

CO-OPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, STATE OF VIRGINIA.  
Virginia Agricultural and Mechanical College and Polytechnic Institute, United States Department of Agriculture, County Fiscal  
Court, Danville Fair Association and Various Banks of the County Co-operating.

Published by W. M. PERRY, County Agent

# BOYS' CLUB LETTER

“HEAD, HEART, HANDS, HEALTH, HOME”

Vol. 2, No. 4.

Published Quarterly.

Jan. 1, 1917.



*S. A. Knapp*

“Careless of Monument by the Grave, He built it in the World—a Monument by which Man shall be  
taught to remember, not where he died, but where he lived.”—Rustin.



## FINANCIAL BACKING

This month we have printed through the co-operation of the First National Bank, Danville, a large edition of the "Boys' Club Letter." A number of copies will be sent to each school in the county for distribution. With each paper goes the best wishes of this banking institution.

## THE FRONT COVER THIS MONTH

Dear Boys:

On the front cover of our paper I have the likeness of one of the greatest men our country has ever produced. Some men have been heroes in war; some have been great statesmen; others immortalized by wonderful inventions, but this man has builded for himself a monument greater than them all. He is the one who gave birth to your Corn Club work. He saw the great need for improved methods of farming; he realized that the one crop system would spell ruin—so he preached diversified farming, along with good seed, good cultivation, good live stock. Not only did he preach better farming, but he got some farmers to agree to work part of their farms under his direction. The boys were given plots also. The plan took so well that it was not long before agents were employed in a number of Southern States to carry on the work under his direction. Now, all the South has its agents, and most of the Northern States have taken it up. You can see what you owe to Dr. Knapp. He was born in Essex County, New York, and found his first employment in a wood-working shop. From there he became a school teacher and finally entered his life-work of solving the rural life problems. Don't we see a similarity between his life and that of the "Carpenter's Son" of long ago? Both boys learned the dignity of labor—the one became the great spiritual leader, the other the great material benefactor. Today both live—the innumerable churches represent the one; The luxuriant fields of grass and grain represent the other. Dr. Knapp, is still speaking. Every one of your acres is his voice telling you of the importance of making the largest possible yields on a small area of land. He is speaking to us now through his son, Mr. Bradford Knapp, who is carrying the mantle so long borne by his beloved father. Now boys I want you to make the most of life. It matters not what your position is at present, should the thoughts of accomplishing something great arise, cherish those thoughts—they are precious. Perchance by and by there will arise even from the ranks of Pittsylvania Corn Club many boys like unto Dr. Seaman A. Knapp, who shall long be "remembered by the good you have done."

W. M. PERRY.

## THE PIG CLUB

Now that the Corn Club has proven a great success and you boys have learned the art of producing more corn and of a better quality, I feel that we can now launch the Pig Club. In this Club the idea is to raise high grade hogs in the most economical way; thus we will improve our stock and produce more meat for home consumption. Then you pig raisers will have a chance to earn some money and to learn the business-like methods of keeping records, breeding and registering. Girls as well as boys may belong to this Club. In a community where a regular Club is formed, I want each member to have a pig of the same breed. We will likely adopt the Duroc Jersey. All the pigs will be sows except one. The boy owning the boar will receive one pig from each litter as pay for the service.

The following brief rules I have formulated: To be a member of the Pig Club, each boy,

1. Shall have been a member of the Corn Club at least one year.
2. He shall have submitted a nicely made out report on his acre.
3. He shall be a member of the Corn Club the current year.
4. He shall exhibit his pig at the Danville Fair next Fall to be judged.
5. He shall keep a record of the cost of feeding the pig and note the gains made.

As in the Corn Club, I will assist you in every way possible with your pig work. It will be a pleasure to do so. The pigs will be secured early in the Spring and then we will have a lively time watching the pigs grow. I hope we will have a goodly number of Pig Club members to start off with this year.

## MONEY TO LOAN

Registered pigs, like everything else that is good, cost considerably more than a common article. In order that you may not be deterred from getting in the Pig Club for financial reasons, one of the Danville banks will loan you the money to buy your pig. You can get the money on your own note for six months at six per cent. interest. No endorsement is necessary if I approve the loan. It must be agreed, however, that the proceeds from the sale of the pig or its progeny shall not be claimed by your father. I consider the above proposition very liberal. The \$500 offered by the bank as loans for the purchase of pigs, shows the great interest our business men are taking in the Club work.

## NEW CLUBS

I have been so busy getting the reports tabulated, that I have done very little visiting to the schools. I find some of the schools, however, are not waiting for me, but are getting up good memberships, ready for my coming to organize. The following is from the Chestnut Level school:

Nov. 14, 1916.

Dear Mr. Perry:

We have organized a Corn Club in our school, and Miss Katherine Hardy is our teacher. She is willing to help in every way she can. We want you to come to see us.

Very respectfully,  
AUBRY CARTER.

Upon calling at the school I found a most enthusiastic lot of boys. The Club was organized with fourteen members. That these boys mean business is shown in the following letter:

Dec. 1, 1916.

Dear Mr. Perry:

We have decided to hold our meeting this coming Thursday, and want you to be sure to come, and if not write me at once, and also let me know when you can come. I wrote to Blacksburg for a copy of the Country Boys' Creed, and he said he sent them to you, and told me to write to you for one, so will you kindly send me a copy by mail.

Yours truly,  
T. L. THOMPSON, Secretary

Here is a letter from the Spring Garden School:

Spring Garden, Va., Dec. 8, 1916.

Mr. W. M. Perry:

I have the names of twelve of our boys in school who say they will join the Corn Club. You can come whenever it suits you to organize the Club.

Very truly,  
(Mrs.) ANNIE BLAIR.

I feel sure your best wishes will go out to these new Clubs.

## MY YEAR'S WORK

By a Canning Club Girl

Having been reared in the country, my interests have always centered in agricultural pursuits, and the last week in March, when Miss Agnew, the State Agent, visited our school and gave a lecture on canning, my interests were highly intensified.

Following Miss Agnew came the County Agent, Miss Pritchett, who organized a Canning Club of ten members, who did me the honor to elect me President.

Our Club was instructed to can tomatoes under the 4-H Brand for the first year, the government furnishing the seed

for planting. Ours was the Stone variety, which is late in fruiting.

My plot was the regulation size, 132 feet long and 33 feet wide—one-tenth acre. This soil was a sandy loam, well drained, with a clay subsoil. No diseased plants had previously grown on this spot. I followed government instructions as closely as possible in preparation of soil. It was plowed, harrowed and disked in the early Spring, and one and one-half tons of stable manure were applied broadcast, and about seventy-five pounds of commercial fertilizer was drilled into the furrows before setting the plants.

My hot bed was located on the South side of the garden, and well sheltered from the north and west. It was five feet nine inches wide and six feet long and was made in the following manner:

The excavation was 18 inches deep, and filled to the surface with manure, the latter being covered with four or five inches of garden loam. After the temperature had fallen to about eighty degrees, which required three or four days, I made little furrows for sowing the seed. My first bed was a complete failure—not a single seed germinating. On May the fourth, I re-sowed the seed and succeeded admirably with this bed. The plants were kept under canvas until they were two inches high, after which they were transplanted into boxes giving more growing space.

When the plants attained a height of seven or eight inches, they were transplanted to the plat. No insects infested these plants, and with plenty of rain they grew uninterrupted. Hoe work was used in first cultivation of the plants and later the soil was kept light and fresh by ploughing. I pruned and staked about one-fourth of my crop according to government directions. The plants were trimmed to one or two stems and tied to stakes. These stakes were about five feet long and driven in the ground, near the plant, about a foot and a half deep.

On July the eleventh I observed the first bloom, two weeks later the first fruit, and on August the seventh, the ripened fruit.

After discarding all imperfect tomatoes, eight hundred and six pounds were gathered, and these were used in a variety of ways; after canning one hundred and twenty-five cans of the 4-H Brand, I made two and one-half gallons of tomato pickle, three gallons of ketchup, and one gallon of sauce, and the home table was kept bountifully supplied all the while.

As I am more experienced in the work along this line, I hope to do better the coming year, and live up to the motto:

"To Make the Best Better."

RUTH HUNTER MYERS,  
Whitmell, Va.

Danville, Va., Nov. 30, 1916.

Dear Mr. Perry:

I am sorry that my corn was so bad that I couldn't make my report. My land got wet before I could get it planted, and didn't get in order for me to plant it, so it didn't get grown and papa fed it to the hogs. I plowed my land twice before I planted it, then I plowed it three times before I laid it by. I used one 50c load of barnyard manure and when I laid it by papa gave me one sack of Zells fertilizer and helped me to mix it with chicken manure and ashes and put it around it, and it made rapid growth. It did the best it could for the time it was planted. I planted it June 23rd, so you know it did not have time to mature. I saved all my feed off of it, so I have enough shucks, tops and fodder to winter our goat and right much over. Thanking you for the interest you have taken in me, I am,

Your little friend,  
T. C.

Whitmell, Va., Nov. 29, 1916.

Dear Mr. Perry:

I will get mamma to write you a note for me this A. M., as I have not time to do so before starting to school. I am sorry I have not been able to get my report to you yet. It is just because I have not had time to finish shucking and measuring up my corn. I'll spend my Thanksgiving holiday trying to finish and mail you my report at earliest possible date.

Thanking you for waiting so patiently on us, and with best wishes for you and our Club,

Your little friend,  
W. T.

Danville, Va., Dec. 5, 1916.

Dear Mr. Perry:

Your letter received. I am sorry to tell you that my crop was such a failure that I did not consider it worth while to display it, but of course I did not take advantage of the free ticket to the Fair. However, all the boys are taking great interest in the corn Club for another year, and I mean to make an extra effort to have some corn next year.

My mother is teaching the school this year and says she will be glad to co-operate with you in any way she can.

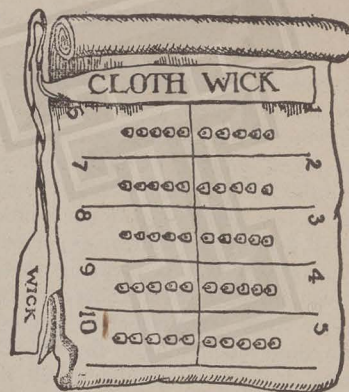
Yours truly,  
B. W.

## RAG DOLL CORN TESTER

A Simple But Accurate Seed Corn Tester For Schools and Business Farmers.

### How to Make a Rag Doll.

Take a strip of muslin about 10 inches wide and 22 inches long for ten ears, and about 36 inches long for 20 ears. Mark on it as many 2-inch and 3-inch divisions



as there are ears of corn to be handled with the tester. Number the divisions 1, 2, 3, 4, etc. Make a wick about 1 inch wide and a foot long of any old cotton cloth.



### How to Use It.

Number the ears to correspond to the divisions, dampen the cloth and place five kernels from ear 1 in space 1, etc.

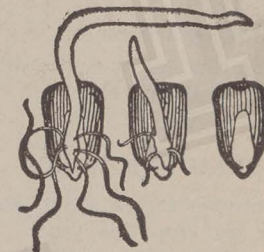
When all the spaces have been filled, carefully roll up the rag-doll, starting from the left hand end, making sure that the seeds are not mixed by careless rolling. Then when the last row has been rolled in, place the wick in the rag doll, letting about 8 inches of it hang out, and finish rolling to the end.

It should then be dipped in water, rolled in a wet towel, and the wicks placed in a glass of water.

Several rag-dolls, testing 50 to 100 ears may thus be placed in the same towel.

### Don't Let it Dry Out or Freeze

Feel of the towel every day and if it is not moist, souse it in a bucket of water and correct the condition that caused it to dry.



### Strong, Weak, Dead.

In about six days the test is ready to count, and all ears showing weak, dead or mouldy kernels should be thrown into the feed box.—County Agent.



## INTEREST IN CLUB MEETINGS

The Club Meetings seem to be increasing in interest this year. The report blanks which I am furnishing are a great help to me in keeping in touch with your gatherings. I will send the Secretaries blanks at the beginning of each month, so that the meetings can be reported on as soon as held. It is pleasing to note how much interest the teachers are taking in our work. They seem to be glad to give an hour each month for the Club meetings. I hope the Clubs which have not done so, will start holding meetings as soon as possible. Use the programs found in our paper, or if you would like to make up a program of your own it will be all right. After you read your papers take care of them, so you will preserve the program.

### ORDER OF EXERCISES

1. President calls meeting to order.
2. Secretary calls roll. Receives applications for membership.
3. "The Country Boy's Creed" to be read in concert.
4. Sing the Corn Club Song.
5. Secretary reads minutes of last meeting; also any communications.
6. Reports of Committees; old business disposed of.
7. Consider any new business.
8. Special program for the month can now be taken up.
9. Announcements for next meeting.
10. Adjournment.

### PROGRAM FOR JANUARY

1. Significance of the "Country Boy's Creed." This should be a paper written by a member.
2. Advantages of country life. Several members to take part.
3. Disadvantages of a country boy going to the city.

### PROGRAM FOR FEBRUARY

1. "Why a Boy Should Join the Pig Club." By any members interested in pig raising.
2. Recitation, by a member.
3. "My Observations as to the value of the Club Work." By a teacher.

### PROGRAM FOR MARCH

1. Each member to tell about the acre selected for his crop this year.
2. Let several members read short articles from his favorite farm paper. Discussions on the above.
3. "Some Ways in Which I have been helped by my Boy being in the Corn Club" by a parent.

## RESULTS OF YEAR'S WORK

The season has closed and winter is now upon us. Ere now you have doubtless received your books and diplomas. I hope you all will accept these presents from one who ever has an interest in your welfare.

As to the largest yield in the County this year, it was made by Claud Adkins, of Museville. The yield was 102 and nine fifty-sixths bushels. This was three bushels less than the largest yield of last year. The average for the whole Club, however is larger than last year. Last year

it was 38 1-2 bushels; this year it is 43 3-8 bushels.

The best ears, as judged at the Danville Fair, were produced by Landen Fuller, of the Sandy River Club.

The total number of reports received were 166, sixteen more than last year.

Callands, Va., Nov. 10, 1916.

Dear Mr. Perry:

The pipe that carries the spring branch, as you may remember, is choked, and my carn is flooded and I don't know when I can get it up. I will send in my report just as soon as I can.

Your friend, J. C.

## THE CORN CLUB SONG

(By W. M. Perry)

Tune, "Labor On," Gospel Hymn Book, No. 328.

Oh, the balmy days of the Spring's bright flow'rs  
Hear the Club Boys' Song by the dale's green bow'rs,  
For the seed is sown with unfalt'ring hand  
In the bed of the fertile land.

### CHORUS:

Working on, working on: in the Club we take our stand,  
And we'll work with a will through the sunny hours,  
Working on with a faithful hand.

Soon the Summer comes with its days so long,  
And the fields are gay with the Bob-White's song,  
While the corn is plowed ere the shade of night  
Gives a rest till the morning light.

Now the golden leaves of the Autumn cheer,  
Tells of harvest-tide and of Winter near,  
For we garner now all the ears so fine  
In the crib for the Winter time.

In the field of life we are sowers all,  
And our thoughts the seed, and our deeds recall—  
"What we sow we'll reap," says the Truth and Way;  
Hence we heed what He says today.

## THE COUNTRY BOY'S CREED

Dedicated to the Boys' Corn Clubs of Virginia by Edwin Osgood Grover.

I believe that the Country which God made is more beautiful than the City which man made; that life out of doors and in touch with the earth is the natural life of man. I believe that work is work wherever we find it, but that work with nature is more inspiring than work with the most intricate machinery. I believe that the dignity of labor depends not on what you do, but on how you do it; that opportunity comes to a boy on the farm as often as to a boy in the city; that life is larger and freer and happier on the farm than in town, that my success depends not upon my location, but upon myself—not upon my dreams, but upon what I actually do; not upon luck, but upon pluck. I believe in working when you work and in playing when you play, and in giving and demanding a square deal in every act of life.



Aug 1911

## THE MISSISSIPPI CLUB BOY

An Official Bulletin for the dissemination of information to members of the various Boys' Agricultural Clubs, their parents, teachers, bankers, newspapers, and others interested in the agricultural development of Mississippi.

Published Monthly by the Department of Boys' Club Work, Mississippi Agricultural and Mechanical College, in cooperation with the United States Department of Agriculture.

