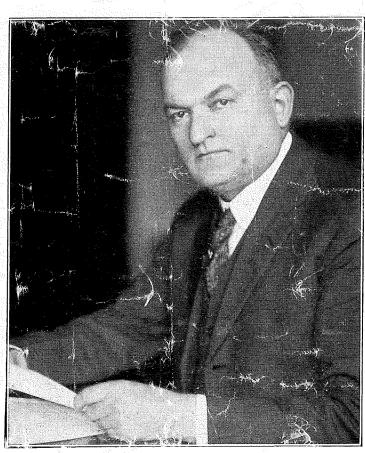
Agricultural Education



DR. J. C. WRIGHT, DIRECTOR Federal Board for Vocational Education

If the rural population is not to be the victim of this complex economic and social system, the schools must at least supply that population with a sufficient number of intelligent leaders to guard its interests. — Dr. George S. Counts,

Teachers College, New York

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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SUMMER ACTIVITIES

VOCATIONAL AGRICULTURE teachers are particularly fortunate in that their employment is on the basis of the calendar year rather than the academic year.

This fact, however, involves an obligation to continue actively and effectively at work when regular classes are discontinued for the school vacation. There is frequently a tendency for us to relax, be in bed a little longer, "let down" in one way or another following the more or less strenuous days occurring at the close of most school sessions.

Other teachers are packing up to leave for home or summer schools, some fortunate ones are talking of the big vacation and loafing spree which they are planning, and others are anxiously preparing to ring door-bells in an effort to supplement their teaching salary with commissions from the sale of books, aluminum or what have you.

Teaching is still, however, the big responsibility of the vocational teacher, after the last senior has been adequately congratulated and informed that the world is his. Not only is this continued teaching a responsibility, it is far more—it is an **opportunity**. No such opportunity exists for other teachers as that which is afforded the agricultural teacher during the weeks when school halls are silent. He is wise to make the most of it.

Think of the ideal conditions for teaching and learning! The home farm and all outdoors for a classroom; the fields, crops, livestock and machinery for teaching materials; a supervised practice program for motivation; and a boy alone in his natural environment, eager and willing to learn. The teacher who does not take advantage of such a situation is certainly possessed of a mental machine sadly inadequate and deficient.

Althog continued teaching thru supervised practice is probably the most important summer activity with which we are concerned, there are plenty of others with which we may well occupy our time. Some of these may be carried out in the course of supervisory visits, others are more or less distinct in themselves.

The summer is a satisfactory time during which to make surveys, both for the purpose of increasing our definite knowledge of community agricultural conditions and in order that progress may be measured. Either general farm surveys or enterprise surveys may be taken at this time. Many teachers have concluded that time spent in this way is very much worth while, for only in this way can a true picture of practices and production be secured.

.It is during the summer months that plans should be carefully and systematically laid out for the coming school year. Courses should be outlined; reference books, bulletins, illustrative material, and apparatus should be ordered and properly arranged; the class room and shop and their equipment should be put in good shape. The whole annual program may be thought out at this time and written down as a guide for the coming year. Progress made on a long time program of work should be checked and plans made for reaching objectives set up.

Some attention should be given also to professional improvement. Special summer sessions are now being provided in some of the states for vocational teachers. The progressive teacher will plan on spending his three or four weeks vacation in this way not less frequently than every third summer. By this means he will keep abreast of progress and fit himself for advancement in the profession.

In spite of all of the above activities and many more which might be mentioned, we should advise that the teacher attempt to get some vacation. He should get away from his work for a week or so at a time, taking whatever form of relaxation he may most enjoy. He will then return to his job with a new spirit and a keen desire to do just a little better this year than he did last.—S. D.

THRU THE MAIL

Mail finding its way to the editor's desk each day from readers of this magazine furnishes much food for thought.

Some letters are most unmerciful knocks without much basis; some are well thought out criticism and suggestions for improvement; some contain compliments and encouragement; some would classify, in modern terminology, as apple-sauce.

Editors get "that tired feeling" when too many letters contain unreasonable knocks; they welcome constructive criticism; they whistle and cheerfully carry on when compliments are numerous; and strange tho it may seem, as a fellow editor recently wrote me, "we even rather like apple-sauce."

Some of our recent mail included some interesting letters, extracts from which are here submitted. It so happens that none is a knock—why pass on depressing things?

"The magazine gets better each issue and it serves as my 'monthly tonic'."—H. L. Comer, Manila, Phillipine Islands.

"Personally, I think the Agricultural Education magazine represents far better textbook material than any book so far published."—Edw. C. Magill, Professor of Agricultural Education, Blacksburg, Virginia.

"I am just writing this morning to express my approval of the excellent character continuing in the Agricultural Education magazine. I find in it continually a great deal of information which is of exceeding value in my work and I recommend it whole heartedly for every agricultural teacher. I spoke to Mr. Kivlin of the College of Agricultura about this yesterday and he advised me that he was using Agricultural Education practically as a text in his Agricultural Education classes."—Louis M. Sasman, State Supervisor, Madison, Wisconsin.

"'Say it with Flowers' may be more apropos, but I'll just peck it out on this old Corona before something happens to you or to me and it is too late! Including myself makes the first lines sound a little less like a Black Hand threat.

"Agricultural Education is as nicely balanced and as helpful professional paper as any that come to my desk. The only thing I can think of to make it more useful would be by some magic to make it pocket size so it could be carried about with one easily. While I approve heartily of the improved print paper in use with the November issue, I would

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Professional



The Evolution of Education for Work

J. C. WRIGHT, Director, Federal Board for Vocational Education

NE of the most interesting things about vocational education is the necessity for it to travel parallel with industrial progress. As new machines are invented people must be trained to use them; as new technical information is applied to agriculture, manufacturing, commerce and the home, our people must be educated so as to be able to think in terms of this information and their job. Scientists and inventors must, and do, precede the application of their discoveries to the work of the world, but workers must be trained to use the results of the inventor and the scientist before society can realize on the benefits of these inventions and discoveries.

In 1800 a man with a sickle could cut one-half acre of wheat per day; while in 1831 a man with a cradle, having strong arms and a strong back, could harvest two and one-half acres. In 1840, using a reaper with four horse power, a farmer could cut six acres of wheat in a single day, but it required five men to bind and shock the grain.

With the advent of the self-binder in 1880 and working from daylight to dark, the farmer was able to cut fifteen acres of wheat in a single day, and it required two or three men to shock the grain.

In 1922 a tractor pulling two binders was able to cut 40 acres of wheat in a single day and now we have the combine, which cuts, threshes, and sacks a field of 40 acres from sun to sun and dispenses with the labor of about 50 men.

The man operating the combine would not be able to carry on alongside his ancestor who used the sickle, nor would his ancestor, if resurrected, be able to understand the operation of the combine. He would need to be given vocational education in auto mechanics, in the care and operation of an intricate piece of machinery and in many problems of farm management which did not exist 120 years ago.

Even oday in remote portions of the earth backward people, uneducated and unskilled in modern methods of agriculture, till the soil with the use of a crooked stick and the wooden plow. In our country, which has probably advanced farther than any other in the use of power machines, the tractor, pulling the gang plow, the harrow, and the drill, prepares the soil and plants the crop all in one operation.

I do not know what constituted a day's work for a man with a crooked stick or wooden plow propelled by oxen, but it is said that one man on some of our western farms can plow, harrow, and seed 25 to 30 acres of wheat in a single working day.

The wheat crop harvested in the United States in 1929, 50 years ago would have required at least 20,000,000

more farm hands than are required today. To keep up with this procession is one of the problems of vocational education in agriculture.

In manufacturing and commerce we have a similar picture. A machine has been invented which produces 8,000 5-gallon glass carboys in 24 hours. This one machine is capable of producing all of the 5-gallon glass carboys that are consumed in the United States.

As another indication of progress in the glass industry, we are told that one man could produce 100 2-ounce prescription bottles by the old hand method, but with the advent of a new machine he is able to produce 4,000 of these prescription bottles in the same amount of time. In other words, it would require 40 workers to produce in one hour by hand as many bottles as the up-to-date automatic machine produces in the same time.

When Edison invented the electric light the bulb was produced by hand. Previous to 1920 the most skillful workman could make only 75 electric light bulbs in a single day. In that year an automatic machine was perfected which could produce 73,000 electric light bulbs every 24 hours; thus, displacing 994 men for each machine installed. But even machines are capable of being improved, and we are told that this machine as now perfected has increased its capacity so that it now displaces 2,000 men who formerly made electric light bulbs by hand.

James J. Davis, our secretary of labor, was an iron puddler, as was his father before him. The job called for a strong body and an intelligent head, with trained hands. While the number of men employed in the production of pig iron has increased 137 percent since 1850, the production of pig iron has increased 6,375 percent. In 1850 the annual output of pig iron per man was 28 long tons. In 1927 the output had increased 4,571 percent.

During the days of their bondage in Egypt the Israelites made brick by hand and furnished their own materials. We do not know the standards of output under those conditions, but we are told that in Chicago a brickmaking machine is now in operation which makes 49,600 bricks per hour, while only a few years ago it took one man an entire day to make 450 bricks.

Thus, the flow of production widens and deepens. A great many jobless men pour out of the doors of factories giving way to the advent of the new machines. In seven years the number of workers in what are called the productive industries fell off 1,500,000 according to an estimate made in the Department of Commerce. In the same period the net decline of employment in the industries of transportation and communication

exceeded 200,000 and the government services dispensed with some 220,000 workers. Here are nearly 2,000,000 eliminated jobs and nearly 2,000,000 persons forced to find new employment, since it may be assumed that they have not the means to enable them to live in idleness.

If you have ever looked for a job week after week with the fear or fact of poverty oppressing you, you can perhaps appreciate the misery inevitably brought about by these changes in production methods; changes which mean a larger volume of production, larger opportunities and cheaper goods for the consumer, but also displacement and unemployment for large groups of workers.

But every cloud has a silver lining. There is a bright reverse to this black picture which I have painted. Our industries would not be in a state of progress unless there were declining trades and methods of production becoming obsolete. The carriage builder who did not convert his plant into an automobile factory probably went bankrupt. The village blacksmith shop has been forced to become a service station. Such changes and readjustments seem inevitable unless we are content, as we are not, to forego the benefits of increasing productivity of capital and labor.

As items on the credit side of the account, we are told by Secretary Davis that seven years ago there were only 25,000 workers in the radio industry, while now there are 150,000; that electric refrigeration was virtually unknown in 1920, while now it gives employment to 40,000 people; that oil heating has created 30,000 new jobs; that the number of insurance agents has increased almost 100,000 in seven years; that from 1920 to 1927 the number of persons employed in the motion picture industry grew from 200,000 to 350,000; and so on for each item of decrease we have as an offset other items of increase.

We are now utilizing the services of 185,000 more teachers and professors than were employed in 1920; 22,000 more lawyers; 17,000 more clergymen; 5,000 more doctors; and 25,000 more dentists.

In 1917 the number of directors, supervisors, teacher-trainers, and teachers engaged in giving vocational education was only a few hundred; today, in 1930, there are more than 25,000 thus employed.

