

I shall try to correct errors when shown to be errors, and I shall adopt new views so fast as they shall appear to be true views.—Abraham Lincoln.



The Agricultural Education Magazine

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Editorial Comment

Freedom to Learn

IT IS time for the American public school system to take careful inventory and make a thoro-going evaluation of all its processes of the present day to find what the answer is to the question: Is freedom to learn being provided for those, young and old, who are being instructed in the public schools of America? There is need constantly to impress on the minds of educators that in a democratic society the right to study and learn, free from bias and prejudices of those giving the instruction, is fundamental. Education that does not guarantee to students freedom to study questions without bias from every angle is not worthy of existence. In fact, such education is dangerous and inimical to the interest of democratic society.

This is a day of isms. In foreign lands it is fascism, communism, and so forth. In this land of ours it is conservatism, radicalism, new-deal-ism, CIO-ism, AAA-ism, or "what-have-you." In Russia, Germany, and Italy education of the people is to indoctrinate them with the ism of the force in power. The press, the schools, the churches, all must teach to this end. The success of this system of education is dreadfully amazing in that the entire population of great nations, almost without dissent, have bowed to the tyrannical will of ruthless dictators.

While we in this country rightfully rejoice in that we are far removed from the conditions found in the dictator countries of the world today, it is not too soon to watch with closest scrutiny every political movement projected by the government, or otherwise, and jealously guard the public schools against becoming propagandizing agents for such movements, whether they be good or bad. Human-welfare movements, particularly political movements, are good or bad, depending on the school of thought evaluating them. Let the public school devote its energies to giving people an understanding of all movements and always avoid soliciting affiliation with any movement under consideration. In a democratic society, each individual must make his own decisions. Real education can go no further than to teach him to understand the relevant facts concerning any question. Neither can education stop short of teaching all the facts about any question.

Treatment of the present-day ills of the American farmer is not free from ism influence. Various treatments are being proposed. Each is the product of some special school of thought. In the minds of some, controlled production is the remedy; in the minds of others, with just as much certainty in their thinking, uncontrolled production is the thing. Subsidized production for domestic consumption, subsidized exports, price-fixing by the government and so forth, all have support.

After all, what treatment is it that will effect the cure that the American farmer wants and is entitled to? No one knows—probably no one will know. Under such conditions, then, should not the farmer choose his own remedy? There is little dissension on the answer to this question. The difficulty lies in the fact that each school of thought wants to promote its particular scheme and propagandize the farmer into accepting its particular views. The AAA has not been free of this type of procedure. Nor can they probably be severely censured for promoting their particular plan. Has not Congress charged the AAA with the responsibility for administering a particular program? Failure to promote the particular program would have been failure to discharge a duty imposed by proper authority. It is true that over \$3,000,000,000 of federal funds in the hands of AAA during the last six years has been a powerful weapon to promote the views of this particular school of thought. The views of other schools have been expounded under relatively great handicaps.

In the entire picture there is only one agency so situated as to give farmers all the facts and only facts. This agency is the public school.

Will the public school rise to the occasion and accept the responsibility of teaching all the people in the light of "the truth, the whole truth, and nothing but the truth?" In the past, when some vital issue was involved, we have been prone to wait until some outside agency presented a prepared

them in teaching our people. If the public schools really are to meet this responsibility, the educators in public schools must become alert to current-day problems, prepare themselves to cope with such problems, and take aggressive steps toward instructing the people in the solution of such problems. Until the schools do this, other agencies will continue to conduct so-called educational work with the schools assisting such agencies. As long as we decline to do the job, doubtless we owe them a debt of gratitude. The vital question is: When will the public school become a courageous and aggressive leader in such educational matters instead of a meek and humble follower?—V. G. Martin, Mississippi.

Football Versus Farming

We publicize, dramatize, advertise, and glorify youngsters for achievements on the gridiron.

That's all right. But what about the boys who win distinction in more worth-while activities? For instance, a Mississippi youngster—Gay Moorehead of the little village of Hickory Flat up in north Mississippi—won fame in the field of agriculture in Kansas City this week.

He was elevated to the degree of "American Farmer," at the national meeting of the Future Farmers of America—the highest honor the association can bestow.

It was no small or mean achievement. It required the completion of three years of systematic instruction in vocational agriculture, an earned income from farming operations of at least \$500, activity in school and community life, and high scholarship ranking.

That's a pretty hefty bill to fill. And his fame and achievements are not fleeting like the glories and glamour of the football star.

They are substantial and worth while. They are built on solid ground instead of the stairs of sand that the football heroes ascend.

Football is all right, and its achievements are commendable; but public acclaim sorely neglects celebrities like Gay Moorehead.

A triple threat would come home from the Rose Bowl with wide acclaim, bands playing amid pomp and ceremony.

But Gay Moorehead will get off the train at Hickory Flat unheralded, unnoticed, and unsung. Yet, it would be interesting to watch the future course of this distinguished young farmer and the touted triple threat.

Honestly, aren't we neglecting one and overdoing it with the other?
—Columbus Commercial-Dispatch.

The above is a copy of an unsolicited editorial carried by one of Mississippi's leading daily papers under date of October 21, 1938. While it was intended to pay tribute primarily to a young farmer who had just won the distinction of the American Farmer degree, it is also a very strong endorsement of our program of vocational education in agriculture. Such endorsement from the leading newspapers of a country is indeed gratifying.—V. G. Martin, Mississippi.

Who Will Supply Our Subject Matter?

Below is a copy of a letter received by one of the State Directors from a Dean and Director in one of the land-grant colleges.

"Dear Mr. —: I am writing this note to ask if you will get in touch with each of your teachers of vocational agriculture and inform him that it is quite impossible to supply his students with copies of our publications. We get requests from students in vocational classes every few days asking for enormous numbers of our publications. It would take several times our printing budget to supply the annual requests that come from vocational students. Of course, we would like very much to supply these students with our printed matter. It cannot be done, however, because of financial limitations. We will attempt to supply each of your teachers with a set of our publications or with those of our publications that he actually needs. We cannot supply publications to students. I am asking, therefore, that you request your teachers to refrain from having their students write us for numbers of our publications. Yours very truly,
Dean and Director."

More and more the difficulty cited by the contents of the letter above is being encountered by students in vocational agriculture in their effort to supply themselves with adequate subject-matter material. The point has been reached where unlimited quantities of printed material from commercial sources flood the libraries of the departments of vocational agriculture throught the country. The supply of this type of material becomes more abundant day by day. Contrasted with this, it is becoming more and more difficult to get ex-

A. K. GETMAN

Professional

R. W. GREGORY

Contributions of Leading Americans to Agriculture—Thomas Forsyth Hunt, 1862-1927

F. L. GRIFFIN, Associate Professor of Agricultural Education, Supervisor of Non-Degree Instruction
Davis, California

F. L. Griffin

FEW men in the field of agricultural education have had their influence felt over such a wide area and under such diverse conditions as Thomas Forsyth Hunt. The college and university positions he held in Illinois, Ohio, New York, Pennsylvania, and California; his year in Rome as the American representative at the International Institute of Agriculture; and his long period of service as a member of the Committee on Methods of Instruction in Agriculture, Association of American Agricultural Colleges and Experiment Stations, support this statement.

Born and reared on an Illinois farm, Thomas F. Hunt obtained his elementary and secondary school education in his home community, and his collegiate training in the University of Illinois. He was the product of an educational era when the newly developing agricultural colleges were graduating men with a broader understanding and more liberal conception of the entire field of agriculture than has been possible with our more highly specialized curricula.

Doctor Hunt received his bachelor of science degree in 1884 and went to work the next year as assistant to the Illinois State Entomologist. In 1886 he accepted the position of assistant agriculturalist in the University of Illinois, which position he held until 1891 when he was called to the Pennsylvania State College as professor of agriculture. He served in that capacity for one year, leaving to accept a similar position and title in the Ohio State University, where he was promoted in 1896 to the position of Dean of the College of Agriculture and Domestic Science. Leaders in agricultural education were none too plentiful in those days, and the rapidly growing land-grant colleges were actively competing for the few such men who were available.

In 1903 Doctor Hunt resigned his position at Ohio State to go to Cornell University. While he was Dean at Ohio State, the first college building devoted solely to agriculture, Townshend Hall, was erected. It was also while at Ohio that he became a member of the original chapter of Alpha Zeta, the honorary fraternity whose membership is limited to outstanding agricultural-college students and faculty members. Through

the remainder of his life, Doctor Hunt worked quietly but effectively in promoting scholarship among agricultural students thru the medium of Alpha Zeta.

From 1903 to 1907, Doctor Hunt served as professor of agronomy at Cornell. It was during this period of full-time teaching responsibilities that many of the present-day leaders in agricultural



Thomas Forsyth Hunt

activities thruout the world came under his influence. Administrative duties again beckoned and in 1907 he returned to the Pennsylvania State College, where he remained as Dean of the School of Agriculture until 1912.

In 1913, President Benjamin Ide Wheeler, faced with the

finding a man equal to the task of developing a college adequate to cope with the changing agriculture of his state, selected Doctor Hunt, making him Dean of the College of Agriculture and Director of the Experiment Station of the University of California. This was undoubtedly the greatest responsibility of Doctor Hunt's career. Within the university were the stresses and strains arising from the rapid growth of a college that hitherto had not been entirely respectable, as judged by the standards of the academic departments of the university. Off the campus came many and varied demands from the farming industry for help with the multitude of new problems arising from the change from a grain and "ranchero" type of husbandry to the specialized commercial production of fruits and vegetables, and the breaking up of large tracts into small holdings devoted to poultry, fruit, dairying, and part-time farming. Interest in agricultural education was also increasing, and the demand for high-school teachers of agriculture was greater than the University could supply.

Notwithstanding the burden of administrative duties in his new work, Doctor Hunt's primary interest in youth never lessened and students always had the right of way into his office. Also characteristic of the man was his way of getting at the basic causes of student difficulties. We cite a concrete example, as described in the dean's own words ("The Future of Agricultural Education," an address delivered before a group of agriculture teachers in 1919):

"As is customary, a young man who had failed in college came into my office to seek reinstatement. 'We must discover', I said, 'why you failed. If the cause of your failure cannot be found and the difficulty removed, it will not help you to be reinstated. You will simply fail again. Usually students fail from one of three general causes: first, they may be earning money to pay their expenses and do not have sufficient time left for their studies; second, they may have some bad habits and are neglecting their studies; third, they may have some physical defect which inhibits their mental processes. What is the trouble in your case? You have not been carousing, have you?'

'No, I'm just dumb. That is all that ails me. I am just dumb.'

'Yes,' I said, 'that is what most people, even many teachers, think. The probabilities are, however, that there is not a great deal of difference in the gray

people. Frequently it is found that students have some physical defect which prevents proper application. It is not a lack of gray matter. Sometimes it is due to defective eyesight. Many people accused of not being able to think straight merely cannot see straight. It may be due to pus pockets in connection with the teeth. It may be due to defective hearing. It may be due to tonsils. It may be due to adenoids.'

'Oh,' said the student, 'I have adenoids all right. The doctor told me so.' 'Go and have them removed. They probably explain your trouble.'

Doctor Hunt modestly explained that his chance remark did serve to get this student adjusted and he cited numerous so-called failures that were corrected by physical treatment. He would not delegate the consideration of serious student problems to subordinates during his deanship, and many a discouraged student who entered his office left with new hope and a new lease on life.

Off the university campus, Doctor Hunt was probably best known for his constructive administrative leadership and for the many books of which he was author or joint author. Those who knew him most intimately, however, knew that his greatest interest and pleasure were in teaching. Keenly aware of the economic basis of all rural social problems, he promoted, as rapidly as funds and other limitations of the time and circumstance permitted, the practical application of economic theory to agricultural problems. The colonizing of western irrigated lands had become of major importance, so he created within the college a division of rural institutions and persuaded Doctor Elwood Mead, with an international reputation in the field of irrigation institutions and land settlement, to head it. When he retired from the deanship he planned and taught a new course called "Comparative Agriculture," which was "elected" by large classes each year. During his last two years of service he also undertook a research project dealing with the development of a large private land-colonization scheme in the San Joaquin Valley.

