all these programs, however, it was still the "lower two-thirds" of the farm population who were helped, loans being made only to those who were not able to borrow elsewhere and being limited to the development of the family-type farm.

Meanwhile the program to make rural life easier and more attractive by bringing to the farm electricity and modern appliances was being developed. In 1935 the Federal Rural Electrification Administration was created, and a year later Congressional authorization was given the REA to lend money to co-operatives and other agencies who were willing to construct and operate power lines and plants for rural consumers, and to finance the wiring of rural buildings and the purchase of appliances. Georgia, which at that time had electricity on only about 7,400 of its 250,000 farms, took to the new program quickly and by 1950 was able to show the best record of rural electrification in the South and one of the best in the nation. Within 15 years Georgia had established 43 REA co-
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operands, built more than 52,000 miles of lines, and electrified practically all the farms in the state.52 The 1950 census showed also that Georgia's farmers were putting this electricity to work. Nearly 53,000 of the state's 198,000 farms were reported to own electric water pumps, more than 62,000 had washing machines, more than 24,000 had water heaters, more than 14,000 had electric chicken brooders, and more than 11,000 had home freezers. While the majority of farmers still had apparently nothing more than electric lights, it was plain that labor saving devices and conveniences of modern civilization were changing the life and habits of a huge proportion of Georgia's farm people. In 1949, the Rural Electrification Administration was authorized to begin a similar program to put telephones into rural homes — and since only 18,600 of Georgia's farm homes had phones in 1950, the prospects for development looked excellent.

The effectiveness of the New Deal programs designed to lift agriculture out of depression is still being debated. Unquestionably there were many other forces at work besides those inaugurated by the Roosevelt administration, and the proportion of credit that should be given here or there for recovery can not as yet be settled accurately.

Nevertheless, from 1933 on, farmers' incomes and land values rose perceptibly. The per capita gross income of Georgia's farm people rose from its low of $83 in 1933 to $183 in 1941. The average value of an acre of farm real estate rose also from about $17 in 1935 to $20 in 1940. Even when allowances are made for price changes, the per capita gross income of the farmer rose 42 points during the first eight years of the New Deal. And for all this the Democratic administration naturally took credit.

Regarding the rehabilitation and tenant purchase program there is less room for argument. While all the experiments were not successful, there is little doubt but that the effort as a whole was constructive and sufficiently forward looking to become a permanent function of the federal government. And regarding REA there is practically no room for argument at all. Its beneficial effects are self evident.

World War II and Its Aftermath

World War II and its aftermath of recurrent international
crises unleashed social and economic forces that made the efforts of the New Deal look feeble. Even if we give the New Deal the maximum of credit for rescuing the Georgia farmer from his pitiable poverty of 1932, it must still be admitted that during 1938 and 1939 his income actually began to slump again.

With the opening of World War II, however, prosperity seemed to leap suddenly out of the earth. During 1940, farm income started up again; and from then on it figuratively soared, the gross farm income for the state as a whole rising from $232 million in 1940 to $499 million in 1945 and to $650 million in 1950.

A shortage of labor, equipment, and supplies accompanied this "boom," as would be expected during a war; and often a farmer was obliged to abandon a field or part of a crop through lack of labor or equipment to work it. During the war, in fact, the number of acres harvested in Georgia declined by about one million because of the loss of labor to the military services, defense industries, and better paying jobs in the cities, because of shortages of equipment, fertilizer, and so on. Production costs also soared. Wages for hired labor rose from about 70¢ (per day with board) in 1940 to almost $2.50 in 1945. The cost of producing a pound of cotton doubled from 10¢ to 20¢ during those five years.

Despite these difficulties Georgia's farmers joined the "Food for Victory" campaign, even resorting to the use of brigades of school children and "city slickers" to harvest the crops. The farmers produced abundantly and subjugated cotton still further—reducing plantings another 700,000 acres and concentrating on foods, as requested by the government.

Once the war was over the "boom" seemed to leap to a higher plane as if injected with fresh energy. Gradually the labor shortage eased; equipment, fertilizers, and other supplies became available; and the Georgia farmer then moved into the greatest era of production the state had ever known, with yields per acre and productivity per farm person and per worker breaking all records.

The major effect of the war was that it gave a tremendous push—a push of seemingly hurricane force—to trends that had been noticeable for many years.

The mechanization of Georgia's farms had been going on, for example, for many years—but at a snail's pace. The chief obstacle had been that the Georgia farmer was in the clutches of a one-
crop economy without a mechanical cotton picker usable in that economy. Georgia's small, irregular fields militated against the use of new farming machinery, most of which was then large and cumbersome. A survey of 20 farms in 20 counties about 1930 showed that the average field in Georgia consisted of only 5.6 acres. The Georgia farm was still a one-horse farm in every sense of the word. Only on the larger plantations was machinery used to any appreciable extent and then it was possible largely because the landlord had orchards, vegetables, grain, and other crops to work in addition to cotton. The smaller farmers owned only cotton planters, fertilizer distributors, plows, hoes, and other such small equipment. By the 'thirties a few combines were seen in Georgia and, where tractors were available, disc tillers came into use. The 1930 census shows that with a meager $139 worth of implements and machinery per farm (as compared to more than $1,000 worth in 15 states), Georgia's farms were among the least mechanized in the nation.

As the years went by some mechanization occurred. By 1940 there were 8,200 farms in Georgia with tractors. During the 'forties that number multiplied six-fold so that by 1950 there were more than 48,000 farms with tractors, and on some farms there was more than one—with a total of 61,000 tractors in the state. By that time, too, there were 8,500 combines as well as a miscellany of other equipment in larger numbers than ever before. What had happened was that relatively small pieces of machinery had been developed suitable for Georgia's small fields; the shift from cotton to diversified agriculture had made the use of machinery economically feasible, and the wartime boom had provided farmers with money to buy equipment.

The war was also responsible for stepping up the pace of diversification, soil conservation, rural electrification, the development of marketing facilities, and so on.

The war's effect on the farm labor supply was momentous. Rural poverty, the attraction of better life in the city, and the ever lessening need for hand labor on Georgia's farms because of the shift away from cotton and the adoption of more machinery had all been conspiring to reduce Georgia's farm population ever since 1920. During the 'twenties the decline amounted to 266,000 people and during the 'thirties it amounted to another 50,000.
During the war decade of the 'forties that trend was stepped up and the greatest exodus from Georgia's farms ever known took place. In that decade there was a drop in farm population of 403,000, leaving the state with less than a million people living on its farms—about the same number that had been living there in 1870. Certainly the old problem of over-population on Georgia's farms was being solved—and quickly.

This meant, of course, that not only the number of people living but also the number of people working on Georgia's farms declined. Here again the trend had been steady for many years (since 1910); and while the decline was not as great during the war years as it had been during the 'twenties and 'thirties, about 50,000 workers left the fields during the 'forties. When the census was taken in 1950 it was found that the number of people engaged in Georgia agriculture had declined from its peak of 734,000 in 1910 to less than half that number (327,000) in 1950. By 1950, the agricultural labor force in Georgia had dwindled back to about where it had been a century before.

The fact that the great majority of these people who left the farms were tenants showed that the war continued the trend begun by the boll weevil, the AAA, and the tractor. During the war-time labor shortage when Negro wage hands were able to wrest a tenant status from their landlords there was some increase in cropping. But the number of tenants as a whole continued to decline until by 1950 there were only 84,800 of the 206,000 that had been in the state in 1920. As incomes had increased, some tenants had at last become able to buy their own farms. The number of owners and part-owners had been increasing, in fact, ever since 1930, but the increase of 24,000 in the 'forties was triple that of the previous decade. The 112,000 owners and part-owners in the state in 1950 made up the largest number as well as the largest proportion the state had been able to show since the first accounting of them in 1880.

