

Hitherto we have leased our lands and allowed the tenant to farm at his will. In the future the successful planter will be obliged to have his plantation supervised, and his work done according to the definite plans. In case of a merchant owning several farms, it can be easily arranged.

In case of a large number of farmers, it will require that one man be employed to supervise and give special directions to the small farmers, because it will never be safe, under boll weevil conditions, to allow the old loose way of cultivating crops. It is sure to result in failure. In fact, it has always been a failure to a great extent.

In the course of this diversification necessary to be carried on, it is very important that the towns should take a part, and should establish such industries as are correlated to the country. For instance, facilities for processing the hogs that are raised in the community and preserving meats.

Some cotton manufactories in many towns can be established with profit, also furniture factories, wagon factories and many kindred industries. In some instances some of these industries will be carried on only in the winter, when there is abundant labor idle on the farms. Hitherto the farmer has expected that the tenant farmer or the farm laborer would earn all that was necessary during the summer, but we are coming into a more strenuous life, and labor must be provided for the winter. How can this be done?

First, diversification will tend to do considerable of this.

The household garden, if properly carried out, will furnish food for the winter and summer, and a good deal of work can be done on it during the winter months.

The clearing and the fencing, and the repair of buildings can go on during the winter months, so that as a whole, where small farms are, the labor can be pretty thoroughly employed the entire season.

We must establish Manufacturing industries, but it is foolishness to talk about abandonment of the growing of cotton. We have just begun to grow cotton, the man who talks otherwise, is just uttering cheap talk. At the same time we are coming to a crisis in the history of the great crop. We must meet it like men. You can produce cotton if you wish,

boll weevil, or no boll weevil. I do not believe that the great American people who have fought and conquered so far intend to be whipped by such an insignificant thing as the boll weevil.

Out in one county in Texas, in 1904, the Government took charge of the fight against the boll weevil, when the entire county was demoralized. That year the County produced 40,000 bales. In 1906, the yield had grown to more than 72,000 bales, and conditions were better there than ever before, as the people had learned to diversify their crops, and to raise their own provisions. For fear that some one will doubt the statements I have made, I wish to state I have with me the names of more than 2,000 people from Louisiana, Mississippi and Texas, who have made a success of raising cotton under the Government plan, in spite of the boll weevil. As I have stated before the essentials for fighting the boll weevil, are first, there must be better drainage of the soil, so there will be a good stand, and the crop can be worked soon after rains. There must be excellent preparation of the soil for planting. Plant early as the season will permit and be safe. Seed of an early maturing variety must be used, one that puts out its fruit limbs low on the stalk and fruits heavily. Rows wider apart than usual. The seed also must be of the best quality. Cultivation should be intensive.

Do not lay by cotton as usual, but continue to cultivate until the bolls begin to open. Cotton is thus made all the time. If the rules of producing cotton are followed a good crop can be made.

To gain the greatest good you must supervise your tenants. You must give them to understand that the day of the haphazard methods is gone. It is the man who uses the most horse and mule power who wins to day. The successful man is the one who enslaves machinery.

We are in the period of higher prices for labor. It is heret o stay I believe, and the man who will win is the one who will see to it that he gets more work out of that labor.

The south should be the richest country in the world. That is from an Agricultural standpoint. You have advantages over every country for the production of good crops, and if you do not succeed, it is your fault, because you failed to apply the proper methods for planting and making a good crop.

7th.

Dont get scared of the boll weevil, it can be whipped. Diversify your crops and get more out of the soil. When you talk about abandoning cotton, you are laying the foundation for agricultural ~~distrust~~ distrust, and that means an agricultural panic. You might just as well put dynamite under your cities and blow them up, as to destroy your agricultural districts. The prosperity of the two must go together. ~~Method~~ The Government gives you a method by which you can succeed if you will. Such men as Congressman Ransdell and Col. Maxwell, of Louisiana, have followed this advice, and they have made ~~good~~ good crops in spite of the boll weevil. Col. Maxwell, said that out of 1500 acres of cotton, he produced 700 bales. I would be glad to give you a list of the names I have, but I will not have time here, but if you will write to my office a list will be furnished you from men who live in the boll weevil sections of Louisiana and Texas, who have made good crops this year. We are prepared to prove our position, and if any of you were born in Missouri, and have your doubts about it, go and find out for yourselves. We tell you the truth, and then you cango and see for yourself. When I came into this section, I found more young men who were educated agriculturally, than I found in any other State, all to the credit of that great man General Stephen D. Lee, and that great man Proffessor Hardy, who is now at the head of your Agricultural College. The 12th. of this month, I sent a graduate of your college to visit the King of Siam, who wanted to learn our methods for making cotton. Mr. Barnett goes there at a salary of \$6,000.00 a year, and his salry begins from the day he leaves Washington. That is what the young men are coming to. There is a great opportunity before the young, who are educated in agricultural lines. There is a demand for them. I have a great respect for the men you send to Washington from this State. You have a great many great men in congress. Your own congressman Mr. Humphreys, is a man that attends to his business and carries great weight in congress. I hear more men say, if you can get Ben Humphreys to advocate that, he is a power on the floor, and then thatold hero Senator H. D. Money. Why he said to me last year, I am going to get that appropriation for you, I am go ing to have it if I have to wring their necks. That is the kind of a man he is. He is going to win, and he ~~does~~ does win. You have got some more men that are coming on. Your next Senator Williams, you have so many great men, that I hardly know which one to pick. ~~from~~ When you have filled up the rank of congressmen, you could find a regiment just as good as they are. This State is noted for her great men. Then I am proud to have spoken to such an intelligent people.

8th.

Your land is worth \$200.00 an acre. They are producing Rice, Cotton, Alfalfa, good stock and many other things. Every one who follows our method of planting and cultivating a crop make a success of it. You cannot fail, if you will follow out the instructions laid down by the Government. What has been accomplished in other sections of this great cotton belt, you can accomplish, but will have to lay aside the old way and follow out the plan as laid down by the Government.

You will live to see this land worth three times what it is worth now, and you **CANNOT AFFORD TO SACRIFICE IT.** Hold your land and there is no reason why you should not succeed. This is the greatest country on earth for the production of the worlds greatest crop. You can make a crop here after the 15th. of June, just so long as you work your ~~lan~~ land properly. I have ~~some~~ letters here that I want read to you, and I am going to stop now and have those letters read to you, to show you what others have done where the boll weevil exist, simply by following out the methods of the Government. I am glad to have had the opportunity of speaking to you, and I hope it shall be my pleasure to meet you again. This work of education will go on, until this method is adopted by every planter in the land. ~~With~~ Mr. H. D. Tate , will read to you two letters now from Col. Maxwell, of Louisiana, whom many of you know.

September 21, 1910.

REPORT OF A MEETING AT RICHMOND, VA. AND ONE AT
MACON, GA.

On the evening of September 13th I left Washington for Richmond, arriving at a little after seven P. M. Later in the evening, Mr. T. O. Sandy, State Agent for Virginia, Prof. O. B. Martin, of our Office, and I held a conference with Governor Mann to outline the course to be pursued on the next day at the organization of the general board for the control of agricultural matters in the State of Virginia. Mr. Sandy and I were made members of this board by law.

At ten o'clock the following morning the Board was called to order by the Governor. This Board is composed of representatives from the Agricultural College, the State Department of Agriculture, the State Department of Education, and representatives of the United States Demonstration Work, with the Governor as Chairman.

The substance of the conclusions arrived at by this session was to turn over most of the funds, particularly the \$10,000 voted to the Department of Education, to us for Demonstration Work, and with that fund and the amount that, under the law, will be raised by the counties it was hoped that we should have sufficient funds to carry out the demonstration plan pretty fully in all of the general agricultural counties of Virginia, something like 48 in all. The purely stock or mainly fruit or truck counties are to be handled in another way, but under our direction. We held long sessions in the forenoon and afternoon but in the end came to a very harmonious agreement as to all points, the details of which are submitted in our full report of plans adopted.

On the evening of September 14th, we left Richmond for Macon, Georgia, and arrived at our destination about 8:30 P. M. on the 15th. The meeting at Macon was called for the purpose of a general conference with all our agents in the State of Georgia. About fifty were present. The reports from the different agents were exceedingly interesting and showed an intense devotion on the part of each agent for the work. Besides the reports, instructions were given by our General Agent, J. P. Campbell, and by our State Agent, E. Gentry. Also a very interesting lecture was given by Prof. Martin on the different phases of the corn club work among the boys and our general work, illustrated.

The Hon. Dudley M. Hughes, M. C., was present and made a most interesting address. Also Chancellor Barrow of the Univer-

UNITED STATES DEPARTMENT OF AGRICULTURE,
BUREAU OF PLANT INDUSTRY,
WASHINGTON, D. C.

OFFICE OF FARMERS' COOPERATIVE
DEMONSTRATION WORK.

IN YOUR REPLY
REFER TO SAK

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versity of Georgia, and Dr. Soule, President of the Agricultural College made interesting addresses.

The meeting was one of great harmony and profit to all parties. Since Georgia was fully organized I had not been able to attend a meeting of agents. I think the first meeting I attended in Georgia there were only seven agents. Some of them were present at this meeting and called my attention to the fact of our conference at that time.

On Saturday evening, September 17th, we took train for Washington and arrived at 10:30 P. M. on the 18th.

For the first time in the progress of our work we had a stenographer present to take full notes, both of the meeting at Richmond and at Macon, Ga. The result has been so satisfactory that I am inclined to think that in future we better plan to have a fairly full report of these meetings so that the Washington end of the Demonstration Work can be fully informed of some of the valuable things reported and done at such general assemblies of agents.

Very truly yours,

Special Agent in Charge.

ADDRESS IN NEW YORK CITY, SATURDAY, JANUARY 21, 1911.

A short time since I received a request from the Office of the Secretary of Agriculture to fill an appointment which had been made by him before the Great Central Republican Club of New York City. This club does not devote itself entirely to politics but on Saturday afternoon of each week during the winter it has addresses from prominent men on the subject of agriculture and other subjects of especial interest to this city, in order that the members may be well informed on these topics.

At first I did not feel inclined to go, but the Secretary said that this club managed a great many affairs of the State and it would be helpful to the Department if I went. The list of speakers as published in their official program was as follows:

Prof. Seaman A. Knapp, S.C.D., LL.D., Chief Expert, Department of Agriculture, (in the absence of Secretary Wilson through illness.)

W. C. Brown, President, New York Central Railroad Company.

Ralph Peters, President, Long Island Railroad (expected).

Prof. L. H. Bailey, of Cornell University, Chairman of Rural Life Commission, appointed by President Roosevelt.

