The Future of the American Farmer

(Continued from page 141)

survived the trials and disappointments of drouth and pests, so shall we survive the disappointments and discouragements of depression and deflation. The American farmer of today is not giving up in the face of overwhelming odds. He is sticking to his task with an indomitable will that would do credit to his forebears. All that he asks is the sympathetic understanding and encouragement of the rest of the nation as he works his way to the better times of the future. He is learning and he is progressing. Such courage will not go unrewarded. The time is close at hand, when the American farmer will take his rightful place in the economic life of the country, when he will again be free from debt. The American farmer is not hopeless and he is not helpless. Conditions are improving. Education is bound to have its beneficial effect. New national land policies, new systems of taxation, new methods of marketing, improved methods of co-operation point the way to a better future; and God willing, the American farmer of the future shall lead the way into the new day of national prosperity.

Citizens of Tomorrow

(Continued from page 142)

dation of every thinking man and woman. And it is to the thinking citizens of America, urban and rural, they appeal. There is no radicalism, no flamboyant oratory in the meetings of Future Farmers where the F. F. A. owl, emblematic of wisdom, looks down upon their councils. Sane leadership is being developed. Nevertheless, it is aggressive leadership and when the agriculture of the future is represented around the council tables of the nation by these lads as mature men, representatives of other industries will find no weaklings. Nor is it too much to hope that they will speak for a united agriculture.

It is in the belief that a matching of abilities in public speaking would be helpful in developing such leadership that I have been happy to aid in fostering this National Public Speaking Contest which has brought together in friendly competition the four fine young men whom you have just heard in this second annual event. To win the right to represent their regional groups which embrace this whole great country of ours, these students first had to win in their home schools, then perhaps in a county or sectional contest, then in a state contest, and finally in a regional contest which brought together the finalists in a large group of states. You who have heard them will feel, I am sure, as I do that the selections were merited. The topics discussed are timely, diligent research was made in assembling facts, the presentations have been forceful, comprehensive, and convincing. The parents and instructors may well feel proud of each contestant; the state and the region represented has cause for just pride.

I am told that the contestants we have heard represent some 60,000 students of vocational agriculture, thousands of whom are listening at this an army trained for the avocation of peace, not war. It must banish any fear we may have had as to the future of agriculture. It fills us with new faith in the ability of the citizens of tomorrow to cope with whatever problems may arise. It is an inspiration to me, it should be an inspiration to every individual interested in agriculture. Here is an army that knows no defeat. It knows only victory.

There is but one regrettable thing incident to a contest of this kind and that is there can be but one first prize award. Our four young friends, as I have told you, represent four regions and thus the nation as a whole. Each is a champion by right of conquest. Altho each wins an award which I soon shall bestow upon him, the judges have had but one grand championship to consider and difficult it must have been for them to arrive at their decision.

Policies in Teaching Marketing

(Continued from page 133)

business judgment and the ability to make their own decisions in management and marketing problems. Furthermore, teachers should be guided in establishing fair and desirable attitudes toward group action and encouraged to study and present unbiased facts without fear or favor. It is believed that such practice will safeguard the integrity of the service rendered by departments of vocational agriculture.

It is believed that much progress has been made in carrying forward these policies. The invaluable assistance being received and the cordial support being given all phases of vocational agricultural education is chiefly responsible for the present progress in teaching marketing problems. It is recommended that in all future relationships with marketing and educational agencies it be the practice of vocational education officials and teachers to organize instruction in marketing in accordance with the foregoing principles and policies. It should be remembered that co-operative marketing is but one phase of group thinking and collective action on the part of rural people and that it is a major responsibility of the public schools to train persons to think and to work together in the solution of their common problems.

The committee unanimously recommends the adoption of this statement of policy.

[Signed] A. K. Getman,
J. A. Guitteau,
K. L. Holloway,
A. P. Davidson.

Leadership Program Under Way in Iowa

(Continued from page 135)

of leadership. (3) Rules for developing qualities of leadership. (4) Estimating your progress.

The program is motivated by a point system: (1) Observing the rules for developing personality (listed in booklet), 100 points. (2) Mastering 12 abilities in parliamentary procedure, 100 points. (3) Leadership service (school and community activities), 100 points. (4) Program planning (programs for of points is entitled to a leadership award. The award is the Future Farmer emblem with the eagle surmounting it, and this is hung from a bar with the word "leadership" on it. Permission to use this emblem has been secured from the national headquarters of the Future Farmer organization.

The awards will be made at the time of the judging contest in the spring. It is hoped that this may be made a very prominent feature of the many events which take place on this occasion. Meetings will also be held at this time for the candidates for the leadership awards. Programs for these meetings will consist of talks, demonstrations, and reports from the field.

The Iowa plan is open to all who wish to undertake it but it is expected that a rather limited number will arrive at the goal. It is non-competitive—each boy works to surpass his own best record only. The plan is in keeping with trends in administering school activities. It attempts to develop the personal qualities of the student and includes the mastery of fundamental techniques in parliamentary procedure. The plan is still on probation; time will no doubt bring modifications but the general features promise to survive.

An F. F. A. Membership Card

The Future Farmers of the New Brunswick, New Jersey, Senior High School have recently devised an F. F. A. membership card. It is printed on two sides, as shown below.

The chief purposes of the card are: to create interest in the F. F. A.; to stimulate the payment of dues; and to prevent trouble about excuses from home rooms when members are attending F. F. A. meetings held during the school session.

Mr. L. S. Archibald, the adviser, has found this device to be a help in his F. F. A. work.

NEW BRUNSWICK CHAPTER
OF THE
FUTURE FARMERS OF AMERICA

This is to certify that

Mr.______________________________

Is a member of The New Brunswick High School Chapter of F. F. of A. and is in good standing for time indicated by dues paid below.

______________ Signature ______________ Treasurer

Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun

193__ [Over]

[REVERSE]

TO ALL TEACHERS
The holder of this card is entitled to attend all stated chapter meetings of the F. F. A. without presentation of other written excuses provided his dues are paid for the current month.

______________ Faculty Adviser

Joe Violini, Future Farmer of Salinas, California, owner of the grand champion baby beef animal at the South San Francisco Junior Livestock and Baby Beef Show, cleared enough from his premium money and sales to pay his first year of college. Joe is now a freshman attending the University of California college of agriculture at Davis, having raised the purple ribbon Angus calf as a senior project in high school.

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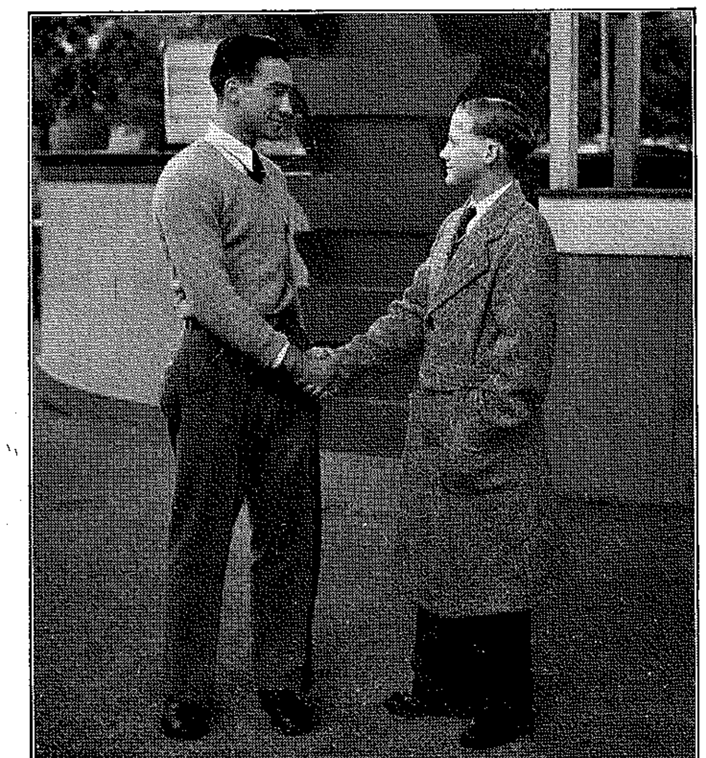
Agricultural Education



Vocational Agriculture students, one representing California and the other New Jersey, exchange a friendly greeting at one of the national meetings.

"Our civilization rests at bottom on the wholesomeness, the attractiveness, and the completeness, as well as the prosperity of life in the country." —Theodore Roosevelt.

EDITORIAL COMMENT

AGRICULTURAL EDUCATION

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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WASHINGTON—FIRST F. F. A.

GEORGE WASHINGTON was not only one of the F. F. V. (First Families of Virginia), he was likewise one of our first and most illustrious F. F. A.s.

As such, it is particularly desirable that the Future Farmers of America recognize and participate in the bicentennial celebration in his honor which is now in progress.

Each chapter should take advantage of this opportunity to glorify the memory of this great American who, among his many other interests, never lost his love and faith in agriculture.—S. D.

HAIL TO THE CHIEF

(1932)

WITH the April issue of *Agricultural Education*, the present editor and writer of this "swan song" retires from his post of the past two years and turns over all honors and emoluments pertaining thereupon to a most worthy successor.

At the New York meeting of the Editing-Managing board, after a careful review of the situation, Dr. Carsie Hammonds of Kentucky was selected as the new Editor-in-Chief. Dr. Hammonds finally accepted the position and will take over the responsibilities of editorship with the April, 1932, issue.

Carsie Hammonds

Dr. Hammonds is professor of agricultural education and head of the department at the University of Kentucky, Lexington, Kentucky. He was born and reared on the banks of the historic Cumberland River and saw his first train at the age of 16. As a boy he was frequently responsible for the conduct of the 300-acre farm as his father was often absent attending to his duties as county sheriff.

His teaching experience includes rural schools, high school principalship, and vocational agriculture. He has a B.S. in agriculture and an M.A. in education from the University of Kentucky and a Ph.D. from Cornell. He has also attended Peabody College and Ohio State. Dr. Hammonds is exceptionally well-liked by all who know him and his ability in agricultural education is clearly recognized.

Let me bespeak for Dr. Hammonds your continued cooperation in the support of *Agricultural Education*. An editor may do much, but he can't do it all. If you will support the new editor as you have the old, there is nothing to fear.

Here's wishing you success and happiness in your work to

TIME EMPHASIS

"OLD TIMERS" will remember that when they attended high school the studying was done between class recitations and at home. Then the "pity the poor child" writers did their stuff. Vivid pictures of the oil lamp, cold room, family distractions, and Willie in his lonely struggle for an education becoming discouraged and quitting high school, were kept constantly before us. Evolution! The study hall came! Our problems were now solved. Well lighted, properly ventilated, correctly heated quarters in which Willie could do his studying. No more becoming discouraged and quitting high school since the study hall director would help him over the difficult spots. But the diversity of subjects under consideration by students and the inability of the music teachor to give much assistance in the field of agriculture, and vice versa, the average run of poor disciplinarians in charge of study hall, the lack of order, and shall we say, the paper wads, all prevented the study hall from solving the problem. Research and more research! Voluminous reports were made before learned societies. Presto! The recitation period is lengthened to give time for study of the lesson under the supervision of the teacher. All the advantages of the study hall plus that of having a master of the subject in question on hand to aid the groping student are now cited. Directed study and recitation. The traditional 45 minutes must make way for this new idea. Of course, the new plan takes more time, but it is worth it.

In 1917 the framers of the vocational education act visioned the necessity for the problem study, discussion plan under a trained leader, and these same leaders recognized the need for ample time for such procedure as evidenced by their interpretation of the vocational education act. No state in 1925* claimed less than 90 minutes daily emphasis in vocational agriculture in their day schools, and 26 states were not satisfied with a minimum of 90 minutes daily in which to offer vocational agriculture in their day schools. This would seem to evidence the fact that states in setting up their programs of work for the day schools in vocational agriculture accepted the principle of 90 minutes or more of daily emphasis.

Many problems have been met in accepting the longer period in the day school classes in vocational agriculture. Curriculum adjustments, content of the course of study in vocational agriculture, organization of the subject matter, ability of teachers to advantageously utilize the time, and maximum credit units to be allowed are mooted points familiar to all who have been working in the field of vocational education in agriculture. Altho leaders in the field recognize these problems as dynamic rather than static, most of them agree that if satisfactory preparation for entry upon the business of farming is to be given the high school boy, more time than the traditional high school single period is necessary for the day school vocational agricultural program.