Summing up the losses and gains of employment during the seven years from 1920 to 1927 in the six large fields of industry covered under the terms production, transportation and communication, distribution, professional and semi-professional occupations, domestic and personal service, and government service, we find that 2,000,000 jobs

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Evening Schools



Evening School an Integral Part of Local Educational Program

A. VERNON MILLER, Richland Center, Wisconsin



winter of 1925 - 26, the vocational agricultural department at Richland Center, Wisconsin, attempted its first evening school with all the uncertainties and misgivings of any new enterprise. Were there possible students in the com-

munity? If so, how could these be interested? How should classes be conducted? What subjects should be considered? Could interest be maintained over a period of years? In fact the first evening school may have been organized more in response to the encouragement from the state department than from any realization of a local need or opportunity. However after nine such schools have been conducted within a period of six years, certain rather definite conclusions have been reached that, while not new, may be of interest to those who still are doubtful as to the permanence and the worthwhileness of evening class work.

If we may judge from the attendance and enthusiasm of these nine evening schools during the last six winters, we must conclude that there are young, old, and older men in this community who can be interested in organized instruction and who will make a great effort to be a regular attendant of the classes. With an average attendance of eleven in 1925-26 the number has steadily increased until the school just closed had an average attendance of 56. The age range is from 16 to 60 with the greater number in the twenties and thirties. Many have been students for four and five years, seldon if ever missing a class. One young man drives over thirty yet has a perfect attendance record for five winters! Another walks five miles and has a perfect record for three years. Several drive as much as 40 miles and have an attendance of 90 percent for two to four years. In the group attending the evening school this winter we have 25 who did not miss a meeting. From these facts it can be seen that our most acute problem is no longer attendance, but the problem of handling

Our evening school efforts have recognized two distinct and important duties, education in practical agriculture and education in sociability and understanding. The first has been undertaken thru organized class meetings and the second thru group games. Classes start and close promptly on time. They last one and one-half hours, with unlimited opportunity to continue the discussion at the close of the class periods. Group games, such as basketball and volleyball, create group spirit and develop acquaintanceship and understanding to a remarkable degree. Every one is urged to participate in the class discussions and games, and the majority do.

Very little preparation by the students is expected. However at each meeting a definite outline of the subject for the next meeting is given and all are urged to bring their problems and questions along that particular subject. From thirty to forty minutes are generally used for the presentation of the subject matter, using every device to create interest. Each class time we use charts, graphs, experiments, demonstrations, movies, slides or the actual material under discussion. Much effort is expended in having an interesting presentation, as we realize that interest is the basis of attendance. If farm ma-chinery is being studied, we have the machines in question before the class; if feed grinding and hammer mills are to be considered, we have the mill set up and actually operate it before the class. The last forty minutes to one hour of the class period is used for discussion, and to take up the questions and prob-lems of the students. This seldom fails to be the most interesting and profitable part of the class. Generally, we must dismiss the class as the closing time arrives and continue an informal group discussion among those who care to stay. If possible we distribute bulletins or mimeographed material upon the subject. This is important as it helps the students to become interested in reading and searching for further information. Once or twice each winter we have a specialist from the college of agriculture or some manufacturing concern appear before the group. This is done as much for the sake of interest as for the purpose of securing the latest and most authentic information. In short we plan each class to be as snappy, interesting and practical as possible, and we think we can judge our success or failure by the response of the students during the discussional part of the class period. The latter part of the evening is spent in the gymnasium playing basketballand volleyball.

A further test of the value of evening schools is the amount of improved practice established on the farms of the students thru their attendance. Very few fail to develop some new idea as a result of their evening class work. In some cases it may be only a better feeding program for dairy cows or poultry, or half acre fertilizer test, while in some cases it is a more spectacular piece of work, such as a 15-acre drainage system or a soil building program for the entire farm. Each student is urged to think of his own problem and try out some new solution. Elaborate records are not kept for records sake, but we do insist that sufficient data is accurately recorded so that no guessing as to results is needed. Repeatedly we argue "Why guess when you can know?" While we do not require projects, very few cannot show improved practices on their farms due to evening school attendance. Since the real purpose of vocational agricultural instruction is to improve farm methods, we feel justified in our procedure. With some students the best results come a year or so after the actual class work. If we can get the students to do some real thinking about their own individual farm problems, the practical application of our teaching will surely

to have become a permanent part of the community. No doubt new and unforeinterest by giving practical agricultural instruction in an interesting manner and by developing sociability and citizenship thru proper group activities.

The Evolution of Education for Work

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have been lost and nearly 2,500,000

The moral which we who are engaged in vocational education should draw from this situation is an appreciation of our responsibility for providing these 2,500,000 workers with the necessary help in selecting their new job and in securing vocational training and education for efficient service to their new employer. Most of them are willing workers; most of them are in need of an honest day's work; all of them are face to face with a new economic condition which they can not understand; some of them are illiterate, and many of them find their previous education of no particular value under these changed conditions. The skills which they had formerly possessed are no longer in demand; the world they know is a thing of the past. Without an opportunity to adjust themselves to these new conditions; to new demands of industry, calling for new skilled hands and new technical information, many will fall by the wayside and become idle parasites living off the work of others, or dependents, criminals, and unnecessary victims of the "iron man."

aultural Education May 1931

Adult education in agriculture seems

vocational work at Richland Center. It has created a genuine interest thruout the regular school system, as well as the

seen problems will arise in the future, but we believe that we can maintain

Giving Evening Schools a Feeling of Permanence

ALLEN COOK, Teacher of Agriculture, Kearney, Nebraska



Allen Cook

▼ET all the information you can this year, Vernon, because next year you'll have to run the farm and let me enter the vocational agriculture department," said one dad after completing his first inspection trip thru the farm shop and agricul-

ture classroom. He said it jokingly as he had never heard of high schools offering work for adult farmers. But he truthfully expressed a desire that is found in the minds of many dads when they see the work that their future farmers are doing and the equipment that is availa-

ble for them to use.

I had never taught any evening classes, but that statement made me resolve to start one as soon as conditions were right. Evening schools for farmers have now become an important factor in the vocational agriculture department of the Kearney high school.

Three schools have now been completed in the Glenwood community and two in the Odessa community. The same procedure has been used in both communities but these remarks will be mainly about the Glenwood class as it

is the older of the two.

The latest class was organized in October, 1930. It was really a re-organization and was fairly simple because they had already selected swine production for their next topic before adjourning the 1929 class. I first consulted a leading citizen, an agricultural college graduate and dirt farmer, who was chairman of the group for the 1928 and 1929 classes. At this time we decided on a date for a first meeting. All regular meetings were held at their schoolhouse. Then letters were written to all who were enrolled in the previous classes, and also to others in the community who might be interested. These letters told the date and place of the first meeting and outlined a long series of swine production problems from which ten or twelve might be chosen for the evening discussions. Some questions that might need answering were suggested under each problem.

I prepared several newspaper articles along the same line as the letters and these were published during the two weeks previous to the first meeting. The F. F. A. also assisted in the publicity as this was a part of their program of work. Some of the later meetings were announced over the radio from the

capitol, 150 miles away.

Forty-five farmers appeared for the first meeting. A chairman and a secretary were elected first. These officers are a great deal of assistance to the instructor and also helps the group to feel that the class belongs to them and not to the high school. It was agreed upon to meet once a week. I then placed the suggested problems on the blackboard. From these

the group selected problems to fill 12 evening discussions. A minimum of 10 meetings is suggested for this state but it is seldom that a topic can be thoroly covered in that length of time. After these preliminaries, which really take very little time, the first problem was discussed.

Under each problem for discussion I tried to anticipate the questions confronting our farmers. This is not so hard to do if one is well acquainted with the community. Most of the problems of the day school are also problems of the evening class. I then had mimeographed copies made of these questions and had them ready for distribution at each evening session. Suggested solutions of these questions were also placed on the sheets. Before distributing the sheets, however, the major questions were drawn from the experience of the group and set up as a basis of discussion for that evening. The lesson sheets, then, would serve as a guide for that discussion. Often a question would be set up that would not be on the sheets and in such cases it could be written on the back.

The solution of questions that I place on the lesson sheets are usually practices taken from experimental data. This must be supplemented in the discussion by the experience of the members. In a group of 40 I can usually find several that have tried the various practices, and their experience is extremely valua-

ble to the group.

In trying to find out the value of lesson sheets, I have held some meetings without preparing them. It seemed that at these meetings the discussion was not as effective and the demand for the sheets was so insistent that they had to be prepared later and handed out anyway. Members who missed a meeting invariably called for the lesson sheet for that meeting. Also, in several instances, members asked for the whole series of sheets to send relatives or friends living at a distance who could not attend the meetings.

I think that the lesson sheets, together with certain charts and graphs that I prepared, were the most valuable teaching aids that I used. A tour to several farms of the community to view some good and bad practices was also a great help. This was taken about the

middle of the course.

For the last meeting I prepared what

I called a check sheet of improved practices. On this I listed the improved practices discussed during the course, thus making a sort of summary of them. These practices were placed on the right hand side of the page and three blank columns were placed on the left hand side. These were labeled "already using," "partially using but will add to," and "new practice this year." By placing a check mark opposite each improved practice in one of the blank columns, the member could quickly and concisely convey to me the status of improved practices used on his farm and which were to be adopted this year as a result of the evening school. Two sheets per farm were given out and the representatives were asked to check them in duplicate. One copy was then handed to me and they kept the other for reference. The effectiveness is indicated by the fact that on the 25 farms represented, 89 improved practices were adopted this year.

This check sheet is useful in many ways. Besides the information that it gives regarding improved practices, it shows definitely what might be termed the supervised practices to be carried out on that farm, forms an effective basis for follow-up work, and will lay a good foundation for a discussion of results at

next year's class.

For follow-up work I will visit each farm and pay particular attention to the improved practices adopted this year as indicated on the check sheet. In each case the check sheet will make the approach much easier, and will also make the member feel more responsibility in using the practices indicated.

Before adjourning the last meeting of this course, the group selected the subject "milk production" for next winter's meetings, and also set the date for the first gathering. This gives the class a feeling of permanence and makes reorganization and preparation a less difficult matter.

Ten Good Rules for Professional Improvement

1. Visit and know successful teachers of agriculture.

2. Associate with successful farmers. 3 Actively participate in such organizations as the Farm Bureau, the

Grange, and the like.

4. Whenever possible practice agriculture, even tho it may be no more than the keeping of a back-yard flock or a

5. Register for extension, home study, and correspondence courses.

6. Read the latest agricultural writings. (Agricultural Education magazine.) 7. Read the new books and articles constantly appearing on school adminis-

tration, teaching methods, and the like. 8. Cultivate the ability to evaluate new ideas, and a receptive attitude

toward their trial. 9. Plan some definite graduate study, either full year or summer session.

10. Concentrate professional efforts along definite lines of improvement.

SUBSCRIPTION EXPIRATIONS

Please take note of the expiration date for your subscription to Agricultural Education. You will find it stenciled on the wrapper in which you receive your magazine. It will usually appear on the first line of the stencil at the right. If it reads 6-31 it means that your subscription expires with the June number (6th month) of 1931. If it reads 12-31, your subscription is paid thru December, 1931.