Dr. Josiah Strong, Sociologist and Author (in opposition).

George T. Powell, Pres., Agricultural Experts Association.

Rev. John F. Carson, Chaplain.

J. J. Hill, President, Northern Pacific Railroad Company.

The addresses immediately followed the one o'clock noon-day lunch. I was requested by President F. P. Duryea to report to the headquarters, 54 West 40th St., where the club has magnificent apartments. At one o'clock about 500 members reported,

which filled the entire dining room in the tenth story. I was seated at the right hand of the President at the table and on my right was Prof. L. H. Bailey, of Cornell. The speakers were all seated at our table and spoke in the order named in the list given. Before speaking President Brown, of the New York Central, wrote that to his great regret he was obliged to be absent on account of the death of Mr. Paul Morton, President of the Equitable Insurance Company of New York; but in the letter he stated he particularly regretted being absent because he had read a great many articles from the pen of Dr. Knapp and he was anxious to hear him speak. President Hill was also detained for the same reason. All other speakers were present. I gave the opening and closing addresses.

The topic under discussion was the general cry now through the United States, "back to the farm". In discussing the subject, I stated that it was useless to appeal to the people to return to the farm as a mere matter of sentiment or loyalty to the place of birth, that the reason the people had gone to the cities was, in the main, because they saw better opportunities for the acquisition of wealth, to secure better social advantages and to obtain more of the comforts of life than in the country; and, therefore, the only reasonable foundation for saying, "back to the farm", must arise from the possibility of making better conditions in the country for the objects stated than now prevail in the cities. That is, there must be a general improvement in the environment of farm life, the schools,

the churches, the highways, the houses, and the conveniences in the country must be equal or superior in every respect to those in the cities. But, above all, it must be proven that the lands will yield a more remunerative compensation for toil than employment in the cities; so far as the average common man is concerned. Then, I showed briefly the numerous losses from unscientific methods in the rural districts and the remedy that could be applied which would in a short time readjust the country.

At the close of my opening address, the President moved a vote of thanks to Secretary Wilson for sending me there, and the members were full of congratulations. It was claimed it was the most interesting session they had ever had. The addresses of Prof. Bailey, Dr. Strong and Mr. Powell were all interesting and able.

At the close of the session I was congratulated by nearly all of the members and invitations were extended to speak at Columbia University, the Presbyterian General Assembly, Cornell University, etc., in an almost unlimited number. Our session closed at 5:00 o'clock and I took the train at 6:00 P.M. for Washington, arriving at 11.30 at night; and it takes about an hour to ride home from the station.

What can the teacher do to improve rural conditions?

What is the present status of rural conditions?

In general they may be outlined as follows:

1st. A very much lower earning capacity of the rural toiler than of his equal in the city and a consequent dissatisfaction upon the part of the farm wage-earner.

2nd. A lower and more hazardous return from farm investments than from those in commercial or transportation lines and a consequent disinclination to hold country property.

3rd. In the past half-century rural improvement has not kept pace with civic, and social conditions upon our farms have declined by the removal of many old and cultured families to the city. The progress of our cities has been so phenomenal that they have attracted people of education and refinement to the detriment of the country.

4th. The increase of rural lawlessness and crime has driven the families of many farmers to the town or city for greater security.

5th. The gradual increase of tenant farming, till it now represents about 40% of the total and the marvelous advance of cities in population, wealth and political power, are parts of the current history which indicate radical changes in our commonwealth not gratifying to lovers of a broad liberty.

6th. Our large cities are danger places on the map of our republic. Homes are so costly that only the rich can own them--the poor and even those of considerable earning power are tenants at will. The industrial enterprises are vast and it requires enormous wealth to handle them. Each supports an army of employees--all dependent upon a managing will.

In New York there are at least one-hundred thousand men so completely dependent for a day's bread upon a day's toil that they are compelled to cast their votes for a job, and there is another hundred thousand unavoidably influenced by their jobs. This we may call mass compulsion. There is also, where great numbers are ag-

gregated, a mass leadership regardless of wealth. Generally this represents organized and predatory poverty.

The prosperity in cities, so far as it relates to the masses, is illusory.

The number of toilers who finally acquire a reasonable reserve for old age in the country as compared with the same class in the cities, is as ten to one, taking the whole country into account.

While the wage is high in the cities, the cost of rents and living are in proportion. The multiplied attractions induce a habit of liberal spending, not conducive to economy. The small farmer may earn less but he can save more.

The true representative of liberty is the man who owns his farm home in the country. He is not obliged to vote for his job and his segregation breaks the spell of mass-leadership. He stands for an independent political unit instead of the mass units of cities.

The problem is: How can we increase and strengthen this individualism so essential to our national life?

1st. The income of the farm can be increased three to five fold by the use of improved methods.

2nd. The farm must be made valuable by the improvement of the soils, by the planting of valuable timber, and by placing on the land substantial improvements.

3rd. The farm must be made a place of beauty, so attractive that every passing stranger inquires, "Who lives in that lovely home?" The house is of minor consideration-- the gorgeous setting of trees and shrubbery holds the eye.

Another most valuable work to be accomplished is a great increase in the quality and quantity of home education. Rural improvement must be made to equal the demands of an enlightened rural population.

Fundamental to all this and infinitely more important is the crop of boys and girls in the country; the kind of men and women born, raised and molded under rural conditions. Shall they be great, strong, earnest, true and potential characters, or shall

they be weak and trifling?

Some families have been intellectual and vigorous for generations; some nations inherit and transmit potency. Are these due to accident, or training, or climate, or inheritance? Blood and racial characteristics are a wonderful heritage, but training is the great item which fashions a race. The seed of the cotton may be thorough-bred and of the choicest selection-- it will not produce the fleecy bolls if the plant is allowed to stand in the grass. The blood of a noble ancestry goes down before inherited wealth and a dissolute training as the tender grass before the whetted sythe. We must have the right training. The greatest schools for the human race are our homes and the common schools-- not our colleges and universities,- greatest in amount and value of the knowledge acquired. A country home, be it ever so plain, with a father and mother of sense and gentle culture is Nature's university, and is more richly endowed for the training of youth than Yale or Harvard.

Peerless among all teachers is that high priestess of the home, whom we know as mother. She inspires as well as instructs. Next to her in work and worth are the common school teachers. They supplement the home training and lay the foundations of knowledge along the lines of wisdom. The greatest event in human life is the awakening of the infant intellect. It has been ascertained with reasonable certainty that the extraordinary per cent of weak-minded and idiotic children in foundling hospitals is due to the lack of a mother's care. The loving eye, the cooing, the encouraging smile, and the chucking under the chin are necessary to the awakening and arousing of that intellect. They pour the very wine of a strong and loving soul into the weaknesses of the dawning intelligence and give it strength. No after-care can make amends for failures or misdirection at this initial stage.

Some people are dull all their lives. What is the matter? They were never fully awakened. That great man sought to be governor of his state and he attributed his failure to a lack of votes. He was mistaken--what he lacked was another mother's chuck

under the chin.

The six years next succeeding this period are generally devoted to growth without regard to mental expansion. What a mistake. For this acquisition of knowledge and for mental direction these six years are worth any other period of twelve years in human life. This is the absorbing period. The Japanese understand it and the infant instead of a cradle and a morphine dope is given the open air and a chance to see things. On the back of the mother or sister or brother the young child is constantly in the open air, and unless asleep is always observing and absorbing. What an iron constitution is built up! What a fund of knowledge is acquired! What brightness of intellect is induced!

Years since I entered a home where the mother believed in education by absorption. Two small children were playing on the floor with letter blocks. The younger could neither walk nor speak a word, but he knew each letter and would creep and bring it at request, or he would make up a train of cars and place the engine in front. To test the child's knowledge, I removed the cowcatcher from the engine and attached it to a rear car. The older child said, "You can't fool babe." Sure enough, in a few minutes that creeping midget had the cowcatcher back in the proper place. In after years he became one of the most skillful engineers in the country-- but he never knew when he learned. In many families it is not unusual for children of six years to speak three languages. They absorbed them. One of the greatest mistakes of our common schools is that the learning by absorption is arrested and the instruction by books is substituted. As far as possible in the common school the instruction should be by object lessons.

Contact with other children is just as necessary to strengthen and broaden child life as contact with men is helpful in forming strong and manly characters. The child raised in seclusion and schooled by private tutors has not had a fair chance for the battle of life. The sidewalk urchin is his superior in real knowledge of men and things. It is just as important that a boy learns to test his strength with his fellows, to stand for his rights and to

take hard usage good naturedly, as to learn anything else. The common school is the greatest of training places for American children.

The criticism that I pass on them is that there appears to be in some sections an organized effort to make them uncommon schools. A common school should be the place where boys and girls are fitted for the common duties and responsibilities of life. Our primary and secondary schools should fit the youth for the ordinary vocations of the commonwealth.

We all recognize the great value of higher education and believe in colleges and universities. They have their work and it is noble; but it is just as out of place to put part of a university into a common school as to put a common school into a university. A university can only be a tandem attachment-- what is needed is to widen the common schools by broader instruction in common things. The young farmer who breaks his harness upon a lonely road blesses the teacher who taught him to always carry an extra string. Any quantity of Roman history in the head is not equal to a string in the pocket for mending broken harnesses. A landlord sometimes attempts to supplement deficiencies in food and service by a band of music, but there is no music for a hungry man like a well cooked meal.

It is assumed that the instruction in the branches usually taught in the common schools of the country will be thorough and satisfactory: my object here is to call attention to lines of instruction neglected but very important.

The greatest of all acquisitions is common sense. Common sense is simply a wide and perfect knowledge of common things and how to use them. It is absorbed knowledge and not book instruction. The best work of the teacher is to cultivate the observation and thus increase mental absorption.

In a school room of forty pupils are forty pieces of complicated human machinery of wonderful power and marvelous possibilities subject to the manipulation and skill of the teacher. No greater

mistake can be made than for the teacher to attempt to make a Clay, a Calhoun or a Webster out of such material. The world is not in need of the exceptional. It is in need of more great, common people, We need an inspiration in the schools that impels every pupil to excel in the line which he or she is to follow.

How are such men and women to be trained unless it be done in our common schools? There ought to be an hour every day devoted to that much neglected study-- the study of common things-- and every pupil should be made familiar with all that relates to the home, the farm, the garden, the orchard, the forest, the animals, the birds, the insects and the fish. There is a world of information in the stores and in the shops to be sought and explained. All that relates to the common phenomena of nature furnishes chapters of absorbing interest. One day it is an object lesson on the leaves of the common trees and their offices; another, it is a chapter on root development and how plants feed; again, it is the marvelous story about seeds; the next day, the horse or the cow is the topic.

