AGRICULTURAL EDUCATION FOR THE RURAL DISTRICTS.

Synopsis of Address of Seaman A. Knapp of the

U. S. Bepartment of Agriculture.

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to successfully teach it. In a breader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these broader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

1st. There is a much lower earning capacity of the rural toiler than of him equal in the city and a consequent dissatis-faction upon the part of the farm wage-earner.

2d. There is 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.

3d. In the past half century rural improvements have 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, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.

4th. There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

5th. From the standpoint of the statesman, 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 event 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 employes, all dependent upon a managing will. In several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. There are also, where great numbers are aggregated, a mass leadership regardless of wealth. Generally this represents organized and predatory poverty. It matters not that the prosperity in cities, so far as it relates to the masses, is illusory; it attracts, it allures.

Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

- (1) A much larger per cent. of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit for the toiler than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and attractive.
- (4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The methods to accomplish this rural reform were outlined by him as follows:

The first step to be inaugurated among the people is the Farmers' Co-operative Demonstration Work of the United States Department of Agriculture, by which the elementary lessons in agriculture are taught directly to the farmers and their methods improved, so that they are able to realize two, three and fourfold the results now obtained by them. Through this increase of income the people of the rural districts are able to improve their homes and to pay expenses incident to a higher civilization. Every upward step, whether in city or country, costs something. No great advances can be made unless this added cost be provided for. Through this instrumentality the homes of our rural population will be greatly improved.

The second great step in the rural uplift the speaker outlines is the consolidation of the rural schools. The neighborhood school is simply adapted to a people in a very elementary conditions of society. It is simply a kindergarten school, but when too many branches demanded by modern conditions are thrust upon them they are totally unsuited to meet the requirements of the pasple. It is better for parents to send their children a greater distance and have a real country school, properly equipped and graded so as to meet all the requirements of rural education. In such schools agriculture should be an important line of education. However, even in such schools it is out of the question to teach all that relates to agriculture and a mistake to attempt it. The present curriculum which has been worked out with such care should not be so disturbed as to inject into it courses of study that must gradually weaken the instruction now given. The public demand for agriculture has made this error, a lack of definiteness. It would have been much better had legislatures simply demanded the teaching of two or three things which are universally required and which would have given some greatly needed information to the people. Instead of agriculture, should be substituted the vegetable and fruit garden. the cow and her products and poultry. These three lines of instruction would give definiteness to what is required. As it is now the teachers are perfectly at sea and there will be an attempt to teach most everything from pure science related

remotely to agriculture to the purely mechanical methods of the farm. In the family vegetable and fruit garden would be included all the instruction in soil, in seed selection, how plants feed and how they grow, and in methods of cultivation necessary for the rural town and for the country in an elementary way. Practical lessons about the cow and her products and poultry would give the kind of knowledge required in every household in regard to such common food supplies as milk, eggs, yeal, beef and the flesh of fowls; how to produce them economically; their value, and the offices they perform in the human system. Instruction of this character is along the line of people's daily necessities and gives the kind of knowledge required by the toiling masses. There is little danger of teaching incorrect theories or methods upon these subjects because the object lessons are at hand for correction. In most schools it would be better to give instruction in only one of these at a time, commencing first with the market garden, secondly, poultry, and third, the cow and her products. No one should be considered educated who is ignorant of the economic production of these, and their great value in the food supplies that must form one of the chief sources of sustenance for the human race.

Instruction in these branches could be given as well by women teachers as by men. In nearly every school district one or more model gardens could be established among the patrons

of the school and in most districts some one could be induced to purchase a better cow and improved poultry, and keep their records for the school. Ask the pupils to bring samples of their gardens, of their cows and poultry one day during each school term. Call it Agricultural Day, and invite the parents. The Farmers' Cooperative demonstration Work or the College of Agriculture in each state could assist by furnishing printed instructions.

One of the greatest forces in education is to get the their people to compare/kmm products and realize that there is a method that will produce better results.

Upon this plan every school teacher will become an educator not only of the children but of the adult population of the district.

The Farmers' Cooperative Demonstration Work of the United States Department of Agriculture and the State Colleges of Agriculture could furnish instructions and thus assist. In the teaching of agriculture it is not so much books that are required as an awakened inquiry upon the part of pupils and patrons. Object lessons and competitive exhibits, with proper direction by the teacher, will do more than books.

Public opinion is that power in civilization which regulates and controls matters beyond the realm of law and it is justaas important that this should be framed upon a conservative and wise basis looking to the greatest good to the greatest number

as that laws shall be enacted of the same character.

At present there is little real country public opinion.

It is mainly a modified town opinion, collected on streets and in storem and taken home by each farmer as he returns from a weekly visit to his market town.

To have a true rural public opinion there must be real rural society. Sound public opinion can not be imported; it must be made on the spot and for the purpose.

The home, the school and the church are the three great forces upon which we must depend for the establishment of society, and the treation of a true public opinion in the country and the final readjustment of rural life. The three forces are ever present and all-powerful if united and can make a true rural public opinion with potential forces to control conditions in the country.

Another course emphasized is the organization of boys' and girls' clubs with the object of working out at their homes in the garden and on the farm the lessons inculcated at the schools.

Great emphasis should be placed on the means of teaching the dignity of labor, the value of thrift, the giving to the young a larger measure of common sense by causing them to be more familiar with the common things of their environment.

Special value should be placed on the importance in a republic of the ownership of small farms. There are two ways to look at a small farm. One is the common way, that it is a place to

make a living and rather a hard place and should be sold soon as anything better can be found. The other is that the ownership of land is a mark of honor; that a patent to land is a title to nobility and right of sovereignty. The ownership must be complete, subject only to the State, so that each proprietor is the independent sovereign of a portion of the United States. That the final power through the ballot to control the local county, state and national governments is a position of great dignity and power.

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 ordinary. If we have no more time 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 the 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 tried to translate the classics and have failed for lack of English. A great nation is not the outgrowth of a few men of genius. We agree, however, that to meet our highest ideals the classes, occupations and provisions of our commonwealth must be strengthened and developed in his life work to the extent of his capacity.

I have tried to show that there are forces in the field for the readjustment of the rural conditions if vitalized and brought into service. There is always a class eager to establish new agencies, to join battle with industrial equipment, to attack the stronghold of raw militia and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this we are learning to include instruction in agriculture. There is danger that we may eliminate branches of great value and necessary to the rounding out of the rural toiler in his obligations to human society. If our institutions are to be preserved it must be accomplished by making greatness common. More thoroughness, faithfulness, exalted character, greater breadth, perfect intelligence and larger views of human rights and government requirements, millions of inspired doers who give to every creation of their handiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created. Millions of scholars in their rural homes controlling knowledge and promoting art. Millions of statesmen toiling on the farm and in the factories, working out the details of a broader life, and millions of rural philanthropists making improvements to better the old.

What can teachers do to help our rural conditions? Everything. They are an essential part of the greatest of all

universities, - the Home. They have charge of the extension courses. They can inspire in the youth a love of knowledge and make all its avenues look delightful. They can unlock the books which are treasury houses of human wisdom and give them a golden key. They can cause the soil to become more responsive to the touch of industry and the harvest more abundant; they can add to the comforts of the home, mold the environments into lines of beauty and increase its attractiveness until the home shall become the greatest magnet of our people. They can create a love for investigation and give it direction and can enlarge the knowledge of the people in common things and thus lay the foundation of common sense. At their instance fingers will touch the lines of deftness, mechanical skill will become universal and thrift and alertness will transform the toilers into captains of industry. Their mission is to make a great common people and thus readjust the map of the world. The dawn of a greater life will appear. A nation of broader horizon and higher purpose will stand forth to battle for human rights.

Agricultural College, Mississippi.
March 24, 1908.

Mr. H. E. Savely, Agent,
Farmers' Cooperative Demonstration Work,
Columbus, Miss.

My dear Mr. Savely:

As President of the institution that has charge of Agricultural education, and of the Experiment Stations and Farmers' Institutes of our state, I desire to thank you and your able assistants, and through the Department of Agriculture and the General Education Board for the splendid work that you are doing for agriculture in our state.

Institute work as the most important agricultural work now being done in this Country; and your work is even better than Institute work, for you are in touch with the actual farmers for 365 days in the year. While I value the work of the Experiment Stations and while this work must be done, in order for agriculture to advance, yet the thing needed now is to induce the people to put into practice that which has already been worked out in the different experiment stations and in the Department of Agriculture. The masses of the people can not be induced by technical experiment station bulletins to fall in line with progressive agriculture and put into practice the results of their investigations. As well expect political battles to be won by circulars and glaring head lines in the daily papers or the world to be converted by tracts and religious literature, as that

the battle of progressive agriculture should be won by experiment station bulletins. Just as the living, breathing preacher, filled with the spirit of the Holy Ghost, is necessary to bring conviction to the minds and hearts of sinners, and just as the fiery political orator is necessary to enthuse and arouse the voters, just so is the living institute worker necessary to accompany the bulletins and meet the people face to face and interpret to them the facts that have cost the Government millions of dollars to bring to light.

In my judgment, the money being spent in your work is bearing the richest fruit of any like amount being spent in the United States. Your work is helping to popularize the College. The Legislature was more liberal in dealing with the agricultural side of our work this time than ever before. We want to cooperate with you in every way possible, especially in the Experiment Station and Institute work.

Please express to Dr. Knapp and through him to Secretary Wilson our appreciation of the character of men that are being put in charge of this work in our State.

Whenever I can serve you or your work, do not hestitate to commane me.

Very sincerely yours,

(Signed) J. C. Hardy, President.

From the "World's Work", July Number 1908.

TEACHING A MAN HIS JOB.

BY

BOOKER T. WASHINGTON.

(Principal of the Tuskegee Institute.)

While education is making immense progress in all directions, at the present time the most important advance in popular education, in my opinion, has been in the direction of bringing the masses of the people in larger numbers and in a more direct and effective manner into practical working relations with the schools. Gradually we are beginning to understand that, in order to keep pace with the rapid changes that are going on in the world, the average man, the man on the farm, the man in the workshop, as well as the man in the laboratory and the clinic, must become a student. At the present time the average man who desires to keep at the head of his trade or profession must read something more than the daily paper. He must read his trade paper. He must keep track of the improvements that are constantly being made in his particular line of work and to do this he must study at home or in his shop, and in some systematic way, the best and most scientific methods. This is breaking down the old wall that separated the school from real life. It has compelled the farmer, the mechanic and the doctor to go back to school, to become a student, and to retain the student habit in reference to the practice of their trades and professions

On the other hand, the same need has compelled the universities and the schools to go outside of their walls in order to reach the masses of the people. It is responsible for the night-schools and the university extension work and the correspondence schools of all kinds. If I were to name a single instance of this new policy of taking education to the man on the job, an instance which seems to me more thorough-going and more fruitful of good than any other of which I know, I should refer to the work that the General Education Board is doing in conjunction with the Agricultural Department of Washington in order to instruct the farmers of the South, by practical demonstrations on their own farms, in the newer and better methods of cultivating the soil. No other single agency, I am sure, is destined to do more in the task of creating the New South.

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- 1st,- There is a much lower earning capacity of the rural toiler than of his equal in the city and a consequent dissatis-faction upon the part of the farm wage-earner.
- 2d. There is 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.
- 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, and it has especially lured the brainy youths of the farm with the visions of becoming captains of indutry.
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advance of cities in population, wealth and political power is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

Sth. From the standpoint of the statesman, 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 several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. This we call mass compulsion. There is also, where great numbers are aggregated, 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.

Rural conditions in the Nation are not what they should be. Of course there are many exceptions, but it is true as a whole. Many and radical reforms must be worked out before ideal conditions can be establised generally in the country.

- (1) A much larger per cent of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and attractive.
- (4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The problem is how to effect these rural changes for the better. Education being so important, many have thought and still think, that the establishment of agricultural schools will accomplish the object. Forty years trial has shown that most of the youth, college trained, whether in schools of agriculture, science, or classics, leave the farm for reasons not difficult to be understood. The education required is one that can reach the adult masses as well as the young, and will hold them to the farm. The error is in a failure to see

that the situation can not be overcome by a college education, however helpful it may be to the graduate as a citizen. The practical and same way of accomplishing the result is to induce the farmers to try better methods and note the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per acre and halve the cost. While the farmer successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

Well informed men who are successful farmers are generally agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his occupation, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that

susceptible period during which he acquires an education.

All reforms must be wrought out by some process of education. We have placed incorrect values and too narrow limits upon what we have labelled education. True education is the leading out of the mind to a knowledge of helpful things, and the most important and helpful to each individual are the things for which he will have the most use in life. For the average man, education better be full and accurate in limited useful lines than narrow and desultory in broad lines. What the average man should know are the things with which he has to deal in his life work. The stored brain, the alert eye and the skilled hand are his equip-Mental discipline depends more on how knowledge is acquired than upon the kind of information received. The farmer needs a broader knowledge of home things. The education required for the rural districts is one that enables the farmer to be a master of husbandry, a good home-maker, and an intelligent and dependable citizen. The character of the home-maker and the citizenship are necessarily based on the success of the husbandry. It is difficult to establish and maintain a comfortable home upon an income totally insufficient and it is impossible to work out a high rural civilization and an exalted citizenship in the country without the art and the science of agriculture are brought to such a degree of perfection that they will wrest from the soil the means necessary to establish and support these higher planes of living. The order of sequence in the uplift of the country, from a material standpoint, is as follows:

1st.-Greater net gains must be wrested by the farmer from the soil.

2d.- The increased gains must be applied, in part, to an improvement of the homes and their environments, to a readjustment of the rural schools and a re-allienment of the rural churches.

3d.- The improvement of the means of transportation and communication, the highways, the telephones, rural free delivery, etc.

4th. The restoration to the country of such manufactures as are closely related to the farm.

An increase of the net gains obtained from the farm is given the first place in this uplift because every upward step in civilization costs something, and the betterment must commence at the point of securing a greater income.

What primary remedy for the improvement of rural conditions should a republic propose where all the adult male citizens are expected to exercise, through the ballot, the functions of a ruler? Evidently it should be one that can directly and immediately benefit all the people. More than nine-tenths of the rural population are limited by their conditions to an education provided by the country district school. The primary remedy that can be successfully applied to help all the rural people, one that will be effective and immediate, is to increase the net earnings of farmers and farm laborers. If

each farmer is shown how to produce twice as much to the acre as he now produces, and at less cost, it will be a profit in which all rural classes will share and will be the basis of the greatest reform ever known to rural life.

How can the knowledge of better agricultural methods be conveyed to the masses in a way so effective that the methods will be accepted and their practice become common? This has been solved by the Farmers' Cooperative Demonstration Work which is an effective system for instructing farmers, and for the readjustment of rural conditions. Its purpose is:

- (1) To reform agriculture and make it an occupation of profit and pleasure.
  - (2) To improve rural conditions.
  - (3) To broaden and enrich rural life.
- (4) To make the farm attractive and country residence desirable.

The farmer is necessarily conservative, but offer him a genuine thing and prove it and no one is more responsive. He will not accept what has not been fully tested, and he must see it to believe. Moreover, he must work out the problem on his own farm. Increase the net income of the average farmer and wages of the rural toiler and the first step necessary to the uplift of the rural masses will have been taken.