Thus a variety of economic, social, and political forces were solving the old problem of tenancy—whether in a desirable way or not. For more than 25 years approximately two-thirds of Georgia's farms had been operated by tenants, but by 1950 the figure was down to 42 per cent and seemed on the way to going lower.
These developments could under no circumstances be taken to mean that the Georgia agricultural establishment was about to overcome the major difficulties that had plagued it for so long. About 1947 Kenneth Treanor of the Georgia Agricultural Extension Service pointed out in some unpublished compilations that the Georgia farmer was still beset by several handicaps. One

### Number and Per Cent of Farms in Georgia Operated by Owners and Tenants, 1880-1950.

<table>
<thead>
<tr>
<th>Year</th>
<th>Owners</th>
<th>Tenants</th>
<th>% Operated by Tenants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>76,451</td>
<td>32,175</td>
<td>44.9</td>
</tr>
<tr>
<td>1890</td>
<td>86,419</td>
<td>64,051</td>
<td>53.5</td>
</tr>
<tr>
<td>1900</td>
<td>134,560</td>
<td>90,827</td>
<td>59.9</td>
</tr>
<tr>
<td>1910</td>
<td>98,628</td>
<td>102,123</td>
<td>59.9</td>
</tr>
<tr>
<td>1920</td>
<td>206,954</td>
<td>79,802</td>
<td>54.6</td>
</tr>
<tr>
<td>1930</td>
<td>174,390</td>
<td>85,181</td>
<td>68.2</td>
</tr>
<tr>
<td>1940</td>
<td>129,850</td>
<td>112,527</td>
<td>56.1</td>
</tr>
<tr>
<td>1950</td>
<td>84,820</td>
<td>42.8</td>
<td></td>
</tr>
</tbody>
</table>

Each figure represents 5000 farm operators. Source: U. S. Census.

handicap was the low productivity of his land, which during 1930-39 produced yields of only 45 per cent of the national average in comparison with the same crops grown elsewhere.

Another handicap was the continued pressure of population on the land—a pressure not entirely abolished even by the exodus of the past thirty years. Some relief has been achieved since 1910, when there were only 15 acres of land for each farm person in the state. The exodus raised that to 26 acres by 1950. But that
was still too few acres—particularly of relatively poor soil—from which to wrest the American standard of living for one person. In most states the average farm person had more.

During the Great Depression social studies pointed out that the traditional one-horse farm of the South could no longer be accepted as of sufficient size to produce a decent living. Many farms were so small that even high production and good prices would not produce more than a meager family income. Fortunately, the exodus from Georgia's farms was helping to solve the problem and the size of the average farm increased from 82 acres in

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres of Farm Land per Farm Person in Georgia, 1850-1950.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>29</td>
</tr>
<tr>
<td>1860</td>
<td>30</td>
</tr>
<tr>
<td>1870</td>
<td>24</td>
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<td>1880</td>
<td>23</td>
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<td>1890</td>
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<td>1900</td>
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<td>15</td>
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<td>1920</td>
<td>15</td>
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<tr>
<td>1930</td>
<td>15</td>
</tr>
<tr>
<td>1940</td>
<td>17</td>
</tr>
<tr>
<td>1950</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: U. S. Census.

1920 to 130 acres in 1950. But as of 1950, 61 per cent of all the farms in the state contained less than 100 acres, and 77 per cent contained less than 140 acres—a "far cry" from the 150-300 acres many agricultural leaders agreed were needed in Georgia to produce an adequate family income.

A third handicap, Treanor declared, lay in the fact that the rate of tenancy was still too high, despite its steady decline, and the tenants' practice of moving frequently showed only a slight sign of diminishing. About half of them still moved annually and great numbers of tenant families did not develop any permanent
interest in the land they operated or in the homes and communities in which they lived.

The result of these handicaps was that in spite of the New Deal, the war, and all other stimulants, the per capita cash income of Georgia’s farm people continued below the average of the farm people in the ten cotton states, less than half the national average, and less than a third that of farm people in the 38 states outside

![Diagram of average farm size in Georgia, 1850-1950.](image)

**Average Size (in Acres) of Farms in Georgia, 1850-1950.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Size (in Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>444 A</td>
</tr>
<tr>
<td>1860</td>
<td>430</td>
</tr>
<tr>
<td>1870</td>
<td>338</td>
</tr>
<tr>
<td>1880</td>
<td>188</td>
</tr>
<tr>
<td>1890</td>
<td>147</td>
</tr>
<tr>
<td>1900</td>
<td>117</td>
</tr>
<tr>
<td>1910</td>
<td>92</td>
</tr>
<tr>
<td>1920</td>
<td>82</td>
</tr>
<tr>
<td>1930</td>
<td>86</td>
</tr>
<tr>
<td>1940</td>
<td>109</td>
</tr>
<tr>
<td>1950</td>
<td>129.9</td>
</tr>
</tbody>
</table>

Source: U. S. Census.

the Cotton South. In 1945, for example, when the per capita cash farm income for Georgia amounted to $366, people in the ten cotton states received $416, and those in the 38 remaining states received $1,102.

Treasnor concluded, however, that Georgia agriculture was making significant progress. Per-acre crop and pasture yields were increasing and population pressure on the land was diminishing.
Fewer and fewer people were producing more and more. His figures showed that between 1924 and 1946 the per capita gross farm income of the state (adjusted to 1924 prices) had increased two and a half times.

It might be thought that during the century of this study the agricultural establishment of Georgia had been humiliated. In a state wherein virtually all inhabitants were farm people 100 years before, in 1950 only 28 per cent were farm people; whereas at one time agriculture produced almost all the income of the state, in 1950 it produced directly only 11.4 per cent of it.

However, since the modern world is an industrialized world, industrialization and its accompanying urbanization are precisely what the Georgia agricultural establishment has needed. For with industrialization and urbanization came urban markets that have made dairying, truck gardening, and livestock production profitable; and with them also came mechanization, electricity, an alert interest in education and the application of science to agriculture, increased credit facilities, and many other things, such as paved roads and libraries, that are often lacking in a dominantly rural society.

As of 1950, therefore, the Georgia agricultural establishment appeared at last to be reaping the rewards of the experiences and reforms of 100 years, and it was standing on the threshold of its greatest era in history.
CHAPTER I

1. The agricultural statistics used in the following brief description of Georgia's regions are taken from compilations from the 1860 Census.

2. So. Cult., XIX (January, 1861), 36-37; Ibid., XIX (February, 1861), 68-69.

3. Benjamin Burks Kendrick and Alex M. Arnett, The South Looks at Its Past (Chapel Hill, 1935), 44.

4. So. Cult., XVIII (May, 1860), 163; Ibid., XXV (September, 1867), 278-279.

5. U. S. Census (1860); Annual Report of the U. S. Commissioner of Agriculture (1867), 416. Average monthly farm wages in the states of the nation were $14.73; in the territories of the West, $18.80. A wage of $13 in Ohio and $15 in Massachusetts shows that Southern wages were not as far behind the North in 1860 as they were in later years.


7. The U. S. Census of 1860 gave a total of 62,003 farms in Georgia and that figure has been used in most subsequent census reports. But when listing the farms according to size, the census accounted for only 53,887. Either 6,000-odd farms were lost in the statistical shuffle, or the figure of 62,003 was wrong in the first place. In his Economics of Land Tenure in Georgia, Banks used the lower figure. Yet the higher figure is accepted more often and will be used in this study.

8. Dodd, Cotton Kingdom, 30.

9. Ibid., 19, 91-93.

10. According to the U. S. Census for 1860, of the 41,084 slave owners of Georgia, 17,534 owned fewer than five slaves. In his Economics of Land Tenure in Georgia, p. 24, Banks declared there were probably only about 15,000 farms in Georgia with no slave labor.


14. U. S. Census (1860). In listing their occupation in the 1860 census, 67,718 people listed themselves as farmers while only 2,858 gave their occupation as planters. This, of course, represents more farms than existed. While it is impossible to draw any sharp distinction between "farm" and "plantation," the latter term usually refers to a fairly large holding engaged primarily in producing staples for the commercial market.

15. U. S. Census (1860). The census
showed 3,453 owners of thirty or more slaves. This corresponds with the number of farms above five hundred acres.