In order that there may be no delay in your receiving each number, it would be well to send in your renewal a month or so previous to the expiration date.

Hereafter it is desired that all expirations take place with the June number.



Methods



Class Procedure in Fact Finding

C. F. CLARK, County Coordinator, Philadelphia, Mississippi

ROBABLY there are as many methods of teaching vocational agriculture as there are vocational agriculture teachers. I have tried several variations of a great many different methods, but the following procedure is the most effective that I have found. This plan consists of four main steps as follows:

1. Selection of the problem and development of a responsive attitude.

2. Setting up the aims or objectives and determining the method of study.

3. Making the study.

4. Making decisions on each practice

of the job.

The first step is one to which entirely too little attention is given. Too often the teacher announces to the boys that we will take up a certain problem today, when, in fact, it is no problem at all to the boys, and delves directly into the study. An interest must be developed before learning occurs. All learning comes as a result of a felt need. Unless the job is one that falls within the supervised practice program of all the boys, it is undoubtedly better to visit the home of each boy to determine the extent of the need on his farm for studying the problem, and to arouse a consciousness of this need in the mind of the student. But let us suppose that the problem is one that falls within the supervised practice program of all the boys in class. The boys are questioned about how they are going to carry out their projects in such a way as to cause them really to see a need for studying the problem and almost to demand that we collect such information as will serve as a guide for their doing this job.

When the students have reached this point they are ready for step number two, "Setting up the aims or objectives and determining the method of study." In my opinion, if vocational agriculture does nothing else but to help farmers present and future—to develop methods of attacking and solving problems, it has served a great purpose. The boys are assisted by the teacher, thru the conference method, in setting up the objectives to be reached in the study of the problem. The problem is definitely fixed in the minds of the students before any study is attempted. The objectives are often referred to in order to see that the proper methods are being set up for the solution of the problem. Insofar as the students are able, they are allowed to determine the method of study, but of course, the teacher has to do a great deal of suggesting. The suggestions should be given very tactfully so as to cause the students to feel they are solving the problem and that the teacher is not forcing something upon them. It is their problem, if it is a problem at all, and they should certainly be allowed and caused to feel it as such thruout the study and practice.

Mr. Clark has offered some splendid suggestions in the accompanying article. The effectiveness of the use of local facts and practices in teaching is coming to be more and more fully recognized. If a practice is common to the farmers of a community, and results in desirable outcomes, it is worthy of consideration by students of vocational agriculture.

worthy or consideration by statistics of vocational agriculture.

It would appear, however, that the use of the "survey method" as described by Mr. Clark would involve the selection of rather too large and broad problems. To send the students out for the purpose of gathering data in a restricted field would seem extremely inefficient. It would seem that data might better be gathered on the basis of enterprises rather than on that of problems. Such enterprise surveys might be made by either teacher or students—but in the letter case a careful training must be provided. Another survey of the home situation made by each boy, with the resulting summary available as a basis for decisions on project and class problems.—Editor.

When the objectives have been set up and the method of study thoroly understood by every student, they are ready for the study. At the beginning of the session, the boys decided that there are two main sources of information that they can usually rely on in the study of practically every problem; namely: the experiences of farmers and results of experiments on the job. The boys seem to be partial to the experiences of farmers of the community, so we have made it a practice to survey the experiences of the local farmers before a study is made of the results of experiments. But before we can make such a survey, we must know what facts we need to gather in order to solve our problem. So we must set up a data sheet covering the information that we need to gather. As a rule, the boys are very good at setting up these questions. Usually the data sheet is set up one morning and the surveying begins on the next morning. This gives time for a number of copies of the data sheet to be mimeographed.

Since the problem is really one that is vital to the boys, they have been very considerate in the use of their own cars in making the surveys. Each car goes out on a different road from the school. The driver of each car makes no surveys, but keeps his car going continuously. He carries the other boys down the road, dropping one boy off at each farm. When he has delivered the last boy, he returns for the first one and carries him to another farm. This process is continued thruout the class period. As many class periods are used as are necessary to give a sufficient number of surveys for fairly accurate comparison of results of various practices. Usually, seventy-five or a hundred surveys are made, and it usually requires not more than three or four class periods, depending upon the character of the survey,

the ease of finding the farmers at home, the number of boys present, and the number of cars available.

When a sufficient number of surveys have been made the students must be given close supervision in summarizing them. A great many comparisons can usually be made if the surveys are properly summarized. Thruout the course of making and summarizing the surveys due cognizance is taken of the fact that these results cover a period of only one year and that no accurate weights nor measurements have been made. For these two reasons the boys realize that the results of a local survey cannot have the weight as carried by the average results of three years or more on the job.

Before a study of the results of experiments is begun, the objectives are carefully reviewed in order that the students may determine the types of experiments that they shall look for. These experiment results are studied from each student's individual bulletins, the problems having been anticipated and bulletins ordered by each student. The results of all experiments from each nearby experiment station are averaged for at least the past five years if such results are available. As a result of this search for data, the boys have developed a distaste for opinions of so-called "authorities." They want the actual results in order that they may make their own decisions.

No objections are raised to boys exchanging work for the sake of making better progress on the solution of the problem, but no boy is held back for the sake of a slower boy, nor is he requested to help the slower boy. If it develops that some boys are falling behind materially, they are given individual help after class or at some other odd times.

When the summary of local surveys has been studied along with the averages of experimental results, each boy, taking his home conditions into consideration makes a decision as to how he is going to carry out each step of the job. The decision is always written. Enough of the home farm conditions and data are given with each decision to serve as a basis for showing why this conclusion was reached. Some teachers have disagreed with me on this point, saying that only the decision should be given and not the basis for decision, but I have found invariably that a new student cannot give a clear reason for having reached any decision that he has made. After the boys have begun the practice of clearly justifying each decision, they want to keep it up. As was stated above, if vocational agriculture does nothing but help farmers, present and future, to develop methods of attacking and solving problems, it has served a great purpose.

(Continued on page 173)



Part-Time Courses



Oklahoma Boys Return for

Short Course
E. B. NELMS,
State Supervisor,
Oklahoma

IN EVERY locality, there are numbers of farm boys between the ages of 14 and 21 who have for various reasons dropped out of school. Within a radius of a few miles of Clinton, Tom Dale, the vocational agriculture teacher, with the co-operation of the superintendent of schools and others interested, found that there were 90 such boys.

In addition to his other duties as a vocational agriculture teacher, Mr. Dale made a special effort thruout the months of November and December to make contacts with these boys to learn of their problems and interest them in a short course for the study and practice of those of greatest interest to the group. He was enabled, in a house to house canvass, to contact 42 of the 90. He followed this with letters announcing more of the details of the proposed course and the

The class met for the first time in the city hall at Clinton on January 5, with 10 boys, the number increasing in two or three days to 19. The class subsequently moved to the vocational agriculture room at the high school. Eighteen attended regularly thruout the six weeks, meeting from 10 to 12 o'clock each morning.

date of opening.

The average age of the boys was 171/2 years. Only two had ever attended high school. Three had not completed the eighth grade. Two lived in the Clinton school district, the other 16 in adjacent or nearby districts. They live an average distance of about seven miles from Clinton, the farthest being twelve miles. Four or five of this group have resolved to attend high school next year. Others have indicated that they want another Part-time Course next winter which will, no doubt, have a large increase in attendance.

The members of the class will continue to meet one night each week thruout the spring and expect to attend

monthly meetings for the remainder of the year as they have organized a chapter of the Future Farmers of America and will participate as a unit in the state program of the Future Farmers of America.

Some of their early activities will include a Father and Son banquet and the sponsoring of a lecture from which they expect to raise funds for defraying the expenses of their group in attending the Oklahoma 4-H and F. F. A. Live-stock Show in March. This will be the first event of the kind which members of the group have ever attended.

Subjects presented as of special interest to different members of the group coming in for study and instruction include the following: Cotton Outlook for 1931; Choosing a Variety of Cotton; Determining the Type of Power to Use on the Farm; Terracing, Including Running the Lines and Constructing the Terraces; Vaccination of Hogs; Livestock Judging; Contracts, Leases, Farm Law, (presented by Judge Keen); Ordering Federal and State Bulletins; Livestock Breeding; Livestock Feeding.

Supervised practice in these jobs and problems is contemplated for the remainder of the year.

Mr. Dale reports that he has never instructed a group of boys that took a keener interest in their work or did it more effectively considering the time available, than this group.

It is estimated that there are more than forty thousand such boys in the state. Several other vocational agriculture departments are doing some work of this type in addition to their regular work with groups of high school boys and adults in evening classes. Superintendent Hann of the Clinton schools is pleased with the results and declares that when it becomes more general thruout the state, it will represent one of the greatest services that the educational system of the state can perform.

Read your magazine and you'll get your dollar's worth.



Part-Time Class in Agriculture at Clinton, Oklahoma

Agricultural Education

Part-Time School Successful

in Oregon
BURRIS L. YOUNG,
Director, Vocational Agriculture,
Dayton, Oregon

THE vocational agricultural departments of Oregon recognize that there are three distinct groups of farm-minded people to serve in the community. First, there is the group of day students who are lucky enough to attend full time classes; then, there is the group of adult farmers in the community who can be enlisted in the evening classes, where they are given help in solving their farm problems; last and not least, there is the group of part-time students, consisting of farm boys who had to drop out of school thru one cause or another. To make a real success of his work, the instructor of vocational agriculture must be sold to his work and be a firm believer in the old axiom, that "He who serves best, serves most.

The part-time students are perhaps the most interesting of any group. During the late fall and early winter, I conducted such a course, giving 15 well spent evenings to the subject of Farm Mechanics. This subject was chosen because there was a real need in the community for this type of instruction, due to the increasing stimulus of power machinery on the farm.

One of the live problems in putting over a part-time school, is that of obtaining results which you can measure as an outcome of the good received at the meetings. Is it not enough to say 16 boys turned out each Monday and Friday evening. The real question is a carry-over of improvement to the home farm, for if this is not possible how can the instructor be even reasonably sure that his instruction and time spent went over the top, serving the purpose

intended? As a result of my part-time school one farmer has installed a farm shop, including a forge, anvil, and other tools. for his four nephews who help run his big farm. Two brothers who attended the classes have also decided to put in a forge and farm shop so that they can repair their own equipment. Two other young men are carrying berry projects and have plans for farm shops. One boy has agreed to carry three acres of early peas and has taken a chance on the mild winter and has them planted already, a few sunshiny days will see them up. Still another boy has about five acres he is putting in corn and potatoes; has a Chester White sow and litter of pigs; 13 colonies of Italian bees from which alone he expects to make a labor income of well over \$200. These part-time boys are real red-blooded farmers and all the evaluation of the aid the agricultural instructor has given, must necessarily come from final application of results on the farm.

[Editor's Note: Mr. Young's course as described above appears to have been effective, but I am wondering if it should not be labeled "Evening School" rather than "Part-time."]



