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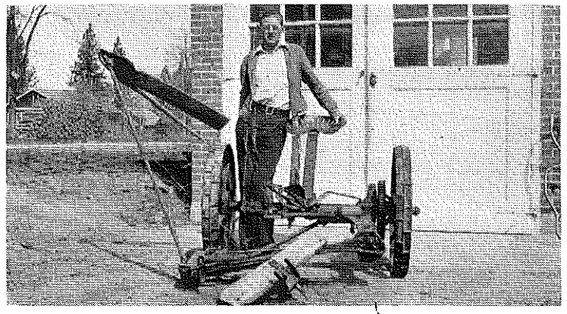
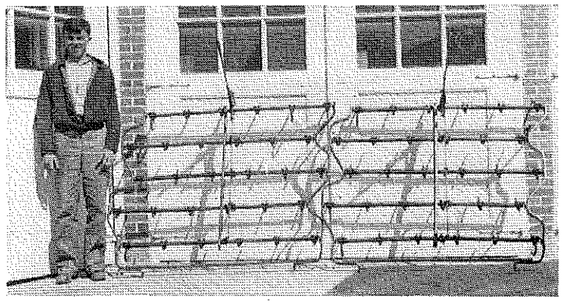
THE AGRICULTURAL EDUCATION MAGAZINE





Above—Edwin Lundquist;
Below—Edward Woodbury, Chewelah, Washington

Farm Shop Work Pays
(See page 128)

I find the great thing in this world
is not so much where we stand, as
in what direction we are moving.
—Oliver Wendell Holmes

The Agricultural Education Magazine

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

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Editorial Comment

Mr. Rufus W. Stimson

At THE request of Mr. E. B. Matthew, Vice President of the Agriculture Section of the American Vocational Association, the chairman has permitted me to make a statement. I am confident at the start that I am speaking for all of you.

The subject of my remarks is fortunately with us. Many years ago this gentleman turned me down as an applicant to teach agriculture in his state. I am reminded of what William Lyon Phelps wrote for the Yale Record when he retired from the Yale faculty baseball team. The Record asked him for a statement about the prospects of the faculty team for the coming season. Among other things he wrote, "The team will be **strengthened by the absence** of Phelps in left field." No doubt vocational agriculture in Massachusetts was strengthened by the absence of Lathrop, as one of its teachers.

My enthusiasm for Mr. Stimson and the Massachusetts program was not dampened by this setback. Mr. Stimson, you have long since become an immortal in the field of agricultural education. I can say very little about you that we do not—all of us—already know. To my mind your greatest contribution is your firm insistence for many years that the boy or young man is the center of the instructional program, and his needs, interests, and abilities are paramount. The fact that we accept this principle today is largely because of your untiring efforts. A few years ago I visited many of the former students of vocational agriculture in Massachusetts. I am convinced, whether it is true or not, that you are in close touch with every former student who is now farming in the State of Massachusetts.

During the past few months my correspondence with you indicates that you are sparing no pains to leave your work ship-shape for your successor in February. This, I think, is an example for all of us.

In one sense, you cannot retire. Vocational agriculture is a permanent thing. You, who are so much a part of it, are also permanent. I hope and pray that we may have the benefit of your advice and counsel for many long years to come.

Frank W. Lathrop, Office of Education, Washington, D. C., Baltimore Convention, December 4, 1937.

Editor's note: Even tho the state laws of Massachusetts make the retirement of Mr. Stimson automatic, we in vocational agriculture know that he will continue to serve our cause which has been so dear to his heart and to which he has so nobly contributed. Mr. Stimson's appropriate response to the remarks by Dr. Lathrop were evidence of his continued effort to make education thru vocational agriculture serve a real need for our farm youth.

Extracts From Reports of the Editor and Business Manager

THE editor appreciates the fine support given *our magazine* by the workers in the field. I take this opportunity, thru the columns of the magazine, to especially express this fact to the teachers of agriculture in the United States since a detailed report by the editor has been mailed to state supervisors and teacher-trainers.

Every state, except four, has had at least one or more articles printed in the magazine during the year. This is a loss of three states over last year in addition to the one which has not contributed in the last three years. Supervisors in 20 states, teacher-trainers in 22, and teachers in 40, have had material printed in comparison to last year's record of 15, 27, and 40 respectively.

It is encouraging to the editor to recognize, in Table I, the consistent support of state supervisors and teacher-trainers, and more encouraging from the growing support of the teachers of agriculture in their contributions.

	Supervisors		Teacher-Trainers		Teachers	
	Articles	Inches	Articles	Inches	Articles	Inches
1935...	53	943	50	1,338	121	1,949
1936...	21	374	41	1,415	147	2,301
1937...	35	802	54	1,630	195	2,773

Teachers of agriculture will also be interested to know that our subscription list reached the high point total of our 5,000 subscribers on November 1, 1937. I am sure that we are proud of our efforts in making the magazine possible. We must improve it and make it continue to serve a real need for all of us. Remember it is *our magazine*.