Supervision of instruction takes time and time costs money. Retrenchment is the order of the day and costs are being considered. The 60-minute directed study recitation period for the academic high school subjects is growing in favor. This naturally causes curriculum adjustments, and definitely effects the vocational agricultural programs. Many questions are being raised. If two of the 45-minute periods were deemed sufficient time, will not 120 minutes be too lengthy? What about the total credits earned in the vocational agriculture course? Just why the matter of total credits should enter in a program of vocational training with the day school student in agriculture may not be

*Williams, C. V., Fundamentals Involved in the Organization and Conduct of Vocational Agricultural Schools and Classes, published by State Board for

Methods

Visual Aids Obtainable From the U. S. D. A.

REUBEN BRIGHAM, Extension Service, U. S. Department of Agriculture

In the hands of the skillful teacher visual aids in instruction may constitute a valuable means of training. The observation of the movements of workers in performing farm activities, fitting local management and marketing activities into nation-wide trends in agriculture, extending one's point of view with respect to agricultural practices, and acquiring needed scientific facts, are some of the ways for using such materials. In the accompanying article Dr. Brigham, in charge of visual instruction and editorial work at the United States Department of Agriculture presents in concise form source material available in this field thru the Extension Service. Our readers will appreciate his timely and helpful suggestions.—A. K. G.

THE progressive teacher of agriculture finds that his courses of instruction can be greatly strengthened when he can obtain suitable visual material for his use. The motion pictures, lantern slides, film strips, and charts on agricultural and home economic subjects prepared by the United States Department of Agriculture are designed primarily, to re-enforce instruction in these subjects by department field workers and teachers of agriculture. The purpose of this statement is to outline the material available from the Department and how it may be obtained for the use of teachers.

The motion pictures of the Department deal with important lines of work in which the department and co-operating institutions are engaged. Their aim is to acquaint the public with the methods and significance of important activities, to gain public co-operation, and, by making common property of the results of scientific investigations, to spread knowledge of improved methods in agriculture.

The field workers of the department and co-operating institutions and teachers of agriculture naturally have first call in the use of these pictures, altho they are available for the use of the general public, in so far as the supply available permits. Altho the number of copies of the pictures the department is able to supply is inadequate to meet all requests, loans are made to farmers' organizations, non-agricultural schools, colleges, churches, theaters, and other agencies or persons wishing to borrow films, whenever copies of the desired pictures are available. Applications for films should be addressed to the Office of Motion Pictures, Extension Service, United States Department of Agriculture, Washington, D. C., and should be sent preferably thru the county extension agent or in counties where there is no agent, the application should be forwarded thru the director of agricultural extension at the state agricultural college.

There are no rental charges for films. Borrowers are required to pay for transportation to and from Washington, D. C. In all cases it is necessary that some responsible person assume responsibility for transportation charges, as well as for the safekeeping, proper use, and prompt return of the films.

Applications for films should be made as far in advance as possible and preferably, should specify several alternative choices of subjects and periods of time. Schedules of proposed showings, or other definite information indicating the use proposed for the films, should accompany applications.

Most of the films distributed by the Department of Agricul-

Practically all of the films are on slow-burning stock, and this stock is being used for all new subjects. A limited number of prints are available on narrow-width (16 millimeter) stock.

To state agricultural colleges and other users of educational pictures of the type such as public schools, farmers' organizations, development associations, and boards of trade, the Department offers a plan for purchasing prints from Department of Agriculture negatives at relatively low cost. Under this plan individuals or organizations may be authorized by the department to buy copies of its motion pictures from a commercial manufacturer at contract prices which are determined annually as a result of competitive bidding. Prices for standard-width or 35-millimeter prints, on the basis of a reel of 1,000 feet, are approximately:

On standard-width, slow-burning film stock.....$30
On standard-width, inflammable film stock.....$18

The price on narrow-width (16-millimeter) slow-burning film stock is about $10 for a reel of 400 feet (equal to 1,000 feet of 35-millimeter film).

The cost of prints varies, of course, with the length. Purchasers are required to pay transportation charges on new prints from the commercial manufacturer's laboratory, and in some cases other small additional charges.

The conditions governing purchases are that no changes be made in the subject matter of the pictures without approval from the department, that credit to the department be retained, and that no commercial advertising matter be added to or inserted in the pictures.

The Department has an extensive lantern slide and film strip service. Series, or about 175 different subjects,

in the cheaper and more convenient form of film strips.

The compactness and portability of both film strip projection equipment and film strips give the film strips a decided advantage over the glass lantern slide. Other advantages from the standpoint of the teacher using them are: (1) That the illustrations always appear upright and in the correct order; (2) breakage in handling, projecting, and shipping reduced to the minimum; and (3) the small expense involved in using illustrations in this form.

The series of glass lantern slides are loaned without any rental charge but all costs of transportation must be paid by the borrower. Lecture notes describing each individual illustration incorporated in a series of slides accompany each shipment.

These series in film strip form can be borrowed on the same basis as lantern slides. Arrangements have been made by the Department, however, whereby these series in film strip form can be purchased at unusually low prices. Complete series packed in individual tin containers, may be purchased for 37 to 71 cents each, depending upon the number of illustrations in the series. Many teachers of agriculture are taking advantage of the low prevailing prices to establish their own libraries of film strips. They thus have at their disposal at all times illustrative material which can be used upon short notice in their classrooms. Approximately 90 percent of the Department's film strips contain less than 65 frames (slides) and the maximum price for a film strip of this length is 44 cents. Lecture notes similar to those prepared to accompany glass lantern slide series to film strip purchasers are supplied by the Extension Service. Complete information regarding the film strip service may be obtained by writing to the Office of Co-operative Extension Work, United States Department of Agriculture, Washington, D. C.

A wide variety of printed educational charts prepared by the Department can be obtained by teachers of agriculture. A list of charts, both those distributed free and those that may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., may be obtained by writing to The Office of Information, United States Department of Agriculture.

This covers in a general way, the visual material obtainable by teachers of agriculture from the United States Department of Agriculture. The Department welcomes suggestions from teachers regarding new subjects for visual presentation and constructive

Lesson Planning for Classroom Work

G. C. COOK, Assistant State Supervisor of Agricultural Education in North Dakota

IMPORTANCE of Lesson Plans—A contractor would not think of building a structure without first working out some definite plans and blue prints. If this is true of the contractor, it certainly should be true of a teacher, since definite objectives cannot be accomplished without previously being worked out and set up. A person must know where he is going and what he expects to accomplish before entering the classroom. A few of the advantages of lesson plans may be stated as follows:

1. The lesson plan sets up definite objectives and situations to be dealt with.

2. Affords a record of the work in the class which aids very materially in knowing what absentees have missed.

3. In case of sickness, it aids substitutes in knowing what to teach.

4. Since time is spent in working out plans, it helps the teacher to have a better knowledge of the subject matter, hence makes a better teacher.

5. Gains student respect.

6. Saves time.

7. Helps eliminate problems of discipline.

8. Adds to organization.

9. Helps create student interest.

10. Helps sell the teacher to school boards, superintendents, supervisors, and so forth.

What the Lesson Plan Should Include—A well worked out lesson plan should be complete enough for a substitute teacher to use to make the lesson assignment, carry out supervised study and classroom discussion. It may well include the following: (1) enterprise; (2) job; (3) concrete situations to be dealt with; (4) objectives; (5) problems or guides to study; (6) laboratory equipment; (7) demonstrations; (8) list of illustrative materials; (9) individual assignments; (10) supervised study; (11) methods of testing; (12) references; and (13) anything else that may aid in conducting the class period.

The ideal lesson plan in agriculture is one that not only contains the assignment, but also some notes written out on the assignment or job layout. A standard-size three-ring notebook can be used very advantageously for this purpose. On the left-hand page may appear the assignment and on the right-hand page the note for that assignment. These notes may well be written out in complete outline form in the order in which the instructor hopes to have them discussed. This gives the instructor a guide to follow in leading the discussion and prevents him from leaving out some points which he might otherwise overlook. While this method requires a great amount of effort and work on the part of the teacher, it makes him a better teacher and after he has it worked out, he can, with slight revisions to keep it up to date, use it for several years. The lesson plan should be flexible enough to meet any necessary changes or additions.

The following procedure is one very

Teacher's Layout of a Job

I. *Enterprise* — Poultry (2 days' work).

II. *Job 5* — Feeding Hens for Egg Production.

III. *Situations to be dealt with:* . .

1. Three methods of feeding being used: (a) single grain; (b) commercial mixtures; (c) home mixed.
2. Egg prices very low.
3. Grain prices very low.
4. Home-grown feeds plentiful in this community.

IV. *Objectives:*

1. To determine the importance of proper feeding.
2. To determine what feeds are necessary for egg production.
3. To have students determine how to mix a ration.
4. To compare cost of home mixed with commercial feeds.
5. To decide if a farmer can afford to feed a balanced ration.

V. *Problems or Guides to Study:* (Set up with students)

1. Of what importance is feeding hens for egg laying?
2. What methods of feeding are being used in this locality?
3. What methods are recommended?
4. What food groups are necessary for egg production?
5. What is the composition of the egg?
6. What feeds are grown locally?
7. What feeds would the farmer need to buy?
8. Should egg tonics and medicines be fed?
9. How many eggs does the average hen lay? Is this satisfactory?
10. Should commercial or home mixed feeds be fed? Why?
11. How much mash is required to feed a hen a year? Scratch?
12. Can a farmer afford to feed a balanced ration at present?
13. Of what value are electric lights?

VI. *Demonstrations:*

1. Mixing feeds.

VII. *Illustrative Materials:*

1. Nebraska Circular No. 1420, p. 9, Mixing Feeds.
2. Nebraska Farmer 1927 — Water Containers.
3. Nebraska Farmer 1927 — Feed Troughs.

VIII. *Individual Assignments for Reports:*

1. Amount of feed necessary to feed a hen one year (Am. Poultry Journal, January, 1928).
2. Value of electric lights (Nebraska Circular No. 33, p. 7).
3. Commercial vs. home mixed (H. & M., pp. 191–194).
4. Composition of egg (Lewis, p. 305).
5. Secure prices of feeds and commercially prepared feeds.

IX. *Supervised Study:*

1. Give students aid where needed.
2. Have students study experimental

4. Encourage brief reading notes on references.

X. *Testing Students:*

1. Written quiz.
2. Mixing feeds in the classroom and on the farm.

XI. *References:*

1. N. D. Circular No. 89.
2. Dickinson & Lewis, pp. 156–197.
3. Farm Bulletin No. 1524, pp. 16–19.
4. Farm Bulletin No. 1331, pp. 12–16.

*Class Notes

Job 5—Feeding Hens for Egg Production.

1. Importance of proper feeding.
a. Necessary for maintenance.
b. Necessary for egg production.
c. Necessary for most profit.
2. Methods being used.
a. Single grain.
b. Commercial mixtures.
c. Home mixed.
3. Methods recommended.
a. Mash and scratch.
(1) Mash fed in hopper.
(2) Scratch in litter.
(3) Most common practice.
b. All hopper.
(1) Mash and scratch fed separately.
(2) Meeting with good success.
(3) Sanitary.
c. All mash.
(1) Recommended by some for leghorns.
(2) May not afford sufficient exercise for heavier breeds.
(3) Saves time.
(4) Sanitary.
(5) In experimental stage.
4. Food groups.
a. Grains.
(1) Whole, cracked, or ground.
b. Protein.
(1) Meat meal.
(2) Tankage.
(3) Skimmilk.
c. Green feed.
(1) Mangels, 10–15 pounds per day per 100 hens.
(2) Sprouted oats, all they will eat in 20 minutes.
(3) Legumes, fed in racks.
d. Minerals.
(1) Bonemeal, 2 to 3 percent of ration.
(2) Oyster shell.
(a) Fed in hopper.
(b) Two pounds per hen per year.
(3) Salt.
(a) One pound to each 100 pounds of mash.
e. Grit.
(1) Aids grinding of feed.
(2) One to two pounds per hen per year.
f. Water.
(1) One hundred hens need 15–30 quarts daily.
5. Composition of egg.

a. Shell, approximately	11.40%
Protein	13.20
Fat	8.90
Ash	.80
Water	65.70

Professional

What Do We Read?

