

participation in leadership development contests such as public speaking, all of which vitalizes the movement by greater local interest on the part of students and patrons.

4. F. F. A. athletics and social stunts are sponsored.

5. Local chapters combine to build county cabins at the State F. F. A. camp.

6. County chapters function to stimulate interest through publicity and are especially valuable in reporting annual results where the County Board plan of school administration is in use.

7. A county organization vitalizes the entire F. F. A. and agricultural program where the schools are grouped about the main trade center which desires to support the general agricultural progress of all smaller educational centers alike.

—Arkansas Visitor

### Ohio F. F. A's. are Active

LOYD Oswalt of Monroe Township, Darke County, Ohio vocational agriculture department, is a real future farmer and has an enviable record as a hog producer. Under the guidance of his instructor, W. W. Smith, he developed ton litters from every litter raised on the home farm this year. The first two litters of 9 pigs each made an average of 261 and 282 pounds. Litter No. 3 of 11 pigs averaged 263 pounds. These weights were taken according to ton litter rules—at 180 days. The entire lot averaged a gain of 3 pounds per day during the last 30 days of feeding. The feed cost was 2.2 cents per pound of pork produced, and the hogs brought \$4.35 on the market. Scientific feeding, giving rapid, substantial gains, brought a profit even on a low market.

Forty-two ton litters have been produced in 4 years by the boys at the Monroe Township agriculture department, a real record reflecting the results of systematic instruction.

Elmer Allen of Green Camp, Ohio, has an outstanding record as an F. F. A. member. This 18-year-old orphan lad graduated from the local high school last spring where he had been an active all-round student and athlete for four years. He is an ardent F. F. A. worker, has attained the degree of State Farmer, and was the champion public speaker of the state for 1932. Elmer's major farming interests are in poultry, and he has exhibited prize-winning birds at local, county, and the State Fair. He has several hundred dollars invested in farming and is looked upon as one of the dependable young rural leaders in his community.

### The Klondike Chapter

WHEN the agriculture boys of the Loranger (Louisiana) High School organized an F. F. A. chapter last summer, choosing an appropriate name became a problem. Since nearly every member had Klondike strawberries as his project, it was finally decided to call the chapter the Klondike Chapter.

We are proud of our agriculture room

painted the national F. F. A. emblem, and on the other, our chapter emblem which is a large yellow "K" and a red Klondike strawberry on a background of light blue. We have a large cabinet for filing records and keeping our F. F. A. equipment. We have an owl which we mounted ourselves. The plow and the ear of yellow corn are fastened to varnished, wooden shields. We have pictures of Washington and Jefferson, a picture of the rising sun, and our framed charter. Strawberry plants growing in window boxes and flower stands made by the members help beautify the room.

Members of the chapter have helped beautify the school grounds by building a fence and a concrete walk and by planting trees and shrubs.

To date four news letters have been issued by the chapter, and copies sent to all other chapters in the state and several outside of the state.

When the district public speaking contest was held at our school we acted as host to the delegates, their advisers, and the state officials. Over forty guests were served a luncheon of strawberries, cream, cake, and coffee.

### Nebraska Association Cooperates with U. S. D. A. in Control of Black Stem Rust

MR. Marion Yount, assistant leader of barberry eradication in Nebraska, reports splendid cooperation on the part of F. F. A. chapters throughout the state, in fighting black stem rust. Here are some of the activities he reports:

1. Two hundred forty-seven members inspected their home farms for harmful barberry bushes and notified the State Barberry Eradication office.

2. Ninety members notified the office relative to the degree of stem rust development in their home fields at harvest time.

3. Thirty-one slide exposure stations were established. These were to obtain information relative to the concentration of stem rust spores in the air in various parts of the state. This work was carried on for six weeks.

4. The slide sets were returned to the Barberry Eradication office from every station at the close of the exposure period.

The U. S. D. A. has expressed its appreciation and thinks this is a very unique record for a cooperative enterprise.—Nebraska F. F. A. News.

Perhaps some of you have heard that a room at Monticello, Jefferson's old home, is to be dedicated to the ideals and aims of Future Farmers of America. This is more than a rumor; it is true. At the Fifth Annual Convention a message was received from the president of the Thomas Jefferson Memorial Foundation, inviting the Future Farmers of America to dedicate this room at Monticello to the aims and ideals of the Future Farmers of America. The delegates voted unanimously to accept the offer. In 1933, then, a room in the home of Thomas

### Egg Laying Contest for Animal Husbandry Class

DURING the month of November the Animal Husbandry class of twenty-two boys started an egg laying contest. We found that no one was getting more than 20 per cent production and that less than 50 per cent of the class were feeding meat scraps in their ration. We decided that one of the main reasons for this low production was due to feeding rations low in protein. So we worked out rations with various feeds and the boys chose the one most economical for them, yet one that supplied all the desired nutrients. Also, each boy made an egg chart out of old card board and fastened a pencil to the chart with a rubber band so he would always have a pencil handy to record the production each day. These charts were fastened on the wall in the hen house. They were made out for the entire year with a place to enter the number of birds in the laying flock. Each month the boys will bring in their records and figure the per cent of production of their flock. We also plan to keep a large record sheet on the bulletin board in the class room recording the percentage of production of each boy's flock each month. In this way they may see whose flock has the highest record each month. The boy having the highest percentage increase of production for February over that of December will receive a prize given by one of the poultry papers we are using in the class room. The boys have taken considerable interest in this contest and some have already doubled their production.—E. G. Holt, Peotone, Illinois Fan-Mill.

### Day-School at Night

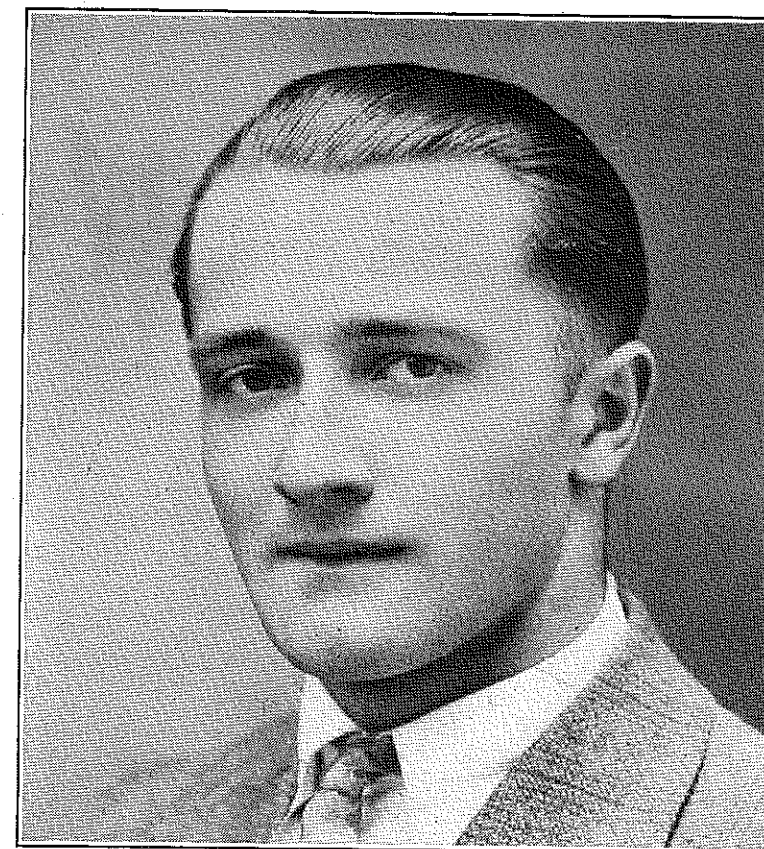
Once a year we have night school here. On this evening, school is conducted just as it is during the day. We manage to do about a half day's teaching in one evening. All parents and eighth grade students in the community are invited to visit and observe the school at work. We always have good attendance at these schools and I am sure the eighth grade students get a pretty good idea of what is expected of them the following year.—F. B. Norton, Maroa—Illinois Fan-Mill.

### Annual High School Day Each Spring

THE Future Farmer chapter of Galatin County High School at Bozeman, Montana are hosts each spring to over 125 rural boys and girls at the annual High School Day. The purpose of this event is to show the rural children the different departments of the high school. Demonstrations are put on by the commercial, chemistry, home economics, and agriculture departments. A lunch furnished by the Future Farmers and prepared by the home economics class is served the visitors. A show and band concert conclude the program.

Charles Dickens—It is well for a man to respect his own vocation, whatever

# Agricultural Education



Clarence Goldsberry, Houston, Missouri, who was recently awarded the title of "The Star Farmer of America"

Members of a changing society "not only must be possessed of certain types of knowledge and skill which were common at the time when they went to school, but they must be trained in such a way as to make them adaptable to new conditions."—Alexander Inglis.

# EDITORIAL COMMENT

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company at Des Moines, Iowa.

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## SERIES OF CONTRIBUTIONS OF LEADERS IN EDUCATION

**B**EGINNING on page 147 is an article by Dr. R. M. Stewart of Cornell University, on the contributions to education of the late Alexander Inglis. This is the fifth article in the series, the four articles published being on the contributions of John Dewey, William James, W. W. Charters, and Edward L. Thorndike. There will be some four or five other articles in the series. Type on all articles of this educational series is being held. At the close of the series, the articles will be brought together in attractive booklet form to be sold at a very nominal price. The booklet should have a wide sale. When you show these articles to your friends, tell them about the booklet.

## OTHER A. V. A. PAPERS

**E**VERY real student of agricultural education will be interested in reading "Some Changing Tendencies in Adult Education in Agriculture," by Dr. H. E. Bradford of the University of Nebraska, beginning on page 149 of this issue of the magazine. This is one of the outstanding papers presented at the recent American Vocational Association. We are happy to be able to present to our readers such a discussion of tendencies in adult education. Our readers will appreciate the contribution.

Beginning page 151 is a paper dealing with factors contributing to the success of evening schools, presented before the High School Teachers of Vocational Agriculture Sub-section of the A. V. A. Page 152 is a paper on "The Class Project as a Form of Supervised Practice," presented before the same section.

## TEACHER CONTRIBUTIONS

**T**HE editors of this magazine are very desirous of securing more teacher contributions. Teachers do plenty of things and have many ideas that should be written up. Frequently it never occurs to the teacher that he has an idea that should find its way to others. Some of our very best articles are written by teachers of agriculture, and we want more of these articles.

Articles written by teachers of vocational agriculture are to be sent to the head state supervisor of vocational agriculture or to the person designated by the supervisor. This is now the policy of the magazine. In nearly all cases the state supervisor himself has consented to be responsible for teacher contributions from his state. The supervisor, after editing the articles if necessary, will forward them to the special editors in whose departments the articles belong.

The magazine has adopted this policy because it should

the state and thruout the United States. They can render the teachers, their state, and the magazine a big service in selecting articles that carry ideas to other teachers. Where the articles are not forthcoming, supervisors can make specific requests. They are in position to know what their teachers have done, and often can adapt the article slightly so as to make it much more valuable for publication. The article as forwarded by the supervisor to the special editor will be in such form as to be fair to the state.

The magazine is not interested in mere publicity. A good article for the local paper is not necessarily a good article for our magazine. For example, your department wins a big prize. That should get into the local paper. Unless there is a helpful suggestion back of winning the prize, such an article has no place in the magazine.

We do not mean to say that articles will not be accepted from the teacher direct. We do strongly suggest, however, that each state adhere to the general policy.