Then the following results will be brought about as rapidly as time will permit:

- (1) The emancipation of the farmer from the bondage of debt.
- (2) The ownership of more and better tools, teams, and stock on the farm.
  - (3) The improvement of the land and the home.
- (4) Better rural school buildings and more months of schooling.
- (5) Better highways, rural-mail delivery, and telephone service.

The Farmers' Cooperative Demonstration Work simply induces some farmer in every rural neighborhood to place an object lesson on his farm for the purpose of showing what better methods can do for the net income.

The first steps in all true education are by object lessons and not by books.

What other forces have we that can be helpful in improving country conditions?

The three great factors in rural civilization are the home, the common school and the church. The greatest school 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 Harvard or Yale.

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 foundation of knowledge along the lines of wisdom.

The church is a great teacher. It gives dignity and honor to men, stability to society and infinitely broadens the human horizon.

One reason why these three great forces have not accomplished more in the country is that they have acted independently, rather than cooperatively. Home conditions have been too little affected by school and church. The school teachers have tried, no doubt honestly, to impart instruction in the fundamental branches and give mental training, but they have almost universally cast about the school room an atmosphere remote from country life and planted the influences that eventually lead to an abandonment of the farm. As one has expressed it "The rural school is mostly a city school located at a country crossroad."

The rural church is justly liable to a similar criticism.

The pastor, instead of being a leader in rural thought and progress, as well as spiritual life, united to his people by ties of sympathy and helpfulness in material things, and the promoter and the sustaining force of a real social life in the country, is a potent factor in magnifying the advantages of

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the city to the detriment of the country, and is ever hoping that he may be transferred to the city. How can we reallign and correlate these, the rural home, the rural school and the rural church?

The work of readjustment must commence with the school and the church. It is within the power of an enlightened public opinion to reach the school at once:

1st.-By requiring every country school teacher to have elementary training in agriculture.

2d.- By requiring that every woman teacher for rural schools shall pass examination in domestic science before receiving a certificate.

3d.- Every teacher should know hygiene and the simple remedies for the common diseases.

Reduce, if necessary, the number of hours devoted to books and put some time on the knowledge absolutely essential to make life comfortable. Let us trade a little Roman history for the science of homemaking, and some of the rules of grammar, if need be, for rules of better living, and some of the useless puzzling problems in the back of the arithmetic for problems of the farm worked out in the school garden plats. Let the teacher take a human interest. Let the country school teacher get connected with the farms and the homes and not make the school house an island where strange bipeds come in every day to be vaccinated with the virus of books and depart at night with an inflammation of the brain instead of usable knowledge. Let the teachers know the things of their environment and have a sympathy with toil

and the homes will be attracted to the school house and the mother will absorb as much from the teacher as the daughter.

Let the rural preacher be connected up to his field of labor. How? Let him graduate at a college of agriculture and of medicine, as well as at a school of Divinity. Let him get away from his remoteness and preach about bettering farm life. Let his heroes be farm boys and his angels farm girls. When he pays a pastoral visit let him go into the field and make good suggestions about farming, instead of sitting about the house and waiting for the yellow-legged chicken to be served. If there is anyone sick, let him be prompt with his services. This is exactly what the mission-aries do in foreign lands to attract and attach the people to their cause. It will work just as well here as there. Usefulness is valuable everywhere.

The preacher and the teacher should be the leaders in founding a true rural society,—genial, instructive, promoting harmony and good will and tending to unity of action. The tremendous power of social unity is mainly lost or is ineffective in the country for lack of organization. Rural public opinion and rural sentiment must be revitalized and wield its power for the common good. Public opinion governs in the vast domain that law does not reach. It determines home conditions, the treatment of children, the respect given to age, the clothing we wear, the schooling we receive and the religion we accept. An enlightened rural public opinion develops a rural pride, forces a readjustment of the home, establishes the rights of the family and the amenities of the social compact.

The model farm dwelling and its environment, the neater farm and better equipment, the touches of refinement about the school-house and the churches, are determined by the laws which public opinion has written into the statute books of rural society.

Where there is no rural social organizations there is a chaos or barbarism in the conditions of life outside the law. Two races, with a color line in the same territory, are a great barrier to social improvement. There are two public opinions, two codes of honor, two standards of morality, and two schools of ethical training. Segregation would be better. As stated, it is the province of the rural church and the school to organize country society and create this readjusting public opinion.

In addition to the school gardens and nature lessons, we can teach practical agriculture. Women teachers can give this instruction as well as men, upon the following plan:

Organize boys' clubs for the production of corn and other standard crops, upon their fathers' farms. Limit the plot to an acre or half-acre. Establish rules for the government of the contest and the distribution of the prizes, and get the instructions from the State College of Agriculture or the Farmers' Co-operative Demonstration Work of the United States Department of Agriculture. The United States Demonstration Work now has enrolled a good many thousand boys to whom it is giving instructions. Last year one boy in Mississippi made 1272 bu. of corn on an acre, while the State average was only about 15 bushels per acre.

Upon the same general plan girls' clubs in domestic science could be organized and operated, taking instructions from the

teacher of domestic science at the College of Agriculture in each state. If the spoon can deplete the resources of the farm more rapidly than the shovel can increase them, then the training of girls in home management is the most important branch of agriculture, and besides, the girls are the homemakers.

The Farmers' Cooperative Demonstration Work of the United 'States Department of Agriculture is susceptible of very wide application. Last year a rural church in Texas was in debt about \$250.00 and could see no way of liquidating it. The ladies of the church leased ten acres of land and planted it to cotton. They planted it under the directions of our local Demonstration Agent, hired all the work done and netted a sum sufficient to pay the debt. A number of Ladies' Aid Societies have adopted the plan. Rural schools in need of funds for libraries, improvement of buildings, or beautifying the grounds, have planned to make the needed money instead of begging it, and at the same time give an object lesson in practical agriculture.

The successful farmer must be an all-round, many-sided man and capable of adjusting himself at all times to new conditions. He should have some mechanical knowledge and skill. Just a knowledge of how to raise a crop and care for stock does not make a farmer. An important part of successful farming is the best equipment and improvements. 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 height of the average door through which they daily pass, nor the proper proportion of windows to the rooms. Their eyes were never opened to see industrial things. Some are 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.

Two common branches not usually taught but of great importance are the dignity of labor and the value of thrift, labor so essential to physical and mental vigor, and thrift, that which conserves the products of labor, can be most successfully taught in the country. More than half the people of our towns and cities, if all that could labor are included, are idlers, spenders of wealth instead of promoters, hunting for servants instead of seeking for toil. In cities the influences for spending are dominant.

The half grown boys and girls of the villages and lesser cities could make gardens and raise the fruits and poultry for 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 strengthen the family pocketbook and help the family character. In the country labor is honorable and thrift a necessity and hence a large per cent of the leaders of industry are country-bred boys.

The most valuable acquisition for the rural population is common sense. There is a large measure of things in the life upon the farm that can not be adjusted by law. They must be adjusted by common sense. Common sense is simply an intimate knowledge of common things and how to use them. It is acquired by home teaching and contact with others. The teacher can greatly enlarge the body of knowledge of common things by daily hints that lead out the youthful minds to full investigation.

## ENVIRONMENT EDUCATION.

There are tremendous educational forces in our environments. In the great cities and in the manufacturing centers there has been for centuries and probably will continue to be, the unrest that arises from a conflict between aggregated capital and organized labor. These conditions will produce certain types of citizens. Prosperous and contented communities of small farmers distributed over the entire country will produce another type of

men who, in habits of life and in political belief, will be almost exactly the opposite of the former and will act as a counterpoise in adjustments of government. A prosperous, intelligent and contented rural population is therefore, essential to our national perpetuity. The world's experience has shown that the best way to secure this is to encourage the division of all the lands into small farms, owned and operated by one family. There are two ways to look at a small farm; one is, and the common way, that it is a place to make a living, but rather a hard place, and should be sold as soon as anything easier is found. The other is that the ownership of land is a mark of honor; that a patent to land is a title to nobility, a right to sovereignty. The ownership must be absolute, subject only to the State, so that each proprietor is the independent sovereign of a portion of the United States, with the final authority through the ballot, to control the local. County, State and National governments; a position of great dignity and power. We speak of the sovereign people. Are they to be sovereign in fact or in theory only? If in fact, then each citizen must own and control something. In a sense he must be a lord of a certain territory. It is called a farm, but legally it is a subdivision of the State to which the farmer is given perpetual title, that he may have the means to support his position as an independent sovereign with dignity. and that by absolutely governing a small portion of the United States. he may wisely assist in governing the whole. This is

the attitude of the state towards individual ownership of land, and these lands should be of an area that will come nearest to the development of the perfect citizen and ruler. It must not be so large that the income can support the owner without effort on his part; nor should it be so small that it will make a mere toiler out of the owner, for this narrows the intellect. It should be large enough to provide good farm equipment buildings, machinery and stock, and furnish labor for the family. The annual income must be sufficient to improve the farm, educate the family, assist in starting its members in ways of independent supports and to provide a reserve for old age. The United States has fixed that amount at 160 acres. The right acreage of the farm must depend upon conditions. In semi-arid sections it might require more than double that number and near large cities, less than one-fourth might answer the purpose.

Communities of small farmers tend to promote common honesty; a respect for the rights of others and for law. No one is rich enough to dominate his neighbors nor so poor that his influence may be disregarded. Their stock, products and property are exposed to trespassers and depredators, hence a common interest unites them for mutual protection and the primary lessons of society are taught.

The education acquired on the small farm broadens citizenship, because it is a many-sided education and gives correct impressions of many phases of life. All over the world the small independent farmers are staunch supporters of conservative government. They

are intense lovers of home and opposed to radical changes.

## AS A SOURCE OF WEALTH.

Ultimately the small farmer learns to keep a reserve of cash against emergencies and these aggregated accumulations become very important factors in the capital of our nation, for they are more reliable than the deposits from commercial sources. The vast sums of money necessary to carry on the business of a nation, are not derived from the deposits of capitalists, but from the aggregation of millions of thrifty, small depositors. This is especially true of England, France, Germany and the United States.

If all is considered education that leads out, develops or trains the individual, then the amount acquired in even the best schools is only a fraction of what the average man must know to succeed in life. It is of the highest importance then to the state that this greater body of knowledge should be correct, broad, conservative, and elevating. Liberal provision has been made by the state, by churches, and by individual gifts for schools, but the moulding of this great body of knowledge to the best interests of society has been mainly left to the caprice of individual efforts. The state can with propriety especially foster such conditions of society, such lines of industry, or such occupations as evidently tend to mental and physical vigor, to breadth of understanding and to the best citizenship and to the stability of the state. For

these ends no more potent influence has been found than an intelligent, prosperous and contented body of thrifty small farmers. States and the National Government have aided by the gift of free lands for homes, and by the promotion of rural schools and free mail delivery.

What is the next step to be taken?-better highways and consolidation of rural schools. The need of better highways is too apparent to require discussion here.

When rural schools were first established in the United States, education in the country was elementary. As the demand for higher education became common, the attempt was made to graft on to the common schools higher branches, until frequently a teacher in the country has thirty or forty classes in one day. Under such conditions thoroughness is impossible. In the readjusted rural school the township should be the unit. One good graded rural school is better than six to nine half equipped, half taught, wholly neglected neighborhood schools, where the traveler is frequently in doubt whether the building is a dwelling without tenants, or a barn without fodder, and where a few months of schooling is given to ease the parental conscience, and where the principal object is to teach the science of how to study books without acquiring an education. This consolidated rural school will be better equipped, better managed and better taught. It is the only way rural education can be made creditable and adequate to the requirements of country life. The onsolidated rural school must do for the country what the High School has

done for the city. Such a school will organize rural society, establish and maintain rural public opinion, and provide adequate education for the toilers upon the farms. In such schools agriculture, the mechanic arts, and domestic economy can be taught. It can be a real rural school. Is it not better that those who love the country and believe that its development, enrichment and culture are necessary to our national life, should unite upon some plan to consolidate the rural school, than to establish a few district agricultural schools?

The objection to an agricultural high school in each Congressional District is that it removes the boys from the farms and homes, gives a semi-city environment, increases the cost of education to such as avail themselves of its offers, and takes money from all the people to provide advantages for a few, and that few generally best able to help themselves. Such schools could only provide training for a few, whereas the necessity for vocational education is universal and should be provided for all. Should the Davis Bill be resurrected an amendment will be offered:- First, that additional means be furnished our colleges of Agriculture to enable them to prepare teachers for rural schools; and secondly, that the funds proposed for district agricultural high schools shall be given to aid consolidated rural schools.

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 foundation or lower stories have not proven 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 lifework 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.

I have tried to show that there are ample forces in the field for the readjustment of rural conditions, if vitalized and brought into service. There is always a class eager to

establish new agencies, to join battle with untested equipment, to attack strongholds with raw militia, and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this reallignment to include instruction in agriculture there is danger that we may eliminate branches of great value and necessary to the rounding out of the rural toiler in his obligations to human society. For after all, in molding men by the processes of education there is something more than just fitting them for a vocation. The aim should be to make a greater common man, and unless this can be done vocational training will be a failure because of the narrowing of his social lines, the dwarfing of his sense of obligation to the state, and a semi-paralysis of his moral nature. Unless the main object of all education for the masses is the making of a great common people, we shall fail. Neither a score of statesmen nor a brigade of scholars make a great nation. If our institutions are to be preserved it must be accomplished by making greatness common .- More thoroughness, sublime faithfulness, exalted character, greater breadth, perfect integrity, a larger view of human rights and God's requirements; millions of inspired doers who give to every creation of their handiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created; millions of scholars in their rural homes fostering knowledge and promoting art; millions of

statesmen toiling on the farms and in the factories, working out the details of a broader national life, and millions of philanthropists making gains to better the world.

What can teachers do to help our rural conditions? Everything. They are an essential part of the greatest of all universities, the home. They have charge of the extension courses: they can inspire in youth a love of knowledge and make all its avenues look delightful: they can unlock the books which are treasure-houses of human wisdom, and give them a golden key; they 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; they can add to the comforts of the home, shape its environments into lines of beauty and increase its attractiveness, till the home shall become the greatest magnet of our people: they can create a love of investigation and give it direction: they can enlarge the knowledge of the people in common things and thus lay the foundation of the common sense. At their instance, fingers will touch the lines of deftness, mechanical skill will become universal, and thrift and alertness will transform the toilers into captains of industry. Their mission is to make a great common people and thus readjust the map of the world. The keystone of American civilazation is the home. By some mysterious social convulsion it has become loosened. They 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.

Hamilcar took the youthful Hannibal and made him swear at a sacred altar eternal enmity to Rome. Let the teacher, on bended knee and with uplifted hand, at the altar of liberty, swear eternal enmity to ignorance, vice and crime, and the dawn of a greater life will appear; a nation of broader horizon and higher purpose will stand forth to battle for human rights.

S. A. K. # 2.

In the event that you find it impossible to attend this meeting you may be able to arrange to have a representative there, but I hope that you will be able to arrange your plans so as to attend personally.