LYMAN E. JACKSON, Department of Agricultural Education, Ohio State University

AS STUDENTS of agriculture preparing to become teachers and as teachers of vocational agriculture, do we confine most of our reading to the books and periodicals having to do with the vocational aspects of our life work? Maybe you will disagree but the answer too often seems to be, "Yes." "Should our reading interests and habits carry us into the broad fields of life activities beyond the confines of the strictly vocational area?" Again, an emphatic "Yes," probably should be the answer. In justification of this answer, we may remind ourselves of the very obvious fact that we have a complete life to live; a life which involves both the vocational and the non-vocational aspects of human activity.

Authors, who have written books for us, have taken literally the words of Margaret Fuller, "If you have knowledge, let others light their candles at it." Yes, we may get a "light" for as G. W. Curtis says, "Books are the everburning lamps of accumulated wisdom." If we but develop the habit of reading there are marvelous worlds to conquer, great intricacies of human thought to think about and unravel.

Most of us have little money to spend or the necessary freedom from ties to gratify what desires we may have for travel. A good book and an interest in reading, however, will take us to strange lands and thru strange experiences; vicarious travel, if you please. We may go "Beneath Tropic Seas" with William Beebe, "Skyward" with Richard Byrd, or over the wastes of the Gobi Desert with Roy Chapman Andrews. Birds may be studied with Frank Chapman upon Barro Colorado, an island in Gatun Lake, Panama. Richard Haliburton will take us thru Mexico and South America following the old trails of the dauntless Spanish explorers if we will but let him. A recent book has been published under the title "A Yarning Bee Among Explorers." Thirty-three eminent explorers have contributed to this interesting book. Wouldn't you like to "sit in" on these yarns which are true tales of modern exploration?

Most of us have had a piecemeal study of history; here a bit and there a bit. Do we have a comprehensive view of what has happened since the dawn of recorded history? Often we have had difficulty in putting our pieces of training in history into an integrated whole. Let H. G. Wells in "The Outline of History" give us a rather connected account of what has happened beginning with the theories of the universe and ending with modern times. It is of interest to have a rather connected pic-

The history of America is now available in a most interesting form in "Epic of America" by James Truslow Adams. In this book one revels in the broad sweeps of historical development as portrayed by the author, without becoming entangled in wearisome detail. For example, the ascendency and descendency of Spanish rule in America is portrayed with great rapidity. One is carried from one event to another in almost a breath-taking manner but the picture is ever clear. In seven league boots one strides over space and time. Try this book even tho history may be despised for it will bring a new experience.

Since the age of Pericles, western civilization has been profoundly influenced by the thoughts of men known to us as philosophers. Why not be introduced to some of these men by Will Durant in his "Story of Philosophy." With this introduction we may go further into the thought activities of great minds. "Living Philosophies" by Einstein and others helps us to understand the great thinkers of our own time.

Bruce Barton says, "Put great men to work for you. There is in biography an antidote for almost every mood. Are we discouraged? A half hour with Lincoln, carrying patiently his great load, never once losing faith, makes us properly ashamed of ourselves. Are we inclined to be afraid? It stirs new depths of courage in us to read Stonewall Jackson, whose motto was: "Never take counsel of your fears."

Why not let Carl Sandburg give us an intimate picture of Abraham Lincoln? Emil Ludwig in "Genius and Character" will, within the covers of one book, tell us of many famous men. The possibilities in reading biography are almost unlimited.

Certain aspects of scientific development are told in a delightful manner by Paul H. De Kruif in "Hunger Fighters" and "Microbe Hunters," two books which teachers of vocational agriculture should read. Delve into the magnificence of the universe with H. T. Stetson's "Man and the Stars" or into the wonders of human development with Herbert S. Jennings in "Biological Basis of Human Nature." These books are nontechnical and are designed for the layman to read.

Turning from the field of books let us not forget that the best contemporary writers are always ready to serve in such magazines as Scribners, Atlantic Monthly, Harpers, World's Work, and many others. By reading regularly The Literary Digest, Time, or the Sunday edition of such a paper as The New

periences thru reading. The results of wide reading will be reflected in our life activities.

The following reading list compiled by Professor H. W. Nisonger, junior dean of the college of agriculture of the Ohio State University, and the writer, is recommended to all men students in the college of agriculture of the Ohio State University. It should prove interesting to teachers of agriculture:

Adams, J. T., *Epic of America*, (Little-Brown), $3.75.

Angell, Norman, *Story of Money*, (Stokes), 1929, $3.

Auslander, Joseph, and Hill, F. E., *The Winged Horse*, (Doubleday, Doran and Co.), 1928, $1.50.

Beebe, William, *The Log of the Sun*, $1 edition.

Bowman, Isaiah, *New World: Problems in Political Geography*, (World Book Co.), 1929, 4th edition, $4.80.

Clark and Ieiber, Editors, *The Great Short Stories of the World*, (Heath) Bonibook Edition, $1.

Crumbine, Samuel J., and Tobey, James Abner, *Most Nearly Perfect Food: The Story of Milk*, (Williams and Wilkins), 1930, $2.50.

Dampier, Whethan, *A History of Science*, (Macmillan) 1931, $4.

DeKruif, Paul H., *Hunger Fighters*, $1 edition.

DeKruif, Paul H., *Microbe Hunters*, $1 edition.

DeKruif, Paul H., *Seven Iron Men*, (Harcourt) 1929, $3.

Durant, Will, *The Story of Philosophy*, $1 edition.

Einstein and others, *Living Philosophies*, (Simon-Shuster) 1931, $2.50.

Jeans, Sir James, *The Mysterious Universe*, (Macmillan) 1930.

Jennings, Herbert S., *Biological Basis of Human Nature*, (Norton) 1930, $4.

Ludwig, Emil, *Genius and Character*, $1 edition.

Munthe, Axel M. S., *The Story of San Michele*, (Dutton) New York, 1929, $3.75.

Overstreet, Harry Allen, *Influencing Human Behavior*, (Norton and Co.) 1925, $3.

Remarque, Erich, Maria, *The Road Back*, (Little-Brown and Co.) 1930, $2.50.

Sandburg, Carl, *Abraham Lincoln*, $1 edition.

Stetson, H. T., *Man and the Stars*, (McGraw-Hill) 1930.

Thomson, J. A., *Outline of Science*, (Putnam) 4 vol. Each $4.50; and Wells, H. G., *The Science of Life*, (Doubleday, Doran and Co.) 2 vol., $10.

Vallery-Radot, D., *The Life of Pasteur*, $1 edition.

Iowa Holds Combined Teacher-Student Conference

G. F. EKSTROM,
State Supervisor,
Iowa

THE organization of a parallel series of leadership meetings for present and prospective F. F. A. chapter representatives was the outstanding feature of the annual fall district conferences conducted in Iowa during the early weeks of the school year. These meetings were given over to reports of chapter activities, a study of leadership traits, and drills in parliamentary procedure.

The program for the instructors involved a round table discussion of evening school problems and project accounting, short talks on outstanding projects conducted in various centers, and a report of the programs conducted by the host departments. Joint luncheon programs were given before the two groups at the noon hour.

The five conferences were attended by 110 of the 116 instructors in the state and by 182 student representatives from 62 departments. Representatives of the Iowa Vocational Agriculture Teachers Club and of the Iowa Association of F. F. A. assisted Professor Barton Morgan of Iowa State College and the state supervisors in conducting the meetings.

District conferences for the instructors have been held in the state for five years with the choice of the centers left to the teachers comprising each group. The men have requested that such meetings be continued another year inasmuch as they feel that some benefits are to be derived from them which are not forthcoming from the state conferences held in June. Some sentiment was expressed in favor of Saturday rather than week-day meetings. However, this suggestion was voted down in each case on the assumption that student delegates would be unable to attend because of their obligations at home over the week-end.

Vocational Teacher Now College President

MR. J. W. HULL of Danville was recently elected president of the Arkansas Polytechnic College, which is located at Russellville.

Mr. Hull is a master teacher of vocational agriculture in the state and a leader and pacemaker among our forces. His ten years of vocational agriculture work in Arkansas has been filled with achievement in both farm practice and F. F. A. work. Last year his Danville Chapter No. 1 was the highest scoring chapter in the United States. This year one of his boys, Glenn Farrow, was dubbed the Star Farmer of America. Mr. Hull is a member of a number of important committees dealing with rural and agricultural education and while we regret to lose his services we know that he is an authority on agricultural education such as is needed to make his new position of the greatest worth to Arkansas. He is a graduate of the Mississippi A. & M. College and received his master's degree from George Peabody College for Teachers.

Why Go to School?

WE GO to school in order to be able to work—not to be able to avoid work.

This idea is not new to us, but it is significant to hear it confirmed by a national leader in general education at the recent American Vocational convention in New York. This speaker called attention to the fact that the theory of education held by many people was irreconcilable with our system of education. These people tend to look upon education as a means of escaping work. Frequently we hear a parent say, "Son, I want you to go to school so you won't have to work as I have been compelled to do." On the other hand, we have striven to provide education for each and every one. Universal education and education for the purpose of avoiding work (or in fact education merely for leadership) are incompatible. A system of universal education such as we have established in this country, must train for work as well as for leisure, and followers as well as leaders. So vocational education is again justified by the general theory of education in a democracy. Justifying Agriculture: A recent article in *Agricultural Education* referred to the question of how to justify agriculture in the midst of the present economy wave in education. The following quotation seems to the writer to state the facts in a nutshell: "The justification of any subject of study must be its usefulness, that is, its serviceableness for the legitimate purposes of life; but it cannot fully justify itself unless it develops habits, attitudes, and ideals that are broader in their application than the limited field of that particular study." —B. C. L., in The Fan-Mill.

Teacher-Trainers Meet

THE Association of Ten-Year Teacher Trainers in Agricultural Education met for its annual breakfast and round table discussion Wednesday morning, December 9, 1931, at the Hotel Pennsylvania, New York City. Fourteen members of the association were present.

Professor John T. Wheeler of Georgia served as conference leader, opening the discussion with the question, What is the teacher trainer's responsibility for the provision of technical training in agriculture for the trainees? The question proved to be most stimulating, and under the able direction of Professor Wheeler much valuable and constructive discussion developed.

Professor H. G. Parkinson of Pennsylvania was elected president of the association for the coming year.

Bridging the Gap

HERMAN FAUBER,
Assistant State Supervisor,
Colorado

WHAT has been done to aid the vocational agricultural student after graduation from high school or after he has completed the prescribed course in agriculture? What is being done by the vocational agriculture teachers for these boys from the time they finish the course until they are established in farming? Just what is our responsibility to the former vocational agriculture student? Should we continue contacting him or consider him as a finished product?

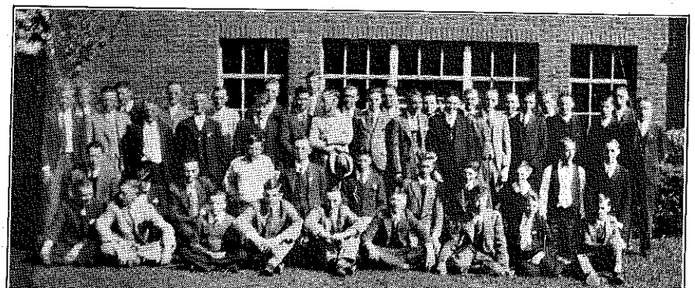
Some teachers are using the F. F. A. as a means of contact, but this method is more of a social nature and does not meet the needs of these older boys. Two teachers in this state, Mr. McCullah of Yuma and Mr. Wilson of Olathe, have organized these former students into part-time classes and are meeting these boys once or twice a month. At these meetings personal and farming problems are discussed.

The questions in the first paragraph may seem irrelevant, but let us get a clearer picture of the situation.