17. Dodd, Cotton Kingdom, 71-72.
23. The total population of the seven largest towns in Georgia, according to the U. S. Census of 1860, was 70,065. Since the population of the state was 44% Negro, it is conservative to estimate that at least 20,000 slaves were in these towns.
27. Georgia State Agricultural Society, Transactions (Fall, 1877), 355-377, passim.
28. So. Cult., XVIII (February, 1860), 44.
30. Ibid., 111; Annual Report of the U. S. Secretary of Agriculture (1893).
31. U.S.D.A., Yearbook (1921), 399-400.
32. So. Cult., XVIII (August, 1860), 236-237; David Dickson and James M. Smith (G. F. Hunnicutt, ed.), David Dickson's and James M. Smith's Farming (Atlanta, 1910), 16.
34. So. Cult., XVIII (June, 1860), 184-185; Brooks, Agrarian Revolution, 73.
37. So. Cult., XIX (May, 1861), 137-140.
39. So. Cult., XXIV (June, 1866), 137; Ibid., XXV (March, 1867), 70-71; Ibid., LXII (October 15, 1904), 15; U. S. D. A., Yearbook (1899), 348.
40. Annual Report of the U. S. Commissioner of Agriculture (1866), 578-579; Georgia State Agricult-


42. *So. Cult.*, LII (June, 1894), 290; *Ibid.*, LV (October 1, 1897), 3; *Agricultural Bulletin* (Winter, 1928), 18.


45. David Christy, "Slavery in the Light of Political Economy" in E. N. Elliott (ed.), *Cotton is King and Pro-Slavery Arguments* (August, 1860), 123-126. See the next chapter for an enlarged view of this argument.

46. Randall, *Civil War and Reconstruction*, 84-85; see also maps in Randall, 86-87.


49. For details on Dickson and his system see Dickson and Smith, *Farming*; Willard Range, "Prince of Southern Farmers" in *The Georgia Review*, II, 1 (Spring, 1948). See also issues of the *Southern Cultivator* for 1859 and 1860.

50. D. Redmond was then editor of the *Southern Cultivator*, having replaced the famed Dr. Daniel Lee in 1859. Howard was associate editor, but, despite his secondary position, appears to have been the driving force of the journal.

51. Joseph Jones, *First Report to the Cotton Planters' Convention of Georgia on the Agricultural Re-

52. *So. Cult.*, XVIII (June, 1860), 184-185.


55. *So. Cult.*, XVIII (March, 1860), 70-71, 73-74, 77-78.


62. *So. Cult.*, XL (December, 1882), 4; *Annual Report of the U. S. Commissioner of Agriculture* (1871), 154. Until his death many years later Moses claimed with no end of boastfulness that this was the first shipment of Southern fruit ever to be sent to the North...
for sale. P. J. Berckmans, however, also shipped fruit to the North in the same year, 1858.

63. *So. Cult.*, XVIII (January, 1860), 37; *Annual Report of the U. S. Commissioner of Agriculture* (1885), 583-584. In 1852 E. B. Barstow produced a crop of watermelons exclusively for Northern markets, probably the first in the South ever grown solely for such outside sale. Oemler was the leading truck gardener near Savannah before the Civil War, using his entire slave force of 26 hands to grow vegetables for Northern markets on what his neighbors considered a large scale. After the Civil War his writings on vegetable culture were accepted by the U. S. Department of Agriculture as standard for the South.


65. Georgia State College of Agriculture, Bulletin No. 106 (June, 1916), 96-98.


73. E. Merton Coulter, "The Movement for Agricultural Reorganization in the Cotton South During the Civil War" in *Agricultural History*, I, 1 (January, 1927), 3-5.


75. *So. Cult.*, LVI (May 15, 1898), 5.


83. Jones, *First Report to the Cotton Planters' Convention of Georgia*, XIV.

84. *Southern Recorder* (Milledgeville), February 7, 1860.

CHAPTER II

1. It is significant that both the *Southern Cultivator* and the Georgia State Agricultural Society early in 1861 appealed for the establishment of a department of agriculture in the Confederate government.


5. As early as December, 1861, the *Southern Cultivator* was the last living monthly agricultural journal in the South, and even it was struggling against declining subscriptions and advertising. *So. Cult.*, XIX (December, 1861), 307.
6. Frank Lawrence Owsley, _King Cotton Diplomacy, Foreign Relations of the Confederate States of America_ (Chicago, 1931), 3-9, 562.
9. Quoted in Owsley, _King Cotton Diplomacy_, 3.
11. See Christy, _Cotton is King_.
12. So. Cult., XIX (August, 1861), 236; _Ibid.,_ XIX (September, 1861), 256, 259; _Ibid.,_ XIX (October, 1861), 273; _Southern Confederacy_ (Atlanta), August 15, 1861; Owsley, _King Cotton Diplomacy_, 4-5, 27-28.
13. Owsley, _King Cotton Diplomacy_, 6; So. Cult., XIX (September, 1861), 264.
14. _Confederate Records of the State of Georgia_, II (Allen D. Candler, ed.), (Atlanta, 1909), 217-218. In May, 1862, this order was modified but it was still the duty of the railroads to keep cotton from the hands of the North.
15. Owsley, _King Cotton Diplomacy_, 43.
18. Coulter, “Movement for Agricultural Reorganization,” 6-9. As Coulter points out, however, the South was split over the idea of abandoning cotton production.
19. _Annual Report of the Comptroller-General of the State of Georgia_ (1862), 23-25. Reports from 127 of Georgia’s 134 counties for 1862 showed that cotton was planted on only 236,000 acres in place of the usual one and a half or two million acres. Farmers also claimed they were using inferior land for cotton. Estimates for the total Southern crop of cotton during this campaign vary considerably. Of course, the 1861 crop was nearly normal, about 3,500,000 bales. George McHenry, _The Cotton Trade_ (London, 1863), 49, estimated the 1862 crop at 1,000,000 bales and the 1863 crop at only 449,000 bales.
23. So. Cult., XXI (August and September, 1863), 111.
24. _Ibid.,_ XX (March and April, 1862), 82; Coulter, “Movement for Agricultural Reorganization,” 13.
25. Coulter, “Movement for Agricultural Reorganization,” 13; So. Cult., XX (September and October, 1862), 181; _Ibid.,_ XX (July and August, 1862), 132; _Ibid.,_ XXI (May and June, 1863), 79.
26. _Ibid.,_ XX (March and April, 1862), 66; _Ibid.,_ XX (July and August, 1862), 147; Coulter, “Movement for Agricultural Reorganization,” 14-15; _Confederate Records of the State of Georgia_, II, 202-207, 260-261, 356, 370, 591-592, 871; Raper, _Preface to Peas-

27. Annual Report of the Comptroller-General of the State of Georgia, Pt. I (1864), 23; So. Cult., XIX (July, 1861), 202; Ibid., XIX (November, 1861), 285; Ibid., XX (January, 1862), 24; Ibid., XX (November and December, 1862), 209; Ibid., XXI (January and February, 1863), 12; Ibid., XXI (November and December, 1863), 127.


29. Rebecca L. Felton, Country Life in Georgia in the Days of My Youth (Atlanta, 1919), 102-103; So. Cult., XX (March and April, 1862), 71; Lillie Martin Grubbs, History of Worth County, Georgia, for the First Eighty Years, 1854-1934 (Macon, 1934), 393.

30. See Owsley, King Cotton Diplomacy, for both the most detailed and the most comprehensive answer to this question. It is sketched only briefly in this study.

31. Estimates of the number of bales reaching Europe in those years vary. But the average pre-war export of 2,000,000 bales a year was not even approached. Schwab claims only about 13,000 bales were shipped during the season 1861-1862; about 131,000 reached England in 1863, and about the same number during the first seven months of 1864. See Schwab, Confederate States of America, 238. Samuel Bernard Thompson, Confederate Purchasing Operations Abroad (Chapel Hill, 1935), 72, claims about 1,000,000 bales of American cotton, altogether, reached Europe during the three years 1862, 1863, 1864. Thus, despite different estimates, very little of the normal supply of cotton was available to European mills from the Confederacy.