## DR. A. E. WINSHIP

**T**HE other day I read of the death of Dr. A. E. Winship. He was a grand old man, and did a great deal for education. Some of the things I have read or heard him say:

"The difference in men is the size of the units in which they measure. Using *inches* one must confine himself to short lines; with *feet* he can measure a long distance; with the *yard*, the *rod*, the *mile*, correspondingly larger distances. . . . Teachers must think of boys and girls out of school as well as in school, of tomorrow as well as today, of the after-graduation life as well as school life. . . . One cannot putter if he thinks in large units."

"We have glorified the slogan that we learn to do by doing, but have never even appreciated that we learn to know by knowing, and have never so much as suspected that we learn to feel by feeling. When doing becomes automatic, you cease to learn by doing. The fact that you are doing a thing well does not signify that you are learning anything by the doing of it, but rather that you are no longer learning to do it by doing it. . . . You learn to do by doing only while you are learning to do by doing."

"Don't fail to appreciate the nobility of the teacher's opportunity. If you are an honor to the profession, you will honor yourself and your profession by being in the profession proudly."

Dr. Winship was fond of telling about the Helper. As he told it, in Carbon City, Utah, on the Denver and Rio Grande Railroad, is a station which always appears in the time-table in large type:

HELPER AR. 9:15 P.M.

HELPER LV. 9:25 P.M.

Helper is so named because at this point the train receives an extra locomotive as a helper up the steepest grade in America. He said that he hoped he had been able, incidentally, to provide an extra locomotive as a Helper over some steep grade in a young man's life.—C. H.

## WHAT DO YOU OWE?

**"E**VERY person gives little to society, but receives much." In these days when we think we are unfortunate, maybe if we would stop to consider how much we receive, we would feel better. What have I done for agricultural education, and what has it done for me? Well, I've been pegging away for several years, and hope that I have done a little something for agricultural education. But when I begin to think about what agricultural education has done for me, I realize that I have given little and received much. If today I were to be thrown out of employment in agricultural education and could not re-enter the field, I would be glad that I had spent these years in the work. It has been a joyous work. It has given me a point of view, a philosophy of education, that I would not have had. It has thrown me with people whom otherwise I never would have known. It has furnished the spur and the means for me to continue my school work. I have received much

# Professional

## Alexander Inglis

R. M. STEWART, Cornell University, Ithaca, New York



R. M. Stewart

**"M**ERE adjustment to existing conditions is relatively easy, the path toward it is direct, and the returns immediate and readily perceived. The development of a capacity to readjust constantly to the changing conditions of life is relatively difficult, the path toward it is indirect, and the returns relatively remote and not readily observed. Consequently there is constant danger that we tend to over-emphasize adjustment to the neglect of the element of readjustment."

"Complete adherence to the principles of training for adjustment corresponds to the hand-to-mouth, day-to-day living in the economic field."

The above statements from that educational statesman, the late Alexander Inglis, sound like our recent discussions of educational programs; they were written almost twenty years ago, and were voiced by him many years earlier. Though I cannot claim ability to present adequately the contributions of Dr. Inglis to the development of vocational education, I am nevertheless happy to accept the fundamental point of view of his philosophy and to indicate certain outstanding positions that he took relative to education and that affect, therefore, an appropriate organization of vocational education. The above quotation from his printed discussions of 1915 are a part of his philosophy which for our purpose may be restated briefly in the following theoretical way: (1)

1. That the purpose of high school education is to maintain stability and at the same time to direct progress;

2. That secondary education is a means of adjusting institutions to one another and at the same time to develop capacity in human beings to provide for continuous readjustment of these institutions to the changes of a dynamic society;

3. That secondary education is pre-eminently the level of education where the problems of social organizations can and are best reflected and, therefore, it should deal with all problems;

4. That the education of this high school period should recognize the preparation of the individual for membership in a democracy;

5. That this level of education, therefore, must recognize the following four fundamental aims of secondary educa-

body; preparation (b) for the life of a prospective citizen; (c) for a prospective producer, and (d) for individual activities.

The statement of aims by our current leaders in secondary education, whether relating to the general purpose of the high school, to the construction and organization of the secondary curriculum, or to the methods of instruction, reflect in no uncertain terms the above expressions by Dr. Inglis, and it is doubtful if much improvement has been made in their statement. In the article of May 1915, the four aims have been stated succinctly as: (a) physical, (b) social-civic, (c) economic-vocational, and (d) individualistic-avocational. These, he would

and variability as the two facts of a state and, at the same time, a progressive society.

It is an interesting observation that I make, as I pen these lines, that in the report of President Hoover's Research Committee on Social Trends (2) is to be found a general statement on education, that Dr. Inglis said so compactly and clearly in his 1915 discussion, referred to above. The likeness is so marked that I am sure you will appreciate Dr. Inglis' vision the more if you may find his earlier ideas expressed by this Commission in the "summary of findings":

"The changes in industrial, economic and social conditions which have taken place in recent years create a demand for a kind of education radically different from that which was regarded as adequate in earlier periods when the social order was comparatively static. Members of a changing society must be prepared to readjust their ideas and their habits of life. They not only must be possessed of certain types of knowledge and skill which were common at the time when they went to school, but they must be trained in such a way as to make them adaptable to new conditions.

"Indeed, it may be said that the failures of coordination in modern life are attributable in no small measure to the tendency of human beings to fall into fixed habits and conservative attitudes. Many individuals are unsuccessful because of their inability to adjust themselves to the changes which take place about them.

"The schools deal with the world of ideas as well as vocational training. They are centers of thought. What ideas shall be passed on may be an issue in the future when the full power and influence of communication inventions in dealing with mass stimuli are realized. Among fascists, communists, churches, patriots, and social reformers it is already a matter of grave concern who shall control the ideas of the children."

Out of these early discussions of Dr. Inglis came a special emphasis upon the analysis of the needs of the school population,—heterogeneous on account of both physical and social heredity,—as the basis of the integration and differentiation of studies, which educators generally agree are essential to a balanced education. Individual differences and diversified social conditions make the study of needs imperative. Dr. Inglis was supported in his day by a naturalistic psychology that has tended to make education more real. Close upon the heels of individual need, came the demand for the re-education of



Alexander Inglis

contend, are the perpetual problems of society and should always be balanced in a program of secondary education. A rare quality of Dr. Inglis' discussions was his cognizance of the contributions made by those who had gone before. He did not claim that what he presented was entirely new, as so many writers are accustomed to do.

He believed in the dynamic character of society. When now we are reading about "education for a changing world", we should not forget that 20 years ago Dr. Inglis was arguing that the individual in government must readjust his preparation to the new privileges and responsibilities of a greater democracy that was coming. He saw the vision of change in the home, in the church, in vocation, as well as in the state, and he saw that the needs

ment. In his suggestions for conserving the stable elements of present education for the future, he emphasized the importance of the stable and comprehensive elements that inhere in all subjects of the secondary program.

This point of view is a valuable contribution to method in education, since it puts the emphasis not upon any subject of study *per se* but upon its organization and presentation in a given situation, expressive of individual need. His expression of this point of view is of particular significance, since Dr. Inglis himself achieved a reputation as a teacher of Latin in the Horace Mann School and prepared or collaborated texts in Latin. He saw the difference between Latin as merely a language discipline and language as serving the particular needs of individual students. His discussion of language study, 24 years ago was evidence of his grasp of educational principles. (3)

His proposed organization of curriculum studies to meet the needs of students emphasizes the "horizontal" rather than the "vertical" curriculum, for which the leaders of vocational education in agriculture are now striving. The "horizontal" curriculum would put the emphasis upon a developing program of studies to meet individual needs; the "vertical" would emphasize logical completeness of subject matter even if to eliminate the pupil. He would integrate so-called fundamental studies as constants and depend upon the variables of differentiated interests to provide for change and progress. This was a far-reaching view which may well have advanced more rapidly in our public schools.

#### Integration of Vocational Education

Dr. Inglis had not only called the attention of the educational public to the new point of view in so-called general education, but his evaluation in 1923 (4) of secondary and vocational education, showed his sound judgment regarding the organization and administration of vocational education. Therefore, while criticizing the "general curriculum" as having too many subjects for the staffs, and specifically criticizing the requirement of algebra and geometry in the first and second years, he criticized also the policy of the separation of vocational education from that of general education and of its separate financial support, as limiting its effectiveness in the high schools. In brief, he advocates closer integration rather than separateness,—a fact that some states recognized early and which other states are now coming to see as more conducive to democratization in education. He would have the work in vocational subjects so organized that the many rather than the few would have its benefits. He predicted that "Conditions will improve as the importance of vocational education is better recognized, as better financial policies are developed, and as school organizations are improved". As he was for flexibility in the general education curriculum, he was for flexibility in the vocational, controverting the idea that vocational

sented any appreciable part of Dr. Inglis' contributions to education, I may sum up the few points that I have tried to make in this brief paper as follows:

1. Education is more than adjustment to existing conditions, which may be relatively easy; it is the development of the capacity to readjust constantly, which is relatively difficult.
2. The purpose of the school, therefore, is to maintain stability through the mastery of the stable elements in all subjects and at the same time to understand and direct the variable elements of life as the basis of progress.
3. The secondary school has the function of providing not only for the preservation of institutions, home, school, church, family, etc., but for their modification.
4. The secondary level is the place where society must provide for social reorganization by preparing individuals here for membership in a democracy.
5. The four aims of education are: (a) physical, (b) social-civic, (c) economic-vocational, and (d) individualistic-avocational.
6. These four aims must be in balance if education in a democracy is to be maintained.
7. Analysis of the needs of the school population is of first importance in a heterogeneous society.
8. A naturalistic psychology rather than a rationalistic psychology more nearly represents the needs of the high school population.
9. All subjects in the curriculum possess certain stable and comprehensive elements, which supply the constant values of subjects; therefore, method would be of increasing importance as the content of school programs multiplies.
10. The emphasis upon what we call the "horizontal" curriculum is, therefore, essential in building programs of study.
11. Separation of vocational education from general education in administration and organization must yield to integration and flexibility.
12. In all things, balance is an important consideration, since democracy cannot exist unless the essentials of our differentiated life are appreciated by all.

Alexander Inglis was born November 24, 1879, and died April 12, 1924. He was cut off in the prime of life, and for this, society lost a leader in a critical time. We are fortunate, however, that he left in print his constructive ideas of educational theory and practice. His comprehensive vision of the educational situation, his democratic spirit in the interpretation of divergent developments in educational practice, his sound basis in experience and fundamental learning for his studies of educational problems, his contacts with men in all walks of life, and his inherent interest in people,—with many other qualities and abilities, have prepared him for a continuing leadership though he in the flesh is gone. If the leaders of vocational education may measure their thoughts well with those of this educational states-

of ours will be permanent. It is ours to "carry on", and it will take our best to do him any honor, if we wish to express it in constructive practice as well as in words.

1. *Teachers' College Record*, Volume 16, 1915.
2. *Recent Social Trends in the United States*. McGraw-Hill Book Company, New York.
3. *Teachers' College Record*, March, 1909.
4. *Report of the Indiana Educational Commission*, 1923.

#### From the Tennessee Agriculture Teachers Eleven-Point Program for Unemployment Relief

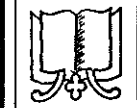
A FEW years ago many farm boys, some with less than a high school education, were going into industrial work. The majority of these boys have drifted back to the farm and for the next few years must depend upon it for subsistence. Teachers of vocational agriculture throughout Tennessee are organizing special classes for these boys, designed to aid them in their efforts to produce a home living.

One hundred seventy-two classes for adult farmers were conducted in Tennessee last year, and plans for a home living were outlined in all of them and later followed up and supervised by teachers of vocational agriculture. This work was very satisfactory and is being continued with renewed vigor this year. Teachers of vocational agriculture and Future Farmers in Tennessee are in many instances maintaining bulletin boards in community centers to aid farmers in the exchange of farm products. Hogs or cattle for clover seed or corn or any other article of which a farmer may have a surplus for articles in which he is deficient.