P. H. SANDERS, - - - Editor

W. H. SMITH,	- - -	President
E. R. LLOYD,	- - -	Director
C. A. COBB,	- - -	In Charge Boys' Club Work
P. H. SANDERS,	- - -	Educational Affiliation
J. E. SIDES,	- - -	Corn Clubs
P. E. SPINKS,	- - -	Live Stock Clubs

## OUR MISSION.

## Greetings:

With this issue The Mississippi Club Boy makes its initial appearance.

It is a boy's paper, published by the Club Workers of Mississippi, for the advancement of the farmer boys of our State. We are anxious for each Club member to feel a personal interest in it—to know that it is his paper, published for his benefit. Our family of Club boys has reached such dimensions that we feel it is impossible to carry on the work by methods followed in the past, hence the Club Boy. Through it we hope to provide a source of additional interest, of thorough instruction; and an indication of the dignity of our work. The Club Boy will visit you monthly, filled to the brim with articles bearing on pertinent topics, and it is our hope and belief that it will be a great force in the development of the work in which we are engaged.

No one factor of itself alone can accomplish the greatest results. A disjointed, single handed effort must result in discouragement in any undertaking. That our efforts may be coordi-

throughout the world, Founder of Demonstration Work, Organizer of Boys' and Girls' Club Work—surely that is a record of service.

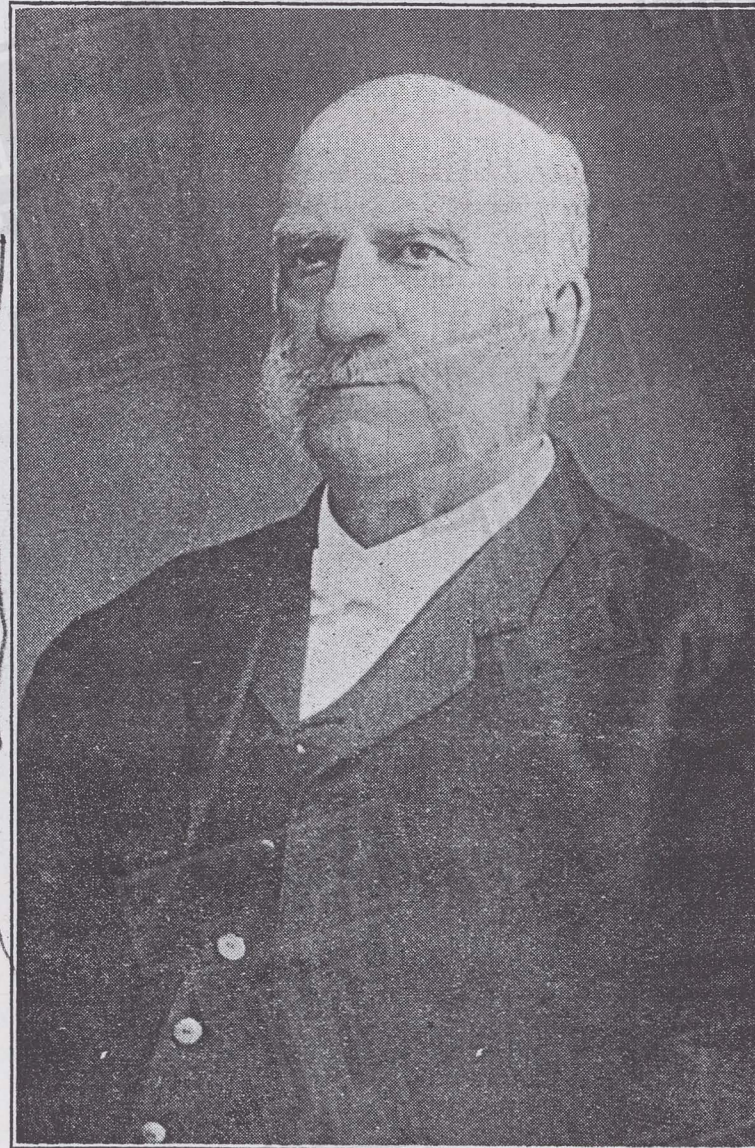
The history of this man is of special interest and importance to Southern people. Dr. Knapp loved the South, where he lived and worked a quarter of a century. It was his chosen home in his mature age. He admired the Southern people for their chivalry, courtesy, and the high sense of honor that prevails among them. "Here is a people," he said, "of pure Anglo-Saxon stock; energetic but conservative. These people should be the conservators of the best American traditions." His implicit faith in the agricultural possibilities of the South is summed up in these words: "Here is a productive soil, delightful climate and long growing season. The germinating power of the South is five times as great as that of any other part of the country."

He witnessed the darkest days of Southern Agriculture, when cotton, the sole money crop, sold often below the cost of production; when science had brought no light or color into the drudgery of farm work, and the menace of the mortgage on the little home stalked like a horrid spectre through the thoughts and dreams of millions of Southern farmers. He saw even the one crop which had given support to our people, crumble beneath the ravages of the boll weevil. But a prophetic vision through the darkness enabled him to exclaim:

"I am thinking of the people, of the rose covered cottages in the country, of the strong glad father and his contented wife, of the whistling boy and the dancing girl, of the orchards and the vineyards, of the flocks and the herds, of the waving woodlands, of the hills carpeted with luxuriant verdure, and valleys inviting to the golden harvest."

To develop this beautiful picture into a reality he saw that a revolution in our system of farming was needed; a revolution which he termed to embrace principally a "greater earning capacity for the people." It was then that he undertook to demonstrate that the South is not dependent upon any one crop, but that through the use of diverse crops, better implements and more live stock, it could be developed into the garden spot of the world.

The peculiar value of Dr. Knapp's service to the South is based upon its



THE SERVICES OF A GREAT MAN AND THE APPRECIATION OF A GREAT PEOPLE. A BRIEF SKETCH OF THE LIFE AND WORK OF DR. SEAMAN A. KNAPP.

DR. SEAMAN A. KNAPP was born December 16, 1833, in Essex County, New York, and died in Washington, D. C., April 1, 1911.

Spent his boyhood on his father's farm.

Entered Troy Conference Seminary as a youth.

Graduated from Union College, Schenectady, New York, with distinguished honors, at the age of twenty-three.

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No one factor of itself alone can accomplish the greatest results. A disjointed, single handed effort must result in discouragement in any undertaking. That our efforts may be coordinated, therefore, we have broadened the scope of the Club Boy to include bankers, school teachers, editors, and other persons interested in the agricultural development of Mississippi.

To the bankers and school teachers, we hope this publication will be a source of information as to the work that is going on in Mississippi and other States, and the things which are being and should be attempted; and at the same time, acquaint them monthly with the steps which each boy should follow.

To the newspapers, we hope, in addition to furnish for publication authentic news relative to the work over the State.

It is our hope that THE MISSISSIPPI CLUB BOY may be the connecting link between the boy and the various organizations and persons which are so deeply interested in him, and through this connection, so organize and so systematize our forces and plans that the work in Mississippi will make progress unknown in the past and only hoped for in the future.

## AN APPRECIATION

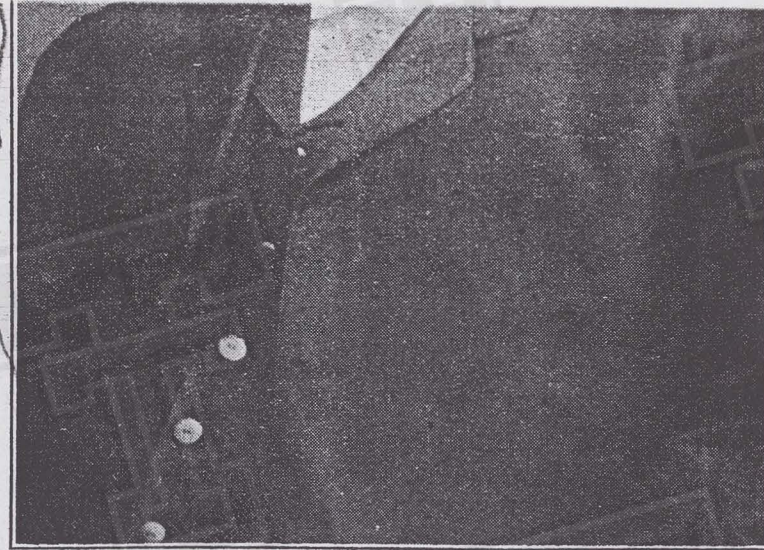
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The peculiar value of Dr. Knapp's service to the South is based upon its intense practicability. Other men have worked out fundamental and technical principles of agriculture but these principles did not reach the ear of the farmer to the extent of inducing him to change his system. For forty years the leading thinkers of this country had been crying in the wilderness of ineffectuality. Dr. Knapp undertook to demonstrate rather than to tell; and from the inauspicious beginning made when he personally held demonstrations on a small Texas farm, we have today a great Co-operative Demonstration work, extending its forces through practically every State in the Union; making farming more profitable and farm life more enjoyable; carrying the messages of light and guidance to fourteen hundred county agents, and they, in turn, to tens of thousands of demonstrators and club members.

And the desired results are being attained. From an all-cotton section we are rapidly developing into a diversified section. Well fed hogs and contented cattle are beginning to fill our pastures, while our fertile valleys are being seeded to corn, oats, cotton, wheat and lespedeza. The big red barn is taking the place of the cotton crib, and our homes are being painted and made comfortable by modern conveniences. Other men before Dr. Knapp organized corn clubs, and during his direction of the work other men originated other forms of club activities; but it was the



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Married Maria E. Hotchkiss in August of the same year.

Soon became Professor and Associate President of Troy Conference Seminary, and later President of Ripley College in Vermont.

Moved to Vinton, Iowa, at thirty-two, and settled on a farm.

Served five years as President of Iowa School for Blind.

Organized and edited the Western Stock Journal and Farmer.

In 1879 elected Professor of Agriculture of the Iowa State College.

Became President of this College in 1894.

At the age of fifty-three Dr. Knapp resigned the Presidency of the College and moved to Lake Charles, La.

Conducted demonstrations in rice growing and diversified farming for benefit of native farmers and immigrants.

In 1898 was authorized by Secretary Wilson of the U. S. Department of Agriculture, to visit China, Japan and the Philippines to make rice investigations.

Made second trip to the Orient and to Europe in 1901, and later to Porto Rico.

In 1903 inaugurated Demonstration Work to fight the Mexican cotton boll weevil.

From 1903 to 1911 extended Demonstration Work throughout the South.

The crowning achievement during the life of Dr. Knapp was the organization of the Farmers' Cooperative Demonstration Work, called by Dr. Walter H. Page "the greatest single piece of constructive educational work in this or any age." During 1903, Dr. Knapp visited a small farm near Terrell, Texas, about twice a month directing the operations there. Neighboring farmers met him in the field meetings. At the close of the year, he had proved that cotton could be grown in the face of the boll weevil, and that through a diversified system of farming she could make herself financially independent, and was urged to extend his teachings and his methods throughout the whole country devastated by the pest. The next year, with funds furnished by Congress and by local business men, he appointed a few agents and began to organize different counties in Texas. The work soon attracted the attention of the country. Congress enlarged its appropriations, local aid was increased and the work was extended to Louisiana and Mississippi. About this time, the General Educational Board of New York asked to be allowed to appropriate money for similar work in other cotton states. In a few short years, this great work had covered the entire South, had a force of fourteen hundred agents, and an enrollment of 300,000



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If service to mankind is a standard by which to judge human worth, surely Dr. Knapp was one of the real big men produced by American people. The story of his life is a story of service to others. Distinguished graduate, twice Professor of Agriculture, Agricultural Editor, twice President of Colleges, President of a School for Blind, Preacher, Student of Agricultural Conditions

with luxuriant verdure, and valleys inviting to the golden harvest."

To develop this beautiful picture into a reality he saw that a revolution in our system of farming was needed; a revolution which he termed to embrace principally a "greater earning capacity for the people." It was then that he undertook to demonstrate that the South is not dependent upon any one crop, but that through the use of diverse crops, better implements and more live stock, it could be developed into the garden spot of the world.

The peculiar value of Dr. Knapp's service to the South is based upon its intense practicability. Other men have worked out fundamental and technical principles of agriculture but these principles did not reach the ear of the farmer to the extent of inducing him to change his system. For forty years the leading thinkers of this country had been crying in the wilderness of ineffectuality. Dr. Knapp undertook to demonstrate rather than to tell; and from the inauspicious beginning made when he personally held demonstrations on a small Texas farm, we have today a great Co-operative Demonstration work, extending its forces through practically every State in the Union; making farming more profitable and farm life more enjoyable; carrying the messages of light and guidance to fourteen hundred county agents, and they, in turn, to tens of thousands of demonstrators and club members.

And the desired results are being attained. From an all-cotton section we are rapidly developing into a diversified section. Well fed hogs and contented cattle are beginning to fill our pastures, while our fertile valleys are being seeded to corn, oats, cotton, wheat and lespedeza. The big red barn is taking the place of the cotton crib, and our homes are being painted and made comfortable by modern conveniences. Other men before Dr. Knapp organized corn clubs, and during his direction of the work other men originated other forms of club activities; but it was the master mind of Dr. Knapp which linked the work in its present form with the Government, and gave it its present usefulness. From the scattered efforts of many he organized a systematic effort which has made possible the wonderful results that have been obtained.

In appreciation of these things we humbly dedicate The Mississippi Club Boy to the South's Greatest Benefactor, Dr. SEAMAN A. KNAPP.

### THE SERVICES OF A GREAT MAN AND THE APPRECIATION OF A GREAT PEOPLE. A BRIEF SKETCH OF THE LIFE AND WORK OF DR. SEAMAN A. KNAPP.

DR. SEAMAN A. KNAPP was born December 16, 1833, in Essex County, New York, and died in Washington, D. C., April 1, 1911.

Spent his boyhood on his father's farm.

Entered Troy Conference Seminary as a youth.

Graduated from Union College, Schenectady, New York, with distinguished honors, at the age of twenty-three.

Married Maria E. Hotchkiss in August of the same year.

Soon became Professor and Associate President of Troy Conference Seminary, and later President of Ripley College in Vermont.

Moved to Vinton, Iowa, at thirty-two, and settled on a farm.

Served five years as President of Iowa School for Blind.

Organized and edited the Western Stock Journal and Farmer.

In 1879 elected Professor of Agriculture of the Iowa State College.

Became President of this College in 1894.

At the age of fifty-three Dr. Knapp resigned the Presidency of the College and moved to Lake Charles, La.

Conducted demonstrations in rice growing and diversified farming for benefit of native farmers and immigrants.

In 1898 was authorized by Secretary Wilson of the U. S. Department of Agriculture, to visit China, Japan and the Philippines to make rice investigations.

Made second trip to the Orient and to Europe in 1901, and later to Porto Rico.

In 1903 inaugurated Demonstration Work to fight the Mexican cotton boll weevil.

From 1903 to 1911 extended Demonstration Work throughout the South.

The crowning achievement during the life of Dr. Knapp was the organization of the Farmers' Cooperative Demonstration Work, called by Dr. Walter H. Page "the greatest single piece of constructive educational work in this or any age." During 1903, Dr. Knapp visited a small farm near Terrell, Texas, about twice a month directing the operations there. Neighboring farmers met him in the field meetings. At the close of the year, he had proved that cotton could be grown in the face of the boll weevil, and that through a diversified system of farming she could make herself financially independent, and was urged to extend his teachings and his methods throughout the whole country devastated by the pest. The next year, with funds furnished by Congress and by local business men, he appointed a few agents and began to organize different counties in Texas. The work soon attracted the attention of the country. Congress enlarged its appropriations, local aid was increased and the work was extended to Louisiana and Mississippi. About this time, the General Educational Board of New York asked to be allowed to appropriate money for similar work in other cotton states. In a few short years, this great work had covered the entire South, had a force of fourteen hundred agents, and an enrollment of 300,000 Club members. Every state in the South began to show an increase in the average corn production per acre, as well as other crops, and Southern Corn Club Boys attracted the attention of the world by producing more than two hundred bushels of corn to the acre, at low cost. Girls, too, demonstrated practical, scientific work in garden and home. During the year of his death, Russia, Brazil, England, South Africa, and Argentina sent representatives to this country to study the demonstration work. Sir Horace Plunkett, the great Irish reformer, came for the same purpose, and at the request of the King of Siam, Dr. Knapp sent one of his agents to take charge of the agricultural matters in that country.



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

OFFICE OF FARMERS' COOPERATIVE  
DEMONSTRATION WORK.