An early reply will be much appreciated. With kind personal regards, I remain,

Yours very truly,

Industrial Agent.

Uttwater

# AAGRICULTURAL EDUCATION FOR THE RURAL DISTRICTS.

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to successfully teach it. In a breader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these breader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

lst. There is a 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. There is a lower and more hazardous return from farm investments than from those in commercial or transporation lines and a consequent disinclination to hold country property.

3rd. In the past helf century rural improvementshas 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 to the detriment of the country, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.

4th. There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

oth. From the standpoint of the statesman, 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 several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. There is also, where great numbers are aggregated, a mass leadership regardless of wealth. Generally this represents organized and predatory poverty.

It matters not that the prosperity in cities, so far as it relates to the masses, is illusory, it attracts; it allures.

Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

- (1) A much larger per cent of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit for the toiler than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and attractive.

(4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The practical and same way of accomplishing the result is to induce the farmers to try better methods and note the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per acre and halve the cost. While the farmers successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

well informed men who are successful farmers are generally agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his vocation, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that.

All reforms must be wrought out by some process of education. We have placed incorrect values and too narrow limits upon what we have labeled "education." True education is the leading out of the mind to a knowledge by helpful things and the most important and helpful to mixing each individual are the things for which he will have the most use in life. What the average man should know are the things with which he had to deal in his life The stored brain, the alert eye and the skilled hand are his equipment. Mental discipline depends more on how knowledge is acquired than upon the kind of information received. The education required for the rural district is one that enables the farmer to be a master of husbandry, a good home-maker and an intelligent and dependable citizen. The character of the homamaker and the citizenship are necessarily beat based on the success of the husbandry. It is impossible to establish and maintain a home upon an income total inefficient and to work out a higher rural civilization and an exalted citisenship without the art and the science of agriculture are brought to such a degree of perfection that they will wrest from the soil the means necessary to establish and support the higher plane of living.

Every step in the human uplift costs something, and how high we can go depends upon how much we can wrest from the soil with which to pay the cost of our progress.

improvement are the home, the common schools and the church. The great schools for the human race are homes and the common schools, not our colleges and universities, greater in amount and value of

knowledge acquired. A good home, be it ever so plain, with a mother and father of sense and general culture, is nature's university and is more richly endowed for the brain of youths than Harvard or Yale.

whom we know as mother. She inspires as well as instructs. Wext to her in work and worth are the common schools teachers. They supplement the home training and lay the foundation for knowledge maker along the lines of wisdem. Our rural reform then must commence with the home. But the problem is how to reach the home effectively and re-adjust it upon a higher plane.

The Farmers' Co-Operative Administration work of the United States Department of Agriculture has, we think, successfully solved that problem, bytsending agents to the rural homes and showing the farmers how to increase their gains by improved methods of agriculture. Each farmer is asked to work out the problem upon his farm and thus prove to himself that the instruction is correct.

The chief inspiration that can come to a farmer is by achievement upon his own farm. Success lends confidence and inspiration and the increased gains from his efforts act directly upon the home giving improved conditions as well as inspiration.

The Farmers' Co-operative administration work directly touches nearly 300,000 farmers and influentially is an important factor for reform in eleven states. The promoters of this work are confident that nearly all men desire better things, better conditions of life, provided the means can be supplied by which they can attain them. It is gratifying to note that the results

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Until the homes have made some progress it will be a difficult thing for the schools to accomplish all that is desired. The school teachers have tried no doubt properly to impart instruction branches of fundamental and good mental training, but they have almost universally cast about the school-room an atmosphere remote from country life and planted the influences that eventually lead to an abandonment of the farm. As one has expressed it "the rural school is mostly a city school located at a country cross-road.

The people have seen that something was wrong with our schools; that there should be a reform and that good schools should be allied more closely to rural life and a number of states have passed laws demanding that agriculture be taught in the public This has spread consternation among the teachers, and schools. well it might. For the legislators did not know exactly what they wented. Agriculture is a very broad term and it includes within its requirements nearly every branch of human in knowledge, so that under the law the teacher may teach a little geology, biology, chemistry, ethics or any other science and still be within the requirements of the law. It is quite natural in order that when we first see anything we see it as a whole and afterwards in its parts. work is needed for common schools is not agriculture as a whole but some definite requirement that can bexexim. met. The three things universally needed are the garden, the cow and poultry raising. Because on these three things the great mass of the people must depend for their living and hence common rural districts they are universally necessary. If instead of requiring agriculture they had passed laws that these three branches should be taught, there would satisfiance short it and the teacher and have

preparation to meet the situation. But when agriculture is demanded they simply stand agast. Naturally the first brush of the school room is x to prepare a book as if agriculture could be taught out of a book. And what kind od books have we had presented? Maraxafixx Some of them said something; in fact, they nearly all said something but they said too much. Now, if the science of agriculture is really taught in any schools, the first thing we ought to do is to accomplish all their sides, because it will require the whole time of a student during the period of his school attendance to acquire the things that relate to agriculture, but if, upon the other hand, we eliminate books in our instructions and have in connection with every rural school a practical farm garden, a few well managed farms and a small creamery belonging to some nearby farmer, instruction could be given that would be valuable. The purpose of this is that the student should graduate in knowing something definite instead of a lot of indefinite things that the student may be prepared to enter successfully upon a career of usefulness. This will require of course a consolidation of rural schools, and xxix it is high time that this was done. In the kindergarten days the common schools when only a few things were taught, it was well enough that one could be established in every neighborhood. Now so much is expected of the schools and so many branches must be taught that it can not be successfully exercises carry out its mission unless it be a graded school and the township principle be made the unit. It is better for parents to send children a greater distance and have them attend a real school where they can complete their education, than to have the forms of a school without the reality close to their doors. The things required, then, of the school are first, consolidation; secondly, instruction in agriculthe the least interference possible with the curriculum all

devised and which has been worked out for the common schools by the experience and wisdom of the ages. This can be done as stated by having very little text-book work and making the agriculture practical and largely an outdoor recreation, confining it to a few things thoroughly taught and well understood. The wax dairy, the poultry and garden are each important for the town and the country.

The rural church is justly liable to a similar criticism.

The pastor instead of being a leader in rural thought and progress as well as spiritually, united to his people by ties of sympathy and helpfulness in material things and the sustaining force of a social life in the country, is a potent factor in magnifying the advantages of the city.

### AGRICULTURAL EDUCATION FOR THE RURAL DISTRICTS.

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to successfully teach it. In a broader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these broader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

- 1st,- There is a much lower earning capacity of the rural toiler than of his equal in the city and a consequent dissatis-faction upon the part of the farm wage-earner.
- 2d. There is 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.
- 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, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.
- 4th. There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

5th. From the standpoint of the statesman, 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 several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. This we call mass compulsion. There is also, where great numbers are aggregated, 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.

Rural conditions in the Nation are not what they should be. Of course there are many exceptions, but it is true as a whole. Many and radical reforms must be worked out before ideal conditions can be establised generally in the country.

- (1) A much larger per cent of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and attractive.
- (4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The problem is how to effect these rural changes for the better. Education being so important, many have thought and still think, that the establishment of agricultural schools will accomplish the object. Forty years trial has shown that most of the youth, college trained, whether in schools of agriculture, science, or classics, leave the farm for reasons not difficult to be understood. The education required is one that can reach the adult masses as well as the young, and will hold them to the farm. The error is in a failure to see

that the situation can not be overcome by a college education, however helpful it may be to the graduate as a citizen. The practical and sane way of accomplishing the result is to induce the farmers to try better methods and note the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per acre and halve the cost. While the farmer successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

Well informed men who are successful farmers are generally agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his occupation, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that

susceptible period during which he acquires an education.

All reforms must be wrought out by some process of education. We have placed incorrect values and too narrow limits upon what we have labelled education. True education is the leading out of the mind to a knowledge of helpful things, and the most important and helpful to each individual are the things for which he will have the most use in life. For the average man, education better be full and accurate in limited useful lines than narrow and desultory in broad lines. What the average man should know are the things with which he has to deal in his life work. The stored brain, the alert eye and the skilled hand are his equip-Mental discipline depends more on how knowledge is acquired ment. than upon the kind of information received. The farmer needs a broader knowledge of home things. The education required for the rural districts is one that enables the farmer to be a master of husbandry, a good home-maker and an intelligent and dependable The character of the home-maker and the citizenship are necessarily based on the success of the husbandry. It is difficult to establish and maintain a comfortable home upon an income totally insufficient and it is impossible to work out a high rural civilization and an exalted citizenship in the country without the art and the science of agriculture are brought to such a degree of perfection that they will wrest from the soil the means necessary to establish and support these higher planes of living. The order of sequence in the uplift of the country, from a material standpoint, is as follows:

1st.-Greater net gains must be wrested by the farmer from the soil.

2d.- The increased gains must be applied, in part, to an improvement of the homes and their environments, to a readjustment of the rural schools and a re-allignment of the rural churches.

2d.- The improvement of the means of transportation and communication, the highways, the telephones, rural free delivery, etc.

4th. The restoration to the country of such manufactures as are closely related to the farm.

An increase of the net gains obtained from the farm is given the first place in this uplift because every upward step in civilization costs something, and the betterment must commence at the point of securing a greater income.

What primary remedy for the improvement of rural conditions should a republic propose where all the adult male citizens are expected to exercise, through the ballot, the functions of a ruler? Evidently it should be one that can directly and immediately benefit all the people. More than nine-tenths of the rural population are limited by their conditions to an education provided by the country district school. The primary remedy that can be successfully applied to help all the rural people, one that will be effective and immediate, is to increase the net earnings of farmers and farm laborers. If

each farmer is shown how to produce twice as much to the acre as he now produces, and at less cost, it will be a profit in which all rural classes will share and will be the basis of the greatest reform ever known to rural life.

How can the knowledge of better agricultural methods be conveyed to the masses in a way so effective that the methods will be accepted and their practice become common? This has been solved by the Farmers' Cooperative Demonstration Work which is an effective system for instructing farmers, and for the readjustment of rural conditions. Its purpose is:

- (1) To reform agriculture and make it an occupation of profit and pleasure.
  - (2) To improve rural conditions.
  - (3) To broaden and enrich rural life.
- (4) To make the farm attractive and country residence desirable.

The farmer is necessarily conservative, but offer him a genuine thing and prove it and no one is more responsive. He will not accept what has not been fully tested, and he must see it to believe. Moreover, he must work out the problem on his own farm. Increase the net income of the average farmer and wages of the rural toiler and the first step necessary to the uplift of the rural masses will have been taken.

Then the following results will be brought about as rapidly as time will permit:

- (1) The emancipation of the farmer from the bondage of debt.
- (2) The ownership of more and better tools, teams, and stock on the farm.
  - (3) The improvement of the land and the home.
- (4) Better rural school buildings and more months of schooling.
- (5) Better highways, rural-mail delivery, and telephone service.

The Farmers' Cooperative Demonstration Work simply induces some farmer in every rural neighborhood to place an object lesson on his farm for the purpose of showing what better methods can do for the net income.

The first steps in all true education are by object lessons and not by books.

What other forces have we that can be helpful in improving country conditions?

The three great factors in rural civilization are the home, the common school and the church. The greatest school 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 Harvard or Yale.

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 foundation of knowledge along the lines of wisdom.

The church is a great teacher. It gives dignity and honor to men, stability to society and infinitely broadens the human horizon.

One reason why these three great forces have not accomplished more in the country is that they have acted independently, rather than cooperatively. Home conditions have been too little affected by school and church. The school teachers have tried, no doubt honestly, to impart instructions in the fundamental branches and give mental training, but they have almost universally cast about the school room an atmosphere remote from country life and planted the influences that eventually lead to an abandonment of the farm. As one has expressed it "The rural school is mostly a city school located at a country crossroad."

The rural church is justly liable to a similar criticism.

The pastor, instead of being a leader in rural thought and progress, as well as spiritual life, united to his people by ties of sympathy and helpfulness in material things, and the promoter and the sustaining force of a real social life in the country, is a potent factor in magnifying the advantages of

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that he may be transferred to the city. How can we reallign and correlate these, the rural home, the rural school and the rural church?

The work of readjustment must commence with the school and the church. It is within the power of an enlightened public opinion to reach the school at once:

lst.-By requiring every country school teacher to have elementary training in agriculture.

2d.- By requiring that every woman teacher for rural schools shall pass examination in domestic science before receiving a certificate.

3d.- Every teacher should know hygiene and the simple remedies for the common diseases.

Reduce, if necessary, the number of hours devoted to books and put some time on the knowledge absolutely essential to make life comfortable. Let us trade a little Roman history for the science of homemaking, and some of the rules of grammar, if need be, for rules of better living, and some of the useless puzzling problems in the back of the arithmetic for problems of the farm worked out in the school garden plats. Let the teacher take a human interest. Let the country school teacher get connected with the farms and the homes and not make the school house an island where strange bipeds come in every day to be vaccinated with the virus of books and depart at night with an inflammation of the brain instead of usable knowledge. Let the teachers know the things of their environment and have a sympathy with toil

and the homes will be attracted to the school house and the mother will absorb as much from the teacher as the daughter.

How? Let him graduate at a college of agriculture and of medicine, as well as at a school of Divinity. Let him get away from his remoteness and preach about bettering farm life. Let his heroes be farm boys and his angels farm girls. When he pays a pastoral visit let him go into the field and make good suggestions about farming, instead of sitting about the house and waiting for the yellow-legged chicken to be served. If there is anyone sick, let him be prompt with his services. This is exactly what the mission-aries do in foreign lands to attract and attach the people to their cause. It will work just as well here as there. Usefulness is valuable everywhere.

The preacher and the teacher should be the leaders in founding a true rural society,—genial, instructive, promoting harmony and good will and tending to unity of action. The tremendous power of social unity is mainly lost or is ineffective in the country for lack of organization. Rural public opinion and rural sentiment must be revitalized and wield its power for the common good. Public opinion governs in the vest domain that law does not reach. It determines home conditions, the treatment of children, the respect given to age, the clothing we wear, the schooling we receive and the religion we accept. An enlightened rural public opinion develops a rural pride, forces a readjustment of the home, establishes the rights of the family and the amenities of the social compact.

The model farm dwelling and its environment, the nester farm and better equipment, the touches of refinement about the school-house and the churches, are determined by the laws which public opinion has written into the statutebooks of rural society.

Where there is no rural social organizations there is a chaos or barbarism in the conditions of life outside the law. Two races, with a color line in the same territory, are a great barrier to social improvement. There are two public opinions, two codes of honor, two standards of morality, and two schools of ethical training. Segregation would be better. As stated, it is the province of the rural church and the school to organize country society and create this readjusting public opinion.

In addition to the school gardens and nature lessons, we can teach practical agriculture. Women teachers can give this instruction as well as men, upon the following plan:

Organize boys' clubs for the production of corn and other standard crops, upon their fathers' farms. Limit the plot to an acre or half-acre. Establish rules for the government of the contest and the distribution of the prizes, and get the instructions from the State College of Agriculture or the Farmers' Co-operative Demonstration Work of the United States Department of Agriculture. The United States Demonstration Work now has enrolled a good many thousand boys to whom it is giving instructions. Last year one boy in Mississippi made 127% bu. of corn on an acre, while the State average was only about 15 bushels per acre.