These boys have taken from two to four years of agricultural work. They have gained experiences and have accumulated some money and investments, and with these they start out for themselves. They enter a new life. School is over. They are confronted with problems of management and business of the more adult nature. If a boy becomes an owner soon after finishing the course, he naturally can put into use the better practices, but still we have the immature mind dealing with mature problems. If the boy becomes a partner his chance for management is limited and there is danger of his becoming discouraged and dissatisfied with the arrangement and will either quit the farm or fall into the general habits of poor cultural and livestock practices and lose the benefits of his former observations and training. If on a well managed farm the problem is that of satisfaction or dissatisfaction resulting from his participation in deciding managerial problems. There is still the boy who works only as a laborer on his parents' or other farms.

With the above situation confronting us, just what is our responsibility to these boys and how can we "Bridge the Gap"? Do you have any suggestions? Is this our job? Will it strengthen our program?

Editor's Note: Write up your views on this problem and send them to us.



Part-Time Courses

Conducting Part-Time Courses

L. M. SASMAN, Supervisor of Agricultural Education, Madison, Wisconsin

L. M. Sasman

THE foremost factor influencing attendance of farm boys in part-time schools in agriculture is the contacting of farm boys in the community who do not attend high school. The number of such boys undoubtedly varies greatly in different communities and states, but surveys which have been made in various places thruout the nation indicate that there are, in practically every community, as many farm boys of high school age out of school as there are in attendance at the high school.

One of the most detailed studies of the location of possible part-time pupils was made by Lyman E. Jackson at the University of Wisconsin and covered the west half of Dane County. This county is the county in which the University of Wisconsin and the state capitol are located and it would seem that there would be less likelihood of pupils being out of school than in sections where school facilities were less readily accessible. Yet, thru this survey, there were located in half of Dane County, 1,050 boys between the ages of 14 and 25 who are out of school and living on farms. (Seven hundred eleven of these boys were between the ages of 14 and 20.) Surveys conducted in 1925 by the instructors in the 64 departments of vocational agriculture in Wisconsin showed that there were, in the radius from which pupils came to the various high schools, 2,593 young farmers from 14 to 20 years of age not attending any type of school. There were at that time only 1,563 farm boys enrolled in high school departments of vocational agriculture in Wisconsin.

A survey conducted in Tennessee in 1927 by D. M. Clements gave definite information of 937 farm boys out of school and 674 of these boys indicated they would be interested in the opportunity to attend part-time classes in agriculture. J. H. Pearson, when state supervisor of vocational agriculture in Nebraska, said, "Recent surveys in a number of counties in Nebraska show that more than 50 percent of the farm boys between the ages of 14 and 21 are out of school." R. B. Smith, state supervisor of vocational agriculture in Arkansas, said, "Of all the neglected social and economic groups of today, the most neglected consists of those struggling and drifting farm youth between the ages of 14 and 21 who cannot attend a America today and nearly 90,000 in Arkansas alone."

These surveys, showing as they do conditions in a number of states varying widely in farm and general economic conditions, indicate strongly that there are, in every state, hundreds, and in most cases thousands, of farm boys of high school age who are out of school. There is no question but that a large percentage of these boys will be the farmers of the future and that to a considerable extent the status of farming in the next generation will be determined by the ability of these young men to aid in the solution of problems of farming. It is apparent that large numbers of these young men can be definitely located by instructors in vocational agriculture and that it is possible to interest a majority of those located in part-time schools in vocational agriculture.

After the location of boys who are desirous of attending part-time schools, the securing of a capable instructor to teach these boys is a deciding factor in influencing attendance. In most states at the present time, the teacher of part-time classes is usually the high school instructor in vocational agriculture. In some states, itinerant teachers have been used to teach special subjects, such as farm mechanics. In Wisconsin, for several years the Wood County School of Agriculture employed an instructor who gave full time to the teaching of part-time schools. At Stoughton, Wisconsin, the past two years the vocational school has employed a man to give full time to teaching part-time and evening classes in agriculture in that community.

In case the high school agricultural teacher conducts the part-time classes, it is, of cource, necessary that his school program be sufficiently flexible to permit him to handle the part-time work effectively. It is possible that, at least for some time to come, the part-time classes will in most cases be handled by the high school agricultural teacher. There are no differences between the requirements for teachers of part-time classes and those for teachers of high school agriculture, provided that both have the viewpoint of the preparation of boys for farming occupations. The teacher of part-time classes, as well as the high school teacher, must thoroly understand the social and economic conditions of farming communities and the technique of farming. He should have spent several years upon the farm in order to have that understanding; he must be thoroly trained in technical agriculture; he must have a personality which will be attractive to young men

In a brief study of promotional methods in expanding the part-time school program which was made in the north central region in 1927–28, all states reporting part-time schools said that the best means of securing pupils for such schools is by personal solicitation. Consequently, the contact which the instructor makes with prospective part-time pupils is one of the prime factors influencing attendance. The extent to which farm boys who have dropped out of school will again return to school is to a very large degree determined by the confidence which they feel in the ability of the instructor to give them something worthwhile. Unless the boys and their fathers are persuaded that the teacher thoroly understands the problems of farming, they will not be greatly interested in any part-time course which may be offered. In most cases, part-time schools are most easily organized by an instructor who has spent several years in the community and secured the confidence of the farmers. However, several of our largest part-time classes in agriculture in Wisconsin during the past two years have been conducted by young men who are just beginning their teaching experience. In cases where a new man in the community has been able to successfully develop a part-time school, he must have made a personal canvass of his territory in order to meet at least the leaders among those who might be interested in the school.

During the period of organization of the school, there will naturally be the question of what the subject of the course will be. In most cases, as these schools are conducted in Wisconsin, the topic for study is not definitely decided until the time of the first meeting. The interest of the boys will be considerably affected by the extent to which the subject of study agrees with the major interest of the boys. There will, in many communities, be diverse interests represented so that there will not be a unanimous vote for any subject. In this state, Feeding Dairy Cattle, the Care and Adjustment of Farm Machinery, Growing of Legumes, and Improving Soil Fertility are some of the most common subjects for study. It has been well established that the boys will be more interested, will secure greater benefit, and will maintain an interest over a longer period of time when a part-time school is organized on the basis of short units rather than on general aspects of agriculture.

Farm boys out of school who, because of interest in improving themselves in farming, come back to school for short unit courses, insist that the instruction

stock, the Growing of Crops, or the Marketing of Farm Products, they may want to know how to write a good letter, or how to figure the capacity of bins or mows, but they do not want a lot of theory about agriculture that they cannot put into practice on the home farm, nor are they willing to spend time parsing sentences or studying mathematics which they think they will never use. In outlining any of the courses for students in part-time schools, the needs of the home farms must be foremost in mind. In other words, the course must be based upon the farming practices of the pupils. Farm boys as well as farmers are anxious to study subjects which will help them to improve their income and they insist that that point of view be kept in mind. They are confident that if they improve their income they will be able to secure the things which will improve their status of living. In suggesting outlines for agricultural subjects in part-time schools in Wisconsin, we have based our outlines upon such subjects as, Are Our Dairy Cows Making a Profit for Us? How Can We Improve the Fertility of Our Farm? What Is the Best Way to Market Our Milk? Of course, in the teaching of any subject, the actual procedure will depend entirely upon the group in the class and the personality of the teacher.

Real supervised practice in farming is another important factor in holding the interest of farm boys in part-time schools. The supervised practice growing out of these schools must be of such a nature as to appeal to the boys as being of real practical value. In the part-time schools on Feeding Dairy Cattle, herd records are commonly kept as part of the supervised practice work accompanied, naturally, by the elimination of unprofitable cows and more careful feeding and handling procedures with the herd.

The introduction of legumes on farms where none were grown before, keeping herd records and improving the feeding of herds, keeping farm records, growing purebred grain or corn, or certified potatoes, beginning the development of purebred herds or using commercial fertilizers, are types of supervised practice work most commonly developing thru the part-time school. This practice is really of utmost importance as a factor in continued interest and attendance in part-time schools, because in the minds of the boys and their fathers the results obtained in this practice are decidedly indicative of the practical nature of the teaching. Further than that, the supervised practice work takes the instructor out onto the farms in contact with the farmer and farming problems as well as with the boys. It tends to strengthen his knowledge of farming and greatly increases confidence in agricultural teaching by the farmer.

Supervised practice work must be the backbone of instruction in vocational agriculture no matter what phase of the work is considered. It to a large extent determines the course and the type of instruction given and it grows out of the instruction as new practices are taken on by the boys. Its results are difficult to measure because it may be and often is the means of revolutionizing the farming practices of a whole community. It is necessary, however, that definite improvements in practice result and that maintained, inasmuch as such improvement will be a strong factor in influencing other farm boys to enter part-time schools.

The factors then influencing attendance on part-time schools are: the location of boys in the community who are desirous of this type of training; the securing of an instructor with the capability and knowledge of farming and farmers which the conduct of a part-time school requires; the establishment of contact by the instructor with the boys to be served; the selection of a topic for study in which the boys are interested; the organization of the teaching material in a practical way based upon the farming practices on the home farms of the boys; and the development of supervised practice work involving better practices growing out of attendance at the school and of such scope as to be recognized by farmers as giving real farming practice.

Young Farmers' Club Active

W. W. SMITH,
Director Vocational Agriculture,
Monroe, Ohio

THE Monroe Young Farmers' Club, Darke County, Ohio, in starting upon the sixth year of its organization, looks back upon a record of activities that has been of considerable benefit to Monroe Township farmers.

A brief resume of the club's activities indicates a program of considerable variety which requires no small amount of versatility on the part of its members.

The formation of the club followed a short course in farm shop in which an especial appeal was made to younger farmers.

A part-time survey disclosed a total of 53 boys between the ages of 16 and 25—students who had dropped out of school at the ages of 16 or shortly thereafter, most of whom held serious intentions of remaining on the farm.

About two-thirds of the club's membership were recruited from this group. The remaining number consists of young married men slightly over the age who are progressive enough to see the value of this type of instruction and who make most capable leaders. The discrepancy in ages, however, does not seem to hinder the participation of the younger members in the activities of the club.

As the organization grew, it retained its former members and added recruits from the part-time age, with an increasing number in later years from former vocational students. Its enrollment has since increased from 18 members to 44 active members.

Meetings are held weekly in the agriculture classroom. The business session is conducted entirely by officers and members and occupies the earlier part of the evening's work. The study session which follows takes up the discussion of the particular subject in hand. A feature of this part of the program which adds much to the interest is the assigning of topics for discussion. These assignments are made by the program committee with the help of the agricultural instructor who provides the study material. Debates are frequently held on subjects of controversial interest. Moving pictures are often provided and outside speakers are secured for discus-

most of the evening sessions includes volley ball, dart games, indoor baseball, and some basket ball.

In developing the social side of the club, feed nights are frequently held. Each season closes with a banquet. The banquet programs often provide outside talent but invariably the most interesting feature of the program is the talks made by members. It is frequently heard that the speeches made at these events are the first attempts of the individual in public speech.

Other agriculture subjects studied in courses offered to the association includes farm engineering, soils management, and dairy management.

Possibly an outstanding feature of the program developed by this Young Farmers' Club is the financial aid it gives various educational movements, all of which goes to the direct benefit of the school and community. It has proven to be of inestimable value to the program of the local vocational agriculture department.

An outstanding illustration of this is in the development of a local Ton-Litter Club sponsored within the local agricultural department but which has since grown into a community swine improvement campaign.

Small medals are offered all the producers of ton-litters and cups are given to the outstanding winners. The agriculture department produced ten ton-litters in 1929. The ton-litter contest was again instituted in 1930, with several of the club members enrolled in competition with the agriculture students. The finish of the season saw the completion of 12 ton-litters with honors even between the club and the students. The third year of the contest, being the season just completed, saw the completion of 13 ton-litters of which seven were produced by all-day students and six by the part-time students of the club.

As a result of the keen interest aroused in the community over the first year's ton-litter achievements, the club sponsored an active swine improvement campaign.

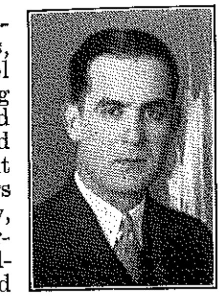
Further assistance has been given the local Future Farmers' organization in their various activities and in the prizes offered in achievements in agriculture projects and in the annual pest-wars. This year a fund of $30 was set aside for the use of the local F. F. A. Chapter in the present school year. The maintenance of a close relationship between the all-day student organization and the part-time student organization is accomplished thru unity of effort and occasional joint social meetings.