KNAPP'S WORK GOES ON.

Son Who Succeeds Him Sends Circular Bulletin to All Agents.

The work of Dr. S. A. Knapp, the founder and leader of farmers' co-operative demonstration methods in the United States department of agriculture, will be carried on without interruption by his son, Bradford Knapp. Every man will perform the same duties as before, make the same reports and be guided by the same rules and regulations. These statements are in accord with a bulletin to all agents recently issued from the department.

The bulletin, which is in the form of a letter to the agents, calls attention to the work that was accomplished by Dr. Knapp, speaks of the confidence he reposed in each of his agents, and assures them they are still to be fully trusted to carry on the work of impressing the people with sound principles of better methods of farming.

The communication also earnestly asks the personal interest of each agent for support to the new head of the department in the execution of the work.

IN YOUR REPLY  
REFER TO

ago and thus far this year same place.

BRADFORD KNAPP IS NAMED TO  
SUCCEED TO HIS FATHER'S PLACE

By Associated Press.

Washington, April 11.—Bradford Knapp was yesterday appointed to succeed his father the late Dr. S. A. Knapp, in charge of the farmers' co-operative demonstration work in the bureau of plant industry, department of agriculture. The appointment was made by Secretary Wilson and is effective at once. Mr. Knapp, who returned Saturday from his father's funeral in Iowa, has already assumed his duties. Secretary Wilson said that Mr. Knapp would have the assistance of five or six agents, who would be brought from the field to consult with the new chief. The farmers' co-operative demonstration work, which is conducted in the Southern states, will continue as nearly as possible the

same as under the management of the late Dr. Knapp.

Mr. Knapp was assistant to his father for the last year and a half and is regarded as better able than anyone else to discharge the duties of the office. There are more than 500 agents doing the work in the South and Mr. Knapp is closely in touch with them all. Mr. Wilson said that it was not easy to fill the late Dr. Knapp's place. "Dr. Knapp was 70 years old when he took up this work in the agricultural department," said Secretary Wilson. "It took 70 years to acquire his knowledge and ability. It is very hard to find a man in whom are combined science and practical experience of farming. But we have such men and the work will be carried on."

SUPREME COURT REFUSES WRIT



*Progressive Farmer - May 11, 1918*

## Prof. Massey's Editorial Page

Notes and Comments. *May 13, 1918*



PROF. MASSEY.

YOU ARE one of the agricultural writers with whom I always agree, and I would like you to come to Washington to help me," said Dr. Knapp as we sat and chatted at a hotel in Charlottesville, Va., where we both had been speaking at the Virginia State Institute. I assured the Doctor that nothing would suit me better than to work with him, but that I was already as busy a man as could be, and that I thought we both could do our work best in our own sphere. But Dr. Knapp had the faculty of inspiring all associated with him with the spirit he possessed, and he had inspired all the young men in his corps with his ideas, so that it has always been a pleasure to meet them anywhere in the South. As an organizer and administrator, it will be hard to find a successor to Dr. Knapp; but the great work he organized in the South is certain to keep growing.

### Legumes Among Corn.

Dr. Butler says that legumes among corn will not seriously lessen the corn yield. I believe that they will increase it; in fact, such has not only been my experience, but the Kansas Station reports that in the experiments made there, the plot of corn with cowpeas among it made more corn than the plot without them. The corn evidently gets some of the nitrogen fixed by the pea bacteria. Last summer I planted peanuts between corn rows that were but four feet apart. The corn was for roasting-ears, and was taken out as soon as the ears were consumed and the peanuts made a heavy crop. After the corn was taken out I sowed rows of curled kale between the peanuts, and when the peanuts were gathered the kale was worked out clean and went into winter in good shape, and we have just finished eating it, and now between the kale rows the green peas are thriving finely. A good coat of manure and phosphatic fertilizer has been added this spring, and I will set late tomato plants between the pea rows, and will follow the tomatoes with fall-planted onion sets for early spring use. The peanut vines helped the soil some and the peavines are turned under, and in this way I keep in all parts of my garden a constant succession of crops, and avoid having the same crop come in too often on the land.

### Running Eight Plows.

Mr. Nipper, of Georgia, who started farming on shares, has certainly done well, but he says that he is "running eight plows." Now, if he means he is using eight two-horse plows for breaking his land, all right. But if he means that he runs eight plows in the cultivation of the crop and, each plow needs a man, he is still taking an expensive way to grow cotton. Better keep the plow of any sort out of the field after the crop is planted, and go over rapidly with weeders, and then with two-horse riding cultivators. Four men with these implements will do far more work than eight with plows, and do it better. Northern farmers pay larger wages to their hands not only because they get a better class of labor, but because one man accomplishes more than twice as much as one man in the cotton country. They use more horse-power to the man. Mr. Nipper is right in advising farmers to exchange their cottonseed for meal and feed it with good roughage, something better than cottonseed hulls, which are good bedding, but poor feed. A plow is a good thing for breaking the soil, but the poorest sort of a tool for cultivating the crop.

### Time for Sowing Parsnips and Salsify.

Mr. Niven says April. In North Carolina I found that the best time was July, and I once knew a neighbor to sow salsify in August and make a good crop. Here in southeast Maryland I sow these the latter part of June. Sowed in the spring, parsnips get over-grown and woody, while mine are tender all the way through. These hardy vegetables will grow till Christmas, or later, in the South, and salsify, in North Carolina, I found would run to seed if sowed in the spring. At same time that I sow my parsnips and salsify I sow some of the Half-Long Denver carrots, and these, too, get sweeter after freezing weather and keep perfectly in the rows where they grew.

*May 13 -*  
I pulled the last of my carrots April 18. Parsnips and salsify were lifted earlier, for they began to grow and would soon spoil if left in the ground. Grow these with fertilizer only, for manure will make them forked. In my sandy soil the parsnips and salsify run down and make very long roots. I dug parsnips over two feet long the past winter.

### When Does It Pay to Replant?

If the crop is corn, I would say that the only time replanting pays is when the crop is so badly damaged that the whole field had better be replanted. Replanting scattered hills to make the stand complete never pays for the labor, for these scattered hills come in after the shower of pollen is over and fail to set good ears. I quit replanting corn forty years ago. I aim to use plenty of good seed, and had rather thin out than replant. With a self-fertilizing plant like cotton, there is a great difference, and replanting will often pay.

### The Weeder or the Harrow?

There is one farmer in Maryland who makes good crops of corn and cultivates the crop entire-



ly with the weeder. He uses the ordinary weed-  
ers and then has sets of weeder teeth put on a  
two-horse cultivator frame that straddles the  
rows. Then, the Keystone weeder can be shut up  
like a cultivator and the one-horse man can run  
it between the rows.



Okla. Ext. News -  
& Boy's & Girls Club Letter

Vol. 1 Nov., 1919  
- No 4

Dr. S. A. Knapp -

"If by any process of training, it matters not how costly, we could implant in the American youth a universal love of industry and a universal knowledge of agricultural and mechanical arts, they would blend with our native genius, skill and ability to do masterful things, and Americans would become the industrial arbiters of the world."

Dr. S. A. Knapp.



*The Extension Division of Okla.*  
*April 1, 1919.*

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\*\* KNAPP'S EPIGRAMS \*\*  
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County agents and home demonstration agents should never forget Dr. S. A. Knapp, the father of the demonstration plan of carrying on agricultural extension work in the United States. The following quotations are from an address by Dr. Knapp before the Southern Education Association, Chattanooga, Tennessee, December, 1910:

"This learning agriculture, which is a compound of the following ingredients— one-eighth science, three-eighths art, and one-half business methods, out of a book— is like reading up on the handsaw and jack-plane and hiring out for a carpenter."

"A town farm, and especially a farm owned by the public, can never be economic. It might be healthful because the public would laugh at it."

"An idle saint only differs from an idle sinner in a coat of paint and direction."

"There are two ways to look at a small farm: One view—the common one—is 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 of nobility, a right to sovereignty."

"This education of the farmer upon his farm by working out problems in the field and receiving the answer in the crib or granary is, like all education, a personal matter, and each man must acquire it for himself. This points to the small farm, personally worked, as the best for the man, for the land, for society, and for the State."



UNITED STATES DEPARTMENT  
OF AGRICULTURE

Bureau of Plant Industry—Farmers'  
Co-operative Demonstration  
Work

A personal letter to Southern Planters about cowpeas.

Do not fail to remember the importance of planting every available cultivated acre to cowpeas. They are valuable for the following reasons:

1 The yare a fairly good human food.

2 They are one of the most nutritious foods for stock.

3 They shade the soil during the hottest part of the summer, thus aiding in the formation of valuable nitrates.

4 If turned under, the vines add considerable fertility to the land.

5 The presence of decaying roots, stubble and vines in the soil helps to convert mineral substances into plant food.

6 If picked, the peas alone are worth from eight to twelve dollars per acre.

7 The vines that grow on an acre planted between the corn are worth from six to ten dollars for stock food.

8 Through their roots peas put into the soil from four to six dollars worth of nitrogen per acre. Most of our unprofitable soils are lacking in this substance.

9 The vines, roots and stubble help to make the soil loose and easily cultivated.

10 They also absorb and retain moisture that will aid the next crop to go easily through a drought.

11 The roots of pea vines are good subsoilers. They go to considerable depth and open up the earth so that air and water can make a deeper soil.

12 Peas get their nitrogen from the air, free of cost to the farmer, so that very little nitrogen is needed in their fertilizers except for very poor soils.

13 Peas feed strongly upon the supply of potash and phosphoric acid, therefore, these substances should be supplied to them. Many crops fail for lack of acid and potash.

14 The price of peas is high, but this does not keep the wise farmer from planting them. He is thinking of the ten dollars in value he is to receive later for every dollar invested in them now.

15 Let no farmer neglect to plant abundantly of this important crop. Plant some for hay; plant some on

hogs and other farm stock; and by some for grazing by horses, cows, or land for turning under; plant all means plant and cultivate a few acres from which to obtain seed peas for next year's planting. Then you will rejoice if the price is high.

16 Plenty of cowpeas on the farm makes loose fertile lands, strong, fine stock and contented, prosperous farmers.

Very truly yours,

S. A. KNAPP.

Special agent in charge.

Kentucky - 1916 -



*The Progressive Farmer*

*June 17, 1916.*

#### SIX RULES FOR SUCCESS

**Dr. Bruce Payne Points Out Six Things to Consider—This Week's "Success Talk for Boys"**

**D**R. BRUCE R. PAYNE, President of Peabody College, Nashville, Tenn., of which institution the Seaman A. Knapp School of Country Life is a part, is the author of this week's stimulating "Success Talk for Boys." Here are the six vital matters as Dr. Payne sees them:

**1. Open-mindedness.**—Keep your mind open for new ideas; be willing to give them many patient trials. Do not hastily refuse the suggestions of others when given orally or upon the printed page. Test all things, and then hold fast to that which is good. Openmindedness to new thought, with a few profound convictions regarding that which has been tried and found sure, are sure elements of success.

**2. Earnestness.**—Wake up and keep awake! Whatever your hands find to do, do it with your might! Be sure your hands find the right thing to do. Then don't be half-hearted in the doing. In good work there is no such thing as temperance. Be as intemperate as you please in accomplishing the right, the useful, and the good.

**3. Health.**—Keep your mind and your body clean, healthy and whole. The victory is to the strong. The lame, the halt and the blind carry no loads. You owe it to God and man to be as strong and as well as you can. A living dog is better than a dead lion, provided the dog can do something.

**4. Concentration.**—Begin to learn to do some important work and stay with it until you excel in it. Prolonged and unremitting concentration of mind and body upon some one undertaking useful both to humanity and to yourself is a prime requisite of success. The world is in some strange but certain way organized so that he who sets himself doggedly to produce such contributions for his fellows, can in no wise fail in this world, and therefore not in the next.

**5. Obedience to Laws.**—Try to discover as many of the laws of nature, the laws of man, and the laws of God as you can. Then forever regulate your action and adjust your life to these laws. God alone makes laws. It is man's business to discover them and obey them.

**6. Friends.**—Half your success will come from your friends. Make friends. Do something for as many people as you can. It pays, though you will never make it pay if you do it for pay. Lay up for yourself treasure in this heaven of friendship and no man may steal it from you. Invest something in other people. It is profitable, if not always in the way you desire, then in a better way. It will be paid in God's own time and manner.

BRUCE R. PAYNE.



# THE FARMERS' UNION SUN

Vol. XIV. No. 47

COLUMBIA, S. C., NOVEMBER 22, 1912

Weekly, \$1 a Year

## PLAN TO HONOR THE GRAND OLD MAN OF AGRICULTURE

The 148,000 teachers and the 7,000,000 pupils of the South are being urged by their educational and agricultural leaders to assemble 3,000,000 farmers, their families and friends, in the 89,000 school houses on November 27th for an hour, in order to survey and review their agricultural resources and achievements, and to express their appreciation of the services of one of their great benefactors. Agriculture is worthy of this consideration, for the farmers of the nation have this year produced ten billion dollars' worth of crops to feed and clothe nearly 100,000,000 people here, with a surplus for other nations.

Knapp Agricultural Day is the official designation. The South wishes to honor the memory of Dr. S. A. Knapp as the founder of the demonstration work and the Boys' and Girls' Clubs. This is fitting, because 100,000 demonstrators are making larger crops on their farms and Corn Club boys are attracting world-wide attention by growing more than 225 bushels on one acre at low cost. The indications are that several of the 75,000 boys will this year break all records. It is fitting, because 25,000 girls, in the harvest season, are filling pantries with wholesome food and selling the surplus. It is a duty, because Dr. Knapp taught a new method in agriculture and the lesson must be more widely impressed and unfailingly transmitted. Representatives of England, Russia, Brazil, South Africa, Siam and Argentina have come to learn them. It is high time for American schools to

their value is everywhere gratefully acknowledged. Among the men of recent years who have contributed ideas of vital worth to the educational development of the South, he stands out prominently. His contribution was not merely to our material wealth. But the larger returns our farmers are getting from their labor, time, and money, and the great agricultural awakening now in progress are emphatically due to his intelligence, teachings, and demonstrations. It is appropriate, therefore, that his influence should be perpetuated and made operative through the activities of the Knapp Farm and School of Country Life to be established at Nashville and in connection with George Peabody College for Teachers. It is highly appropriate that this should be done mainly through small contributions. How much better that a multitude of nickles and dimes and dollars shall establish this public-service institution for the entire South than to ask a few men to give the whole sum.

When \$150,000 is collected for the farm and school building \$250,000 will be added for endowment of the School of Country Life by the General Education Board. No other such institution exists. It will start out with the purpose of reaching and helping every school and farm in the South. This institution will be a laboratory, a clearing house, and an assembling place for agricultural and educational workers. Eventually it will have demonstration schools in each State and county teaching its lessons. It

9. What I did with my vegetables and fruits, by three girls.

10. The strength, beauty, and truth of Nature: Selections from the great poets and lovers of the country, by a class of pupils.

11. The best farm crops for this community, and why, by several pupils; display and judging of products in school exhibit.

12. How to express our appreciation of Dr. Knapp's great services and perpetuate his influence; collecting contributions, pledges.

### Hints and Material for Knapp Agricultural Day Exercises.

1. All the neighborhood should be assembled. If needful, let the pupils write invitations and copy programs to be sent out to everybody. One large program illustrated by colored drawings might be made and placed in the assembly room, where the whole audience can see and follow easily.

The exercises should give some part to every person present, and should appeal to the eye as well as to the ear. A period of music will bind the audience together; encourage the singing of familiar songs: State Song, America, some of the noble hymns, or other pieces in which all can join heartily.

2. Reading from the Bible at the opening of the exercises by an invited minister. One or more passages like the following might be used respectively: Deuteronomy XVI, 13-17; Ecclesiastes XI; Psalm XXIII, L, LXV, CIV; Isaiah XXXV; Matthew VI, 19-34; Mark IV, 1-20; VIII, 14-21.

3. A biographical sketch of Dr. Knapp could be read by one of the

citizen or a demonstration agent, would bring home concretely to everybody the value of the demonstration work. The names of noted workers, particularly those who have helped the community practically and concretely, will prove helpful.

7. Many forms of practical exercises can be carried out by groups of pupils to show in a definite way how Dr. Knapp's influence and that of other leaders was exerted. Some examples are here suggested:

(a) Let five boys stand together and each in turn give one of five lessons learned about combatting the cotton boll weevil, and still standing let them give five points in the successful growing of cotton.

