on, by the light of an open fire my parents could see to read The Biblical Recorder, the Charity and Children, and the Patron and Gleaner (our county paper), and I could see to study my lessons. In my time I have seen our Northampton County newspaper evolve from Patron and Gleaner to Roanoke-Chowan Times to Roanoke-Chowan Times-News, to Northampton County Times-News. There were no daily newspapers available to us. A Raleigh or Richmond or Norfolk daily probably would have reached us two days late. But I am speaking now of lighting, not reading. By the light of the open fire my parents read these weekly papers and, after I started to school, I studied my lessons, stretched out on the floor, on my stomach, before the open fire. My grandmother used to say that I was going to "bake my brains."

In those days on the farm we went to bed early, perhaps not more than an hour after darkness and, so we did not have to depend upon the open-fire lighting any great length of time.

The next form of lighting was the tallow candle. Tallow is the fat of cows, steers, and calves, and of sheep. However, we did not raise sheep, so I know nothing of sheep tallow. But we always did have cattle pn the place; and I remember when my mother herself milked four or five cows. What they did with all that milk I do not know; perhaps fed it to the hogs.

When one of our cattle was slaughtered, the fat was saved, cooked, and converted into tallow. Then the womenfolk - I remember seeing my grandmother do it - would take a candle-mould that would make four candles at a time, run a thread wick from the top flown to the bottom of each of the four moulds and fasten it top and bottom so that it would remain in the middle of the mould and become the wick of the candle. This done, they

would re-heat the tallow and pour it into the moulds to cool and harden. Then they would have four tallow candles ready for use; and the process of candle-making would be started all over again.

These candles did not make brilliant light. In a breeze they flickered and might "go out." If one did not watch out, the metled tallow of the burning candle would run down onto the table-cover on which the candle-holder had been placed.

I wish so much that my grandmother's candle-moulds had been preserved. We still have some of the candle-holders with the curved, saucerlike receptacle at the botton of the holder to catch and hold the melting tallow.

When I see the wax candles on the diningroom table here at Warren Place used principally for decoration and only incidentally for lighting - beautiful decorations at that - I wonder if our sons and their wives, much less our grandchildren and their friends, know the origin and use of candles, not as ddcorations, but as mediums for lighting.

The third and last lighting device of my boyhood was the kerosene lamp. We had such lamps as far back as I can remember. No doubt my grandparents had them before I was born.

We bought kerosene oil by the gallon at the country store. We also bought the lamp wicks which had to be turned up and down from time to time, and lamp globes which had to be cleaned of smoke and soot. Some of the "parlor" lamps had pretty lamp-shades, not unlike the decorative ones of today.

In Wake Forest College my table was lighted by a student lamp, which I still have. It is on a stand with a rod on one

side of which is the lamp and on the other the tank for the oil. Thus one can replinish the tank without disturbing the light.

It was after I had left for college that my father installed in the present Warren Place first acetylne-gas and, after that, electric lighting.

In the May 15 1960 issue of The News and Observer Farm Editor Bill Humphries of that newspaper has an interesting feature article, The Night That the Lights Came on, descriptive of the excitement over the coming of electricity to the farn.

Despite the fact that open-fire, candle, kerosene-lamp lighting did not compete in brilliance with present-day electric lighting, I do not recall that the boys and girls of the 1890's had any more trouble with their eyes than do those of the 1960's.

Next after lighting came heating. Most residence, from tenant house to Great House, were heated by open, wood-burning fireplaces. Every residence had its woodpile. The wood was either small round logs or poles or larger logs split and cut into fire-place length. Onely the most provident farmers themselves cut or had cut their firewood and piled it under shelter for winter use. Here at Warren Place we wtill (1960) have an old-fashioned woodshed, now used for other purposes than firewood. Most of the farmers provided their firewood only from week to week as needed. The best firewood was oak and hickory. The fires were started by "fat light-wood splinters" brought in from the pine woods. In my boyhood light-wood was plentiful and was consumed wastefully and extravagantly. Now in our woods it is almost non-existent.

Naturally, fire in the open fireplace had to be replenished from time to time, several times an evening. As the first would

die down, someone would throw on another stick of wood or put another piece of lightwood - perhaps a lightwood knot - under the wood to get the fire going again.