A report recently prepared by the organization's treasurer reveals a total of $134.10 that has been spent to date in a manner of direct benefit to the school. This amount includes $50 spent in the spring of 1931 in the construction on the school grounds of two tennis courts with permanent nets and eight-foot backstops, and scaping and leveling a baseball diamond with ample backstop added on it. The above amount does not include the great amount of donated labor involved in this work. Additional financial aid given the school includes the purchase of athletic equipment and visual education expenses for both day and night school.

The part the club has played in lead-

Evening School Completes Program

H. H. BROWN, Instructor Vocational Agriculture, Washington, Kansas



H. H. Brown

THE Washington, Kansas, High School has offered evening courses in Feeds and Feeding and Soil and Crop Management to the adult farmers of the community, and a course in Marketing Farm Products is being planned for this winter. These courses were made possible thru the co-operation of the board of education, the superintendent of schools, the Washington County Farm Bureau, the Washington Chapter of the Future Farmers of America, and the department of vocational agriculture. Each played an important part in organizing and conducting the courses and any success of the venture was due to the combined wholehearted support of all.

Information gained thru teaching evening school invaluable in teaching all-day class. By means of the evening classes I hoped to become better acquainted with the progressive farmers of the community, and to provide an opportunity of making this group familiar with the day school program in vocational agriculture. Such knowledge aids materially in promoting the day school class. I wished to learn from these farmers the practices which they had proven successful on their farms, this information being invaluable in planning the course of study to be offered to the boys. For, as someone has said, the best farm practices for any community are those practices which have proven successful on the farms of that community. This information cannot be learned except from the farmers.

I also wished to learn the problems confronting the farmers of the community and to aid if possible in solving these problems. Since it is useless to solve the problem unless the solution is put into practice, I hoped to give each farmer reached some definite information and to encourage him to adopt some improved method or practice.

Would encourage improved practices. In brief, I hoped to become acquainted with the progressive farmers of the community, allow them to know me and my program, and to learn from these better farmers those facts which would make the day school instruction more effective. I hoped to determine the problems facing the farmers of the community, aid in the solution of these problems and to encourage the practice or putting to use of the solution.

The way in which the work is organized here may best be shown by outlining the procedure followed last year. My

board of education. The latter freely granted their permission and the use of the high school building and equipment, including light and heat. After I had explained my plans to Mr. Hewitt, he agreed to send out a letter over his signature, announcing the evening course.

Content of course determined in conference with county agent and key farmers. I had discussed the class with several farmers during the summer. After talking with County Agent Leonard F. Neff, we concluded that a course in Soil and Crop Management was most needed and would work in best with our respective programs. We made a tentative outline of ten lessons and divided the work of leading the discussions equally between us. The lessons were briefly as follows:

1. Soil study and tillage methods.
2. Terracing.
3. Legumes.
4. Rotations of crops.
5. Commercial fertilizers.
6. Seed selection.
7. Weed control.
8. Insects affecting crops.
9. Diseases of crops.
10. Summary.

This outline was included in the letter sent out in announcing the course.

Prospective members invited by F. F. A. members. The next problem was to determine who to invite. Here I decided to use the F. F. A. Chapter. At a regular meeting the proposition was presented and each boy asked if he knew of one or more farmers who would be interested in an evening class and who would attend a majority of the sessions. After some discussion the group adopted the idea with considerable enthusiasm and competition was stirred up among the boys as to who could bring the most members. Names suggested by the boys, the roll of the previous evening class, and men known by myself or Mr. Neff to be interested were included in the mailing list.

Local papers used. We were now ready to mail the announcement of the course setting the date for the first meeting on January 20, 1931. As suggested above, the first letter was signed by the superintendent. Other letters were sent out each week so worded as to arouse interest in the subject to be discussed. These letters were signed by the F. F. A. president and myself as F. F. A. adviser. Short articles were published in the local newspaper each week, giving a resume of the lesson discussed and announcing the next topic. The combination of letters and news stories and the personal contact of the F. F. A. members kept a fairly satisfactory attendance thruout the course.

A group of 45, including 30 actual

nounced, the content of the course was thrown open for discussion and many important suggestions were made by the members of the class. The time of the meeting was set by the group.

The method of conducting the class may be shown by citing the procedure followed in some of the lessons. Mr. F. C. McNitt, a farmer near Washington, has been following, for several years, a definite rotation planned for him by the faculty of the Kansas State College and the extension service. I made a map of his farm and charted his rotation which illustrated clearly a satisfactory system of cropping for this county. After a preliminary discussion of the values and essentials of crop rotations Mr. McNitt explained his system and gave its advantages and faults. This brought forth several questions and ideas from the group.

For the lesson on weed control I asked the group to name the weeds which were common. Over thirty were suggested and the names written on the board. We took them up one at a time and discussed the control measures. A very satisfactory discussion followed in which the members gave their experiences. I discussed the use of chemical sprays in controlling weeds and gave the experimental results obtained by the Kansas experiment station on time of cutting pasture weeds. Samples of all available weed seeds were studied by the group.

The lesson on terracing was also handled by a local farmer with considerable experience. The day class built some models of terraces, soil saving dams, and so forth. As a follow-up to this lesson a field demonstration was held at which the day school students ran levels for terraces and a short terrace was constructed.

The experienced farmer is the best source of subject matter. In summing up teaching methods, I am fully convinced that the experienced farmer is the best source of subject matter, and the best discussion leader. His experiences supplemented by charts of experimental results and samples of seeds, soils, or other materials involved should put across any job.

Why was attendance irregular? My biggest dissatisfaction is caused by the fact that while many farmers attend the meetings only a relative few are regular. This may be due to my method of securing enrollment or to my practice of announcing the course rather than building it entirely with the group. I am not fully satisfied with the number of improved practices adopted and intend to stress this phase more in the future.

Conclusions. Here are a few conclusions which I have drawn from my experience. I am convinced that the voca-

Evening School Do's and Don'ts

J. D. ADAMS, Vocational Agriculture Teacher, Garden City, Kansas

[Editor's Note: During this difficult period when school boards are having trouble in balancing budgets and so are looking around for places to reduce expenses, it behooves us to keep our program before the public. We invite your consideration to two sentences from Mr. Adams' paper: "The schools provide a good opportunity to make a direct hookup between the school patrons and taxpayers. This contact (thru evening schools) increases the number of enthusiastic supporters for the department."]

EVENING school instruction for the adult farmer has made rapid progress within the last few years. The efforts of the vocational agriculture teacher in the numerous communities have pioneered the way for such instruction. Since the farmers are having to continually make adjustments to their ever-changing environments, the adult education program is being successfully promoted thru the vocational agriculture departments.

Evening school contacts increase number of supporters. After having conducted three evening schools, and at present conducting a fourth, I am fully convinced the holding of evening schools is one of the most valuable contributions a vocational teacher can make to his community. The schools provide a good opportunity to make a direct hook-up between the school patrons and taxpayers. It gives the agricultural teacher a personal acquaintance and puts him in touch with a large number of farmers that he probably would otherwise never have made. This contact also increases the number of enthusiastic supporters for the department.

To the vocational agriculture teacher who is planning to conduct his first evening school there might be hesitancy on his part due to the fact that there is always a doubt in his mind as to his ability to appear intelligently before a group of experienced farmers. But I believe this is a good point because it puts the teacher more on the alert.

Instructor must be familiar with course content. Probably one of the first essentials of an evening school is for the instructor to be thoroly familiar with the contents of the course. Altho thru careful manipulations the meetings can be conducted so as not to draw too much from the instructor for we are aware the conference method is by far the better method of conducting a school, and I might suggest that from my own experiences it is much more desirable to conduct the meetings yourself than to have an outsider. He may be a valuable speaker but he does not know the local conditions as the teacher knows them, neither will he be present to follow up with aid thruout the year.

Securing attendance. After deciding upon unit or units, which should be determined by the needs of that particular community, and you feel you are sufficiently familiar with the subject matter involved, the next problem is getting the attendance.

There are numerous agencies to be used in securing attendance.

A number I have used are:

1. First talk to a number of farmers who would likely be interested.
2. Make a personal invitation to other farmers and tell them of influencing farmers and neighbors who are going to attend.
3. Secure the co-operation of the county agent in obtaining attendance.
4. Secure a list of men who might be interested and send them an invitation with a list of the units which have been tentatively outlined.
5. Make announcements thru the local newspapers.
6. Have the members of the vocational agriculture class tell not only their fathers but their neighbors.
7. Getting interested men to invite other men.
8. Use the telephone on the afternoon of the first meeting to remind them of the school.
9. After the first meeting announce thru the newspaper the number in attendance and the subject for discussion at the next meeting.
10. A letter is usually sent out each week to all those who are enrolled announcing the subject unit for the following meeting.

Subjects of courses. My first two schools were on "Feeds and Feeding." The third one was on "Hog Production" and my fourth one this year is again on "Hog Production." The topics which will be discussed this year are:

1. Present type as demanded by the packer.
2. Selecting and breeding the sow.
3. Feeding the pregnant sow.
4. Economical production of hogs.
5. Diseases and vaccination of hogs.
6. Butchering, cutting, and curing of meats.
7. Feeding fat hogs.
8. Hog houses and equipment.
9. Pastures and pasture management.
10. Marketing.

The methods of presentation of the material and conducting of the meetings has a very deciding effect on the success and interest of the meetings. At the first meeting I try to make those attending feel perfectly at ease and to know that they may ask questions at any time. When a question is asked it is in turn referred to someone else. In this way a number of farmers will give their ideas, others will offer contributions of their own experiences and soon a discussion is in progress.

On some occasions it is necessary for the instructor to do some explaining and use charts. Questions may be asked the group from time to time so they will feel they have a part in the discussion.

Suggestions for determining course content. In outlining the units of the course for the school it is not always best to wait until the first meeting to decide upon the problems to be discussed. The average group will not suggest many topics as they are not accustomed to this kind of response. The best method I have found is to offer a number of suggestions to get their minds working in a general direction, then they will begin to respond more freely. I have tried both methods and find it is necessary to lead in the discussion.

Before the meetings are started the instructor can anticipate some of the questions which will be asked. I always and to have charts and references ready to answer technical questions.

Checking Up. Soon after the first meetings of his initial evening school, the agriculture teacher begins to ask himself, "Am I getting results?" and "Are my meetings a success?" There is no possible way to measure to completeness the success of a school. It is true, one is encouraged to see a large attendance and to hear of results in dollars and cents. These are all worthwhile but if a school has been at all successful, results may be noticed long after the course has been concluded.

In my schools on "Feeds and Feeding" it soon became evident that my people were changing their rations, feeding a balanced ration, feeding their dairy cows according to their production and other practical methods. These practices have been continued since the first evening school was held. For the "Hog Production" school we stressed "packer type of hog" very much. This was kept before the group so much that they suggested a hog show for the following fall so that they could get the type more firmly fixed in their minds. To make it more interesting they gave $100 for prizes. When the show was held we had about forty head of fat hogs for competition and about the same number of breeding stock for exhibition. The opinions of the farmers and business men were that it was the best thing in hogs they had ever seen in this part of the state. The hog buyers also are reporting that the farmer's idea of type is fast changing, as well as the quality of hogs being marketed.

Do's and Don't's. There is so much to say about evening schools and adult education I am at a loss to know where to quit but I will end by giving a few "do's and don't's" as I see them and to say that this article is just my own experiences as I have encountered them in conducting evening schools.

1. Start and stop on time.
2. Be full of your subject.
3. Have confidence in your own ability.
4. Don't become excited.
5. Give each person proper consideration and don't slight anyone.
6. Use tact and judgment in showing a fellow he is not altogether correct.
7. Be sociable.
8. Don't talk too much but talk enough to keep the discussion going.
9. Don't allow the meeting to drag.
10. Don't talk above the members' heads or talk too fast.
11. Be practical.
12. Give opportunity for the members to express their own ideas.