(b) Let a group of boys stand and give in turn one of a number of important facts about yields of corn and at least five points in the successful growing of corn.

(c) Let a group of girls stand together and each in turn give one of five definite ways in which the country life movement has helped the women on the farm: Tomato clubs, canning work, help for mothers, improvement at home through success of farm, social improvement through better roads and schools and closer community interests.

8. The smaller pupils can be used to make an attractive feature. Let them sing a song or give some dramatized poem. Certain portions of Longfellow's Hiawatha lend themselves well to this treatment.

9. Essays based on actual experience in growing crops or adding to



and achievements, and to express their appreciation of the services of one of their great benefactors. Agriculture is worthy of this consideration, for the farmers of the nation have this year produced ten billion dollars' worth of crops to feed and clothe nearly 100,000,000 people here, with a surplus for other nations.

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What vast possibilities loom up, if the people of the whole South will annually focus their thoughts on agriculture and country life for just one hour! It is hoped that the observance will grow into a custom and that an Agricultural Day will become an annual feature of all the schools.

Such a day can include in its exercises a survey of all the activities which trace directly to the farmer: crops, trees, birds, nature, the children of the country and their proper equipment! Surely the celebration of an Agricultural Day has possibilities enough to make it the greatest occasion of the year. It could be made to render untold service, not only in the schools of the South but of the whole Nation. And the city child is coming to need such a survey of agricultural matters even more than the country child; the private school pupil needs it quite as much as the public school pupil.

A double significance will attach to the day this year. In connection with the program of country life it is planned to commemorate the life and services of Dr. Seaman A. Knapp. His teachings are universally known and followed throughout the South and

are getting from their labor, time, and money, and the great agricultural awakening now in progress are emphatically due to his intelligence, teachings, and demonstrations. It is appropriate, therefore, that his influence should be perpetuated and made operative through the activities of the Knapp Farm and School of Country Life to be established at Nashville and in connection with George Peabody College for Teachers. It is highly appropriate that this should be done mainly through small contributions. How much better that a multitude of nickles and dimes and dollars shall establish this public-service institution for the entire South than to ask a few men to give the whole sum.

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The State and county superintendents of education are taking the lead in this movement. It will be a worthy tribute to a worthy man. The name of each contributor will be kept as a grateful record.

#### **Suggested Program for Knapp Agricultural Day.**

November 27th, 1912, or the nearest convenient date.

1. Songs, by the audience.
2. How the Bible teaches agriculture, by an invited minister.
3. How Dr. Seaman A. Knapp prepared himself for great service, by a boy.
4. What Dr. Knapp taught, quotations by class of pupils.
5. Song or recitation.
6. How the Demonstration Work was organized and conducted, by a demonstration agent or other leading citizen.
7. How Dr. Knapp's work helped this community, this State, and the South, by three boys.
8. How I grew my crop, by a Corn Club boy.

in school exhibit.

12. How to express our appreciation of Dr. Knapp's great services and perpetuate his influence; collecting contributions, pledges.

#### **Hints and Material for Knapp Agricultural Day Exercises.**

1. All the neighborhood should be assembled. If needful, let the pupils write invitations and copy programs to be sent out to everybody. One large program illustrated by colored drawings might be made and placed in the assembly room, where the whole audience can see and follow easily.

The exercises should give some part to every person present, and should appeal to the eye as well as to the ear. A period of music will bind the audience together; encourage the singing of familiar songs: State Song, America, some of the noble hymns, or other pieces in which all can join heartily.

2. Reading from the Bible at the opening of the exercises by an invited minister. One or more passages like the following might be used respectively: Deuteronomy XVI, 13-17; Ecclesiastes XI; Psalm XXIII, L, LXV, CIV; Isaiah XXXV; Matthew VI, 19-34; Mark IV, 1-20; VIII, 14-21.

3. A biographical sketch of Dr. Knapp could be read by one of the advanced pupils, or a sketch could be prepared and read by such pupil. The different periods of Dr. Knapp's life or the different aspects of the service he rendered to the agriculture of the State and nation might be treated separately in short essays by several pupils. It might also be well to include in one essay some of the achievements of other agricultural leaders.

4. Pointed sayings and apt quotations from the writings and speeches of Dr. Knapp and of other agricultural leaders might be given by a group of pupils. Let ten, for example, stand and each quote in turn one or more important statements worth remembering.

5. A joyous song or a spirited recitation, or a combination of the two, could be brought in at this place in the program; or these features could be interspersed so as to divide the exercises into three parts.

6. A leading farmer or other citizen could make a short speech on the great benefit of Dr. Knapp's agricultural teachings. An account of successful experiments and crops in the neighborhood could be used effectively. The results on nearby demonstration farms, explained either by some

to show in a definite way how Dr. Knapp's influence and that of other leaders was exerted. Some examples are here suggested:

(a) Let five boys stand together and each in turn give one of five lessons learned about combatting the cotton boll weevil, and still standing let them give five points in the successful growing of cotton.

(b) Let a group of boys stand and give in turn one of a number of important facts about yields of corn and at least five points in the successful growing of corn.

(c) Let a group of girls stand together and each in turn give one of five definite ways in which the country life movement has helped the women on the farm: Tomato clubs, canning work, help for mothers, improvement at home through success of farm, social improvement through better roads and schools and closer community interests.

8. The smaller pupils can be used to make an attractive feature. Let them sing a song or give some dramatized poem. Certain portions of Longfellow's Hiawatha lend themselves well to this treatment.

9. Essays based on actual experience in growing crops or adding to home comforts can be easily secured: How I grew my crop, by a boy; What I did with my vegetables and fruits, by a girl; How I laid out and cultivated my flower garden, by a girl, etc. Prizes might be offered for the best essays, which could be put into the form of booklets illustrated by original drawings or by pictures pasted in.

10. Let several of the pupils read selections from the great nature poems and masterpieces of prose; and have some one with a good voice, the teacher or other good interpreter of literature, render some impressive passage calculated to uplift and to inspire with a love for nature.

11. The results of experience in the community and the ideas gathered from reading agricultural books and journals could be used in a debate between two teams of boys or of the older people: Resolved, That wheat, corn, and clover are the best crops for this community; Resolved, That cotton and oats are the best crops for this community; Resolved, That the soil of this community is not suited to the growing of cotton alone; Resolved, that oats should be substituted for wheat in this country, etc.

Exhibit of products. Encourage the



ed to extend his methods throughout the South, devastated by the war, with funds furnished by local business and by local business. He organized a few agents to visit different counties and soon attracted work to the country. Congress appropriated local aid for the work was extended to Alabama and Mississippi. The General Education Board asked to be appropriated money for other cotton States. Years this great work in the entire South, had a number of agents, an enrolled thousand farm-boys in the twenty-five thousand Young Men's Christian Union Clubs. Every year began to show an average corn production as well as other crops, and Club boys attracted to the world by producing two hundred bushels of corn on one acre at low cost. Demonstrated practical, in garden and home. In his death, Russia, South Africa, and representatives to this by the Demonstration of Plunkett, the great came for the same the request of the Dr. Knapp sent one of the charge of agricultural that country.

expressed the belief husband's career had been guided as a preparatory work that he did years. Dr. Buttrick by saying, "Seventy years of Southern life, whether, farmer, philosopher, or man." Dr. Walter H. demonstration work, greatest single piece of educational work in this country." Forrest Crissey missionary bishop of culture."

Following Dr. Knapp's suggestions arose in the South in regard to a memorial. It was argued to build a monument to the heroes of the South in the arts and letters. Knapp's work and it well-nigh impossible monument of cold marble. It was felt that there was a memorial. A committee with representation from the Southern State. After it was decided to build a school and to purchase a farm. The General Education Board of New York to endow the Knapp Memorial Life in connection with the College at Nashville. The committee has underwritten 150,000 for the building. No such institution has been planned before in the world. This is to build a farm and a Demonstration.

At this memorial shall be a service was distinctive merits, and will be a recitation of a grateful people. It brought the South to the attention

of the world in a new light; but better still, it brought comfort and joy to thousands where poverty and gloom had prevailed. It made the education of children possible where ignorance must, perforce, have held sway. It brought better instruction and renewed hope to men and women whose training had been neglected. A leading thinker has said that his plan constitutes one of the greatest systems of adult training ever devised. Dr. Knapp loved the South and was a citizen thereof for a quarter of a century. It was his chosen home in his mature years. He had admired its people for the chivalry, courtesy, and high sense of honor prevailing among them. He had sympathized with them during their hardships and struggles. Dr. Knapp was a benefactor to mankind and his works do follow him. The sentiment which actuated him and those who worked with him and for him is best expressed in his own words:

"The power which transformed the humble fishermen of Galilee into mighty apostles of truth is ever present and can be used as effectively today in any good cause as when the Son of God turned His footsteps from Judea's capital and spoke to the way-side children of poverty."

O. B. Martin.

Justin S. Morrill (1810-1898).—The Land-Grant Act, signed by President Lincoln in 1862, was the work of Mr. Morrill, who at the time was a congressman from Vermont. This act gave to each State a certain amount of land, the proceeds from the sale of which were to be used in colleges of agriculture and the mechanic arts, "without excluding other scientific and classical studies." Mr. Morrill was also the author of the bill approved August 30, 1890, for the greater endowment of these colleges. There are now forty-eight colleges in the United States established under these acts.

Louis Pasteur (1821-1895).—This great French chemist made the wonderful discovery that there are vegetables which prey on animals, just as animals prey upon vegetables. These flesh-eating plants which are known as bacteria, float in our blood and cells, and though they are so exceedingly small that it takes a very strong microscope to see them at all, at the same time they make up in numbers and in appetite for what they lack in size. Dr. Pasteur also found that there are good bacteria and harmful ones, and that the harmful kinds could be so weakened that when introduced into one's system they could do no ill, but on the contrary would preserve one from the attacks of the more powerful bacteria. On these discoveries of Pasteur rest in large measure the science and art of modern medicine.

With the knowledge he thus gained, Pasteur himself was able to end the silk-worm plague in France, cure chicken cholera and the deadly disease, anthrax, in cattle, and to perfect an almost infallible treatment for hydrophobia, or rabies. It is said of him that he added more to the wealth of his country than both France and Prussia together wasted in the bloody war which they fought in 1870-'71.

Isaac Newton (1800-1867).—As the first Commissioner of Agriculture, Mr. Newton laid the foundations for the great Agricultural Department as it exists today. Upon its creation in 1862 the Government's agricultural bureau was merely a subdivision of the Patent Office; but, administered

on the policy formulated by Mr. Newton, it rapidly increased in power and importance. At last, on the presidency of Benjamin Harrison, it was finally raised to the rank of an executive branch of the government with its secretary assuming a seat in the cabinet.

James Wilson (1835- ).—It has been under the administration of Mr. Wilson that the United States Department of Agriculture has experienced its greatest growth, until today it comprises the greatest academy of scientists ever assembled. Mr. Wilson has been Secretary of Agriculture since 1897, thus establishing the record of holding a cabinet portfolio longer than any other department head. Before his appointment as secretary, Mr. Wilson was director of the Iowa Agricultural Experiment Station, and professor of Agriculture at Iowa State Agricultural College.

#### Knapp Epigrams: Quotations From Writings and Speeches of Dr. S. A. Knapp.

"The greatest of all acquisitions is common sense."

"A prosperous, intelligent and contented rural population is, therefore, essential to our national perpetuity."

"A patent to land is a title to nobility, a right to sovereignty."

"A great nation is not the outgrowth of a few men of genius, but the superlative worth of a great common people."

"It is impossible to impress upon any one that there is dignity in residing upon a farm with impoverished soil, dilapidated buildings, and an environment of ignorance."

"The income of the farm can be increased from three- to five-fold by the use of improved methods."

"Double the crop to the acre and halve the cost."

"More power and less hand-work."

"Increase the earning capacity of country toilers."

"No nation can be great without thrift."

"Training is the great item which fashions a race."

"The world's most important school is the home and small farm."

"The public school teacher's mission is to make a great common people and thus readjust the map of the world."

"You can cause the soil to become more responsive to the touch of industry and the harvest more abundant to meet the measure of a larger hope."

"The common toiler needs an education that leads to easier bread."

"The basis of the better life is greater earning capacity of the farmer."

"It happens to be a philosophy of the Southern people to let money slip through their fingers without sticking."

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

"The demonstration work may be regarded as a system of adult education given to the farmer upon his farm by means of object lessons in the soil, prepared under his observation and generally by his own hand."

"Any race betterment to be of permanent value must be a betterment of the masses."

"An idle saint only differs from an idle sinner in a cost of paint and direction."

"The greatest failure as a world force is the man who knows so much that he lives in universal doubt, injecting a modifying clause into every assertion and ending the problems of life with an interrogation point."

"In general, it is not the man who knows the most who is most successful, but the man who imparts an implicit belief in his message."

"Agriculture in most sections consists simply in a series of motions inherited from Adam."

"This learning agriculture (which is a compound of the following ingredients—one-eighth science, three-eighths art, and one-half business methods) out of a book is like reading up on the handsaw and jackplane and hiring out for a carpenter."

"These mechanic farmers now reside in a town or city, live out of a canned garden and milk a tin cow."

"The great battles of the future will be industrial."

"We are now prepared for the accomplishment of what we have so earnestly sought, the placing of rural life upon a plane of profit, of honor, and power."

"The least worthy monument to a man is a granite block or a marble shaft. They represent the dead man's money and the kindness of friends. The true monument is what the man has accomplished in life. It may be a better gate, or house, or farm, or factory; put his name on it and let it stand for him."

#### 800 Per Cent. Bigger Profits for the Southern Farmer.

"I estimate that there is a possible 800 per cent. increase in the productive power of the farm laborer in the average Southern State, and I distribute the gain as follows:

"300 per cent. to the use of more and better mules and farm machinery.

"200 per cent. to the production of more and better stock.

"150 per cent. to a rotation of crops and better tillage.

"50 per cent. to better drainage.

"50 per cent. to seed of higher vitality, thoroughbred and carefully selected.

"50 per cent. to the abundant use of legumes and the use of more economic plants for feeding stock."

#### The Ten Commandments of Agriculture.

"(1) Prepare a deep and thoroughly pulverized seed bed, well drained; break in the fall to a depth of 8, 10, or 12 inches, according to the soil, with implements that will not bring too much of the subsoil to the surface. (The foregoing depths should be reached gradually, if the field is

#### N. L. WILLET SEED CO. AUGUSTA, GA.

**Forage Crops.**—Cow Peas, Soy Beans, Velvet Beans, Sorghum, Peanuts, Millets, Chufas, Artichokes, Etc.

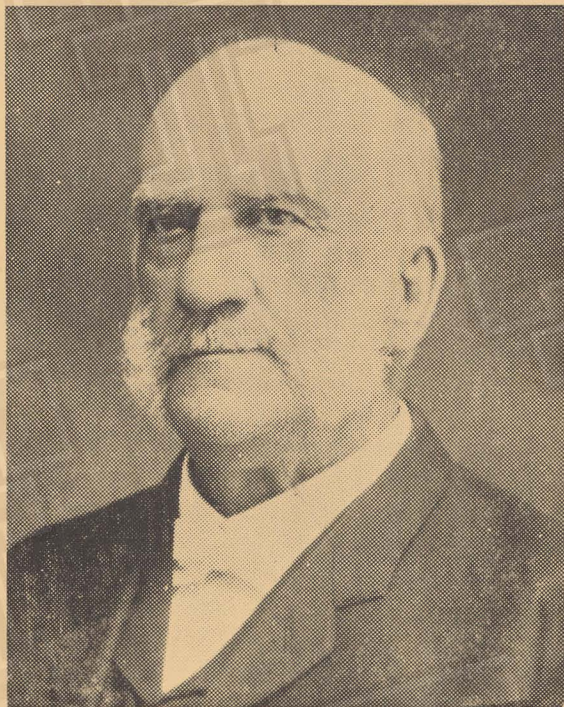
**Field Crops.**—Corns, Potato Plants, Melon Seeds, Etc.

**Poultry Supplies.**—All kinds.

Get Catalog.



S. C. Columbia,  
March 24, 1916.



HOTEL JEFFERSON  
MARCH 24, 1916

*S. A. Knapp*

(Founder Boys' Club Work)



Macon Telegraph-Ja.  
April 17, 1913.