Professor John W. Gilmore, who was a colleague of Doctor Hunt at Cornell and Penn State, and who later joined the staff in California, had abundant opportunity to evaluate his work as a teacher, and has commented on his ability as follows: "Dean Hunt was a teacher of men. A teacher may instruct his students and he may inspire them. Doctor Hunt did both. The words he spoke, the work he did, and the life he lived were the agencies thru which he manifested himself; and many men and women today are perpetuating his spirit thru this inspiration. His motto in this respect was: 'Teaching, Not Telling.'"

When Doctor Hunt became Dean of the College of Agriculture in California, he inherited a division of agricultural education just then getting established. He was, of course, aware of the nationwide interest in vocational education that was developing at that time, and of the forces that were crystallizing public sentiment in favor of the congressional legislation that appeared in the form of the Smith-Hughes Act a few years later.

It was my good fortune to be a member of the agricultural education division

California, and again when the Smith-Hughes work was just getting established. I can, therefore, give personal testimony regarding Dean Hunt's keen interest in the teaching of agriculture in the secondary schools as well as that of college grade. Altho 20 years have elapsed, Doctor Hunt's insistence that only outstanding agricultural-college juniors and seniors should be encouraged to go into teaching stands out in my mind. Dean Hunt wanted these men to be impressed with the opportunity for service they would have in California rural communities and he frequently expressed the hope that many of the agriculture teachers would eventually be "promoted" to the position of principal because of the increased opportunity they would have for exercising their leadership ability. He lived to see this happen. He was also interested in the training of agricultural-college students for teaching agriculture, general science, and biology in city high schools, believing that their point of view would invigorate science-teaching and at the same time give the future urban voters and consumers an intelligent appreciation of the problems of agricultural production and rural life.

Few recent agricultural graduates have had opportunity to know many of the men who had so much to do with the formulation of the agricultural curricula and courses of study of which they are the beneficiaries. They have probably heard of the Association of American Agricultural Colleges and Experiment Stations, at the annual meetings of which the administrative officials in the state land-grant institutions and the Federal Government exchange experiences and formulate the policies that have motivated and directed the progress of our agricultural colleges thruout the years.

At the ninth annual meeting of the Association in 1895, Doctor Hunt, then professor of agriculture at Ohio State University, presented a paper entitled, "A Discussion of Methods of Teaching Agriculture." It was at this meeting (possibly prompted by Doctor Hunt's paper) that a committee on methods of teaching agriculture was authorized; and annually thereafter, for fully 20 years, Doctor Hunt's name appeared as a member of this committee.

Professor Edwin C. Voorhies, professor of agricultural economics and assistant dean of men in the University of California, a former student of Doctor Hunt's and later his assistant in the dean's office, had unusual opportunity to know him intimately, and I am privileged to summarize some of his impressions:

"While most of Dean Hunt's life was spent in an administrative capacity, his real interests during the latter part of his life were in the humanitarian and economic aspects of agriculture. Altho he never spent an hour in the legislative halls of California, the College of Agriculture grew at a rapid rate. Experience with all phases of agricultural endeavor had convinced him of the equal importance in an agricultural college of instruction, research, and extension. He treated them all alike. When the suggestion was made on one occasion that he elevate one branch above the others, his reply was, 'The College of Agriculture cannot have any stepchildren.'

without encountering opposition. With a determination few men possess, Doctor Hunt vigorously cut thru to the goal which his clearly thought out ideas convinced him were right. Almost invariably time pointed to the correctness of his viewpoint. After years of daily association with Doctor Hunt, the attitude which stands out most conspicuously was fairness and justness. This sense of fairness at times met with the greatest opposition. Yet behind the doors of Dean Hunt's office never appeared a trace of pettiness nor smallness with reference to those who had different views. He was strict concerning his views of conduct, and lived up to them. He was always dignified in the true sense. He was the same every day, year in and year out, always the courteous gentleman, never ruffled, whatever the emergency."

During his later years in the dean's office, Doctor Hunt became more and more interested in the economic aspects of agriculture. At the annual conferences of the agricultural extension workers, usually held early in January in Berkeley, he was always one of the most popular and respected speakers. The county agents and extension specialists had good reason to respect his judgment in that he was primarily responsible for establishing their work on such a sound basis with regard to financial support, university affiliations, and farm bureau relationships that no fundamental change in policy has ever been necessary.

At the 1924 conference, Doctor Hunt's subject was "The Present Status of the Farmer." In developing the topic, "short-term crises," he mentioned the panics of 1893, 1900, and 1907, and pointed out that one was brewing in 1914, when aborted by the beginning of the World War. Then followed these statements: "The exigencies of the great war did not prevent another crisis from occurring in 1921. In the last 110 years there have been 15 such crises, or one about every seven and one-half years. . . . The businessmen who most successfully weather these sabbatical storms are those who manage to sell their surplus commodities before the clouds burst, reducing actual but not potential production until such time as the weather becomes more settled. A few accomplish this sleight-of-hand but most of them do not. Otherwise, I assume there would be no crises. The principal item to be remembered is that if business runs its normal course, the next crisis will occur in 1928 or 1929. A farmer who has grain or cattle ready for the market in 1927 would doubtless be unwise to hold his product until 1929. Many of them probably will."

The interesting thing, of course, is that in this discussion in 1924 Doctor Hunt predicted that the next "crisis" would appear in 1928 or 1929. Those of us whose memories run back that far will recall that the prophecy was made during the "Coolidge prosperity" era when "business cycles have now been ironed out and there can be no more panics."

Doctor Hunt gave up his administration as dean in 1923, but continued as a member of the university staff with the title of professor of agriculture, dividing his time between teaching and research. His death occurred on board ship, April 25, 1927, when returning home from

University of California at the Pan-Pacific Conference on Education, Reclamation, and Rehabilitation.

Doctor Hunt was the recipient of the honorary degree of doctor of science from the University of Illinois and the Michigan State College. He was active in the affairs of the Society for the Promotion of Agricultural Science, serving as president during 1907-1909. He was selected as one of the members of the Agricultural Commission sent to Europe by the Federal Government during the World War, and in 1920 and 1921 was the resident delegate of the United States at the International Institute of Agriculture at Rome. The decoration of Cavalier of the Order of the Crown of Italy was conferred upon him; but with characteristic modesty he did not permit this to be announced, and it was only after his death that it became known among his friends.

Doctor Hunt was the co-author and author of many agricultural textbooks widely used two to four decades ago. In 1895 "Soils and Crops of the Farm" appeared with Morrow as co-author. In 1899, his "History of Agriculture and Rural Economics" helped lay the foundation for these new fields of study. "Cereals in America" (1904) and "Forage and Fiber Crops in America" (1907) were so widely used as texts that Doctor Hunt facetiously remarked on one occasion that he was probably better known thruout the country as professor of "Agony" than as professor of "Agronomy." "How to Choose a Farm" (1906) and the "Young Farmer—Some Things he Should Know" (1912) were manifestations of his growing interest in economic and agricultural education. "Soils and Crops" (1913) and "Farm Animals" (1914) with Doctor Burkett as co-author, were prepared in response to the rapidly growing demand for texts in the secondary field, and represent one of the first carefully considered attempts to adapt agricultural subject matter "to the high school mind; that is, to pupils between the ages of 14 and 18".

Many of Doctor Hunt's most valuable contributions to agricultural education of secondary grade are found in addresses delivered at meetings of students, farmers' organizations, and faculty, parts of which were collected and issued in the Quarterly of Alpha Zeta, Vol. 25, No. 1, February 1929, by Professor Edwin C. Voorhies. Space limitation permits only a few excerpts, the significance of which may be impaired by the writer's inexpert removal from their context:

"WHAT IS AN AGRICULTURAL EDUCATION?" (The time and occasion of this address could not be ascertained.)

"An agricultural education does not differ in its main fundamentals from any other sound education. If it accomplishes its purpose, it teaches the student to think, to will, and to do; and at the same time it furnishes him with the body of information which is essential to a high measure of success in his chosen calling."

"... An education which trains students only to think teaches them neither self-mastery nor the habit of doing—the inspiration to action—giving them a one-sided education. While an agricultural education deals with these fundamentals of thought and action, it has certain peculiarities of its own—agri-

living things and, therefore, has two important aspects. One is that it deals with life—the other is that it is commercial. While some of us may pursue agriculture as a profession, in its larger aspects it is a commercial enterprise. The larger body of students trained in agriculture should, and in the end will, pursue it as an occupation, . . . the emphasis in agricultural education must, therefore, be placed on biology and economics."

Doctor Hunt's experience in California, with its highly specialized agriculture, confirmed his belief that farming rests on an economic as well as a biologic basis. The increasing difficulties in the way of young men seeking to get established as farmers were stressed in an address delivered to the Patrons of Husbandry at their annual state meeting during one of the pre-war years.

In developing the topic, "HOW CAN A YOUNG MAN BECOME A FARMER," Doctor Hunt said: "How are young men to become farmers? Why do young men seek positions with salaries rather than engaging in business such as farming? How is farming to be made a continuing commercial enterprise like manufacturing, transportation, or business? One of the important subjects of discussion at present is farm credit. How is this to apply to the young man who most needs it? How is a young man of 21 years to obtain farm credit? What is needed is some basis on which educated, hard-working, honest young men between the ages of 21 and 30 may obtain a reasonable capital with which to make a home in the open country. What is needed is some method of replacing the opportunity which formerly existed under the Homestead Act.

"Suppose a young man could pass an examination in agriculture. Suppose he could present evidence of practical farm experience and had a reputation for honesty and good habits, why should not the state lend him money on terms similar to that which the state now keeps millions on deposit in banks, or why should not the United States lend its postal deposit on terms similar to those on which it now lends them to savings banks. . . ?

"I do not ask you to assume there would be no difficulties in the execution of the plan. I merely desire to convince you that some such method would be worth while. . . My reply to all these arguments is that we have before us a matter of deepest national concern. If men of brains and character are to cultivate the land in the future, as in the past, they must have an even chance with their wage-earning brothers. Every man is going to try to make for himself and his family a comfortable home. If he cannot start with an even chance on the farm he will go elsewhere. This is not a plan to help the farmer; it is a plan to help the nation."

"DON'T BE A CREPE HANGER" was the subject of a talk given by Doctor Hunt before the agricultural student body in Berkeley, in 1921. The somewhat dismal outlook at that time was responsible for the topic, of which the preamble and conclusion was: "It is better to be an optimist and wrong some of the time, than to be a pessimist and right all of the time."

"THE NEXT DECADE" was delivered at an Agricultural Club Banquet

low me to repeat myself by quoting what I said to some of you three years ago this month?"

"Without doubt your first duty is to earn a sufficient living to rear and educate a family. That is the first duty of every man. But if, in addition to this fundamental requirement, you who have had the unusual advantages furnished by the state for a special purpose, do not lead in every progressive enterprise which affects the agriculture of California, then the college will have been a failure and should be abolished.

"Circumstances are such that in the future the representatives of agriculture are going to be heard in the councils of the nation as never before. Whether these hearings will result in the good of humanity must be largely determined by the agricultural-college graduate, whose vision has been broadened and whose courage has been strengthened by the most thoro education which it is possible for a beneficent state to give him. It will be incumbent upon you to see that progress shall be permanent; that prosperity shall not be transitory; and that in material, moral, and social ways you leave to your children a heritage that will cause them to rise and call you blessed."

"THE SIGNIFICANCE OF ABILITY IN FARMING" was the topic at a meeting of short-course students at the University Farm, Davis, in 1915. In describing the values and significance of farm-management surveys, Doctor Hunt said: ". . . Perhaps the most significant fact brought out by these surveys . . . is that they show that in a great many of these regions one fifth of the farmers have labor income from \$800 to \$2,000 more than the average of the particular locality. . . this is only another way of saying that the labor income is from three to five times as great among the upper one fifth as it is for the average farmer. Part of the success of (this) upper one fifth is doubtless due to physical environment. It is not true, as is sometimes stated, that all the differences . . . are due to the farmers themselves. There are many factors which influence the result, such as soil, climate, size of farm, and location. Even in these matters, however, the farmer may be indirectly responsible.

"I was visiting a given locality when my companion remarked: 'A capable man could make a living on this land. But,' he reflected, 'if he knew enough to make a living from it, he would know enough not to buy it.' It all comes back to the fact that, in general (to which there are exceptions), to make an attractive financial success on a farm it is necessary to be more than an average farmer in judgment, knowledge, and industry.