Minnesota Claims Goodwin

NOW we are sure that somebody reads the magazine. We have been notified that Norman Goodwin, an American Farmer of the most recent crop, was credited to Michigan, whereas his home is really in Minnesota. We hasten to make the correction, altho

Farm Mechanics

A Suggested Plan for Shop Grading

L. J. SCHMUTZ, Instructor, Vocational Agriculture, Wakefield, Kansas
J. D. ADAMS, Instructor, Vocational Agriculture, Garden City, Kansas

ONE of the most difficult problems of the vocational agriculture instructor has been to find a satisfactory method of grading the farm shop work.

One of the important factors to consider is the habits which the boy is forming. If he has formed the habit of correct handling of tools, is interested in the work, and has shown progress in his skills, he should be graded by a method which will show these merits. Another factor which should be considered is the quality of the finished product which must always be graded so that credit may be given for the actual achievement.

A number of methods are being used in different departments but none of them seem to fill the requirements. The difficulty in the present system of grading has come when an attempt has been made to grade two projects of unequal size on the basis of the 100 percent or "A" grade. The grading has been on the boy alone or what the teacher thought he deserved and not by the differences of two projects completed. One boy completes a chicken feeder and another a nail box. Both are given a "B" for the grade. This is unfair because the boy making the chicken feeder should receive more credit than the one making the nail box. In making the chicken feeder there were more skills required, a greater amount of planning and estimating, and it requires a longer time to complete than the nail box.

In attempting to improve our methods the "point system" lends itself to this type of grading. This plan is not intended to solve all the problems of grading, but it is an aid in evaluating the student on his advancement according to his achievement. Take the example of the chicken feeder and nail box again and grade them on the basis that the feeder is worth 100 points. Then by comparison the nail box would be worth 20 points. In arriving at the 100 points basis, which is an arbitrary number, the time or number of hours for the slower student to complete the job were considered. Upon comparing the time to make the nail box we value it at 20 points. Now if both boys did 90 percent work they would receive their credit in points proportional to the time it took to complete their project. With the other method they both received a "B" grade.

The use of the point system brings up many problems on how the plan should be put into practice. What should be the total score in points for the year? How many points should be given to each enterprise? What should be the relative value of jobs, exercises, and projects? Should the standard be established for the A-grade student, the average student, or for the passing mark? What are the things to consider in scoring the project? Should credit be given for home practice work in farm mechanics? Will the boy be permitted to follow his own record? How can a definite, usable plan be set up?

As a basis for working out this plan 100 points may be allowed as a minimum passing grade for each week's work in the shop. The total minimum score for the year would be 3,600 points. The next problem is that of establishing a time distribution in weeks for each enterprise in the course. The following enterprises are considered most adaptable as a farm mechanics course for freshmen boys: drawing, 2 weeks; glazing, 1 week; care and use of tools, 3 weeks; elementary carpentry, 15 weeks; sheet metal, 3 weeks; cold iron work, 2 weeks; harness and leather work, 3 weeks; rope, 1 week; and blacksmithing, 4 weeks.

The total points alloted to each enterprise may be determined by multiplying the weeks given to each enterprise by the 100 points. For example, 4 weeks will be given to blacksmithing, therefore each student must make a minimum of 400 points in this enterprise to make a passing grade.

The next step is that of listing under each enterprise the exercises, jobs, and projects that the students are most likely to do. An estimate of the amount of time in hours to do each job or project should be made. We have used a standard of 20 points for each hour's work of "A" grade. If it takes a boy 6 hours to file a cross-cut saw, the perfect score would total 6 × 20 or 120 points.

One can readily see the advantage of having a minimum standard rather than a maximum standard of points. Every student will need to work to make the minimum score. Grading will be on a competitive basis and only the students that will be able to outstrip their fellows will receive the higher grades. No student will be certain of his position at any one time. The whole plan tends to stimulate competition by giving definite credit in points for every job performed.

The exercises and the more simple jobs performed in the shop should be evaluated on the quality of the finished job. Where projects are completed, a definite credit should be given for the planning and estimating as well as the quality of the finished work. The boy will do better work of planning his jobs, making his working drawings, and estimating his materials, if he knows he is to be scored on that part of his shop project. A simple scheme used in this plan is to allow 20 percent of the project score on planning and estimating, and 80 percent of the points on the quality of the finished project.

The plan of grading by means of the point system should be worked out on a large chart and kept before the students at all times so each may follow his own record. This will stimulate the boys to work at full capacity and will tend to put the whole shop program on a highly competitive basis.

The following outline for the first year in farm mechanics is a suggestive set-up whereby the point system may be put into practice. Each enterprise is divided into a group of jobs, exercises, and projects and the perfect score for each is listed. Following the outline is a plan showing how the scheme may be worked into a large chart and placed on the wall of the farm shop. Each student's score may be obtained each 6 weeks by totaling his column. These scores should then be marked out so they will not be added to the next 6 weeks' score. Credit for home practice work should not be added but should be left to accumulate on a separate record and the student given credit at the end of the school year or at the same time the livestock home project is closed and summarized. The outline covers 34 weeks. Two weeks are left for quizzes and other work. Each student may earn an additional 50 points each 6 weeks for good shop conduct. Conduct includes such points as interest, attitude, shop dress, manner of handling tools, co-operation, and so forth.

OUTLINE OF FIRST YEAR FARM MECHANICS

(The following outline illustrates the time distribution in each enterprise, and a suggested list of exercises, jobs, and projects with the evaluation of each into points.)

GLAZING: (Time—1 week, or 6 hours.) Minimum points—100.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Exercise in glass cutting		40	40

BLACKSMITHING: (Time—4 weeks, or 24 hours.) Minimum—400

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Exercise, building a forge fire		20	20
2. Exercise in hot metal		120	120
3. Making meat hook	12	48	60
4. Making a hay or hog hook	20	80	100
5. Making a fire poker	12	48	60
6. Making a gate hook and staple	36	144	180
7. Making a clevis and pin	48	192	240

COLD IRON WORK: (Time—2 weeks, or 12 hours.) Minimum—200.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Sharpening a twist drill	....	60	60
2. Exercise, drilling	....	40	40
3. Exercise, counter sinking	....	20	20
4. Exercise, removing broken bolts	....	40	40
5. Exercise, reaming	....	20	20
6. Exercise, cutting threads	....	40	40
7. Exercise, chiseling and punching	....	20	20
8. Exercise, hack sawing	....	20	20
9. Exercise, filing	....	20	20
10. How to clean files	....	20	20
11. Others	....	....	....

ROPE WORK: (Time—1 week, or 6 hours.) Minimum—100 points.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Whipped end	....	5	5
2. Square knot	....	5	5
3. Crown splice	....	10	10
4. Eye splice	....	10	10
5. Weaver's knot	....	5	5
6. Bowline	....	20	20
7. Timber hitch	....	5	5
8. Clove hitch	....	5	5
9. Sheep shank	....	5	5
10. Half hitch	....	5	5
11. Blackwall	....	5	5
12. Scaffold hitch	....	10	10
13. Miller's knot	....	10	10
14. Short splice	....	40	40
15. Long splice	....	60	60
16. Rope halter	12	48	60

CARE AND USE OF TOOLS: (Time—3 weeks, or 18 hours in shop.) Minimum points—300.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Sharpening a plane bit	....	30	30
2. Sharpening a wood chisel	....	30	30
3. How to adjust a jack plane	....	60	60
4. How to adjust and operate a block plane	....	20	20
5. How to use a wood chisel	....	20	20
6. Redressing a screw driver	....	20	20
7. Fitting handles	....	20	20
8. How to use the brace	....	40	40
9. Use of the marking square or gauge	....	10	10
10. How to use the try square	....	20	20
11. The use and application of steel square	....	30	30
12. How to sharpen a cross-cut saw	....	120	120
13. How to sharpen a rip saw	....	100	100
14. How to use the nail hammer	....	20	20
15. How to file an auger bit	....	20	20
16. How to sharpen an ax	....	60	60
17. How to sharpen a scraper	....	10	10

ELEMENTARY CARPENTRY: (Time—15 weeks, or 90 hours.) Minimum points—1,500.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Wood exercise	....	140	140
2. Bread board	20	80	100
3. Chicken feeder	60	240	300
4. Saw horse	72	288	360
5. Machinery repair horse	72	288	360
6. Drawing board	24	96	120
7. Watering trough for hogs	36	144	180
8. Harness sewing clamp	36	124	160
9. Shop tool cabinet	72	288	360
10. Hog feeder	160	640	800
11. Hog house	200	800	1,000
12. Wagon box	288	1,152	1,440
13. Farm gate	24	96	120
14. Hay rack	240	960	1,200
15. Single tree	36	124	160
16. Double tree	36	124	160
17. Neck yoke	48	192	240
18. Nail box	24	96	120
19. Hog crate	24	96	120
20. Chicken crate	36	124	160
21. Beehive	26	124	160
22. Trapnest	80	320	400
23. Others (teacher must evaluate)	....	....	....

SHEET METAL: (Time—3 weeks, or 18 hours.) Minimum—300 points.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Operating a blow torch	....	60	60
2. Tinning a copper	....	60	60
3. Soldering a hole	....	60	60
4. Sweating two pieces of metal	....	60	60
5. Soldering an oil can	....	60	60
6. Making a dust pan	48	192	240
7. Making a funnel	40	160	200
8. Making a drip pan	40	160	200
9. Other jobs or projects	....	....	....

DRAWING: (Time—2 weeks, or 12 hours.) Minimum points—200.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Mechanical drawing of a wood block	....	4	16
2. Isometric of a wood block	....	4	16
3. Mechanical and isometric of a block	....	6	24
4. Mechanical drawing of a spool	....	8	40
5. Mechanical lettering exercise	....	30	30
6. Mechanical exercise, cross sections	....	30	30
7. Conventional lines, exercise	....	20	20
8. Practice in free-hand lettering	....	30	30
9. Common wood joints, sketching	....	30	30
10. Reading a blue print, exercise	....	60	60
11. Others that instructor may select	....	....	....

HARNESS AND LEATHER WORK: (Time—3 weeks, or 18 hours.) Minimum—300.

Job, Exercise, or Project	Planning and Estimating	Quality	Total
1. Making a harness clamp	....	60	60
2. Splicing by use of the conway loop	....	40	40
3. Attaching a snap by use of conway loop	....	20	20
4. Making a hame strap	24	96	120
5. Making a stitched splice	24	96	120
6. Making a leather halter	36	144	180
7. Repairing, cleaning, oiling set harness	48	192	240
8. Others	....	....	....

SUGGESTED PLAN FOR CHART

Projects, Jobs, and Exercises	Perfect Score			Student's Name		
Grading Factors	*P&E	Q	*T	P&E	Q	T
DRAWING:						
1. Mechanical drawing of wood block	.....	20	20	.....	.....	.....
2. Isometric drawing of wood block	.....	20	20	.....	.....	.....
3. Others	.....	.....	.....	.....	.....	.....
CARE AND USE OF TOOLS:						
1.	.....	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....	.....
ELEMENTARY CARPENTRY:						
1. Wood exercise	.....	140	140	.....	.....	.....
2. Chicken feeder	60	240	300	.....	.....	.....
3. Wagon box	288	1,152	1,440	.....	.....	.....
OTHER ENTERPRISES:						
1.	.....	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....	.....
First 6 weeks	Conduct *			Conduct *		
	Total			Total		
Second 6 weeks	Conduct *			Conduct *		
	Total			Total		

*P&E—Planning and Estimating.
*Q—Quality of Work.
*T—Total score.
*Conduct—Fifty points added for each 6 weeks for perfect conduct.

Making Lesson Plans for Farm Mechanics Class

G. C. COOK, Assistant State Supervisor of Agricultural Education, North Dakota

IMPORTANCE of Farm Mechanics Lesson Plans—No instructor should attempt to teach a shop class without having previously made out a lesson plan of the day's work. It is said that preparation is the keynote to success. There are a number of reasons why lesson planning in shop work is important:

1. The instructor knows what he hopes to accomplish.
2. A better grade of teaching results.
3. Much time and confusion on the part of the class is saved.
4. There is less opportunity for disciplinary problems.
5. The students have a greater respect for the instructor.
6. Much more work is accomplished.