#### Book Reviews

*One Hundred New Declamations*, edited by Lester C. Boone, published by The Babcock Co., Ft. Worth, Texas, and for sale through The University Declamation Bureau, University Station, Austin, Texas, at \$2.50. The book contains one hundred five-minute speeches attractively bound in durable cloth. The print is clear and easily read. An introduction dealing with selection, memorizing, and delivery of the speech, is followed by four parts classifying the contents under: patriotic selections, current American problems, good citizenship, and characters and events. While this book is not designed to give much information that can be used in public speeches dealing with agricultural problems, it should prove helpful from the standpoint of organization and form, to boys interested in preparing for public speaking contests in vocational agriculture.

If E. L. Ledman approaches you with a subscription proposition, offering a club of papers, please wire Successful Farming, Des Moines, Iowa, collect, immediately, and don't let Ledman know



## Evening Schools



### Some Changing Tendencies in Adult Education in Agriculture

HARRY E. BRADFORD, Professor of Vocational Education, University of Nebraska



Harry E. Bradford

people during the entire period of our interest in adult education in agriculture, or since the passage of the Smith-Hughes Act.

#### Problem I

*Are farmers unique as a class in their need for adult education?*

Students of rural sociology will testify that people who live on farms are just ordinary, normal individuals, with powers to learn and change which are quite comparable to those possessed by other people. They vary, of course, these rural dwellers, with their economic conditions and with the section of the country in which they live. But business and professional men also show marked variations which may be traced to environment and education.

All classes of adults need education to meet the problems of a constantly changing world. The farmer is only one of these classes, and today he resents being singled out as someone apart who needs special attention from the standpoint of education. This feeling of the farmer marks a change which is pronounced and must be recognized by leaders in the agricultural field. One farmer remarked that he would welcome the day when speakers no longer voiced their pleasure over the fact that so many farmers were in the audience. It is probable that doctors and merchants, too, would resent the implication that they might benefit more largely than other classes by attendance at a lecture.

The other half of this first problem deals with the kind of education needed, and in this respect every class in society admits its individuality and peculiarity. It is in this field that many changes in philosophy and method may be observed. Reports from many states give positive assurance that their programs of adult education deal with and through those problems which are real and vital to the farmer and to his family. It has not always been so. Teachers, as well as extension agents, have been guilty of taking to the farmers what they

out studying his needs in advance. This change in direction is decidedly a step in advance, and farm groups have responded enthusiastically to the new treatment of their problems.

#### Problem II

*"Do farmers, as a class, possess a body of knowledge which, if organized, would tend to improve their farm practices; their standards of living; and their community social life?"*

Certain changes in viewpoint among educational workers are now producing good results in the education of adult farmers. One of the changes is the tendency to recognize the fact that many valuable contributions do come from the farm group itself. Farm practices and farm living customs are largely good and usually quite well adapted to local economic and social conditions. Agriculture teachers and extension workers have been influenced in their leadership by the soundness of practices found on good farms and in progressive communities. This change may be called the education of the leaders.

Such a change in viewpoint does not mean that leaders are no longer needed. Any group of people living in comparative isolation finds it more difficult to produce its local leaders. Such a group is inclined to accept and support the skilful outside leader who is able to play upon human needs and community problems. It is well recognized that good practices spread very slowly from farm to farm in the absence of definitely organized trips, demonstrations, and explanations.

A recent experience of the writer illustrates the need of aggressive and skilful leadership to introduce desirable practices or to spread those which already exist on a few farms. A class of agricultural college juniors made a study of farm home conveniences in various Nebraska counties. One student found that his home county ranked very low as to farm home conveniences. His father owns and operates 760 acres of the best land in the county, but has no furnace or running water in his home. The boy appeared puzzled and a bit chagrined over his county's low rank. He seemed unable to give a reason why so prosperous a county should have such a small percentage of modern homes. Privately, he remarked that the base burner stood in the living room near the door of his parents' bedroom and his father saw no particular need for heat in the boys' bedroom upstairs. Even this boy of 22 years had not realized that other counties with less wealth had more homes with heated

iences. Leadership in this county is needed for the development of an appreciation of modern home conveniences.

#### Problem III

*What attitudes do farmers have which may be classed as strong or weak characteristics?*

Replies from and conversations with many leaders in vocational education indicate decided opinions that adult education does and must deal with the problem of attitudes to a considerable extent. This is no more true of farmers, however, than of city-business or professional men. Attitudes vary with modes of living, with economic conditions and, in many cases, with tradition. Community attitudes are often very strong. Sometimes adult influence dominates the thought and habits of the youth so completely that community and family life see little change over a considerable time.

Writers on rural life have too largely emphasized the attitudes of farmers considered as weak and detrimental to progress. The farmer in general possesses the following advantageous attitudes which should be appreciated by any leader in dealing with a rural group.

1. *Courage*:—He faces his problems with a calmness and a lack of panic worthy of emulation on the part of city dwellers. In the face of a hail storm or a drought he remarks with a smile that it might have been worse. His sons give up college courses in time of necessity without bitterness or regret. Many students of sociology think that the life of the farmer develops within him the ability to face crises with courage and calmness.

2. *Responsibility*:—He does not dodge personal responsibility. Perhaps he is influenced by the fact that all his property and his business dealings are in the open where everyone may see. The farmers' children grow up well schooled to the virtue of accepting responsibility and becoming dependable. This must be true, the farmer feels, whether the job includes the faithful feeding of the hogs or the paying of a note at the bank.

Suppose we list a few other attitudes which are admittedly the farmer's. He has:

- (1) A strong neighborly spirit
- (2) A rather intense family loyalty
- (3) A capacity to adjust himself to new conditions
- (4) Resourcefulness in connection with his farm problems
- (5) A conservatism which resists too rapid changes

Other attitudes might be named which

have been found available not only in times of great need but, also, for purposes of education in times of progress. There is a hopefulness in the responses from vocational education leaders that tell the story of a tendency to recognize more and more the strong points of the American farmer which are the foundations of a program of adult education.

Now comes the other side of the farmer. The following attitudes are too well known to be more than mentioned. It might be well to remark again that farmers are not the only people who have attitudes not on the strong side. Business men and even teachers are charged with certain characteristics which others deem not altogether happy. Let us examine the list in an attempt to discover the progress which has been made in adult education, formal or incidental.

The American farmer has had the reputation of being strongly individualistic in spirit. Many of his brightest children have in every generation entered the fields of business, professions, and public life and have been found in large numbers among the leaders of the nation. Surely we cannot criticize the farm group for being proud of such a record. A boyhood in the open country where the boy was early taught to work steadily and consistently has tended to produce a man who fights his own battles and asks only a square deal.

But different times have come upon us. Business, meaning the interchange of commodities and services, is the life of the nation, not simply the production of raw materials and their transformation into food, clothing, and shelter.

#### Attitudes Changing

It is worthy of notice that there seems to be a decided tendency on the part of farmers to forsake the individualistic attitude and to organize into effective groups for co-operative action. Some vocational leaders think this change in attitude is more pronounced in localities where programs of vocational agriculture and agricultural extension have been in force over a period of years. There is room for a series of studies in various states to determine the extent to which the above statement is true. Be that as it may, we are more interested in tendencies toward change in attitudes than in claiming credit for such changes.

Another attitude which farmers have smilingly admitted in the past is that of antagonism toward science applied to agriculture. The white collar, so-called, agricultural scientist has met with his share of derision from the man who has spent a lifetime on the farm and solved his problems in the light of experience. Perhaps this derision was good for the college professors and extension workers. No doubt, it forced them to adapt their findings and their recommendations to the conditions on the farm. But in the process of adjustment the farmer has changed, too. While the agriculture teacher and the county agent have been learning the lesson of caution, the farmer has discovered the value of bulletins, statistics, feeding experiments, variety tests

purposes of study.

This tendency for the scientist, the teacher, the extension leader, and the farmer to adjust themselves to each other's needs has been marked and may be considered one of the hopeful signs of the times.

A third attitude of the farmer, which some have considered unfavorable to his best interests, is that of small appreciation for modern home comforts and for the beautiful in connection with home surroundings. One must admit that running water, bath, toilet, and electric lights are more expensive in the open country, and for that reason alone have been omitted in many a rural home. However, they have also been omitted in thousands of farm homes where conditions were favorable, and the income sufficient. Many farm yards have been bare and innocent of shade trees when a small expenditure of money and labor would provide these desirable features.

This lack of appreciation is giving way in many communities in many states. The writer cannot say how far the tendency to appreciate home comforts and beauty has spread. Here again, there is room for a series of studies. Perhaps it will be sufficient to suggest that the development of this attitude among boys in agricultural classes and among farmers in evening classes is quite as important as the teaching of facts which may produce higher yields of grain.

Last of these attitudes unfavorable to the farmer's best interests is his neglect of his home community's social and religious activities. In the middle west, it has been noticed that during periods of greatest farm prosperity the tendency was to go to the nearby towns for amusements and diversions. It was easier to attend the picture show and the dance than to plan and organize their own community social events. The results have been disastrous to many rural communities, in community pride and spirit.

Now in the midst of this depression, with a shortage of ready cash, a new tendency to provide home and community amusements has appeared. People are playing table games in the homes and organizing community parties with even greater satisfaction than they formerly received from commercialized entertainment. This tendency cannot be claimed as a result of any program of adult education, but it contains a hint for the agriculture teacher. This is the time to develop such a tendency so that rural people of all ages will realize their ability to provide their own worth while activities for social diversion.

It is not the purpose of the writer to attempt a detailed outline of all the attitudes of the farmer. Rather it is his purpose to show that farmers have well-developed attitudes which are decided assets to be considered in any program of adult education; also, that there is much satisfaction to be gained from a survey which shows a strong tendency to change those attitudes which have been detrimental to the farmers' best interests.

#### Problem IV

What are the tendencies toward

of adult education?

The agricultural supervisors in a number of states have contributed to this analysis by enumerating the following changes in their adult education programs.

#### Changes as reported by certain state supervisors

1. A change from education to increase yield, to education for improving the quality of farm products.

2. An increase in the number of farm management and economic problems discussed in evening classes. Attention is being directed to systems of taxation, agricultural credit, and farm leases.

3. A tendency toward making evening classes seasonal.

4. The organization of group activities in addition to the initiation of new and improved practices on the part of individual farmers.

5. Co-operation of teachers within a county to handle similar unit courses simultaneously.

6. Setting up county programs by the teachers, the county Farm Bureau, and other agencies.

7. Tendency away from production problems and toward farm reorganization, co-operative marketing, soil improvement, better farm living, and other phases of providing a more satisfactory life.

8. A tendency to emphasize spiritual values more, and material values less as sources of or means to genuine and abiding satisfactions in life.

9. A tendency to have all evening classes for adults handled by the regular agriculture instructor rather than by specialists or special teachers brought in for that purpose.

10. Teachers, because of their close contact with actual farm problems, have modified much their methods of instruction for all-day pupils, so that the supervised practice work of all-day pupils is coming to be more and more effective and pointing toward establishing boys in farming.

11. A tendency on the part of agriculture teachers to use existing organizations such as the Grange, P. T. A., Farm Bureau, F. F. A., Service clubs, Farmers Union Locals, etc., as aids in developing desirable attitudes among adult farmers.

12. Great progress has been made with supervised or directed practice. In evening schools, we are now reaching the point where each practice taught is followed up with each farmer to see whether the results of his efforts are satisfactory.