Supervised Practice



Supervised Practice Converted Jimmie Jensen

L. R. IVINS, Teacher of Agriculture, Lund, Nevada

N DISCUSSING this very important phase of our vocational agriculture program I am going to use a particular boy and his work as an example. This example will show in replica on a larger or smaller scale what each successful project is when it has adequate possibilities for supervised farm practices, of course varying according to size, kind, attitude of parents, school, section of country and ability and responses of the boy

Jimmie Jensen is in his third year of vocational agriculture at the Lund High School. He has carried thru a project with its associated supervised farm practices. He began his vocational work as a sophomore with little more in mind than to make some money out of his project to buy an automobile. Now, his great ambition as a senior is to win the distinction of Star Farmer of America. This work with its development thru successful farm practices will build up a substantial and ambitious attitude toward the future.

Three years ago Jimmie's father wanted to sell his farm. An older boy had gone away to work in a wholesale house and Mr. Jensen was not able to take care of the place properly and hired help was very unsatisfactory. The suggestion was made that part of the farm would make Jimmie a fine project. The boy's associations were not just the best so the father wholeheartedly co-operated in anything that might mean giving Jimmie a more vital interest in his school work and keep him on the farm. Jimmie finally decided to take one-half of the farm of about eighty acres, fiftyfive of it irrigated and under cultivation. He was to take it on the same basis that other farms in the section were rented. on a share basis. He was to assume all managerial, operative and financial responsibility and receive one-half of

Records were carefully kept and at the end of the first year he received a labor income of \$598.50. Along with other supervised practices, many improved practices were used such as cleaner ditches, earlier cutting of alfalfa hay for dairy feed, earlier planting of grain in the spring, leveling land to make irrigation easier and simpler and planting more oats than usual. This last item consisted of three or four acres of virgin soil, having raised only one crop of any kind. In the early plans this was to be left idle but upon the recommendations of his instructor and the state supervisor it was planted to oats and produced a bumper crop. This supervised practice alone increased Jimmie's income by \$150.

The first year Jimmie purchased all his own clothes, had all the spending money he needed and purchased four fine purebred Holstein heifers. He didn't buy the car because a careful check was made on the first cost and the other expense and upkeep and Jimmie decided that the cost was more than the returns.

For a project in his second year's work Jimmie took over the whole farm on a half share basis. During this year two of his improved supervised practices were planting 10 acres of rye on some unused land and 21/2 acres of potatoes where potatoes had not been produced on the farm for several years. Strange as it may seem these were the only two crops that paid any profit except his 35 acres of alfalfa hay. Chinch bugs made almost a total failure of all his other grain crops, but, even with all the hard luck of a bad year, Jimmie had an income of considerably more than his first year besides the increase in value of his dairy heifers, two of them having freshened.

In this, his third year of vocational agriculture Jimmie is continuing with the farm, is going to keep records on the cows and expects to follow farming after graduating with the idea of paying his expenses thru the agricultural college.

This fine project is almost ideal when considered vocationally. It consists of a cross section of the farm and community practices, potatoes being added to a well balanced alfalfa hay, grain, dairy, hog and chicken ranch where a good market demands diversified farming.

A Large Class Project B. B. ZIMMERMAN, Vocational Teacher,

LeSueur Center, Minnesota

HE largest turkey ranch in LeSueur County is the turkey project of the Vocational Agriculture II class of the LeSueur Center high school. Last April seven boys in this class and B. B. Zimmerman, their instructor, pooled their funds to raise turkeys in large numbers. The class purchased the materials and constructed three brooder houses. The inside equipment was next installed. Many of the poults were bought as day old poults, others were incubated from eggs. The labor has been divided between all members of the class. Since school started this fall a caretaker and watchman have been hired altho the class still supervises the feeding and management problems. Today a visit to this class project reveals hundreds of turkeys eating, drinking, fighting, and enjoying their short existence. To be exact there are 553 turkeys. The losses from all causes have been below 15 percent, a comparatively low figure in turkey raising. The class has followed the Dr. Billings, of University Farm, plan of raising turkeys in confinement and using sanitary measures of combating diseases. The fact that many of these birds now weigh over 18 pounds is proof that sanitation pays. Hundreds of people have visited this project and

studied the methods being used. The boys are now hoping for a fair market price for "America's Holiday Treat."

Oregon Student Makes \$18.83

on Projects WALTER C. LETH,

A LABOR income of \$813.83 from his project in purebred Duroc-Jerseys and crops is the accomplishment of Richard Carter, a student of vocational agriculture in Newberg High School at Newberg, Oregon.

This income is from a project on 3 registered Duroc-Jersey sows, 7 acres of barley, 3½ acres of clover, 12 acres of corn, and 19 acres of timber pasture and was made in less than a year. In order to start his next year's project on swine at September 1, he closed his swine part of the project on that date thereby including the returns from only the spring litter of pigs instead of upon the fall litter as well, which should have been added to make the year's work complete. He estimates that had this been included his final return after paying all expenses and counting interest on his investment he should have about \$1,200 for the year's work.

Carter has sold his female pigs at weaning age for \$15 each and his barrows sold for \$6 each at the same time. He saved four young gilts to add to his breeding herd and purchased two mature boars. The crops he harvested to feed his swine.

In addition to his net profit the success of his project is more marked because of winnings he has made. At the Clackamas County Fair he won first prize for the best livestock project among all the departments represented and entered his swine on the open classes as well to make a total of \$42 in prize money. Recently Carter was presented with a silver cup by the First National Bank of Newberg for having the best animal project in the Newberg department.

Carter's next year's project which is all planned and started indicates his interest in project work for it consists of 7 registered Duroc-Jersey sows and litters, 2 registered Duroc-Jersey boars, 19 acres of timber pasture, 2 stands of bees, and 33 acres of the following crops: wheat, red clover, alfalfa, corn and barley.

Besides being successful in farming Richard is one of the outstanding boys in the department. He is president of the local chapter of F. F. A., is at the head of the Newberg F. F. A. Co-operative Swine Association, he was high man on the Newberg judging team at the Pacific International, he was high man on the Oregon judging team at Kansas City this year and took fourth in the national judging contest; he was captain of last year's F. F. A. basketball team; and is active in other school affairs.

Agricultural Education May 1931

We Got the Money

H. M. MORELAND, Kingsburg, California

MUCH information on home projects for agricultural students has been printed and broadcasted thru various mediums, consisting largely of material on plans, project books or inspirational stories of successful individuals carrying home projects.

This information has met a definite need, but was only useful to the boy who could arrange the financing of his project, and to the boy whose resources were very limited, it presented a serious problem, or perhaps utter discouragement. In many localities it has been the custom of the local banks to provide any necessary finance for worthy agricultural

students, but occasionally the banks

have not cared to assume that responsi-

bility As this situation has arisen in our agricultural classes, some method of meeting the difficulty was necessary for the best interests of all concerned, especially the boys. It was thought that by presenting the matter to the local Farm Bureau Center and explaining the seriousness of the problem to that organization, which should be most in sympathy with it, that perhaps a committee would be appointed to determine what might be

done to remedy the difficulty. After some discussion a Future Farmer Loan Fund Committee was appointed by President Claude Rouch. This committee decided to send a letter to a number of the more prosperous citizens of the community, explaining the idea and enlisting their co-operation. An outline of the plan was drawn up by the agricultural teacher, in co-operation with District Superintendent Funderburgh, who submitted it to the school trustees for their endorsement. This plan accompanied the letter to the local citizens. At a later meeting this F. F. A. Loan Fund Committee, when plans were to be formulated to follow up these letters, it was decided not to solicit the individuals, on account of the depressing economic conditions prevailing. However, it was thought that some of the local civic organizations might have some funds available, which they might be willing to loan to such a worthy community enterprise. Different organizations were approached, and the idea explained by members of this F. F. A. Loan Fund Committee, with the result that the Kingsburg Tuesday Club, a member of the National Federated Women's Clubs; the Masonic Lodge; the Kiwanis Club, and the local American Legion Post, each loaned \$100 to initiate the F. F. A. Loan Fund. The Farm Bureau not having any available funds, were unable to participate, but deserve great credit for their initiative and loyalty to this project, and in addition secured the donation of 350 baby chicks for worthy agricultural students, from local hatcherymen. The Kingsburg Chamber of Commerce has accepted the responsibility of administering this fund, and have issued notes to the various organizations as security for their loans, with the idea of incorporating this project in their yearly program of work. The latter organization seemed to be best to administer the fund, as it is a legally state incorporated organization, and represents a wider cross-section of the various

organizations participating in the fund. One of the local attorneys worked out some of the details, and presented it to the local organizations for their con-

By this method it is now possible to assist most of our under-privileged Future Farmers, thus aiding them to widen their horizon and to get a better vision of the future possibilities of California agriculture.

PROJECT ACCOUNTING
A series of articles on project accounting will appear during the next few months. This is one of the many unsolved problems in vocational agriculture and such discussions should be gladly anticipated by readers of Agricultural Education. The first article will be contributed by Professor H. M. Hamlin of Iowa State College.

Class Projects Finance F. F. A. Activities

FROM many states, we have received mention of class projects conducted by F. F. A. members and the proceeds used to finance camping trips, pay expenses of delegates to the national convention, provide for father and son banquets, and the like. Such projects reduce the amount of dues paid by members, add interest to vocational agriculture work and teach the boys to carry out activities for themselves.

A good example of such a class project is found at the St. Cloud, Florida, chapter. Last year, this chapter project paid all state and national dues, financed a father and son banquet, a chicken pilau, and a camping trip. This project is carried in addition to the individual home project of each member.



F. F. A's of St. Cloud, Florida, Planting Potatoes as a Class Project

Marketing Taught By Actual Practice

C. L. KUTIL, Antioch, Illinois

WHEN the fall school term began at the Antioch Township High School, a course in farm management and agricultural economics was announced. Fourteen boys enrolled.

One of the first steps was to make the course as vocational as possible so that some of the phases studied could be tried in practice. Before much time had passed, the boys, together with their instructor, held an organization meeting, drew up a constitution, adopted it, and elected officers. The organization, known as the Antioch Future Farmers' Cooperative, soon appointed one of their members as manager and another as bookkeeper and began doing business.

Matters of policy are discussed during class periods, but the manager and the bookkeeper do their work outside of class hours. The manager does all the buying and sets the selling price of the commodities handled. Twice annually

after the share holders are paid their 6 percent dividend the balance of the profits are pro-rated according to patronage among the members.

The manager finds a market for the farm products among the home folks of the school pupils, the school cafeteria, the farmers, and the people of the village. Eggs are sold in a carton under the Future Farmer brand.

According to the books, from Septemter 15, to January 20, a period of about four months, \$346 worth of farm products were sold thru the Co-operative at a profit of \$30.

A new set of officers is now carrying on the work during the second semester and indications are that a greater volume of business will be done owing to the usual spring rush of buying seeds, plants, hatching eggs, and fertilizer.

To give one some idea of the kind of business done, a list of the products

sold is here given:

Dressed poultry..... 220 pounds Shelled corn.....1,000 pounds Small grains..... Onions.... 31 bushels Apples..... 25 bushels Honey . . . 80 pounds 55 dozen Maple sirup. 26 quarts Other vegetables..... 493 pounds Miscellaneous..... \$4.90

The work will be continued during the summer even if a part time manager will have to be hired. Mostly eggs and poultry and fruit and vegetables will be handled in summer. As Antioch is a great summer resort town, a large volume of business is anticipated. One of the local butchers has consented to handle the eggs.