**THE NEW SPIRIT.**—In the Review of Reviews, E. E. Miller contributes an article on "The New Spirit in Southern Farming." "To Dr. S. A. Knapp," he says, "and the co-operative farm demonstration work he conducted is due much of the new spirit of Southern agriculture. Dr. Knapp was a great factor in helping to recast rural life in the South." Speaking of the boys' corn clubs and the big yields per acre they achieved, he further says: "It is doubtful if any other one thing has done as much to bring a realization of the possibilities of Southern soils to the country at large as has this demonstration work. It has brought this same realization to thousands of Southern farmers also, and has given them an entirely new conception of their section and calling. And this new appreciation of the possibilities and the rewards of farming is just as potent a factor in the remaking of Southern rural life as is the knowledge of better methods of doing farm work. The farmers realize the methods and practices of past years must be changed."



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"Corn Club" and Southern Agriculture.

(From "The New Spirit in Southern Farming," by E. E. Miller in The American Review of Reviews for April.)

To the late Dr. S. A. Knapp and the co-operative farm demonstration work he so successfully conducted much of the new spirit of southern agriculture is due. Dr. Knapp was not only a great organizer, but also a great adviser. He put his men to work on the farms of the south teaching and demonstrating better methods of cultivation, seed selection and fertilization. He organized the boys as well as the men into corn clubs and other clubs to try for big yields; and then he let the whole country know just what he had accomplished.

The names of Jerry Moore, Bennie Beeson and other corn club prize winners became familiar to men and women all over the country, along with their big yields—223 and 227 bushels to the acre, respectively, for the two boys named.

It is doubtful if any other one thing has done as much to bring a realization of the possibilities of southern soils to the country-at-large as has this farm demonstration work. It has brought this same realization to thousands of southern farmers also, and has given them an entirely new conception of their section and their calling. And this new appreciation of the possibilities and the rewards of farming is just as potent a factor in the re-making of southern rural life as is the knowledge of better methods of doing farm work.

Southern farmers, and the whole country are beginning to see that the small average yields of southern staple crops are not necessary and permanent, but are only the results of poor farming by this and past generations of farmers. This

knowledge carries with it the conviction that the methods and practices of past years must be changed. The south owes a debt of gratitude to Dr. Knapp and his co-workers, not only for what they accomplished, but also for the fact they told folks about it.



MAY 15 1913

## DISCUSSES WORK OF SEAMAN KNAPP

O. B. Martin Speaks at  
Clemson Conference.

### INTERESTING SESSION

Gathering of County Superintendents and Other Workers for  
Common Good Successful.

Special to The State.

Clemson College, May 14.—Today was the most notable at Clemson as the "big day" of the conference of South Carolina county superintendents of education and other workers in the cause of the common good. The conference, which began last night, was attended by about 100 educational and agricultural advancement workers. The feature of the session today was an address by O. B. Martin, dealing with the life and work of Dr. Seaman A. Knapp, the late director of demonstration work of the federal government, whose name has really become a household word in South Carolina.

The intimate relations that existed between Dr. Knapp and Mr. Martin enabled the speaker to give interesting personal sidelights on the character of one of the South's best friends and great benefactors. For more than an hour he held the close attention of the audience and at the conclusion of his address had to rise in acknowledgement of the hearty applause. A dress parade in honor of the visitors followed the memorial exercises. The cadets reflected great credit on Col. Cummins.

Dr. W. M. Riggs opened the morning session with a clear, forcible and optimistic address on "The Mission of Clemson College." He was followed by J. C. Littlejohn, who explained in detail the rules governing the holding of scholarship examinations. "School Grounds and Gardens" was the subject of a helpful address by C. C. Newman.

At the evening session Miss Edith Parrott, State agent of the Girls' Tomato clubs, made an inspiring address on the possibilities and results of the work by the girls.

She was followed by Prof. L. T. Baker, who spoke forcefully on the training of principals for the country schools.

W. W. Long, the new superintendent of extension and farmers' cooperative work, discussed interestingly what has been accomplished and what it is proposed to accomplish in demonstration and extension work.

The first session of the conference was called to order last night in the Columbia society hall by President W. M. Riggs with about 40 of the superintendents present. The total attendance was a hundred or more. Alan Johnstone, chairman of the Clemson board of trustees, made a statesman-like address on education, by way of welcome, full of inspiration and wholesome advice. Happy responses were made by J. E. Swearingen, R. T. Hallum of Pickens and L. T. Baker of the University of South Carolina.

"The Strategic Position of the County Superintendent" was the subject discussed by Superintendent J. E. Swearingen in a frank and forceful way. He pointed out many of the defects in the educational system of the State and suggested many helpful remedies.

"Better School Buildings" was the title of a very sane paper by Prof. R. E. Lee of Clemson college. Prof. Lee, who is the architect for the college, has published a bulletin on school buildings that has had wide circulation and has been of great benefit to the public. His excellent paper was followed by an earnest discussion, led by Superintendent S. H. Brown of Horry and G. L. Pitts of Laurens and others.

Prof. W. K. Tate, a great believer in conferences, was the last speaker of the evening. He handled his subject, "Training Principals for the Country Schools," with the skill of a master. Prof. Tate knows the conditions surrounding the country schools as no other man in the State does, and his words were all the more weighty because of that fact. All who heard him were convinced of the great need for trained country school teachers.

President Riggs informed the speakers that they were all limited to 15 minutes and that he would ring them down in the middle of a two-syllabled word. That policy promises to save the meeting from the long-drawn-out discussions that do so much to kill interest in such conferences.



There were no years of "retirement" for him. He was splendidly active to the very end.

He was a successful man. I am glad to write that. He died rather well off, I think; but that is of small consequence—he was successful anyhow, for he lived a life of activity, doing work which most writers would have called drudgery, but which to him was interesting because he saw all there was in it.

Like Joe Wing, whose life his very much resembled, he made a success of devoting himself to writing and speaking for the farming interests, for farm living.

I wish the lives of Uncle Henry Wallace and Joseph E. Wing could be read and studied by every farm boy in the United States.

They were both soldiers of the common good, ennoblers of the common life—and both of them proved that big men may build great careers out of the materials which surround every farmer's son in the land.



It was this philosophy which made him the president of the National Conservation Congress, and constituted him a tower of strength to the Conservation movement. It needs him today more than ever before, and will suffer by his loss. He wanted the coal, the lands, the minerals, the gas, the oils, the forests and the water power of the nation conserved for the use of the children of men to whom they were given, and not for some of the children of men. But mainly he spoke for the soil.

In a little book, *Letters to the Farm Folk*, published not long before his death, he said in a passage on the social life of the country people:

But, you say, this would make us all stockmen. Well, that's what we ought to be, and will have to be sooner or later, if we are to have any satisfactory social life in the country. Growing grain for sale off the land starves

the soil. I am speaking now for the voiceless land. It will not feed you unless it is fed; we will then become poorer and more discouraged; and how can we have any satisfactory social life among poorly fed and discouraged people?

Do you think that Uncle Henry in this passage was speaking of a danger of tomorrow only? Not so. He saw when he wrote this passage all the centuries of the future. He was in the Corn Belt, as I was, at a time when it was the common utterance of many farmers that their soil did not need manure, and that it was cheaper to move the sheds than to haul the manure.

He lived to see the question of fertility a growing one. He lived to see the need of commercial fertilizers cross the Mississippi, in spots—and he spoke, as he did as president of the National Conservation Congress, as he always did, “for the voiceless soil.”

There is a revelation as to the bent of our old friend's mind in that expression “the voiceless soil.” To him the soil was not dead at all, only dumb. It was the stuff of human life. Sow it with dragon's teeth, and it will produce a crop of armed men who will fall upon and destroy one another.

Ignorance, injustice, oppression—these are the dragon's teeth with which our American soil must not be sown or they will spring up armed men like those who are destroying each other in the Old World today. In the preface of this little book, which is his last word to the farm folks of America, Uncle Henry said:

The conviction has been growing upon me of late years that the biggest thing on the farm is not the land nor the livestock, but the farm folk, the people who live on the farm and out in the open country. These letters therefore will not be agricultural, but human. Do you know that the biggest thing in life, whether in city or country, is just to be a fine human being, interested in all things that interest or should interest human beings?

#### Slogan Centered About Happiness

His slogan for years was Good Farming, Clear Thinking, Clean Living, but it centered about the welfare and happiness of people. Good farming, that the life of the family might be a well-nourished life economically, and that the soil be conserved; clear thinking, that it might be intellectual, and not like that of “sheep and goats that nourish a blind life upon the soil”; clean living, because the life that is not based upon righteousness rots and makes both good farming and clear thinking impossible.

On this all-embracing text did Uncle Henry Wallace preach quietly, persistently, sanely and effectively for decades to one of the greatest audiences in America. What greater pulpit could he have chosen? Who can estimate the effect this preaching has had in sweetening and uplifting our national life, and shall have for generations to come?

For thought does not die with the thinker. What shall a man do to have eternal life? Do as Uncle Henry Wallace did.

Even in this world, such a man's thoughts live in other minds to all ages. “Our echoes roll from soul to soul, and grow forever and forever.” They may be evil echoes or good ones. Those of Uncle Henry will be good.

He knew the soil. He not only knew that the soil, instead of being dead, is literally teeming with life—he also understood its moods.

Did you ever read one of his articles on some phase of soil management? Suppose, for instance, it was on the subject of clods; he made it interesting and always useful. He knew why the soil gets cloddy, and just how harmful clods are to crops. He knew the beneficence of tilth; the secrets of the warm, air-filled seed bed were open to his mind. In his mind the soil had place as the universal friend of humanity, and through him the voiceless soil found utterance for its claims.

#### He Was a Very, Very Wise Man

Uncle Henry was a very, very wise man; for he added to those of his own long life the experiences of others. He knew his Corn Belt well, and all the better because he knew other regions and other lands. In order that he might better know Iowa he studied England, Germany and Denmark.

He was one of those leaders of our agricultural thought who almost tremble at the increase in tenant farming, caused by the flocking of successful farmers and farm families to town. The “retired farmer,” rusting out a short life in town, was to him a national problem; and the transient, year-to-year tenant was an equally grave one. He once wrote:

At present the law allows the tenant to rob the land or, in other words, to starve it. The law would put the tenant in jail if he starved his horses or cattle, but we allow him to starve the land.

The law would put the landlord in jail if he confiscated the horses of the tenant, but we allow him to confiscate the fertility which the first-class tenant stores in the soil, and seem to think it is all right. The law would put the tenant in jail if he sold the personal property of the landlord, but we are likely to approve the robbery of the fertility which the retired farmer had stored in the soil when the farm was his home.

The English Government has solved the problem in Scotland and England by compelling the tenant to put back into the land the manurial equivalent of the grains he sells off it; by preventing him from selling straw and roots, which must be fed to livestock on the farm; by compelling the landlord to pay the tenant for the manurial value of the foodstuffs he has purchased and fed to livestock, or else let him stay until he has used up this fertility; and also by forbidding the landlord to raise the rent because of improvements the tenant has made.

During his later years he seldom spoke without mentioning this matter; but did Uncle Henry advocate the passage of such laws in this country? No; but he did urge American farmers—tenants and landlords—to think about these things, talk them over, and study the problem. No law, he always urged, is worth anything until it has public opinion behind it.

He hoped for the amendment of the landlord's lien laws so as not to be so severe on the tenants; he hoped for the passage of laws giving the tenant a claim, if his lease was not renewed, for the fertility that he had placed in the soil.

Mostly he hoped for these as beginnings. They would tend to stop this everlasting moving about, and make rural society more stable, so as to make better schools, better churches, better neighborhoods.

Uncle Henry is gone, but he leaves behind him something for us all to consider—his thoughts, his doctrines, his methods, and, most of all, the fine and noble lesson of his life.



# HENRY WALLACE-

Vol XXXI - By Herbert Quick

No. 14.

April 1, 1916

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IOWA has given to the nation three great figures in agriculture, who were also a trio of bosom friends. The names of these three are Henry Wallace, James Wilson and Seaman A. Knapp.

James Wilson made the Department of Agriculture, and served as its secretary for so long that he was dubbed "The Irremovable."

Seaman A. Knapp went to Washington with his friend Wilson, and became, in my opinion, the greatest educator this country has produced. He took advantage of a law appropriating funds for fighting the cotton-boll weevil, and began teaching the farmers of the South the importance of diversified farming if they were to escape ruin. He fought the weevil of the cotton boll by starting the South on her change from cotton alone to cotton, corn and livestock. And incidentally out of his work grew the gigantic, nationwide, farm-demonstration movement through county agents.

When Wilson and Knapp went from Iowa to Washington, Wallace stayed in Des Moines and devoted himself to his lifelong work as editor of Wallace's Farmer.

Two of the trio have passed over the river. Doctor Knapp died in the harness two or three years ago, full of years, honors and good deeds. Uncle Henry Wallace has just joined him in the ranks of the great majority. He leaves vacant in American life a position so unique that, though he was not at the time of his death, nor was ever, so far as I am aware, the holder of a public office, his loss will be felt more keenly than would that of a thousand men who have been elevated to places of eminence by the votes of the people or by appointment.

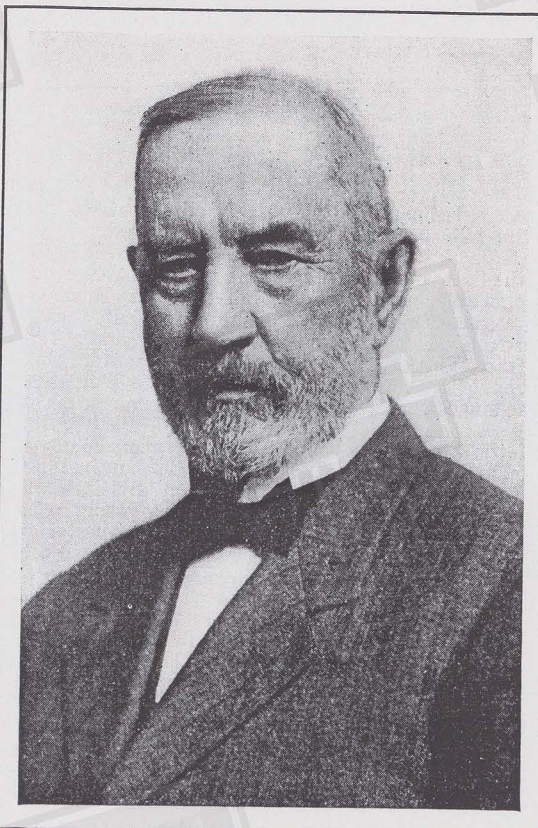
Henry Wallace will be remembered by the farmers and many others when the great mass of governors, senators, congressmen, justices of the Supreme Court, and cabinet officers of the day are forgotten. For he worked with the people, not over them.

He was a Pennsylvanian who as a young man identified himself with the farming interests of the Middle West. The writer was born in Iowa, and is no longer young, but he does not remember the time when Henry Wallace was not a strong, quiet, uplifting force in that state. His strength was exerted like that of a growing tree, which heaves the ground under its roots by the power which it drinks in through its branches outspread in the sky. Nothing can resist such a force, because it is patient, unceasing, tireless, and always bears upward against the gross things with which it contends. Like the tree, too, Uncle Henry was strong because his roots were in the soil.

## Wanted to Preach to the Farmers

He was a good writer, but he never tried to shine as a fine writer. He chose the field of Iowa journalism at a time when its prospects for usefulness were far brighter than its chances of business success—mainly, I suspect, because he was a preacher.

He had been a minister of the Gospel, and wanted to preach to the farmers of the country along different lines from those usually followed in the pulpit. He believed



Like the Tree, Uncle Henry Was Strong Because His Roots Were in the Soil

the truth should be emphasized that good farming is a good way of serving God, and that passing down to future generations a well-kept farm, unimpaired in fertility and adapted to the nourishment of a happy, wholesome life, is in itself an act of worship and the best possible sort of partnership in the purposes of the Almighty, who the Scriptures assure us gave the earth to the children of men.

He believed, and for much more than a generation he taught every week to many thousands of his followers, that the earth God gave to the children of men was given not to this generation only, to be mined, robbed, exploited and ruined by greed, but to all future generations of the children of men as well; and that to rob mankind a thousand years hence is just as bad as to rob our neighbors today.

Who is thy neighbor? Those on earth today only? No, said Uncle Henry, thy neighbor is the human being who comes after thee just as truly as is the one who walks at thy side.



*The Progressive Farmer*  
Jan. 17, 1914.