These 12 tendencies toward change in method, emphasis, and attitude toward values indicate a number of trends which will cause much speculation in the minds of thoughtful and inquiring observers. Some states have passed into a second, and others even into a third stage in the development of their adult education. A few will probably decide that they have made very few changes, and that their programs are progressing satisfactorily along lines laid down in the beginning. The writer does not presume to say that all change means progress.

For purposes of interpretation let

erated. First, a change in objective, from size of yield to improvement in quality of product, is a step in advance and indicates definite progress in the techniques of agricultural production.

The increase in the number of farm management and economic problems under discussion introduces a new problem, that of the ability of the agriculture teacher to conduct such discussions with profit. Usually the instructor is under 25 years old and has been out of college from one to four years. In some instances these young men have had too few life experiences to successfully interpret general economic laws in terms of specific agricultural problems. There are, however, a number of management and legal problems which are within the reach and grasp of both farmer and teacher. Taxes, leases, law as applied to agriculture, outlook program, relation between supply and price,—all these and others of like nature are timely and of interest to many adult farmers. The fact that such economic discussions are called for indicates that farmers are more and more considering their relations to business and government.

#### County Programs

It is encouraging that in some parts of the country the agriculture teachers, the Farm Bureau, and other agencies have set up county programs of adult education. Where these co-operative programs can be made to work without friction or overlapping, they mark another advanced stage in planning. Agricultural extension forces and vocational education leaders have spent many hours in committee meetings trying to determine the exact fields within which each should work. We may soon see the day when a co-operative attack upon a common problem will take the place of competitive effort.

Last, there seems to be a strong inclination to recognize that the solution of problems involving a satisfactory farm life must include more than the consideration of farm management and farm finance. Moreover, this inclination to admit the presence of the spiritual and the cultural values as necessary comes not only from the agriculture teacher but from the farmer as well. One extension speaker, whose special field is community development, testifies that his audiences want and welcome talks dealing with family and community life. They seem, he says, to be a bit hungry for material of an inspirational nature, while a few years ago every address had to be tied up to economic phases in order to get a sympathetic hearing.

This change in attitude and desires affords an opportunity for a bit of reflection. From 1920 to 1930 may be characterized as a period in which men sought for material gain and unearned wealth. The fever of speculation was at its height, and with it grew a disregard for many of life's finer things which, in calmer days, had been held in high esteem. Men thought that happiness and contentment could be bought with wealth and creature comforts. This frame of mind brought uneasiness and dissatisfaction with occupations that returned only ordinary incomes. The

advised their sons to seek more lucrative fields of work. Naturally the drift cityward resulted in much disillusionment and disappointment. The worker can expect to receive a wage which is never much larger than his necessary expenses, and those city dwellers who amass considerable fortunes are in the great minority.

Then came the great reversal of conditions. There is no need for a rehearsal of the details regarding the grief, the worry, and the panic of the months since 1930. We are in the midst of it now, and each of us is anxiously awaiting the time when jobs will again be plentiful, and money finds its way more easily from man to man.

But with it all has come a new frame of mind which provides many compensations for material losses. The trend of population is toward the open country, and in November, 1932, the number living on farms was only 77,000 less than in 1910. With millions unemployed, the farmer can no longer look to the city for better conditions. He has financial troubles of his own, but they cannot be solved by deserting the farm.

With this change in conditions there is now developing a tendency among farmers to develop their satisfactions and create their happiness out of their own environment. Therein lies the key to the solution of more than one problem

## Factors Contributing to the Success or Failure of Evening Schools for Adults in Agriculture

IRA L. PLANK, Instructor in Vocational Agriculture, Winfield, Kansas

(Paper presented before the High School Teachers of Vocational Agriculture Sub-Section of the A. V. A. December, 1932.)

THIS paper will use "evening schools for adults" to mean a progressive educational program from year to year to meet the needs of adult farmers. There is some distinction between this type of education and the old institute type in that it takes on a more intensive form and deals more distinctly with unit subject matter. It also differs from the modern extension program in that the evening school does not try to set up a county-wide program of work, but rather has for its main purpose the bringing together of farmers in order to assist them in analyzing their every-day problems and to furnish information that will aid in the solution of such problems.

Now to point out some of the factors contributing to the success or failure of such schools. First, I shall mention, without comment, four factors—they might be termed background factors—that contribute to the success of such schools.

1. Sufficient publicity to insure that the community is well informed on the nature and plan of the course.

2. A well-worked-out course of study, based on the needs of the community as determined by a survey.

3. A centrally located, well-lighted, and comfortable building in which to hold the school.

in our program of adult education. If we admit that one of our objectives is the development of a program of better farm living, then we must stress the encouragement of those activities which will create among members of the farm groups a satisfaction in farm living as well as a belief in their ability to solve their own economic problems.

These, in general, appear to the writer to be the changing tendencies in connection with adult education in agriculture. The changes seem to be in the direction of growth in breadth and scope of objectives. There seems to be more of a desire to understand the problems of the farmer and to adapt thereto the program of adult education. There seems also to be a strong tendency in some states to bring about changes in attitude and thought through other existing organizations, such as farmers clubs and boys clubs. Vocational agriculture has made a place for itself in the public schools, and even in this storm and stress period it has not suffered a serious setback at the hands of local school boards. If our thoughts and plans in adult education keep pace with changing economic and social conditions, we may make the agricultural program so valuable to rural communities that they will make it one of the last items to be disturbed on those occasions when economies must be seriously considered.

ance in the community on the part of the instructor.

With these background factors in mind I wish to discuss some of the factors involved in conducting a successful evening school for adults.

1. Regular attendance is an important factor in the success of the evening school program. This cannot be accomplished unless a plan is mapped out securing regular attendance. Merely emphasizing regular attendance and urging it on the members of the class will not accomplish results; it might actually have the opposite effect. I have two suggestions to offer in securing regular attendance: first, make it clear to the class that the problem they are about to undertake to solve will take about ten weeks. Keep the idea of self improvement before them. They should think of the work as a school and not as a place to dip in and out to get such material as they can use personally.

The second defense against irregular attendance is that of "school credit" for the work. Our school recognizes evening school work by giving credit on the hour basis. When a member of the class has finished 80 hours of attendance, he is presented with a certificate from the high school. Each course offered in the school runs for 10 weeks, 2 hours to the week or 20 hours each



## Supervised Practice



### The Class Project as a Form of Supervised Practice

LESTER J. SCHMUTZ, Instructor in Vocational Agriculture, Wakefield, Kansas

(Paper presented before the High School Teachers of Vocational Agriculture Sub-Section of the A. V. A., December, 1932.)



Lester J. Schmutz

STUDENTS in vocational agriculture need the participating experiences of actually working with the jobs and problems that arise in each enterprise. The class project offers an excellent opportunity for all students to observe and share these problems together

as they arise each day. The convenience of location of the class project usually facilitates the economy of time and expense in getting the class to and from supervised farm practice problems.

If the individual home project must be depended upon entirely for project problems needed for efficient teaching, too much time will likely be spent in getting the class to the farms where these problems arise, or the students may lose the opportunity of witnessing the solving of these problems.

The class project in Kansas has been built up to supplement the individual project as a teaching device. It is not intended for a demonstration or an experiment. The students learn to use the approved practices followed by the most successful farmers in their community, as well as those recommended by the experimenter stations.

#### Kinds of Class Projects

The class in animal production may choose a class project in poultry, beef cattle, swine, dairying, or sheep. Several departments of vocational agriculture in Kansas carry class projects in sheep production, a larger number carry projects in fattening and marketing of beef cattle and swine, while more than one-half of all the departments conduct some type of poultry class project.

These class projects involve productive farm enterprises, of a farm unit size, cooperatively carried by all members of the class. The class enrolled in soils and crops may choose a class project in any of the crop enterprises common to the community. Successful crop enterprises carried by our school have been in sorghums and potatoes.

#### Securing Interest in a Class Project Program

A community is always eager to follow the activities of a productive class project. Publicity through the local newspaper will develop interest among

of education and the superintendent may become interested in developing a class project program after visiting successful class project programs in other schools. The teacher who presents a careful outline of the plans of a class project program to each parent will secure parent and student cooperation, as well as the confidence of the community. Pictures and project summary reports of successful programs in other schools will aid greatly in stimulating an interest in the development of a class project program among the boys.

#### Equipment Needed to Handle Class Projects

The progressive teacher will always find means to carry out his class project program if he puts forth the effort. A successful project does not necessarily mean expensive equipment. We have had many successful beef cattle projects with an open shed for a wind break, and outside feeding bunks and hay racks. The local lumberman, in most cases, will be anxious to furnish the materials for a brooder or laying house, and the boys may be given the opportunity to construct the buildings as a class project in farm mechanics. Our poultry house is an 18 x 24 foot Kansas Sectional Straw Loft type; the materials furnished by the local lumber company.

The house is subject to sale, and when sold, the building is taken apart in sections, laid on a truck, hauled to its new location, and reassembled. The boys then have the opportunity to build another house for their next year's project. Our brooder equipment is handled in the same manner.

If A-type farrowing houses are used, and cheap straw sheds for the fattening of shoats, the cost will be very little for the swine enterprise. Our class projects have been operating successfully for 10 years, with a very small outlay for equipment. At present we are taking advantage of low prices, and are building more permanent equipment for class projects in poultry, swine, and beef cattle.

#### Financing

Our most successful class projects have been those in which the students actually participated in the financing. During 1929, 22 boys borrowed or used of their own money \$2,000 for a project in beef cattle. The money furnished by the students was pooled with that borrowed from the bank, and the fund was handled as a special project account. Last year a similar number borrowed a maximum of \$1,300 to handle 30 beef

notes given the bank have always been secured by the board of education and the teacher in charge. In case of a loss, each boy stands his portion in the same manner he shares when there is a profit. Student participation in the financing of the project has always resulted in a maximum amount of interest.

#### Organization

The class working together in an organized group provide the necessary equipment for the project. The selection of the project is made after the class makes a thorough study of the probable outcome. Feed costs, production problems, and market trends are studied, and estimates made. After the class decides to carry the project, arrangements are made at the bank, and approval is asked of the board of education. Committees are elected to purchase the feed and livestock, and the labor is handled through organized squads.

Daily record blanks are filled out by those on squad duty, and at the end of each week these records are entered into the project record book. At the close of each month these records are summarized in the classroom by all of the students.

#### Projects at Wakefield, 1931-32

During the past year the 40 boys enrolled in our department have conducted six class projects in animal production. These were in addition to the individual home projects. Two projects were in the fattening of beef cattle, one of 21 Hereford steers and another of 10 Angus heifers. We handled two swine projects, one a winter fattening project of 39 shoats, and the other a summer feeding project of 25 shoats. Our poultry project consisted of 100 laying hens, 75 capons, and 75 pullets. We now have a state accredited flock, bacillary White Diarrhea tested for two years, with a flock average of 178 eggs per hen. This flock operates continuously the year around.

#### Fits in with the F. F. A. Program

Class and group projects are just as much a part of the Future Farmer program as is the individual project. Boys take special pride in working out large projects of a farm-unit size. These projects give splendid opportunity to develop habits of thrift, cooperation, and group loyalty. We feel that this type of activity aids greatly in developing a group consciousness for the Future Farmer organization.

#### Relationship to the Individual Project

Professor I. F. Hall supervisor of

class project builds a precedent for the students to follow in carrying their individual projects. For example, in the case of a laying flock class project, the fact that it is started on time, housed in a standard poultry house, made up of good early pullets of one breed, fed according to a definite time schedule on a balanced ration consisting largely of home grown feeds, an accurate diary of events, as well as a detailed record of expenses, receipts, and production is kept, and all of this material brought into the classroom regularly in the form of a well organized report from those on squad duty, will definitely encourage the student to want to carry an individual project of high quality." It has been our experience that most of the boys in their individual projects follow closely the production practices set up for the class projects.