Upon the same general plan girls' clubs in domestic science could be organized and operated, taking instructions from the

each state. If the spoon can deplete the resources of the farm more rapidly than the shovel can increase them, then the training of girls in home management is the most important branch of agriculture, and besides, the girls are the homemakers.

The Farmers' Cooperative Demonstration Work of the United States Department of Agriculture is susceptible of very wide application. Last year a rural church in Texas was in debt about \$250.00 and could see no way of liquidating it. The ladies of the church leased ten acres of land and planted it to cotton. They planted it under the directions of our local Demonstration Agent, hired all the work done and netted a sum sufficient to pay the debt. A number of Ladies' Aid Societies have adopted the plan. Rural schools in need of funds for libraries, improvement of buildings, or beautifying the grounds, have planned to make the needed money instead of begging it, and at the same time give an object lesson in practical agriculture.

The successful farmer must be an all-round, many-sided man and capable of adjusting himself at all times to new conditions. He should have some mechanical knowledge and skill. Just a knowledge of how to raise a crop and care for stock does not make a farmer. An important part of successful farming is the best equipment and improvements. 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 ongines, machinery and tools in the hands of children. Some of the most skillful engineers and corporters 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 height of the average door through which they daily pass, nor the proper proportion of mindows to the rooms. Their eyes were never opened to see industrial things. Some are 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.

portance are the dignity of labor and the value of thrift, -labor so essential to physical and mental vigor, and thrift, that which conserves the products of labor, can be most successfully taught in the country. More than helf the people of our towns and cities, if all that could labor are included, are idlers, spenders of woulth instead of promoters, hunting for servants instead of seeking for toil. In cities the influences for spending are dominant.

The half grown boys and girls of the villages and lesser cities could make gardens and raise the fruits and poultry for 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 strengthen the family pocketbook and help the family character. In the country labor is honorable and thrift a necessity and hence a large per cent of the leaders of industry are country-bred boys.

The most valuable acquisition for the rural population is common sense. There is a large measure of things in the life upon the farm that can not be adjusted by law. They must be adjusted by common sense. Common sense is simply an intimate knowledge of common things and how to use them. It is acquired by home teaching and contact with others. The teacher can greatly enlarge the body of knowledge of common things by daily hints that lead out the youthful minds to full investigation.

#### ENVIRONMENT EDUCATION.

There are tremendous educational forces in our environments. In the great cities and in the manufacturing centers there has been for centuries and probably will continue to be, the unrest that arises from a conflict between aggregated capital and organized labor. These conditions will produce certain types of citizens. Presperous and contented communities of small farmers distributed over the entire country will produce another type of

men who, in habits of life and in political belief, will be almost exactly the opposite of the former and will act as a counterpoise in adjustments of government. A prosperous, intelligent and contented rural population is therefore, essential to our national perpetuity. The world's experience has shown that the best way to secure this is to encourage the division of all the lands into small farms, owned and operated by one family. There are two ways to look at a small farm; one is, and the common way. that it is a place to make a living, but rather a hard place. and should be sold as soon as anything easier is found. The other is that the ownership of land is a mark of honor; that a patent to land is a title to nobility, a right to sovereignty. The ownership must be absolute, subject only to the State, so that each proprietor is the independent sovereign of a portion of the United States, with the final authority through the ballot, to control the local, County, State and Mational governments: a position of great dignity and power. We speak of the sovereign people. Are they to be sovereign in fact or in theory only? If in fact, then each citizen must own and control something. In a sense he must be a lord of a certain territory. It is called a farm, but legally it is a subdivision of the State to which the farmer is given perpetual title, that he may have the means to support his position as an independent sovereign with dignity. and that by absolutely governing a small portion of the United States, he may wisely assist in governing the whole. This is

the attitude of the state towards individual ownership of land, and these lands should be of an area that will come nearest to the development of the perfect citizen and ruler. It must not be so large that the income can support the owner without effort on his part; nor should it be so small that it will make a more toiler out of the owner, for this narrows the intellect. It should be large enough to provide good farm equipment buildings, machinery and stock, and furnish labor for the family. The annual income must be sufficient to improve the farm, educate the family, assist in starting its members in ways of independent supports and to provide a reserve for old age. The United States has fixed that amount at 160 acres. The right acreage of the farm must depend upon conditions. In semi-arid sections it might require more than double that number and near large cities, less than one-fourth might answer the purpose.

a respect for the rights of others and for law. No one is rich enough to dominate his neighbors nor so poor that his influence may be disregarded. Their stock, products and property are exposed to trespassers and depredators, hence a common interest unites them for mutual protection and the primary lessons of society are taught.

The education acquired on the small farm broadens citizenship, because it is a many-sided education and gives correct impressions of many phases of life. All over the world the small independent farmers are staunch supporters of conservative government. They

are intense lovers of home and opposed to radical changes.

## AS A SOURCE OF WEALTH.

Cltimately the small farmer learns to keep a reserve of each against emergencies and these aggregated accumulations become very important factors in the capital of our nation, for they are more reliable than the deposits from commercial sources. The vast sums of money necessary to carry on the business of a nation, are not derived from the deposits of capitalists, but from the aggregation of millions of thrifty, small depositors. This is especially true of England, France, Germany and the United States.

If all is considered education that leads out, develops or trains the individual, then the amount acquired in even the best schools is only a fraction of what the average man must know to succeed in life. It is of the highest importance then to the state that this greater body of knowledge should be correct, broad, conservative, and elevating. Liberal provision has been made by the state, by churches, and by individual gifts for schools, but the moulding of this great body of knowledge to the best interests of society has been mainly left to the caprice of individual efforts. The state can with propriety especially foster such conditions of society, such lines of industry, or such occupations as evidently tend to mental and physical vigor, to breadth of understanding and to the best citizenship and to the stability of the state. For

these ends no more potent influence has been found than an intelligent, prosperous and contented body of thrifty small farmers. States and the National Government have aided by the gift of free lands for homes, and by the promotion of rural schools and free mail delivery.

What is the next step to be taken?-better highways and consolidation of rural schools. The need of better highways is too apparent to require discussion here.

When rural schools were first established in the United States, education in the country was elementary. As the demand for higher education became common, the attempt was made to graft on to the common schools higher branches, until frequently a teacher in the country has thirty or forty classes in one day. Under such conditions thoroughness is impossible. In the readjusted rural school the township should be the unit. One good graded rural school is better than six to nine half equipped, half taught. wholly neglected neighborhood schools, where the traveler is frequently in doubt whether the building is a dwelling without tenants, or a barn without fodder, and where a few months of schooling is given to ease the parental conscience, and where the principal object is to teach the science of how to study books without acquiring an education. This consolidated rural school will be better equipped, better managed and better taught. It is the only way rural education can be made creditable and adequate to the requirements of country life. The consolidated rural school must do for the country what the High School has

done for the city. Such a school will organize rural society, establish and maintain rural public opinion, and provide adequate education for the toilers upon the farms. In such schools agriculture, the mechanic arts, and domestic economy can be taught. It can be a real rural school. Is it not better that those who love the country and believe that its development, enrichment and culture are necessary to our national life, should unite upon some plan to consolidate the rural school, than to establish a few district agricultural schools?

The objection to an agricultural high school in each Congressional District is that it removes the boys from the farms and homes, gives a semi-city environment, increases the cost of education to such as avail themselves of its offers, and takes money from all the people to provide advantages for a few, and that few generally best able to help themselves. Such schools could only provide training for a few, whereas the necessity for vocational education is universal and should be provided for all. Should the Davis Bill be resurrected an amendment will be offered:— First, that additional means be furnished our colleges of Agriculture to enable them to prepare teachers for rural schools; and secondly, that the funds proposed for district agricultural high schools shall be given to aid consolidated rural schools.

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 foundation or lower stories have not proven 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 lifework 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.

I have tried to show that there are ample forces in the field for the readjustment of rural conditions, if vitalized and brought into service. There is always a class eager to

establish new agencies, to join battle with untested equipment, to attack strongholds with raw militia, and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this reallignment to include instruction in agriculture there is danger that we may eliminate branches of great value and necessary to the rounding out of the rural toiler in his obligations to human society. For after all, in molding men by the processes of education there is something more than just fitting them for a vocation. The aim should be to make a greater common man, and unless this can be done vocational training will be a failure because of the narrowing of his social lines, the dwarfing of his sense of obligation to the state, and a semi-paralysis of his moral nature. Unless the main object of all education for the masses is the making of a great common people, we shall fail. Neither a score of statesmen nor a brigade of scholars make a great nation. If our institutions are to be preserved it must be accomplished by making greatness common .- More thoroughness, sublime faithfulness, exalted character, greater breadth, perfect integrity, a larger view of human rights and God's requirements; millions of inspired doers who give to every creation of their handiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created; millions of scholars in their rural homes fostering knowledge and promoting art; millions of

the details of a broader national life, and millions of philanthropists making gains to better the world.

What can teachers do to help our rural conditions? Everything. They are an essential part of the greatest of all universities, the home. They have charge of the extension courses; they can inspire in youth a love of knowledge and make all its avenues look delightful; they can unlock the books which are treasure-houses of human wisdom, and give them a golden key; they 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: they can add to the comforts of the home, shape its environments into lines of beauty and increase its attractiveness, till the home shall become the greatest magnet of our people: they can create a love of investigation and give it direction; they can enlarge the knowledge of the people in common things and thus lay the foundation of the common sense. At their instance, fingers will touch the lines of deftness, mechanical skill will become universal, and thrift and alertness will transform the toilers into captains of industry. Their mission is to make a great common people and thus readjust the map of the world. The keystone of American civilazation is the home. By some mysterious social convulsion it has become loosened. They 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.

Hamilear took the youthful Hannibal and made him swear at a sacred alter eternal enmity to Rome. Let the teacher, on bended knee and with uplifted hand, at the alter of liberty, ewear eternal enmity to ignorance, vice and crime, and the dawn of a greater life will appear; a nation of broader horizon and higher purpose will stand forth to battle for human rights.

#### AGRICULTURAL EDUCATION FOR THE RURAL DISTRICTS.

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to successfully teach it. In a broader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these broader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

1st,- There is a 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.

- 2d. There is 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.
- 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, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.

4th. There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

of the statesman, 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 several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. This we call mass compulsion. There is also, where great numbers are aggregated, 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.

Rural conditions in the Nation are not what they should be. Of course there are many exceptions, but it is true as a whole. Many and radical reforms must be worked out before ideal conditions can be establised generally in the country.

- (1) A much larger per cent of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit than employment in the city.
- (3) The farm improvements must be durable, suited to the recuirements of the farm, convenient and attractive.
- (4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The problem is how to effect these rural changes for the better. Education being so important, many have thought end still think, that the establishment of agricultural schools will accomplish the object. Forty years trial has shown that most of the youth, college trained, whether in schools of agriculture, science, or classics, leave the farm for reasons not difficult to be understood. The education required is one that can reach the adult masses as well as the young, and will hold them to the farm. The error is in a failure to see

that the situation can not be overcome by a college education, however helpful it may be to the graduate as a citizen. The practical and same way of accomplishing the result is to induce the farmers to try better methods and note the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per sere and halve the cost. While the farmer successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his occupation, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that

susceptible period during which he acquires an education.

All reforms must be wrought out by some process of education. We have placed incorrect values and too narrow limits upon what we have labelled education. True education is the leading out of the mind to a knowledge of helpful things, and the most important and helpful to each individual are the things for which he will have the most use in life. For the average man, education better be full and accurate in limited useful lines than narrow and desultory in broad lines. What the average man should know are the things with which he has to deal in his life work. stored brain, the alert eye and the skilled hand are his equip-Mental discipline depends more on how knowledge is acquired than upon the kind of information received. The farmer needs a broader knowledge of home things. The education required for the rural districts is one that enables the farmer to be a master of husbandry, a good home-maker and en intelligent and dependable citizen. The character of the home-maker and the citizenship are necessarily based on the success of the husbandry. It is difficult to establish and maintain a comfortable home upon an income totally insufficient and it is impossible to work out a high rural civilization and an exalted citizenship in the country without the art and the science of agriculture are brought to such a degree of perfection that they will wrest from the soil the means necessary to establish and support these higher planes of living. The order of sequence in the uplift of the country, from a material standpoint, is as follows:

lst.-Greater net gains must be wroated by the farmer from the soil.

2d.- The increased gains must be applied, in part, to an improvement of the homes and their environments, to a readjustment of the rural schools and a re-allianment of the rural churches.

3d.- The improvement of the means of transportation and communication, the highways, the telephones, rural free delivery, etc.

4th. The restoration to the country of such manufactures as are closely related to the farm.

An increase of the net gains obtained from the farm is given the first place in this uplift because every upward step in civilization costs something, and the betterment must commence at the point of securing a greater income.

What primary remedy for the improvement of rural conditions should a republic propose where all the adult male citizens are expected to exercise, through the ballot, the functions of a ruler? Evidently it should be one that can directly and immediately benefit all the people. More than nine-tenths of the rural population are limited by their conditions to an education provided by the country district school. The primary remedy that can be successfully applied to help all the rural people, one that will be effective and immediate, is to increase the net earnings of farmers and farm laborers. If

each farmer is shown how to produce twice as much to the acre as he now produces, and at less cost, it will be a profit in which all rural classes will share and will be the basis of the greatest reform ever known to rural life.

How can the knowledge of better agricultural methods be conveyed to the masses in a way so effective that the methods will be accepted and their practice become common? This has been solved by the Farmers' Cooperative Demonstration Work which is an effective system for instructing farmers, and for the readjustment of rural conditions. Its purpose is:

- (1) To reform agriculture and make it an occupation of profit and pleasure.
  - (2) To improve rural conditions.
  - (3) To broaden and enrich rural life.
- (4) To make the farm attractive and country residence desirable.

The farmer is necessarily conservative, but offer him a genuine thing and prove it and no one is more responsive. He will not accept what has not been fully tested, and he must see it to believe. Moreover, he must work out the problem on his own farm. Increase the net income of the average farmer and wages of the rural toiler and the first step necessary to the uplift of the rural masses will have been taken.

Then the following results will be brought about as rapidly as time will permit:

- (1) The emancipation of the farmer from the bondage of debt.
- (2) The ownership of more and better tools, teams, and stock on the farm.
  - (3) The improvement of the land and the home.
- (4) Better rural school buildings and more months of schooling.
- (5) Better highways, rural-mail delivery, and telephone service.

The Farmers' Cooperative Demonstration Work simply induces some farmer in every rural neighborhood to place an object lesson on his farm for the purpose of showing what better methods can do for the net income.

The first steps in all true education are by object lessons and not by books.

What other forces have we that can be helpful in improving country conditions?

The three great factors in rural civilization are the home, the common school and the church. The greatest school 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

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One reason why these three great forces have not accomplished more in the country is that they have acted independently, rather than cooperatively. Home conditions have been too little affected by school and church. The school teachers have tried, no doubt honestly, to impart instructions in the fundamental branches and give mental training, but they have almost universally cast about the school room an atmosphere remote from country life and planted the influences that eventually lead to an abandonment of the farm. As one has expressed it "The rural school is mostly a city school located at a country crossroad."