Suggestions to Consider in Preparing Lesson Plans—

1. Objectives for the day's work.
2. A worthwhile job for every member of the class.
3. A list of available blue prints and job sheets.
4. A list of available illustrative materials.
5. Sources of other materials and supplies to use.
6. Plan of procedure to follow in conducting the class.
7. General instructions to the class.
8. Questions for study and discussion.
9. Demonstration material in readiness.
10. A list of references.

Job Sheets:

Every instructor should work out or secure job sheets for his shop class. Many times no lesson plans are needed in addition to the job sheets. Instructors should have each of their students make copies of such sheets and file them in their notebooks. The questions as set up in these sheets should be carefully studied and discussed, the students should then place brief notes on these questions in their notebooks. The page opposite the job sheet in the notebook may be used for the notes.

The job sheets to be used in the shop may be shellacked on a heavy piece of galvanized iron, then coated with clear varnish. The galvanized iron will hold the sheet in place and the varnish will

Future Farmers of America

National Program of Work—1932

1. Encourage and aid unorganized states to affiliate with the F. F. A. and assist recently organized states to perfect their state associations.
2. Have every state in the Union chartered by the national organization of F. F. A. by November, 1932.
3. Encourage every state association and local chapter of F. F. A. to participate in George Washington Bicentennial celebration during 1932.
4. Conduct a full-hour F. F. A. national radio program monthly in co-operation with the National Broadcasting Company.
5. Issue an official publication of the national organization of F. F. A.
6. Publish a F. F. A. directory of all affiliated state associations and chapters.
7. Have 100 percent state delegate representation at the Fifth National F. F. A. Convention in 1932.
8. Elect the quota of 75 fully qualified candidates for the "American Farmer" degree at the Fifth National F. F. A. Convention.
9. Provide suitable awards for the following events:
   a. The F. F. A. public speaking contest.
   b. The F. F. A. Star Farmer contest.
   c. The F. F. A. chapter contest.
   d. The F. F. A. state association contest.
   e. The American Vocational Dairy and Poultry Convention (judging).
   f. The National Congress of Vocational Agricultural Students (judging).
10. Encourage state associations to instruct local chapters to provide radio facilities for chapter and classroom activities.
11. Encourage state associations to assist local chapters in providing proper equipment for conducting meetings.
12. Encourage state associations to include in their programs of work an item on the conservation of natural resources (soils, trees, wild animals, and so forth), and to recommend this item to local chapters for their programs of work.
13. Encourage state associations to hold conferences or leadership schools for officers of local chapters.
14. Encourage state associations to publish periodicals describing F. F. A. activitics and to arrange for exchanges with other states.
15. Encourage state associations to use limited standardized report forms in securing necessary information.

Pettibone Comments On Hawaii F.F.A.

KENNETH PETTIBONE,
President, Future Farmers of America,
Corvallis, Oregon

THE Hawaiian Association of Future Farmers of America had extended an invitation to an Oregon boy to pay a visit to the Islands. This was an item of interest to me, of course, but not especially so—until I was chosen as the fortunate one. The Portland Chamber of Commerce assisted by the Corvallis Chamber, the Associated Students of the Corvallis High School and the Oregon Association of Future Farmers, completed the necessary financial arrangements. I left for the Islands April 16, and returned to Oregon May 18, making it a month away from home.

At the time I was in the Islands, there were 17 F. F. A. chapters and about 700 boys enrolled in the Hawaiian Association. The plantation men regard the F. F. A. movement as the solution to the problem of supplying the cane and pineapple industries with skilled workers, and are very much interested in promoting this work. Only recently the Territorial Legislature appropriated $2,000 to the Hawaiian Association for use as they saw fit. The recent Territorial Convention of Future Farmers, an annual affair, cost nearly $4,000, and every cent was paid by the boys.

During the latter part of 1931, Wilbert Choi, past president of the Hawaiian Association, paid the state of Oregon a visit. Wilbert is of Korean descent and is an outstanding individual in many fields of endeavor.

The greater part of the boys in the Island schools are of oriental descent. Because of the fact that they live in plantation villages instead of individual farms, the project work they carry must be of a different nature than it is here. The boys contract an acreage of cane or pineapple and cultivate it as classwork. One half of the time is spent in the fields and one half in the classroom. The gross proceeds from the class projects are divided up according to the amount of work each boy has accomplished.

The entire Island school system is on a vocational basis. It really trains students by doing the actual work. The grade schools have a system of prevocational work, the junior high schools vocational work that turns out students capable of holding down a job, and the high schools turn out students to go into the mills and canneries and on to the plantations as specialists in various lines.

New Hampshire F.F.A. Plan Annual Summer Camp

E. B. McCLENNING,
Teacher of Agriculture,
Weare, New Hampshire

FUTURE Farmers of New Hampshire will hold a state camp next summer if present tentative plans can be made to materialize. These plans call for a camp of ten days' duration, accommodating about eighty-five boys, or five from each chapter in the state. The boys will be delegates from the chapter and will be selected on the basis of accomplishment during the school year. A part of their expenses will be paid by their local chapter.

The committee planning the camp is making a survey of available sites with the intention of leasing an already equipped camp for a time before the regular commercial season opens. Estimates have been secured from experienced camp directors and there seems to be reasonable hope that the project may be successfully completed.

Every agriculture teacher will attend the camp and serve as counselor under the direction of the state supervisor. Many have had experience in Y. M. C. A. or Boy Scout work and are enthusiastic about the enterprise.

Tune in on F. F. A. Broadcast Over N. B. C. Farm and Home

An Attractive Program

WILLIAM DEAN BOYLE, Instructor,
Lewisville, Idaho

WITH the beginning of school in September came the beginning of Future Farmer activity. Officers were elected. A definite program covering the entire year's activity was planned, presented, and accepted by our chapter as a nucleus from which to start working.

As facilities for financing our chapter are limited, we raised funds by selling candy during the lunch hour. We elected a boy to supervise the selling of the candy for the year. He had the privilege of asking, each week, any Future Farmer to help him. The manager took invoice each night and turned over the receipts to our secretary-treasurer. Our first activity was preparing a booth which we displayed at the Eastern Idaho District Fair. This booth consisted of exhibits of superior products raised on our chapter members' farms.

Following the fair we gave an annual Harvest Ball. Attraction and interest were added by the selection of a Harvest Queen, voted on by the entire student body. Our decorations for the ball consisted of the display of products used in our booth at the fair, blended with harvest colors portrayed by leaves and shrubbery, and shocks of grain and corn.

Several parties were given during the winter by our chapter, and we also supplied many snappy programs for student-body assemblies.

As spring set in we began working on the task of making our school grounds more attractive. With the use of teams and trucks which the boys brought, we leveled the surrounding ground, enlarging the possible parking space. Trees from the University of Idaho were planted and cared for by our chapter.

Before school closed we visited the government sheep experiment station at Dubois. The station superintendent explained the methods of management.

Next on our list of activities was a mid-summer trip thru Yellowstone National Park. The constant draw on our treasury had left it without sufficient funds to finance the trip. However, the boys, eager and interested, soon solved this difficulty by each offering to earn $5 to help defray expenses.

Thirteen of our 40 members had previously made the trip, but the remaining 27 were ready to go. We employed two rainproof trucks for $112 and in these made the trip.

Early on July 9 we were off! Hungry and boisterous we stopped for our first meal at Big Springs. Here we fed the tame trout which were so numerous that they completely covered the bottom of the stream.

Camping our first night at Old Faithful Inn we witnessed the eruption of Old Faithful Geyser and visited the bears' feeding grounds.

Noon the following day found us motor-boating on Yellowstone Lake. We were amazed to find geysers in the lake spouting boiling water while the surrounding lake water was icy cold.

The boys, always interested and anxious to learn, found our stop at the Yellowstone Fish Hatchery, where trout are raised for the Park streams, worthwhile. A ranger explained the habits of the fish and showed us every stage of their life cycle.

At Grand Canyon we received an unexpected thrill when a large bear, in search of food, struck one of our tents, tearing it full length. Its racketeer companion, not to be outdone, continued the depredation by tearing into pieces a food laden box which it had carried from one of the trucks.

Bears were not the only animals our group observed. Going over Dunraven Pass to Mammoth the next morning we saw a buffalo herd and mule deer with their young. The mule deer surprised us by eating candy mints from our hands.

At Mammoth the terraces were highly colored in rainbow colors, which we found were made by algae growing on the ledges of rock over which the water from the above geysers flow.

Yellowstone Lake had many surprises and thrills for us. First fishing, then skimming across the lake to Pelican Point in a Criscraft launch going more than 30 miles per hour.

July 12 we camped at Jenny's Lake beneath the towering Tetons Peaks. The boys, rowing boats on the lake, watched the sun sink between the peaks, throwing reflections and misty shadows on the clear water.

The last day, homeward bound, we went thru Jackson Hole which is known as the last of the Old West, and over the Teton Pass. Here our trucks labored in low gear for four miles crossing the Pass thru Teton Valley and on to Midway.

This trip successfully closed our year's activity. These trips and outings, we feel, have made our Future Farmer chapter more worthwhile.

Develop Attractive Program

KENNETH H. MARTIN,
Albion, New York

THE Albion Future Farmers believe that the educational program of the year should center around one well-chosen, worthwhile thought. They believe that the ambitious, keen-thinking, farm boys who have left full-time agriculture classes will remain associated with the organization longer if this is true. Farm boys will not continue to come to Future Farmer meetings if there is no food for thought.

With this principle in mind the Albion group prepared their 1931–32 program using as a central thought, "Farm Legislation." This will be developed by group discussions, debates, outside speakers, and the like. At our last meeting a former state assemblyman gave valuable information regarding legislative procedure. We have also had one debate with a local grange on a proposed amendment to the New York State Constitution.

Among the community activities of the group are an F. F. A. booth at the county fair, co-operative sale of certified seed, apple exhibit at the New York State Horticultural Society Show, radio broadcast of model meeting, and participation in judging contests and leadership conferences. The recreational part of our program has been taken care of by agricultural movies, a three-act play, parties, and picnics.

Our Future Farmer chapter meets regularly for monthly meetings and other special occasions. About 50 percent of the membership is made up of boys not in full-time agricultural classes. Many of the boys drive ten or twelve miles to meetings in order to participate in this program.

Official Future Farmer Song Not Selected

AN ERROR was made in reporting the adoption of a song at the last Kansas City convention as the "official F. F. A. song." The song which was awarded the $150 prize as being the most suitable of those contributed was called "Hail the F. F. A." but the delegates decided against making it the official song of the organization. The song will serve as a nucleus for a song book to be gradually developed as suitable material becomes available.

Public Speaking Contest to Be Repeated in 1932

THE National F. F. A. Public Speaking contest will again be on the program as one of the features of the annual convention to be held in Kansas City, Missouri, in November, 1932.

The same amount of prize money will be available, a total of $1,000, to be apportioned among the four contenders, each representing a region. It is not too early for every eligible F. F. A. in every chapter to start work in preparation for this contest.

National Chapter Contest to Continue

Announcement has been made to the effect that the Chapter Contest will be continued for 1932. Rules for this con-

More Books On Farm Mechanics

Job Operations in Farm Mechanics, Third Edition, revised and enlarged, printed, paper cover, standard size, 164 pages, price $1.50 ($1 in orders of 10 or more) written by teachers of vocational agricultural teachers of Missouri, edited by Sherman Dickinson, professor of agricultural education, Columbia, Missouri.

The revised edition of "Job Operations in Farm Mechanics" is an interesting and valuable contribution to the library of the teacher of farm mechanics. Presentation of principles, references, and details of instruction are set forth in an interesting and concise manner. Complete bibliography and index is included in this edition.

The information in this book is reliable and in accordance with recommended present-day practices for 154 job operations. References are carefully arranged and well selected. This book should prove of value to both student and teacher in farm mechanics courses. —E. C. Graham, Manhattan, Kansas.

The Handy Man's Handbook by C. T. Schaefer; 273 pp., well illustrated, published by Harpers, price $3, should prove most interesting and valuable to what might be termed the incidental mechanic. For such a person the book is up to date and full of the best information about the care and use of the ordinary hand tools. Likewise materials and processes reasonably available are treated in an effective way.

Often a little resourcefulness will meet a mechanical situation more easily than hunting up a regular mechanic. For those accustomed to such procedure this book should prove particularly stimulating and helpful.