Class Procedure in Fact Finding

(Continued from page 170)

The decisions made by the various boys differ—not widely—but they differ to a certain extent, mainly due to home farm conditions. The practices decided upon by the boys do not usually reach the level of best experimental results, but are much higher than the average practices of local farmers. These written decisions are kept in the classroom during the school session, or until needed at home to begin the job.

No attempt is made here to deal with the supervised practice, since this article is limited simply to the classroom procedure. Any one with experience in teaching vocational agriculture can easily see that this method takes time, and plenty of it, but real learning is a slow process. We may cover ground in a hurry, but we cannot cause students to learn in a hurry. Students taught by this method accept experimental data very much more readily than by any method that I have ever used. The best method in teaching that I have ever found for saving time is to take plenty of it.

(Due credit should be given Messrs. Holloway and Roberts of the Rural Education Department of the University of Arkansas for the development of the local survey. So far as I know, the use of the local survey had not been so well adapted to the teaching of vocational agriculture until the release of a method that they have recently de-

veloped.—C. F. C.)



Farm Mechanics



Wisconsin Goes Progressive

LOUIS M. SASMAN, State Supervisor, Agricultural Education

ARM MECHANICS is taught as a year's course in the Junior year in all but three or four of Wisconsin's 97 departments of vocational agri-

The content of the course of study in farm mechanics has been continually changing to meet the changing needs of Wisconsin farms. A decade ago the course was a semester of woodwork or farm shop which in many cases was not very applicable to shop conditions on the home farms, and a semester of farm mechanics which included rope and belt work, farm drainage, some study of gas engines, and a little study of farm machinery

According to the 1920 census, Wisconsin had an investment of over one hundred and sixty-seven million dollars in farm machinery and equipment or nearly nine hundred dollars on every farm of the state. That indicates, of course, that on many farms especially in the richer dairy sections of the state, this investment will run into several thousand dollars. The study of farm machinery therefore becomes an increasingly important problem.

Its importance has been reflected by increasing attention to the care and repair of farm machinery in farm me-chanics courses. This study has included setting up, adjusting, and repairing such implements as mowers, corn planters, cultivators, harvesters, grain drills, plows, lime spreaders and manure spreaders. To accommodate this type of work, driveways have been built into school shops or separate shops have been constructed. In some cases where the school shop has not provided sufficient facilities, excellent study has been made available thru the use of the shop of the local implement dealer where the boys have set up machinery and studied adjustments and operation. In other cases, several days have been spent in studying machinery on nearby farms. In some cases, machines have been taken apart and taken into the agriculture room in pieces. In fact, I know of one community in which the soil fertility practices of the community have been revolutionized because the boys found an old lime spreader which they overhauled so it was usable and by putting it into operation began a liming and fertility program which has swept the community. We are requiring in new departments that a shop at least 24' x 36' shall be provided.

The use of the tractor has been another revolutionary development in Wisconsin farming. According to the census of 1920 there were about 9,100 tractors on farms in the state. In 1927, there were about 36,000 with some counties reporting tractors on 48 percent of their farms and in 1928, the number had increased to 41,000. This situation has increased the necessity for training farm hove in the care and operation of the

tractor. This need has not yet been adequately met in our farm mechanics courses altho it is receiving an increasing amount of attention. Attention is being given especially to the managerial phases of tractor operation. In a few cases, the boys are actually given lessons in tractor operation at dealers or on farms. In all cases, boys coming from farms where tractors are used are being given instruction in tractor care and management.

More progress has been made in the study of problems of rural electricity than in any other branch of farm mechanics study in this state. This progress has largely been because of the rapid development in the use of electricity and the active assistance of the Department of Agricultural Engineering at the Wisconsin College of Agriculture. In 1927, 17 percent of Wisconsin farms were using electricity. At the present time, 28 percent or 52,000 farms in the state are electrified and 6,000 to 8,000 farms are connecting to high lines annually. To meet the needs in connection with this rapid development, we began a year ago the introduction of part-time and evening schools in rural electricity. At first teachers felt the lack of training to teach this type of work and considerable help was secured from the College of Agriculture and from local power companies. However, courses of study were worked out by the College Department of Agricultural Engineering, in co-operation with the workers in vocational agriculture, together with a list of sources of information so that in several cases this winter these short unit courses of from ten to fifteen lessons have been given with practically no outside assistance. In other cases, and in departments where this development has not previously been tried, outside help is still largely depended upon. About fifteen of these part-time and evening schools in rural electricity have been held up to the present time. Fractically all of the instructors, however, are including the study of rural electricity as an important part of the farm mechanics course.

In farm woodwork, I do not know that we are doing much different work from what is being done in most states. Our aim is to give training in such repair and construction as the boy will need to undertake when he actively engages in farming. Our shops are equipped with the kind of tools and benches that we would expect to find in a good farm shop. We do not aim to train boys to make furniture or to work with machines with which their home shops are not likely to be equipped.

The approximate division of time now being given in this state to the various branches of farm mechanics work is about as follows:

Farm machinery, 5 weeks. Farm woodwork, 8 weeks.

Farm buildings, 2 weeks. Rope and belt work, 1 week. Harness repair, 2 weeks. Soldering, cold metal and forge work,

Farm lighting and water supply, 4

Gas engine and automobile, 6 weeks. Concrete work, 2 weeks. Leveling and surveying, 2 weeks.

Unusual Shop Work

E. B. NELMS, State Supervisor, Oklahoma

UYMON boys are handy with tools in doing the usual shop work and, some unusual, shop work about the farm. Skill along these lines is one of the aims of vocational agriculture which they all study under the direction of D. A. Dobkins at Guymon High School.

Perhaps one of the most unusual farm shop jobs was the overhauling of an OX5 Eaglerock airplane by Dannie Birt, vocational agriculture student, and

his older brother.

Harold Bartels, another Guymon Future Farmer, constructed a winddriven electric generator at a total cost of \$15.50 for material with 30 hours of labor.

The airplane is used on the Birt place in emergency to rush repairs during harvest and plowing seasons. It is a hobby, too, of Dannie's older brother. In the overhauling, in their farm shop, they put in new piston rings, ground valves, tightened valves, and put in a new oil pump.

The brothers also made a windshield for a motorcycle on which Dannie rides 30 miles to school. In this country of big distances, he finds the motorcycle, doing 75 miles per gallon of gasoline, his cheap-

est transportation.

Harold Bartels purchased a 31-foot metal windmill tower from a neighbor by exchanging work. A rebuilt Ford generator was used for producing the current. It was geared three to one, in order to have enough speed to charge in a low wind. The gearing was made of a Ford cam-shaft. The propeller was fashioned of white pine, and painted with linseed oil and clear varnish.

A four-mile wind brings the ammeter over to five, in a ten-mile wind the battery can be charged in 12 to 14 hours. Little attention is required by the machine. The generator is used to charge radio, truck and car batteries on the home farm and Harold charged eight batteries for neighbors in the first two weeks after completing the generator.

Harold and his father installed all of the plumbing fixtures and carbide gas lines, used in the farm home, which is modern thruout. Their shop is equipped to do hot and cold metal work which can be used in many jobs on the farm. They also have equipment necessary to do any woodwork on the farm.

Grading Students in Farm Mechanics

C. T. CHENEY, Instructor in Farm Mechanics, Iowa State College

ONE of the big problems of any teacher, and especially the teacher of a laboratory course such as farm mechanics, is that of fairly and accurately grading the students. The grading system should include not only a record of the work done but if possible, it should be devised so as to induce each student to put forth his best efforts at all times. Furthermore, the students exerting the greatest effort should be rewarded, and likewise, those who may be only drifting along should be detected and graded accordingly.

It was with the above ideas in mind that we set about to devise a grading system which would satisfactorily meet

those requirements.

The projects in each phase of the course in farm mechanics were anlayzed from the standpoint of skill and time required to do them, and a number of points were assigned to each. The maximum number of points which could be made for the quarter was set at 1,000, the equivalent of 100 percent. The minimum for a passing grade is 750. Each project was likewise assigned a maximum and a minimum number of points.

This course in farm mechanics is a two-credit laboratory course with two three-hour periods per week or a total of 72 hours per quarter. The 1,000 points divided by 72 gives 14, or the value in points for each laboratory hour of the course. This hourly value was considered in assigning points to each project.

Every phase of the work is introduced by a class discussion and demonstration lasting about one hour. The students are given points for class discussions as well as for doing the actual projects. These points may be recorded at the end of the laboratory period while the discussion is fresh in the mind of the instructor, or they may be given to the student when the project relating to the discussion is graded. A project well done, concerning which the student is well informed, would tend to indicate that the student had paid attention to the discussion and demonstration.

An additional motivation scheme is a chart about 14" x 18" posted on the bulletin board in the laboratory. These charts consist of a sheet of white paper glued to a sheet of heavier black paper. The white sheet is ruled horizontally for students' names and vertically for number of points. A strip of the white paper between each horizontal line is perforated and may be torn out disclosing the black back-ground as a graph to represent the points made. The students record the points on the charts by tearing off a strip of white paper as their

projects are graded.

This system is being used for grading four sections of farm mechanics students, with a total enrollment of 83. The points for every student in the four sections are recorded daily in a notebook 4 x 6 inches, which opens at the side. The left-hand side of one page holds the names of all the members of one section. Then the next six or eight pages are clipped off so that the students' names will not be covered by the succeeding pages. The projects are written in at the top in vertical columns along with the points assigned. In this same

note-book is also recorded the absences and the work to be taken up at each laboratory period.

Some of the advantages of this system of grading are:

1. Added incentive for more and better laboratory work because points are given according to quantity and quality of work done.

2. Added incentive due to the graphical display of the points earned by each student, giving a comparison between his work and that of others in the class.

3. Detection of the loafer, bluffer, or poor student early in the course.

4. Ease with which the mid-term or final grade may be made out. The total points made during the quarter divided by ten gives the final grade or provides for the ranking of the students for grading by any other system.

EDITOR'S NOTE: Altho the above article has reference to a college course in farm mechanics, the suggestions made should prove adaptable to the high school course. Some of these suggestions are in line with articles which have appeared previously.

$\begin{array}{ccc} Practical & Farm & Shop & Work \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$

R. B. JEPPSON, State Supervisor, Nevada

A T THE beginning of the present year the boys enrolled in farm shop at Virgin High were fortunate in having a new, well-built shop in which to carry on their work. However, the fact must not be overlooked that these boys did the greater part of the labor in putting up the building last year. Their work in erecting it has greatly stimulated their interest in the farm mechanics program.

As an evidence of the interest shown by the 19 boys enrolled in farm shop work the following is a list of their completed work so far this year: 25 saws reconditioned and sharpened; 19 poultry self feeders made; 3 grain markers constructed; 30 household articles soldered; 3 gates for irrigation ditches; 8 double-trees; 4 ironing boards; 8 handles put in axes; 5 handles put in hammers; 8 tool boxes built; 8 poultry watering troughs; 13 soldering coppers made; 3 book racks; 6 singletrees; 8 handles put in saws; 16 axes sharpened.