32. So. Cult., XXII (February, 1864), 29.


34. Ibid., 311, 328.

35. Brandlee, Blockade Running, 47; Schwab, Confederate States of America, 205-206.

36. David Dickson, A Practical Treatise on Agriculture (Macon, 1870), 241-242.


38. Mary A. H. Gay, Life in Dixie During the War (Atlanta, 1897, third edition), 96-97.

39. Owsley, King Cotton Diplomacy, 253.

40. Southern Confederacy (Atlanta), November 30, 1862.


42. So. Cult., XIX (July, 1861), 206-207. Most of the food products, of course, were to be used to feed the army, while cotton was to be held as security for foreign purchases.

43. Convention of Cotton Planters Proceedings (Macon, 1861), 1-10, passim; So. Cult., XIX (July, 1861), 229. A minority report of the convention held, however, that the scheme would not work since cotton had to go through a long series of credit transactions and actually reach Liverpool to be of any value. And the
blockade and embargo forbade that.

44. Owsley, "The Confederacy and King Cotton," 7-8; DeBow's Review (September, 1866), 328; Schwab, Confederate States of America, 26-27. The end of the "Produce Loan" scheme did not mean that the government ceased using cotton to bolster Confederate finances and provide security for European loans. That practice, in fact, was intensified.

45. So. Cult., XXIII (February, 1865), 31-32; Ibid., XXIII (May, 1865), 80; Confederate Records of the State of Georgia, II, 862-863; Avery, History of Georgia, 316; Gay, Life in Dixie, 237. Prices fluctuated very widely throughout the state as supplies were destroyed or as transportation facilities were available to bring them in.

46. So. Cult., XXII (September, 1864), 145-146; Schwab, Confederate States of America, 290-300, passim; Emory Q. Hawk, Economic History of the South (New York, 1934), 410-415. Those exempt from the tax in kind were chiefly all heads of families worth less than $500 (with $100 additional allowance for each minor child), and wounded soldiers and veterans worth less than $1,000. The property tax of 1863 consisted of a levy of 8% on the value (above home-used supplies) of all naval stores, salt, wines, liquors, tobacco, cotton, wool, sugar, and other farm produce on hand. Apparently, this tax was imposed in an effort to bring hoarded produce into the market.

47. Wright, "Economic Conditions in the Confederacy," 212-213.

48. So. Cult., XXII (January, 1864), 15; Ibid (February, 1864), 32. At this meeting in Sandersville, these Washington County farmers also proposed a state convention to try to stabilize currency, check inflation, and determine uniform prices for farm products. But no such action was taken.

49. Heard, "St. Simons Island," 255-265, passim; Confederate Records of the State of Georgia, II, 321. In addition to being sent out as foragers, the slaves were set to work raising food by federal naval officers. But by the end of 1862 the contraband camp at St. Simons was disbanded, most of the men being taken as recruits for a Negro regiment, and the women and children being sent to a larger camp in South Carolina.

50. Georgia Writers' Project, W. P. A. of Georgia, "Colerain Plantation," Part IV, in Georgia Historical Quarterly, XXV, 3 (September, 1941), 226.


53. Confederate Records of the State of Georgia, II, 434. In April, 1863, Governor Brown asked Congress to raise soldiers' pay from $11 to $20 per month on the grounds that the non-slaveholders' families were actually in want. Large planters, he held, claimed exemptions or hired substitutes. Speculators were getting rich. There was no equality.

54. Schwab, Confederate States of America, 193-195; Confederate Records of the State of Georgia, II, 601; Pendleton, Alexander H. Stephens, 312; So. Cult., XXII
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(January, 1862), 23. It mattered little that those aged 17 or over 45 were to be used only for home defense in the state, for Georgia now needed them for exactly that.

CHAPTER III

1. So. Cult., XXII (September, 1864), 143. The following list of maximum prices in gold was considered liberal by the commandant; and although far below prices in Confederate money, they were not so bad considering the soundness of Federal money: Irish potatoes $1.00 bu., Sweet potatoes 1.00 bu., Turnips .50 bu., Apples 1.00 bu., Peaches 1.00 bu., Eggs .20 doz., Lard .15 lb.

2. Tom S. Gray, Jr., "The March to the Sea" in Georgia Historical Quarterly, XIV, 2 (June, 1930), 113.


4. So. Cult., XXII (November 17, 1864), 189. This number, however, probably refers only to those freed before Sherman left Atlanta.


6. Actually the financial loss was probably twice this amount since $302,694,00 was only the valuation returned for taxation in 1860 and was far below the actual market price of that year to say nothing of the actual market price at the end of the war. In 1864 the assessed value of slaves on the tax books was $762,105,000.


8. In his Agrarian Revolution in Georgia, p. 38, Brooks reports that 400 acres in Montgomery County and 200 acres in Decatur County were sold for the lump sum of $2.50; and in Appling County 400 acres were sold for 10¢ per acre.

9. The value of Georgia's land and buildings declined from $157,000,000 to $75,000,000; implements and machinery from $6,800,000 to $3,600,000. While in 1860 the value of the average Georgia farm was only about $640 below the national average, in 1870 it was more than $1,500 below.

10. E. Merton Coulter, The South During Reconstruction, 1865-1877 (Baton Rouge, 1947), 7-12. Coulter gives a very vivid account of the rascality and dishonesty of the Treasury Agents who collected far more money and property than was ever turned over to the Federal Government. See also James L. Watkins, King Cotton: A Historical and Statistical Review, 1790 to 1908 (New York, 1908), 20-21, 112.

11. Coulter, The South During Reconstruction, 4, 7-13, 72-73; So. Cult., XXIII (July, 1865), 100; Sherman, Memoirs (New York, 1875), II, 251-252.

12. Confederate Records of the State of Georgia I, 17-18; Coulter, The South During Reconstruction, 14. Georgia's white male population in 1860 aged 18 to 45 was 119,000. During the war 100,000 to 120,000 men were called to the colors.

13. Coulter states that only 8,000 to 10,000 persons from the entire South went to Brazil. See Ibid., 184-185.

ly, XX, 4 (December, 1936), 323-324. It is usually stated that about 140,000 Georgia Negroes went West immediately following the Civil War but this statement appears to have resulted from a misreading of the 1866 Annual Report of the Comptroller-General of Georgia.

16. Leigh, Ten Years on a Georgia Plantation, 127-129.
22. So. Cult., XXII (July, 1868), 207.

CHAPTER IV

2. So. Cult., XXIII (June, 1865), 88.
4. So. Cult., XXVII (September, 1869), 281.
5. The appeal for “settlers” as opposed to “laborers” is dealt with in Chapter Nine.
8. Everett E. Edwards, “Historical Background of the Present Situation in Southern Agriculture” (Mimeographed copy of an address issued by the United States Department of Agriculture, Bureau of Agricultural Economics, 1950), 2.
11. So. Cult., XXVII (June, 1870), 173.
12. Ibid., XXVI (March, 1868), 79-80.
15. Supplementary Report of the Georgia State Department of Agriculture, (No. 23½, 1881), 75-76.
16. So. Cult., XLV (July, 1887), 295; Ibid., LV (June 15, 1897), 1.
17. The U. S. census has carefully reported each decade such facts as the value of implements and machinery per farm acre and per improved acre. But such figures are so influenced by changing price levels that they are of little use when studying trends.
18. Georgia State Agricultural Society, Transactions (Fall, 1877), 151; Report of the Georgia State Commissioner of Agriculture (1898), 11.
23. Ibid., 389; So. Cult., XXXIV (February, 1876), 56-58.
24. U. S. Census (1880), VI, 58. See also various issues of the So. Cult. during 1882-1883.
27. So. Cult., XXXV (February, 1877), 50-51.
29. Ibid., 51; Leigh, op. cit., 14; So. Cult., XXXIII (June, 1865), 91; Ibid., XXV (March, 1867), 101-102; Ibid., XXXII (April, 1874), 125.
31. 46 Georgia, 484-485. Similar decisions were handed down in 1878 and 1888.
32. So. Cult., XXXVII (April, 1874), 125.
33. U. S. Census (1880), VI, 174. Rice land rented for 7 bushels of rice per acre.
34. So. Cult., XLIII (October, 1885), 408. Presumably the wage hands also received rations.
35. Report of the Georgia State Commissioner of Agriculture, (1875), 88-89, 109, 111; Ibid. (1876), 82; Georgia State Department of Agriculture, Publications, V (1879), 339, 361. Some doubt concerning these conclusions is expressed in an article "Cotton Production in Georgia" which was published in the 1880 Census, VI, 172-173.
37. So. Cult., XLII (September, 1884), 296.
38. Calculations made from United States Census reports indicate that the value of production per agricultural worker was about as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Ga.</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>$239</td>
<td>$413</td>
</tr>
<tr>
<td>1880</td>
<td>155</td>
<td>288</td>
</tr>
<tr>
<td>1890</td>
<td>182</td>
<td>266</td>
</tr>
<tr>
<td>1900</td>
<td>199</td>
<td>454</td>
</tr>
</tbody>
</table>
39. Of the 224,691 farms in Georgia reported in the census of 1900, about 77% of them produced less than $500 worth of products; 17.5% of them raised from $500 to $1,000 worth; and only about 4% of them produced more than $1,000 worth.
40. Comparative figures on wages are available in all census reports from 1870 to 1890 and from the Reports of the United States Commissioner of Agriculture that were issued annually.