In the appendix is also found a very helpful collection of tables and tabulations.—V. L. Strickland.

Second Year Farm Mechanics Manual for use by individual students, has recently been published by Mr. H. D. Eldridge of the high school agriculture department at Greeley, Colorado. This manual follows the same plan as his first-year manual. A partial outline of the year's work with a space for checking individual jobs under each unit and a suggested list of tools for the home work shop, are included. Job instruction sheets are included on gasoline engines, blacksmithing, repairing farm machinery, and concrete work. Many teachers will find this manual of considerable assistance, especially where they have large classes.—M. A. Sharp.

Time Emphasis

(Continued from page 146)

entirely clear, yet the fact remains this problem does color the picture. The question of whether or not the day school student in agriculture can be given adequate preparation training is also raised. A number of local school administrators, and some state school administrators even are asking, "Can not the vocational agricultural work be satisfactorily given to the day school group on a 60-minute basis?" What shall be our reply?

No attempt is being made to criticize its advantages. The problem that we as vocational agricultural workers must face is whether or not we can afford to lessen the time given to the training of day school students in vocational agriculture. Can we? Suppose we ask ourselves what the prime objective of the Smith-Hughes Act is as it relates to the day school student in agriculture. "To prepare for entry upon . . . ," of course. Suppose you were charged with all the responsibility of preparing the farm boys in your day schools in vocational agriculture for entry upon the business of farming, and upon this successful preparation your jobs depended. How many of you would be satisfied with 60 minutes a day for four years? Let us not beg the question. We know the purpose of the act, we are accepting federal moneys specifically designated, and it would seem expedient to plan our programs accordingly.

With the multitude of problems facing the farm boy who wishes to prepare for entry upon the business of farming today, it seems ill advised to think of shortening the daily emphasis in our vocational agricultural day school classes. "Over-production," "too many farmers," "better training agencies outside the school," and many other familiar excuses do not lessen our responsibility to those farm boys who want to take preparation for entry upon the farming occupations thru the medium of our Smith-Hughes vocational agricultural day schools.—A. P. D.

Lesson Planning for Class Room Work

(Continued from page 148)

b. All above must be met in feeding.
6. Feeds grown locally.
a. Corn, oats, wheat, and barley.
7. Feeds to buy.
a. Tankage or meat meal.
b. Salt.
c. Bonemeal.
d. Oyster shell.
e. Charcoal, if desired.
8. Egg tonics and medicines.
a. Stimulating.
b. May stimulate too much.
c. Not practical over period of time.
d. Sanitation more important than medicine.
9. Average hen.
a. Lays 60–75 eggs per year.
b. Should lay at least 150 eggs per year.
10. Commercial vs. home mixed feeds.
a. Home mixed preferred.
(1) Cheaper.
(2) Use home-grown feeds.
(3) Gives just as good results.
(4) Know what it contains.
(5) Tastes just as well.
b. Formulae for home mixtures.

(1) Mash (N. D. Circular No. 89).

*160 lbs.	fine ground wheat	@ $1.00 cwt.	$1.60
160 lbs.	fine ground barley	@ .75 cwt.	1.20
80 lbs.	fine ground oats	@ .75 cwt.	.60
100 lbs.	meat scraps	@ 2.00 cwt.	2.00
	(Reduce ⅓ if plenty of skimmilk is available.)		
15 lbs.	bonemeal	@ 2.00 cwt.	.39
5 lbs.	salt	@ 1.25 cwt.	.06
5 lbs.	fine charcoal	@ 3.00 cwt.	.15
525 pounds			$6.00

$6.00÷5.25=$1.14 cwt.

Add one quart cod liver oil to each 100 pounds of mash during cloudy weather.

(2) Scratch grain.

200 lbs.	wheat	@ $0.85 cwt.	$1.70
200 lbs.	barley	@ .60 cwt.	1.20
200 lbs.	oats	@ .60 cwt.	1.20

(c) Commercial feeds (Fargo prices, September, 1931).

(1) Mash.
X brand, $3.00 per cwt.
Y brand, $2.75 per cwt.
Z brand, $2.25 per cwt.

(2) Scratch.
X brand, $1.50 per cwt.

11. Amount to feed.
a. Mash, 8 to 10 pounds per 100 birds daily.
(1) All they will eat from the hopper.
b. Scratch, 10 to 16 pounds per 100 birds daily.
(1) All they will eat in 20 minutes.
(2) Feed ⅓ in morning, ⅔ in evening.
12. Can a farmer afford to use a balanced ration?
a. Depends on care, management, and the kind of chickens.
b. An average hen will eat about 40 pounds of mash and 50 pounds of scratch feed per year.
c. Figuring a home mixed feed, it would cost about 80 cents to feed a hen mash and grain one year.
(1) About 25 percent less under farm conditions.
13. Electric lights.
a. Often practical for specialist when eggs are high.
(1) November to March.
b. Slight increase in yearly production.
c. Increases feed consumption.
d. Excessive use not advised.
e. Not practical for average farmer.

The above lesson plan may seem too much in detail and one that requires too much time to develop. There are, however, a number of facts to be considered in planning one's work.

1. The work should be taught on a vocational basis.
2. Definite objectives must be set up.
3. The job analysis method of teaching should be used.
4. Actual student and home problems should be discussed.
5. Experimental data must be studied and the facts presented.
6. It is better to teach a few of the more important jobs well than to try to cover all possible jobs in an enterprise and merely lecture on them.
7. The boys must be trained to think out and solve problems.
8. The boys must be taught to do the job and not merely to talk about it.
9. Wherever possible definite conclusions must be drawn.
10. Students should keep notebooks for future reference.

A job such as "Feeding Hens for Egg Production" is extremely important and one on which a teacher can well afford to spend considerable time. Too often the only conclusion drawn is that each student will have to work out the job for himself. Such conclusions mean very little to the boy and probably never take root on the home farm. The boy must be made to see why a balanced ration should be fed and why home mixing is generally recommended. Can he do the job? Will he do it? In most cases he can and will do it if it is properly presented in the classroom.

Young Farmers' Club Active

(Continued from page 152)

ties may be shown in the work of rebuilding the local farmer's institutes.

Previous to the organization of the club institutes had been held but were discontinued because of the inability to make it a financial and patronal success. It was re-instated in 1927 thru the efforts of the club and showed a reasonable success. The Young Farmers' Club took the leadership part in 1928 and made it a success far exceeding former years. The independent institute of 1929 was further increased to the extent that its total attendance, 2,800 at six sessions, placed it third in the state in rank and its total expenditures for programs, prizes, entertainment talent, and speakers, and so forth, exceeded $450. The main source of funds paying these expenses were secured thru the selling of program advertisements altho the club has provided $171.85 from its treasury. The source of the funds earned by the organization has been largely thru the giving of an annual play.

The club has further provided community leadership in a male quartet and an orchestra which provided musical talent for a number of school programs.

Another activity of the club was a Canada thistle eradication campaign introducing the sodium chlorate method. The club sold the chemicals to farmers at cost as a means of stimulating its use over a wide area.

An annual tour is held each spring. These tours include visits to widely known farms and industrial plants. The 1931 tour was a two-day event. Chartered busses transported the 31 individuals and they visited the Akron rubber plants, the dirigible hangar where the "Akron" was under construction, Firestone dairy herd, Ohio agriculture experiment stations at Wooster, state reformatory at Mansfield, and Harding Memorial at Marion, Ohio. It was the club's first attempt at a long tour and its success over the others prompts even longer tours to come.

The cure for any lapse of interest on the part of club members lies in the continual promotion of a program involving active participation of all members. Unless the organization holds as its goal the accomplishment of definite agriculture improvement and always holds the educational side of its program uppermost, it does not warrant the time and effort required for its continuance.

The value of an active agricultural organization of this type to a community cannot be estimated. It is providing leadership training to many of the younger group who in their day may occupy positions of real importance. It is creating a spirit of co-operation which will serve the community in good stead and above all is providing a respect and love for country life which will add much to the prosperity and content of our future farm homes.

Evening School Completes Program

(Continued from page 153)

greatly by co-operating closely with the county agricultural extension agent. A complete community program may be built about 4-H clubs, [illegible] agriculture during high school and evening schools for graduates and adult farmers. The evening school can accomplish the objectives set forth earlier in this article. Group discussion and the use of local experienced farmers is the best method of instruction. The F. F. A. chapter can be used in securing attendance and conducting an evening school. Leading adult discussions keeps a teacher awake and up with the times and I think it is fun, I like to do it.

Making Lesson Plans for Farm Mechanics Class

(Continued from page 156)

torn and soiled. When job sheets are prepared in this way, they may be hung before the students who are using them, and will last several years. They are also very easily filed.

Job Operation Sheets:

Job operation sheets may be formulated or purchased which serve as a splendid guide to the student in developing shop skills. The following job operation sheet is taken from "Job Operations in Farm Mechanics," edited by Sherman Dickinson, Department of Agricultural Education, University of Missouri, Columbia:

Tinning the Copper

Object: To prepare the copper so that it will retain melted solder.

Material: Solder, soldering copper, flux, damp rag, blow torch.

Tools: Flat file, vise.

Procedure:

1. Clean the copper by filing each side of the point while hot. This will remove any corrosive material which may have accumulated. If the sides have become pitted, they should be hammered out smoothly. A clean bright surface is necessary.

2. Dip the copper into the flux especially prepared for this purpose. This will make it possible for the solder to adhere.

3. Rub the heated copper on some solder. The copper must not be too hot to burn it off. A copper not hot enough will cause an excess of solder to be retained. Wipe off any surplus solder with a damp rag.

4. Before using the copper for any soldering work it must be examined to see if the tinning is still effective. Remember that exposed parts of the copper will corrode, making it impossible to make solder adhere.

Questions:

1. What causes the copper to corrode? Explain.

2. Why should the copper be hot while filing the surface smooth?

3. What devices may be used to facilitate the tinning processes?

4. How does zinc chloride affect the copper?

5. What is the best weight soldering iron to use?

6. Why is copper used in making soldering irons?

References:

1. Cornell Ext. Bul. No. 57, Soldering, pp. 21–27.

2. Smith, Agricultural Mechanics, pp. 249–250.

Other Shop Plans:

Frequently the only lesson plan nece sary will be a list of the jobs to be do with certain boys assigned to do t various jobs. Such planning is essenti in order to accomplish best result There may be several pieces of far machinery to repair, a hay rack, sever self feeders, and other projects to co struct or repair, but much time will l saved if the instructor makes out a li of the jobs and assigns certain indivic uals to them before the class enter This is especially true when the class taken away from the shop to work o some group project, such as a garag Every boy must be assigned a definit job and everyone put to work immedi ately, otherwise, little may be accom plished. Bystanders may wonder if th students are out for business or a goo time.

Two Helpful Books

Making Farms Pay, by Cornelius J Claassen; Macmillan and Company 1931, xvi, 126.

This little book, according to the subtitles, is "a way out for owner and tenant, a narrative of personal experiences in managing 1,000 farms." The author is in charge of the Farmers National Company, an organization furnishing group farm management service. The accomplishments of this company and the advantages of such services to farm owners and tenants are described. The materials presented are of most interest and value from the standpoint of the possibilities of such services. The discussion of methods is incidental and the one who wants to know how it is done will find this question only partially answered. "This book . . . is solely intended to show how the knowledge obtainable from books, from agricultural colleges, from government institutions, can be put to work in the cause of the landlord who doesn't operate his own farm."—W. E. Grimes.

Swine Enterprises, by Arthur L. Anderson; J. B. Lippincott Company, 449 pp., 195 well-chosen illustrations, 27 chapters, appendix, and index; price $2.50. A well organized rather complete text on swine production. The author has included a number of features designed to make the book especially helpful in teaching as well as in carrying out practices in swine production: that is, Job analysis and problem method of setting up subject matter; Statistical methods of proving teachings; The latest station findings on all swine practices; New feeding standards; Standardized swine practices; Production tests; Local inquiries and activities; Debates and discussions; Available reference materials; Illustrations selected for definite purposes; Calculations to clinch points driven home. This text will prove decidedly helpful to vocational agricultural teachers who teach swine production, and will prove of special value to vocational agricultural students carrying swine projects. —A. P. D.

My Last Editorial

As my last official words, I urge you