"It may seem like a boastful and unkindly attitude to take, but in farming the only way to make an outstanding financial success is to be a better farmer than your neighbor.

"So far as making-money is concerned, if a man is to be only an average farmer he may just as well be a street-car conductor, a teacher, a merchant, or a professor. I made this remark to the short-course students last year. One man promptly went home. He said he was only an average man and never expected to be anything else; hence, if I

A Greenhouse Built by Students of Vocational Agriculture

C. H. LANE, Federal Agent
Agricultural Education,
Washington, D. C.

ONE of the most effective vocational schools in the country is the Camden

County Vocational School at Merchantsville, New Jersey, which is just across the Delaware River from Philadelphia, Pennsylvania.

The accompanying pictures show the exterior and interior views of the greenhouse which was built by the students. The carpentry work and steelwork was done by the students in different departments of the school, including the vocational agriculture boys, using materials purchased out of earnings made by the sale of plants from the greenhouse. Stu-

dents taking up steelwork in the vocational school put up the steel frame of the greenhouse. Students in the carpenter shop did the wood work with materials purchased from a well-known supply house.

The original section of the greenhouse was built when the school started, and out of earnings from time to time additional sections were added and built by the students.

The classroom shown here was also built of greenhouse construction with a corrugated asbestos-rock roof. Here the students in floriculture meet each morning and, under the capable instruction of Mr. H. O. Yates, learn the theory of different vocations and are assigned definite details of the planting work in the greenhouses. In this classroom there is also a laboratory where instruction on the chemistry of floriculture is taken up.

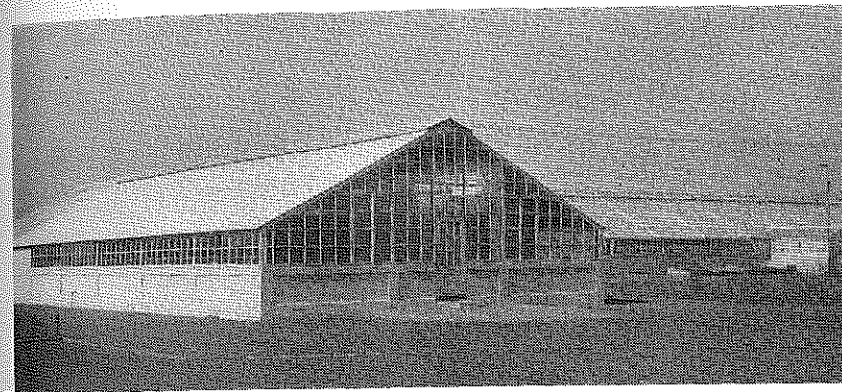
Some of the flowers raised in the greenhouses are sold in the wholesale market in such a way as not to antagonize the commercial florist trade. In fact, the department of floriculture in this county school enjoys the confidence and friendship of the various florists, nurserymen, and estate superintendents, and their professional organizations co-operate with them by helping to place boys and generally encouraging the work. The flowers are not retailed but sell at regular market prices at the time they are shipped. It is with the money these plants bring in that the greenhouses are extended. More glass is constantly needed, for it does not take long for a body of energetic students who are interested in this work to plant and care for a large area of flowers under glass.

The floriculture course is composed of the combination of study of the various plant sciences and the study and practice of the various greenhouse and garden skills. The practice work consists of three hours of work each day in the greenhouses or gardens. Propagating, spotting, potting, fertilizing, supporting, disbudding, training, and the various other greenhouse skills are demonstrated and practiced. Elementary and applied botany, plant physiology, plant pathology, and entomology are given in the classroom. Related English, mathematics, chemistry, civics and economics are presented by trained floriculturists who are ever mindful of the students' need of these subjects in the floriculture trade.

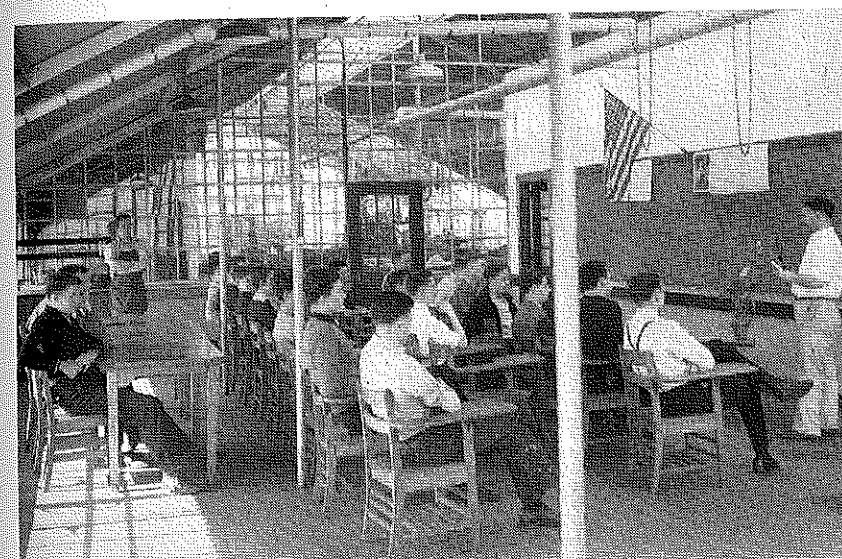
The students who are successful in this work are ready to become floriculturists when they graduate from this school. Many start their own business, others find employment with the retail florists, the wholesale cut-flower and potted plant growers, nurserymen, landscapers, and on private estates where they are able to be of real value to their employers.

AN educated man is not one whose memory is trained to carry a few dates in history. He is one who can accomplish things. A man who cannot think is not an educated man however many college degrees he may have acquired. Thinking is the hardest thing one can do—which is probably the reason we have so few thinkers.—Henry Ford.

They think too little who talk too much.—Dryden.



Exterior view showing the classroom, laboratory, office, and greenhouses



The classroom where students are taught the sciences and study of plant culture



Interior view of the greenhouse which was built by the students in the vocational school. The carpentry work and steelwork was done by students in these departments from material

A. M. FIELD

Methods

A Population Survey and Its Uses

J. F. HUXTABLE, Teacher,
Ithaca, New York



J. F. Huxtable

SOME may wonder what I mean by a population survey. It is here referred to as a classified list of the male population in a school patronage area. It is that part of the population which the teacher of agriculture must contact in order to promote successful guidance and part-time programs. The survey should include the name, age, educational status, parents' names and address, and farming opportunities of each individual male up to 25 years of age. These rural youths are grouped by townships and school districts. Other related information concerning the different school districts may well be obtained.

The purpose of such a survey, altho indirect, may be clearly defined. As civilization moves onward and social and economic life become increasingly complex, there is a great need for the continuation of educational assistance and vocational guidance for the out-of-school youth. Likewise, the young boy coming from the farm needs to be guided into the proper channels of secondary education. Before entering high school, he should have the personal advice of someone who is vitally interested in his welfare. This advice could well be given to the boy by the teacher of agriculture. He is qualified to understand the interests and problems of our rural youth. In order to fulfill the responsibilities entrusted to him, the teacher must do a thoro job of contacting the out-of-school youth, rural youth, and those who are about to enter high school. Herein lies the true purpose of the population survey. It becomes a means to an end.

The population survey is in some respects analogous to keeping farm records; both are necessary in determining the success of a job. Farm records are necessary when analyzing the business as to its strong and weak points. The success of a guidance or part-time program is partially judged by the percent served of the total number in need. Is the survey a necessary step in your program? In some areas, teachers will find that it is not needed. This will only be so, however, in extreme cases where the area is very small and the teacher exceptionally well-acquainted. In very few instances will the teacher know all of the out-of-school youth and all of those entering high school. Many men who enter the field find that it is their task to start a department of agriculture in the high school. For them the survey is of utmost importance. If they do not

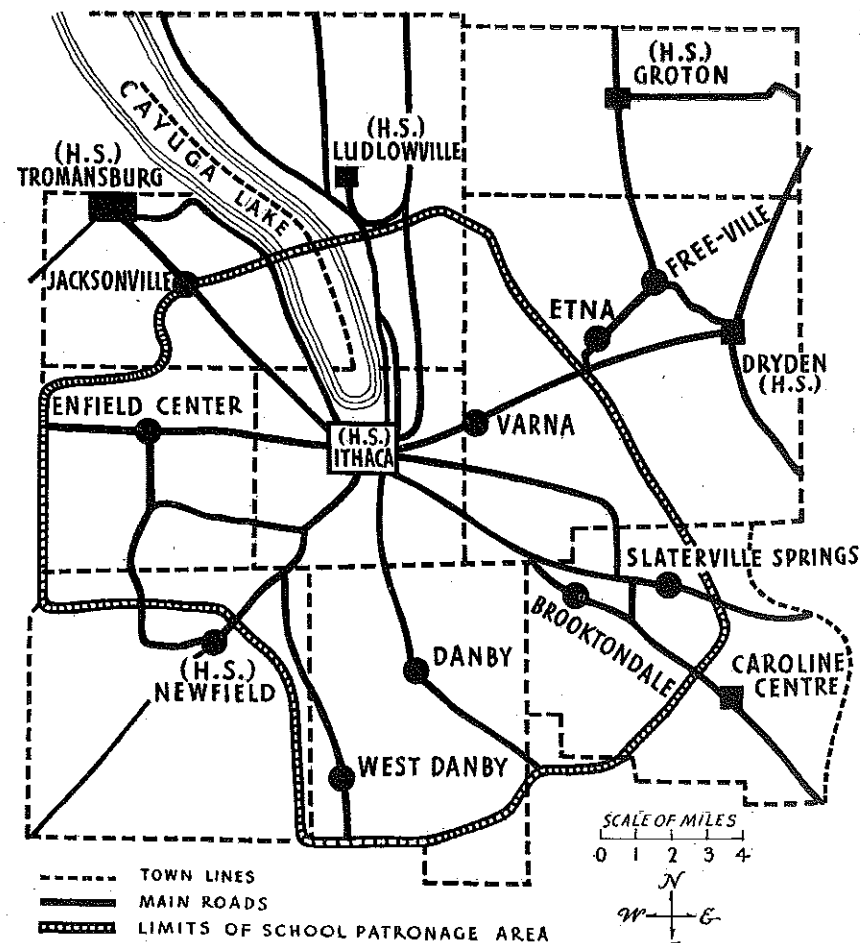
personally contact every rural boy entering high school, there will be some who may miss the opportunity to take the course. The teacher frequently experiences cases of misguidance during the first and second years of teaching agriculture. Time and the attitude of the administration should always be considered when taking a survey. I believe that in all cases the benefits derived from the survey would be ample reward for the effort expended.

The actual task of taking the survey may be quite simple or somewhat involved. From experience gained thru taking a survey at Ithaca, New York, a procedure has been developed which might be partially applicable in other situations.

1. Budget time. When taking the survey during the school year it seems wise to set aside a certain time of each day or week for the work. Some find it works better to make a concentrated drive to accomplish the task during a period when school is not in session. In any event, it should be done as rapidly as possible.
2. Collect all previous survey material.

This should be checked for accuracy and completeness.

3. List all school districts or areas to be surveyed and locate them on a map. A vivid picture of the area is essential to efficient survey work. Soil, topographic, and rural index maps are useful for this purpose.
4. Obtain all available information possible from the school authorities. List all rural school teachers and trustees by townships and districts, including their addresses. You will need the assistance of these people in classifying the population as to educational status.
5. List and classify all rural male population up to 25 years of age. School and other census material will be useful in compiling this list. The name, age, year in school, parents' names, address, and remarks concerning their opportunities should be included for each individual. The school census which may be obtained from the superintendent or at the high-school office will likely not include individuals over 18 years of age. To gather the names and statistical information regarding these individuals, it will be necessary to interview persons very well-acquainted in each district. Old census reports may be useful in locating this group. The rural youth, as listed above, must now be classified according to educational status and vocational opportunities. The dis-



strict school teacher will be able to give the school standing of the elementary school group. Information concerning the high-school group may be obtained from the high-school records. The rural school teacher or some well-acquainted person in the area may be contacted for information regarding the out-of-school youth. This classified list should be tabulated on suitable forms and adequately filed.