Say what one pleases, there was a brightness, a sparkle, a spiritual , if not physical, wealth, a warmth, a hospitality about these open fires that no other form of heating I ever have experienced anywhere equals. Today one of our joys at Warren Place is having and sitting before and having our friends with us sit ~~sit~~ before and enjoy an open fire in our living room, even though our central heating system would give us all the heat we or they would need.

One of the housewife's chores and prides was keeping the hearth of her fireplace clean and sightly. From time to time as the hearth became soiled with dirt and ashes or soot, she would clean it with a mixture of clay and water which, when it dried, left the hearth a rich dark brown.

Some modern people, hearing that country people in those days, kept their windows and doors shut tight during the day and night, wonder "why in the world they didn't stifle to death." They overlook the facts that during the daytime there was a frequent opening of doors that let in air, that the houses of those days were not weather-stripped as well as weather-boarded, and that fresh air seeped in, and that the open fireplace and the chimney on up to the top of the house gave ventilation equal, if not superior, to that found in the modern, centrally-heated residence.

For the children of that time one of the nice things about the open fireplace was that we could use the embers - called "coals" - for popping corn, "parching" peanuts, and roasting sweet potatoes. And our elders, I am sure, used the fires for

heating water for their coffee and for warm water for washing their faces and the men for shaving.

When the fire was buring brickly, sparks sometimes flew out onto the floor or carpet. We had to watch out for this. But the crackle of the wood and the flight of the sparkes added liveliness to the time we spent before the open fire - liveliness unknown to our grandchildren.

After the open fireplace came the iron or tin wood-burning stove, then the coal-burning heater, then the oil-burnder, and finally the central heating unit. But all of these innovations came after the 1890's. It is interesting to note that at the present time it is almost as common to have central heating system in a farm residence as in a town or city residence.

We of this generation are so accumstomed to quick and easy communication with other persons far away as well as nearby that it is hard for us to realize that this was not so in our grandparents' day.

We not only have railroad-train mail as they did, but we have airmail. Now, I understand, they are experimenting with with instantaneous mail whereby a letter written in North Carolina addressed to someone in San Francisco would be transcribed and delivered in San Francisco within minutes after it had been written in North Carolina.

Then as now there were postoffices in the villages and towns to which the railroad trains brought and received mail once or twice a day. I do not know how far back urban free house-to-house mail delivery goes, But in my childhood there was no

rural free delivery of mail. If one wished to send or to receive a letter or package, he had to go to the postoffice to do so.

Today the daily rural free delivery and collection of mail brings the whole civilized world closer together.

In communication by telephone progress has been equally revolutionary as that by mail. In the 1890's in the country there were no rural telephone lines. In towns and cities there were a few wall phones through which the owner of a 'phone could communicate with the few other people on the line who had a 'phone - a very limited number.

At the present time most of the thrifty farmers have their 'phones, and their 'phones are connected with the trunk lines. The boys and girls now visit with one another on the 'phone sometimes to the impatience of their parents who themselves want to get on the line to talk or to transact business. Today one of us in North Carolina can get in touch in a very few minutes with anyone in almost any town or city of this country or of many other countries.

Since my father was one of the pioneers in introducing rural telephony, let me go into a little more detail about his part in doing so.

Today at Warren Placewe pick up one of our two 'phones, dial 120-301-BE59507, and in a minute or so we have Jim or Jeanne in Baltimore on the line; or we call 120-302-0L20548 and in as short a time we have Steve or Libby or one of the children on the line. It is as quick as that. By the modern development of direct dialing, without the intervention of an operator except to get our number so as to charge the call to us or to help us in case of trouble, we can get anyone whose number we know anywhere in the United States that

has installed the direct-dialing system. More than that, we have direct connection with most of the civilized countries of the world Not long ago, for instance, Wiley Stephenson in Pendleton called and talked with his daughter Martha Lou in Germany where her husband was in the Service.

Not even our sons, much less our grandchildren, have any conception of the time when there were no telephones in either city or country.