## KNAPP SCHOOL OF COUNTRY LIFE

Great Things Expected of the Unique Institution Just Now Organizing in Nashville, Tennessee

THE Knapp School of Country Life now being organized in Nashville, Tenn., is the first of its kind in America. Just now, announcement is



DR. KNAPP

made of the securing of the endowment fund of \$250,000 for the maintenance of this new line of work. The gift has been made by the General Education Board on condition that certain other funds be raised for the Central Teachers' College, at Nashville, of which this School is a part. Those conditions have been fulfilled and the money is secure. Of course, other

funds will be needed, but at present the School of Country Life has \$25,000 for the farm and subscriptions of \$35,000 for other equipment.

The new School is created as a memorial to the life and work of the late Dr. Seaman A. Knapp, founder of demonstration farming, boy's corn club work and girls' canning and tomato club work. The cardinal principle upon which it is founded may be briefly stated:

To increase economic efficiency and to increase the profits thereby attained by the citizens of the rural districts of the South, living in the country must be made more physically tolerable and more humanely interesting. It must become more healthful for the 85 per cent of our population who live in rural districts. Social life in all its phases must be made more interesting and valuable.

The lines of work which this new School will undertake lie chiefly along these lines:

1. Better farming, better seed, better livestock, better fruit, better management.
2. Better rural schools — redirected along more practical and useful lines.
3. Better marketing, better buying and selling—cooperation.
4. Rural credits and farm ownership—tenantry systems.
5. Good roads and better transportation.
6. Improvement of social conditions.
7. The rural home and its surroundings.
8. The rural church as a social center.
9. Rural leadership.

The work of the school will be carried to all sections of the South through the medium of farm demonstration, boys' corn clubs, girls' club work, extension courses, and correspondence courses. It is believed that the Knapp School will have a farm so well equipped and so well managed that it will be the

Mecca for all farm demonstration and club workers.

Leadership is the keynote of better country life. Wherever there is a local leader, the community is well contented, happy, and usually prosperous. The rural school is one of the best centers for all rural life. There has been no college or university which has systematically undertaken the training of teachers to become rural leaders. The Knapp School of Country Life will undertake to accomplish this.



#### FOLLOWING DR. KNAPP'S PLAN

Twelve years ago at Pinehurst Dr. S. A. Knapp, the wisest student of rural matters that this country has ever had, said that to bring about proper conditions in rural America three things must be done. First the farmers must learn to grow crops profitably and manage farms intelligently. Second, better (not easier) credit facilities must be provided for the farmer. And finally the farmers' wives must be taught how to feed, clothe, and care for their families. "If these three things are accomplished," said the old sage, "all other forward steps will be easy." I doubt that there is a place in the world where this program is being pushed more vigorously than it is being pushed right here. The big farms here with all their blundering have taught us much about better farming, and their work is not yet finished. Demonstration has done much—all opinions to the contrary notwithstanding—and all just criticisms duly acknowledged. Other agencies are also to be thanked. Two credit unions have been established. What they do here remains to be seen; but we know what they have done elsewhere—and what other agencies have signally failed to do. And finally, brethren, we have two as good workers among the women and girls as you can find in a Sabbath day's journey. One of these has the County Canning Club work and the other the work at the Farm Life School.

"Zanny thing doing in the Sandhills?" Yes, my good stay-at-home friend, there is so much doing here that when the man in the moon grows weary of watching the dead lock in Europe, he turns to the Sandhills for real excitement.

#### FARM DEMONSTRATION

##### The Creed of a Great Man. Its Practical Effect on This Neighborhood

"The power that transformed the humble fishermen of Galilee into great disciples of truth is still abroad in the world and is as potent now for any good work as it was when the son of God turned his footsteps from Judeas capitals and taught by the sea and by the wayside."

Much fustian is being uttered about rural problems and rural conditions but these are the words of the man who under-

stood the Southern farmer best and consequently did most to help him—Dr. Seaman A. Knapp. Dr. Knapp had no panacea for poverty. He was wise enough to know that the causes of poverty are as numerous as are the causes of prosperity. Dr. Knapp knew that there was no magic in such words as co-operation. He knew that the average rural community resembled an oyster bed more than it resembled a bee hive. Farmers do not work in groups. Each lives to himself fastened to his own bit of soil, and encased in his own shell of conservatism and suspicion of all things new. The farmer develops no skill in dealing with other men as does the city man. The farmer is ignorant of commerce and its organizations. All this must be true to the end of time simply because this happens to be this kind of a world. Instead of making paper plans for Utopian communities, Dr. Knapp started with the farmer as he is and cast about not for means to help him but for a method of enabling the farmer to help himself. He did not send college trained missionaries to do "uplift" work. He chose his workers as did the man of Galilee from those among whom he wished to work. "They may make mistakes," he said, "in what we tell them to teach; but they will not make blunders in their method of imparting that knowledge and thus cause the work to become an object of ridicule." Therefore all over the South today his workers are chosen from the ranks of the country people and day by day, each in his county, these new disciples of truth are going about carrying the gospel of better agriculture to the men whom bulletins and schools could not reach.

Last week those who work in Central North Carolina met at Aberdeen, six miles from Pinehurst, for their annual convention. The story that a summary of their report would make is one of better crops and better living in the country homes of this part of the State. The workers first got a few acres grown by proper methods. The farmers soon saw how much yields were increasing under the methods that the demonstrators advocated and the new methods were therefore soon copied. Great increase in the yields of the Dixie farms and an interest in better methods is the net result of this work.

But the end of the work was not mere increase of production! "I am going into the kitchen through the garden," said Dr. Knapp. The children have been enlisted in gardening and canning. From sanitary canning it is a short step to lessons in cooking and general home keep-

ing. Today there are rows of preserves, jellies, and tinned fruits and vegetables in many a home where formerly the diet was merely pork, greens, corn bread and molasses.

First we must teach the farmers proper methods of tilling by demonstrating in the community what our methods will produce, said Dr. Knapp in his great speech at Pinehurst twelve years ago. Second, we must better credit conditions—make it possible for the man who can use money wisely to get it at a reasonable rate of interest. The banking system of today gathers in the profits of agriculture and leads them out for industrial development. Moreover a bank lends for ninety days and it takes six months or more to make a crop. Store credit is excessively high and its results are pernicious. Thirdly, the farmer's wife must be trained to feed and care for her family properly. If these three things are done, said wise Dr. Knapp, all other forward steps will follow easily. Without the added profits that these will bring, better roads, better schools, better homes, etc., are impossible. These all take money. Without these matters are remedied the country will continue to become deserted and farmers will continue to become town dwellers, eat vegetables out of a canned garden and milk a tin cow.

Here around Pinehurst in the Sandhills of North Carolina these things are being made possible. Demonstration has made greater the yields by improving the method of cultivation. Credit Unions copied after the Baiffeissen System which is the bottom of German economic organization and strength, are being organized under the lead of the Sandhill Board of Trade. These will enable the man who should have a loan to get it and will tend to keep the man who is not capable of making one talent win another from getting a loan and so drifting into bankruptcy. Finally the canning clubs under the direction of Miss Grace Bradford and the home economics work under the supervision of Miss Bradford and Miss Rankin of the Sandhill Farm Life School is training the country girl to be a better home maker than her mother was—however good the mother may have been.

This story is a sample of the reports that are coming in from the rural sections of the South today. Conditions are still bad. There is still much to do. A mere beginning has been made. But a way to do the work has been pointed out to us by Dr. Knapp, and the fruits of the work are already great. We are no longer discouraged. We believe that the country is at last moving and that its face is set toward better things.

CLYDE DAVIS,  
Secretary of the Sandhill Board of  
Trade, Aberdeen, N. C.



## AN ACTIVE NEIGHBORHOOD

Clyde L. Davis, Keeper of the Great Seal of the Sandhills,  
Tells What the Dynamo Is

Workings of the Farm Demonstration Idea in Moore County.

### THE ETERNAL QUESTION

"'Zanny thing happening in the Sandhills now?" The secretary hears this question day after day from Dan to Beersheba and from Ben Salem to Lobelia. It is perfectly pertinent and is usually asked with genuine interest and in all sincerity. The answer is yes,—yes with multitudinous acclaim and wild eclat. "'Zanny thing happening in the Sandhills!" Well I should say there is. It is dollars to doughnuts that there is not a rural section this side of Northern France where so many different things are happening just now.

### ANOTHER QUESTION

This is no empty boast. And anyone who could ride over this section day after day and see the hundreds and hundreds of acres that are being cleared or improved which a few months ago were wild as Eden before Adam would readily comprehend that something is taking place. My employers expect me to know what is going on in the Sandhills. I work every day and usually put in between ten and sixteen hours; but I find it impossible to keep up with all that is being done. The paramount question in my mind sometimes is, "What isn't being done in the Sandhills?"

### SEEING THINGS

As I rode into Candor recently I saw something. I went to investigate. If the Allies had built a munitions plant here with capacity enough to supply the French Army I wanted to know it. But superintending the construction of the great building I saw the Reverend Robert Arrowood, and then I knew that Candor has a new high school of which a town twice its size might well be proud. Coming back Mr. Von Canon showed me through the beautiful new church at West End. Just after I had watched the remodeling of the Jackson Springs Church an auto came near getting me as it whizzed by. Later I learned that the driver was excusable; for each auto that carries chil-

dren to the new Derby consolidated school has to make three trips both morning and night. Somebody asks how the new Pinehurst school is doing and before this can be answered someone else asks if I know that the Women's Auxiliary has raised another thousand dollars for the Farm Life School. I attempt to come back by saying that the new schools at Samarcand and near Lobelia are both doing well, and that I have been invited to talk at Ingram Branch as soon as the new school house is finished, and that Mr. Lowry said day before yesterday that one of the best of the New England masters would surely have a private school at Jackson Springs next winter; but that I am not sure Dr. Achorn's friend will

establish the school at Pinebluff, and that I do not know as yet just what the gentleman who is now writing to me about founding a school here will do. "'Zanny thing doing in the Sandhills!" It would take an around-the-world-in-eighty-days man to keep up with the schools alone!

### FROM THE FOUR CORNERS OF THE EARTH AND ELSEWHERE

Nearly every day somebody writes to know about what the section has to offer. Forty letters have come in in less than two months asking for printed matter, and some are coming to look the place over with a view of locating here. Books and letters are sent to them. The letters are written conservatively and nothing is stated that cannot be backed with facts. The facts are plenty strong and striking enough without any frills or frescoes.

### ALREADY HERE

No one but the recording angel knows just how many people have settled in the Sandhills during the last year. The place is so big that nothing but Gabriel's trumpet could locate them all. Scores have visited and not a few have located in the vicinity of Cameron. Mr. Hinshaw is getting a colony to going near Vass. D. J. Priest has a lot of new neighbors

down near Lakeview. There are several new families at West End, and wherever one goes one finds the old faces nearly all there still and new ones here and there. Mr. T. D. McLean has an opportunity to travel over this section three times as much as the average citizen has. Yet the other day when he drove into the new settlement just west of Pinehurst he found himself a stranger in the land of his birth. If all the development that has taken place in the past year could be put in one place even the dullest man would soon realize that there is something going on in the Sandhills.

### GROWING EVERYTHING

It is doubtful whether any section of equal size is producing so many different crops. Last summer I counted eighteen different crops on one farm—and it wasn't Deaton's Nursery either. It was just an ordinary farm. Mr. Tufts thinks that we shall soon have hay enough and cheap enough if alfalfa pans out as well as his acre promises to do. Soudan grass promises well. The most unique thing of all, I suppose, is Mr. Springford's prune orchard which is growing famously. Of course all that miscellaneous planting is a grand medley of wisdom and folly, but nobody now knows just which is which. Moreover, some are ready to bet that pecans will soon get an inning and the evidence is that they will hold a permanent place in profitable agriculture.

### ET CETERA

A rural nurse will probably be at work here before the June bugs hatch again. Dr. Owen is coming to preach hog cholera prevention. A summer school at Eureka is sitting in the anterooms of creation waiting for time to give it a chance to be. The pageant continues to flee from us; but two leaps of the executive committee equal three leaps of the pageant so we can count on overtaking it one of these days. A new and larger dormitory is already voted for the Farm Life School. Charlie Williams is making history in hog raising. You may not believe it; but the road between Vass and Cameron is being improved. Southern Pines and Pinehurst are both filled to the rafters, and many tourists who would like to come are being turned away because there are no rooms in the inns. Etc., etc., etc., etc., ad infinitum.



ALA, FRIDAY AFTERNOON, JUNE

## PLANT 'COW PEAS' SAYS THE LOCAL FARM AGENT

**They Make Fertile Land  
Fine Stock and Pros-  
perous Farmers.**

By A. R. Gissendanner.

Early in the year we have had several articles on planting velvet and soy beans. In these articles it was necessary to state the amount of seed, and time, to plant and the kind of soil best suited to these plants. We now come to the "old trusty" cow peas which can't be beat and every "farmer" knows how to grow them. It might be well to give the sixteen reasons for planting cow peas, as given by the late Dr. Seaman A. Knapp, in a letter written June 20, 1910. These reasons are just as good now as they were in 1910, and are as follows:

1. They are fairly good human food.

2. They are one of our most nutritious foods for stock.

3. They shade the soil during the hottest part of the summer, thus aiding in the formation of valuable nitrates.

4. If turned under the vines add considerable fertility to the land.

5. The presence of decaying roots stubble and vines in the soil helps to convert mineral substance into plant food.

6. If picked, the peas alone are worth from \$8 to \$12 per acre.

7. The vines that grow on one acre planted between the corn are worth from \$6 to \$10 for stock food.

8. Through their roots, peas put into the soil from \$4 to \$6 worth of nitrogen per acre. Most of our unprofitable soils are lacking in this substance.

9. The vines, roots and stubble help to make the soil loose and easily cultivated.

10. They also absorb and retain moisture that will aid the next crop to go through a drouth.

11. The roots are good subsoilers. They go to a considerable depth and open up the earth so the air and water can make a deeper soil.

12. Peas get their nitrogen from the air free of cost to the farmer, so that very little nitrogen is needed in their fertilizers except for poor soils.

13. Peas feed very strongly upon the supply of potash and phosphoric acid, therefore, these substances should be supplied to them. Many crops fail for lack of acid and potash.

14. The price of peas is high, but this does not keep the wise farmer from planting them. He is thinking of the \$10 in value he is to receive later for every dollar invested in them now.

15. Let no farmer neglect to plant abundantly of this important crop. Plant some for hay, plant some on poor land for turning under, plant some for grazing horses, cattle, hogs and other farm stock, and by all means plant and cultivate a few acres from which to obtain seed peas for next year's planting. Then you will rejoice if the price is high.

16. Plenty of cow peas on the farm makes loose fertile lands, strong, fine stock and contented, prosperous farmers. Plant peas, farmers, plant peas.

ala - 1916



*The Progressive Farmer*

*Feb. 19, 1916.*

### Don't "Burn Off" Any Land This Year

**I**N WRITING *The Progressive Farmer* once, Dr. Seaman A. Knapp said that one of our great needs in the South is to "use less fire and more sense in dealing with our fields". We have always stood in need of this shrewd counsel, but never more than now. With fertilizer higher than ever before in human history, farmers should see to it that every possible ounce of trash, grass, straw, etc., is plowed under and that nothing is burnt.

The Lord's way of making land rich is to get humus on it—set it to growing vegetation and let the decaying leaves and other matter enrich the soil. And yet when the Almighty offers this help to us, ten thousand farmers in every state come along and reject and spurn his help—"burn off" their lands and so keep them poor in spite of the Lord's effort to add to their fertility.

Let's not "burn off" any land of any kind this year.



UNITED STATES DEPARTMENT OF AGRICULTURE,  
BUREAU OF PLANT INDUSTRY,

WASHINGTON, Lake Charles, Louisiana,

September 10th, 1906.

FARMERS' COOPERATIVE COTTON  
DEMONSTRATION WORK.

Dear Sir:-

As we note that the bollworm is doing considerable damage throughout the country, it occurs to us that it is a good time in which to suggest to the farmers a remedy for this pest. The remedy is suggested in Farmers' Bulletin #212 U. S. Department of Agriculture on page 32 as follows:

"In the cultural system, by which profitable crops of cotton may be grown in spite of the presence of the bollworm, the following procedures are important: (1) Thorough plowing of the land during the fall or winter months to destroy as many as possible of the hibernating pupae in the soil; (2) the use of seed of early fruiting varieties of cotton; (3) the use of fertilizers to hasten and increase the growth of plants and the formation of fruit; (4) planting at the first practicable date in the spring; (5) early and frequent cultivation.