#### The Class Project as a Teaching Device

The class project provides an immediate laboratory for productive farm enterprises. When properly conducted, it supplements rather than supplants the individual home project. It tends to hold the teacher to the problem method of teaching. Observations, demonstrations, and special field trips may be conducted with a minimum amount of time and expense. The class project has the advantage of size and location, and is convenient for all to observe its operation. It may help the individual projects by showing the value of well-kept records. It also helps the instructor to develop skills and habits of work, without fear of restraint from the parent.

#### The Relationship to the Adult Farmer

The parents of the boys are usually well informed as to the efficiency or lack of efficiency of the class project. Success or failure is soon recognized by the community. A special field day once a year is a splendid method of bringing the results of class project activities before the community. Charts and printed summaries permit wide dissemination of desired information. These summaries present interesting material for an evening school. We are organizing at Wakefield a poultry association of dealers, hatcherymen, and farmers, largely through confidence in our poultry class project program.

The program of teaching through class projects is so valuable to the agriculture of a community that the patrons soon recognize its benefits and insist on the permanency of this type of instruction in the educational program of the community.

"The agriculture teacher who can lift all his boys to a little higher level does the community a greater service than if he should elevate only one or two to a great height."

"The ideal condition for an Iowa community would be every family on its own farm, learning the art of living rather than trying to become rich. In the words of Channing:

"To live content with small means,  
To seek elegance rather than luxury,  
and refinement rather than fashion,  
To be worthy, not respectable, and  
wealthy, not rich."

## A Diary for Simplified Record Keeping

M. K. LUTHER, Graduate Student, Oregon State College

MUCH of what may be of real value often results from a slight change in some familiar thing. This is true of the project diary which, if used as I am going to suggest, should do much to eliminate some obstacles in getting good project records.

In this use of the diary, I refer to it not as the commonly used supplement to the record pages, but in itself a complete detailed, chronological record of all items of labor, costs, inventories, expenses, and so on.

*I am going to suggest that this diary be substituted for the more usual method of keeping segregated account pages, but only until such time as these pages would ordinarily be totaled and summaries started.*

This will not do away with keeping accurate record sheets. Neither will it eliminate the need of the boy's being instructed as usual in his project accounting.

While this use of the diary is applicable to projects in all four years, let us assume, in following this thing through, that we are working with a group of first-year boys. The majority have decided on their projects, some planning has been done, and lessons on project records have been taught. Most of the boys are now ready to start putting entries in their project books.

They are now instructed as follows:

1. Put all that takes place of interest or importance in the diary in story form, using the pronoun "I" when necessary.

2. Include these important items for later reference: (a) Dates, (b) What was done, (c) By whom, (d) Number of horses, (f) Kinds of machinery, (g) Amount of feed, (h) Kinds of feed, (i) Cost per unit, (j) Amounts sold, (k) Price received, (l) Unusual happenings—hail, frost, theft, disease, and any others.

3. Items should be listed when they occur, except items occurring daily which should be listed at the end of the week or month.

Here are samples of items:

July 10. I built some roosts and artificial shade today. Materials from farm valued at 50 cents. Time 3 hours, self.

November 22. Sold 50 birds today. 47 birds weighing 580 pounds graded prime. 3 birds weighing 35 pounds graded No. 2. I received an advance of 18 cents on the primes and 13 cents on the No. 2s. 12 miles going and coming. Self 4 hours labor. The grader said to starve my birds a little longer.

The boys are instructed to keep the record in this form throughout the project year. This may be inspected by the instructor exactly as if happenings were segregated to their respective pages, as they will be later.

In the fall or winter when the project cycle is completed, the actual record work starts. These boys have been instructed during their previous year in the use and methods of keeping records. Class time, or individual time, is now given to the transfer of the items from the diary to the proper record page.

and analysis go on as if no diary had been kept.

A cursory reading of my explanations of the diary up to this point will hardly give a clear understanding of its advantages. Below are those which have become evident to me over three years of trial.

1. The boys feel it is easier to keep the diary than the record pages. It is easily understood.

2. Items are more apt to be entered. The boy is not in doubt as to what to do, is less inclined to shirk, and will forget less easily.

3. Small but essential bits of information which have no place provided for them in the record pages may be easily kept in the diary.

4. The diary as a basis for farm accounts is often recommended by specialists, and one bulletin of the U.S.D.A. is on this subject.

5. Perhaps many farmers do not keep farm accounts, but a lot of them keep a diary, if only on the calendar. Let the boy use the diary properly when he starts farming.

6. The usual record keeping needs explaining again and again to many boys. This is not necessary if the diary is used.

7. Many men use diaries in teaching record keeping or use of the record books. Where this is done the boy goes onto his project, keeping a diary.

8. Checking the records by the instructor, on his visits or during the year, is not only easier but more effective.

9. Teaching the use of the diaries first, and the remainder of the records in the project book later, is teaching by difficulty levels. The slow boy gets along as well as the bright.

10. The boy thinks through his project as he makes the transfer to the record pages. He may not do this in transferring page totals to summary sheets only.

11. Many problems arise from discussions taking place in the classroom during the transfer of items.

12. Records are neater, and more accurate, when made up from the diary sheet.

13. Unit values, such as hourly labor, can be decided on after the project is completed. This is more accurate than deciding on them before the project starts, as in the usual method of keeping only the record pages.

14. When the sophomore transfers his records, there are many opportunities for freshmen to help him. This is learning by doing for the first-year boy.

*Try a Vocational Project Show.* If you want to get a lot of real interest stirred up try a project show. For spirit, interest and enthusiasm it surpasses a Father and Son banquet. The boys put on such a fine show recently, in exhibits from their projects that the incentive for good projects has materially improved. Comments from the mothers and fathers indicated that a better showing would be made next year by their sons. P. B. Morrison, The Boy



# Farm Mechanics



## The Problem of Scoring and Grading in Farm Mechanics

R. H. PERRILL, Vocational Agriculture Instructor, Goodland, Kansas

TO the beginning teacher this scoring and grading problem, possibly, presents no very great challenge, for in his mind he visions a system smoothly functioning. To the experienced teacher however, the problem is a keenly live one, ever facing him with a challenge that must be met or slighted, for in its persistent recurrences it cannot be ignored.

Some of the problems it presents are:

1. How shall individual differences of the class be graded?
2. Shall all projects be graded on a per cent basis?
3. Shall a second and third like project be graded as high as the first?
4. How shall make-up work be graded?
5. How may the choice of projects be motivated?
6. How may project rather than job selection be stimulated?

With these problems ever facing him, the alert teacher begins to search for a method of grading whereby he may meet these problems. There appear to be two current systems of grading, namely, the percentage system and the point system. Briefly stated, the percentage system measures the student in degrees of 100 per cent perfect, with little influence in emphasizing the selection of projects. The point system deals with the giving of an arbitrary number of points for a finished job or project, either as a maximum or a minimum number. Doubtless each system has its merits, but to my way of thinking, the point system has decided advantages over the percentage system. Although the point system requires more organization and careful planning, the results gained more than compensate the instructor for the time and effort.

Any good system of grading strives to give two things—comparison, and stimulus. The point system accomplishes these two aims, thus: The point system compares:

1. Individual achievement
2. Amount of work done in each enterprise
3. Quality of work done
4. Time taken for job or project completion
5. Number of skills practiced in a year.

The point system stimulates:

1. Careful planning
2. Selection of jobs in every enterprise
3. High quality of work
4. Desirable shop spirit.

A word of explanation may be in order.

1. Individual achievement is measured according to the total number of points a student can pile up during

Thus, the boy who is speedy and who does not sacrifice quality will secure more points than the slow boy, and for this effort receives a higher grade.

2. Amount of work done in each enterprise is carefully kept on each boy. Thus, at the close of the year's work, each boy must have a minimum of points in each enterprise or he immediately shows himself weaker in that enterprise, and justly receives a lower grade.

3. Quality of work: Since planning and quality make up the total grade given for each job or project, quality will receive just consideration on each grade and serve as a means of comparison.

4. Time taken for job or project completion: Comparison is here gained indirectly. Since each boy has an equal amount of identical projects, the number of points received divided by the total hours spent would give the direct comparison.

5. Skills practiced in a year are carefully measured by a consistent check of the skills practiced in any project, and are brought for a skill grade some-time during the year.

Concerning the second phase of grading with which the point system deals, a brief explanation of each point will be made. It stimulates:

1. Careful planning: It is necessary in working against time to have a careful, definite plan, and the better the plan the more points accrue to the student's total.

2. Selection of jobs in every enterprise is stimulated, for the time spent in every enterprise in the year's work will somewhere nearly set the number of points necessary for the student to have in order that he meet the minimum in that enterprise.

3. High quality of work is stimulated, since it is through the quality of the finished project that the student receives probably two-thirds of the total number of points received from his project.

4. Desirable shop spirit receives a stimulus from the point system of grading, because each boy, every six weeks, is eligible to receive 50 points in addition to his total of project points, provided he has no deduction of points because he was negligible in some shop duty as:

1. Failure to put tools away
2. Careless treatment of equipment.

The mechanics of this system might offer some drawback in that it necessarily must be quite large, perhaps in a chart form. However, this objection becomes a desirable feature of the point system, for each boy may at any time figure his own rating. Furthermore, it acts as a stimulus to individual progress. Nor should the satisfaction the instructor receives from this system of measuring and stimulating his

## Should We Limit Equipment to Common Farm Tools?

I. C. MAYFIELD, Instructor in Vocational Agriculture, Whitehall, Montana

THE purpose in teaching farm mechanics is to train boys to be better farmers by being better mechanics. Farming, as all other industries, has revolutionized into a machinery stage. Tractors, combines, trucks, and household appliances such as heating plants, light plants, water plants, and sewer systems make it necessary that our future farmers receive a liberal education along every line in order to solve the simple problems of the farm as occasion demands. Our problem as shop instructors necessitates our teaching the boys mechanical work in soldering, rope, leather, woodwork, concrete, blacksmithing, carpentry, plumbing, farm machinery, auto and gas engines, farm surveying, glazing, power transmission, electricity, and fencing.

To undertake such a shop program efficiently, the first problem to consider is "How many tools do we need?"

When Stevens wrote "Experience, joined with common sense, to mortals is a providence", I believe he sounded the keynote to farm shop equipment. Makeshift, inadequate tools, and only partially doing the job go hand in hand and teach boys poor planning and careless work and produce unsatisfactory results. In short, their farm shop experience does not produce the ability to meet and solve mechanized farm problems in a practical way.

Having the best equipped farm shop in Montana, I have had the opportunity to see extra tools used and can justify, I think, their inclusion in any farm shop. First, and possibly most important, is the fact that the boys secure a well-rounded education in farm construction and repair work. They are constantly anticipating shop period when they can learn to do the constructive repair jobs which they thought belonged to skilled mechanics. This is truly a lesson in thrift twice—1. Boys learn to do farm jobs themselves instead of having to pay to have them done; 2. They know the proper tools for the job, thereby saving the money that they would invest in useless tools on the farm.

Being able to do jobs in a first-class manner creates self-reliance and initiative which carry over into other fields of work.

Our shop is a source of pride and a useful unit in community work. Farmers and townspeople consider it the reliable place for repair work which is necessary but which would under the present economic conditions be impossible because of the outlay involved. Having tools to meet every emergency, I welcome such jobs for the boys and find it gives them splendid, practical experience. Every piece of work is finished in first-class shape, and this

than common tools in the shop.