My father, as I say, was one of the pioneers in providing telephone service for himself and his neighbors who cared to come in with him. He himself, at his own expense, built a line from the old Warren Place out to Pendleton, having the poles cut and the wires strung. His first telephone, as I remember it, was a wall, cabinet type - which one never sees now except in movies and museums. Each person on the line had his own ring, then as now. It was taken for granted that anyone on the line would listen in on anyone else's conversation if she or he had time and cared to do so. My Aunt Mary (Captain Will's mother) was on the line my father built. One day her 'phone rang - not her call but someone else's on the line. She rushed to the 'phone to everhear the conversation. In her haste she stepped on and killed a cat that was in her way. Someone - perhaps it was Will himself - remarked that that was a case in which "curiosity killed the cat."

In my boyhood there were only a few of these private lines. There was no central nor any other way of connecting up with other persons' private lines nor with any trunk line.

Just as soon as a telephone company was organized and built lines and rented 'phones, my father switched over to the commercial line - rather, as I remember, he had the company

take over his line upon some terms. Ever since then - and that was nearly a half-century ago - Warren Place has had its telephone outlet to the outside world.

I recall this incident about our first 'phone line: One of our neighbors objected to our running the line by his house between his residence and his horselot on the other side of the road from his residence. He was afraid, he said, that lightning would hit and run down the line and kill his horses and mules. When his objection became so positve and outspoken that it looked as though we might not be able to build the line after all, I, possibly to show off my learning a bit, told him that, unless he let us build the line by his house, we would invoke and apply the right of Eminent Domain against him. He had no idea what that was and I, not much more. But it worked. It had, as I know now, nothing whatever to do with our right to build a private telephone line along a public highway. He withdrew his objection - at least, we was silenced - and we went ahead and built the line. Now, many years later, he himself is the proud possessor of a 'phone on a commercial line that serves all of us.

Think of the isolation of people living in the country in those days - on a muddy road in winter, dusty in summer, possibly several miles from a village or town, with no rural free delivery of mail, with no means of getting to a village or to a neighbor's except walking or going by cart, wagon, buggy, or roadcart, with no telephone. Yet that was ths way in our community and in everyone else's community during my boyhood.

How did boys and girls get and keep in touch with one another? In the first place, the boys courtdd and married the girls in their own small neighborhood. About the only new blood was

that of the men and women who came in to teach and remained to marry the local women and men. The result has been that in these long-settled communities - such as ours is ~~a~~ nearly everyone is related by blood or marriage to everyone else.

By means of radio or television, which, of course, were unknown, undreamed-of, in the 1890's, and which now are in the possession and enjoyment of nearly every settled family, rural as well as urban, everyone is or may be in constant touch with what is going on in the world. How much of the news we get over both radio and television is about what is going on in India or in Algiers or in South Africa or in the Arctic or Antarctic Regions as well as what is going on the the adjoining county or nearby tow or city! By means of rural free delivery of mail, the farm family has its daily newspaper and its weekly or monthly magazine, just the same as the people in the city do. For example, at Warren Place we receive our ~~Sunday~~ daily News and Observer before seven in the morning, as early as or earlier than the people in Raleigh receive theirs. Similarly other people in our neighborhood receive their daily newspapers from Norfolk or Richmond.

The net result of all this revolution in communication is that, whereas the boy or girl in the 1890's was a citizen of a local community only, the boy or girl of the 1960's is, whether he wishes it or not, a citizen of the whole round world, and is influenced and affected, for weal or woe, by what goes on, not in a local community only, but also and perhaps even more by what goes on in rhw uttermost parts of the world. We simply cannot overestimate the significance of all this development of means of communication that has come about in our own lifetime.

In the foregoing recollections of life here at Warren Place during the 1890's we have set the stage amply for a somewhat more detailed discussion of farming and farm life during my boyhood, from 1892 when I started to school until 1899 when I went away to college. Contrasting farming and farm life in the 1890's with farming and farm life in the 1960's may be the most vivid way of presenting the subject.

Perhaps as many and as major changes in farming have taken place in our community since the 1890's as in any other human enterprise.

Only an agronomist and economist could present the details of this change. All that I aspire to do is tell of some of the changes in the superficialities or visible aspects of farming that have taken place in my own lifetime. Furthermore, I must confine what I say to the things that I observed and experienced as a farm boy in the 1890's and what of them I remember now 60 or 70 years later.