The use of corn as a trap crop is recommended. In planting cotton leave vacant strips across the fields every 200 or 300 feet sufficiently wide for planting 10 or 12 rows of corn. The corn should be planted so that it will be in prime silking condition about August 1st. Under favorable conditions of rainfall and with good cultivation, Mexican June corn planted by June 1st, will be in proper condition by August 1st. Plant cowpeas in the corn belts so that the peas will be flowering at the time the silks and tassels appear on the corn, thus furnishing feed for the moths and keeping them out of the cotton fields. Much the same benefits may be secured by planting patches of late corn on different parts of the plantation, as after oats, wheat, etc. In all cases peas should be planted in the corn. The corn thus grown may be harvested in the usual way. The corn should not be planted for trap purposes in belts through the cotton field at the usual time of planting in the spring. To be of value in bollworm control it should not be in silk and tassel until about August 1st.

During the season of severe bollworm injury, poisons may be profitably used on cotton. Poisons should be applied late in July and early in August to secure the maximum destruction of young larvae of this generation. Two or three applications may be necessary at intervals of a week or ten days. After rains the applications should be immediately repeated. Paris green at the rate of from 2 to 3 pounds per acre for each application will be satisfactory. It is best applied in dry condition, either pure or mixed with cheap flour, and dusted over the plants by the usual pole-and-bag method or by means of dust spray machine."

SAK--IK.

Very truly yours,  
S. A. Knapp,  
Special Agent.



*Memoir*

DR. SEAMAN A. KNAPP.

Just as The Bulletin went to press last month, the intelligence was flashed over the wires that Dr. S. A. Knapp of the United States Department of Agriculture, Bureau of Plant Demonstration, was dead. His demise came almost without warning, and was a sad blow to thousands of friends throughout the South who learned to look upon him as a true friend and co-worker.

The work conducted by Dr. Knapp was especially popular with the farmers of this section, being a demonstration of methods that result could be readily seen and were convincing. It easily stood at the head of all undertakings by the Agricultural Department for the benefit of the farmers. It was begun and developed under the close personal supervision of Dr. Knapp.

Although a native of Iowa and educated in the Middle North, he had spent a number of years in Texas and Louisiana, acquainting himself with conditions in this section and studying the needs of the South. He understood our people and the best methods of enlisting their sympathy and co-operation in the movement that was destined to produce such excellent results in the way of bettering farm conditions.

His death was a sever blow to this section. His place cannot be filled. A son, Dr. Bradford Knapp, has taken up the work and will give to it his best efforts. Our people should extend to him every help and co-operation. They will do it. He will be aided by all interests in carrying out the great movement planned and begun by his father. Let it be hoped that the work will go on as begun, and all give assistance to that end.



# Economize---Cut Down the Expenses of the Farm.

## Home Fertilizers for the Farm.

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It is essential to their ultimate success that the farmers of the South be impressed with the importance of giving more attention to the saving of farm manures. The conveniences of commercial fertilizers, the ease with which they can be obtained (they can always be bought on credit) together with the fact that their use requires little forethought—has led most of our farmers to forget or neglect the home supply. Another reason why home manures have been neglected is, that owing to the lack of an intelligent care of them the results following their use have not been satisfactory. If such good has been obtained from them, it is usually reached only by their use in very large quantities, which it is difficult to secure upon the average farms.

We should not be understood as opposing the intelligent and economical use of commercial fertilizers. Commercial fertilizers have proven themselves of great value and are destined to play even a greater part in our farm economy; but it is only when used as supplements to the home product that this will be so. In the first place they are costly; and secondly their exclusive use instead of effecting a permanent improvement of the soil, actually hastens the depletion of that soil of its plant food. It is only when used with green manures and barn yard manures that the most permanent improvements can be accomplished. It therefore behooves the farmers of the South to give more attention to the conservation of farm manure. The small value frequently realized from the use of barn yard manures arises from the fact that it was not properly saved and handled by the farmer, and the manure had lost the greater part of its plant food. Barn yard manure may be regarded as just so much vegetable matter. It differs, however, from the food from which it is derived in that having been once digested, its nutritive elements are more available for

liquids and prevent their loss. If not practicable to pursue either of these methods, then a cheap shed can be provided and the manure stored in it, until ready for use.

There is one precaution that must be observed when the shed is used, and especially if the droppings from the horses predominate. Under these circumstances the manure is apt to heat. This should be avoided by dampening it. For this reason it is a good plan to have a leaky shed—one that will not permit enough water to enter and leak through; but will leak enough to keep the manure moist. In case of protracted drouth there should be artificial means of watering the compost. The question may arise with the farmer as to whether it is more economical to go to this trouble and expense with his manure, or to depend upon the commercial source for fertilizers. This question soon answers itself in the affirmative when the following facts are considered:

First, bear in mind that while he may buy an equal number of pounds of plant food, yet he can not get it in so good a form, nor does the commercial fertilizers have so great an effect. It does not add vegetable matter, does not start soil fermentation and does not correct mechanical defects of the soil. A ton of well preserved manure from a well fed horse contains about 9.3 pounds of nitrogen; 5.2 pounds of phosphoric acid; 9.6 pounds potash—plant food that would cost \$2.21 bought as commercial fertilizer. A horse weighing one thousand pounds will produce about twelve tons of manure per year and this manure is consequently worth 7.6 cents per day, or about \$27 per year. The manure from the average cow is worth about 6.5 cents a day or \$23.20 per year. These values are based upon the presumption that the animals are well fed. The manure is nothing but the food of animal in a different form. When

worth \$2.00. When that heap was uncovered it falls to \$1.70 and the unprotected thin layer at the end of that time is worth only \$1.10. This is not the extent of the loss for that portion of the fertilizer ingredients that are left are the least valuable, and what we have, is really, only the skeleton as it were, of the formerly valuable manure. This tremendous loss from improper handling, easily explains why our farmers find it necessary to use such large quantities of manure, to derive much benefit from it. It will be observed that even when the manure is stored in the shed there is a loss. By covering the manure heap with certain substances it is found that not only can this loss be prevented, but that our stock of manure can be very greatly increased. A ton of ordinary loam will absorb 13 pounds of nitrogen, and if placed over the manure heap will prevent all loss of that substance. Sawdust will absorb 8 pounds per ton. Wheat straw will absorb nearly 4 pounds of the nitrogen. The necessity of absorbents brings us to the consideration of the compost heap. By the compost heap the farmer is able to multiply his available manure many fold. We should remember that anything of vegetable or animal origin is a valuable fertilizer, if put in a proper condition. The compost heap is the means of doing this. One ton of leaves contain 16 pounds of nitrogen and 6 pounds of phosphoric acid and 6 pounds of potash; and at ordinary values for these substances is worth nearly \$3.00. A ton of straw similarly worth \$2.25 and sawdust \$2.20. These values, of course, are based on their total composition. In actual practice it is safe to assume that half of their values are available. But it is only after undergoing fermentation in the compost heap that these values are available. That it will pay the farmer to give more attention to the compost heap has been repeatedly proven by practical trials. At the

ners. If stable manure, or mold are not available, use straw, leaves, or any waste material, even weeds. Be sure and wet all thoroughly. After the heap has stood from four to six weeks, it should then be worked over and well mixed. This is best done by beginning at one end and cutting it down vertically, throwing the material in a pile behind. Wet again and cover again with loam. It will be ready for use in three or four weeks.

The above proportions are for use with cotton. Where it is desired for corn the quantity of phosphate can be reduced, use only fifty pounds instead of one hundred to each layer. Thirty bushels or one two-horse wagon load per acre of this compost will produce very marked results. When this quantity is used, it is best applied in the drill, just prior to planting. If preferred, the rows can be marked off, the compost distributed in this furrow and then bed it. Be careful, however, not to bury it too deep. It is safe to estimate that this quantity of such a compost will more than double the crop on poor land the first year. But the benefit does not stop here. Its effect will be shown for a number of years. Thus the composted land can be rotated and in the course of a very few years all the land can be permanently improved. With due attention to the compost heap, the average farmer can easily produce from twenty to forty loads. This means that, at least, that number of acres can be permanently improved each year. Bearing in mind the supplemental value of the compost, and it is safe to say that at least 50 per cent can be added to the productiveness of the average one hundred acre farm, a year, and that simply at the cost of a few tons of acid phosphate and a little labor. With the compost and the cow-pea at his service to save and gather nitrogen for him, the average farmer is simply throwing his money away



ical use of commercial fertilizers. Commercial fertilizers have proven themselves of great value and are destined to play even a greater part in our farm economy; but it is only when used as supplements to the home product that this will be so. In the first place they are costly; and secondly their exclusive use instead of effecting a permanent improvement of the soil, actually hastens the depletion of that soil of its plant food. It is only when used with green manures and barn yard manures that the most permanent improvements can be accomplished. It therefore behooves the farmers of the South to give more attention to the conservation of farm manure. The small value frequently realized from the use of barn yard manures arises from the fact that it was not properly saved and handled by the farmer, and the manure had lost the greater part of its plant food. Barn yard manure may be regarded as just so much vegetable matter. It differs, however, from the food from which it is derived in that having been once digested, its nutritive elements are more available for plants. The fact that this is the case, while constituting one of the chief reasons why these manures are so beneficial, is at the same time the reason why they so readily lose their value. Available plant food, means plant food that is easily decomposed and soluble in water. If the manure is allowed to heat, large quantities of the nitrogen are driven off into the atmosphere.

On the other hand, if the manures are left exposed to the elements, the water from rains easily and rapidly leaches out the soluble plant food, so in order to get the most valuable manure either of these sources of loss must be avoided. There are several ways of accomplishing this. Probably the best plan, where it is practicable, is to haul the manure direct upon the land and plow it in. Again, especially with horse manure, etc., it is good to allow the manure to remain in the stable, using plenty of litter. The animals tramp it down, thus excluding air and as it is kept dry it will keep with practically no loss. The little used in bedding not only is of value itself as a fertilizer, but serves also to absorb all

commercial source for fertilizers. The question soon answers itself in the affirmative when the following facts are considered:

First, bear in mind that while he may buy an equal number of pounds of plant food, yet he can not get it in so good a form, nor does the commercial fertilizers have so great an effect. It does not add vegetable matter, does not start soil fermentation and does not correct mechanical defects of the soil. A ton of well preserved manure from a well fed horse contains about 9.8 pounds of nitrogen; 5.2 pounds of phosphoric acid; 9.6 pounds potash—plant food that would cost \$2.21 bought as commercial fertilizer. A horse weighing one thousand pounds will produce about twelve tons of manure per year and this manure is consequently worth 7.6 cents per day, or about \$27 per year. The manure from the average cow is worth about 6.5 cents a day or \$23.20 per year. These values are based upon the presumption that the animals are well fed. The manure is nothing but the food of animal in a different form. Where common manure heap is used for all farm animals, together with other farm refuse, while its composition is necessarily variable, yet it can safely be assumed that a ton of it will contain 12 pounds of nitrogen; 5 pounds of phosphoric acid and 6 pounds of potash. These are worth in the form of commercial fertilizers from \$2 to \$2.25 per ton. These values do not take into consideration the indirect benefits of the soil. While the actual plant food contained in a ton of barn yard manure is worth at least \$2.00, yet, it is safer to say that the former will derive nearer \$3.00 worth of good from it.

Now let us see the effect on manure of improper handling. When left in loose heaps under cover, it has been found that manure loses 1.4 per cent of its nitrogen. When these heaps are not covered this loss amounts to 30 per cent, and when exposed in thin layers, as is the case when it is left on the barn lot, this loss increases to 64 per cent. Putting it differently, the same manure, that when properly cared for is worth \$2.25 per ton, if allowed to remain in loose heaps for twelve months is

of that substance. Sawdust will absorb 8 pounds per ton. Wheat straw will absorb nearly 4 pounds of the nitrogen. The necessity of absorbents brings us to the consideration of the compost heap. By the compost heap the farmer is able to multiply his available manure many fold. We should remember that anything of vegetable or animal origin is a valuable fertilizer, if put in a proper condition. The compost heap is the means of doing this. One ton of leaves contain 16 pounds of nitrogen and 6 pounds of phosphoric acid and 6 pounds of potash; and at ordinary values for these substances is worth nearly \$3.00. A ton of straw similarly worth \$2.25 and sawdust \$2.20. These values, of course, are based on their total composition. In actual practice it is safe to assume that half of their values are available. But it is only after undergoing fermentation in the compost heap that these values are available. That it will pay the farmer to give more attention to the compost heap has been repeatedly proven by practical trials. At the North Louisiana Experiment Station, Calhoun, La., the following results were obtained. The land normally would produce one-fourth bale of cotton and seven to ten bushels of corn. By the annual application of thirty bushels per acre of a compost composed of stable manure, cotton seed acid phosphate and loam this yield has been increased to from one and one-fourth to one and one-half bales of cotton and fifty to sixty bushels of corn. The annual expense of applying this compost amounted to a little over one dollar per acre.

#### How Made.

Locate it in an old shed, or build a shed of any kind of old material for a roof. If it leaks some, all the better, spread on the ground in a layer ten inches thick ten bushels of stable manure, wetting thoroughly. Over this scatter 100 pounds of acid phosphate; then follow with another layer of manure and phosphate, etc.; continue these alternate layers until all material is used up, or until the pile has become inconveniently high; then cover the pile, both top and sides with four inches of forest mold or good loam, taken from the fence cor-

marked off, the compost distributed in this furrow and then bed it. Be careful, however, not to bury it too deep. It is safe to estimate that this quantity of such a compost will more than double the crop on poor land the first year. But the benefit does not stop here. Its effect will be shown for a number of years. Thus the composted land can be rotated and in the course of a very few years all the land can be permanently improved. With due attention to the compost heap, the average farmer can easily produce from twenty to forty loads. This means that, at least, that number of acres can be permanently improved each year. Bearing in mind the supplemental value of the compost, and it is safe to say that at least 50 per cent can be added to the productiveness of the average one hundred acre farm, a year, and that simply at the cost of a few tons of acid phosphate and a little labor. With the compost and the cow-pea at his service to save and gather nitrogen for him, the average farmer is simply throwing his money away when he buys that substance in commercial fertilizer; for he could raise all of this substance his land needs upon his farm. Economy should be his watchword; and there is no better place for him to start than by stopping the waste of nitrogen that is so flagrant throughout the whole South. The soil is the farmers bank, and the fertility stored therein by nature is his capital. He can no more expect to draw indefinitely upon this supply without ultimately exhausting it, than he could expect to be honored without making fresh deposits.

The people of the South have been doing this for years and their credit in nature's bank is getting low. Every ton of hay sold from the farm, the manure from which is not returned to the soil takes off \$5.00 worth of fertility. Cotton seed about \$11.00; corn, \$6.75. This has been going on till the farm responds reluctantly in many of our drafts.

We trust that we have made the values of the farm manures sufficiently evident, and more farmers will give attention to their saving.

S. A. KNAPP.

Lake Charles, La., Nov. 16, 1906.



*The Progressive Farmer & Southern Farm  
Lett.*  
*April 22, 1911.*

## **The Late Dr. Knapp and Some of His Sayings**

(See his "Ten Commandments of Agriculture" on Page 18.)