The rural church is justly liable to a similar criticism.

The pastor, instead of being a leader in rural thought and progress, as well as spiritual life, united to his people by ties of sympathy and helpfulness in material things, and the promoter and the sustaining force of a real social life in the country, is a potent factor in magnifying the advantages of

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The preacher and the teacher should be the leaders in founding a true rural society,— genial, instructive, promoting harmony and good will and tending to unity of action. The tremendous power of social unity is mainly lost or is ineffective in the country for lack of organization. Rural public opinion and rural sentiment must be revitalized and wield its power for the common good. Public opinion governs in the vest domain that law does not reach. It determines home conditions, the treatment of children, the respect given to age, the clothing we wear, the schooling we receive and the religion we accept. An enlightened rural public opinion develops a rural pride, forces a readjustment of the home, establishes the rights of the family and the amenities of the social compact.

The model farm dwelling and its environment, the nester farm and better equipment, the touches of refinement about the school-house and the churches, are determined by the laws which public opinion has written into the statute books of rural society.

Where there is no rural social organizations there is a chaes or barbarism in the conditions of life outside the law. Two races, with a color line in the same territory, are a great barrier to social improvement. There are two public opinions, two codes of honor, two standards of morality, and two schools of ethical training. Segregation would be better. As stated, it is the province of the rural church and the school to organize country society and create this readjusting public opinion.

In addition to the school gardens and nature lessons, we can teach practical agriculture. Women teachers can give this instruction as well as men, upon the following plan:

organize boys' clubs for the production of corn and other standard crops, upon their fathers' farms. Limit the plot to an acre or half-acre. Establish rules for the government of the contest and the distribution of the prizes, and get the instructions from the State College of Agriculture or the Farmers' Co-operative Demonstration Work of the United States Department of Agriculture. The United States Demonstration Work now has enrolled a good many thousand boys to whem it is giving instructions. Last year one boy in Mississippi made 127% bu. of corn on an acre, while the State average was only about 15 bushels per acre.

Upon the same general plan girls' clubs in domestic science could be organized and operated, taking instructions from the

teacher of domestic science at the College of Agriculture in each state. If the spoon can deplete the resources of the farm more rapidly than the shovel can increase them, then the training of girls in home management is the most important branch of agriculture, and besides, the girls are the homemakers.

The Farmers' Cooperative Demonstration Work of the United States Department of Agriculture is susceptible of very wide application. Last year a rural church in Texas was in debt about \$250.00 and could see no way of liquidating it. The ladies of the church leased ten acres of land and planted it to cotton. They planted it under the directions of our local Demonstration Agent, hired all the work done and netted a sum sufficient to pay the debt. A number of Ladies' Aid Societies have adopted the plan. Rural schools in need of funds for libraries, imprevement of buildings, or beautifying the grounds, have planned to make the needed money instead of begging it, and at the same time give an object lesson in practical agriculture.

The successful farmer must be an all-round, many-sided man and capable of adjusting himself at all times to new conditions. He should have some mechanical knowledge and skill. Just a knowledge of how to raise a crop and care for stock does not make a farmer. An important part of successful farming is the best equipment and improvements. Everywhere throughout the country there is a shocking lack of mechanical knowledge and skill. It is shown in the buildings, the fonces, 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 height of the average door through which they daily pass, nor the preper proportion of windows to the rooms. Their eyes were never opened to see industrial things. Some are 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.

Two common branches not usually taught but of great importance are the dignity of labor and the value of thrift, -labor
so essential to physical and mental vigor, and thrift, that which
conserves the products of labor, can be most successfully taught
in the country. More than half the people of our towns and cities,
if all that could labor are included, are idlers, spenders of
wealth instead of promoters, hunting for servants instead of seeking for toil. In cities the influences for spending are dominant.

The half grown boys and girls of the villages and lesser cities could make gardens and raise the fruits and poultry for 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 strengthen the family pocketbook and help the family character. In the country labor is honorable and thrift a necessity and hence a large per cent of the leaders of industry are country-bred boys.

The most valuable acquisition for the rural population is common sense. There is a large measure of things in the life upon the farm that can not be adjusted by law. They must be adjusted by common sense. Common sense is simply an intimate knowledge of common things and how to use them. It is acquired by home teaching and contact with others. The teacher can greatly enlarge the body of knowledge of common things by daily hints that lead out the youthful minds to full investigation.

## ENVIRONMENT EDUCATION.

There are tremendous educational forces in our environments. In the great cities and in the manufacturing centers there has been for centuries and probably will continue to be, the unrest that arises from a conflict between aggregated capital and organized labor. These conditions will produce certain types of citizens. Presperous and contented communities of small farmers distributed over the entire country will produce another type of

men who, in habits of life and in political belief, will be almost exactly the opposite of the former and will act as a counterpoise in adjustments of government. A prosperous, intelligent and contented rural population is therefore, essential to our national perpetuity. The world's experience has shown that the best way to secure this is to encourage the division of all the lands into small farms, owned and operated by one family. There are two ways to look at a small farm; one is, and the common way. that it is a place to make a living, but rather a hard place, and should be sold as soon as anything easier is found. The other is that the ownership of land is a mark of honor; that a patent to land is a title to nobility, a right to sovereignty. The ownership must be absolute, subject only to the State, so that each proprietor is the independent sovereign of a portion of the United States, with the Anal authority through the ballot, to control the local, County, State and Mational governments; a position of great dignity and power. We speak of the sovereign people. Are they to be sovereign in fact or in theory only? If in fact, then each citizen must own and control something. In a sense he must be a lord of a certain territory. It is called a farm, but legally it is a subdivision of the State to which the farmer is given perpetual title, that he may have the means to support his position as an independent sovereign with dignity, and that by absolutely governing a small portion of the United States, he may wisely assist in governing the whole. This is

the attitude of the state towards individual ownership of land, and these lands should be of an area that will come nearest to the development of the perfect citizen and ruler. It must not be so large that the income can support the owner without effort on his part; nor should it be so small that it will make a mere toiler out of the owner, for this narrows the intellect. It should be large enough to provide good farm equipment buildings, machinery and stock, and furnish labor for the family. The annual income must be sufficient to improve the farm, educate the family, assist in starting its members in ways of independent supports and to provide a reserve for old age. The United States has fixed that amount at 160 acres. The right acreage of the farm must depend upon conditions. In semi-arid sections it might require more than double that number and near large cities, less than one-fourth might answer the purpose.

a respect for the rights of others and for law. No one is rich enough to dominate his neighbors nor so poor that his influence may be disregarded. Their stock, products end property are exposed to trespassers and depredators, hence a common interest unites them for mutual protection and the primary lessons of society are taught.

The education acquired on the small farm broadens citizenship, because it is a many-sided education and gives correct impressions of many phases of life. All over the world the small independent farmers are staunch supporters of conservative government. They

are intense lovers of home and opposed to radical changes.

## AS A SOURCE OF WEALTH.

cash against emergencies and these aggregated accumulations become very important factors in the capital of our nation, for they are more reliable than the deposits from commercial sources. The vast sums of money necessary to carry on the business of a nation, are not derived from the deposits of capitalists, but from the aggregation of millions of thrifty, small depositors. This is especially true of England, France, Germany and the United States.

or trains the individual, then the amount acquired in even the best schools is only a fraction of what the average man must know to succeed in life. It is of the highest importance then to the state that this greater body of knowledge should be correct, broad, conservative, and elevating. Liberal provision has been made by the state, by churches, and by individual gifts for schools, but the moulding of this great body of knowledge to the best interests of society has been mainly left to the caprice of individual efforts. The state can with propriety especially foster such conditions of society, such lines of industry, or such occupations as evidently tend to mental and physical vigor, to breadth of understanding and to the best citizenship and to the stability of the state. For

these ends no more potent influence has been found than an intelligent, prosperous and contented body of thrifty small farmers. States and the National Government have sided by the gift of free lands for homes, and by the promotion of rural schools and free mail delivery.

That is the next step to be taken?-better highways and consolidation of rural schools. The need of better highways is too apparent to require discussion here.

Then rural schools were first established in the United States, education in the country was elementary. As the demand for higher education became common, the attempt was made to graft on to the common schools higher branches, until frequently a teacher in the country has thirty or forty classes in one day. Under such conditions thoroughness is impossible. In the readjusted rural school the township should be the unit. One good graded rural school is better than six to nine half equipped, half taught, wholly neglected neighborhood schools, where the traveler is frequently in doubt whether the building is a dwelling without tenants, or a barn without fodder, and where a few months of schooling is given to ease the parental conscience, and where the principal object is to teach the science of how to study books without acquiring an education. This consolidated rural school will be better equipped, better managed and better taught. It is the only way rural education can be made creditable and adequate to the requirements of country life. The consolidated rural school must do for the country what the High School has

done for the city. Such a school will organize rural society, establish and maintain rural public opinion, and provide adequate education for the toilers upon the farms. In such schools agriculture, the mechanic arts, and domestic economy can be taught. It can be a real rural school. Is it not better that those who love the country and believe that its development, enrichment and culture are necessary to our national life, should units upon some plan to consolidate the rural school, than to establish a few district agricultural schools?

The objection to an agricultural high school in each Congressional District is that it removes the boys from the farms
and homes, gives a semi-city environment, increases the cost of
education to such as avail themselves of its offers, and takes
money from all the people to provide advantages for a few, and
that few generally best able to help themselves. Such schools
could only provide training for a few, whereas the necessity
for vocational education is universal and should be provided for
all. Should the Davis Bill be resurrected an amendment will
be offered:— First, that additional means be furnished our colleges of Agriculture to enable them to prepare teachers for
rural schools; and secondly, that the funds proposed for district
agricultural high schools shall be given to aid consolidated
rural schools.

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 enimals, 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-stery buildings without foundation or lower stories have not proven 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 lifework 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.

I have tried to show that there are ample forces in the field for the readjustment of rural conditions, if vitalized and brought into service. There is always a class eager to

establish new agencies, to join battle with untested equipment, to attack strongholds with raw militis, and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this reallignment to include instruction in agriculture there is danger that we may eliminate branches of great value and necessary to the rounding out of the rural toiler in his obligations to human society. For after all, in molding men by the processes of education there is something more than just fitting them for a vocation. The aim should be to make a greater common man, and unless this can be done vecational training will be a failure because of the narrowing of his social lines, the dwarfing of his sense of obligation to the state, and a semi-paralysis of his moral nature. Unless the main object of all education for the masses is the making of a great common people, we shall fail. Neither a score of statesmen nor a brigade of scholars make a great nation. If our institutions are to be preserved it must be accomplished by making greatness common, - More thoroughness, sublime faithfulness, exalted character, greater breadth, perfect integrity, a larger view of human rights and God's requirements; millions of inspired doers who give to every creation of their hendiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created; millions of scholars in their rural homes fostering knowledge and promoting art; millions of

the details of a broader national life, and millions of philanthropists making gains to better the world.

What can teachers do to help our rural conditions? Everything. They are an essential part of the greatest of all universities, the home. They have charge of the extension courses: they can inspire in youth a love of knowledge and make all its avenues lock delightful; they can unlock the books which are tressure-houses of human wisdom, and give them a golden key; they 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; they can add to the comforts of the home, shape its environments into lines of beauty and increase its attractiveness, till the home shall become the greatest magnet of our people; they can preste a love of investigation and give it direction; they can enlarge the knowledge of the people in common things and thus lay the foundation of the common sense. At their instance, fingers will touch the lines of deftness, mechanical skill will become universal, and thrift and alertness will transform the toilers into captains of industry. Their mission is to make a great common people and thus readjust the map of the world. The keystone of American divilagation is the home. By some mystorious social convulsion it has become loosened. They can reach it from the pedestal of the common school, push it to its place and dement it in a way that will be enduring.

Hamilton took the youthful Hannibal and made him swear at a sacred alter sternal enmity to Rome. Let the teacher, on bended knee and with uplifted hand, at the alter of liberty, swear eternal enmity to ignorance, vice and crime, and the dawn of a greater life will appear; a nation of broader horizon and higher purpose will stand forth to battle for human rights.

## AAGRICULTURAL EDUCATION FOR THE RURAL DISTRICTS.

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to successfully teach it. In a broader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these broader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

lst. There is a 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. There is 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.

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 to the detriment of the country, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.

4th. There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

oth. From the standpoint of the statesman, 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 several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. There is also, where great numbers are aggregated, a mass leadership regardless of wealth. Generally this represents organized and predatory poverty.

It matters not that the prosperity in cities, so far as it relates to the masses, is illusory, it attracts; it allures.

Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

- (1) A much larger per cent of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit for the toiler than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and attractive.

(4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The practical and same way of accomplishing the result is to induce the farmers to try better methods and note the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per acre and halve the cost. While the farmers successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

Well informed men who are successful farmers are generally agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his vocation, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that.

All referms must be wrought out by some process of education. We have placed incorrect values and too narrow limits upon what we have labeled "education." True education is the leading out of the mind to a knowledge by helpful things and the most important and helpful to winds each individual are the things for which he will have the most use in life. What the average man should know are the things with which he had to deal in his life The stored brain, the alert eye and the skilled hand are his equipment. Mental discipline depends more on how knowledge is acquired than upon the kind of information received. The education required for the rural district is one that enables the farmer to be a master of husbandry, a good home-maker and an intelligent and dependable citizen. The character of the homemaker and the citizenship are necessarily hazz based on the success of the husbandry. It is impossible to establish and maintain a home upon an income total indefficient and to work out a higher rural civilization and an exalted citizenship without the art and the science of agriculture are brought to such a degree of perfection that they will wrest from the soil the means necessary to establish and support the higher plane of living.

Every step in the human uplift costs something, and how high we can go depends upon how much we can wrest from the soil with which to pay the cost of our progress.

The three great forces upon which we must depend for rural improvement are the home, the common schools and the church. The great schools for the human race are homes and the common schools, not our colleges and universities, greater in amount and value of

knowledge acquired. A good home, be it ever so plain, with a mother and father of sense and general culture, is nature's university and is more richly endowed for the brain of youths than Harvard or Yale.

whom we know as mother. She inspires as well as instructs. Next to her in work and worth are the common schools teachers. They supplement the home training and lay the foundation for knowledge water along the lines of wisdom. Our rural reform then must commence with the home. But the problem is how to reach the home effectively and re-adjust it upon a higher plane.

The Farmers' Co-Operative Administration work of the United States Department of Agriculture has, we think, successfully solved that problem, bytsending agents to the rural homes and showing the farmers how to increase their gains by improved methods of agriculture. Each farmer is asked to work out the problem upon his farm and thus prove to himself that the instruction is correct.

The chief inspiration that can come to a farmer is by achievement upon his own farm. Success lends confidence and inspiration and the increased gains from his efforts act directly upon the home giving improved conditions as well as inspiration.