This extra equipment should not be considered impractical because every farmer does not and probably will not have it. On the other hand, it will tend to create a new goal in farmer tools. If a boy learns how to do a job correctly and in his shop work has been able to do it with proper tools, it is reasonable to expect that even if he does not have all of these same tools on the farm, when occasion arises his farm shop experience will aid him in improvising substitutes for the missing tools that will help him in his attempt to do a better job. Reliable persons also have access to the loan of school equipment over a short period of time, thus making an extra saving to the farmer.

## An Evening Course in Farm Mechanics

REX E. RUCHI,

Vocational Agriculture Instructor, Denison, Iowa

AT the first five meetings we had an average attendance of 42 adults and farm boys, but since this sub-zero weather our attendance has been 29, 17, 20 for the past three meetings. I made a special attempt to interest eighth grade graduates who did not attend high school, and have four or five regularly enrolled. Some of my day students attend, also, but 90 per cent of the attendance is adult farmers.

I have handled all the meetings so far, and have made the work as practical as possible. The first evening we listed the different shop jobs that the men wanted to study, and made our plans for the school. We adjourned to the shop where we spliced rope, made loop and eye splices, and completed an adjustable rope halter. The men showed great interest in rope, especially the long hay-splice. Both three-strand and four-strand ropes were spliced.

With a committee of the men, we scraped together a sufficient number of blow torches and irons, and with the aid of the gaspipe furnaces I constructed, we were able to solder very satisfactorily at the next meeting. I gave the group an exercise to solder, and explained and demonstrated the necessary procedure to do common repair work. The men seemed to enjoy this work, and although it was a job to gather equipment and material to make the meeting a success, I was pleased with the results.

A number of men have come to me since we sharpened saws, and indicated that they had sharpened meat saws, wood saws, circular saws, and other types of saws and tools as a result of our meeting on this phase of the work.

We estimated bills of material and figured everything from concrete to shingles, paint, and hardware, and cut rafters obtained from the local yards. These were 1 x 4 inch pine boards which each man marked out to pitches as I gave them. The boards were cut and checked against others, and laid on the floor for final check. The men were eager for this material and seemed as pleased as boys when they completed their job.

The last meeting dealt with gasoline engines. We changed over a low tension wiring system to the high tension, which was most interesting to the members en-

boys have helped with demonstrations, in addition to assisting the men with the various jobs.

I have supplemented the work at several meetings with a multiple hitch demonstration. A set of miniature horses were obtained from a local repair man. These were hitched to a two-bottom plow. I displayed a collection of local weeds at another meeting.

The meetings were started November 17 and in spite of corn husking, were well attended. I believe the good roads and weather offset the ill effects of corn husking. Meetings were held Monday and Thursday nights of each week.

I believe this type of evening school will interest any group of farmers if they can be shown that the knowledge will save them money. I have stressed the fact that they will not only save time and money by doing their own repair jobs, but will feel a personal satisfaction in being able to do the things themselves. Eighty-eight individuals have been reached by the school thus far, and an average attendance of 34 at the eight meetings to-date.

The following indicates the content of the course:

1. Rope and its uses
2. Soldering (rope work continued)
3. Tool sharpening (emphasis on saws)
4. Building construction and rafter cutting
5. Estimating bills of material, concrete, lumber, paint, hardware
6. Harness repair
7. Care and repair of farm machinery
8. Gasoline engines
9. Babbitting bearings (machine and shop demonstrations)
10. Belt lacing, pulleys, etc.

Other content will be added later.

## Farm Mechanics Evening School

WILLIAM ROSS, Vocational Agriculture Instructor, Conrad, Montana

FOR the past two years Conrad High School has been holding an evening school in farm mechanics. The meetings have been held on Saturdays during the winter months and extending over six weeks.

I was somewhat skeptical about holding an evening school in farm mechanics. However, at the first meeting I had a group of 15 farmers. They picked out the jobs they wanted in the course. I started them out on rope splicing and saw filing, as we had plenty of equipment for these two jobs. After the first two meetings the men worked on four or five different jobs, as some of them finish a job more quickly than others. This makes more work for the instructor, but where the department is short on equipment, it has an advantage.

A few days after each meeting I get out a mimeographed circular letter. This letter is sent to each farmer enrolled and hits the high spots of work taken up at the previous meeting and also gives information as to what jobs we take up at the next meeting.

During the six weeks last year we took up the following jobs: saw filing, rope splicing, forge welding, tool tempering, pipe work, babbitting, rafter cutting, tool sharpening, forcing chisels

I am glad I had an opportunity to put on these schools. I have had a mighty fine bunch of men to work with both years and I know that everyone who attended was well satisfied with what they got out of the course and will put in a good word for the department whenever possible.

## Shop Jobs

DO you have trouble getting enough good shop jobs to keep students busy? It was not common to have plenty of good jobs on hand even in pre-depression days. And now, with farmers building less and spending less for improvements, the problem is even more acute. But if we are to teach shop, we must have jobs to do. This is the heart of a good shop program.

Do you hear some of your students say that there aren't any jobs they can bring in from home? The usual sequel to such an excuse is to visit the boy and his dad at home, and to discover that there are dozens of repair and construction jobs which need doing, and which dad is glad to have the boy bring in. It is rare to make such a call without finding plenty of jobs of the kind which you want the boy to do.

That farmers do not care to spend much need not hamper shop effectiveness. This year, of all years, repair jobs, and construction jobs in wood which can be made from rough or used lumber are most proper. To fit in with our live-at-home objectives, we can perhaps take on more jobs for the farm house than we have in the past.

There is a remarkable difference between the attitude of students in a shop where there is more work ahead than they feel they can possibly get done, and students in a shop where only a scattered few jobs are under way, and none in the offing. The old saw about the devil and idle hands applies here. And where busy work is provided through exercises, the student is being cheated of the very training he came to school to get.

There are some teachers who always have plenty of work on hand for students to do; and there seem to be some whose shop never has more than a few good projects going at one time, whose work is largely confined to making wood joints and other trivial exercises. Observing the methods of those who are most successful in providing good projects, the following activities seem responsible for the difference.

1. Call on home farms and visit the shop, barns, poultry house, and machine shed, to select and secure repair jobs.
2. Refuse to let jobs go out from the shop until a workmanlike job has been done.
3. Select projects carefully, and see that they are done promptly.
4. Hold costs down to a minimum, assisting students to secure materials at low cost.
5. Give more points for jobs which students bring in than for those the teacher finds for them.
6. Keep a scrap book of plans and devices; keep a list of suggested projects, on the bulletin board; particularly jobs which can be done for small

# Part-Time Courses

## Young Men's Farming Clubs and Part-Time Instruction

E. C. MAGILL, Virginia Polytechnic Institute

YOUNG farmers' clubs and a resurrected part-time movement are a challenge to every teacher of agriculture. Within two years the opportunities seem to have tremendously increased. The slack in employment in the cities and industry, and the lessening opportunities of "going to college" are tending to keep young farm-reared men on farms. This damming up of the outlets for migration is causing a greater accumulation of young blood on our farms than since 1910. You, Mr. Teacher of Agriculture, may have an opportunity under your very nose without seeing it. The following should interest you.



E. C. Magill

A study was conducted by Mr. F. J. Ruble, graduate student at Ohio State University, as a basis for his master's thesis, "Young Men's Farming Clubs in Ohio". The Young Men's Farming Clubs are not part-time classes, but part-time classes are largely fostered and made to function by the club. The club is the parent, the class the child. The digest of the study gives the following in the way of a summary as to the Young Men's Farming Club idea:

- A survey to locate the young farmers.
- A teacher to interest, encourage, and guide them.
- A course to bring them together.
- An organization to unite them.
- A self-built program of varied and worthy activities to hold them.

There is a very close relationship between Young Men's Farming Clubs and part-time work in Ohio, as will be noticed in Table I. The wave of part-time instruction surged into the Ohio program from 1926 to 1928, and then subsided as in many states. The crest was struck in 1928 with 75 clubs and 65 part-time classes. The subsidence was not as great as in most states. The interesting observation is the percentage of agriculture departments with Young Men's Farming Clubs which continued to offer part-time instruction. Eighty-five to 87 per cent of those departments in Ohio which had clubs maintained part-time classes. This suggests that Ohio would have lost much more heavily in part-time work except for these clubs.

Interests of Club Members

a large margin, with athletics as second and social interests a close third. A still more interesting bit of information is that contained in Table II, where 50 club members gave their interests. There were three kinds of instructional activities listed, and in every case but three these young farmers placed instruction as the major interest, with social activities as second. They seemed to favor managerial problems as representing their greatest need.

Membership

"The common practice in the organization of a farming club is to bring the young men together for a number of part-time meetings on a subject of general interest to the group. After they have found this instruction and other group activities worth while, it is relatively easy to form an organization. Young men, 16-25, living on farms and who are not regularly enrolled in school are eligible for membership. Older men may be accepted as members of the club if advisable. High school boys are accepted as members in 4 out of 25 clubs reporting. They are not usually encouraged to attend part-time meetings, as they lack the background of experience of the young men. In this connection let us note the answer to

the question, "Should we combine the Young Men's Farming Club with the Future Farmers of America Chapter?" It was the opinion of 19 out of 24 teachers reporting that this should not be done. The reasons given were in the main:

- "The school boys lack the background of experience."
- "A difference in interests, both educational and social."
- "Future Farmer activities center around high school; Young Men's Farming Club activities center around outside interests."

The F. F. A. and The Young Men's Farming Club have some joint meetings, activities, and projects but seem to function most fully as separate organizations. It seems quite natural for the F. F. A. member to pass into membership in the Young Men's Club after he leaves school.

The typical constitutional requirement for membership seems to be: first, age 16-25; second, residence on a farm; third, written application with a small fee; and fourth, a 90 per cent vote of membership present.

The Initiation

Only five of the 26 clubs had an initiation. The advisability of its use

Table I

GROWTH OF YOUNG MEN'S FARMING CLUBS, SHOWING RELATION OF NUMBER OF DEPARTMENTS OF VOCATIONAL AGRICULTURE AND NUMBER OF PART-TIME COURSES FOR NINE YEARS, 1922 TO 1930\*

	1922	1923	1924	1925	1926	1927	1928	1929	1930
Number of departments of vocational agriculture...	86	113	134	154	173	185	196	191	192
Departments offering part-time work.....	3	5	No data	23	46	61	75	55	40
Departments having Young Men's Farming Clubs.....	1	1	3	8	20	35	65	47	34
Per cent of departments having Young Men's Farming Clubs that offer part-time work.....	33	20	.....	34.7	58.8	57.3	87.8	87.3	85

\* J. B. McClelland, Agricultural Instruction for Part-Time Groups in Ohio.

Table II

RANKING OF PART-TIME WORK BY FIFTY YOUNG MEN

Kind of Interests	First	Second	Third	Fourth	Ranking
Managerial type.....	22	8	10	8	140
Supervised practice, project work.....	11	16	11	11	125
Mechanical type of course.....	14	9	16	6	121
Social part of work.....	3	15	8	22	95

seemed to depend upon the community, the attitude of authorities, and the kind of initiatory ceremonies, particularly as to the secrecy involved. Tendency to the latter in many cases proved as safe as chewing a dynamite cap. The study, however, seems to classify the initiation idea as a matter of secrecy, and often associated with "horse play". Perhaps dignified initiations, shorn of secrecy, might be more acceptable.

The Year's Program

"The most successful farming clubs have had definite, organized activities". The program is usually laid out by months for the entire year. The programs show sufficient variety to meet the varied interests of members and to take advantage of the seasonal changes. Thus there may be a party for February, a tour for July, initiation of the part-time course in November. During the summer, one-third of the clubs continue with regular meetings, while the others cease meetings or have them when interest or need demands. Success seems to depend first on having some definite worthwhile activities that challenge attention and that give satisfaction on completion.