Other miscellaneous jobs that have been completed are: sharpening chisels, punches, knives and bits; making clevises and pins; milk stools; hog troughs; bread boxes; putting tongues in renovator and plow; sewing soles on shoes and making small cabinets for supplies.

In addition to these things several articles of equipment have been made for the school, including a cupboard for athletic supplies, a dress hanger for the home economics department, a magazine and paper rack for the library and a poultry catching crate for the agriculture department.

During the month of January special instruction was given in leather work. Each boy was required to clean, repair and oil one double set of harness as a part of his work for the month.

In Virgin Valley there is a definite need of work in farm mechanics and the high school is attempting to fill this need by training vocational agriculture students along this line.

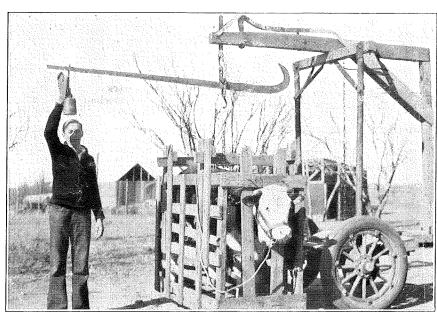
A Weighing Trailer

Texas A. and M. College

A NOVEL "weighing trailer" is owned by the members of the vocational agricultural classes at Cisco, Texas. The trailer, which was resurrected from a junk pile and equipped at a small cost, has greatly increased the interest of the boys in their feeding projects according to E. H. Varnell, teacher of vocational agriculture.

"Frequent weighings of the animals which they have on feed enables the boys to check up on the average daily gain per animal and to see just how each animal is responding to the feed it is getting," Varnell said. "The boys take the trailer home with them at night and weigh their calves, pigs, and lambs. It has an easy hitch to attach to any car with a bumper and is in almost constant use by the members of classes."

The members of the Cisco vocational agricultural classes have 23 calves, 81 lambs and 10 pigs on feed. These boys will exhibit their animals at the Southwestern Exposition and Fat Stock Show at Ft. Worth in March and at a local show at Cisco on February 27 and 28.



Garth McCaulies, Vocational Agriculture Student at Cisco, Texas, weighing his calf Avery, that made a gain of 66 pounds in the 17 day feeding period ending February 5, 1931

These Books Should Interest You

Farm Machinery and Equipment, by Harris Pearson Smith; McGraw Hill Book Company, 370 Seventh Avenue, New York; 11 parts, 36 chapters, 448 pages, including alphabetized index. Clear print, good paper, and binding, splendid illustrations. Price \$3.50. Part I deals with the more important phases of physics which are of assistance in analyzing the design, operation, and adjustment of the machines taken up in later chapters. A chapter giving a brief description of the various elements of a farm machine, together with typical application, and a chapter on selection of farm machinery with suggestions as to place of purchase are included in Part I. The main part of the book is given over to a discussion of the various types of farm machines, their design, construction, operation, and efficiency. Plows given special emphasis because of importance in preparation of seed bed for all crops. Discussion of machines arranged in logical sequence in which they are usually applied to the farm work, e.g., seeding machinery, harvesting machinery, seed separation machinery, feed preparation machinery, transportation equipment are typical headings of the different parts into which the book has been divided. A thoro treatise, organized in a manner which will prove helpful to teachers of farm mechanics. Inclusion of laboratory suggestions and application problems would have made book more usable in hands of vocational agricultural instructors.—A.P.D.

Group Leaders and Boy Character, Abel J. Gregg, Association Press, 347 Madison Avenue, New York, 236 pages.

This is a manual for leaders of groups of boys, outlined by the Committee on Counsel and Guidance of the Christian Citizenship Program. The prime purpose of the book is to help to a more thoro understanding of such elements as the place of activity and its use in character building; the place of the leader and methods by which he may more resultfully do his work; the way a boy grows and the resulting demands upon all leadership and group functions by these laws of growth and learning. Chapters on "Leaders," "How a Leader May Become Acquainted With Boys," "How a Boy Learns," "How to Begin," "How to Guide Group Program Building," "Interviews-Charting," and "How to Estimate the Result of a Program," will prove especially helpful to vocational agricultural teachers dealing with Future Farmer chapters. The growth of a leader's skill is the purpose with which the book begins and ends.—A. P. D.

How Old Am I Financially, American Provident Society, Inc., 51 Madison Avenue, New York, New York; price \$3, with 33½ percent discount to teachers. A life guide in personal economics with record tables; published 1930. Approximately 175 pages, well illustrated, with reserve schedules and junior and senior records and budgets. Part I consists of 11 chapters setting forth in a lucid manner the importance of productive work, wise spending, systematic saving, sound investing, the avoidance of waste, and financial independence in old age. Part II is given over to reserve

schedules and record sheets. Money, an important invention, reasons for money reserves, compound interest, bank and budget, choosing an investment, and speculation analyzed are among the important subjects delightfully treated. This book should prove extremely helpful to teachers of vocational agriculture in teaching thrift, as well as in attaining a better understanding of their own financial problems.—A. P. D.

AGRICULTURAL EDUCATION INDEXED

Agricultural Education is now indexed in the Education Index published by the H. W. Wilson Company of New York City.

This information will be of particular interest to agricultural education students and teacher trainers for it makes it possible to easily locate articles dealing with various phases of the work.

Practically all college libraries subscribe for the Index. Articles are listed by both author and title.

Have We Kept the Faith? Prosser and Allen; Century Company, New York. Price \$2.75.

This book presents a unique challenge to the progressive school administrator and supervisor. The authors have, in their usual and characteristic forward looking way, challenged the static minded school man within the confines of every chapter of the book. The call to education to meet the needs of society in the present rings clear thruout the book, and at every point the issue is a clear one and the conclusions are definite.

Any teacher, administrator or supervisor who is inclined to think the school system of the present has arrived can well afford to give ear to the thinking set up by the authors. Their challenge to conservatism is clear cut, and the needs of the present are so clearly set forth that no one can question the meaning of what the authors aim to set forth. Certainly "America is at the crossroads" and the question, "Have We Kept the Faith" is one that the authors bring squarely to all forward thinking school men

This is a book that should be of immense interest to vocational agriculture teachers, and carries with it an appeal that will make everyone who peruses its pages enter into his employment situation with greater determination to meet the needs of his community.—C. V. Williams.

KEEP IT UP

Don't allow your subscription to Agricultural Education to lapse. Nearly 4,000 progressive vocational agriculture teachers are now included in our circulation and from letters received by the editor it is evident that the magazine is rendering a service.

Note your expiration date on the wrapper and resubscribe in advance.

Joe's Motor Repair Processes, T. C. Joachim, published by T. C. Joachim, Dacoma, Oklahoma.

A text book together with job sheets in outline form, for complete instruction in doing all automotive and tractor re-

pair jobs. One short chapter on care and operation of the combine. Two hundred seventy-three pages with introduction on the use of the book and the job outline sheets. Alphabetical index and table of contents. The job outline sheets could have been improved by conforming to a uniformity in size. Book interestingly written; type small but clear; well and profusely illustrated. The contents are based on 101 repair jobs. Complete enough to serve as a text for industrial and trade school courses. Of value to the vocational agriculture teacher and student as a ready reference for motor repair work in the farm mechanics course. -H. W. Schmitz.

Economic Biology. A text for students of agriculture and general biology, by George P. Welden; published by Mc-Graw-Hill Book Company, 370 Seventh Avenue, New York; price \$0. The book contains 457 pages, with a preface, 26 chapters, and an index. Good paper, clear print, well bound, each chapter followed with questions and problems, and in most instances with laboratory suggestions. Interestingly written, profusely illustrated with exceptionally well chosen subjects. The economic aspect rather than the systematic is carried thruout. The alphabetized index carries approximately 950 topics. Of interest to vocational agricultural students from standpoint of orientation and specific aids in discussing the related sciences and general information of a biologic nature. However for specific control measures teachers will continue to go to the special subject matter departments concerned.—A. P. D.

Livestock and Poultry Diseases, by W. A. Billings, D. V. M.; 495 pp., well illustrated with 56 photographic cuts, price \$3.50; published by Macmillan Company. A valuable reference for both teacher and student. Should prove especially helpful in project work. An understandable and usable chapter on sanitation in disease prevention opens the book. Following this there are five divisions, each dealing with the health of one class of animals: cattle, horses, sheep, swine, and poultry. The book is written in a simple, direct manner, with an apparent studied attempt to avoid technical terms. When necessary, simple methods of first aid are outlined, and specific sanitation against contagious and parasitic diseases is carefully described.—A. P. D.

Co-operative Livestock Field Service Manual, available thru National Livestock Marketing Association, 608 South Dearborn Street, Chicago, Illinois, at \$1 per copy. A booklet designed primarily for field workers in the cause of co-operative livestock marketing. A comprehensive treatise on the subject of co-operative marketing of livestock, concise, well illustrated with charts, and interestingly written. Of value to vocational agricultural teachers who are desirous of informing themselves on this important phase of the livestock business, and should prove especially helpful in evening school instruction.—A.

P. D.



Future Farmers of America



Blake Wins Essay Contest

JOE BLAKE, of Gonzalez, Florida, received a check for \$15 from the American Royal Livestock Show because he kept his eyes open, his mind alert, and was able to express himself well in writing.

In other words, he was the winner of the Essay Contest conducted annually for vocational agriculture students in connection with the contests held in Kansas City, Missouri, each November. His essay title was "The Value of My Trip to the American Royal Livestock Show to My High School Work."

The winners and winnings in this contest, as supplied by Mr. A. M. Patterson of Kansas City are as follows:

Joe Blake, Gonzalez, Florida, first, \$15; Ephram Wall, Perkins, Oklahoma, second, \$12; Albert Fox, New Brunswick, New Jersey, third, \$8; Clifford Kinney, Supply, Oklahoma, fourth, \$6; Franklin Bond, Buffalo Center, Iowa, fifth, \$4; Clinton McCarty, Quinlan, Oklahoma, sixth, \$3; Ward Bander, Pauline, Nebraska, seventh, \$3; David Johnson, Stockton, New Jersey, eighth,

Joe Blake's essay is given herewith:

The Value of My Trip to the American Royal Livestock Show

JOE BLAKE, Gonzalez, Florida

The value of my trip to the American Royal Livestock Show can never be accurately measured or comprehended. It was of great value to me. Why? Because it gave me a keener insight into the future of American agriculture.

My trip very forcibly brought home to me the fact that a new and better era of agricultural advancement is beginning and I truly believe that the foundation for this is being laid in the won-derful presentation of livestock shows thruout the country. Closely connected with this is the perfect co-operation of the livestock shows with the efforts of the Future Farmers of America in stimulating interest in all phases of agriculture.

The American Royal showed me what great opportunities there are for raising the standard of livestock production in my own state and what wonderful strides have been made in this respect thruout the United States. To see the American Royal with all the purebred cattle, hogs, horses, sheep, and poultry, affords education that cannot be had in the schoolroom.