Dr. Beal once related to me his experience as a student of Agassiz: He had graduated at college and studied science for a year or more when he concluded to take a course of lessons under Agassiz. He called on the distinguished scientist and explained his object. Agassiz took down a shell about half an inch across, and said, "You may look at this, see what you find and report to me tomorrow." He examined and thought he saw everything about it, but upon hearing his recitation, Agassiz said, "You have seen some things but not all. You may look further and report tomorrow." This was repeated daily for three weeks, till Mr. Beal mastered the story of the shell; then Prof. Agassiz said, "Mr. Beal, you have tenacity of purpose. Most young men would have left in disgust. You will make a scientist whether you remain with me or go elsewhere." He had acquired the great lesson that wisdom lies in knowing a subject thoroughly.

This is folk lore. The knowledge of common things is child lore; and whoever does not acquire it in childhood will be either lacking in common sense or dull in apprehension of it.

One of the most radical and practical innovations in common schools is the introduction of nature studies and the school garden. Formerly many of our educational methods were erroneous. We tried to extract knowledge from books-- an impossibility. Pages of names in the sciences were committed without knowing for what they stood. Just as if we should commit to memory the names of a thousand people in a given city and then sometime try to fit the person to the name. Nature studies and the school garden aim to correct these erroneous methods, but they must be real nature studies and not nature studies in a book. The book should be secondary and never opened till the observations have been made. The garden is simply a great slate. The examples are placed upon it and worked out-- then others follow. The book helps to systematize this knowledge and place it in retentive form. The object of education should be to fit the individual to his environment and give him the knowledge and power to master it instead of allowing it to overcome him. For some years in my earlier life I was a teacher and I conceived it to be my duty to try to make every student who came under my influence dissatisfied with his environment and fill him with the hope of becoming a great man in law, or medicine, or scholarly attainments. I see now what wreckage I made.

I recall the case of a young man who attended my school years since. Through my influence his widowed mother sent him to college. He ultimately studied law and became a lawyer, briefless and unknown. All his forebears were farmers. There was not a particle of his gray matter that was adapted to the law.

If much can be done for boys to interest and instruct them in their life work, more can be done for girls. Teach them to mend and sew, and cook; how to doctor; how to dress a wound or make a ligature; how to adorn the simple home and make it appear like a palace; how by a simple arrangement the environment of the home can be transformed into a place of beauty. In the United States the art of cooking is mainly a lost art. There are communities where not to be dyspeptic is to be out of fashion. If we could have some lessons on how to live royally on a little; how to nourish the body

without poisoning the stomach; and how to balance a ration for economic and healthful results, there would be a hopeful gain in lessening the number of bankrupts by the kitchen route.

Our greatest need being a wider knowledge of common things, the teacher who really enters into country life and siezes its opportunities for developing the resources of the country, for increasing the harvests, improving the landscapes, brightening the homes and flooding the people with knowledge about helpful things, will never want for friends nor for places to teach. How joyfully will such a teacher be welcomed. The sound of her footstep on the approaching walk will be sweeter music to the cottage inmates than ever came from organ or piano even under the touch of genius.

Mechanical Skill.

Everywhere throughout the country there is a shocking lack of mechanical knowledge and skill. It is shown in the buildings, the fences, in the general farm arrangements and in the machinery. For success upon the farm, a knowledge of mechanics is second in importance only to a knowledge of agriculture. Mechanical knowledge and skill should come like common sense through absorption by placing engines, machinery and tools in the hands of children. Some of the most skillful engineers and carpenters and blacksmiths never consciously served an hour of apprenticeship. No farmer can afford to send for a mechanic to attend to the minor repairs-- they must be done by the men on the farm. Attached to every country school-house should be a room for the practice of mechanics. The use of tools is a necessary part of a common education. It will give mental direction as well as skill. Most boys can not tell the width or heighth of the average door through which they daily pass, nor the proper propertion of windows to the room. Their eyes were never opened to see industrial things. They may be able to talk learnedly about the Acropolis, or the Pantheon, or the Dome of ST. Peter, but to know about the house in which they live, this would be vulgar. There is no place for such rot in this utilitarian age. Not to know the things with which we come in daily contact is dense ignorance.

I know a professor, who for twelve years walked through a small pasture, where a choice herd of Jersey cattle grazed, and never noticed an animal. At the end of that period he inquired of a friend what kind of cattle they were and who owned them. He probably would never have noticed if he had not run against a cow.

Financial Sense.

There is another great field for instruction in common things-- financial sense, the value of a dollar and its conservative uses. It is acquired in the same way as common sense and mechanical sense-- by early practical training. This thrift may become a family or a state or a national characteristic according to the training. The Chinese, as a people, are thrifty, eager to earn, and prudent in expense. They live within their means, pay their debts and lay something in store for the future. The Filipino, the Malay, and the Hindoo are unthrifty. They delight in festal days, in storing nothing for the future and in spending the wage before it has been earned. The teacher should give practical lessons in thrift and show the importance of saving the pennies and wisely investing them.

I know a man who saved all his nickels and dimes till he was twenty years of age. They amounted to enough to purchase a choice farm of 80 acres, and he made the investment. In a few years the state wanted a man for a position of trust and selected him because of his reputation for thrift. Most of the rich men of the United States were born poor. They rose above their fellows not by superior genius but by greater thrift. The average wage in Japan is about one-sixth the amount paid in the United States for the same class of labor, yet Japan has not one-tenth of the beggars and the evidences of desperate poverty that there are in the United States. They all work and live simple lives; they are all mechanics.

Prompt and Alert.

The introduction of the military system into common schools has served a beneficent purpose. It has taught attention and prompt obedience. In daily life, the greatest elements of success are alertness and immediate action. Do today what might possibly be deferred till tomorrow. Tomorrow will bring its full responsibili-

ties. Training can do much towards making a people so prompt and alert that the baneful word tomorrow will cease to be a part of business language.

Another lesson of great value the teacher can impress upon the pupils, and that is, the necessity of labor and its dignity.

I am ashamed of the young man who is afraid of toil and I pity the girl who keeps soft, white hands. Let the young man glory in his rugged physique and let the young woman be proud of the common things she can do and not of her delicate hands.

We are rapidly becoming a nation of idlers. In the towns more than half the population does nothing towards earning a support if we count all the men, women and children who could do something. These half-grown boys and girls could make a garden and raise the fruit and the poultry to support the family if they would. It might brown their skins and soil their hands, but it would help them to do something and to know something. It would aid the family pocketbook and help the family character. There is no sufficient reason why every American family should not own a good home and have a snug sum laid by for a rainy day, except our laziness, our lack of thrift or possible sickness, and nine-tenths of all sickness is due to mal-nutrition, which is another name for ignorance.

Teachers! You must help to create sentiments of thrift and establish habits of industry or this nation will drift to wreckage. The greatest opportunity in the history of the world for the molding of a strong people and the establishment of a mighty nation will culminate in disaster if we discard such cornerstones as labor and thrift. Idleness and lack of thrift will undermine intellect, weaken physical vigor and personal courage, and waste the fairest heritage that ever fell to the fortunes of man.

In the elder day children were taught politeness. Politeness is the material expression given to human kindness. It is one of the most valuable of all acquisitions and no young man or woman ambitious for great success can afford to be without it. I know

an eminent banker who banks on politeness. It gives him capital and influence and power.

For a quarter of a century there has been much discussion about improving rural highways. This discussion has, in my judgment, lacked definiteness, and the servants of the people eager to obey have tried to construct, to mend, to patch and to please everybody-- the result is, a vast amount of money has been expended and but little good accomplished. Our main highways should be Roman roads, graded and bridged with the same care as railway lines. This would give the people cheap and rapid transit and prepare the way for rural mail and parcel delivery, and telephone service which must become universal. Where is the money to be obtained to defray this enormous expenditure? Save the waste and the vast sums expended for liquor and tobacco and in five years the entire country from Canada to the Gulf of Mexico, from the Atlantic to the Rocky Mountains, could be thickly checked with Roman roads. What is needed is a reconstructed public opinion in favor of bettering our conditions. Public opinion rules our country. The teachers are the natural initiative and reconstructing force in public opinion.

I have no sympathy with the unrest of our rural population. We are upon the eve of radical changes for the betterment of country conditions. Today the safest place for investment is the farm. Land values will advance rapidly with increasing population. They will more than double in thirty years. Already the abandoned farms of New York and New England are being sought by capitalists for investment. There is many a man planning to sell his paternal acres in the country for a pittance and invest the proceeds in a cottage in the town-- and then earn the support of his family by daily toil. It is the act of an irrational man. He does not stop to think that that farm will give him a home and support and soon quadruple in value. He fails to note the possibilities of rapidly increasing his wealth by the planting of valuable trees, and he voluntarily exchanges the rights of a king and the privileges of a free-man for a daily wage and the badge of service.

I have tried to make clear the importance of an education in common things for common people as opposed to the exceptional and the remote and the extraordinary. If we have no more time than necessary to become perfect in the knowledge of one country, let that country be our own. Study the history, the language, the soil, the climate, the animals, the birds, the plants and all the conditions that make for home success and comfort. If still there be inclination, leisure and means, then extend the researches into foreign lands. We are on the wrong line. We have tried to master ancient history without knowing modern. We have attempted to translate the classics and have failed for lack of English; our ten-story buildings without foundations or lower stories have not proven even good air structures. A great nation is not the outgrowth of a few men of genius, but the superlative worth of a great common people. Few will attempt to controvert this statement. Our differences appear when we undertake to outline a course of study essential to the making of a great common people. We are agreed, however: That to meet our highest ideals each individual, in all the classes, occupations and professions of our commonwealth, must be strengthened and developed in his life work to the extent of his capacity. Chemistry, botany, entomology, biology, mechanical conditions of the soil, plants, mechanics, etc., must be taught to the extent required in the vocation to be followed, and with special adaptation to it. At present they are taught on the iron bedstead plan, the same for all.

What can you, teachers, do to help our rural conditions? Everything. You are an essential part of the greatest of all universities- the home. You have charge of the extension courses. You can inspire in youth a love of knowledge and make all its avenues look delightful. You can unlock the books, which are treasure houses of human wisdom, and give them a golden key. You can cause the soil to become more responsive to the touch of industry and the harvest more abundant to meet the measure of a larger hope. You can add to the comforts of the home, shape its environment into lines of beauty and increase its attractiveness, till the home shall

become the greatest magnet of our people.

You can create a love of investigation and give it direction. You can enlarge the knowledge of the people in common things and thus lay the foundation of common sense. At your instance, fingers will touch the lines of deftness and mechanical skill will become universal, and thrift and alertness will transform the toilers into captains of industry.