The Farmers' Co-operative administration work directly touches nearly 300,000 farmers and influentially is an important factor for reform in eleven states. The promoters of this work are confident that nearly all men desire better things, better conditions of life, provided the means can be supplied by which they can attain them. It is gratifying to note that the results

Until the homes have made some progress it will be a difficult thing for the schools to accomplish all that is desired. The school teachers have tried no doubt properly to impart instruction branches of fundamental and good mental training, but they have almost universally cast about the school-room an atmosphere remote from country life and planted the influences that eventually lead to an abandonment of the farm. As one has expressed it "the rural school is mostly a city school located at a country cross-road.

The people have seen that something was wrong with our schools; that there should be a reform and that good schools should be allied more closely to rural life and a number of states have passed laws demanding that agriculture be taught in the public This has spread consternation among the teachers, and schools. well it might. For the legislators did not know exactly what they wanted. Agriculture is a very broad term and it includes within its requirements nearly every branch of human ix knowledge, so that under the law the teacher may teach a little geology, biology, chemistry, ethics or any other science and still be within the requirements of the law. It is quite natural in order that when we first see anything we see it as a whole and afterwards in its parts. What work is needed for common schools is not agriculture as a whole but some definite requirement that can bexaxis.met. The three things universally needed are the garden, the cow and poultry raising. Because on these three things the great mass of the people must depend for their living and hence common rural districts they are universally necessary. If instead of requiring agriculture they had passed laws that these three branches should be taught, there would have here a sesint teness shout it and the teacher could have made

preparation to meet the situation. But when agriculture is demanded they simply stand agast. Maturally the first brush of the school room is m to prepare a book as if agriculture could be taught out of a book. And what kind od books have we had presented? Makexafxxx Some of them said some thing; in fact, they nearly all said something but they said too much. Now, if the science of agriculture is really taught in any schools, the first thing we ought to do is to accomplish all their sides, because it will require the whole time of a student during the period of his school attendance to acquire the things that relate to agriculture, but if, upon the other hand, we eliminate books in our instructions and have in connection with every rural school a practical farm garden, a few well managed farms and a small creamery belonging to some nearby farmer, instruction could be given that would be valuable. The purpose of this is that the student should graduate in knowing something definite instead of a lot of indefinite things that the student may be prepared to enter successfully upon a career of usefulness. This will require of course a consolidation of rural schools, and xxix it is high time that this was done. In the kindergarten days the common schools when only a few things were taught, it was well enough that one could be established in every neighborhood. Now so much is expected of the schools and so many branches must be taught that it can not was successfully exercises want carry out its mission unless it be a graded school and the township principle be made the unit. It is better for parents to send children a greater distance and have them attend a real school where they can complete their education, than to have the forms of a school without the reality close to their doors. The things required, then, of the school are first, consolidation; secondly, instruction in agriculfure with the lesst interference possible with the curriculum all

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2nd. There is a lower and more hazardous return from farm investments than from those in commercial or transporation 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 to the detriment of the country, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.

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until the homes have made some progress it will be a difficult thing for the schools to accomplish all that is desired. The school teachers have tried no doubt properly to impart instruction branches of fundamental and good mental training, but they have almost universally east about the school-room an atmosphere remote from country life and planted the influences that eventually lead to an abandonment of the farm. As one has expressed it "the rural school is mostly a city school located at a country cross-road.

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The people have seen that something was wrong with our schools; that there should be a reform and that good schools should be allied more closely to rural life and a number of states have passed laws demanding that agriculture be taught in the public This has spread consternation among the teachers, and schools. well it might. For the legislators did not know exactly what they wanted. Agriculture is a very broad term and it includes within its requirements nearly every branch of human in knowledge, so that under the law the teacher may teach a little geology, biology, chemistry, phony saica ethics or any other science and still be within the requirements of This error was quite reduced It is quite natural in order that Then we first see anything we see it as a whole and afterwards in its parts. What work is needed for common schools is not agriculture as a whole The three things but some definite requirement that can bexmade.met. universally needed are the garden, the cow and poultry raising. Because on these three things the great mass of the people must depend for their living and hence EDMMON rural districts universally necessary. If instead of requiring agriculture they had passed laws that these three branches should be taught, there would have been a definiteness about it and the teacher could have made

preparation to meet the situation. But when agriculture is demanded they simply stand agast. Naturally the first brush of the school from is x to prepare a book, as if agriculture could be taught out of a book. And what kind od books have we had presented? Makex wixxx Some of them said something; in fact, they nearly all said something but they said too much. Now, if the seience of agriculture is really to be taught in any schools, the first thing we ought to do is to acwith au other branches, because it will require the whole time of a student during the period of his school attendance to acquire the things that relate to agriculture, but if, upon the other hand, we eliminate books in our instructions and have in connection with every rural school a practical farm garden, a few well managed fewers and a small creamery belonging to some nearby farmer, instruction could be given that would be valuable. The purpose of this is that the student should graduate in knowing something definite instead of a lot of indefinite things, that the student may be prepared to enter successfully upon a career of usefulness. will require of course a consolidation of rural schools, and this it is high time that this was done. In the kindergarten days the common schools when only a few things were taught, it was well enough that one could be established in every neighborhood. so much is expected of the schools and so many branches must be taught that it can not be successfully exercise carry out its mission unless it be a graded school and the township principle be made the unit. It is better for parents to send children a greater distance and have them attend a real school where they can complete their education, than to have the forms of a school without the reality close to their doors. The things required, then, of the school are first, consolidation; secondly, instruction in agriculture with the least interference possible with the curriculum all

devised and which has been worked out for the common schools by the experience and wisdom of the ages. This can be done as stated by having very little text-book work and making the agriculture practical and largely an outdoor recreation, confining it to a few things thoroughly taught and well understood. The hax dairy, the poultry and garden are each important for the town and the country.

The rural church is justly liable to a similar criticism.

The pastor instead of being a leader in rural thought and progress as well as spiritually, united to his people by ties of sympathy and helpfulness in material things and the sustaining force of a social life in the country, is a potent factor in magnifying the advantages of the city.

Delivered Denver Calo July 4 1909 before To US Ed assur

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Address of Seaman A. Knapp of the
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1st. There is a much lower earning capacity of the rural toiler than of him equal in the city and a consequent dissatisfaction upon the part of the farm wage-earner.

- 2d. There is 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.
- 3d. In the past half century rural improvements have 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, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.

4th. There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

5th. From the standpoint of the statesman, 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 event 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 employes, all dependent upon a managing will. In several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. There are also, where great numbers are aggregated, a mass leadership regardless of wealth. Generally this represents organized and predatory poverty. It matters not that the prosperity in cities, so far as it relates to the masses, is illusory; it attracts, it allures.

Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

- (1) A much larger per cent. of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit for the toiler than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and attractive.
- (4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The methods to accomplish this rural reform were outlined by him as follows:

The first step to be inaugurated among the people is the Farmers' Co-operative Demonstration Work of the United States Department of Agriculture, by which the elementary lessons in agriculture are taught directly to the farmers and their methods improved, so that they are able to realize two, three and fourfold the results now obtained by them. Through this increase of income the people of the rural districts are able to improve their homes and to pay expenses incident to a higher civilzation. Every upward step, whether in city or country, costs semething. No great advances can be made unless this added cost be provided for. Through this instrumentality the homes of our rural population will be greatly improved.

The second great step in the rural uplift the speaker outlines is the consolidation of the rural schools. The neighborhood school is simply adapted to a people in a very elementary conditions of society. It is simply a kindergarten school, but when too many branches demanded by modern conditions are thrust upon them they are totally unsuited to meet the requirements of the pasple. It is better for parents to send their children a greater distance and have a real country school, properly equipped and graded so as to meet all the requirements of rural education. In such schools agriculture should be an important line of education. However, even in such schools it is out of the question to teach all that relates to agriculture and a mistake to attempt it. The present curriculum which has been worked out with such care should not be so disturbed as to inject into it courses of study that must gradually weaken the instruction now given. The public demand for agriculture has made this error, a lack of definiteness. It would have been much better had legislatures simply demanded the teaching of two or three things which are universally required and which would have given some greatly needed information to the people. Instead of agriculture, should be substituted the vegetable and fruit garden. the cow and her products and poultry. These three lines of instruction would give definiteness to what is required. As it is now the teachers are perfectly at sea and there will be an attempt to teach most everything from pure science related

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Public opinion is that power in civilization which regulates and controls matters beyond the realm of law and it is justace important that this should be framed upon a conservative and wise basis looking to the greatest good to the greatest number

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To have a true rural public opinion there must be real rural society. Sound public opinion can not be imported; it must be made on the spot and for the purpose.

The home, the school and the church are the three great forces upon which we must depend for the establishment of society, and the treation of a true public opinion in the country and the final readjustment of rural life. The three forces are ever present and all-powerful if united and can make a true rural public opinion with potential forces to control conditions in the country.

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Great emphasis should be placed on the means of teaching the dignity of labor, the value of thrift, the giving to the young a larger measure of common sense by causing them to be more familiar with the common things of their environment.

Special value should be placed on the importance in a republic of the ownership of small farms. There are two ways to look at a small farm. One is the common way, that it is a place to

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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 ordinary. If we have no more time 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 the 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 tried to translate the classics and have failed for lack of English. A great nation is not the outgrowth of a few men of genius. We agree, however, that to meet our highest ideals the classes, occupations and provisions of our commonwealth must be strengthened and developed in his life work to the extent of his capacity.

I have tried to show that there are forces in the field for the readjustment of the rural conditions if vitalized and brought into service. There is always a class eager to establish new agencies, to join battle with industrial equipment, to attack the stronghold of raw militia and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this we are learning to include instruction in agriculture. There is danger that we may eliminate branches of great value and necessary to the rounding out of the rural toiler in his obligations to human society. If our institutions are to be preserved it must be accomplished by making greatness common. More thoroughness, faithfulness, exalted character, greater breadth, perfect intelligence and larger views of human rights and government requirements, millions of inspired doers who give to every creation of their handiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created. Millions of scholars in their rural homes controlling knowledge and promoting art. Millions of statesmen toiling on the farm and in the factories, working out the details of a broader life, and millions of rural philanthropists making improvements to better the old.

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Seamon A. Ruapp, U.S. Department of Agriculture, Washington C

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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.

Rural conditions in the Nation are not what they should be. Of course there are many exceptions, but it is true as a whole. Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

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The problem is how to effect these rural changes for the better. Education being so important, many have thought and still think, that the establishment of agricultural schools will accomplish the object. Forty years trial has shown that most of the youth, college trained, whether in schools of agriculture, science, or classics, leave the farm for reasons not difficult to understand. The education required is one that can reach the adult masses as well as the young, and will hold them to the farm. The error is in a failure to see

that the situation can not be overcome by a college education, however helpful it may be to the graduate as a citizen. The practical and same way of accomplishing the result is to induce the farmers to try better methods and mote the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per acre and halve the cost. While the farmer successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

Well informed men who are successful farmers are generally agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his vocation, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that

susceptible period during which he acquires an education.

All reforms must be wrought out by some process of education. We have placed incorrect values and too narrow limits upon what we have labelled education. True education is the leading out of the mind to a knowledge of helpful things, and the most important and helpful to each individual are the things for which he will have the most use in life. For the average man, education better be full and accurate in limited useful lines than narrow and desultory in broad lines. What the average man should know are the things with which he has to deal in his life work. The stored brain, the alert eye and the skilled hand are his equipment. Mental discipline depends more on how knowledge is acquired than upon the kind of information received. The farmer needs a broader knowledge of home things. The education required for the rural districts is one that enables the farmer to be a master of husbandry, a good homemaker, and an intelligent and dependable citizen. The character of the homemaker and the citizenship are necessarily based on the success of the husbandry. It is difficult to establish and maintain a comfortable home upon an income totally insufficient and it is impossible to work out a high rural civilization and an exalted citizenship in the country without the art and the science of agriculture are brought to such a degree of perfection that they will wrest from the soil the means necessary to establish and support these higher planes of living. The order of sequence in the uplift of the country, from a material standpoint, is as follows:

(1st):- Greater net gains must be wrested by the farmer from the soil. (2nd):- The increased gains must be applied, in part, to an improvement of the homes and their environments, to a readjustment of the rural schools and a re-allignment of the rural churches and the creation of a true rural society. (3rd):- The improvement of the means of transportation and communication, the highways, the telephones, rural free delivery, etc. (4th):- The restoration to the country of such manufactures as are closely related to the farm. An increase of the net gains obtained from the farm is given the first place in this uplift because every upward step in civilization costs something, and the betterment must commence at the point of securing a greater income. The three great factors in rural civilization are the home, the common school and the church. 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 Harvard or Yale. 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 foundation of knowledge along the lines of wisdom. --6--

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The rural church is justly liable to a similar criticism.

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be transferred to the city. How can we reallign and correlate these, the rural home, the rural school and the rural church?

The work of readjustment must commence with the school and the church. It is within the power of an enlightened public opinion to reach the school at once:

lst. - By requiring every country school teacher to have elementary training in agriculture and be able to give expert advice in the production of farm crops.

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Reduce, if necessary, the number of hours devoted to books and put some time on the knowledge absolutely essential to make life comfortable. Let us trade a little Roman history for the science of homemaking, and some of the rules of grammar, if need be, for rules of better living, and some of the useless puzzling problems in the back of the arithmetic for problems of the farm worked out in the school garden plats. Let the teacher take a human interest. Let the country school teacher get connected with the farms and the homes and not make the school house an island where strange bipeds come in every day to be vaccinated with the virus of books and depart at night with an inflammation of the brain instead of usable knowledge. Let the teachers know the things of their environment and have a sympathy with toil and the homes will be attracted to the school house and the mother will absorb as much from the teacher as the daughter.

When rural schools were first established in the United

States, education in the country was elementary. As the demand for higher education became common, the attempt was made to graft on to the common schools higher branches, until frequently a teacher in the country has thirty or forty classes in one day. Under such conditions thoroughness is impossible. In the readjusted rural school the township should be the unit. One good graded rural school is better than six to mine half equipped, half taught, wholly neglected neighborhood school, where the traveler is frequently in doubt whether the building is a dwelling without tenants, or a barn without fodder, and where a few months of schooling is given to ease the parental conscience, and where the principal object is to teach the science of how to study books without acquiring an education. This consolidated rural school will be better equipped, better managed and better taught. It is the only way rural education can be made creditable and adequate to the requirements of country life. The consolidated rural school must do for the country what the High School has done for the city. Such a school will organize rural society, establish and maintain rural public opinion, and provide adequate education for the toilers upon the farms. In such schools agriculture, the mechanic arts, and domestic economy can be taught. It can be a real rural school. Is it not better that those who love the country and believe that its development, enrichment and culture are necessary to our national life, should unite upon some plan to consolidate the rural school, than to establish a few district agricultural schools?

The objection to an agricultural high school in each Congressional District is that it removes the boys from the farms and homes, gives a semi-city environment, increases the cost of education to such as avail themselves of its offers, and takes money from all the people to provide advantages for a few, and that few generally best able to help themselves.

Such schools could only provide training for a few, whereas the necessity for vocational education is universal and should be provided for all.