To have had the opportunity to participate in the judging of such high class livestock and to have been closely associated with boys from all sections of the country, was indeed an inspira-tion. The trip has enabled me to see those heights which a boy can obtain thru agricultural activities and caused me to realize how necessary good farm-



Joe Blake

ing and good farmers are to the prosperity of our country.

My automobile trip to and from the American Royal has shown me what extensive amounts of labor and money the United States government is using for the building of good roads. It also gave me an opportunity to compare my own state with other states in the development of their farming district.

In conclusion, it is my sincere wish that every boy interested in agriculture, and livestock in particular, may have the opportunity to attend the American Royal Livestock Show in Kansas City at some time in the future. I can assure them that they will receive an inspiration that will be lasting and a higher record for the business of farming.

New F. F. A. Charters Issued

THE Board of Trustees of the F. F. A. has made arrangements with the Welch Diploma House of Chicago for the printing of new charters with up-todate insignia and revised wording. These are now being issued to the states applying and qualifying and, according to W. A. Ross, executive secretary, will also be issued to states already in the organization if they care to surrender their old charters.

Promotes Scholarship

THE New Brunswick, New Jersey, Chapter of the Future Farmers of America offers a gold and a silver medal to the members of the graduating class who have done the best work in vocational agriculture. At the February graduation exercises, the gold medal was awarded to Thomas Voorhees, and the silver medal to Herman von Thun,

Collegiate Chapters of F. F. A. Authorized

By action taken by the House of Delegates of the Third Annual Congress associate collegiate chapters of F. F. A. for teacher training purposes were authorized.

Revised F. F. A. Manual

THE F. F. A. Manual has been revised and is now ready for distribution by The Farm Journal, Washington Square, Philadelphia, Pennsylvania. Advisers should order copies direct from the publishers. The cost is 15 cents per

A few of the changes which have been made in this edition are as follows:

The standard material such as the constitution, ceremonies, and the like, has all been placed toward the front of the manual while the suggestive material such as sample chapter, minutes, and similar material has been placed toward the back. The emblem on page has been brought up to date and an entire page given to the new Future Farmer Creed. The F. F. A. constitution has been left intact and stars have been placed at various sections thruout the constitution indicating where changes have been made. The amendments appear on pages 12 and 13 following the constitution. The summary of paraphernalia for chapter and state associations on page 13 is new and the ceremony for raising State Farmers to the degree of American Farmers on page 30 has been included. On page 35 some helpful material has been added on the discharge of important responsibilities in connection with the F. F. A. A good suggestive local program of work appears on page 44. The piano arrangement of the F. F. A. March, written by Captain Stannard, appears on page 58. It is hoped that F. F. A. members will learn to play the March and use it at various gatherings. A rather complete list of Future Farmer supplies appears on page 64. The color used on the back of the manual is more nearly a vellow corn color than that used on the first

Use of Insignia Limited

The F. F. A. insignia will be limited to use hereafter on pins, keys, watch fobs, medals, plaques, belt buckles, felt banners, pennants, arm bands, cap, and sweater emblems. This action was taken on recommendation of an Insignia Com-

Project Marker Adopted

An official project marker is available which is a 10 x 12-inch metal plate of 29-gauge material, having the F. F. A. emblem in colors thereon. The markers are to be placed at the F. F. A boys' homes and will sell in cartons of 25 for \$2.07 plus carriage.

The Texas F. F. A. has provided each local chapter with a sepia print of Henry Groseclose of Virginia. This is to be framed and hung in the chapter headquarters as a compliment to the "Founder of Future Farmers of America.

May 1931 Agricultural Education

Why the "Future Farmers of America?"

C. H. LANE, National Adviser, Future Farmers of America

HE organization known as the Future Farmers of America is an integral part of the program of vocational education in agriculture. The organization is composed of boys taking vocational agriculture in the public schools. Teachers of vocational agriculture act as advisers to local chapters of the organization; the state supervisors of agriculture or teacher trainers act as state advisers; and the Chief of the Agricultural Education Service of the Federal Board for Vocational Education is the national adviser. The activities of the organization are those normally recognized in a sound program of vocational education in agriculture. The facts here presented are intended to answer the question, "Why a National Organization of F. F. A.?"

In attempting to answer this question I shall do it in mere outline lest we become lost in words and fine phrases. Let us then look at the question from four angles: First, from the standpoint of the vocational pupil; second, from the standpoint of the teacher of vocational agriculture; third, from the standpoint of what it is going to take to carry on the program of F. F. A. permanently; and fourth, from the standpoint of sound training in life activities and the improvement of farming.

The Vocational Pupil Is Served By the Future Farmer Organization Because:

1. Vocational boys have wanted an organization thru which they could indulge in competitive activities within their own organization.

2. Vocational boys have wanted an organization thru which they could claim credit for their activities rather than give this credit to some other organization, or even to the school as a whole.

3. The vocational boys have wanted not only local and state organizations but a national organization of their own.

4. Boys of the high school age want to belong to something big—the bigger the better-hence, a national Organization of Future Farmers of America.

5. Boys of the high school age want an organization thru which the "gang spirit" can find expression under leaders chosen from among their own number.

6. Boys of the adolescent period want an organization thru which they may ex-

press themselves freely and on their own.
7. There is a "kick" in belonging to a vocational class which is supplemented by activities of the F. F. A.

The Teacher of Vocational Agriculture Is Served By the Future Farmer Movement Because He Has Needed:

1. An organization thru which he could teach and promote a co-operative spirit among vocational pupils.

2. An organization to stimulate interest on the part of the public in the activities of the vocational program.

3. An organization to take over some of the load that he has been carrying in general community activities.

4. An organization to call on for help when needed.

5. An organization thru which he

could provide recreational and educational activities for his pupils.

6. An organization thru which true leadership may be developed.

7. An organization in which and thru which confidence may be established by the farm boy in himself and his occupa-

8. An organization to develop on a participating basis the right attitude toward country life.

9. A more effective device—an organization of his boys—for promoting thrift.

10. An organization which he could use to train his boys in worthy, rural and social activities.

To Carry On the Program Permanently Will Require:

1. A recognition of those principles of adolescent psychology—the doing of those things that boys like to do in the way boys like to do them.

2. A program for every chapter that calls for action at every meeting.

3. A program for every chapter that challenges each individual member within the chapter.

4. A set of goals which may be reached with a reasonable amount of effort.

5. An insistence that the conducting of meetings and the carrying out of programs set up be the work of the chapter and the chapter officers, and not the work or job of the local adviser.

6. The holding of as many meetings out of class time as possible.

7. The promotion of an organization thrift bank, under the direction of F. F. A. members.

8. The approval of public initiation ceremonies, which, in a large measure, should be a recognition of achievement of the pupil.

9. The approval of organized outings and sports events.

10. The encouragement of the competitive spirit of the organization.

In Order That the Future Farmer Organization May Give Training in Life Activities:

It is necessary that we set as our goal that every man who reaches maturity

and remains on the farm shall have had during his youth an opportunity to come in contact with F. F. A. work and to take an active part in it.

Why? Because men thus trained, it is believed, will get a bigger vision of agricultural and rural life during their early years which will stay with them to their profit all the days of their lives. They will learn at the outset the source of agricultural information and how to use it by using it. Thus taught, they will begin their farm careers with a knowledge of and experience in co-operation and group action, one of the most vital needs of farmers. They will know how to conduct a meeting, how to play, how to take part in demonstrations, how to exhibit, how to serve, and more than all this, those who have come in contact with F. F. A. work in their youth will have had presented to them the idea that the man most likely to succeed in life is the man whose mind and hand are trained in the things they are to do. Great numbers of them will be encouraged to go on to a higher education in agriculture, as a result of which life will have a bigger meaning for them and the country will be enriched by their larger vision and greater usefulness.

Weekly Star Again Provides \$2,100

THE Weekly Kansas City Star, under THE Weekly Mainsas Ory, Comp., is for the editorship of W. A. Cochel, is for total of the third time sponsoring a total of \$2,100 as prizes for boys who make outstanding achievements as Future Farmers of America.

The boy adjudged to be the best Future Farmer of America will be designated as the Star American Farmer and will receive \$1,000 as an award; \$100 each will be given to the outstanding American farmer in Arkansas, Colorado, Iowa, Nebraska, Oklahoma, Kansas and Missouri, \$100 each will also be awarded to the best future farmer in eastern and western Kansas and in northern and southern Missouri.



Members of the Seminole Chapter Future Farmers cultivating celery on school farm, Sanford, Florida. Alex R. Johnson is teacher and chapter adviser. The Sanford High School is in the background. This Future Farmer Chapter won first place in the "Chapter Contest" conducted by the Florida Association, F. F. A. In addition to the honor of winning as the best chapter in the State of Florida, the chapter received a cash prize of \$25 donated by the Chilean Nitrate of Soda Educational Bureau

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How About That F. F. A.

Camping Trip

SUMMER camping trips of F. F. A. boys are very popular in some sections. They mean a lot of planning and work for committee members and the adviser, but they are well worthwhile. Louis M. Sasman, state supervisor of agricultural education of Wisconsin, has sent us some interesting material that was prepared by L. R. Larson, agricultural instructor of Beaver Dam, who has been especially successful in organizing and conducting camping trips for his F. F. A. boys.

Following is a summary of a Future Farmer camp held at Devil's Lake, Wisconsin, in June, 1930:

Number days in camp, 7. Number of boys, 17. Cost per boy including truck, \$4.20. Number of tents, 5.

All cooking done by boys.

Three boys constituted a cooking team. The duties of the cooking team were to: Keep cook fire going and with plenty of wash water available at all times; get plenty of wood under cover for next day; keep camp clean and neat; prepare all meals; wash all cooking dishes and supervise the washing of individual dishes. These boys were on for one day.

List of camp equipment needed for 17 boys: 1 rake, 1 spade, 3 wash dishes, 3 bars of hand soap, 3 bars of good grade laundry soap, 1 can "Old Dutch," 2 dish swabs, 1 scrubbing brush, 1 strip of oilcloth, 2 empty 5-gallon tins with tight cover, 6 tight cover gallon pails, 4 other small pails, 5 tents of 50-60 square feet each, 2 axes, 1 hammer, 1 hand axe, 1 saw, 1 pound of assorted nails, 4 water buckets, 2 large boilers for water, 3 large spiders and covers, 6 large skillets and covers, 1 large coffee pot, 2 pancake turners, 4 large spoons, 1 can opener, 3 paring knives, 2 potato peelers, 2 butcher knives, 2 dish pans, 12 dish towels, 1 large dipper, 200 feet of clothesline, 1 first aid kit, boards to make ice box, and so forth, 1 "chore boy" for pans, 3 trays.

Personal equipment suggested for boys: Rubbers, tennis shoes, 2 wool blankets, swimming suits, extra trousers, extra shirt, 2 pairs of socks, handkerchiefs, sweater, slicker, towels, toothbrush and paste, shaving equipment, writing materials, 2 granite cups, tin plate, knife, fork, and spoon, baseball equipment, kodak, fishing outfit, flashlight, musical instrument, book, small mirror, comb.