The main crops at Warren Place were corn, cotton, cornfield peas. Peanuts came later. Sweet potatoes and Irish (white) potatoes were not grown as money-crops but only for home-consumption. Hog-meat also might be regarded by the more progressive farmers as a supplementary money-crop. They would fatten and slaughter more hogs than they would need for their own tables, have a hog-killing, cure the hams, shoulders, and sides, and sell them during the year. I do not remember my grandfather or father ever selling hogs on the hoof; but they did sell hams on the market and shoulders and sides to their tenants.

Peanuts, I say, came later. I went with my grandfather

over into Southampton County, Virginia, and he bought two or three four-bushel bags of seed peanuts. This was in the 1890's and was the beginning of our raising peanuts for the market. I do not mean that no peanuts were raised by people in our neighborhood before then. But the ones raised then were for home-consumption - to be "parched" (roasted) and, some of them, made into peanut candy.

Most of the corn was consumed in use on the farm; perhaps a small quantity of surplus corn was sold, but it was not regarded as a major money-crop.

In those days farmers had very little ready money. With cotton selling for seven cents and peanuts, the few for market, a two or three cents a pound, farm money-income was small indeed. And the farm outgo in money was equally small. Thrifty farmers "lived at home," and used money only for things they could not raise on the farm.

When I was a very small boy our farm labor was "hired hands." That is, men worked by the month the year round. My grandfather and then my father always had two or three month hands, as they were called, here at Warren Place. As I remember, their wages were not over $10 a month. The married ones lived in houses on the place and boarded themselves. Some of the unmarried ones took their meals in our kitchen and lived in houses on the place.

During my early boyhood I was with hired hands a great deal. From them I learned about "hants", and even this day I have a "creepy" feeling when I walk in nighttime by a graveyard or through a dark place in the road. Also, I heard them talk and, in some cases, their profanity became part of my vocabulary. Once,

I recall now, I saw a hen running across the horselot. Without any provocation whatever, except to show off and, unbeknownest to me, in the hearing of my father, I yelled "Damn the hen." That one time was enough. It may be that my present disuse of and distaste for profanity stems back to the lesson my father taught me for "damning" the innocent hen.

It is interesting that, after over a half-century, Warren Place and other farms in our community are reverting to the hired-hand system. Only now hands are hired by the day and their daily wage is between $2.75 and $3. This reversion is directly attributable to the mechanization of farming.

The hired-hand system for the Negro smacked too much of slavery. He must have felt that in hiring out by the year to a white farmer to work on his farm he had sold himself to that master for that year.

So, it is not surprising that generally in our community and, I presume, in other similar Southern communities, the tenant system was developed. Under this system the landlord rented the tenant a specified number of acres of cropland. A one-horse crop consisted of about 25, sometimes as many as 30, acres, which were divided among cotton, corn, and, later, peanuts. The landlord furnished the land, the mule or horse, the plows and all farm tools and equipment, and one-half of the seed and fertilizer. The tenant furnished the labor and became responsible to the landlord for his half of the seed and fertilizer. The landlord "ran" the tenant at his commissary or, more often, at the nearby country store at which both landlord and tenant traded. Up to a specified amount the landlord was responsible for the tenant's

store-account. If the merchant let the tenant trade over this amount, he himself assumed responsibility for the overage. The landlord had a "landlord's lien" on the tenant's half of the crop for the tenant's share of the seed and fertilizer and his store-account up to the specified amount. The tenant was supposed to work under the supervision and direction of the landlord or, if the landlord had several farms, under that of an overseer.

The share-crop system did, theoretically at least, give the Negro tenant more freedom of action. He had his own family home. He had his own garden and "potato patch," if he really was thrifty and provident enough to have them, without having to share vegetables or potatoes with his landlord. He was free to trade at the commissary or store up to the amount the landlord had agreed to "stand for." A good crop-year with good prices, the tenant stood to make a good deal more money than he would have as a hired hand. A poor crop-year with low prices might leave him in debt to the landlord for his share of the seed and fertilizer and advances - usually sidemeat and lard - and the store-account. He might remain on with the landlord and let his debt be carried over into the next crop-year. Or he might leave and move to another landlord, leaving a string of debts behind him. Since the tenant had little or no property, there was nothing the landlord could do legally about recovering what the tenant left owing him. The upshot was that the landlord, for his self-protection, charged above-normal prices - "time prices" they were called - for what he himself advanced the tenant, and the merchants charged "times prices" for what the tenant bought at the store.