Your mission is to make a great common people and thus readjust the map of the world. The keystone of American civilization is the home; by some mysterious social convulsion it has become loosened; you can reach it from the pedestal of the common school- push it to its place and cement it in a way that will be enduring.

Hamilton took the youthful Hanibal and made him swear at a sacred altar eternal enmity to Rome. Teachers! On bended knee and with uplifted hand, at the altar of liberty, swear eternal enmity to ignorance, vice and crime. The trumpet calls to battle. "Soldiers! Go, but not to gain mouldering spoils of earth-born treasure,

Not to win a vaunting name,

Not to dwell in tents of pleasure-

Dream not that the way is smooth.

Hope not that the thorns are roses,

Cast no longing eyes of youth when the sunny beam reposes,

You have sterner work to do,

Hests to cut your passage through .

Close behind you gulfs are burning,

Forward! There is no returning."

WHAT CAN THE TEACHER DO FOR THE IMPROVEMENT OF RURAL CONDITIONS?

BY S. A. KNAPP.

DELIVERED AT CHARLOTTE, NORTH CAROLINA, JUNE 18, 1908. And KNOXVILLE,
TENNESSEE, JUNE 27, 1908.

Not quite a half century has elapsed since these States, now so peaceful, were engaged in a relentless war. In that struggle the resources of the country were taxed to their limit and the proceeds expended with lavish hand. Under tremendous forces evoked boys sobered in a day and became men and men became heroes; battles were won or lost; women suffered and wept; men fought and died, but the purpose of the people faltered not.

The Southern States are now in the midst of a greater struggle than that and one more far-reaching in its consequences. It is the conflict of the industries waged for industrial independence and a chance to contend with the most favored people of nations for the industrial supremacy of the world. Every acre of land, every dollar of capital and every citizen in the South are involved in the issue. Its results will determine the measure of improvement and the ultimate value of our farms, the comforts and culture of our homes and the educational advantages afforded our people. Hitherto our aspirations have been too individual. Each man has sought wealth or power for himself that he might have ease and comfort or position and influence. Individuals die; races live; his ambitions and achievements should have been for his race. His purposes have been too narrow and too low; instead of seeking local supremacy and fame he should aspire to a supremacy which reaches, and strengthens, and elevates every individual and results in the industrial conquest of the world. The industries here are simply regarded as the material evidence of the culture and potentiality of men. The least worthy manumnt to a man is a granite block or a marble shaft. They represent the dead man's money and the kindness of friends. The true monument is what the man has accomplished in life. It may be a

better gate, or house, or farm, or factory; put his name on it and let it stand for him.

The production of raw material is the lowest round in the ladder of industry. We have stepped one foot on this and looked down instead of up. We have been content to produce cotton, sugar, rice and tobacco and buy the remainder. With few exceptions we have produced them in an uneconomic way and without effort at excellence. In these products we have four of the best cash crops of the world. They yield us about eight hundred and fifty millions annually; of this five hundred and fifty millions are exported. What becomes of this vast sum annually flowing to the South? It is mostly returned to buy the vast variety of articles we do not produce.

We must climb the ladder of industry. If Southern farmers would produce upon their farms the food for the people and domestic animals required to till the farm there would be a great gain in bank accounts. From the standpoint of the farm the Southern people occupy a vantage ground for prosperity greater than that of any other people in the present or the past. The possibility of immensely increasing their gains is within reach. The Southern farmer can learn if he will, how to increase the average product of each acre threefold. The methods are simple and can be understood and practiced by the illiterate as well as the learned. He can increase the efficiency of each farm laborer fivefold by the use of more and better teams, better implements and labor saving machinery. In the two items of increased production, and increased efficiency of labor is a possible gain of fifteenfold.

About sixty per cent of the lands of the South are idle and mainly a tax upon the forty per cent improved. Every idle acre should be made tributary to the net bank account. An idle acre of land is as great a sin against civilization as an idle man. They both eat and do not work. If idle lands are a tax upon wealth of the nation much more is the enormous and increasing idleness of the American people. More than thirty millions of our population are mainly spenders of wealth rather than contributors. It ought not so to be. Every man and every woman and every child over six years of

X Tea
age should have some useful line of work for gain. The labor of house-keeping should be reduced to its lowest limits by the installment of labor saving devices, so as to greatly increase the lines of gainful labor. We are importing annually fifty-four millions dollars worth of unmanufactured silk. Every pound of silk used could be produced at home by the non-working children. Silk worms are easily raised and their food; - the mulberry leaves, are found everywhere in the South. X The garden, the poultry and the cow should be a part of the home. They are required for education training as well as for support. They stand for health and vigor, for better nourishment and greater economy and they foster education and morals.

The science of conserving and wisely expending gains is as important as the science of producing them.

The loss to the people of the United States from disease, mainly due to mal-nutrition and lack of open air and physical exercise is something enormous. Without exact data I place the sum at twenty dollars per capita, or one billion eight hundred millions annually for the nation. Ninety per cent of this vast sum could be saved by the right education and training. There is something radically wrong about an education that tends to a weakening of the race. The loss by failure to use the labor of the family to produce the food for the home and by actual idleness in the nation exceeds one billion annually. The loss by uneconomic expenditure exceeds another billion. The facility with which costs can be added without increasing/^{the}value is something marvelous. The sweet potato worth a cent is canned, a flaming label put on and is eagerly bought at fifteen cents. A head of cabbage costing one cent for production is readily retailed from the market at five to fifteen cents. The farmer sells a pound of cotton for ten cents and buys it back from the shelf of the merchant at thirty to forty cents per pound. The transformation of the raw cotton into the woven and finished fabric actually cost only five to seven cents per pound; the rest is the fiction of transportation and the jugglery of profits. These can be eliminated by home manufactures. The spindle, the loom and the

workshop must be close to the farm.

There is another great waste, the excreta of animals. If the solid and liquid excreta of human beings and domestic animals be included, the annual loss exceeds a billion. It is carried into creeks, rivers, harbors, oceans at immense cost with the sole purpose of disposing of waste. Science has shown how this can be easily and economically converted by germs into available nitrates.

The loss by **uneconomic** transportation is measured by millions. We have neglected our water ways and transport our food, our constructive material and our fuel by artificial **highways**, miscalled rapid transit. A trained ox hitched to a loaded canal boat will make better speed than freights by rail.

Actual gain in rural wealth is illusive. In many cases the deterioration of the soil more than equals the cost of improvements upon the farm.

The tremendous problem before us is the building and perpetuating of a high civilization. Mental training, culture and refinement are assets of value, but men die and these gains are **lost**. To be enduring brains must be bound into books, mouldered or hammored into structures of iron, shaped into habitations of brick; carved into marble or granite; packed into highways, rolled into thought conveyors strung on poles to carry the voice across a continent, or placed in some usable and enduring form, helpful to the human race. We must rebuild our wasted soils, restore the valuable woodst to our forests, construct economic and enduring highways, substitute in the country substantial structures of brick or stone for our frail tenements of wood; the meadows must send their **fragrance** from the valleys; the fruit trees must cover the hilltops with bloom; the school house, the church and the factory must gladden the view from every summit. We must build a complete and enduring rural civilization where strong and vigorous manhood is reared and where the purest and rarest forms of womanhood are in bloom. To do this will require not only high purpose and great intelligence but some radical changes in our methods. Every step upward in civilization costs and the highest conditions are enormously expensive. If we would have the resources to carry out our plans we must increase the net earnings of the rural

toiler at least fivefold; every idle acre of land must be made to produce and every idle man and woman drafted into army of toil; extravagance and waste must cease; intelligence must dominate matter; and universal vigor take up the tasks of general frailty. Our industrial Cromwells must lead an army of iron-sides -- men that pray and fight.

In this great uplift -- ^{what} part can the teachers take? And what part must the teacher take or our civilization will be of too low a standard. Next to the parent the teacher is the greatest power in our civilization -- Their office is not solely to instruct in rudimentary or higher educations; they weave the threads of thought into mental fabrics; they plant the germs of future work and worth in the mental garden; they sit in judgment on heroes and statesmen; they are moulders of destiny; they carve out Empires small and large; they finally readjust the map of the world. It was the German School teachers, not Bismark and Von Moltke, that won a Sedan.

To do this work successfully requires breadth of knowledge on the part of the teacher. In this statement it is assured that the fundamental branches are well taught. It is a high science to encourage, inspire and thoroughly instruct children untrained to think. The foundation is the most important part of the future scholarship. A teacher that has done this work well deserves great credit and justly stands high upon the roll of successful teachers. However, from our point of view such teachers, have done only one third of the work required. They are one third of the highest type of a teacher.

The second third is the training of the observation and the memory. Up to the time, when the child enters the school room, the acquisition of knowledge has been mainly through observation. Suddenly a book is thrust before the eyes and the child is told to form a conception of an object from the description. He does not conceive. The word types make only a blur on the brain. This change is too radical. It should be gradual. There is too much book work in the schools. In all the school life the method by which we acquire knowledge the first three years of life, a trained eye and ear and an exact memory, should be continued as far as possible.

Ninety five per cent of the usable knowledge of the world must be acquired that way. It is the main training for life; books are only aids. If we can not see and hear and know, then use a book; but it is only a substitute. A book comes about as near meeting the wants of the scholar thirsting for knowledge as the description of a circus to satisfying the boy who wants to see the real thing; and yet blessed be books; they are mighty helps. Error is rife everywhere; few people tell the exact truth; and yet in the main the misconceptions and strifes that result from this are due to an untrained eye that does not measure or outline accurately, or to an ear defective in its apprehension of sound language, or a memory without accuracy or grip. This is faulty training.

Suppose a laborer in a garden should transfer a thrifty, vigorous, rapidly developing plant from a moist, fertile and sunlit soil to one that is cold, dry and shaded the effect would be immediate. The gardener would call the plant stunted. Many a boy and girl have been stunted when transferred from the genial and sunlit schoolroom of God in their first years of study to the cold, dry and shaded schoolroom of man with a book thrust before them. The observation and memory are trained by use. Fill the child's mind with a knowledge of common things. They can never be taught so successfully as then. It is nature's way. The creeping midget upon the house floor is a student of environment of which the door that jams the finger and the hot coal are apart. Man is but a creeping midget upon the arena of life and unless he knows his environment he is constantly picking up a live coal or putting his fingers in the way of some slamming social device.