Success of these clubs seems to depend upon three things:—

1. Definite worthwhile activities that challenge attention and give satisfaction when accomplished.
2. Variety.
3. Insuring individual activity and expression of each club member.

Supervised Farm Practice

The per cent of part-time class members having supervised farm practice programs seems to have been increasing, 67 per cent having such programs the last year of the study. The following quotation shows what was being done by members of the Grove City, Ohio, Club.

"As a result of this part-time course, seven students conducted projects with 500 baby chicks, and two others had 400 and 200 chicks. These students

built five new brooder houses in 1926. Six others were built by different boys the next year. A poultry house raising was held at the home of one of the boys in September, 1926. He and another student managed Demonstration flocks beginning in November of the same year. Two other students managed Calendar flocks beginning at the same time. Other members made changes in the feeding and housing programs of the home flock, under the direction of the instructor. Feeding of mash and culling the laying flock were adopted as aims of the group. Three students have continued with baby chicks for five years. Some of the students who were not interested in raising baby chicks at the end of the part-time course were interested the following year because of the profits made by some of the boys. The first year one student raised 485 out of 519 chicks to 12 weeks of age, making a labor income of \$138.76."

### The Outstanding Educational Feature

LEO L. KNUTI, Agriculture Supervisor, Cotton, Minnesota

A BALANCED program, in agricultural education, including two all-day schools, two evening schools, and one part-time section for boys and girls out of school, was carried on under the direction of Henry Roningen, instructor, and Leo L. Knuti, county agriculture supervisor.

Part-time school aims of the St. Louis County Rural Schools are as follows:

1. To provide instruction for youths of part-time school age who at present are neglected by all existing agencies.
2. To have a part-time school conducted by each department every year.
3. To give to all students who wish to attend an opportunity to do so.
4. To provide a well-balanced educational program to fit the needs of the students, emphasizing agriculture, yet providing training in better English and reading, appreciation of music, pro-

vide social opportunities, and teach physical education.

5. Secure the cooperation of the entire teaching staff, use of the physical plant, and the financial support of the county board of education.

6. To provide vocational guidance and stimulus for establishing the student in a gainful agricultural occupation.

These aims were presented to the principal and the school staff by the local supervisor of agriculture. The instructor organized the course under the following plan:

Time of Classes—February 23 to March 21, 1932; meeting five days per week from 1:40 to 3:40 p.m. for a total of 20 meetings.

Enrollment—Thirty-two rural farm boys and girls, 15 to 26 years of age; 10 of these were girls. Two of the group were high school graduates. Transportation facilities were provided for part-time students at a total cost of \$35, which was largely for actual costs of operating cars for a total of 1,813 miles. The county board of education paid for the transportation, which made it possible for everyone to attend classes regularly.

Daily Program—

- 1:40-1:45—Community singing
- 1:45-2:00—Farm shop—dairy judging from pictures
- 2:00-2:15—Farm arithmetic
- 2:15-2:30—English or spelling
- 2:30-2:35—Recess
- 2:40-2:55—Farm law, citizenship—Tues., Wed., Thurs.
- 2:55-3:40—Agriculture for boys—Tues., Wed., Thurs.
- 2:40-3:40—Agriculture for boys—Fridays.
- 2:40-3:40—Special instruction for girls—Mon., Fri.
- 2:55-3:40—Girls' gymnasium—Tues., Thurs. Girls' special shop and library—Wednesday.
- 2:55-3:40—Boys' gymnasium—Mon., Wed.

Instructional Staff and Subject Material  
Agriculture—Agriculture instructor—Dairying.

Farm Shop—Agriculture instructor—Rope work and manual training.

Farm arithmetic—Agriculture instructor—Text *Agricultural Arithmetic*, Shuttles and Weir. General farm arithmetic.

Business English—English teacher—Grammar, spelling, using old fashioned spell-downs, letter writing, common mistakes in punctuation and use of words.

Farm Law and Citizenship—Principal of school E. Knoblauch—Text, Koos.

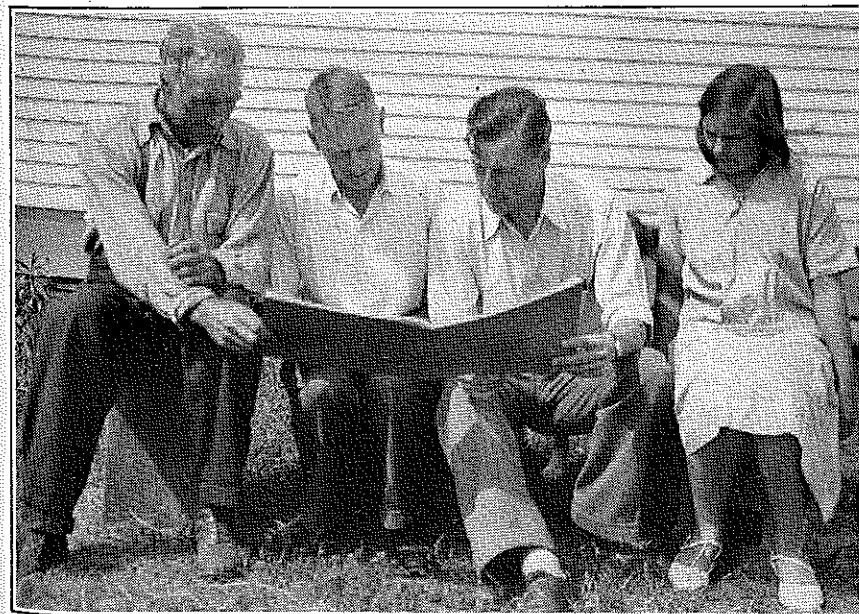
Home Economics—County club leader—Demonstration lessons in hygiene, home furnishing, baking, clothing, and leadership.

Athletics for boys and girls, by respective physical education instructors.

Group singing—Music instructor.

Library—Survey of books and periodicals worth reading—School librarian.

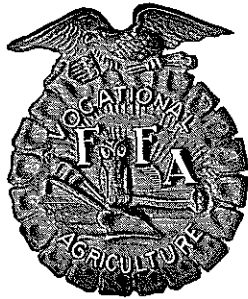
Special assembly programs—Film strips on appropriate subjects, vocational talks by state extension specialists, county superintendent of schools, county agriculture supervisor, home



Where Part-time Student, Evening School Student, State Supervisor, and Instructor in Agriculture meet in Minnesota. Left to right: Olet Holland, evening school student, Paul



# Future Farmers of America



## Cyrus Hall McCormick --- Famous Farmer

W. HARRY KING, Member, Federal Board for Vocational Education

(Delivered as a part of the Future Farmers of America program during the Farm and Home Hour of the National Broadcasting System, Monday, February 13, 1933.)

IT has been said of Cyrus Hall McCormick that his success in inventing a workable harvesting machine after all others had failed, was due to the fact that he was a farmer and not a parlor inventor. He knew from first hand contact with it, what wheat was and how it grew. And his first aim in making a reaper was not to produce a mechanical curiosity nor to derive a fortune from the sale of his patent, but to cut the grain on his father's farm. According to one of his biographers he "did more than any other member of the human race to abolish the famine of the cities and the drudgery of the farm."

The story of McCormick's invention, manufacture, and marketing of the harvester is the story of a tenacity, a perseverance, and a patience that would not be denied.

Like a lot of folks who have impressed themselves on the life and history of this country, McCormick was born on a farm. There is so much that is of interest in his career that one scarcely knows where to pick the story up and where to lay it down. I can only touch the high spots.

When he was about 15 years old McCormick undertook to do a man's work in reaping wheat. He discovered that to swing a cradle against a field of grain under a hot summer sun was of all farming drudgeries the most severe. Both his back and his brain rebelled against it. But he did what he could immediately to help matters—he made a smaller cradle that was easier to swing.

His inventive genius McCormick inherited from his father, Robert McCormick. Two reapers made by his father, one tried out in 1816 and the other in 1831, were failures because they could

not properly handle and deliver the grain after it was cut. Cyrus took up the task where his father left off.

He completed a new reaper, which he designed and fashioned himself in the little log workshop where his father had built his early models, just in time to try it out in the wheat harvest of 1831. And one day in July with no spectators except his parents and his excited brothers and sisters, he put a horse between the shafts of his reaper and drove against the yellow grain. Roughly as it was constructed, the reaper worked. For McCormick had mastered the principle of cutting grain effectively.

This try out was made on the McCormick home farm. Four weeks later Cyrus, having improved the reel and divider on his machine, took it to a near-by village, where he cut six acres of oats in an afternoon. Such a feat at that time was incredible. This was the first of many public demonstrations.

About this time Cyrus, a farm lad of 22, received a tract of land from his father which he proceeded to farm intensively and alone. He lived in a small log house on his land with two aged negro servants and his reaper. Although he was a good farmer, farming did not provide him with sufficient funds to launch his reaper. So, in partnership

with his father and the local school teacher, he built a furnace with which, from iron ore deposits near-by, he made pig iron. The reaper was laid aside for the time being, not because he lacked faith in it but because farmers would not buy.

In the panic of 1837 McCormick's iron business failed, and his farm went to creditors, an experience which might have floored a less courageous person. But not McCormick. He returned to the reaper, which was all he had left, and in 1840 sold his first machine to a farmer who had decided to risk \$50 on it. In 1842 he sold two more. This may be said to be the beginning of his establishment in the business of making and selling harvesting machines, and incidentally the beginning of an increased interest in the production of small grains in this country.

Time does not permit me to tell you in detail how by hard work and perseverance McCormick, the Farmer, improved the reaper from time to time until he perfected the basic principles of harvesting machinery of to-day; how he decided for economic reasons to move from his Virginia farm to Chicago, which he pictured as the center of the grain raising territory of the future; how he got farmers to buy his reaper by guaranteeing to refund their money

if it did not meet specifications; how he based his expanding business upon the credit of the developing agricultural West; how he spent years in the courts endeavoring to protect the patents on his reapers; and how in the end he laid the foundations of the agricultural implement industry of the present. He transferred the farmer-inventor of his younger years into the business man whose life centered in agriculture.

The life and ex-

farmer-manufacturer read like romance and should be an inspiration to us all, especially in the present period of economic stress. What I would like to impress upon you Future Farmers of America particularly is that only by tremendous resolution was Cyrus Hall McCormick, whose over-mastering purpose was to teach the wheat nations of the world to use his harvesting machinery, able to rise to the heights he attained.

He knew what it was to lose everything as a result of a financial panic; he knew what it was to fail repeatedly in accomplishing the objective upon which he had set his heart; and he knew what it was to have even his friends turn against him when he needed them most. Such experiences, however, only served to stiffen his resolution, to sharpen his creative imagination, to challenge his fighting spirit, and to increase his tenacity of purpose.

And remember that it was on his own and his father's farm that McCormick acquired those qualities of character which stood him in such good stead in later years, and which kept him sympathetic throughout his career with the farmer and his problems. He built his successful career upon the foundation of a personal understanding of farm problems.

An indomitable spirit is an asset to anyone. It was the attribute which guided Cyrus Hall McCormick to success through all the obstacles which beset him. And it is the attribute which I covet for all Future Farmer members.

### Significant Steps in the Growth and Development of the F. F.

#### A. Movement in New York

STEPHEN O. SALMON, Adviser, Union-Endicott High School, Endicott, New York. (Broadcast over Station WESG, Cornell University, February 28, 1933. Only a part of the address is presented here.)

THE Young Farmers movement started in New York State September 10, 1920, in the agriculture department of the Union-Endicott High School at Endicott, New York, under the direction of Stephen O. Salmon, teacher of Agriculture. Howard R. Bradley, now principal and agriculture teacher at Sinclairville, was the first president of the first club in the state. Some two years previous, or in 1918, I organized an agriculture club of boys taking agriculture in Millbrook, New York.