In practice, if not in theory, the share-crop tenant system was a vicious one alike for the landlord, the tenant, and the mer-

chant. As I say, the tenant was charged outrageously high "time prices" in order to make up for the inevitable losses. The landlord, as a solvent property owner, made himself legally liable for the tenant's share of the seed and fertilizer, if purchased. In 1929, for example, farmers "pitched" their crops on the basis of 40-cent cotton and 10-cent peanuts. On that basis they bought for themselves and their tenants high-priced seed and fertilizer. They gave their tenants liberal accounts at the store. The merchants let tenants trade beyond the amount for which the landlord agreed to stand. In general, landlord, tenant, and time-merchants all figured that in the fall of 1929 the financial conditions, so far as prices went, would be as good as they had been during the spring of that year and two or three years before. Then came the Depression. Cotton dropped to 20 cents; peanuts, to three. The consequence: the tenant could not pay out to the landlord; the landlord could not pay out to the merchant; the merchants could not pay out to the wholesale house. All three groups were caught in a vicious circle. Landlord, tenant, and merchant were, all, in a bad way; the whole economy suffered; we entered a period of "hard times."

A few tenants, mostly the better ones and, many of them, the white ones, rented for cash. The cash rent ranged between $3 and $10 an acre of crop-land. Seldom was a tenant unable to pay his rent, although he might not have much, if any, left over for himself.

But from the landlord's point of view, this also was a very bad system. The tenant simply "mined" the land, getting out of it all that he could without any thought or effort to improve it. Men who themselves were substantial landowners would rent land from

aging or absentees of women or other landowners who were not able to operate their own farms , and these renters would proceed to mine the land they had rented for cash or even for a part of the crop. Furthermore, they did not nor scsrcely could they be expected to pay any special attention to the upkeep of the buildings on or connected with the land they were renting. One of the deplorable features of this type of cash-renting was that the renters took unconscionable advantage of landowners who themselves were unable to look after their farms.

Today the up-to-date farmer fertilizes his crop-land according to its needs. This was not so in my boyhood. The present-day progressive farmers sends samples of his soil, field by field, to the State Department of Agriculture to have it analyzed. Only yesterday I took two big packages of samples to Raleigh to have 15 or 20 different samples of soils analyzed. The department reports the missing of deficient element in each sample. The farmer then supplies the lacking element with fertilizer. This not only reduces the cost of fertilizing but also gives the soil of each field the food that it needs to make up for its lack or deficiency.

In my boyhood farmers did not depend so much upon commercial fertilizer as they do now. Instesd, they cleaned out rail-fence jambs and hauuèed off ditch banks and hauled the dirt out and scattered it over the fields. They went into the woods and hauled out woods mould. They hauled out and spread on the land horse-stable manure and cow-shelter manure. During the year they built up compost heaps which they hauled out in the spring. Further, they lay a field "lay out" every other year to "rest up," with the thought that it would fertilize itself during the "off" year. They

did not realize that the weeds and the grass on the land "lying out" were consuming soil-food the same as the crops would have. Then, to cap the climax, in the spring of the year, instead of plowing under the weeds and grass, they would burn them off. Even today we have trouble with the older Negroes on our places wanting to burn over all land with weeds or grass on it before plowing or getting ready for the crop the coming year. They seem to think that there is some virtue in the ashes of the burnt weeds and grass.

Then after our farmers began to raise peanuts for market, they used the peanut vines, after the peanits had been separated from them, for fertilizer. The vines were hauled out and spread on the land. This still is being done where peanuts are harvested by combines. But some of the present day farmers who have dairies or herds of cattle bale their peanut vines and use them for cattle-feed. But where they do this, they put a cover-crop on the land just as soon as the peanuts have been harvested. Thereby they try to put back into the land more than they take out of it year by year. It has proved to be an agriculturally sound practice.

Already I have given some idea of the prices farmers received for the crops they sold and what they paid for the things they bought. Cotton, as I said, sold for anywhere between seven and ten cents a pounts; peanuts, between two and three. It was during the 1890's that the Cleveland Panic struck us and dropped the bottom out of farm prices.