At three years old the average American child has learned to speak the English language and has mastered the names and uses of all the things about the home. At the same rate of progress a child ^{could} acquire a knowledge of the common and essential things about the soil, the seeds, the plants, the flowers, the shrubs, the trees, the domestic animals, the local insects and the native birds without cramming or in any way interfering with his

progress in the fundamental branches of learning usually taught,

At twelve years of age every boy and girl, in addition to the acquisition of a good, practical, English education should be a perfect encyclopaedia of the knowledge of common things. They should know the main usable facts about everything in the vegetable and animal kingdom, that is, in common use, and should be similarly informed as to manufactured articles and their uses. They should be ready for a post graduate course in all home matters. This requires no cramming. It can all be accomplished by a simple and natural absorption. Put the things to be learned in their way so they can not fail to see them frequently. Have all the common trees and plants in the yard at home, or at the schoolhouse; place a durable label on them, giving the common name and their ordinary uses, and along similar lines carry out the whole plan of education. Knowledge for the young should be mixed with rhubarb but should be made into candy and taken in drops. It should not be branded on to them with a hot iron, but should be formed into bouquets and graciously given with good will.

The final work of the great teacher is to reach the homes and influence the parents, so the home environment, if it does not precede, will at least keep pace with the education of the children. Education can not attain its greatest results unless the home and the school are colaborers. The mighty power of home in moulding childhood and youth must be utilized. It can be done by interesting parents in the advance methods employed with the children, by public meeting for rural improvement, by personal visits and appeals, and by rural associations for home and school betterment. Do not try to accomplish too much at one time. Do not expect immediate results.

There appears to be a general demand for the teaching of agriculture in the rural schools. Upon the following plan I see no reason why it can not be made a success:

(1) Do not try to teach in primary schools everything closely or remotely related to agriculture. This would exhaust the resources of the wealthiest college of agriculture in the land.

(2) Outline the few things absolutely essential to success in agriculture. Some of these are principles, some are practices, and some are business methods. The principles can be taught; the practices and business methods must be acquired by observation and experience.

At an early period it was found necessary to evolve from the mass of ethical teaching, a few general rules for living, called the ten commandments by which a man could be moral without taking a course in theology. Just so, at the commencement of our Demonstration Work to instruct the average farmer how to produce larger crops at a less cost, we found it necessary to first deduce from the mass of agricultural teachings a few general rules of procedure, which we have called the ten commandments of agriculture, by the practice of which a man may be a good farmer in any state without being a graduate of an agricultural college. They are as follows:

(1) A deep and thoroughly pulverized seed bed, well drained; deep fall breaking (plowing) with implements that will not bring the subsoil to the surface.

(2) The use of seed of the best variety, intelligently selected and carefully stored.

(3) In cultivated crops, give the rows and the plants in the rows a space suited to the plant, the soil and the climate.

(4) Intensive tillage during the growing period of the crops.

(5) A high content of humus in the soil. The use of legumes, barnyard manure, farm refuse, and commercial fertilizers.

(6) The value of crop rotation and a winter cover crop on southern farms.

(7) The accomplishing of more work in a day on the farm by using more horse power and better implements.

(8) Increase the farm stock to the extent of utilizing all the waste products and idle lands of the farm.

(9) The production of all food required for the men and animals on the farm.

(10) The keeping of an account with each farm product, in order

to know from which the gain or loss arises.

A man may be covered with diplomas from institutions of agriculture and be filled with bucolic lore, but he will never enter the farmers' paradise unless he observes these commandments of agriculture.

The value of good drainage, the deeper and more thoroughly pulverized seed bed, abundant humus, the best seeds, intensive cultivation and proper economic fertilization can be taught in the school garden, in plats as small as eight feet square, and for some varieties^e much smaller will give results. These plats are the open air blackboards for demonstration. The following rules should be observed in their use where agriculture is to be taught:

(1) The examples should be agricultural examples and not those of a park or a floral garden.

(2) The lessons must be limited in range, simple in statement and fundamental in character.

(3) Use no scientific names; call that common tree a white oak and not a quercus alba; call wheat, wheat and not triticum vulgare, and oats, oats, not avena sativa. Children are learning for practical use and one name will answer. In packing a thing into the human brain it is not well to have it fit so loosely that it will require a big name on each side for filling.

(4) The final value of the lessons will depend upon thoroughly fixing in the mind a few fundamental principles. The bane of teaching is the tendency to spread.

There are three simple things essential to profitable agriculture, to wit:

(1) A deep and thoroughly pulverized seed bed, well drained and filled with humus.

(2) The use of seed of the best variety, carefully selected to an approved type and of the highest vitality.

(3) Intensive cultivation.

If by means of the school garden these three things can be successfully transferred to the brain of the American youth and be universally practiced on

the farms it would increase the aggregate income of all our husbandmen sufficient to pay the salaries of all the common school and high school teachers in the United States, if doubled, and the salaries of all the college professors and then there would be sufficient surplus to build and equip a school house in every rural township throughout the land.

There are three more things of great value to be added,-

1st.- How to live in a simple and economic way and provide the best nourishment for the human race and for the domestic animals.

2nd.- How to convert all the vegetable mould, now wasting, into humus and all the excreta of the human family and of the domestic animals into available nitrates for the renovation of the soil.

3rd.- How to secure a fair profit from the lands that now produce only a crop of taxes.

If these could be taught and universally practiced it would increase the bank accounts of the American farmers by a sum sufficient to build reservoirs at the sources of our rivers and send their waters more slowly to the sea; sufficient to transform every river of consequence into a highway of commerce, to dam every rapids and convert the falling waters into electric power to supply every manufactory and light every home in the land, and sufficient to reforest all of our mountain lands for the conservation of moisture, the improvement of climate and the future timber supply of our nation. In the six things before named there is a wealth of possible product and profit that will make all the gold mines of the world look like a ten cent piece.

But many things absolutely essential to success in agriculture can not be taught in the common schools. They are not taught in the agricultural colleges. They can be said, but saying a thing is not teaching. Parrots can say things and occasionally a human parrot attempts to teach or write a book. There is all of that great and difficult side of agriculture,- the practical side: how to utilize everything to the greatest advantage; how to increase the accomplishments and decrease the expenses; how to substitute more teams and better tools for human labor and how to use the

light gas engine instead of human hands for washing, ironing, pumping water, sawing wood, husking corn, milking cows and making butter; thus converting farm drudgery into accomplishments without toil, by a service without a wage and one that never tires, nor strikes, nor has the rheumatism. How to secure this practical training and connect it with the common school machinery has been our problem. For a long time I thought it could not be done; at last a method has evolved which thus far has proven a surprising success. In a state where there are county super-intendents of public instruction, four such superintendents were commissioned callaborators by the Secretary of Agriculture. This gave them the privilege of using government stationary and the frank for letters and circulars and gave to each school boy demonstrator full instructions how to raise the crop. The United States Department of Agriculture furnished the seeds for the test and the public spirited citizens of each county subscribed ample funds for premiums to intensify the interest in the contests. The boys' names were published in the county papers. They received their first inspiration for farm work. Over eleven hundred boys were enrolled in this school demonstration work. Thus far it has been a success beyond our expectations. The lads have taken the deepest interest in the plan and have faithfully followed instructions. Other boys observe; their parents are keen for the contest, alive to the results and derive fully as much benefit from the demonstrations as their children; the people who furnish the prizes are interested; there is an uplift of the whole community.

The economic side appeals to the people. It has been feared in some quarters that this extentionsof the lines of education would call for such a vast expenditure of money that it would fail because it was impossible to sustain it. In this trial the total additional cost to the United States Department of Agriculture in conducting 400 school boy demonstration farms in a county is less than fifty dollars per annum or twelve and a half cents per farm. The County Superintendent does his part as a work of love and pleasure,- the people the rest. This school extension cooperative work is a miracle of success. In a short time I trust there will be a further extension of the Cooperative Demonstration

system into rural homes. This time four hundred girls under proper instruction and supervision may be invited to contest for valuable prizes in domestic economy, the best house keeping, the best preparation of the simple foods, the best work in making the common garments of the home or the best poultry and garden, and this plan be extended until it has revolutionized every home in the land.

In outlining all the lines of work to be added and all the responsibilities of teachers, we are impressed with the greatness of their duties. These appear stupendous, even impossible. Let it be remembered that no one expects it to be done in a day nor a year nor a generation. It must germinate and it must grow, but it must be planted and cultivated.

(1)

In the centuries the American people have been at work on the problems of rural reform, some progress has been made and we are now prepared for the accomplishment of what we have so earnestly sought, the placing of rural life upon a plane of profit, of honor and power. We must commence at the bottom and readjust the life of the common people.

1st, By increasing the earning capacity of the small farmers. More comfortable homes, better schools, improved highways, telephones, free delivery of mails and rural libraries all require money. They cannot be installed and maintained without it; hence the basis of the better rural life is greater earning capacity of the farmer. Farm renovations and maximum crop production are now fully understood and they can be explained and illustrated in such a simple and practical way that it would be a crime not to send the gospel of maximum production to the rural toiler. It is said by some that the farmers are a hard class to reach and impress. That is not my experience; they are the most tractable of people, if you have anything substantial to offer--- but they all want proof. They do not take kindly to pure theories and no class can more quickly discriminate between the real farmer and the book farmer than the men who till the soil. The message to the farmers must be practical, and of easy application. Who shall take this message? Our experience is in favor of farmers of fair

(2)

education and acknowledge success on the farm. They may make mistakes, from a scientific standpoint in delivering the message, but these are easily corrected. The main thing is to induce the farmer to act, and no one can do that like a fellow farmer. Of what avail is that the message be taken by a man of science, if the farmer will not give heed? In general it is not the man who knows the most, who is the most successful; but the man who imparts an implicit belief with his message. The greatest failure as a world force is the man who knows so much that he lives in universal doubt, injecting a modifying clause into every assertion and ending the problems of life with an interrogation point.

The process of changing the environment of a farmer is like that of transforming a farm boy into a scholar. First the farmer is selected to conduct a simple and inexpensive demonstration. Second a contract is drawn with the United States Department of Agriculture by which he agrees to follow certain instructions. Third, better seed is furnished him and his name is published in the papers. Fourth, every month when the Governemnt Field Agent goes to inspect his demonstration many of his neighbors are invited; consequently he will almost unconsciously improve his farm so as to be ready for company and cultivate all of his crops better. Fifth, a report of his extra crop is made in the country papers. His neighbors talk about it and want to buy seed. Sixth,

(3)

he sells the seed of his crop at a high price; his neighbors ask him how he produced it; he is invited to address public assemblies, he has become a man of note and a leader of the people and cannot return to his old ways. Soon there is a body of such men; a township, a country and finally a state is transformed. The power which transformed the humble fishermen of Galilee into mighty apostles of truth is ever present and can be used as effectively today, in any good cause, as when the Son of God turned His footsteps from Judea's capitol and spoke to the wayside children of poverty.