"Nothing can have value without being an object of utility. If it be useless, the labor contained in it is useless, cannot be reckoned as labor, and cannot therefore create value."* Could we justify a survey if it were allowed to remain in the filing cabinet? From the survey the teacher knows who the rural youths are and where they are located. It is his responsibility to serve them. Interview the young men out of school and the rural boy entering high school. Gather the necessary information from each individual to carry on successful part-time and guidance programs. Suitable forms should be made for recording the needs, interests, and adaptations of the rural youth. The family background, farming status, and occupational opportunities of each individual are vital to successful part-time or guidance work. With this information as a guide, every possible effort should be made to assist the young man in becoming established in his life's work. Likewise the rural boy entering high school should now be capable, thru the advice of the teacher of agriculture, of choosing the high-school course to which he is most adapted.

In order to clarify the purpose, procedure, and use of the survey, I will attempt to tell how it has met our needs at Ithaca, New York. The area surveyed may be visualized by referring to the accompanying map. Fifty-two school districts were included. Following the procedure as outlined, it took approximately three weeks to compile and summarize the data. The work was completed about two weeks before the beginning of the school year 1938-1939. The total rural male population in the 52 districts was found to number 1,300. These boys and young men were grouped as follows:

1. Number of pre-school age (under six) 286—22%
2. Number in grade or elementary school 611—47%
3. Number in high school 195—15%
4. Number out of school up to 25 years of age 208—16%

The total number graduating from grade school and eligible to enter high school in 1938 was found to be 80. As many of these were contacted as was possible. They were advised as to the course which was best adapted to their interest. Out of the 80 eligible for high school, 23 are taking agriculture this year. A record of each one contacted was filed. We also have a list of the pupils to graduate from the district schools next June. We hope to do a more complete job of contacting next summer. The total number of out-of-school youth from the 52 districts was 208. Fifty-one percent of this group either live on farms or are interested in farming. It is this 51 percent that must be served thru the part-time program. Our mailing list consists of 110 rural youths. Fifty of these have been personally con-

tacted to ascertain their

needs and interests. These young men have formed a Young Mens' Vocational Club of Ithaca, with a central theme of "Getting Established in Our Life's Work." Twenty-five were present at the first meeting and 30 at the second. Eventually we hope to reach the whole group. It will be necessary for us to check our survey once in three years, in order to keep it up-to-date.

Cato, a noted Roman orator, once said, "The agricultural population produces the bravest men, the most valiant soldiers, and a class of citizens the least given of all to evil designs." It is our responsibility, as teachers of agriculture, to see that this valuable portion of our population be given an even chance.

*Karl Marx—Capital, Part II, Chapter 3, Page 33.

Influencing Human Behavior

C. L. KUTIL, Instructor,
Antioch, Illinois

ALMOST everybody has the idea that I am primarily engaged in the teaching of technical agriculture. However, I have found by many years of observation that the mere technical performance of any work, whether it be some phase of farming or that of science or industry, is soul-deadening to say the least. I have, like most older teachers, realized that there must be more in our living than just mere daily technical routine. The kindling of the will, the enrichment of the emotions, the lighting up of the imagination, the making of students sensitive and eager, seems to the experienced teacher more important than all else.

And so, in my teaching, I have tried to inspire my students to the things that would make their lives fuller and more satisfying, regardless of the vocation they were to follow.

Farmers are the source of supply for more than bread, meat, wool, and the long list of needs familiar to everyone. They are the source of supply of people for the cities and towns. A recent survey in London showed that no family exists longer than four generations in that city. Only one individual was found who was of the fifth generation and he was an imbecile. Most of our increase in population comes from the going of people from farms into towns. It is clear then, the quality of family life on our farms is of National importance. Of course, we have more family life on farms than any other place. No doubt, our farm people are better fed, clothed, and sheltered than they would have been had not our various agricultural research workers been working to solve the problems of the farm and farm life. We can well be proud of our accomplishments, but that is only one phase of the problem.

I have come to think of the human aspects—family life, building up men and women better able to enjoy life, to work comfortably and happily with others for the common good. We are far from being a mentally and emotionally happy people. Unhappiness takes a dreadful toll in human suffering and in money.

You may have three basic attitudes toward life. You may approach it with

the philosophy of the plant, in which case your life will consist in being born, eating, drinking, sleeping, maturing, mating, growing old, and dying. I don't think God intended us to take that attitude.

Another way is to approach life as a business. You will ask yourself, "How much is this experience worth to me?" On this level, happiness becomes a matter of successful competition. The stronger eats the weaker. This attitude, too, is not for human beings, even tho the great majority today look at life as if it were a business.

The third approach to life is that of the artist. What can one put into life? History remembers best those who have contributed richly to the welfare of their fellow men. The artist's attitude is the only one that is consistent with human happiness. This attitude I wish to dwell on and discuss at greater length.

In addition to our physical needs, every individual needs four things.

First, a sense of security. Everybody needs a sense of knowing where his next meal is coming from. To develop this trait in our students, we as teachers should stress thrift. The only way to security and independence is thru the practice of thrift. The thrifty individual has confidence about him, he is happy, and radiates the happiness to others. He is progressive.

Second, everybody needs recognition. You are not happy unless you have a degree of success among your fellow men. Let's help our students to distinguish themselves in some things. To learn to do something well is one of the things we need for mental happiness.

Third, everybody needs affection. All children are more or less shy. Too often we teachers mistake that for dullness and express that opinion to our victims. We need to be continually on our guard. Let's not doubt their ability to hope. Let's not question their capacity for faith. Right here, I want to say that our farm people are especially shy. It is nothing against them necessarily. Chances are they will go farther than city students. They usually do. From the very nature of their isolated surroundings and lack of associations, they are more reserved. However, they have had time to think, they know Nature, and from them we can expect great things if we but have patience and do not kill their spirits by calling them dull. Remember, the nation's increase in population and our future welfare comes from these farm children. Children are being placed under the teacher's influence. Are you, as a teacher, going to develop affection or shall we produce men and women who will go thru life embittered against society?

Fourth, Everybody needs adventure or new experience. Anyone who does the same thing over and over again gets dull. He dies on his feet. This happens to most people over 40 unless they have been brought up to do otherwise. The well-educated man usually finds a new way to do his work or diversify his methods. I am not saying that we as teachers should cultivate "grass-hopper" thinking by jumping from one thought to another in our classes, but that we change our method of approach to a subject.

The other day I again ran across

Supervised Practice

H. H. GIBSON

What One Urban Boy Accomplished in Vocational Agriculture

LYLE E. ANDERSON, Teacher,
Dowagiac, Michigan



Lyle E. Anderson

SOMETIMES feel that we teachers fail to realize the importance of our work and how something that we say may change the lives of some of our pupils. Many times I hear agriculture teachers say that they do not care to have city boys in their classes. One of my experiences with a city boy, Robert Moss, has emphasized in my mind the potentialities these urban students in the field of agriculture may possess and the accomplishments that can be made by any boy who develops the proper attitude and a genuine interest.

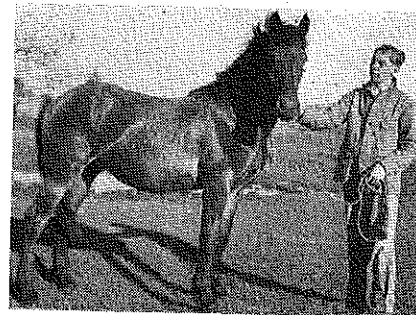
Three years ago, after I had been discussing farm practice work with a group of freshmen and sophomore boys, one of them came to me and asked if he could get a pig for a project. I had just explained the fact that the F. F. A. chapter would furnish young gilts, seed corn, and seed potatoes to boys who would agree to follow certain management rules. The gilts and seed were to be paid for by returning two gilts, two bushels of corn or potatoes, as the case might be, for each one received.



After asking the boy a few questions I found that he lived outside Battle Creek, a city of about 43,500, and that his father worked in a factory in the city. I also learned that it had been suggested to him that he take "Ag. 1." He had signed up for the course, not knowing what "Ag. 1" meant. I visited his home and found that his folks were renting a house on a large, very poor, run-down farm. Nothing was being done to the farm; suitable buildings were available. The parents were interested in his desire to raise a pig, thought the idea sounded good, and were willing to co-operate in order to help the boy with his pig project. I advised the F. F. A. hog

committee that I thought the boy could manage the gilt which was, altho little did I dream it could be, the beginning of the best project program I have had in my five years of teaching.

The next spring the boy realized that he ought to raise some feed for his pig so he began making plans to plant corn. He found that, in order to raise enough corn for his sow and the litter she was going to have in the fall, he should have some power. This resulted in the purchase of an old brood mare, 20 years old, which had failed to breed after raising several colts. The folks asked what I would suggest as some crop he could raise to secure some cash during his summer vacation. I suggested cucumbers, which proved to bring in as much as he could have obtained from labor for someone else. In the fall his sow had a litter of seven pigs, which made him very proud and happy. In fact, he has been so pleased with results that he has never wanted to part with any of the original stock, not even the barrows.



Robert and Andy

His first summer over, he felt that he had been successful with his farm program and had received some good experience and a real desire to continue in the business of farming.

The next spring he began talking about renting a farm. He did not have much to work with except the help his folks could give him. They were willing to move with him to a farm where he could carry out his desires and from which his father still could drive back and forth to his work in town. After considerable looking around we found a place which was within their means and looked as tho it would give the boy a start. The soil was light, but there was some alfalfa and lots of pasture; and some stock and equipment went with the place.

He put in six acres of oats, two acres of corn, one acre of cucumbers; cut six acres of alfalfa; and harvested some rye which was on the place. In addition, he raised 25 pigs and a fine colt which the old mare, altho it had failed to breed for the former owner, had foaled. Even tho the soil had been light, we had lots of rain and the crops turned out well. The best of seed and fertilizer had been used. This was made possible thru a Production Credit Association loan.

I had always wondered just how long his desire for farm work would last; but after he had spent his second summer working against every odd a farmer could hope to encounter and then began talking about buying a farm, I realized that it was more than a passing idea.

This spring he has rented a much better farm, has purchased a team and harness and two cows, in addition to his yearling colt and a heifer which he received last fall in a trade for some of his pigs. He has three registered Poland China gilts and 30 spring pigs. He has four acres of barley, four of oats, 15 acres of corn, two acres of potatoes, and six acres of alfalfa, as well as a small amount of rape and some soy beans for hay.

He will be graduated from school in June and will continue with his farm program. In school he has been active in athletics, F. F. A., and other school activities, as well as making a good record in his school work. He was recently voted into the National Honor Society and awarded the State Farmer degree at the Michigan State Convention this spring.

Altho this boy started with absolutely no agricultural knowledge, he is the best informed student I have ever contacted in agriculture and has had lots of real experience. He has always been a boy who reads and studies his own problems; and in most cases it has not even been necessary for me to recommend approved practices, as he found out about them in his reading and then came to ask about them. It has been a pleasure to work with this boy as well as to bring out the possibilities of vocational-agriculture work.

Group Farming Program

EARL MARTIN, Teacher,
Pratt, Kansas

CLASS or group projects in agriculture have proved their value in teaching vocational agriculture. A genuine learning situation, a common interest, and a co-operative undertaking are things that make them particularly worth while. In keeping with the "farming program" idea for each boy's farming activities, the Pratt vocational-agriculture department is going a step further than the "class project" idea, and is developing a "group farming program." A tract of land has been leased and a program of group activities planned. The following chart shows these activities by classes.

No. 9 Class: Barley. No. 10 Class: Sows & litters, Atlas sorgo. No. 11 Class: Stock calves, wheat pasture, Kaffir grain.

The No. 9 class will sow barley in the spring to feed to hogs the following year.

litters of pigs, and will plant Atlas sorgo to be fed as silage to calves the next year. The No. 11 class will feed stock calves on silage, will sow wheat and pasture it off, and will plant Kaffir for a grain crop. The field arrangement and crop succession are shown in the following chart.

'39 Wheat	'39 Barley	'39 Atlas	'39 Kaffir
'40 Kaffir	'40 Wheat	'40 Barley	'40 Atlas
'41 Atlas	'41 Kaffir	'41 Wheat	'41 Barley
'42 Barley	'42 Atlas	'42 Kaffir	'42 Wheat

This is an example of long-time planning, co-operative effort, consumption of home products, and co-operative marketing.