CHAPTER V

1. So. Cult., XXIV (February, 1866), 52.
2. Ibid., XXVII (September, 1869), 279.
3. Ibid., XXVII (May, 1869), 143.
4. Ibid., XXVIII (June, 1870), 188.
5. Georgia State Agricultural Society Transactions (1871), 6.
7. Tifton Gazette, September 16, 1892.
9. Ibid., XXXIII (February, 1875), 43.
10. Authorities, including the U. S. Census Bureau, the U. S. Department of Agriculture, the Georgia Department of Agriculture, farm journals, cotton organizations, and economists, cite different figures for the cotton crops of those years, often with as much as a million bales' variation. The above figures are, therefore, only approximate.


14. These reports, however, were from large and usually successful landowners whose achievements could not often be matched by most farmers even with high-priced cotton. For an example of such a report see *DeBow's Review* (May, 1866), 546.

15. *Report of the U. S. Commissioner of Agriculture* (1874), 217-219. In 1878 the United States Department of Agriculture estimated Georgia's farmers were making a profit of only 5 mills per pound.

16. _So. Cult._, XLIV (March, 1886), 98.

17. *Ibid._, XLIX (December, 1891), 613.

18. The use of fertilizer in Georgia made it possible to grow cotton on land not hitherto suitable, but no increase in the yield was noticeable until the turn of the century.

19. Some loans on land were made during the 'seventies and early 'eighties by outside companies and loan agencies, but such investors eventually found themselves obliged to foreclose on farms that turned out to be hard to sell. See _So. Cult._, XLI (March, 1883), 3.


22. _So. Cult._, XXVIII (September, 1870), 292.


26. _So. Cult._, LVI (December 15, 1898), 5.

27. *Ibid._, XLVII (February, 1889), 84.


30. During 1850-1880 the Census Bureau's figures on milk production per cow excluded milk used on farms. Since nearly all Georgia's milk was produced for home consumption, the comparison between Georgia and U. S. production per cow is unduly unfavorable to Georgia. The census figures on production per cow were, however, as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Ga. (gals)</th>
<th>U. S. (gals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>41</td>
<td>166</td>
</tr>
<tr>
<td>1860</td>
<td>54</td>
<td>174</td>
</tr>
<tr>
<td>1870</td>
<td>58</td>
<td>205</td>
</tr>
<tr>
<td>1880</td>
<td>72</td>
<td>232</td>
</tr>
</tbody>
</table>

31. In 1885, for example, the average value per acre of various crops in Georgia was as follows: Corn $6.53, Wheat $6.77, Rye $5.08, Oats $4.78, Barley $15.39, Potatoes $59.22, Hay $13.84, Cotton $12.93. See the *Report of the United States Commissioner of Agriculture* (1886), 398. Similar comparisons are available in other annual reports.


33. _So. Cult._, XXV (June, 1867), 181; *Ibid._, XXVI (June, 1868), 192;
34. The United States Report of 1883 declared, however, that Georgia's biggest loss was due to neglect. See Report of the United States Commissioner of Agriculture (1883), 279; Georgia State Department of Agriculture, A Manual on Sheep Husbandry in Georgia (2nd ed., 1888), 6-8.

35. The first refrigerated car of peaches to go from Georgia to New York was shipped in 1887. The Tifton Gazette, June 16, 1893, reported that a car of vegetables that should have arrived in Cincinnati in 48 hours actually took 6 days to arrive.


37. For a detailed description of these lien laws and their influence see Brooks, Agrarian Revolution, and Banks, Economics of Land Tenure in Georgia.

38. As noted previously, some loans on land were made during the period; and the 1880 census (VI, p. 174) noted that in some counties in the Coastal Plain livestock was sometimes accepted as security for credit. But these were exceptions to the general practice throughout the state.

39. So. Cult., XXXIV (April, 1876), 131; Ibid., XLVII (September, 1889), 458; Report of the Georgia State Commissioner of Agriculture (1876), 44; Ibid. (1879), 34-35.

40. Georgia State Department of Agriculture, Circular No. 41 (1883), 22.

41. So. Cult., XLII (February, 1884), 54.

42. Brooks, Agrarian Revolution, 106. In 1870 only 3% of Georgia's cotton crop came from the Wiregrass area but 18% was coming from there by 1910.

CHAPTER VI

1. So. Cult., XL (December, 1882), 10; Ibid., XLV (September, 1887), 400; Ibid., XLIX (June, 1891), 285; Ibid., L (March, 1892), 148; Ibid., LVI (October, 1898), 5-6.


3. Ibid. (1884), 447. This report declared 9% of Georgia's cattle were high grade as compared to 18% for the nation and 40% in such advanced cattle states as Ohio. The 1890 census, however, reported the lower figures.