The environment of men must be penetrated and modified or little permanent change can be made in them. The environment of the farmer is limited generally to a few miles. The demonstration must be carried to this limited area and show how simple and easy it is to restore the virgin fertility of the soil, to multiply the product of the land per acre, to increase the number of acres each laborer can till by three or four fold and harvest a profit from untilled fields by animal husbandry. This is our Farmer's Co-operative Demonstration Work.

The second step in rural regeneration is the establishment of Agricultural banks, through which reliable men may be assisted to own ^{the} lands ^{they till} they till. In the United States there are over two millions of rented farms, more than one-third of the total number. The majority of these farmers

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would become owners if properly encouraged and aided. In addition there are tens of thousands of mechanics in the towns and cities, who were raised on farms and would return to the country and purchase lands for homes, if slightly assisted.

Agricultural banks should be established to assist in carrying out the plan of colonizing the country with thrifty home owners. Furthermore, it is equitable, because millions produced by the farms of the nation have by the process of banking been transferred to commerce and no way has been provided, under the law, by which the money of the people can be used by the people for time investments in providing for ownership of rural homes-- the royal right of Americans. Sovereigns and more honorable than the order of the Garter or the Golden Fleece.

The third advance in the great uplift of rural conditions consists in teaching farmers wives and daughters how to feed clothe and doctor their families. When the township graded school takes the place of the scattered district schools, it will be plain how to accomplish this work by school demonstrations.

If these three progressive steps be taken the rest will follow as a natural evolution. It is not a matter of pure deduction which assures me that the farmers will make their homes more comfortable and more beautiful, will perfect the rural school system, will construct good roads, telephones and electric railways, when they have the means to do so.

Where our Farmer's Cooperative Demonstration Work has been conducted long enough for the farmers to get out of debt there is a marked improvement in buildings and farm equipments to do good work. The farmers' families are better clothed and fed; thrift and comfort have appeared in places formerly as destitute of these as the jungles of Africa.

The state can accelerate the progress of rural improvement by encouraging good works. In England better high-ways have been promoted by a law which provides for the general Government taking charge and thereafter maintaining all roads which the people construct and improve up to a certain excellence. In a similar way the state could encourage the building of the best Macadam or Roman type of roads by offering premiums for every mile constructed by a township or county, and important highways might even receive national aid. Such a highway as the Spaniards constructed from Ponce to San Juan is worthy of National aid and is more valuable to the country than a railroad and at less cost. The life of a Roman highway is more than two thousand years. Several such highways should bisect every country in the United States and be a part of a great National road system. The secondary highways will of course for many years be dirt roads; but they should be of the best type. With our waterways improved, connecting canals constructed and a system of National highways the problem of transportation will be largely solved and an immense impetus given to better country conditions.

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In a similar way a wise government policy can foster schools by special annual appropriations to township and country graded schools of a certain excellence. Under such a system a High School fully equipped to instruct in the practical branches required for successful farm life, could be maintained in every country.

Telephones should be made a part of the postal system and extended through the farming districts of the United States where the people have shown ability to construct and maintain a first class highway; one half of the expense of installing the telephones to be borne by the rural route and a rental charge made, as for post office boxes. In addition there should be a rural express on every highway of the first class. Thus a farmer residing ten miles from his market town could make an order by "Phone" and receive the package by express in a short time. By the same conveyance the sons and daughters of the farmers could attend a Central High School.

BETTER CONDITIONS FOR SOUTHERN FARMERS

Address of Dr. Seaman A. Knapp

Special Agent of United States Department of Agriculture

Before The

Conference of Education in the South

HELD AT PINEHURST, N. C., APRIL, 1907

In discussing this topic, it is necessary to arrive at a just estimate of present conditions in our Southern rural districts.

Some years since, a traveller said that the farms of the South looked like a bankrupt stock ready for the auctioneer; the soils were impoverished; the brush and briar patches conspicuous; the buildings dilapidated; the fences a makeshift; the highways but little more than much used bridle paths; the churches and school houses were built upon the plan of inclosing the necessary space at the least expense; and the grave yards appeared as if the living did not believe in the resurrection.

This view point is not mine. To me the Southern States surpass all of the countries of the earth of equal area, in material resources, mainly undeveloped. Underneath almost every acre is concealed a mineral wealth of surpassing value; within almost every acre are agricultural resources that touched by intellect and labor, will reveal marvelous products. To me the Southern people are the purest stock of the greatest race the world has produced. The rural population has lived under unfortunate conditions for the best development, but the essential material of their natures is not impaired and it requires but leadership to attain great results. "Scratch a Philippino and you may uncover a Malay"; scratch a poor white of the South and you reveal a hero. Great gains have already been made and grater are yet to come. There are some retarding conditions. What are they? The following are a few of the most apparent:

- 1st. In the older states of the South the annual product per acre has greatly decreased owing to the rapid loss of soil fertility; and moderate production is only maintained at increased cost. Even comparatively new states, like Texas, indicate rapid loss of fertility.

- 2nd. Within the last half century vast areas of virgin prairie soils have been opened for settlement by the construction of railway lines and have attracted many from the older states. Economic and rapid transportation are equalizing the land values of the world, depressing them in older and more populous sections and rapidly enhancing values in the newer. This is true in Virginia, in New York, in England and elsewhere.

3rd. The large body of freedmen settled throughout the rural districts of the South has tended to lower farm values and depress Agriculture. I am not claiming that they intentionally do this or are morally responsible for the effect. The effect is not the result of color, but is caused by lower planes of living. I simply mention it as a factor.

4th. The poverty of the laboring whites should be taken into account. It takes resources to build and maintain a high civilization. If the poor whites and the colored people, constituting nine-tenths of the country population, do not have means to buy farms, nor improve them, nor purchase equipment, nor to pay current expenses, country conditions must fall to a low level. Considerable of this is due to the war between the states, which financially ruined the South. It takes a long time for the people to recover from sweeping disasters, and it takes longer when nine-tenths of them have but slight knowledge of thrift.

5th. The credit system has been a potent factor in depressing Agriculture. To some extent it might have been a necessary evil in a limited way, forty years ago; but it prospered and became dominant, oppressive and insolent. It unblushingly swept the earnings of toil from the masses into the coffers of the few. It substituted voluntary for involuntary servitude, ownership by agreement and poverty by contract under fear of the sheriff for the ownership by birthright and a government by proprietary right. So we have lived under a slavery where the chains are ingeniously forged and the bands riveted with gold. It is all the same in effect, the impoverishment of the masses.

6th. Evolutions in manufactures has wielded a mighty influence against the general development of the country. Sixty years ago most of our mechanics lived in the country upon small farms, which they and their families tilled for support and they sold their surplus labor to supplement the home income. People were honest and thrifty, because all were employed; today these mechanic farmers reside in town or city, sell all their labor and live out of a canned garden and milk a tin cow; of course their sons and daughters are idle.

7th. To foster the mechanic arts we have levied a duty upon the farmers, thereby destroying competition and increasing the cost of what they purchase about fifty per cent. This with the marvelous improvements in machinery and mechanical power has given the mechanic an earning capacity (as shown by the last census) of from four to six times that of the average farmer. This is the main magnet which attracts the best youth from the farms and deprives the rural districts of their rightful leaders.

8th. To cap the climax of depressing influences most of the money of the country has been diverted into commercial channels through the banking laws. In the olden time there were men in the country who loaned money to farmers; later all such funds have been absorbed by banks, until banks directly and indirectly control the money of the country. Farmers can deposit in a bank; but they cannot borrow from that bank, even their own money, to make a crop. It requires at least six months to make and market an average crop upon a farm. Banks can loan only for ninety days. Suppose all of the deposits of a village bank were made by farmers, that money must be loaned upon short time and hence is not available for crop-raising to any extent. Thus the banking capital of our country, a considerable portion of which belongs to farmers, has not promoted agriculture; but has stimulated commercialism and by its concentration in cities has fostered gambling in stocks. The great fluctuation in the values of farms and farm products lies in the fact that the money of the country is not backing them. It has been loaned to the merchant, the manufacturer and the speculating interests. This is not intended as an argument against banks. Banks are a necessity. The criticism holds against a phase of our banking laws, which by process of law diverts the money of farmers into commercial channels.

This backward condition of the country, as compared with the city is not a new problem. It dates from the earliest historical periods. Many of the words of reproach or opprobrium in the English language were the designation of farmers, in the several languages from which they were derived, such

as villian, heathen, clown and boor. While rural conditions were such as these names indicate, the weavers of Bruges and the train-bands of London were winning victories for liberty.

Every effort to improve the country has been more or less of an uplift. When manufactures were established in the villages of England and in New England an important step was taken in economic production. It helped the marketing of farm products and gave employment to the surplus labor of the country. This should still be the policy of manufactures, if the most economic production is sought. These villages were a social as well as an economic gain.

The establishment of country schools was another advance. They had been far from perfect and possibly should be modified to meet present conditions; but they have been an inspiration to thousands who lived remote from urban refinement. They were expensive, but infinitely cheap as compared with the barbarism of ignorance.

Another advance for the country was the establishment of Agricultural Colleges. These democratic institutions attracted the sons of farmers by their gospel of labor and the introduction of studies, helpful in vocations of toil.

It was hoped, and by many expected, that the graduates of these colleges would return to the country, become captains of rural industries and revolutionize conditions. This did not occur, but good was done. Thousands of the under graduates are upon the farms. Many of these colleges have established short courses for the tillers of the soil. Farmers Institutes have been organized to carry agricultural knowledge to the scattered homes in the country and deliver it orally. They have fostered investigations along agricultural lines and keep the necessity of more agricultural knowledge as a live issue before the people.

Another class of reformers is prescribing "Diversification of Farm Products", as a remedy. Diversifying is a great aid to success in agriculture, under certain conditions; but how can the man who has nothing diversify? He cannot go into dairying nor stock farming; because he cannot buy the fraction of a cow or pig. He cannot plant new crops, because the merchant

regards the move as an experiment, and he will not advance on an experiment. The only way such farmers can prosper is by remaining in the old rut and improving the rut.

Other advocates of reform are clamoring for improvement of rural conditions—better homes, passable highways, free delivery of mails, etc. These are excellent suggestions; but they do not reach the main difficulty, which is the lack of means to do anything.

I once heard a poor tenant farmer complain that he could not make a living farming; a passing stranger remarked "Why don't you quit farming, if there is no money in it and go to banking?" "Mister!" replied the poor man, "I don't know whether you are insane or an idiot. It sounds like both." To men on the farm hunting for a breakfast considerable of the advice sounds like both.