Junior Herd Testing

HARRY M. McDONALD, Teacher,
Sparks, Maryland

IF MOST of us who have taught agriculture for 10 or more years will check back we will, no doubt, be surprised to know the number of times we have been enthusiastic for a while over some new device, idea, method, or technique which seemed to have so much merit that we could not imagine getting along without it. Sad to say, many of the new "flashes" had inherent weaknesses which made them of limited value.

The writer has fallen for, tried, and discarded many of these and similar Utopian schemes. One has, however, persisted in staying at the top regardless of weather, depression, or personal whim. I refer to our Junior Herd Testing Association. It is known that this is no stranger to most of us, but I wonder if we have ever taken the time to evaluate carefully this activity, to learn its splendid content, and to see the place it can be made to occupy in our work.

Without going into minute details it can easily be seen that this activity includes a variety of skills, application, calculations, and original information. First of all, I find that it gives a sound practice and application in basic mathematics, enabling the pupil to see new and worthy uses for simple mathematical procedures. It gives skill and confidence in simple laboratory procedure, such as accurate weighing, measuring, timing, reading, and recording. The actual testing and cleaning involve certain definite relationships to chemistry, physics, and mechanics. The primary outcome of this testing, knowledge of yearly production per cow, is so valuable and essential that good herd management is impossible without it.

This activity is popular with pupils, and is highly regarded by parents and patrons. In proportion to its value and importance I have found that it requires little close supervision. Pupils assume responsibility and, if the laboratory is free during their study periods, they can carry the test thru most of its phases with little help after the first test. Older and experienced pupil members are usually glad to assist beginners. On testing day, non-members and miscellaneous folks in the community send in samples for testing, ranging in number from a sample from one family cow to the 22 sample boxes. All of this takes but little extra work, yet it gives valuable experience to our boys and, incidentally, often wins new friends for our

The operation of our testing association has remained unchanged in nature for some years. Each year we test between 100 and 130 cows for from 8 to 10 pupil members, using the monthly test plan and testing usually between the 14th and 18th of each month. Some members do the feed calculations along with the production records, using the U. S. D. A. type of herd book. The majority, however, concentrate their efforts on production records alone. Standard procedure of weighing and sampling milk both night and morning of the testing day is followed.

A phase deserving a few words is the monthly test during the summer months. In my estimation, the teacher of agriculture can spend no summer days more profitably than the three to four days spent on herd tests. Testing is done the same as during the school months, except that work must be organized for speed as well as for accuracy. In addition to all professionally phrased goals and outcomes, the summer test day with its time out for luncheon and swimming has a great, yet simple, value in that it provides a sound basis for that type of teacher-pupil friendship which endures thruout the years.

Establish Project Program on a Breeding Basis

RALPH W. CANADA, Teacher,
Holdrege, Nebraska

THE points listed below present the reasons that the project program set up on a breeding basis lends itself as the most desirable project for accomplishing maximum results in carrying out a sound, well-rounded program.

1. By starting with a breeding project, the boy understands he is to continue to improve and develop this basic project for three years or longer. This fact alone leads the boy and his parents to plan more soundly for the future project program.

2. The boy has greater interest in the breeding project. He has something to which he can look forward each succeeding year.

3. The boy will develop far more man-

agerial ability and skill in a breeding project as compared with a productive project which covers only a couple of months' duration.

4. The boy meets numerous challenging problems; he asks more questions in and outside of class. He studies with greater zeal problems relating to his own project. Likewise, his interest is quickened and deepened in the other livestock enterprises and related work.

5. Generally speaking, the boys with the most desirable continuation projects likewise have the strongest shop program. As the breeding project increases, the number of farm shop projects increase.

6. A greater range of supplementary farm practices and skills results thru the breeding projects as compared when only the fattening project is carried.

7. By starting the boy's beginning project on a breeding basis, a more effective crops project program can be developed. More animals mean more grain, temporary pastures, and drought-resistant crops to insure a constant feed supply.

8. A more effective crops project program can be developed the second year after the boy has his breeding project functioning. The boy and parents will be receptive and ready to begin a crops improvement project.

9. Under this type of program it can be stated with confidence based on experience that a steadier vocational agriculture program can be followed. A lower mortality will result from year to year. The more desirable students will be enrolled and derive greater benefits from the training.

10. At the close of the boy's high school career, he will have established a livestock enterprise on his home farm and in the community of which he can be proud. He has likewise improved himself economically and as a member of society.

A few suggested types and scope of desirable projects are given in the table.

Regardless of the type of project the boy plans to carry, he should provide a suitable and adequate amount of pasture on clean, well-located ground—one half of the ground fall-seeded to rye, balance in the spring to oats and sudan. This can be used for any type of project and will materially decrease feed costs as well as provide adequate sanitation.

	First Year	Second Year	Third Year
Swine	1 sow and litter. Early spring and fall litters to market. Age or weight.	2-3 sows and litters. Early spring and fall litters to market. Age or weight.	5-7 sows and litters. Early spring and fall litters to market. Age or weight.
Sheep	1-2 purebred ewes to lamb. 4-6 grade ewes for early lambing.	3-4 purebred ewes to lamb. 8-10 grade ewes for early lambing.	5-6 purebred ewes to lamb. 12-18 grade ewes for early lambing.
Dairy	1-2 bred heifers. 1-2 heifers (grow to breeding age).	1-2 mature cows to freshen. 1-2 heifers to freshen.	2-3 cows to freshen. 1-2 cows to freshen.
Baby Chicks	150-250 baby chicks (early hatched).	250-350 baby chicks (early hatched).	350-500 baby chicks (early hatched).
Laying Eggs	75-125 pullets.	125-200 pullets and second season layers.	200-300 pullets and second season layers.

V. G. MARTIN

Farmer Classes

J. B. McCLELLAND

Starting a Part-Time Class

C. J. CUNNINGHAM, Instructor,
Hedgesville, West Virginia

FOUR years ago an assistant state supervisor asked me why I did not start a part-time class for the out-of-school group between the ages of 16 and 25. I replied that I could not see the value of such an undertaking, and that I did not believe there were enough boys interested to justify it. The supervisor insisted that there were enough boys to justify such a class and that the value could not be doubted.

After thinking the proposition over I decided that during the winter I would make a survey to determine the facts. The senior all-day class agreed to help me in any way possible in making the survey of my patronage area. We worked out a survey blank similar to the one used by the State Department of Vocational Agriculture. Many of these boys took survey blanks and got prospective members to fill them out. After the survey blanks had been returned, the instructor visited these boys to show his interest in them and get acquainted with their home conditions. Many students were located while on regular supervisory visits. The file containing the records of former vocational agriculture students was reviewed and those within the patronage area were visited. The aid of the county superintendent of schools, local school principal, county assessors, county engineer, county agricultural agent, rural mail carrier, and N. Y. A. supervisor was found to be helpful. In the personal contacts with the boys it was pointed out that such a class would provide: (1) chance to earn money for self; (2) opportunity for recreation; (3) social and civic improvement thru study of problems and participation in group activities; (4) study based on problems that will help boys in farming; (5) opportunity for organization thru which worthy interests and talents are brought out and accomplishments made known; (6) chance to develop mechanical skills; (7) study of vocational opportunities looking to placement in farming and other jobs; (8) association with old friends and new friends.

With the help of the senior all-day boys the survey was summarized and the results tabulated. To my surprise the survey showed there were 20 farm boys living within a six-mile radius of Hedgesville who were interested in such a class. Most of the boys were from small farms with low income. They ranged from 15 to 22 years of age. Their interests were quite varied, but most of them were interested in some phase of agriculture. Three of these boys had finished only the seventh grade, six the eighth, two the tenth, and nine had graduated from high school. Two had completed one year of vocational agriculture, six two years, and two four years.

Eight of the boys worked on orchards. Two of them worked full time and the

others worked for three months on the orchard and spent the rest of the time helping out on the small home farm and working at odd jobs. The two that are working on full time are expecting to become orchard managers. One boy is renting a farm, married, and working for himself. Three boys, one of whom is married, are farming on definite share basis with their parents. Three are working on sawmills and doing odd jobs. Five are living with their parents on small farms and doing odd jobs.

Most of the boys are interested in farming, some general, some orchard, and some prefer livestock. The boys are at the age where they need a lot of guidance and help. Many are interested and anxious to get started in farming, and to get a start in life sufficient to begin a home of their own.

After the busy work of the summer was over a meeting was called in the vocational agriculture room. There were 14 at this meeting and all seemed very much interested. After the meeting the boys remained around talking to old friends and discussing the meeting. It was decided at this meeting that the next meeting would be devoted to setting up an organization and making up the course of study. Each boy was asked to bring to the next meeting a list of problems that he would like to have discussed.

The second class meeting was waited for with much interest. The response was very good. Most of the boys returned and proposed many problems for consideration. The instructor submitted problems which he thought might interest the group. All of these problems were written on the board and discussed. The boys, with the aid of the instructor, selected problems which they desired for the basis of the course. It was also decided to use the following as guides for making the course: (1) the boy's individual farming problems; (2) the boy's opportunity for supervised farming program; (3) the possible development of the boy's farming program in view of markets, soils, and placement; (4) the boy's future plans—farming, and other work; (5) the vocational abilities, training, and activities needed by the boys for production, marketing, and management of the farm business as a whole; (6) the educational abilities, training, and activities needed by the boy as a prospective farmer; (7) the immediate need for the job; (8) the available teaching facilities; (9) the community farming resources and needs; (10) the boy's financial status.

After the course of study was set up the boys took charge. They elected a chairman and set up an organization known as the Hedgesville Young Farmers, with constitution and by-laws. It was decided that meetings would be held weekly thruout the year on Thursday nights, from seven until eight o'clock to be recreational, and from eight until nine to be for study and discussion of problems.

After three years of the part-time

work, I find great pleasure in the work and I am sure it is of great value to the boys, the community, the school, and the teacher. The work has now grown until there are 25 boys in the class, including the original 14. We have never had a boy to drop his membership and the percentage of attendance has averaged 70 percent.

Suggested Problem Sources for Instruction in Part-Time Courses

H. M. BYRAM, Teacher Education,
East Lansing, Michigan

IN SETTING up any course for out-of-school farm young men in agriculture their needs and interests must be considered. Many of these will be revealed if a thoro survey is taken. To further aid teachers of agriculture in setting up such courses and in selecting suitable problems for study and discussion, a list of sources or areas of pertinent problems is suggested below. This list has been made up with the chief aim of part-time instruction in mind, namely, that of "aiding the young men on farms to become established in farming occupations."

In using this list it is suggested that the teacher, together with representatives from the proposed part-time class, select from it those areas that will appeal to the class members and that seem to be most in need of attention. Each of the problem areas or sources can then be analyzed and problems listed for study and discussion. For example: Area No. 1, in Group II, "Working out a partnership agreement in farming," might be analyzed into the following problems: (1) What are the essential points that should be included in any farm partnership agreement? (2) What will be a good way to divide responsibilities on investments and expenses? (3) How should farm income be divided? (4) What will be a good way to divide property at the termination of partnership?

It is not intended that the problem sources listed in a given group will be used to constitute an entire course. On the contrary, in most courses it will probably be desirable to cut across the classifications used in this list and to include problems from several of the various categories given. There are, no doubt, many problems not included in the areas listed which should be treated in a part-time course.

I. Areas Relating to Occupational Adjustment

1. Becoming acquainted with the opportunities in farming and in related occupations.
2. Getting a job to earn money to get started in farming.

4. Deciding whether to enter an occupation related to farming.
5. Increasing one's efficiency as a farm laborer.
6. Discovering opportunities for placement.

II. Areas Relating to Establishment in Farming

1. Working out a partnership agreement in farming.
2. Choosing the type of farming to follow.
3. Finding and selecting a suitable farm to rent or to buy.
4. Deciding how much to invest in a particular farm (real estate).
5. Deciding how much a particular farm is worth.
6. Deciding how much to invest in livestock, machinery, and equipment.
7. Deciding how much operating capital will be needed in a particular farming business.
8. Deciding how to go about purchasing a farm.
9. Using credit facilities in purchasing a farm.
10. Determining the best lease to use for a given renting situation.
11. Using credit facilities in equipping and stocking a farm.
12. Selecting suitable farm equipment and machinery at the lowest possible cost to start in farming.