It should be emphasized that such a consolidated rural school is the whole thing, the complete education for the masses. It is the primary school, the High School, the college, the university, the agricultural college and the school of technology for the great majority of our rural population. Evidently the course of study should include thorough instruction in the fundamental branches of an English education followed by lessons in practical mechanics, agriculture, domestic arts and home making. All these branches should be taught by doing the things under investigation and simply using a book afterwards for explanation. A simple, sansible and practical kitchen, provided with all modern conveniences and utensils to do household work rapidly and economically, with practical lessons in economic providing and plain cooking for the girls, would be of inconcervably more advantage to the average girl than a smattering of French or German.

A carpenter's shop, properly equipped for a farm boy is better than a chemical laboratory. He better lern to handle skillfully the saw and the jack-plane than the retort and the Leyden jar.

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Agriculture should be taught in a concrete way and with special application to the vicinity of the school. The soil, the plants, shrubs and trees of that section should be studied with special reference to their utilization. Then if the pupils could be taught a few definite things, for example, to make a summer and winter garden, to successfully manage a poultry yard and to skillfully handle the cow and her products, they would have more usable agriculture than the average graduate.

They would thus know some definite things of almost universal use, and they could supply a general want. Excellence in common things is out of date. Advertise for a type-writer or stenographer, a clerk, a doctor or a lawyer, and hint at a good salary, and there will be a hundred applications in a week. Apply for a competent housekeeper who can provide with judgment and economy for a household and prepare food with skill, or for an intelligent and skillful gardener, poultry raiser, or dairyman and if you find one to suit in six months you may count yourself fortunate. Skill in common things is becoming rare. We are taught the least about the things most essential to life and because some one in a bygone age installed a lot of gibberish into our schools and called it education, the masses must absorb it and be centent.

The foregoing remarks are made with reference to the children of toilers upon the farms and in the workshops, where education must be limited by the law of necessity to earn a support.

Let us return to our plan of creating a true rural public opinion and discuss the rural preacher. He should be connected up to his field of labor. How? Let him graduate at a school of agriculture and of medicine, as well as at a school of Divinity. Let him get away from his remoteness and preach about bettering farm life. Let his heroes be farm boys and his angels farm girls. When he pays a pastoral visit let him go into the field and make good suggestions about farming. If there is anyone sick, let him be prompt with his services. This is exactly what the missionaries do in foregin lands to attract and attach the people to their cause. It will work just as well here as there. Usefulness is valuable everywhere.

The preacher and the teacher should be the leaders in founding a true rural society,— genial, instructive, promoting harmony and good will and tending to unity of action. The tremendous power of social unity is mainly lost or is ineffective in the country for lack of organization. At present country public opinion is a medley of town or city gossip, picked up on the streets or in the stores or in various rumor exchanges, and carried home under the hat without assortment. Rural public opinion and rural sentiment must be reconstructed and revitalized and wield its power for the common good. Public opinion governs in the vast domain that law does not reach. It determines home conditions, the treatment of children, the respect given to age, the clothing we wear, the schooling we receive and the religion we accept. An enlightened rural public

opinion develops a rural pride, forces a readjustment of the home, establishes the rights of the family and the amenities of the social compact.

The model farm dwelling and its environment, the neater farm and better equipment, the touches of refinement about the schoolhouse and the churches, are determined by the laws which public opinion has written into the statute books of rural society. Where there is no rural social organization there is a chaos or barbarism in the conditions of life outside the law. Two races, with a color line in the same territory, are a great barrier to socila improvement. There are two public opinions, two codes of honor, two standards of morality, and two schools of ethical training.

Segregation would be better. As stated, it is the province of the rural church and the school to organize country society and create this readjusting public opinion.

Women can teach practical agriculture as well as men, upon the following plan:

Organize boys' clubs for the production of corn and other standard crops, upon their fathers' farms. Limit the plot to an acre or half-acre. Establish rules for the government of the contest and the distribution of prizes, and get the instructions from the State Colleges of Agriculture or the Farmers' Cooperative Demonstration Work of the United States Department of Agriculture. The United States Demonstration Work has enrolled a good many thousand boys to whom it is giving instructions. Last year one boy in Mississippi made 127½ bu. of corn on an acre,

while the State average was only about 15 bushels per acre.

Upon the same general plan girls' clubs in domestic science could be organized and operated, taking instructions from the teacher of domestic science at the College of Agriculture in each state. If the spoon can deplete the resources of the farm more rapidly than the shovel can increase them, then the training of girls in home management is the most important branch of agriculture and besides, the girls are the home-makers.

The successful farmer must be an all-round, many-sided man and capable of adjusting himself at all times to new conditions. He should have some mechanical skill and knowledge. Just a knowledge of how to raise a crop and care for stock does not make a farmer. An important part of successful farming is the best equipment and improvements. 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.

Two branches not down in any text book and seldem taught but of great importance are the dignity of labor and the value of thrift, - labor so essential to physical and mental viger; and thrift, that which conserves the products of labor, can be most successfully taught in the country. More than half the people of our towns and cities, if all that could labor are included, are idlers, spenders of wealth instead of promoters, hunting for servants instead of seeking for toil. In cities the influences for spending are dominant.

The half grown boys and girls of the villages and lesser cities could make gardens and raise the fruits and poultry for 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 strengthen the family pocketbook and help the family character. In the country labor is honorable and thrift a necessity and hence a large per cent of the leaders of industry are country-bred boys.

The most valuable acquisition for the rural population is common sense. There is a large measure of things in the life upon the farm that can not be adjusted by law. They must be adjusted by common sense. Common sense is simply an intimate knowledge of common things and how to use them. It is required by home teaching and contact with others. The teacher can greatly enlarge the body of knowledge of common things by daily hints that lead out the youthful minds to full investigation.

## ENVIRONMENT EDUCATION

OR

## THE UNTAUGHT SCHOOL.

There are tremendous educational forces in our environments. In the great cities and in the manufacturing centers there has been for centuries and probably will continue to be, the unrest that arises from a conflict between aggregated capital and organized labor. These conditions will produce certain types of citizens. Prosperous and contented communities of small farmers distributed over the entire country will produce another type of men who, in habits of life and political belief, will be almost

exactly the opposite of the former and will act as counterpoise in adjustment of government. A prosperous, intelligent and contented rural population is therefore essential to our national perpetuity. The world's experience has shown that the best way to secure this is to encourage the division of all the lands into small farms, owned and operated by one family. There are two ways to look at the small farm; one is, and the common way, that it is a place to make a living, but rather a hard place, and should be sold as soon as anuthing easier is found. The other is that the ownership of land is a mark of honor; that a patent to land is a title to nobility, a right to sovereignty. The ownership must be absolute, subject only to the State, so that each proprietor is the independent sovereign of a portion of the United States, with a final authority through the ballot, to control the local, County, State and National governments; a position of great dignity and power.

Communities of small farmers tend to promote common honesty; a respect for the rights of others and for law. No one is rich enough to dominate his neighbors nor so poor that his influence may be disregarded. Their stock, prodicts and property are exposed to trespassors and depredators, hence a common interest unites them for mutual protection and the primary lessons of society are taught.

The education acquired on the small farm breadens citizenship, because it is a many-sided education and gives correct impressions of many phases of life. All over the world the small independent farmers are staunch supporters of conservative government. They are intense lovers of home and opposed to radical changes.

# AS A SOURCE OF WEALTH.

or trains the individual, then the amount acquired in even the best schools is only a fraction of what the average man must know to succeed in life. It is of the highest importance then to the state that this greater body of knowledge should be

correct, broad, conservative, and elevating. Liberal provision has been made by the state, by churches, and by individual gifts for schools, but the moulding of this greater body of knowledge to the best interests of society has been mainly left to the caprice of individual effort. The state can with propriety especially foster such conditions of society, such lines of industry, or such occupations as evidently tend to mental and physical vigor, to breadth of understanding and to the best citizenship and to the stability of the state. For these ends no more potend influence has been found than an intelligent, prosperous and contented body of thrifty small farmers. States and the National Government have aides by the gift of free lands for homes, and by the promotion of rural schools and free mail delivery.

What are the next steps to be taken? - The next step is the nonisolation of the rural districts. Telephones and good roads must become universal.

1st.- They should be of three classes- National roads connecting Washington with one great center in each state in union to be constructed by congressional appropriation.

(2nd):- State roads, connecting all the cities in a State, to be built and maintained jointly by State appropriations and assessment on the cities benefitted.

(3rd):- Purely rural highways, connecting the farms with national and state roads constructed by local taxation.

The national and state roads should be built first. With an organized rural public opinion this plan could be incorporated into law immediately and be an accomplished fact in a few years to the great advantage of all.

The forces necessary to created or redirected to work out our rural problems are the following:

(1st):- Some simple method like the Farmers' Cooperative Demonstration Work, by which the valuable knowledge necessary to the successful conduct of his business can be brought to the notice of the farmers in an authoritive and convincing way.

(2nd):- A readjustment of the rural schools to accomplish the purposes for which they were created.

(3rd):- A realignment of the rural church.

(4th):- The creation of a real rural public opinion upon a higher plane which shall dominate the country in the things which law can not control.

I have tried to show that there are ample forces in the field for the readjustment of rural conditions, if vitalized and brought into service. There is always a class eager to establish new agencies, to join battle with untested equipment, to attack strongholds with raw militia, and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this reallignment to include instruction in agriculture there is danger that we may eliminate branches of great value and necesary to the rounding out of the rural toiler in his obligations to human society. For after all, in molding men by the processes of education there is something more than just fitting them for a vocation. The aim should be to make a greater common man, and unless this can be done vocational training will be a failure because of the narrowing of his social lines, the dwarfing of his sense of obligation to the state, and a semi-paralysis of his moral nature. Neither a score of statesmen nor a brigade of scholars make a great nation. If our institutions are to be preserved it must be accomplished by making greatness common, -More thoroughness, sublime faithfulness, exalted character, greater breadth, perfect integrity, a larger view of human rights and God's requirements; millions of inspired doers who give to every creation of their handiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created; millions of scholars in their rural homes fostering knowledge and promoting art; millions of

statesmen toiling on the farms and in the factories, working out the details of a broader national life, and millions
of rural philanthropists making gains to better the world.

What can teachers do to help our rural conditions? Everything. They are an essential part of the greatest of all universities, the home. They have charge of the extension courses: they can inspire in youth a love of knowledge and make all its avenues look delightful; they can unlock the books which are treasure-houses of human wisdom, and give them a golden key; they 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; they can add to the comforts of the home, shape its environments into lines of beauty and increase its attractiveness, till the home shall become the greatest magnet of our people; they can create a love of investigation and give it direction; they can enlarge the knowledge of the people in common things and thus lay the foundation of common sense. At their instance, fingers will touch the lines of deftness, mechanical skill will become universal, and thrift and alertness will transform the toilers into captains of industry. Their mission is to make a great common people and thus readjust the map of the world, and the dawn of a greater life will appear; a nation of broader horizon and higher purpose will stand forth to battle for human rights.

# ACRICULTURAL EDUCATION FOR THE RURAL DISTRICTS.

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to successfully teach it. In a broader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these broader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

lst:- There is a 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:- There is 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, and it has especially lured the brainy youths of the farm with the visions of becoming captains of industry.

4th:- There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

otties 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 several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. There is also, where great numbers are aggregated, a mass leadership regardless of wealth. Generally this represents organized and predatory poverty. It matters not that the prosperity in cities, so far as it relates to the masses, is illusory; it attracts; it allures.

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.

Rural conditions in the Nation are not what they should be. Of course there are many exceptions, but it is true as a whole. Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

- (1) A much larger per cent of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit for the toiler than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and attractive.
- (4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The problem is how to effect these rural changes for the better. Education being so important, many have thought and still think, that the establishment of agricultural schools will accomplish the object. Forty years trial has shown that most of the youth, college trained, whether in schools of agriculture, science, or classics, leave the farm for reasons not difficult to understand. The education required is one that can reach the adult masses as well as the young, and will hold them to the farm. The error is in a failure to see

that the situation can not be overcome by a college education, however helpful it may be to the graduate as a citizen. The practical and sane way of accomplishing the result is to induce the farmers to try better methods and hote the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per acre and halve the cost. While the farmer successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

Well informed men who are successful farmers are generally agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his vocation, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that

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(4th):- The restoration to the country of such manufactures as are closely related to the farm.

An increase of the net gains obtained from the farm is given the first place in this uplift because every upward step in civilization costs something, and the betterment must commence at the point of securing a greater income.

The three great factors in rural civilization are the home, the common school and the church. 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 Harvard or Yale.

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Such schools could only provide training for a few, whereas the necessity for vocational education is universal and should be provided for all.

It should be emphasized that such a consolidated rural school is the whole thing, the complete education for the masses. It is the primary school, the High School, the college, the university, the agricultural college and the school of technology for the great majority of our rural population. Evidently the course of study should include thorough instruction in the fundamental branches of an English education followed by lessons in practical mechanics, agriculture, domestic arts and home making. All these branches should be taught by doing the things under investigation and simply using a book afterwards for explanation. A simple, sensible and practical kitchen, provided with all modern conveniences and utensils to do household work rapidly and economically, with practical lessons in economic providing and plain cooking for the girls, would be of inconceivably more advantage to the average girl than a smattering of French or German.

A carpenter's shop, properly equipped for a farm boy is better than a chemical laboratory. He better lern to handle skillfully the saw and the jack-plane than the retort and the Leyden jar.

Agriculture should be taught in a concrete way and with special application to the vicinity of the school. The soil, the plants, shrubs and trees of that section should be studied with special reference to their utilization. Then if the pupils could be taught a few definite things, for example, to make a summer and winter garden, to successfully manage a poultry yard and to skillfully handle the cow and her products, they would have more usable agriculture than the average graduate.

They would thus know some definite things of almost universal use, and they could supply a general want. Excellence in common things is out of date. Advertise for a typewriter or stenographer, a clerk, a doctor or a lawyer, and hint at a good salary, and there will be a hundred applications in a week. Apply for a competent housekeeper who can provide with judgment and economy for a household and prepare food with skill, or for an intelligent and skillful gardener, poultry raiser, or dairyman and if you find one to suit in six months you may count yourself fortunate. Skill in common things is becoming rare. We are taught the least about the things most essential to life and because some one in a bygone age installed a lot of gibberish into our schools and called it education, the masses must absorb it and be centent.

The foregoing remarks are made with reference to the children of toilers upon the farms and in the workshops, where education must be limited by the law of necessity to earn a support.

Let us return to our plan of creating a true rural public opinion and discuss the rural preacher. He should be connected up to his field of labor. How? Let him graduate at a school of agriculture and of medicine, as well as at a school of Divinity. Let him get away from his remoteness and preach about bettering farm life. Let his heroes be farm boys and his angels farm girls. When he pays a pastoral visit let him go into the field and make good suggestions about farming. If there is anyone sick, let him be prompt with his services. This is exactly what the missionaries do in foregin lands to attract and attach the people to their cause. It will work just as well here as there. Usefulness is valuable everywhere.