There is another remedy for the country, very popular just now, and that is the teaching of Agriculture in the Common Schools. Properly defined and understood, there is a certain amount of helpfulness in it. However, if taught universally in the country schools, no sweeping revolution will result, for the following reasons:

1st. Agriculture is not a science and it has but little science in it. That little science can be taught. The remainder must be acquired by observation, experience and business methods. Some instruction may be given in soils, in plant classification, in the way plants feed and grow and are protracted, in insect and bird life and in animal structure and requirements. These may go into secondary schools in a limited way. It appears to me impracticable to introduce them generally into the rural Common Schools, as they are now organized; at least till teachers are trained to instruct. If these schools can be consolidated into township schools, properly graded, it will then be possible to introduce some object lessons and primary instruction in nature studies. In the Common Country Schools, it is unwise to attempt much at present looking to agriculture beyond object lessons. These are always valuable, and oral instruction should be given with them.

It is estimated that there is a possible gain of five fold in the earning capacity of each farm laborer above his present income. Practically the whole gain is due to the following plan—fill the soil with humus; prepare a deeper and more thoroughly pulverized seed bed; better seed; proper fertilization; more cultivation; the use of stronger teams; better machinery and tools and utilize the idle lands by grazing. Four-fifths of the gain is in the economic use of better teams and tools and the introduction of animal husbandry. A majority of our Common School teachers are women, ignorant of practical Agriculture, but no more so than sixty per cent of the male teachers. How are such teachers to instruct in these branches, which require a farm fully equipped, and practical experience?

I have been talking about Common Schools. In our portion of the United States there are no Common Schools. They are most extraordinary schools. The children are given science lessons, language lessons, social economy, French, Latin, drawing, vocal and piano music, &c. Possibly later they may learn to read and spell. I asked the patron of one school how the pupils progressed in Latin. He replied, "Very well indeed, the only difficulty is that they are required to write their translations in English and they do not know how to write English."

Let us drop this farce. The need in common schools is for thorough training in the fundamental English branches. If there is time for more, let the boys study book-keeping and business methods. If still there be room, introduce nature studies and object lessons. Let the girls take for higher branches the lost sciences of cooking, house-keeping and Physiology. I am asking for a substantial foundation upon which to build a useful life for such people as must be practical, because they must earn their bread by toil. For people of means and with love of learning, I commend a life of study, broad, deep and thorough, well rounded by extensive travel and observation. We need great scholars. The common toiler needs an education that leads to easier bread.

In the centuries the American people have been at work

on the problems of rural reform, some progress has been made and we are now prepared for the complete accomplishment of what we have so earnestly sought, the placing of rural life upon a plane of profit, of honor and power. We must commence at the bottom and re-adjust the life of the common people.

1st. By increasing the earning capacity of the small farmers. More comfortable homes, better schools, improved highways, telephones, free delivery of mails and rural libraries—all require money. They cannot be installed and maintained without it; hence the basis of the better rural life is greater earning capacity of the farmer. Farm renovation and maximum crop production are now fully understood and they can be explained and illustrated in such a simple and practical way that it would be a crime not to send the gospel of maximum production to the rural toiler. It is said by some that the farmers are a hard class to reach and impress. That is not my experience; they are the most tractable of people, if you have anything substantial to offer—but they all want proof. They do not take kindly to pure theories and no class can more quickly discriminate between the real farmer and the book farmer than the men who till the soil. The message to the farmers must be practical, and of easy application. Who shall take this message? Our experience is in favor of farmers of fair education and acknowledged success on the farm. They may make mistakes, from a scientific standpoint in delivering the message, but these are easily corrected. The main thing is to induce the farmer to act; and no one can do that like a fellow farmer. Of what avail is it that the message be taken by a man of science, if the farmer will not give heed? In general it is not the man who knows the most, who is the most successful; but the man who imparts an implicit belief with his message. The greatest failure as a world force is the man who knows so much that he lives in universal doubt, injecting a modifying clause into every assertion and ending the problems of life with an interrogation point.

The process of changing the environment of a farmer is like that of transforming a farm boy into a scholar. First the

farmer is selected to conduct a simple and inexpensive demonstration. Second, a contract is drawn with the United States Department of Agriculture by which he agrees to follow certain instructions. Third, better seed is furnished him and his name is published in the papers. Fourth, each month when the Government's Field Agent goes to inspect his Demonstration many of his neighbors are invited; consequently, he will almost unconsciously improve his farm so as to be ready for company and cultivate all of his crops better. Fifth, a report of his extra crop is made in the County papers. His neighbors talk about it and want to buy seed. Sixth, he sells the seed of his crop at a high price; his neighbors ask him how he produced it; he is invited to address public assemblies, he has become a man of note and a leader of the people and cannot return to his old ways. Soon there is a body of such men; a township, a county and finally a state is transformed. The power which transformed the humble fishermen of Galilee into mighty apostles of truth is ever present and can be used as effectively today, in any good cause, as when the Son of God turned His footsteps from Judea's capitol and spoke to the way-side children of poverty.

The environment of men must be penetrated and modified or little permanent change can be made in them. The environment of the farmer is limited generally to a few miles. The demonstration must be carried to this limited area and show how simple and easy it is to restore the virgin fertility of the soil, to multiply the product of the land per acre, to increase the number of acres each laborer can till by three or four fold and harvest a profit from untilled fields by animal husbandry. This is our Farmers' Co-operative Demonstration Work.

The second step in rural regeneration is the establishment of Agricultural banks, through which reliable men may be assisted to own the lands they till. In the United States there are over two millions of rented farms, more than one-third of the total number. The majority of these farmers would become owners if properly encouraged and aided. In addition there are tens of thousands of mechanics in the towns and cities, who were raised on farms and would return to the

country and purchase lands for homes, if slightly assisted.

Agricultural banks should be established to assist in carrying out the plan of colonizing the country with thrifty home owners. Furthermore, it is equitable, because millions produced by the farms of the nation have by the process of banking been transferred to commerce and no way has been provided, under the law, by which the money of the people can be used by the people for time investments in providing for ownership of rural homes—the royal right of American Sovereigns and more honorable than the order of the Garter or the Golden Fleece.

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If these three progressive steps be taken the rest will follow as a natural evolution. It is not a matter of pure deduction which assures me that the farmers will make their homes more comfortable and more beautiful, will perfect the rural school system, will construct good roads, telephones and electric railways, when they have the means to do so. Where our Farmers' Co-operative Demonstration Work has been conducted long enough for the farmers to get out of debt there is a marked improvement in buildings and farm equipment to do good work. The farmers' families are better clothed and fed; thrift and comfort have appeared in places formerly as destitute of these as the jungles of Africa.

The state can accelerate the progress of rural improvement by encouraging good works. In England better highways have been promoted by a law which provides for the general Government taking charge and thereafter maintaining all roads which the people construct and improve up to a certain excellence. In a similar way the state could encourage the building of the best Macadam or Roman type of roads by offering premiums for every mile constructed by a township or county, and important highways might even receive national aid. Such a highway as the Spaniards con-

structed from Ponce to San Juan is worthy of National aid and is more valuable to the country than a railroad and at less cost. The life of a Roman highway is more than two thousand years. Several such highways should bisect every county in the United States and be a part of a great National road system. The secondary highways will of course for many years be dirt roads; but they should be of the best type. With our waterways improved, connecting canals constructed and a system of National highways the problem of transportation will be largely solved and an immense impetus given to better country conditions.

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Telephones should be made a part of the postal system and extended through the farming districts of the United States where the people have shown ability to construct and maintain a first class highway; one half the expense of installing the telephone to be borne by the rural route and a rental charge made, as for post office boxes. In addition there should be a rural express on every highway of the first class. Thus a farmer residing ten miles from his market town could make an order by "Phone" and receive the package by express in a short time. By the same conveyance the sons and daughters of the farmers could attend a Central High School.

Upon this general plan, and no other, can the country become what it should—a home making place, where the farmer will reside upon his farm. The mechanic and the merchant wanting more space for their homes, will choose it five or ten miles in the country and professional men will seek rural quiet and rest. Our Civic centres are expanding with amazing rapidity, not because men love brick walls and electric elevators, but because they there find greater earning capacity, and certain conveniences and comforts, which have become a necessity. Make it possible to have all of these amid the quiet and

beauties of nature with rapid transit to business centres and vast numbers that have sought an urban home will turn to the country for a home at less cost with purer air and water, greater convenience and beauty, cheaper food and more contentment.

Let it be the high privilege of this great and free people to establish a republic where rural pride is equal to civic pride, where men of the most refined taste and culture select the rural villa and where the wealth that comes from the soil finds its greatest return in developing and perfecting that great domain of nature which God has given to us as an everlasting estate.

To the Members of the Conference, with compliments of Leonard Tufts, Pinehurst, N. C.

A RURAL REFORM.

On the fifth of February 1907, I received a letter from Dr. John H. Pope, Mr. W. T. Twyman and others of Marshall, Texas, setting forth the general alarm in Harrison County, resulting from the invasion of the Mexican cotton boll weevil, and requesting that some measures be taken immediately to allay the public alarm and prove to the people that cotton could be profitably produced regardless of the weevil. In Harrison County as in nearly all the Southern States, cotton had been almost the sole cash crop and its production had been financed by advances to the farmers from merchants and bankers. Money is cautious and the certainty that most of the money necessary to the support of this industry would be withheld, had caused a general exodus of laborers and tenant farmers, a large contemplated reduction in acreage to be planted by the great landholders, and further that this was causing a depression that practically paralyzed all lines of business.

To this I replied that I would give the matter immediate attention, but owing to previous appointments I could not be in Marshall till Saturday, February 23rd, and suggested that on that date a public meeting be called at the Courthouse to take effective measures to restore confidence, and to demonstrate that a cotton crop could be successfully made regardless of the weevil.

On the morning of February 23rd, W. F. Procter, State Agent of the Farmers' Cooperative Demonstration Work for East Texas, and I arrived at Marshall where we conferred with Dr. Pope, Mr. Twyman and other prominent citizens. Just before we entered the Courthouse for the public meeting Dr. Pope touched my arm and said, "Excuse me a moment, I want to step in and divide the space so our colored people may have good seats. We have better colored farmers in this county than the average and we want them to hear what is said.

Dr. Pope is a typical Southern planter of the best type, courteous to everyone and generous to a fault. I detained him long enough to say. "You remind me of the good people of Tyler, Texas. They raised a fund and paid the expenses of fifty colored farmers in Smith County to attend the great meeting at Dallas, and learn how to farm under boll weevil conditions, and in mentioning the incident to me they used almost your language." We have better colored people here than in most sections." I think, Doctor; where there are better colored people is good evidence that there are better white people." The Doctor smiled and hastened on his errand. As we faced the audience I noted that over one third of the main floor was given to the colored farmers and when we came to the distribution of literature, the chairman looked to it that the colored contingent was well supplied.