4. So. Cult., XLII (June, 1884), 186.

5. See pp. 205-206.


9. Statistics are lacking for the period before 1880.


12. So. Cult., XXIX (December, 1871), 452-453; Georgia State Agricultural Society, Proceedings (1914), 45.


14. Although kafir was first introduced into the United States at
the Philadelphia Centennial Ex-
position of 1876, Dr. J. H. Wat-
kins of Palmetto and the Geo-
orgia State Department of Agri-
culture are credited with develop-
ing the first thimbleful of seeds
to a point where in 1885 distri-
bution throughout the South and
West began. See United States
Department of Agriculture,
Yearbook (1913), 224-225.
15. So. Cult., XL (December, 1882),
3.
16. Georgia State Department of Ag-
culture, Circular No. 124
(1889), 11.
17. Tifton Gazette, January 6, 1899:
January 27, 1899. During the
'eighties Richard Peters and
others also experimented with
jute and ramie in the hope of
finding a new commercial crop,
but nothing came of the effort.
18. Georgia State Department of Ag-
culture, Publications (1882), 44.
During the period Georgia pro-
duced an average of only about
9 to 13 bushels of oats per acre.
The largest yield I have encoun-
tered was 1381/2 bushels on one
acre and was made by James S.
Rose of Upson County about
1881.
19. Tifton Gazette, November 11,
1898.
20. Ibid., September 16, 1898; Ibid.,
October 14, 1898; Ibid., October
21, 1898.
22. Tifton Gazette, September 16,
1892; Georgia State Department
of Agriculture, Georgia: Her Re-
sources and Possibilities (Atlan-
ta, 1895), 224.
24. Tifton Gazette, February 8, 1895.
25. So. Cult., XL (December, 1882),
10-11.
26. Georgia State Horticulture Soci-
ety, Proceedings (1896), 13; Ibid.
(1908), 16; Georgia State De-
partment of Agriculture, Georgia
and Her Resources (Atlanta,
1928, Serial No. 107), 30; United
States Department of Agri-
culture, Yearbook (1903), 267-272.
27. So. Cult., L (October, 1892), 483;
Tifton Gazette, January 27,
1892.
29. Ibid., XXV (January, 1867), 21.
30. Ibid., XXVI (June, 1868), 192.
31. See maps, United States Depart-
ment of Agriculture, Yearbook
(1925), 278-281.
32. So. Cult., LV (April 1, 1897), 9.
33. Ibid., XXXVII (May, 1879), 184.
34. Georgia Experiment Station Bul-
letin No. 57 (August, 1902).
35. So. Cult., XLI (May, 1883), 2.
36. So. Cult., XLIV (March, 1866),
111. D. Redmond's nursery near
Augusta was another that sur-
vived the war.
37. Ibid., L (July, 1892), 326.
38. This has often been referred to
as the first commercial seed farm
in the South. See Georgia State
Department of Agriculture, Publica-
tions (1886), 262; So. Cult.,
XL (March, 1882), 23.
39. Ibid., L (January, 1892), 18.
40. The U. S. Census of 1900 stated
that 5,525 Georgia farms were
growing tobacco with an average
of 2.1 acres planted per farm.
This would mean that Georgia
had 7,402 acres in tobacco. The
figures cited in the text above
are from a mimeographed sta-
tistical report issued by the
Georgia Agricultural Extension
Service about 1940 and are, I be-
lieve, more accurate than those
of the 1900 census. The discrep-
ancy may be due to the fact that
the census reports included to-
bacco grown for home consump-
tion while the other report might
not have included it.
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41. Georgia State Department of Agriculture, Publications (1879), 361; Ibid. (1880), 397.
42. So. Cult., XL (July, 1882), 10-11.
43. Tifton Gazette, January 19, 1894.
44. No. comparative statistics for 1860 or 1870 are available.
45. Georgia State Department of Agriculture, Circular No. 41 (1883), 29.
46. The figures include products consumed at home as well as those marketed.
47. Tifton Gazette, November 23, 1894; So. Cult., LVI (November 15, 1898), 5.

CHAPTER VII

3. Illiteracy in Maine in 1870 was only 3.8% and in Iowa only 5.3%.
5. Georgia State Agricultural Society, Transactions (Fall, 1876), 25-30.
6. Georgia State Department of Agriculture, Georgia: Her Resources and Possibilities, 5, 257; Georgia State Department of Agriculture, Georgia Historical and Industrial (Atlanta, 1901), 318-321; Georgia State Department of Education, Saving Georgia Soils (Atlanta, 1938), 32-33.
7. So. Cult., XXXIII (October, 1875), 374-375.
10. So. Cult., XXVI (October, 1868), 300; Ibid., XXVIII (May, 1870), 142-143.
11. Ibid., XXVIII (December, 1870), 428.
12. See page ___ concerning cotton yields.
13. So. Cult., L (October, 1892), 500.
14. Ibid., XXX (June, 1872), 210-211.
17. So. Cult., XLIII (June, 1885), 240; Ibid., XLV (August, 1887), 360.
18. Ibid., L (October, 1892, 499-500.
19. Ibid., XXVIII (December, 1870), 444.
20. Ibid., XLVIII (October, 1890), 494.
21. So. Cult., LXV (March 1, 1907), 4-5.
22. Ibid., XXVIII (December, 1870), 444.
23. Ibid., XLII (May, 1884), 150.
24. Georgia State Department of Agriculture, Handbook of the State of Georgia, 210-211.
25. Those who served as Commissioner of Agriculture during the period were, in order: Thomas P. Janes, J. T. Henderson, R. T. Nesbitt, and O. B. Stevens.
28. See reports of the Chancellor of the University and the President of the College for 1873 and 1874.
30. So. Cult., XXXVI (April, 1878), 166.
33. So. Cult., XXVIII (July, 1870), 205.
35. See issues of the Tifton Gazette for 1890-1896.
36. Annual Report of the Georgia Experiment Station (1915), 5; Georgia State Department of Agriculture, Georgia Historical and Industrial, 510-513.
37. See Annual Report of the Georgia Experiment Station (1890-1900).

39. Ibid. (1925), 455-459.
42. Annual Report of the Georgia Experiment Station (1895), 424.
43. Georgia State Department of Agriculture, The Commonwealth of Georgia. The People; The Productions (Atlanta, 1885), 69.
44. So. Cult., XLVI (December, 1888), 559.
45. Ibid., XLV (October, 1887), 467.

CHAPTER VIII

1. Since the Agrarian Revolt in Georgia has been rather thoroughly treated by a number of historians only its general outlines with reference to Georgia agriculture need to be sketched here. In other parts of the nation, of course, urban wage laborers also participated in the revolt, but it was almost entirely a rural movement in Georgia.
3. Tifton Gazette, July 28, 1893.
4. So. Cult., XLVIII (April, 1890), 176.
5. Ibid., XXXI (May, 1873), 164-165.
6. In 1887 an Inter-State Convention of Southern Farmers, composed largely of Conservatives, met in Atlanta to discuss the condition of agriculture and remedies for it. Apparently this was a move to appease the growing rebellion. While it was finally conceded that the farmers were getting poorer every day and all were willing in the usual Southern tradition to berate the tariff, the convention was reluctant to place the blame on anyone but the farmers themselves. See So. Cult., XLV (October, 1887, 467-468; Ibid., XLV (November, 1887), 499-500.
7. So. Cult., XXII (June, 1868), 167.
8. Ibid., XXII (August, 1868), 236.
9. Ibid., XXX (February, 1872), 76.
10. Ibid., XLII (September, 1884), 299. Membership in the Grange was open to women as well as men.
13. Ibid., XLV (December, 1887), 557; Johnson, Georgia, 592.
17. Tifton Gazette, October 21, 1892; So. Cult., LI (September, 1893), 452.
18. Ibid., XLVIII (July, 1890), 321.
19. Ibid., XLVIII (October, 1889), 509; Ibid., XLVII (January, 1889), 22.
21. Georgia State Department of Agriculture, Circular No. 124
CHAPTER IX

1. So. Cult., XXIX (December, 1871), 443.
2. So. Cult. XLII (August, 1884), 257, 259; Ibid., XLIII (February, 1885), 62. The Comptroller-General's conclusions were based on the fact that farmers were paying their taxes with more alacrity than in bad times and the dockets of rural courts were largely free of debt suits.
3. Ibid., XLII (February, 1884), 54; Ibid., XLII (April, 1884), 116.
4. Ibid., XLV (December, 1887), 558.
5. Ibid., XLV (August, 1887), 362.
7. Tifton Gazette, September 8, 1893.
9. It is obvious that aggregate increases in wealth improve well-
being only if the increase outruns the increase of population, there is a reasonable distribution of the wealth, and the totals are not too greatly affected by fluctuating currency and price values.


11. *Report of the United States Commissioner of Agriculture* (1883), 296-302. There were, of course, some exceptions to these figures but they were true generally.


27. The 1880 census showed 136,000 residents born in other states, but most of them were from other Southern states.


30. See various issues of the *Tifton Gazette*, 1895-1896.

31. *Ibid*.


CHAPTER X

1. *So. Cult.*, LVII (December 1, 1899), 4.