### **800 Per Cent Bigger Profits Possible in the South.**

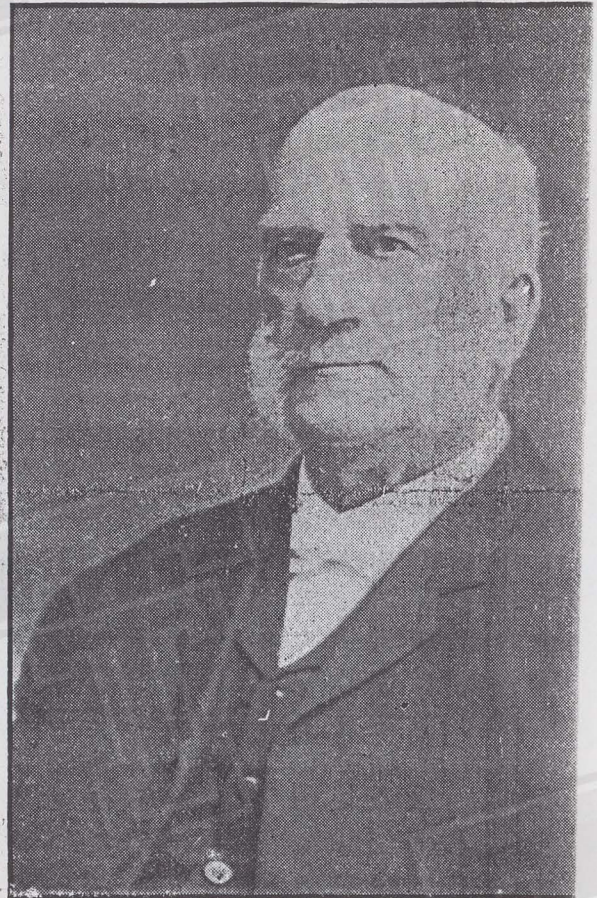
ESTIMATE that there is a possible 800 per cent increase in the productive power of the farm laborers in the average Southern State, and I distribute the gain as follows:

- 20 per cent to a rotation of crops and better tillage;
- 10 per cent to better drainage;
- 10 per cent to seed of higher vitality, thorough bred and careful selection;
- 50 per cent to the use of more economic plans for feeding stock, and the abundant use of legumes;
- 300 per cent to the use of more and better mules and farm machinery, and
- 200 per cent to the production of more and better stock.

### **More Machinery and Horse-Power the Greatest Need of the South.**

THE AGRICULTURAL reform, from which the greatest net gain will be realized in the South, and at the least cost, is the use of more power and improved machinery on the farm. A careful inquiry into the causes for the farm workers in the different States varying so widely in the values produced will demonstrate that it was mainly due to the ratio of horses or mules employed to the number of workers upon the farms. In Iowa, where each farm worker produces \$611.11 annually, exclusive of stock, nearly four horses per worker were used. In Vermont, with an earning capacity of \$328.37, two horses per worker were used, and in South Carolina, where each farm worker produced \$144.46, one mule for two laborers was the average farm power. An analysis of the Southern States shows a much smaller use of power on the farm, and consequently less use of good machinery than in the Northern States, and a correspondingly lower earning capacity. Where the South Carolina farmer uses one mule, weighing 800 to 900 pounds, and one man to plow, accomplishing less than an acre per day from 3 to 4 inches deep, the Iowa farmer uses at least three horses, weighing from 1,400 to 1,500 pounds each, and plows four acres per day, 6 to 8 inches deep. He uses five and one-half times the power and accomplishes about eight times the work in a day, if depth of plowing be considered. What is true of plowing is equally true of other lines of farm work. There has been considerable instruction along the line of how to produce larger crops per acre, but they have not taught the importance of working more acres in a day.

This is the key to agricultural reform: More power and better machinery on the farm, and more accomplished in a day, heavier mules and more of them. Away with the half-a-mule farm and convert the one-mule farm into a four-mule farm. What revolutionized manufacturing in the United States and made us the first of productive nations? More power and less hand work. What will hold the boys on the farm and multiply the wealth of our farmers? More power and less hand work.



DR. SEAMAN ASAHEL KNAPP.

Born Essex Co., N. Y., Dec. 16, 1833.—Died Washington,

### **His Opinion of The Progressive**

THE PROGRESSIVE FARMER suits me. It is with a fast team and a good driver. I have to watch the race, but I will be in at the finish cheering. Maybe they will let me tie on the ri



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## The Late Dr. Knapp and Some of His Sayings

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### Cent Bigger Profits Possible in the South.

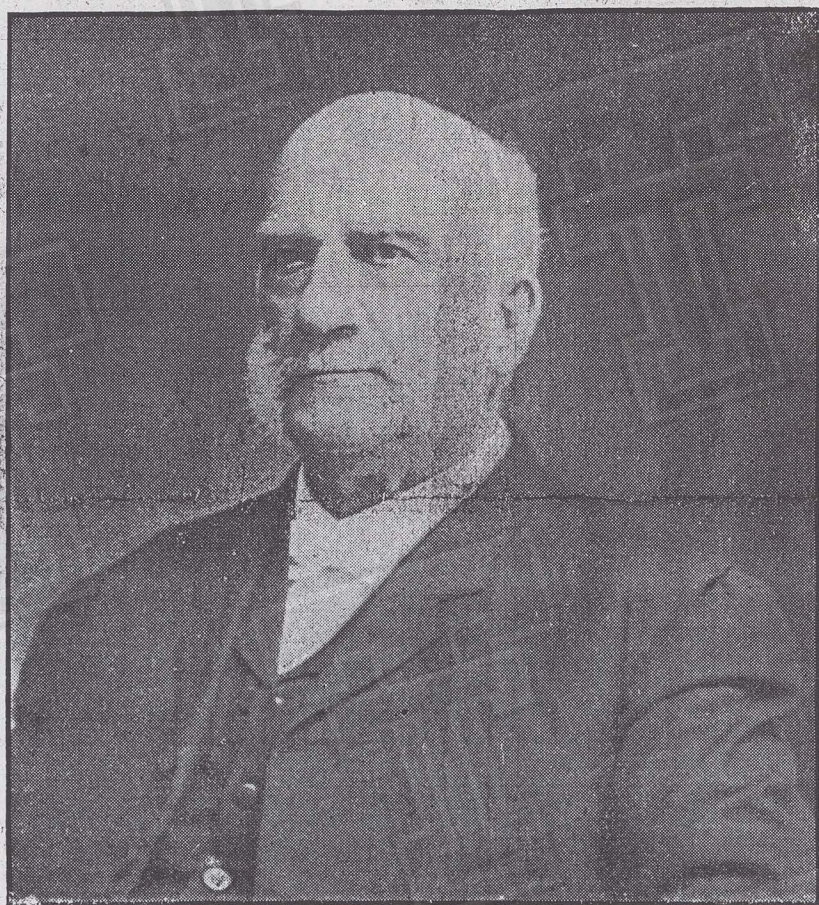
That there is a possible 800 per cent increase in the live power of the farm laborers in the average Southern States distribute the gain as follows:

- 100 per cent to a rotation of crops and better tillage;
- 100 per cent to better drainage;
- 100 per cent to seed of higher vitality, thorough bred and careful selection;
- 100 per cent to the use of more economic plans for feeding stock, and abundant use of legumes;
- 100 per cent to the use of more and better mules and farm machinery;
- 100 per cent to the production of more and better stock.

### Machinery and Horse-Power the Greatest Need of the South.

AGRICULTURAL reform, from which the greatest net gain is realized in the South, and at the least cost, is the use of improved machinery on the farm. A careful inquiry into the values produced will demonstrate that it was mainly the ratio of horses or mules employed to the number of men on the farms. In Iowa, where each farm worker produced annually, exclusive of stock, nearly four horses per man were used. In Vermont, with an earning capacity of \$328.37 per worker were used, and in South Carolina, where each worker produced \$144.46, one mule for two laborers was used for farm power. An analysis of the Southern States shows a smaller use of power on the farm, and consequently less use of machinery than in the Northern States, and a correspondingly smaller earning capacity. Where the South Carolina farmer plows, weighing 800 to 900 pounds, and one man to plow, plowing less than an acre per day from 3 to 4 inches deep, the farmer uses at least three horses, weighing from 1,400 to 1,600 pounds each, and plows four acres per day, 6 to 8 inches deep. The man and one-half times the power and accomplishes about the same work in a day, if depth of plowing be considered. The same is equally true of other lines of farm work. There has been considerable instruction along the line of how to grow crops per acre, but they have not taught the importance of plowing more acres in a day.

The key to agricultural reform: More power and better machinery on the farm, and more accomplished in a day, heavier mules and men. Away with the half-a-mule farm and convert the one-half to a four-mule farm. What revolutionized manufacturing States and made us the first of productive nations? More power and less hand work. What will hold the boys on the farm and the wealth of our farmers? More power and less hand work.



DR. SEAMAN ASAHIEL KNAPP.

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### His Opinion of The Progressive Farmer.

THE PROGRESSIVE FARMER suits me. It is on the right track with a fast team and a good driver. I have not much time to watch the race, but I will be in at the finish and do some cheering. Maybe they will let me tie on the ribbons!"



# THE BULLETIN

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JACKSON, MISSISSIPPI, MAY, 1911.

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## DR. SEAMAN A. KNAPP.

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Just as The Bulletin went to press last month, the intelligence was flashed over the wires that Dr. S. A. Knapp of the United States Department of Agriculture, Bureau of Plant Demonstration, was dead. His demise came almost without warning, and was a sad blow to thousands of friends throughout the South who learned to look upon him as a true friend and co-worker.

The work conducted by Dr. Knapp was especially popular with the farmers of this section, being a demonstration of methods that result could be readily seen and were convincing. It easily stood at the head of all undertakings by the Agricultural Department for the benefit of the farmers. It was begun and developed under the close personal supervision of Dr. Knapp.

Although a native of Iowa and educated in the Middle North, he had spent a number of years in Texas and Louisiana, acquainting himself with conditions in this section and studying the needs of the South. He understood our people and the best methods of enlisting their sympathy and co-operation in the movement that was destined to produce such excellent results in the way of bettering farm conditions.

His death was a sever blow to this section. His place cannot be filled. A son, Dr. Bradford Knapp, has taken up the work and will give to it his best efforts. Our people should extend to him every help and co-operation. They will do it. He will be aided by all interests in carrying out the great movement planned and begun by his father. Let it be hoped that the work will go on as begun, and all give assistance to that end.

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After conference with Secretary Wilson and Dr. Knapp, the General Education Board made a small contribution for the extension of this work into the State of Mississippi. This was in 1906. In 1907 the work was extended to Alabama and to Virginia; the latter State presenting conditions radically different from those existing in the cotton-growing sections. So successful was this work of demonstration farms that in the following year the General Education Board supplied funds for the extension of the work to all the Southern States. From this time forth Dr. Knapp became the apostle of agriculture in the Southern States. He traveled almost constantly; he addressed members of the Legislature, agricultural colleges, meetings of bankers and business men and groups of practical farmers. He not only taught them how to raise cotton and corn, but he taught the farmer how to find out the cost of his crop and whether he was making or losing money. He said: "Agriculture may be divided into eight parts, one-eighth is science, three-eighths is art and four-eighths is business management." He discussed the economics of the situation with merchants and bankers, showing them that if the farmer would first make his living on the farm, and then raise stock and make crops of cotton and corn which would bring him in money, he would be able to purchase not the bare necessities of life, as heretofore, but the things that make for comfort and even luxury. In this way he secured the hearty assistance of merchants and bankers in the coöperative demonstration farm work and began a pervasive movement for economic and social betterment. Dr. Knapp associated with him as State, county, and local supervisors many men of insight and power, but he was the inspiring and controlling spirit of them all.

#### BOYS' CORN CLUBS

In the course of his work he found that boys were interested,—school boys from ten to eighteen years of age. With the coöperation of State and county superintendents of education he organized these boys into corn clubs. The story of this movement is so well known that details are not called for. It is estimated that this year 100,000 boys will be engaged in corn-growing contests throughout the Southern States. This work is important from the standpoint of economics, but its greatest significance is in the interesting of boys in practical farming and the awakening in them of a desire for a wider and bet-

ter knowledge of agricultural science and the methods of its application.

#### GIRLS' CANNING AND POULTRY CLUBS

Dr. Knapp was a man of vision and of imagination. The success of one form of work gave him a pinnacle of outlook from which he saw other forms of successful endeavor. Something must be done, he said, to interest the girls and to bring about the economic independence of the women of the farm. During the last year of his life he organized Canning and Poultry Clubs for Girls, and on the occasion of his last visit to New York he arranged with the General Education Board for a large appropriation to extend this work to all the States of the South.

#### THE WORK TO BE CONTINUED

"Will the work be continued now that Dr. Knapp has gone from us?" people are asking. Emphatically, yes. Dr. Knapp believed in organization, and the chief glory of all that he did is the fact that he so organized his work that it can be and must be continued. His son, Mr. Bradford Knapp, has been appointed his successor. For some time he was associated with his father in special preparation for this important responsibility. The entire organization, district, State, county, and local, is so efficient and its parts are so thoroughly coördinated that there can be no question of the continued success of this valuable work.

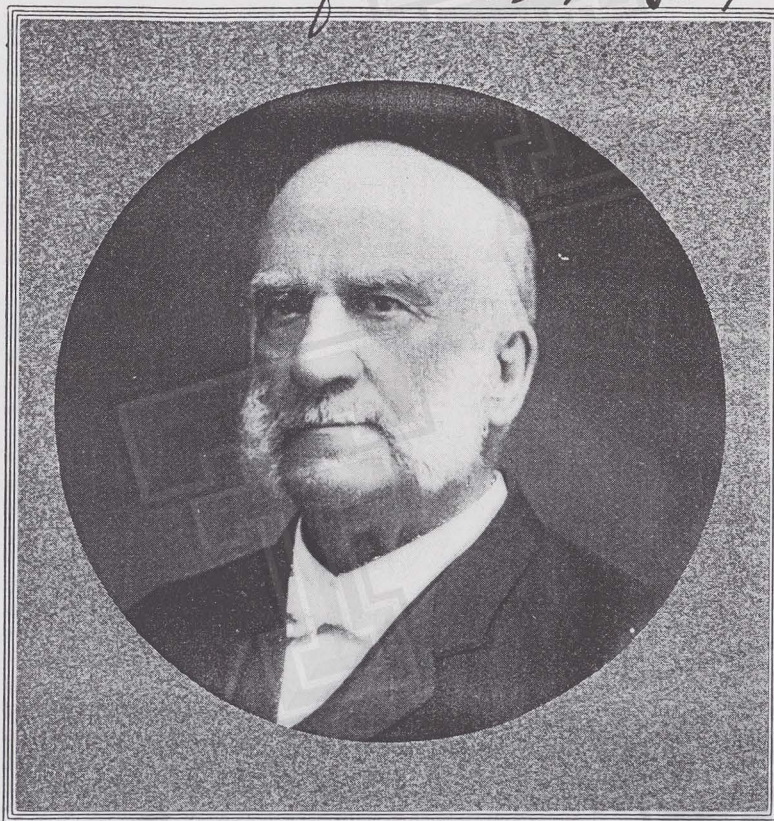
One could not be long in Dr. Knapp's company without appreciation of his intellectual greatness, his moral earnestness, his abounding common sense, his imagination and vision, his knowledge of men, his breadth of view combined with a grasp of the simplest details, the practicability of his methods, and why he gained the confidence of the common man and became his leader into new hopes and new achievements. He was a great man and had the simplicity of character and tenderness of spirit and wealth of sympathy which belong to greatness when in its highest estate. He gained the confidence and secured the following of statesmen in their counsels. His addresses were listened to by great companies of horny-handed men called from their toil. He could counsel with groups of experts who were seeking new methods. He could win the love and secure the following of the simplest child in the home. He loved his fellow men. There was no cant about him. He lived above trifles. Work was his pleasure.



*Review of Reviews - Page 682*

*June, 1911.*

*Evans, J. A.*



SEVENTY YEARS OF PREPARATION FOR SEVEN YEARS OF WORK

(This does not imply that highest usefulness did not characterize Dr. Knapp's life during these seventy years, but that the experience of seventy years of splendid living and high service were massed in one successful effort to meet a great crisis in our national life)

## SEAMAN A. KNAPP'S WORK AS AN AGRICULTURAL STATESMAN

BY WALLACE BUTTRICK

(Secretary of the General Education Board)

SEAMAN A. KNAPP was born in Essex County, New York, on the shores of Lake Champlain. His father was a physician. I have heard him speak of the generous culture and fine wisdom of his father and mother. He was graduated from Union College, Schenectady, N. Y., in 1856, during the presidency of Dr. Eliphalet Nott. For some years he was teacher and associate manager of Fort Edward Collegiate Institute. In 1863 he went to Iowa, where he became a successful farmer and stock raiser. Before long he was talking to his neighbors about improved methods of farming; later he became state lecturer on agricultural topics and afterward teacher and president of the State Agricultural College at Ames, Iowa.

In 1884 he went to Louisiana and inaugurated the upland rice industry. For several years he was president of the Rice Association of America. In connection with his promotion of rice-growing he studied general agricultural conditions in the Southern States. When the Hon. James Wilson became Secretary of Agriculture in 1897 he sent for his old friend, Dr. Knapp, and asked him to become his chief associate in promoting better agricultural conditions in the Southern States.