For two hours and a half Mr. Procter and I explained the method of raising cotton profitably under boll weevil conditions, and proved to the satisfaction of the people that it could be done. They were advised to appoint a committee of leading citizens to raise funds to purchase better cotton and corn seed for free distribution, and to act as an advisory committee during the season. Dr. John H. Pope, P. G. Whaley, W. T. Twyman and M. Scully were named as the committee. At the close of the meeting I explained to the committee the importance of prompt action. as another meeting was called for one week from that date. Within the week the necessary money was raised by subscription for the purchase of improved seed, the seed ordered by wire and delivered, about 300 farmers representing every neighborhood in the County were notified by letter to come to Marshall, March 2nd, get the seed and receive instructions for planting and tending the crop. Two large seed farms were established to insure a supply of seed for the next year, and an experimental field agent was secured. On March 2nd, everybody was on hand. All but four of the 300 farmers notified were present in person or by proxy. State Agent, W. F. Procter was ready to give instructions and special field agent Tom. O. Plunkett was thereto sign contracts with the farmers and take charge of the campaign. The Warnock Company Twyman and Roseborough Jr., became enthused and concluded to buy another 1000

bushels of this seed on their own account.

Everything started out well but the spring and entire season of 1907 proved wet and disastrous to cotton. Notwithstanding the heroic efforts of Tom. O. Plunkett and the committee, the panic returned and increased in intensity till in June several hundred tenant farmers decided to abandon their crops, and leave their farms and they should not be blamed. It was wet, their crops were grassy and everything looked discouraging. In this emergency the committee wired me to come to Marshall and attend a meeting the following Saturday. Owing to previous appointments this was impossible and I wired Mr. Procter to fill the appointment. On the day set for the meeting several hundred colored tenant farmers, grim, sullen and determined, met in the Courthouse square when Procter, tall, spare but intensely earnest began to address them in his kindly persuasive manner and tell them incidents in his experience with the boll weevil. An hour passed and there was no relaxation of the set jaw and the sullen attitude. - No words of approval - No smile of appreciation greeted the most humorous story. He was talking to grave stones - only they were black instead of white. The noon hour came and at adjournment they asked him to return and talk some more. At two o'clock he stood before them again and for three hours plead with them to stay by their crops and homes.

About the middle of the afternoon the general sentiment began to turn and responses would come; then he told them that every man who staid by his crop and worked according to government directions would receive advances from the land owners for himself and family. This was a very satisfactory argument. When Mr. Procter took his seat at five o'clock he knew the crowd felt better, but he was uncertain just what course it might take. Finally an old colored farmer lifted his hand and said: "Gentlemen! If President Roosevelt tinkes enough of us poor niggers to send a man down from Washington to tell us how to make cotton, I tinkes we ought to make de crop and I moves we do." (Procter is a Texas farmer and has never resided out of that State.) It was put to vote and carried. Everyone that returned to the farm made a crop, paid his advances and had good credit. Some of the others went hungry.

By fall the panic was over. The demonstration fields were proof to everyone. The result was a great victory, because it had been won in one of the worst seasons for cotton production ever known in Texas, and against the general opinion that cotton could not be profitably made with the boll weevil. Many of the best farmers refused to plant any cotton and set their men to make cross-ties for a living. Some small farmers went to the timber camps and some to saw mills. Many tried Irish potatoes and market gardening.

Thousands of peach trees were set. A peanut candy factory was started and made a demand for hundreds of car loads of peanuts. Most farmers planted less cotton, if they planted any, and raised all their food supplies for men and animals on their farm. They thus learned the lesson of thrift and while the cotton crop of that year was small, owing largely to weather conditions, the farmers prospered. They continued the same policy in 1908 and made an excellent crop for the season. That was a great committee which the people appointed. The members worked indefatigably and unselfishly for the interest of all.

Tom O. Plunkett and his job.

When Plunkett commenced in Harrison County, it was too late to do the most effective work. The spring was cold and wet and about one third of the valuable seed bought and planted was lost by reason of the excessive moisture. The previous winter had been unusually mild and dry, thus permitting an enormous number of hibernating weevils to survive. The alarm was intensified by the most damaging rumors of disaster to the cotton industry, and the most absurd stories about the boll weevils. Two Texans were overheard discussing the boll weevil and one remarked. "I heard a man say you might soak a weevil in alcohol for hours and it would have no effect upon it." Just to test it I placed some weevils in the strongest alcohol I could buy and left

THE CAUSES OF SOUTHERN RURAL CONDITIONS
AND THE
SMALL FARM AS AN IMPORTANT REMEDY.

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If delightful climate, fertile soils, annual rainfall, the number of navigable rivers, the abundant supply of valuable timber for constructive purposes, inexhaustible mineral wealth and a marvelous topography- wonderful valleys, fertile hills, picturesque mountains are essential factors in the making of a mighty nation, then the South Atlantic and the South Central States of our Union were designed by nature to be the seat of great activities along broad lines; with a dense population rich in all material things- the masses well housed, broadly educated, independent and progressive. No equal area upon the globe could compare with these states in the material resources above enumerated in their virgin condition.

They were settled mainly by one of the most virile races that ever touched foot to western shores. Why did many of the results which appeared certain to follow, fail to materialize ? It was due to some economic errors that crept into their civilization at an early period and show the far-reaching effect of even slight deviations from the correct fundamental laws that govern civilizations.

(1) Their labor was mainly compulsory and by another race. This lowered the dignity of labor, because unavoidably the

character of the doer determines the dignity of the thing done. It ought not to be thus, but it is and has been from the formation of human society. This condition was a barrier to free labor and an obstacle to the immigration of small farmers accustomed to till their own lands. These influences in many cases, contributed to an emmigration of these classes from the South.

(2) The second great economic error was the adoption by the Southern States of the one crop system of farming. True, they chose their staples with wisdom; tobacco, rice, sugar and cotton, four of the best staples and they found world markets for them. Upon the surface, it appears just as sound a policy for a farmer to produce one cash crop and supply all his wants from the sale of it, as it is for the manufacturer to limit his out-put to one article instead of many. There is this difference: the manufacturer is sure of his product, at uniform cost and of standard quality. The farmer is never certain of the quantity, quality or cost of his crop and should throw out this anchor of safety, that whatever may occur to reduce the cash crop, it shall not curtail the food supply, clothing and schooling of the family, nor place in jeopardy the home.

The great objection to the one cash crop system is that it limits knowledge, narrows citizenship, does not foster home-building and does promote commercial farming. It lacks the element of safety; if the one cash crop fails, everything goes, living, clothing, etc. It might be asked why

the many small farmers of the South did not diversify. Farmers can not produce just any cash crop they like. It must be something recognized by the local market, and the large planters made the local market.

(3)A third economic error from the stand point of the State was the great number of large plantations in the South. A plantation of several thousand acres, worked under one management, is like a great factory; each person employed is limited to one kind of labor. He may work in the stables or garden or be a field hand or be assigned to general improvement and repairs. In any event, it is one line of work he follows for life and he knows no other. That may be good as part of a machine, but is bad for the citizen. The large plantation, as generally managed, blocks highways, interferes with schools, retards rural development and promotes class distinctions as against mass development.

(4)A fourth economic error was failure to utilize the wealth of the minerals, the vast forests of woods, matchless for constructive purposes and other natural resources of the South, so as to build a commonwealth that would furnish markets as well as raw material, and thus in a measure become self-sustaining and independent.

The neglect of common schools, throughout the rural

sections and the slight attention paid to internal improvements, were the natural results of the other policies adopted.

The price of virgin lands averaged so low, that in many cases, it was cheaper to make a new plantation, than to restore the impoverished soils of the old.

The foregoing statements present only the general view. There were, under the old conditions, many planters of high character and great intelligence, who maintained an excellent standard of agriculture. They bred the best stock of the world and followed an excellent system of crop rotation.

The period of greatest disaster to Agriculture in the South, was from 1861 to 1890, when nearly all that was excellent in the old civilization was swept away and little of value substituted. During this period the South was laid waste by the barbarism of war; then an unlettered and subordinate race, in some states more than equal in numbers to the rural ^{white} population, and but slightly amenable to its public opinion, was given the ballot and came into the possession of lands as owners, renters or occupants for hire. A lowering of country life drives out the better classes, just as an inferior coinage usurps the place of the more valuable. That the lands were held by a great and virile race is shown by the fact that Caucasian Civilization was not completely overwhelmed by such masses of another race and condition. Non-resident ownerships increased, and with it

a more careless tillage, immense waste of fertility by erosion and a general reduction in the character of farm improvements and equipment. Till within the past decade and a half, rural conditions and general influence upon national life steadily declined.

Two other causes of universal effect have operated with tremendous force in the depression of rural conditions in the South: One is transportation and the other is money—both vital to farm values and farm profits. The total cost of transportation of products from the farm to the seaports has been too high. The poor highways have been one factor contributing to this; the one commercial crop system has been another, because it supplied freights only a few months in the year, furnishing an over-supply for such periods and a deficiency the remainder. The one cash crop intensified the deficiency in money. It took most of the annual proceeds of the crop to buy needed supplies and it created an abnormal demand for money to move this main crop out, when it matured.

Another serious obstacle to rural progress has been a deficiency of labor. The employers of labor in factories and in the construction of railroads have been able to pay a much higher wage than farmers could afford, and have drawn not only laborers from the farms, but many small independent owners of land from their homes.

Notwithstanding these adverse conditions, there has been a great improvement in the South in the past twelve years, due in part to the general prosperity of the country, and in part to the heroic efforts of her people. They have put forth almost superhuman efforts to reconstruct what was left upon the best basis; to rebuild what of value that had been destroyed and to create whatever was necessary to round out the best civilization of the age. No people ever worked more heroically and with greater unity of purpose.

The higher price of cotton, sugar and rice, three of the great cash crops of the South, has for the first time since disaster came to it, provided the means to get out of debt and improve her condition. With the improvement of her fortunes, home building, the encouragement of education, the founding of schools, the establishment of manufactures and a comprehensive system of internal improvements have received prompt attention. The South is rural and her most significant sign of awakened interest is her effort to place agriculture upon a better basis.

One object of this article is to urge that in this great uplift which marks the people of the South as patriots, there shall not be omitted from the solid foundation placed under their new civilization, some of the essential supports that uphold and perpetuate a Republic.