There was not much interest created in other schools of the state, until I had presented several papers on the value of Young Farmers Clubs before members of the Agriculture Teachers Association at their annual professional improvement conferences. However, the movement in Endicott met with immediate success, and has been growing ever since.

The real purposes in starting such an organization among farm boys were to teach cooperation by actually cooperating, to create a greater interest in agriculture in general, to teach rural leadership by making the boys leaders in their own chapters, and to allow the agriculture department of the school to be of greater service to the farmers of the community. As the work has progressed, it has accomplished all of these purposes and more.

These Young Farmers chapters are run strictly according to Roberts Rules of Order; for we must realize that we are simply training the farm boys to step out into larger fields as leaders in the Grange, the G. L. F., Dairymen's League, and similar organizations, and they must know how to conduct meetings. In other words, they must assume rural leadership, which is one of the greatest needs of the farmers of today.

We teach the boys to cooperate by actually having them cooperate, thus, when they step out into life's work, cooperating with their fellow farmers is nothing new. We pool our orders when buying baby chicks, farm seeds, lime, fruit, stock, etc.; thus taking advantages of lower prices by buying in large quantities. The Endicott Chapter now owns three pure-bred bulls, loaned to the boys for the improvement of local stock, thus practicing community breeding.

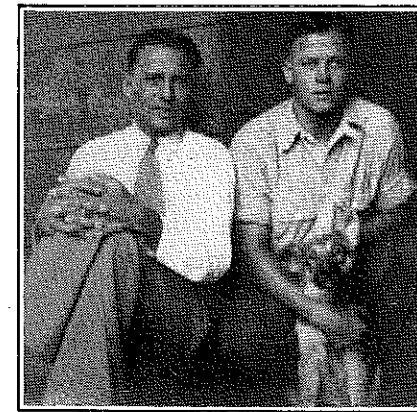
Now, for the history of the Association. After the Endicott Club had been going some 4 or 5 years, another club was started at Bath, and about the same time Albion started a club. At the 1925 Conference of the Association of Teachers of Agriculture of New York, I recommended that a state wide organization of Young Farmers be formed. Thus, in September 1926, at the State Fair, preliminary plans were made for the State Association, by delegates from Endicott, Albion, and Bath at a meeting in the Mizpath Hotel, Syracuse. The seed of interest had been sown in fertile soil, for in 1927, at the second annual meeting at Syracuse at the State Fair 33 local clubs were represented.

#### Trinity Chapter, Pennsylvania

JOSEPH D. RYBURN, Acting Adviser

TRINITY Chapter carries on! Thomas C. V. Ford, our chief adviser and one of the best in the state, has lain paralyzed in the hospital since August 15, yet the chapter has forged ahead, doing the things he would have us do. A good pilot may be expected to bring his craft safely through the storms of each year, but he whose crew continues to function properly even in his absence is truly a master pilot. We hope to have Mr. Ford back with us again in good health, and during his absence, we intend to keep our chapter up among the first-raters as always.

At present we have 105 boys in our Future Farmer chapter, and are proud of their ability to do things.



Tom Ford and Donald Gantz,

resented. In February, the first mid-winter meeting of the State Association was held in connection with Farm and Home Week at the State College of Agriculture at Ithaca. At the third annual meeting we had 53 clubs represented, with a membership of 1,174 Young Farmers. This growth has been steady, until at our last, or sixth annual meeting, we had 90 chapters, with a membership of about 4,000, and at our 1933 midwinter meeting we had 172 Chapters in the state.

From 1926-1929 the organization of Young-Farmers functioned under the name of the Association of Young Farmers of New York, but on February 15, 1929, the State Association affiliated with a national body formed in the meantime, known as the Future Farmers of America.

Each local chapter is governed by a president, vice-president, secretary, and treasurer, with a local adviser who is the director of agriculture. The Young Farmers should run their own business, as far as possible. New York State is divided into 7 Districts, with a vice-president in charge of each; the districts are sub-divided into groups, with a group chairman in charge of each.

The Young Farmers of New York State publish a paper of their own regularly, called the New York Times. The first issue was in 1928. Local chapter, district, and group news appears in the paper, as well as articles by leaders in agriculture.

### Cooperative Activities of Crawfordsville, Indiana

L. L. STEWART, Agriculture Teacher

FOR the past two years we have held a semi-annual banquet for parents. Nearly all the parents have taken part, and the average attendance has been 150.

We operate a community seed corn tester, averaging 15,000 ears per year. Until last year this furnished the funds for the chapter.

Last year the chapter made \$5.40 by going to farmers' barns and catching pigeons, which were sold at 4 cents each.

This year six boys grouped their orders and purchased 1,000 pounds of feed, and mixed their own poultry mash, which cost them 93 cents per 100 pounds. Since feeding this mash, their production has increased from 4 to 46 per cent.

Each week a published report appears in the local newspaper giving the entire vocational record of some F. F. A. member. It deals with his supervised farm practice work and accomplishments in related fields.

The Chapter makes an annual trip to the Indianapolis stock yards and Purdue University. The Producer's Commission Company arranges for the trip through the yards. Their salesmen point out and describe the market classes of livestock and how they are handled from the time they enter the yards until slaughtered. This is followed by a trip through the packing house.

The chapter has encouraged the use of good seed corn by purchasing pure-bred seed and furnishing it to members. For each ear given to plant, the class selects two ears in the fall. This year



is stored, tested, and put out to the other members the following year.

In our Vocational Cow Testing Association we have 106 cows on test, belonging to 14 men. Records are summarized each month, and the summary put in the local paper. The summaries furnish valuable material for class instruction.

Last year we planned an egg show for chapter members. Due to so much outside interest, it was changed to a county show. We had 150 exhibits, together with a special exhibit on grades of eggs put on by the chapter. Merchants furnished the premiums which were amounts in trade at their stores. We plan to make this an annual event.

Each spring we hold an open house for seventh and eighth grade boys in our school district. The purpose of the program is to show the boys the nature of the work in vocational agriculture. About 30 boys and their fathers attend these meetings.

### The Poolesville, Maryland, F. F. A. Program of Work

THE following program of work for 1932-33 was formulated by the Poolesville, Maryland, Chapter:

1. Enter all state F. F. A. contests.
2. Hold meetings twice a month during school year.
3. Hold chapter meetings once a month during summer.
4. Hold a Father and Son banquet.
5. Conduct a Future Farmer fair.
6. Pay national dues for all members by November 19.
7. Enter chapter in National Chapter Contest.
8. Enter chapter in the state F. F. A. banner contest.
9. Have 100 per cent of members with projects completed and with full ownership of projects.
10. Have each member with a bank account by June 1, 1933.
11. Initiate all Green Hands and Future Farmers according to the F. F. A. Manual.
12. Stage a campaign for home and school beautification.
13. Submit an annual report on chapter activities by June 1, 1933.
14. Have members attend the state F. F. A. camp.
15. Have reporter submit regularly all outstanding chapter activities for publication in the Maryland Farmer.
16. Have members cull 2,000 birds for farmers this year.
17. Test milk samples for farmers.
18. Hold local F. F. A. camp in summer of 1933.
19. Have a well-planned program for each meeting.
20. Study the purposes, aims, and objectives of our organization.
21. Sponsor a program of community improvement.
22. Hold F. F. A. project tour.
23. Have a committee to arrange pictures and charts in the agriculture room, and change them from time to time.
24. Have a committee to arrange and keep agricultural magazine table in order.
25. Organize an F. F. A. basketball team, and arrange a schedule with other schools.

26. Send delegates to all state F. F. A. meetings.

27. Strive to have at least one State Farmer elected from the local chapter.

28. Sponsor a farmers' corn judging contest.

29. Increase the enrollment in vocational agriculture for 1933-34.

30. Display "Future Farmers Creed" and the local charter in our agriculture room.

31. See that each member wears his F. F. A. emblem.

32. Give at least one community moving picture program dealing with agriculture.

33. Provide the following for chapter use: plow; rising sun; stuffed owl; ear of corn; United States flag; pictures of Washington and Jefferson; two gavels, one for the president and one for the watch dog; secretary's book; treasurer's book.

34. See that each member owns a 1933-34 F. F. A. Manual.

35. Elect officers for 1933-34 in May.

36. Put up a community Christmas tree.

### Factors Contributing to the Success or Failure of Evening Schools

(Continued from page 151)

year. Where two courses a year are offered, the members are urged to take only one of the courses.

2. Promptness in starting and closing classes is a very important factor in the success or failure of the evening class. Farmers naturally do not work on schedule, as do some other groups, and consequently are likely to be careless about being on time. Variation in the time of starting encourages lateness. If the class always starts promptly, the members will know what to expect and will govern themselves accordingly. Promptness will prove more satisfactory to the member who practices being on time.

3. The materials presented and the method of presentation is a very important factor in the success of the school. It is difficult to say what to teach or how to teach it. It is generally agreed that vital subject matter of immediate concern to the class, presented in a discussion manner is the ideal situation. Any materials or method in the hands of a poor teacher will be a failure. There are a few things, however, that any teacher should try to do. He should anticipate the problems that will arise and have as much information on the subject as possible. Every question should be settled on its own merits rather than on the prejudice of the community or the enthusiasm of the teacher. It is far better for the class to get the idea of "truth seeking" than it is for them to get the idea that the school is trying to change their practices.

4. The "carry-over" of evening school work, or the improved practices, would probably be considered by most of us as the greatest indication of success in the evening school program. It often occurs, however, that farmers making a satisfactory showing in class discussions and taking the most

failures in their own business. My experience has been that most members of evening classes are glad to have the instructor work with them in solving their more personal problems connected with the farm business, and that some of the most effective work is done under what might be termed supervised practice. We make a distinction here, however, between supervised practice in the day school work and supervised practice in evening school work. We are convinced that much care must be exercised in the intensity with which supervised practice is carried out with adults. Much harm may be done the school by over zealotness on the part of the teacher to institute new practices in the community. The teacher may become too heavily involved in detail work, or he may be subjected to too severe criticism in case the plans do not work out satisfactorily. Would it not be advisable to place the responsibility for improvement on the individual farmer? The teacher could render him assistance when he calls for it, or could visit him occasionally to casually talk over the farmer's problems. The teacher objective should be more to obtain growth in the evening class student—growth comparable to his capacity for growth—rather than the number of improved practices instituted.

### The Outstanding Educational Feature

(Continued from page 157)

tural agents, and successful farmers. *Commencement*—Appropriate exercises were arranged by members of the class, who took a large part in the commencement program. Certificates were awarded for regularity in attendance and intentions to carry on improved practices. Civic leaders, news reporters, and other interested citizens attended the exercises. Plans are completed to organize the class into a Young People's Community Club.

The part-time school in the Cotton Community was the outstanding educational feature in the entire county for 1932, and attempts will be made to duplicate this type of classwork in other communities.

### Another Wiley Book

*Producing Farm Livestock*, by Edmonds, Carroll, Kammalade, Nevens, and Snall, John Wiley and Sons, pp. 439, price \$2.50 net. Good binding, clear, easily read print, excellent illustrations well chosen and placed. The book is divided into four parts dealing with organization, feeding, management, and improvement. Dairy, Beef, Horse, Sheep, and Swine enterprises are treated. The subject matter is presented on the operative basis, and is well adapted for classroom study and use in the organization of home projects. The subject of livestock production is presented as a whole, including not only the procedures necessary to make production in itself successful, but also those necessary to give it its proper relation to the other activities of the farm. An outstanding book adapted to the needs of vocational agricultural students and teachers—