III. Areas Relating to Management of a Farm

1. Developing a suitable livestock program for the farm.
2. Planning a suitable cropping program for the farm.
3. Planning crop rotations.
4. Planning the farm layout.
5. Keeping farm records.
6. Making and using a farm budget.
7. Analyzing and interpreting farm records.
8. Hiring and managing farm labor.
9. Determining the power requirements of a farm.
10. Preventing farm losses and cutting down wastes.

IV. Areas Relating to Business Management

1. Determining the need for production credit.
2. Securing or making use of production credit.
3. Using banking agencies.
4. Dealing with common laws of concern to young farmers.
5. Selecting insurance.
6. Solving arithmetic problems encountered in managing the farm business.
7. Writing advertisements for farm products.
8. Building up a tourist business.

V. Areas Relating to Increasing Efficiency in the Livestock Program

1. Selecting livestock for working, feeding, production, and breeding.
2. Improving livestock thru breeding and selection.
3. Feeding livestock, balancing rations for livestock.
4. Adjusting livestock production to market demands.

VI. Areas Relating to Increasing Efficiency in the Cropping Program

1. Improving crops thru introduction of new varieties and thru breeding and seed selection.
2. Finding better ways of using crops.
3. Producing certified seed.
4. Carrying out a soil improvement program.
 - a. building up soil productivity.
 - b. controlling erosion, using cover crops, strip cropping.

VII. Areas Relating to Farm Improvement and to Farm Machinery and Equipment

1. Improving the farmstead layout.
2. Beautifying the home grounds.
3. Improving and repairing farm buildings and equipment.
4. Using electricity on the farm.
5. Providing a farm lighting system.
6. Providing a water system and sewage disposal.
7. Heating the farm home.
8. Repairing machinery and equipment.
9. Building farm equipment.

VIII. Areas Relating to Rural Leadership in the Family and Community

1. Leading a discussion on farmers' problems.
2. Conducting meetings according to accepted parliamentary procedure.
3. Improving rural-urban relations.
4. Making the community more interesting and attractive.
5. Organizing young farmers for business, recreational, and service purposes.
6. Understanding government programs relating to agriculture.
7. Understanding the programs of farmers' organizations.
8. Improving schools for rural children.
9. Co-operating in group economic and social undertakings.
10. Developing cordial family relationships.

Who Will Supply Our Subject Matter

(Continued from page 143)

periment station publications which is the main source to which we must look to get substantial factual information. Thus we find that propoganda material is free and abundant while material that is the product of careful research and free from bias is very difficult and often-times impossible to get. In the long run, what will be the influence of such a situation on the education of the farm youth of this country?

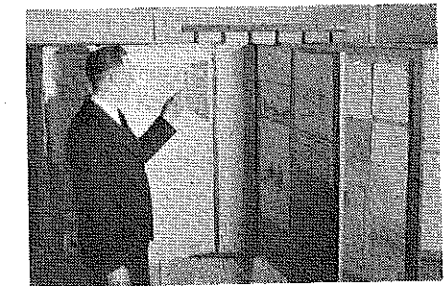
Unquestionably the situation cited presents a grave problem. Shall we continue to be dependent on other agencies to supply us with subject-matter material or shall we adopt a policy of making available to our students subject-matter material gathered, organized, and disseminated under the auspices of our own organization? The situation that we now have seems to indicate that the latter course is the better alternative to choose.—V. G.

Making and Using a Multiple Section Bulletin Board

C. E. RHOAD, Critic Teacher,
West Jefferson, Ohio

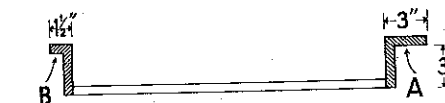
HAVE you ever wished for three times as much bulletin board space as you had available when you had a set of particularly interesting photographs or charts to display?

I had been in the above situation many times until last year when I had the opportunity to do something to solve the problem. The result was the multiple bulletin board which can be seen in the accompanying picture.



The total cost of the materials was \$9.50. Two three feet pieces of 1 1/2" angle iron with 1/2" holes in them placed 6" apart are fastened to the wall with lag screws. The six "leaves" of the bulletin board are made of 3'x4' pieces of 1/4" plywood framed on one side with 1"x2" yellow pine. Pieces of flat iron (1/4"x1"x4') are bolted to the inner edge of the "leaf" and pieces of 3/8" iron rod are welded at top and bottom to make the shape, shown in figure I. The top rod, A, is 3" long and the bottom one, B, is 1 1/2" long which allows the "leaves" to be removed by lifting them up and tipping the bottom outward.

This makes 144 sq. ft. of bulletin board space available on 12 feet of wall space.



Support for "leaves"

I make the following use of the bulletin board leaves:

1. "For Sale" and "Wanted" lists.
- 2 and 3. Summaries of the surveys of the home farms of my pupils.
- 4 and 5. Running charts of pieces received by Ohio farmers for their 17 chief products. These are brought up-to-date each month.
6. Suggestions for building supervised farming programs.
7. F. F. A. news, program of work, committees, etc.
8. Programs of instruction for my classes by weeks, listing problems and decisions to be met.
9. Map with numbered tacks showing location of all-day and adult students.
10. Summaries of projects by enterprises.
11. Photographs.
12. Part-time announcements, news, attendance record, etc.

Studies and Investigations

C. S. ANDERSON

A Reply

F. W. LATHROP, Specialist in Agricultural Education (Research)
Office of Education, Washington, D. C.

NATURALLY the article in the January issue of *The Agricultural Education Magazine*, entitled "Dare We Face the Findings of Research?" was of particular interest to me because it was a criticism of my interpretation of facts. When I read Mr. Kenestrick's article, his array of facts almost persuaded me to plead "guilty" to the charge of "biased interpretation of facts." I almost concluded that my keen desire to see vocational agriculture develop and improve had created such a bias that I could no longer interpret facts impartially. However, when I checked again the figures which are alleged to be selected to fit my biases, I gradually lost the "guilty" feeling. I find some places in my article which I wish I had worded differently; and I think most people are in this predicament, unless they have written a Gettysburg address, but I cannot see how the conclusions I have drawn would be changed if I should accept the criticisms and revise the article. I must question the validity of most of the criticisms. I am writing this article partly in self-defense and mostly because I see an opportunity to clarify and emphasize some important issues in vocational education in agriculture. In his article, Mr. Kenestrick does make some very good statements on these issues, and I wish to reinforce and in some cases repeat what he has said.

First, I would like to point out that I was not interpreting Mr. Gregory's study. I accept his interpretation. I was comparing it with Mr. Nylin's study, a fact which Kenestrick ignores. Such a comparison necessitated a selection of facts in each study which were comparable. Piecemeal comparisons of studies are, of course, quite dangerous. In addition, certain facts were selected from each study because they might be of special interest to the A. V. A. members, before whom the article was originally presented. Kenestrick makes four points around which I want to organize this statement. I hope the following are fair statements of his points:

1. The statement that 50 percent of former students in rural communities where departments have been established a long time are now engaged in farming is not justified by the facts.

2. A comparison was made of young men who came from owned and rented farms in respect to the percent remain-



F. W. Lathrop

ing in farming. 1934 figures were used instead of 1937 figures or both.

3. Young men from homes not on farms numbered 110. Only a small number were farming in 1937. Here I used 1937 figures; was not consistent and, even worse, showed bias.

4. The Gregory study does not show that increasing the number of years in the agriculture courses increases the proportion of its former students who go into farming.

I state these points in the order in which I wish to discuss them.

"Nevertheless in the absence of complete figures one would be inclined to assume that the figure of 50 percent included the study under discussion."

The above quotation makes an excellent starting place for a discussion of the first point. If my article in the March (1938) issue of *The Agricultural Education Magazine* is re-examined, it will be seen that my statement, that "studies show 50 percent of former students are in farming," is made in connection with the Hatch study and does not refer to the Gregory study. Moreover, these studies to which I refer are not comparable with the Gregory study.

The Gregory study differs from these other studies in this respect: Gregory takes vocational students in 1929-30 and checks their occupations in 1931, 1934, 1937. In 1934 and 1937 many former students who have stayed at home a few years after leaving school have left farming. The studies to which I referred as showing 50 percent or more of former vocational students in farming include all former students and always a rather large number of the younger, more or less transitory group. Elimination occurs constantly, but there is always a new group of young men leaving school to offset, or more than offset, this elimination. These young men are in farming but not established in farming for the most part. I feel that the efforts of the teacher of agriculture in assisting this transitory group to become established in farming should be one of his big contributions. I do not think a large enough proportion of our former students go into farming, and I think vocational agriculture will suffer in the long run if we try to cover up the facts. However, I recommend that anyone who is discouraged, study the figures in other vocational education programs.

Now to take up the second point. In the article criticized, I was comparing the percentages of young men from owned and rented farms in farming in 1934, and not trying to show how great a percentage stay in farming. The figures show a larger percentage of young men from owned farms remaining in farming.

It would have been better to use 1937 figures. However, I wonder if I have misled anyone except Kenestrick. The 1934 figures show that more young men from owned farms stay in farming than from rented farms. The 1937 figures show the same thing. Of course, the 1934 percentages were larger; some young men left the farms between 1934 and 1937. My interpretation would have been the same if I had used the 1937 figures.

I think we should differentiate between the establishment problems of young men from owned farms and young men from rented farms. Each of these owned farms should be studied to determine what changes, if any, should be made to make a real opportunity at home for the young men. Usually the young man from a rented farm does not have such an opportunity and, consequently, too many of these young men, as well as the surplus young men from owned farms, have gone into other occupations. They will continue to do so unless the teacher of agriculture or some one else comes to their aid.

The third point is that I was inconsistent in using 1937 figures in showing the number of town boys remaining in farming out of 110 young men. Both Kenestrick and I have been mixed up at this point. There were 10 town boys in farming in 1937 and seven in 1934. I gave the 1934 figure and called it the 1937 figure. In his table he has these figures misplaced. I agree with Kenestrick that the difference in conclusions would be negligible. To be more exact, the difference is zero. However, I dislike the term "biased interpretation" in this connection. There is really not enough at stake to justify this term.

This town boy problem could be further emphasized here. We still have it with us in some states. However, I think I expressed myself sufficiently on this point in the March (1938) issue.

In regard to the fourth point, there is one sentence in my article which justifies criticism. It is "Increasing the length of course is shown to be a factor in increasing the percentage going into farming." No study that I know of proves this directly. What I was trying to say may be restated as follows:

In general, the longer the course of instruction in vocational agriculture taken by an individual, the more likely he is to engage in farming or related occupations. The fact that we have less than four years of vocational agriculture in some schools prevents an even closer relationship between average number of years of instruction taken by young men in a department and the percentage of these young men entering farming and related occupations. Gregory's study reinforces what I was trying to say. Nylin's study, which was compared to Gregory's at this point, was in agreement.

number of years of instruction taken by an individual and the number of years of instruction offered by a school. However, we must increase the length of course in many schools to make it possible for individuals to obtain more instruction. Some years ago I estimated by means of an examination of the Experiment Station Record that about 5,000 technical studies are reported each year. This gives some indication of the enormous amount of technical knowledge in the field of agriculture even if nine-tenths of it is not useful to a given person or group. A four-year course assuming 90 minute periods and a 36-week term affords 1,080 hours of instruction. This seems to me an inadequate amount of time to give a thorough training even tho a strong individual farming program goes with it.

There are some situations, as Mr. Kenestrick suggests, where four year courses are not needed. In many other localities it would strengthen the program if a two-year course during the last two years of high school could be followed by a series of part-time courses which would directly assist young men to become established in farming.

I am grateful to Mr. Kenestrick and to the *Agricultural Education Magazine* for the opportunity to further emphasize some points which to me seem important.

Should Agriculture Teachers Use New Type Tests?

G. S. DOWELL, Teacher,
Quail, Texas

DURING the last quarter of a century one of the great movements in the educational world has been that of educational measurement. Probably more research work has been done in the field than in any other part of education, and the new type objective tests have been the heart of the movement. Many kinds of tests, especially achievement tests and diagnostic tests, have been prepared and standardized. They have been used extensively in every nook and corner of the country from the primary grades thru the colleges and universities, and by the leading educators of the country as well as the rank and file of the teaching profession. They have been accepted as a scientific contribution to education and no one reasonably well versed in education doubts their value or ability to do the thing for which they were prepared.