But, furthermore, the prices at which we bought things that we had to have for the farm were correspondingly low. In a word, while there were fewer dollars, every dollar, whether

outgoing or incoming, went much further than one does today. While the present-day farmer has in his pocket or in bank a great many more dollars than his father or grandfather in the 1890's had, I doubt that the more dollars in the 1960's buy more in this world's goods for the farm that the fewer dollars did in the 1890's.

The phenomenal change in farming since my boyhood has been almost complete mechanization. Elsewhere I speak of the mechanization of highway transportation. The change on the farm has been equally momentous. Let me mention a few of these things, item by item.

In the 1890's the motive power on the farms was horses, mules, and steers. There was the one horse or the one mule for every 25 or 30 acres of crop-land. Steers were used for hauling things around the farm, seldom for plowing except by Negro tenants and then on a very small acreage. There were one-horse plows, two-horse plows; one-horse carts and wagons, two-horse wagons. Motor-driven equipment then was unknown and, perhaps, undreamed-of.

Cotton was sowed by a cotton-sower in rows about three feet apart. The cotton was chopped out with hoes so that the cotton plants stood about 12 or 15 inches apart. Cotton was cultivated with one-horse cotton plows - sided and then the middles split. It was plowed - three streaks to the row - about three times a season. When the cotton opened in late September or October, it was picked by hand. A good cotton-picker could pick, sometimes, 200 pounds a day. The price, I think, was $1 per hundred pounds; how it is $3 or more. My father as a young man picked 400 pounds one day by starting very early, having his mother feed him as he picked, and picking until dark. The cotton in the seed was hauled to the gin

in carts and wagons. It took between 1,200 and 1,500 pounds of cotton in the seed to make a 500-pound bale of cotton.

In our community, where cotton now is a minor crop, as it was a major crop in my boyhood, most of it still is picked by hand. In the cotton-growing areas of the South and Southwest and West it is picked by mechanical pickers. Even in our own community they are beginning to use mechanical pickers. In my boyhood cotton had to be fertilized heavily because it was quite a drain on the land. Now, in addition to fertilizing, it has to be dusted for boll weevil and for other destructive insects. The dusting is done by tractor or plane. When in a "wet" year the cotton stalks become excessively high and the bolls on the lower part of the stalk are being overshaded, farmers have their cotton stalks topped so as to let the sunshine in to these lower bolls. All of this is expensive; and cotton-growing no longer is a profitable enterprise for us.

When I was a boy corn was planted in squares. Rows were run both ways. The corn was planted by hand at the intersection of the rows. The corn then could be cultivated both ways. It was known as "checked" corn. It was plowed - sided and the middles split - about three times a season and was "laid by" the latter part of July or first of August. During the middle or latter part of August farmers pulled fodder for "long feed" for their horses and mules. The fodder - leaves stripped from the corn stalk - was pulled, tied into small bundles, and left on the stalk to dry, then re-tied into larger bundles - known as bundles - and either hauled to the fodder-house or stacked in the field - called fodder stacks. The fodder stacks - fenced around - to keep cattle and hogs out, was let stand in the field until needed

for feed. Fodder-pulling now is a thing of the past; I do not remember when, ever, I saw a stack of fodder in the field.

At the present time corn needed for silage for the cattle is cut by machinery during August - the machine cutting the standing stalk and griding the stalk, the ears of corn, and all and blowing it into a wagon attached to the machine. This silage is hauled to and blown up into the silo for winter feed for cattle. The silage becomes, in reality, canned food for cattle.

Corn that is let stand in the field until it is cured - "dry" - also is separated from the stalk by machinery, shelled, and the shelled corn is delivered in a wagon attached to the machine. Except for operating the tractor pulling the machine and the truck containing the shelled corn and putting the shelled corn into the barn, there is very little handwork connected with the harvesting of corn, whether for silage or for shelled corn.

The harvesting, even more than the cultivation, of peanuts has undergone the greatest revolution of all crops in my lifetime. As far back as I can remember there were peanut planters. In fact, one of the earliest inventors and manufacturers of peanut planters was a man named Ayres of Petersburg, Virginia, whose daughter, Florence married my cousin Jesse Paul Stephenson.