The preacher and the teacher should be the leaders in founding a true rural society,— genial, instructive, promoting harmony and good will and tending to unity of action. The tremendous power of social unity is mainly lost or is ineffective in the country for lack of organization. At present country public opinion is a medley of town or city gossip, picked up on the streets or in the stores or in various rumor exchanges, and carried home under the hat without assertment. Rural public opinion and rural sentiment must be reconstructed and revitalized and wield its power for the common good. Public opinion governs in the vast domain that law does not reach. It determines home conditions, the treatment of children, the respect given to age, the clothing we wear, the schooling we receive and the religion we accept. An enlightened rural public

opinion develops a rural pride, forces a readjustment of the home, establishes the rights of the family and the amenities of the social compact.

The model farm dwelling and its environment, the neater farm and better equipment, the touches of refinement about the schoolhouse and the churches, are determined by the laws which public opinion has written into the statute books of rural society. Where there is no rural social organization there is a chaos or barbarism in the conditions of life outside the law. Two races, with a color line in the same territory, are a great barrier to socila improvement. There are two public opinions, two codes of honor, two standards of morality, and two schools of ethical training.

Segregation would be better. As stated, it is the province of the rural church and the school to organize country society and create this readjusting public opinion.

Women can teach practical agriculture as well as men, upon the following plan:

Organize boys' clubs for the production of corn and other standard crops, upon their fathers' farms. Limit the plot to an acre or half-acre. Establish rules for the government of the contest and the distribution of prizes, and get the instructions from the State Colleges of Agriculture or the Farmers' Coeperative Demonstration Work of the United States Department of Agriculture. The United States Demonstration Work has enrolled a good many thousand boys to whom it is giving instructions. Last year one boy in Mississippi made 1272 bu. of corn on an acre,

while the State average was only about 15 bushels per acre.

Upon the same general plan girls' clubs in domestic science could be organized and operated, taking instructions from the teacher of domestic science at the College of Agriculture in each state. If the spoon can deplete the resources of the farm more rapidly than the shovel can increase them, then the training of girls in home management is the most important branch of agriculture and besides, the girls are the home-makers.

The successful farmer must be an all-round, many-sided man and capable of adjusting himself at all times to new conditions. He should have some mechanical skill and knowledge. Just a knowledge of how to raise a crop and care for stock does not make a farmer. An important part of successful farming is the best equipment and improvements. 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.

Two branches not down in any text book and seldom taught but of great importance are the dignity of labor and the value of thrift, - labor so essential to physical and mental vigor; and thrift, that which conserves the products of labor, can be most successfully taught in the country. More than half the people of our towns and cities, if all that could labor are included, are idlers, spenders of wealth instead of promoters, hunting for servants instead of seeking for toil. In cities the influences for spending are dominant.

The half grown boys and girls of the villages and lesser cities could make gardens and raise the fruits and poultry for 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 strengthen the family pocketbook and help the family character. In the country labor is honorable and thrift a necessity and hence a large per cent of the leaders of industry are country-bred boys.

common sense. There is a large measure of things in the life upon the farm that can not be adjusted by law. They must be adjusted by common sense. Common sense is simply an intimate knowledge of common things and how to use them. It is required by home teaching and contact with others. The teacher can greatly enlarge the body of knowledge of common things by daily hints that lead out the youthful minds to full investigation.

# ENVIRONMENT EDUCATION

OR

# THE UNTAUGHT SCHOOL.

There are tremendous educational forces in our environments. In the great cities and in the manufacturing centers there has been for centuries and probably will continue to be, the unrest that arises from a conflict between aggregated capital and organized labor. These conditions will produce certain types of citizens. Prosperous and contented communities of small farmers distributed over the entire country will produce another type of men who, in habits of life and political belief, will be almost

exactly the opposite of the former and will act as counterpoise in adjustment of government. A prosperous, intelligent and contented rural population is therefore essential to our national perpetuity. The world's experience has shown that the best way to secure this is to encourage the division of all the lands into small farms, owned and operated by one family. There are two ways to look at the small farm; one is, and the common way, that it is a place to make a living, but rather a hard place, and should be sold as soon as anuthing easier is found. The other is that the ownership of land is a mark of honor; that a patent to land is a title to nobility, a right to sovereignty. The ownership must be absolute, subject only to the State, so that each proprietor is the independent sovereign of a portion of the United States, with a final authority through the ballot, to control the local, County, State and National governments; a position of great dignity and power.

Communities of small farmers tend to promote common honesty; a respect for the rights of others and for law. No one is rich enough to dominate his neighbors nor so poor that his influence may be disregarded. Their stock, prodicts and property are exposed to trespassors and depredators, hence a common interest unites them for mutual protection and the primary lessons of society are taught

The education acquired on the small farm breadens citizenship, because it is a many-sided education and gives correct impressions of many phases of life. All over the world the small independent farmers are staunch supporters of conservative government. They are intense lovers of home and opposed to radical changes.

If all is considered education that leads out, develops or trains the individual, then the amount acquired in even the best schools is only a fraction of what the average man must know to succeed in life. It is of the highest importance then to the state that this greater body of knowledge should be

correct, broad, conservative, and elevating. Liberal provision has been made by the state, by churches, and by individual gifts for schools, but the moulding of this greater body of knowledge to the best interests of society has been mainly left to the caprice of individual effort. The state can with propriety especially foster such conditions of society, such lines of industry, or such occupations as evidently tend to mental and physical vigor, to breadth of understanding and to the best citizenship and to the stability of the state. For these ends no more potend influence has been found than an intelligent, prosperous and contented body of thrifty small farmers. States and the National Government have aides by the gift of free lands for homes, and by the promotion of rural schools and free mail delivery.

What are the next steps to be taken? - The next step is the nonisolation of the rural districts. Telephones and good roads must become universal.

1st. - They should be of three classes - National roads connecting Washington with one great center in each state in union to be constructed by congressional appropriation.

- (2nd):- State roads, connecting all the cities in a State, to be built and maintained jointly by State appropriations and assessment on the cities benefitted.
- (3rd):- Purely rural highways, connecting the farms with national and state roads constructed by local taxation.

The national and state roads should be built first. With an organized rural public opinion this plan could be incorporated into law immediately and be an accomplished fact in a few years to the great advantage of all.

The forces necessary to created or redirected to work out our rural problems are the following:

- (1st):- Some simple method like the Farmers' Cooperative Demostration Work, by which the valuable knowledge necessary to the successful conduct of his business can be brought to the notice of the farmers in an authoritive and convincing way.
- (2nd):- A readjustment of the rural schools to accomplish the purposes for which they were created.
  - (3rd):- A realignment of the rural church.
- (4th):- The creation of a real rural public opinion upon a higher plane which shall dominate the country in the things which law can not control.

I have tried to show that there are ample forces in the field for the readjustment of rural conditions, if vitalized and brought into service. There is always a class eager to establish new agencies, to join battle with untested equipment, to attack strongholds with raw militia, and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this reallignment to include instruction in agriculture there is danger that we may eliminate branches of great value and necesary to the rounding out of the rural toiler in his obligations to human society. For after all, in molding men by the processes of education there is something more than just fitting them for a vocation. The aim should be to make a greater common man, and unless this can be done vocational training will be a failure because of the narrowing of his social lines, the dwarfing of his sense of obligation to the state, and a semi-paralysis of his moral nature. Neither a score of statesmen nor a brigade of scholars make a great nation. If our institutions are to be preserved it must be accomplished by making greatness common, -More thoroughness, sublime faithfulness, exalted character, greater breadth, perfect integrity, a larger view of human rights and God's requirements; millions of inspired doers who give to every creation of their handiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created; millions of scholars in their rural homes fostering knowledge and promoting art; millions of

statesmen toiling on the farms and in the factories, working out the details of a broader national life, and millions
of rural philanthropists making gains to better the world.

What can teachers do to help our rural conditions? Everything. They are an essential part of the greatest of all universities, the home. They have charge of the extension courses: they can inspire in youth a love of knowledge and make all its avenues look delightful; they can unlock the books which are treasure-houses of human wisdom, and give them a golden key; they 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; they can add to the comforts of the home, shape its environments into lines of beauty and increase its attractiveness, till the home shall become the greatest magnet of our people; they can create a love of investigation and give it direction; they can enlarge the knowledge of the people in common things and thus lay the foundation of common sense. At their instance, fingers will touch the lines of deftness, mechanical skill will become universal, and thrift and alertness will transform the toilers into captains of industry. Their mission is to make a great common people and thus readjust the map of the world, and the dawn of a greater life will appear; a nation of broader horizon and higher purpose will stand forth to battle for human rights.

The great value of educating and training youth for agriculture is so universally conceded that it does not require discussion. The necessity of presenting and impressing better types of husbandry upon adult farmers through demonstrations under their care is rapidly being accepted by the American people as a most important means of education for the rural masses and necessary to any general and rapid advancement.

The opinion that the municipality, the state and the nation are responsible only for the mental training of youth mainly through books, has been too common. A broader conception of education includes instruction to adults in all useful knowledge applicable to their vocations. In agriculture the knowledge of the best animals, implements, seeds, methods of culture and farm management is a necessary part of the equipment of the farmer to do his best and the knowledge must be made so intensive by demonstration that it will result in If the rural masses can be influenced to accept achievment. and adopt the best methods of tilling the soil, the best plants and fruits of their kind, animals of the greatest merit, bred for the purposes intended, and a general farm policy and management that tends to the improvement of the soil, the most economic production, and the greatest thrift a proper material basis will be laid for all other reforms, and improvements leading to a broader national life. It is the intention in this statement to claim that this material improvement is a necessary factor in any permanent uplift

and that education of adults is essential to the great plan of human betterment.

### AGRICULTURAL EDUCATION FOR THE RURAL DISTRICTS.

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to successfully teach it. In a broader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these broader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

- lst.- There is a 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.
- 2d. There is 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.
- 3d. 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, and it mass especially lured the brainy youths of the farm with the visions of becoming captains of industry.
- 4th. There has been a 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 is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

oth. From the standpoint of the statesman, 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 several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. This we call mass compulsion. There is also, where great numbers are aggregated, 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, I allract, it sellers

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.

(Rural conditions in the Nation are not what they should be. Of course there are many exceptions, but it is true as a whole.) Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

- (1) A much larger per cent of the farmers and their families must be broadly educated and of high character.
- (2) The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit, than employment in the city.
- (3) The farm improvements must be durable, suited to the requirements of the farm, convenient and atteactive.
- (4) Churches, schools, means of communication, social conditions and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The problem is how to effect these rural changes for the better. Education being so important, many have thought and still think, that the establishment of agricultural schools will accomplish the object. Forty years trial has shown that most of the youth, college trained, whether in schools of agriculture, science, or classics, leave the farm for reasons not difficult to be understood. The education required is one that can reach the adult masses as well as the young, and will hold them to the farm. The error is in a failure to see

that the situation can not be overcome by a college education, however helpful it may be to the graduate as a citizen. The practical and sane way of accomplishing the result is to induce the farmers to try better methods and note the result, to improve their farms, to make tillage less expensive and production more certain, to double the crop per acre and halve the cost. While the farmer successfully solves the problems of the farm, his experience widens and he becomes a broader man, till he is broad enough to size up the whole situation and has the means to execute his plans. As men broaden they will have aspirations for their children, and better scholastic education will accompany the general uplift.

Well informed men who are successful farmers are generally agreed that a thorough knowledge of agriculture can be acquired in one way only, and this is by working out the problems of the farm upon the farm. There is a world of details, of business knowledge, skill and tact about farming that can be acquired only by contact with the soil and practical experience in farm life.

This education of the farmer upon his farm by working out the problems in the field and receiving the answer in the crib or granary, must be personal and local. Thus, the average farmer to be a success must be educated for his postpetion, and that education must be acquired in the country so that he will not be compelled to live in a city environment and have city habits and methods of thought forced upon him in that

susceptible period during which he acquires an education.

All reforms must be wrought out by some process of education. We have placed incorrect values and too narrow limits upon what we have labelled education. True education is the leading out of the mind to a knowledge of helpful things, and the most important and helpful to each individual are the things for which he will have the most use in life. [ For the average man, education better be full and accurate in limited useful lines than narrow and desultory in broad lines. ) What the average man should know are the things with which he has to deal in his life work. The stored brain, the alert eye and the skilled hand are his equipment. Mental discipline depends more on how knowledge is acquired than upon the kind of information received. The farmer needs a broader knowledge of home things. The education required for the rural districts is one that enables the farmer to be a master of husbandry, a good homemaker, and an intelligent and dependable citizen. The character of the home-maker and the citizenship are necessarily based on the success of the husbandry. It is difficult to establish and maintain a comfortable home upon an income totally insufficient and it is impossible to work out a high rural civilization and an exalted citizenship in the country without the art and the science of agriculture are brought to such a degree of perfection that they will wrest from the soil the means necessary to establish and support these higher planes of living. The order of sequence in the uplift of the country, from a material standpoint, is as follows:

1st. - Greater net gains must be wrested by the farmer from the soil.

2d. The increased gains must be applied, in part, to an improvement of the homes and their environments, to a readjustment of the rural schools and a re-allignment of the rural churches and The creation of the rural churches.

3d.- The improvement of the means of transportation and communication, the highways, the telephones, rural free delivery, etc.

4th. - The restoration to the country of such manufactures as are closely related to the farm.

An increase of the net gains obtained from the farm is given the first place in this uplift because every upward step in civilization costs something, and the betterment must commence at the point of securing a greater income.

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What primary remedy for the improvement of rural conditions should a republic propose where all the adult male citizens are expected to exercise, through the ballot, the functions of a ruler? Evidently it should be one that can directly and immediately berefit all the people. More than nine-tenths of the rural population are limited by their conditions to an education provided by the country district school. The primary remedy that can be successfully applied to help all the rural people, one that will be effective and immediate, is to increase the net earnings of farmers and farm laborers. If

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each farmer is shown how to produce twice as much to the acre as he now produces, and at less cost, it will be a profit in which all rural classes will share and will be the basis of the greatest reform ever known to rural life.

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How can the knowledge of better agricultural methods be conveyed to the masses in a way so effective that the methods will be accepted and their practice become common? This has been solved by the Farmers! Cooperative Demonstration Work which is an effective system for instructing farmers, and for the readjustment of rural conditions. Its purpose is:

- (1) To reform agriculture and make it an occupation of profit and pleasure.
  - (2) To improve rural conditions.
  - (3) To broaden and entich rural life.
- (4) To make the farm attractive and country residence desirable.

The farmer is necessarily conservative, but offer him a genuine thing and prove it and no one is more responsive. He will not accept what has not been fully tested, and he must see it to believe. Moreover, he must work out the problem on his own farm. Increase the net income of the average farmer and the wages of the tural toiler and the first step necessary to the uplift of the rural masses will have been taken.

Then the following results will be brought about as rapidly as time will permit:

- (1) The emancipation of the farmer from the bondage of debt.
- (2) The ownership of more and better tools, teams, and stock on the farm.
  - (3) The improvement of the land and the home.
- (4) Better rural school buildings and more months of schooling.
- (5) Better highways, rural mail delivery, and telephone service.

The Farmers' Cooperative Demonstration Work simply induces some farmer in every raral neighborhood to place an object lesson on his farm for the purpose of showing what better methods can do for the net income.

The first steps in all true education are by object lessons and not by books.

What other forces have we that can be helpful in improving country conditions?

The three great factors in rural civilization are the home, the common school and the church. 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