For some reason, however, it has not taken root in the field of agriculture. While there are about 5,000 departments of vocational agriculture in the high schools of the United States with nearly 183,000 students enrolled, not one single new type objective test was published until 1937* and then only one, and that one in animal husbandry by Doctor G. P. Deyoe, of Michigan State College. This is the only such test for use in vocational agriculture on the market today. Why have agriculturist and vocational agriculture teachers not adopted this scientific contribution and used it the same as the rest of the edu-

tion in vocational agriculture is so very different from instruction in other subjects that it cannot be measured by the same means? Are all the great educators who have offered tests and measurements in various subjects wrong in the belief that they have developed a means of measuring or testing knowledge of subject matter in any field?

Some vocational agriculture people say that the test of vocational training is the ability to do, and accomplishments rather than information about the vocation is the goal; that a good project program and the process of the student's growing into farming is the test of good vocational teaching; that the adoption of improved practices or what the student does about his instruction and not how much information he acquires is the measure of vocational education, and that such abilities cannot be measured by objective tests. They overlook the fact, however, that in order to do any or all of these things the student must acquire certain information and put it into practice, and that the knowledge or information, whether it be acquired in the classroom, on field trips, or in project work, can be tested by the new type objective tests—which is all that is claimed for them and which is all that is necessary to justify their use.

Another common objection advanced is that such tests could not be standardized and used extensively because of the difference in local conditions; that a test in vocational agriculture that would be satisfactory for one community would not be satisfactory in another community; that a vocational department in the wheatbelt would not teach the same things that a department in the cornbelt or the cottonbelt would teach. There is some justification in this if we suppose that one examination is to cover the whole course in vocational agriculture, but in practice we do not give such examinations. Our six weeks tests, or semester tests cover only definite parts of the course such as feeding livestock and poultry, controlling parasites and diseases of livestock and poultry, controlling insects and diseases of plants, restoring and maintaining soil fertility, marketing, managing the farm business, cotton classing, and farm shop work. Is there any difference in the information necessary about cotton classing in any place in the cotton producing country? In farm shop we teach such things as concrete, soldering, rope work, leather work, sharpening tools, pipe work, etc. and the information necessary is the same thruout the whole country. Certain technical information either applies to the whole country or to a large section of the country and tests could be standardized for these sections or for the country at large.

The vocational homemaking people have realized this and have done considerable work in the field. If standardization is not desired, any teacher with sufficient training in educational measurements can make new type objective tests that might fit his department better than prepared tests in certain subjects but even then, if he could secure tests containing, say, 50 true-false questions on poultry, if there were 10 that were not satisfactory he could mark them and use the other 40, or he

appropriate to his conditions to the 40 that he already had, and have a full set of 50 questions.

As a matter of fact, all vocational agriculture teachers do give examinations of one kind or another, grade papers, and give marks on them. This brings up the whole question of testing and the value of the various kinds of tests, which lack of time and space will not permit me to discuss here and which would not be advisable since the whole subject is so well understood by teachers and administrators everywhere. However there are certain advantages that the new type objective tests have over the essay and problem-solving type which is commonly used among vocational teachers. There are limitations to new type objective tests in vocational agriculture, but there is a place for them, and they are valuable aids to the teacher of agriculture the same as they are to teachers of other subjects. Vocational agriculture teachers everywhere complain of being overworked. If they could secure new type objective tests already prepared which they could score in half the time it takes to grade the papers of an essay type test or could have some NYA assistant or trustworthy student score the papers according to prepared score cards which accompany such tests, it would reduce the time and effort spent on examinations. They cannot be used to the exclusion of other kinds of tests but used in vocational agriculture courses the same as they are in non-vocational courses they serve the same purpose and have all the advantages they have in other subjects.

*Editor's Note: The following tests have been prepared and no doubt there are many others. Mr. Dowell makes a challenging statement to the rest of the workers in the vocational agricultural field.

Myers, Charles Everett—National Agricultural Tests (ten) State College, Pennsylvania, 1924.
Dickinson, Sherman—American Agricultural Tests (dairy, farm shop, poultry), Columbia, Missouri, 1928.
Lathrop, F. W.—Information Test on Oat Growing (Forms I and II), St. Paul, Minnesota, 1928.
Louisiana Achievement Tests in Agriculture, Teacher-Training Department, Baton Rouge, Louisiana, 1928.
Fay, Ivan G.—State-Wide Tests—(feeds, dairy cattle, swine, horses, sheep, poultry), The Agricultural Education Magazine, Volume IX, No. 7, January, 1937, Page 105.

Influencing Human Behavior

(Continued from page 149)

Marshall Field's "Twelve Things to Remember." I like things "boiled down" into short form. There is so much in these "twelve things" that we pass them on as worthy of attention this coming year; here they are: 1. The value of time. 2. The success of perseverance. 3. The pleasure of working. 4. The dignity of simplicity. 5. The worth of character. 6. The power of kindness. 7. The influence of example. 8. The obligation of duty. 9. The wisdom of economy. 10. The virtue of patience. 11. The improvement of talent. 12. The joy of originating.

We must learn to see beyond the immediate practical to the permanent practical. From Cruickshank to Dorset, from Pasteur to Edison, and from Socrates to Doctor Frank, history has recorded the permanence of the artistic which makes for a better life—a life

Future Farmers of America



L. R. HUMPHERYS

How Elect F. F. A. Officers

LESLIE NELSON, Instructor,
Brigham City, Utah



Leslie Nelson

THE next order of business is the election of officers for our Future Farmer chapter to serve us for the next year. Who will you have for president?" This familiar statement from the president of a local chapter presents the most critical moment of the year in Future Farmer activities. In any democratic organization there is always a chance that the wrong person or persons may be elected to office. This is especially true where many of the members of the organization are immature, inexperienced, and do not analyze readily the qualities of leadership needed for different situations. How many of you have heard the following statement from an adviser after passing thru a hectic year of chapter activities, "The boys elected the wrong fellow for president?"

There are several reasons why ordinary chapter members, if unaided, may not always elect the most logical individuals as leaders. In the first place, boys, by nature, are hero-worshippers and an "athletic idol" may be the first boy to be nominated from the floor of the house in an annual election. Quite often such a president turns out to be nothing but an athletic idol. A second important reason for poor selection of officers lies in the fact that many elections are held without due notice and without giving the boys time to carefully consider the relative merits of individuals. Very often the chapter clown is nominated and elected to some important office to the regret of all concerned. Or the election sometimes may turn out to be a "popularity contest"; special abilities and fitness for office sink into insignificance. Then again it sometimes happens that the F. F. A. president is a very competent individual but is carrying the responsibilities of other school activities with the result that the whole program suffers.

What procedures shall be adopted to provide the members of the local Future Farmer chapter adequate practice in the selection of potential leaders and still insure competent leadership for the year ahead? There is no "royal road" for the election of officers but there are a few fundamental principles of organization, which if followed, may promote chapter efficiency. The local Future Farmer chapter should be...

democracy." Every member should feel that he has a voice in organization and activities. Consideration must be given to the two-fold purpose of teaching principles of leadership, co-operation, and citizenship and then providing an opportunity to practice these fundamental principles. In the vast majority of the difficult situations in chapter activities there is a temptation for the adviser, in order to save time, to do the thinking and make the decisions for the group. This unfortunate situation must not prevail. The officers and members must "get the feel" of co-operative effort. True, they are green learners, but they must have the opportunity to learn the skill of deliberately planning and executing their plans. To be more specific, the adviser and incumbent officers must see to it that the nominations are made and elections are carried out in a manner that will most nearly insure good leaders and at the same time make the membership feel that the leaders are their officers and that the selection was made by them.

One method for election which has proved quite successful is for the president at an appointed meeting to set up on the blackboard by the "conference method" the qualifications of an efficient president, secretary, and reporter. On a basis of these qualifications the chapter members vote for the men who in their judgment most nearly fill the requirements set up for the several positions. A special committee is appointed to canvass the returns, select the three high individuals for each position, print a ballot, and set a date for the final "run off."

Another method which is used in various types of organizations is to have a nominating committee appointed.

In one of the most successful chapters that I know, the adviser encourages a member of the nominating committee to visit each agricultural class and conduct a short discussion on the qualifications individuals should possess to fill the several offices in the Future Farmer chapter. By this method the members, thru their own representatives, are brought face to face with what seems to be their specific job. The student conducting this discussion lists the qualifications for each office on the board and this list serves as a guide when nominations are made from the floor of the nominating meeting. The adviser is given an opportunity to add additional qualifications to the list or make suggestions whenever he deems it necessary. There are many modifications of these methods and other methods which are practiced thruout the country in selecting the officers to pilot the chapter thru the year's work.

Whatever method is used, the officers should be selected on a basis of ability to function. The members must know what their responsibility is and vote their convictions on a basis of this infor-

that the adviser could in the majority of cases request and select the best set of officers, but what we are attempting to do is to provide an opportunity for practice for these young farmers in nominating procedures, in casting their vote, in having a part in a major decision that is to be made, and in enjoying the feeling and sense of pride that they have "had a hand" in the organization. It is the writer's conviction that in an annual election it is well to give the members an opportunity to vote by ballot. This provides a degree of secrecy and furnishes a dignity and a precision that needs to enter into their lives at this early age.

Milking Contest Excites Community Interest

A. J. McCONNELL, Teacher,
Newton, New Jersey

THE Future Farmer Chapter staged their third Cow Milking Contest on the stage of the Newton Theatre July 25 to 27. During the three nights of the contest, 24 cows were put on the stage. The first night the 4-H Clubs of the County were invited to compete. On the second evening, four boys of the local chapter and their dads took part; and on the third night two boys each from Sussex, Hacketstown, Blairstown, and Newton competed in an inter-chapter contest.

There were cash prizes each night and a grand prize of \$25 offered by the theatre for the most milk produced in 3 minutes. Ralph Shotwell, member of the Pequest Dairy Club and former member of the Newton Chapter, won the contest with a record of 20.9 pounds of milk.



Ready to Start

The splendid co-operation from the Newton Theatre, cow-dealers of the vicinity, banks, hardware- and feed-dealers, milk distributors, and others helped make the enterprise a success. An exhibit showing chapter activities was set up in the lobby of the theatre and some of the milk distributors displayed their products.

One farmer stated that his boy had never showed much interest in the job

CHAPTER CHATS

Kansas Organizes Officers' Training School

At the August meeting of the vocational-agriculture teachers of Kansas a plan was worked out for the coming year, providing for definite training programs for the Officers of Future Farmer Chapters thruout the State. In general, two meetings will be held in each training center, either morning and afternoon sessions on Saturday or an afternoon and evening meeting on a Friday. A committee of teachers is in charge of all local arrangements and a calendar of training schools has been set up to be conducted, for the most part, during September and October.

It is planned to have at least one state officer at each of the meetings. It is hoped that guidance and inspiration will result from the attendance of Future Farmers and teachers at these schools. The slogan is: "Every local officer should be given an opportunity to attend an officers' training school." These schools will be set up in 10 or more important centers in the State.

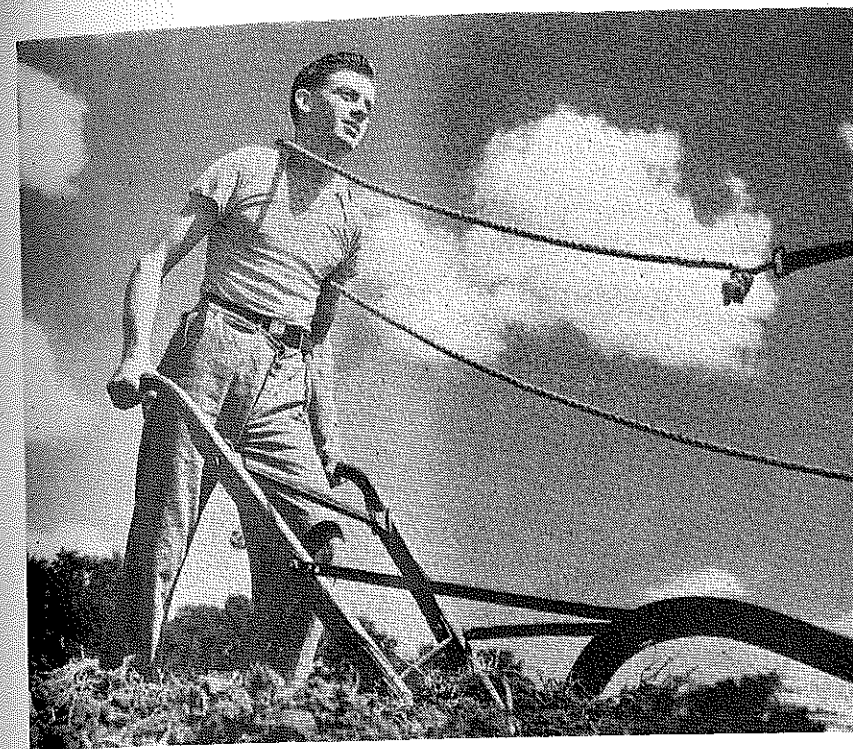
New Project in Transportation

"We bring it in, repair it, and take it home." This is the motto which was formulated by the President of the North Cache Chapter of Future Farmers in exhibiting a truck for the chapter under the direction of Mr. Harold Wadsworth, Farm Mechanics teacher. North Cache Chapter is in a consolidated school area in Utah where many of the boys have to travel 50 miles a day in going to and from school. The transporting of machinery in need of repairs from the farm to the school farm shop and back has been a major problem for the students enrolled in farm mechanics. However, the completion of the truck has reduced the problem to a simple matter.