When I was a boy the peanut, as well as the cotton and corn, rows were run by "sticks." To run a straight row two sticks had to be kept in line with each other as the row-runner and his mule or horse approached them. Now they are run by a tractor with a marker attached to it to keep each succeeding row parallel with the preceding one. If there was a curve in the first one that was run, a similar curve would be in every succeeding row that was run by the same marker.

In my boyhood peaunts were cultivated - sided and the middles split - by the same kind of plows as were used for cotton - "cotton plows" they were called. Now they are cultivated by plows attached to tractors, with the siding and the splitting of middles going on simultaneously. Peanuts, the same as cotton, have to be dusted with sulphur and other insecticides to kill or to prevent the onslaught of destructive insects.

It is in the harvesting of peanuts that the greatest change has taken place. When I was a boy the peanuts were dug by mule and plow, shaken out by hand, and shocked - that is, put into stacks; and when the peanuts were dry enough to pick, they were picked by hand. And that was fun. Several shocks of peanuts would be hauled or dragged up to the place where the peanuts were to be picked. A fire of peanut poles was built. The pickers sat around and picked peanuts and threw the vines into piles behind and around them. The pile of vines gradually became a windbreak for the pickers. It was great fun to sit around the fire picking peanuts, gossiping, and telling jokes. The peanuts were put into baskets and then into four-bushel bags which, when full, weighed about 100 pounds. A hundred pounds of picked peanuts was about a day's work for one hand.

Next after the picking of the peanuts by hand came the mechanical peanut picker. In 1899 my father was the first farmer in the community to have one. He lost part of that year's crop experimenting with it. The motive power was known as level-tread power. Two mules were led into the cage housing the level-tread power and set to walking. It was like walking up hill. The weight of the mules started the endless chain of level treads running,

and that, connected with the peanut picker by belt, started it going. It was hard work for the mules, walking uphill all the time. They had to be relieved by another pair of mules every once in a while.

Next came the tractor-driven picker. The tractor was connected with the picker by belt. The peanuts were separated from the vines, the peanuts pouring out at one side of the picker and caught into bags and the ground-up vines thrown out at the rear end of the picker. The peanuts placed in four-bushel bags were ready for market. The vines were either stacked or bundled for feed or left to be spread back onto the land for fertilizer.

The next and latest development in peanut-harvesting is the combines and the artificial dryers. Now the peanuts in the field are plowed up and shaken out by a tractor-drawn machine. Then after they have been left on the ground in the rows two or three days, a combine, tractor-drawn, goes along, picks up the vines, separates the peanuts and the vines, delivers the peanuts at one side or over the top of the combine and the vines at the rear. Then these "green" - moisture laden - peanuts are taken to the artificial dryers - a series of bins - and put into them for 24 to 72 hours, subjected to motor-driven artificial drying process until the moisture in the peanuts has been brought down to the permissible maximum. Then the peanuts in bulk or in bags are taken to the market, tested again for their moisture content, and sold. They are graded not only for the moisture-content but also for the foreign matter - such as dirt and trash and pieces of peanut vines. Today there is no guesswork about the quality of peanuts being sold and bought. It is scientific marketing throughout.

out.

At the present time there are three prices - loan, support, and market. The loan price is what the Federal Government will lend the farmer on his peanuts. The support price is the price at which the Government will support the price - that is, will pay that much for the peanuts of a given grade. The market price is the price which the the buyers - the cleaners and manufacturers - will pay for the peanuts. The loan price, naturally, is lower than the support price. In a good crop-year peanuts may go for as low as the loan price; in a poor crop-year they will be bought up by the cleaners and manufacturers and processors for the support price. If the crop is very short, they may enter competition with one another and offer considerably above the support price. If the farmer takes the loan price and stores his peanuts in a Government-approved warehouse, he may get a "dividend" on his peanuts when they eventually are sold by the Government for more than the loan price.

Peanut-harvesting, with the combines and dryers, has become a very expensive proposition. The combines are in use only during the peanut-harvesting season of a few weeks in the fall. The dryers are usable the year round not for drying peanuts only but for drying shelled corn, peas, milo, and other grains as well.