2. Quoted in *Tifton Gazette*, January 26, 1900.


9. See the *Yearbooks* of the United States Department of Agriculture.


13. *So. Cult.*, LXII (March 1, 1904), 13. This price of 16¢ prevailed
only in the spring. The average price for 1904 was about 9.4½.
1. _Ibid._, LXII (April, 1904), 32.
3. _Ibid._ (1908), 31; _So. Cult._, LXV (January 15, 1907), 38.
4. _So. Cult._, LXII (February, 1904), 16; _Ibid._, LXIV (August 15, 1906), 6-7; Report of the Georgia State Commissioner of Agriculture (1904), 13; _Ibid._ (1913), 43.
5. U. S. D. A., _Yearbook_ (1921), 613. The Report of the Georgia State Commissioner of Agriculture (1917), 130, gives figures indicating that in the 26 counties most affected by the boll weevil the loss was much greater. The Commissioner, however, unfairly based his comparison on the bumper crop of 1914 and also was apparently trying to make the situation look as frightening to farmers as possible.
7. _Ibid._ (1921), 613; _Ibid._ (1923), 801; _Ibid._ (1925), 957; Raper, Preface to Peasantry, 202-205.
12. Georgia State College of Agriculture, Bulletin No. 211.
16. During five of the eight years 1938-1945, for example, Georgia's production costs were actually less than those of Texas. See U. S. D. A., _Agricultural Statistics_ (1947), 82.
17. The U. S. D. A., _Yearbook_ (1894-1936), provides an excellent annual commentary on agricultural conditions in general and the relation between the national government and agriculture, although from the point of view of the administration in power. See also Donald C. Blaisdell, _Government and Agriculture_ (New York, 1940); B. Rausch, _The History of the New Deal, 1933-1938_ (New York, 1944), Chs. XI, XIV; Marshall Edward Dimock, _Business and Government_ (New York, 1949), Ch. 12; Merle Fainsod and Lincoln Gordon, _Government and the American Economy_ (New York, 1948), Ch. 5. For a rather detailed account of the government's agricultural programs see the annual reports of the Chief of the Agricultural Adjustment Agency (U. S. D. A.), 1933-1945.
18. For a summary of all these campaigns see Everett E. Edwards, "Memorandum Concerning the Campaigns in 1905, 1915, 1921, and 1927 to Decrease the Cotton Acreage" (Mimeographed and issued by U. S. D. A., Bureau
of Agricultural Economics, Washington, January 31, 1930). For details concerning the 1905 campaign in Georgia see Georgia State Agricultural Society, Proceedings (1905), 10-14; So. Cult., various issues for 1904 and 1905.

33. Ibid., 6. In this campaign the Georgia State Agricultural Society actually appealed for state legislation to forbid all cotton planting for one year to exterminate the boll weevil.
34. U.S.D.A., Yearbook (1932), 16-17.
35. Vance, Human Factors in Cotton Culture, Ch. V.
39. U.S.D.A., Agricultural Adjustment

CHAPTER XI

1. Tifton Gazette, March 15, 1901; Georgia State Agricultural Society, Proceedings (1904), 59; Ibid. (1908), 31; Ibid. (1909), 12.
3. Quoted in Vance, Human Factors in Cotton Culture, 188.
6. Ibid., 16-17; U.S.D.A., Yearbook (1940), 20; Georgia State Department of Agriculture, Georgia, The Empire State of the South: What She Is and Will Be (Atlanta, 1915), 10.
7. Georgia State Department of Agriculture, Georgia and Her Resources, 131.
12. A farm was classified as a cotton
farm, poultry farm, etc., if 40% of the value of its production was in that particular commodity.

13. These percentages are based on statistics given in the two Georgia Agricultural Extension Service compilations, *Georgia Agricultural Facts* (1944), and *Georgia Agricultural Statistics* (1946).


15. The 1948 distribution of cash farm income, as reported by the Georgia Crop Reporting Service, was:

<table>
<thead>
<tr>
<th>Crop</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>24.2%</td>
</tr>
<tr>
<td>Peanuts</td>
<td>14.6%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>8.9%</td>
</tr>
<tr>
<td>Fruit &amp; nuts</td>
<td>2.6%</td>
</tr>
<tr>
<td>Truck crops</td>
<td>3.7%</td>
</tr>
<tr>
<td>Corn</td>
<td>2.3%</td>
</tr>
<tr>
<td>Other</td>
<td>10.3%</td>
</tr>
<tr>
<td>Livestock</td>
<td>32.3%</td>
</tr>
<tr>
<td>Hogs</td>
<td>8.8%</td>
</tr>
<tr>
<td>Cattle &amp; calves</td>
<td>7.1%</td>
</tr>
<tr>
<td>Dairy products</td>
<td>6.0%</td>
</tr>
<tr>
<td>Broilers</td>
<td>5.5%</td>
</tr>
<tr>
<td>Eggs</td>
<td>3.1%</td>
</tr>
<tr>
<td>Other</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Government payments made up the remaining 1.2%.


17. Georgia State College of Agriculture, Bulletin No. 159 (September, 1918).

18. During the twentieth century Georgia's rye acreage increased from about 12,000 to 20,000 acres; the yield per acre rose from about 5 to 8 bushels. It is obvious, however, that rye production in Georgia is a very minor activity, and the same may be said for barley.

19. In 1945 a record 895,000 acres were seeded in oats.

20. Georgia State Department of Agriculture, *Georgia* (Atlanta, 1907), 19; Georgia Chamber of Commerce, *Georgia* (Atlanta, 1914), 16. The plantation covered about 25,000 acres and generally had from 1,000 to 2,000 acres of tobacco growing under shade.


28. *Georgia Agricultural Quarterly* (May, 1919), 6, 34.

29. *U.S.D.A., Yearbook* (1930), 814; *Ibid.* (1933), 581; *Ibid.* (1934), 572. About twice the above acreage in peanuts was actually planted but nearly half of it was "hogged off."


Cultivation of Sugar Cane (Savannah, 1901), 2 parts.


35. So. Cult., LXII (July 15, 1904), 2.


37. Georgia State Department of Agriculture, Georgia and Her Resources (1930 edition), 197.


41. So. Cult., LXV (December, 1907), 24.


43. Georgia Experiment Station, Bulletin No. 218 (October, 1941).

44. Ibid., Bulletin No. 147 (July, 1927).

45. Ibid., Bulletin No. 150 (February, 1929).


47. Ibid., LXII (July 15, 1904), 1.


49. So. Cult., LXII (July 15, 1904), 1.


51. So. Cult., LXIII (September 1, 1905), 23-24; Ibid., LXIII (November 15, 1905), 1.

52. Ibid., LXIV (November 15, 1906), 2-3.


54. This figure includes the value of products consumed on the farm. The figure would be several points lower if based on cash income.

55. Georgia Agriculturalist (April, 1950), 4.


57. Georgia State Department of Agriculture, Georgia Agriculture, State and County, 35; Georgia State Department of Agriculture, Georgia and Her Resources, 64; Georgia W. P. A., Federal Writers' Project, The Story of Washington-Wilkes, 88.


59. Most of the material included here on this topic is taken from an article by Arthur Gannon, "Georgia's Broiler Industry" in The Georgia Review, VI, 3 (Fall, 1952), 306-316.


63. Ibid. (1917), 107-108; Georgia State Agricultural Society, Proceedings (1912), 61.

64. The attack on the federal employees, however, put an end to these activities by bringing federal law enforcement officers and courts into action. Report of the Georgia Commissioner of Agriculture (1917), 109; Ibid. (1921), 46-48; Ibid. (1922), 45-53, 59, 64-65; U.S.D.A., Yearbook (1926), 482.


66. Ibid. (1927), 998.

68. Georgia's beef production in both 1947 and 1949 was just under 180,000,000 pounds.


70. U.S.D.A., Yearbook (1912), 156.

71. Agricultural Bulletin (Fall, 1927), 9.


73. Atlanta Constitution, July 15, 1923; Agricultural Bulletin (October, 1925), 20; Ibid. (Winter, 1928), 17; Blue Book of Southern Progress (1926), 62.

74. Manufacturers' Record, The South's Development: Fifty Years of Southern Progress, Part II, 159-60.


76. Agricultural Bulletin (Fall, 1927), 9; Georgia State Department of Agriculture, Georgia and Her Resources, 233.


78. Report of the Georgia State Commissioner of Agriculture (1914), 9-10; Georgia State Department of Agriculture, Georgia and Her Resources (1930 edition), 58-60; U.S.D.A., Yearbook (1922), 206-207.

79. The 1,127,913 hogs and pigs butchered during 1920 was almost twice the number reported for subsequent census years.

80. The New Deal's famous pig and sow killing program of 1933 scarcely touched Georgia. Only 11,000 head were killed. U.S.D.A., Yearbook (1935), 572.