Suggested cooking schedule: 6:30 a. m, build fire and get ready for breakfast; 7:30 a. m., breakfast; 8 a. m., wash dishes; 8:30 a. m., clean up camp, peel potatoes; 9:30 a. m., town after eats and mail; 11 a. m., get ready for dinner; 12 m., dinner; 12:30 p. m., wash dishes; 5 p. m., get ready for supper; 6 p. m., supper; 6:30 p. m., wash dishes, clean up camp, get wood for tomorrow.

General routine: 7 a. m., wash for breakfast; 7:30 a. m., breakfast and wash dishes; 8 a. m., clean up tents and air out blankets; 8:30 to 10 a. m., free time; 10 a. m., games; 12 m., dinner; 12:30 p. m., wash dishes and fix up tents; 1 to 2:30 p. m., free time; 2:30 p. m., games; 4 p. m., swimming; 6 p. m., supper; 6:30 p. m., wash dishes; 6:30 p. m., free time or games; 9 p. m., campfire; 10 p. m., lights out.

Official Song Wanted

THE F. F. A. is offering \$150 as a prize for an official song. Such a song would be invaluable for banquets, chapter meetings, conventions and similar occasions.

This song should carry a theme suited to the ideals of the F. F. A., should be adapted to singing by large groups without particular training, should be catchy, inspiring and full of rythm.

It is suggested that all persons who expect to compete in this contest secure a copy of "The Future Farmers of America Manual," (price, 15 cents) printed and for sale by the Farm Journal, Washington Square, Philadelphia, Pennsylvania. The material contained in this publication will supply necessary information about the F. F. A., and will be very helpful to the song writers. Competition is open to anyone anywhere.

All songs submitted will be reviewed by a committee of competent persons and they shall select three or more of the songs which in their opinion are most suitable and appropriate. The songs selected by the committee will be rendered before the delegates at the Fourth Annual Congress of Future Farmers of America in November, 1931. The delegates present shall make the final selection. In case no selection is made by the delegates at this Congress, the contest will be continued another year or until a final selection is made.

Rules

The rules governing the F. F. A. songwriting contest are as follows:

1. The composition, including words and piano accompaniment, must be original.

2. Words and music may be by the same author or by different authors. In case of joint authorship, the prize may be divided according to the wishes of the authors.

3. Two completed copies of the composition on manuscript paper ready for rendition and in form suitable for printing must be submitted.

4. Both copies of the song submitted must bear the following information at the end of *each* manuscript submitted:

a. Name of author or authors.
b. Share of authorship (if more than

one author).

c. Complete address of author or authors.

5. Entries as indicated may be submitted at any time but all entries to be considered must be mailed before September 15, 1931, to:

The Executive Secretary
Future Farmers of America
1523 'L'' Street, N. W.,
Washington, D. C.

6. Authors will be duly credited with their composition but receipt of prize money by individuals will constitute evidence of the fact that authors thereby relinquish all rights and claim to their compositions, and that the said compositions henceforth become sole property of the Future Farmers of America.

7. Manuscripts will be returned to the authors on request after the contest closes

Prize

Prize Song, \$150.

This amount will be payable immediately upon selection of a song which is accepted as the official song of the Future Farmers of America.

This F. F. A. Chapter Gets Results

D. M. CLEMENTS, Tennessee Supervisor of Vacational Agriculture EN Dr. E. W. Grove

WHEN Dr. E. W. Grove endowed the Henry County High School at Paris, Tennessee, he did not foresee what would happen for the boys of Henry County. He wanted the Henry County boys to accomplish the very things they have. The Paris Chapter of the Tennessee Branch of the Future Farmers of America made his wish possible.

Two years ago these Future Farmers were issued a charter. There were 42 members. Things didn't do very well at first, but note what has happened since these Future Farmers of Henry County caught that spirit.

They have reclaimed gullied land. They have cared for and managed an orchard of 150 trees and 125 grape vines continuously for the past

order to show how a well pay. They corp. T. A. in beau pus, by hauling and putting out grass seed. They that is the pr.

These boys have hear their chickens and terra.

They are as good in general school

activities as they are in agriculture. This school has a student body of 400 boys and girls. There are 53 members of the local F. F. A. Chapter. They have had two presidents of the senior classes, a representative in the inter-class contest, a representative of the school in the West Tennessee Public Speak Contest, two presidents, a vice-preside. and a secretary of the Hi-Y Club, a president of the Astronomy Club, vicepresident of the Mathematics Club, manager of the football team, 18 regular members of the football team, 3 captains of the football teams, 8 members of the school baseball teams, and 1 captain and 4 members of the track team.

These boys are good citizens, good students, and good farmers. They have invested in farming \$36,000. Three of the boys own their own farms. They have \$1,430 in savings. They made \$5,084 from their projects in 1929 and even the 1930 was a bad year they made a profit of \$4,100.

This chapter has four members who have been awarded the State Planter degree. They support the State Convention, and attend the State Camp. The Paris Chapter of the Future Farmers of Tennessee has shown by its works that it can do things. It has won the respect and admiration of the students of the school and the people of the community.

Chapter Contest Continues

THE American Farming Publishing Company is the new sponsor for the F. F. A. Chapter Contest and is providing \$1,000 in eash prizes.

There will be four prizes, \$400, \$300, \$200 and \$100. The final competition for these awards will be between the best chapters from each region rather than "at large" as previously. Winners in 1930 are ineligible to compete. The score for "program of work" has been raised 50 points and "accomplishments" has been lowered correspondingly.

F. F. A. Uniform Attractive and Serviceable

THE delegates to the 1930 Future Farmer of America convention in Kansas City adopted a standard uniform for use by members of the F. F. A. This is not a compulsory uniform requirement, but optional with members and chapters. It is, however, the only official uniform recognized by the organization of Future Farmers of America.

During the discussion on the floor at the National Convention it was suggested that the uniform be worn at chapter meetings, father and son banquets, weiner roasts, judging contests, county and state fairs ar ! state conventions. The uniform is neat and dressy in appearance and yet is sufficiently inexpensive to be within the means of most members. The uniform is thereby serviceable and, worn to school as clothing, rage boy less per day of nary school clothes.

of Uniform

Made of dark aranteed not to I material used and looks even ∫een laundered than

perore. It is made only of select long staple cotten and is closely woven for wear and service. The shirt as well as the other garments comprising the uniform are made of Pool-shrunk fabrics. The shirt is what is known as a full coat style with box pleat the entire length of the front. The seven buttons on the front

I the buttons on the cuffs are ocean of "ducoed" in a slightly lighter blue than the shirt. The shirt has two roomy bellows pockets with batton down flaps.

Pants 32.45. Made of genuine "Swetpruf" knaki of a heavier weigh; than the shirt. Swing type foomy pockets in the pants are made of heavy material for extra service. All points of strain are bar tacked to prevent ripping. Bottoms are 20 inches with 1¾ inch cuff. Outside buccous are of colored wood is cry and waist band and fly buttons are of solid aluminum, the most durable and satisfactory button for that purpose.

Cap 50 cents. Made of same material as pant. Emblem on side. Initials F. F. A. on other side. Gold braid around top. Imitation leather sweatband and poplin interlining. Special stiffening inside of inner-lining to hold shape.

Necktie 80 cents. Four-in-hand type of old gold silk with initials F. F. A. gainted in blue.

A blazer or lumber jack made of the same material as the pant was recently given tentative approval by the National Board of Trustees and is now available at \$2.95 each.

Riding breeches and blazer of heavy bedford cord material were also given tentative approval but will not be offered until next fall as they are suitable only for winter use.

How to Order Uniforms

Mail orders for uniforms from chapters outside of the southwestern states may be sent to Walraven Uniform Co., 1309 Caruth Street, Dallas, Texas, or if desired the Pool Manufacturing Company can designate a local merchant to serve as a dealer for F. F. A. uniforms. forms handled thru a local merchant should select a well rated merchant and request him to order a sample uniform from the Pool Manufacturing Company, Sherman, Texas.



Alpha Tau Alpha HERBERT J. RUCKER, National Secretary, Urbana, Illinois

WITH the development of the teaching of vocational agriculture has also come the birth and growth of a fraternal spirit among those engaged in that work. Some nine years ago Dr. A. W. Nolan, associate professor of agricultural education, University of Illinois, and a group of 16 men interested in teaching vocational agriculture organized the Alpha Chapter of Alpha Tau Alpha at the University of Illinois. Today, altho still young in years and service when compared to some professional fraternities, there exists six chapters, the majority having been organized within the past two years. These chapters are located in the University of Nebraska, the University of California, the George Peabody College, Nashville, Tennessee, the University of Florida, the Colorado Agriculture College, and Penn State College. Sam Houston State Teachers College, Texas, has made application.

The preamble to the Constitution expresses well the purpose of the fraternity —(1) to develop a true professional spirit in the teaching of agriculture, (2) to help train teachers of agriculture who shall be rural leaders in their com-

spirit among students in teacher training for vocational agriculture. policy is to encourage and support every bona-fide organization or effort in any university or college, the Future Farmers of America, and other similar organizations, looking to the improvement and the advancement of agricultural teaching. The fraternity is collecting information for the publication of its first national directory, and will contain the positions as well as the professional training of its 500 or more members.

The advisory board is composed of the national officers: President, Dr. A. W. Nolan, Illinois; first vice-president, Dr. K. C. Davis, Tennessee; second vice-president, Professor G. A. Schmidt, Colorado; secretary-treasurer, Mr. Herbert J. Rucker, Illinois. National headquarters are located at 116 Old Agricultural Building, Urbana,

Illinois.

Thru the Mail

(Continued from page 166)

hate to learn that any sacrifice in size was therefore necessary. I say this seriously because I know of no department you could eliminate or even limit wisely. By balance I mean the proportionate space given to Professional, Supervised Practice, Methods, Evening Schools, F. F. A. Activities, and the like.

'I am a cover to cover reader and enthusiast and agree with the editor in the 'kick' to Coan's March article on 'Changing Farm Practices Thru Evening Courses.' Then take Dr. Sutton's article, and Dr. Getman's 'The Means and Ends of Life'—every one of these reveal a fervor and zeal that is contagious. Professor Davidson's article on 'organizing Bulletins . . . ,' and Professor Wheeler's 'Facts Take Fear Out of Facing Farmers' gets down to brass tacks in real fashion. Wheelshows real insight to the jobs the instructor is up against with nearly all the materials available.

I could tire you out with praises of all the helpful things in recent numbers—but I shall stop here. A few suggestions and I'll sign off! Beatty's 'The Problem of Handling Large Classes in Agriculture' needs more extended treatment. I fairly bristled at the implications in Professor Hamlin's boxed item 'Project Record Keeping' in February issue, tho you have recently published some excellent antidotes. I still feel an answer on my chest which I may trouble to write and pester you with.

Wish it were in my power to send you a hundred subscribers! ! sincerely hope your success with the paper partly compensates you for the personal leisure you must have sacrificed for it."—Ray L. Hahn, Teacher of Vocational Agriculture, Willimantie, Conn.

F. F. A. Chapter Contest Entry Date Extended

Estes P. Taylor, editor of American Farming and Agricultural Leaders Digest has issued a statement to the effect that entries in the Chapter Contest will be accepted to June 1.

The extension of time will offer an opportunity for many more chapters to enter the contest and compete for the prizes provided by the American Farm-