It is a long, long way from the hand-picking of peanuts in the 1890's to the combining and artificial drying of peanuts in the 1960's. Meanwhile peanuts have become one of the major crops in the South and are the major crop in our part of the South. Many commercial uses of peanuts have been discovered. Peanut oil, instead of lard, is being used for cooking purposes. One of the very greatest benefactors of peanut growers and processers was

the Negro scientist, George Washington Carver, and this story that he told on himself is worth relating: "When I was young I said to God, 'God, tell me the mystery of the universe,' But God answered, 'That knowledge is reserved for Me alone.' So I said, 'God, tell me the mystery of the peanut.' Then God said, 'Well, George, that's more nearly your size,' and He told me.'"

That mechanization of farming has reached a very advanced stage is evidenced by the fact that, except on small farms and in less advanced and progressive areas, horse-and-mule farming is almost a thing of the past. Tractors, trucks, and machines of all sorts have taken their place. At one time we had, all told, 50- or 60-horse farms, counting 25 acres to the horse. Today we have one mule here at Warren Place and not over one or two at all the other places.

The economics of this evolution of farm machinery and equipment is another matter. As I have said, farming on a considerable scale has become a business and the farmers, a professional man. Let us pursue this professional-man idea a little further.

In the 1890's farming, as a rule, was an occupation engaged in primarily for a living or livelihood. There were few who regarded it as a business and almost none regarded the farmers as a professional man. The small farmer cultivated his own land with the help of his wife and children and, sometimes, one or two hired hands. The larger farmer - the plantation owner - either tenanted out his land or worked it himself with hired hands under the supervision of an overseer. None of them thought of farming as a business enterprise nor of the farmer as a professional man with a status comparable with that of the physician, lawyer,

minister, or educator.

Today, by contrast, the modern, up-to-date farmer is indeed a scientist - he has to be - and his status is that of a professional man. A non-farmer, like myself, overhearing the conversation between two modern young farms would understand the meaning of as few words and phrases as he would overhearing the conversation bwtween any two other professional men. These modern farmers apply the principles and discoveries of science to the fertilization of their land, to the selection and conditioning of their seed, to harvesting their crops, and to marketing their produce.

The wholesome result of this emergence of farming as a profession based on scientific knowledge and practice is that ambitious young men are turning to farming for their lifework as in the 1890's they turned to the "learned" professions. My grandfather used to speak of a "farmer's education," meaning only reading, writing, and 'rithmetic. He thought that, if a boy was to be a farmer, all he would need in the way of education was to know how to read, write, and figure. Today in the prosperous and progressive agricultural areas all this in changed. Young farmers and their wives - college-bred men and women - are as much at home on polite and cultured society as are the young lawyers, physicians, ministers, and educators; and their wives are equally at home in polite, cultured society. In such communities it is inept for people in town to speak of their "country cousins." Those country cousins are likely to outshine their "town cousins" in dress and in ease of manner.

Although the handling of woodland and timber is a branch of farming, I am telling about it separately because there are several phases of it somewhat dissociated from farming.

Already, under farming, I have spoken of "mining" land under the cash-rent system. In by boyhood there was similar "mining" and destruction of timber.

First came the conversion of timberland into cropland by the clearing of "new grounds." This was, of course, a necessary first step in opening our new country to civilized man. Each year, all the way back to colonial times, the progressive landowner would "clear" an acre or more of woodland. He would cut the pines that could be converted into sawlogs and, with a yoke of steers or, in a few cases, a pair of mules take the logs to a local sawmill to be sawed into timber for farm use. Prior to the sawmill was the period the farmers with crosscut saws had to saw their logs into timber; but this was long before my day. I think that perhaps some of the flooring in the original Warren Place had been handsawed in this way. Next, in the process of clearing the land for new ground, the farmer would "deaden" the larger trees left standing and leave them standing for the time being. Or he would cut and pile the larger trees into a log-heap and, in time, set fire to the heap. Log-heaping, like hog-killing, was a semi-scial affair. The farmer would cut down, pile, and later burn the undergrowth. All this done, he would bring in a man with a grubbing-hoe to grub the land. Some of the older Negroes made their living "grubbing new grounds." Finally, even while some of the deadened trees still were standing, after the land had been grubbed, the farmer would have the new ground broken up as best he could by a new-ground plow pulled by a yoke of steers or of gentle, slow-moving mules or horses. The "new ground" then was planted to corn. Plowing a new ground and cultivating the corn were tedious work in that the plow continually