81. Georgia Agricultural Extension Service, Georgia Agricultural Facts (Athens, 1944), 84.


83. The Cypress Knee (1933), 44.

84. Ibid.

85. See Chapter Thirteen.


87. Atlanta Journal, August 10, 1952; Georgia Statistical Abstract, 117; Georgia State Department of Commerce, Industrial Survey of Georgia (Atlanta, 1952), 40.

88. See Christy Borth, Modern Chemists and Their Work (New York, 1943), Ch. V. While this work is partisan and incomplete, it is the fullest account available of Herty's work.

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2. Georgia State Agricultural Society, Proceedings (1900), 40.
7. Ibid. (1922), 7.
8. Georgia State College of Agricultur-
ture, Circular No. 89 (January, 1913).
11. Ibid. (1914), 33-34; Ibid. (1916), 10, 74.
12. Ibid. (1916), 15.
13. Ibid. (1917), 18.
17. Ibid. (1917), 41-43, 48; Ibid. (1923), 16.
18. Ibid. (1928), 19.
19. Ibid. (1920), 16-17.
21. Ibid. (1918), 22; Ibid. (1921), 10, 18-19; Ibid. (1923), 17.
23. Ibid. (1930), 19-22; Ibid. (1935), 162.
28. Ibid. (1931), 1080.
30. Georgia State College of Agriculture, Bulletin No. 304 (February, 1925), 30-32; Georgia State Hor-ticultural Society, Proceedings (1909), 91-95; U.S.D.A., Yearbook (1909), 172. This organization replaced the information gathering Georgia Fruit Growers' Association and was in turn replaced in 1923 with the Georgia Peach Growers' Exchange which was given more control over the crop.
31. Georgia State Department of Agriculture, Georgia Agriculture, State and County, 76-81, 85-88. California's success in this field provided much of the incentive for the national cooperative movement of the 'twenties, particularly in the South. During 1921-1923 Sapiro himself was called into almost every Southern state to help launch the movement.
32. Tifton Gazette, April 27, 1900; So. Cult., LVIII (September 1, 1900), 7.
33. See various issues of the So. Cult., 1905-1907, for information on these developments.
35. Ibid. (1921), 10, 17-18; Ibid. (1922), 10; Ibid. (1923), 19.
37. Ibid. (1931), 1077; Ibid. (1932), 949; Ibid. (1949), 604.
38. Georgia State College of Agriculture, Bulletin No. 244 (October, 1921), 3; Georgia Agricultural Extension Service, Marketing Facilities Survey (1947).
40. Georgia State Department of Agriculture, Georgia Agriculture, State and County (1923), 33-35; Georgia State Department of Agriculture, Georgia and Her Resources, (1930), 37.
41. Peach growers marketed their comparatively large crops either individually in car lots or through exchanges and were not in need of further facilities.


CHAPTER XIII

1. Georgia State Department of Agriculture, Georgia Historical and Industrial, 167, 191; Georgia State Agricultural Society, Proceedings (1904), 41; Georgia State College of Agriculture, Bulletin No. 106 (June, 1916).


5. So. Cult., LIX (December 1, 1901), 3-4; Georgia State Agricultural Society, Proceedings (1901), 66-67.


11. A survey in 1927 showed that only 18.4% of the agricultural college's graduates were engaged in farming. Georgia Agriculturist (March, 1927), 3.


15. Ibid. (1912), 157-158.


17. Ibid., 182, 186-187.


23. Report of the Georgia State Board of Vocational Education (1925-1926), 3-6; Agricultural Bulletin (Summer, 1926), 6-7; Ibid. (Fall, 1926), 27.


27. So. Cult., LVII (April 1, 1899), 7; Ibid. LX (June 1, 1902), 4; Ibid., LX (November, 1902), 1; Georgia State Agricultural Society, Proceedings (1900), 49-53.


30. Ibid. (1910), 145-152; Georgia Agricultural Quarterly (March, 1911), 88; Ibid. (May, 1911), 112-121; Ibid. (January, 1922), 51.


40. John T. Wheeler, Two Hundred Years of Agricultural Education in Georgia (Danville, Illinois, 1948), 375.

41. See Annual Reports of the Georgia Experiment Station (1890-1950).

42. Georgia State Horticultural Society, Proceedings (1915), 24-25.

43. Annual Report of the Georgia Experiment Station (1913), 311; Ibid. (1915), 4-5; Ibid. (1917-18), 4-6.

44. U.S.D.A., Yearbook (1925), 78; Ibid. (1936), 83. For more detailed information see the annual reports of the Georgia Experiment Station and the Coastal Plain Experiment Station.
CHAPTER XIV

1. The Georgia lien law of 1866 which permitted liens upon crops for provisions and supplies had originally limited to landlords the right of taking crop liens. The desire of the tenants to do their own buying at a store in town rather than be "furnished" from the landlord's commissary had forced changes in the law to permit merchants to take liens also. It is safe to say that by the turn of the century the merchants of the town were doing the bulk of short-term production lending.

2. Banks, The Economics of Land Tenure in Georgia, 58.


4. Ibid. (1924), 213.

5. Hawk, Economic History of the South, 553.

6. The number of banks varied from 372 in 1937 to 425 in 1948.

7. U.S.D.A., Agricultural Statistics (1915), 625; I. W. Duggan and Ralph V. Battles, Financing the Farm Business (New York, 1950), 217. This figure includes both mortgage and non-real estate loans.

8. See E. S. Sparks, History and Theory of Agricultural Credit in the United States (New York, 1932); Clara Eliot, The Farmers' Campaign for Credit (New York, 1927); Ivan Wright, Bank Credit and Agriculture (New York, 1922); Freida and Claude L. Benner, Ten Years of Federal Intermediate Credits (Washington, 1933); William G. Murray, Agricultural Finance (Ames, Iowa, 1947), 2nd edition.

9. Wright, Bank Credit and Agriculture, 121.


12. Ibid., 2.

13. Ibid., 1.


15. Ibid., 100, 212-213, 232.


NOTES

20. Ibid., 9.
31. More than twenty privately capitalized corporations, commonly referred to as agricultural credit corporations, existed before 1933 in such towns as Albany, Athens, LaGrange, Waycross. They were chartered under state law, had their paper rediscounted by the Federal Intermediate Credit bank, and made loans similar to those made by the new production credit associations. All failed, however, or voluntarily ceased to function.

CHAPTER XV

6. Tifton Gazette, August 16, 1901.
9. Brooks, “Report on the Effect of the Great War on Agriculture in Georgia” in *op. cit.*, 23. Professor Brooks claimed that despitecries in some Northern magazines that the law was resulting in abuse of Negroes, he found no instance in which the law was enforced.
17. During the years 1850-1900 the per-acre value of Georgia's land and buildings had fluctuated from a low of about $3 to a high of about $7.
24. See, for example, David J. Sully, “King Cotton's Impoverished
Retinue,” in *Cosmopolitan* (February, 1909).

43. *Atlanta Constitution*, November 22, 1934.
46. Greene County, Georgia, was selected as a demonstration area to show what a rehabilitation program could do in a depressed community. For an account of that, see Farm Security Administration, *Greene County, Georgia* (Washington, 1941).
47. For this and other data see the annual reports of the Resettlement Administration, Farm Security Administration, and Farmers Home Administration.
48. FSA's last annual report for 1945-46 gives a figure of 3,513 active borrowers for Georgia in the tenant purchase program as of March 31, 1946. It is unlikely that more than a small percentage of them had paid off their loans by that date.
51. Georgia Experiment Station, *A Study of Farming by Tenure of Farms in Terrell County, Georgia*, Bulletin No. 234 (June, 1944); Georgia Experiment Station, *Some Aspects of the Farm Tenure Situation in Newton County, Georgia*, Bulletin No. 237 (January, 1945).
52. The Report of the Administrator of the Rural Electrification Administration for 1950 differs from the 1950 Census Report considerably. The REA report declares there were 216,000 farms electrified in 1950, but the Census Bureau found a total of only 198,000 farms in the state, 149,000 of which were electrified.
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