If at any time farm machinery such as mowers, plows, harrows, rakes, cultivators, etc., needs repairing, the Future Farmer can load it on the chapter flat rack truck and have it in the hospital in a few minutes' time.

The flat rack truck was rebuilt by the farm mechanics instructor, Mr. Wadsworth, from a 1926 model Dodge school bus which had been condemned for school use. The students in farm mechanics dismantled the bus and built a flat rack onto the chassis. The truck is not the most attractive piece of mechanical equipment so far as streamlining and floating power are concerned, but it does have the distinct feature of "air-blow" due to the lack of windows, doors, and other conveniences.

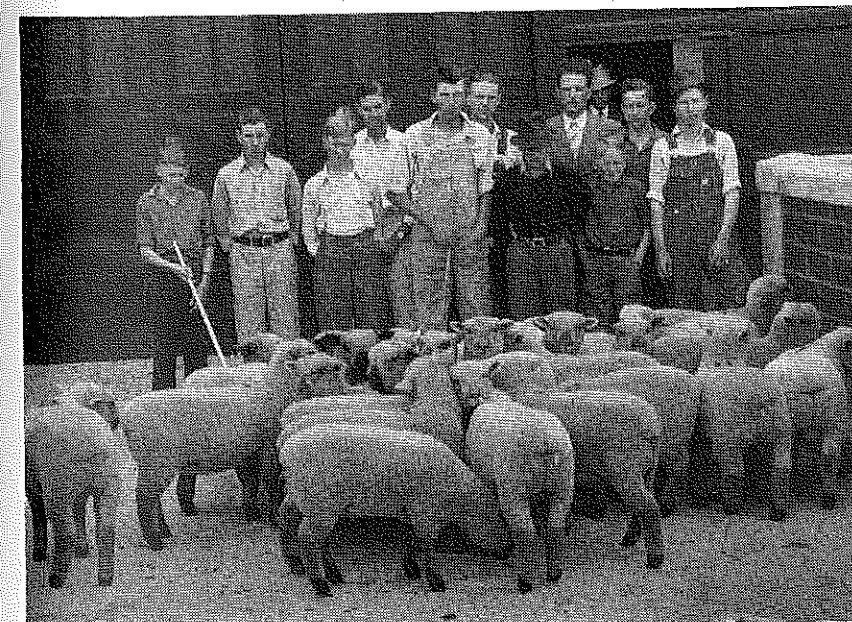
Any boy in the chapter in good standing is allowed to drive the truck home at night and return the next morning with whatever machinery he wishes to have repaired. After the machinery is repaired it is taken home and the truck becomes available for another ambulance trip. The students keep the truck in good repair and furnish their own gas in transporting the equipment to and from



This photo by Art Bennack, entitled "Strong Son of the Fertile Soil," came to my attention one morning last summer when I was traveling thru Texas. I happened to buy a copy of The San Antonio Light, August 19, 1937, and was delighted to observe this true-to-life picture the central figure in five columns width on the front page of an important metropolitan paper. Beneath the picture appeared the comment, "Bernard Hanson puts his hands to the plow, throws the guide lines around his neck and breaks the ground from which he and other students at the new Luther Burbank High School will coax production. Future Farmers of America are now to learn husbandry of the soil, poultry raising, dairying, landscape gardening, and other important agricultural subjects at school."

An excellent article entitled, "Farm Courses Offered at New High School," accompanied the picture. A 75-acre tract of land, the soil which stalwart young Hanson is breaking, was to be the center of a school project.

Upon my return home I wrote Mr. Frank G. Ragsdale, news editor of The San Antonio Light, to commend him for the prominent place and generous comments which he had given to vocational agriculture in his paper. In his reply Mr. Ragsdale sent me an original cut of the picture, and it is with his permission that I am forwarding it for use in the Agricultural Education Magazine.—C. S. Anderson, Professor of Agricultural Education, State College, Pennsylvania



Champion carlot of 25 fat lambs exhibited by the Future Farmers from Stet, Missouri, at the Second Annual Midwest Vocational Agriculture Fat Lamb Show, American Royal Building, Kansas City, June 8-9-10.—Justin Doak is the instructor of this group and 1,241

This piece of equipment has presented another argument for consolidation of schools, namely, that the school can set up a program of farm activities in terms of the needs of the local farm.

Alabama Future Farmers Install Water System

An event filled with human interest took place in the territory covered by the Sylacauga Chapter in Alabama. This chapter is responsible for one of the happiest days in the life of Mrs. John Guy, whose husband owns a farm about four miles from Sylacauga. One washday not long ago, Mrs. Guy, for the first time in her life, washed clothes without having to draw a bucket of water.

Members of the F. F. A. chapter and their adviser, Mr. R. N. Holt, offered to assist Mr. Guy in installing a system of running water in his home. They agreed to curb in his spring, lay the pipe, and build the tank if he would furnish all necessary materials. When estimates on the cost of materials were obtained and presented to Mr. Guy, he considered the expenditure involved too great for him to manage. Mrs. Guy then offered to donate the money she had saved from raising chickens, thus making it possible for the project to be carried out. As all labor was furnished free of charge by F. F. A. boys, the total cost of the water system amounted to only \$73—ram and fittings, \$20; pipe, \$35; tank (small), \$8; concrete (used in curbing spring), \$10.

Milking Contest Excites Community Interest

(Continued from page 156)

of milking until he had participated in one of the contests. Furthermore, there was considerable community interest aroused by the contest, not only among the farm people, but also among the residents of the town.

The chapter netted \$75 for its treasury from the activity, which will help toward the funds used for trips.

Thomas Forsyth Hunt

(Continued from page 146)

was right, there was no use for his studying farming. He acted wisely. No person has any right to ask the state to incur the expense of educating him without undertaking to be more than an average person. The very fact that a person goes away to school, whether for six weeks or six years, puts upon him a responsibility which he cannot ignore. No one lays the burden upon him. He voluntarily takes it upon himself when he enters the institution. He cannot thereafter avoid the responsibility any more than any other soldier can shirk his duty."

"WHEN SHALL WE BEGIN STARVING?" was the title of an article prepared by Doctor Hunt about

1924, in answer to one appearing in a local periodical dealing with the Malthusian doctrine: "There are two important aspects in the improvement of agricultural processes. One is the maintenance of an abundance of food of ever-increasing quality and variety; the other is the constant reduction in the percentage of the people required to produce that supply. The latter releases more people for the essential industries. More commodities are produced for those who produce food, as well as for all other people. A farmer is helped just as much by a ten-percent reduction in the cost of his clothes as he is by an equal reduction in his farming expenses.

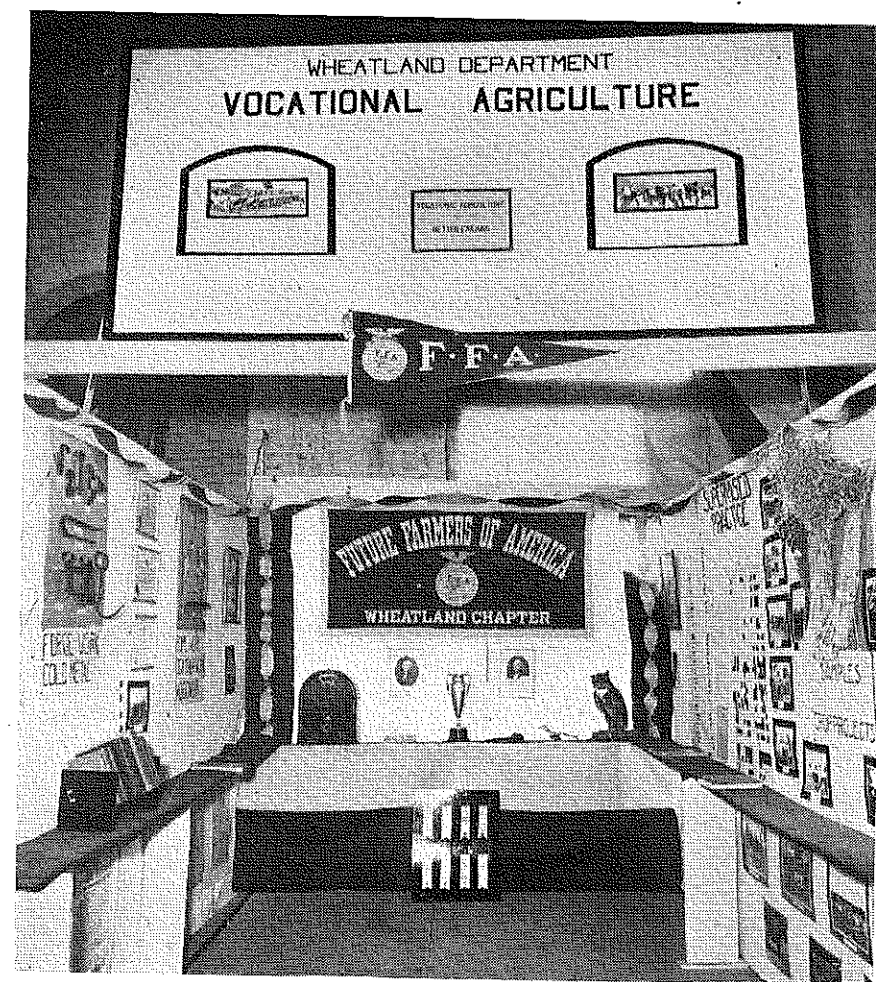
"It is not necessary to get excited just yet about the over-population of the world, altho there may be spots where the bees should swarm and create new hives. It is, however, important to improve constantly all processes of production in order that the returns per capita may be increased, or at least maintained. Quit worrying about numbers, but see to it that everybody gets busy."

"RESEARCH FUNDAMENTAL TO SUCCESS." In his annual report of the College of Agriculture and Experiment Station for 1913-14, Doctor Hunt enunciated certain principles relating to research that all students of agriculture may well heed: "It must be obvious to a thoughtful person that research work of the Department of Agriculture of the University of California is fundamental to its success. Without accurate knowledge it is impossible to instruct or to advise properly. There is no warrant for an extension division or a farm adviser unless the Experiment Station, thru painstaking investigation, has created knowledge that is worthy of credence. There are only two satisfactory reasons for the nation and the state to maintain an experiment station—one is that it shall extend the realm of knowledge concerning agriculture; the other is that those who investigate shall have no motives to do so other than to discover and state the truth. The highest quality an investigator can have is the ability to be judicial. The value of a man of research to the public does not lie so much in the special technical knowledge which he possesses as in the fact that his own welfare is in no way affected by the conclusion he reaches."

May I conclude this summary of the life and work of Doctor Hunt by again quoting a man (Professor Edwin C. Voorhies) who was privileged to serve as an assistant and understudy during his last years as Dean of the College of Agriculture and teacher of university students:

"In the passing of Thomas Forsyth Hunt the world loses a vigorous, constructively working citizen, a leader of men; agriculture loses an educator and administrator, a builder of agricultural education and research, a director with rare ability to evaluate and correlate the problems of the farm and the studies of the investigator."

If ever there was a cause, if ever there can be a cause, worthy to be upheld by all of toil or sacrifice that the human heart can endure, it is the cause of edu-



Chapter Exhibit at the State Fair

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