We again express our appreciation for the co-operation of the Meredith Publishing Company in publishing the magazine. The following persons on the staff of the company, for the editorial side, Mr. Hugh E. Curtis and Mrs. Gladys Johnson Heise; and for the business side, Mr. M. A. Hunnicutt, are rendering a most efficient service for us.

Comments From Report of Business Manager

Compared with the report of last year the number of states ranking 100 percent or above in subscriptions is the same, 11 states appearing in the honor group. Eight states—Florida, New Mexico, Tennessee, Nevada, Missouri, Virginia, Vermont, and Wyoming—appear in the select group both years. On the other hand the number of states securing less than 50 percent of the desired subscriptions reduced from 14 to 11. Among these falterers seven states are found both years.

Subscription Data by States—1937-38

STATES	Number White Teachers	Subscriptions November 1, 1937	Percentage Rank
Alabama	169	191	103
Arizona	31	25	74
Arkansas	143	27	17
California	247	70	26
Colorado	69	46	61
Connecticut	15	9	53
Delaware	16	17	94
District of Columbia	.....	14	.....
Florida	69	107	141
Georgia	217	130	54
Idaho	38	39	93
Illinois	312	162	47
Indiana	240	223	84
Iowa	139	138	90
Kansas	142	141	90
Kentucky	186	108	84
Louisiana	149	72	44
Maine	36	31	78
Maryland	56	10	16
Massachusetts	70	47	61
Michigan	233	241	94
Minnesota	122	82	61
Mississippi	198	88	40
Missouri	164	208	116
Montana	48	21	40
Nebraska	86	92	97
Nevada	11	16	133
New Hampshire	16	17	94
New Jersey	35	33	85
New Mexico	44	55	115
New York	267	333	113
North Carolina	310	81	24
North Dakota	44	23	46
Ohio	271	295	99
Oklahoma	133	144	99
Oregon	47	50	96
Pennsylvania	204	103	73
Rhode Island	11	1	8
South Carolina	189	106	51
South Dakota	63	52	74
Tennessee	174	256	134
Texas	325	304	85
Utah	55	26	43
Vermont	33	41	114
Virginia	159	245	140
Washington	92	96	95
West Virginia	73	61	76
Wisconsin	161	204	115
Wyoming	36	40	100
Hawaii	56	.....	.....
Puerto Rico	75	.....	.....
Alaska and United States Possessions	.....	34	.....
Foreign	.....	10	.....

Indexes. An index was printed in the August issue this year. There are about 250 additional copies of this index available at 25 cents per copy. These should be moved at once. Mail your orders directly to M. A. Hunnicutt, Meredith Publishing Company.

Binders. Three years ago the editing-managing board ordered 500 binders for our magazine placed on sale at $1.00 per copy. To date only 220 binders have been sold. Have you done your part in using these binders and making them available to your subscribers? Do you have a sample on display at your annual conference?

Tenth Convention Future Farmers of America

THE Tenth Convention of the Future Farmers of America, held at Kansas City, October 16–23, 1937, with an attendance of over 8,000, and the many outstanding features on the program, celebrated in a very fitting manner the ten years of growth of this organization for farm boys studying vocational agriculture in our high schools. The membership in the organization now exceeds 143,000, which was represented at the convention by 91 delegates from 48 chartered state associations. One outstanding feature was the participation of 25 of the former 48 national officers. Three official bands, Utah, Texas, and Missouri, totaling 300 pieces, and the chapter orchestra from Solomon, Kansas, furnished the much appreciated music and entertainment. Some of the other features follow:

National Public Speaking Contest

First: Jack Gunning, Oshkosh, Wisconsin, North Central Region, "First in Agriculture."
Second: Bernel Simmons, Magnolia, Mississippi, Southern Region, "The Need for Soil Conservation."
Third: David Inciong, Hamakuapoko, Maui, Hawaii, "The Necessity for Trained Farmers."
Fourth: John Venard, Chehalis, Washington, Pacific Region, "War and Its Effect on Agriculture."
Fifth: Virgil Harrison, Canal Winchester, Ohio, North Atlantic Region, "What Co-operation Is Doing and Can Do for the American Farmer."

Judges on Delivery

L. H. Dennis, Executive Secretary, American Vocational Association; E. L. Kirkpatrick, Chairman, Youth Committee, American Country Life Association; and J. D. Harper, Editor-Manager, National Livestock Publishing Association.

Judges on Manuscript

Eric Englund, Assistant Chief, Bureau of Agricultural Economics, United States Department of Agriculture; Robin Hood, Executive Secretary, National Co-operative Council; and L. A. Schlup, Visual Instruction and Editorial Section, Extension Service, United States Department of Agriculture.

American Farmers

ARKANSAS
Eugene Warren, Calico Rock
William H. Daniel, Jr., Sparkman

ALABAMA
C. W. Wells, Jr., Jemison
Joseph Pearson, Dixon's Mills
Lawrence Crawford, Marion

CALIFORNIA
Joe Scagliotti, Hollister
Bernard Ritchie, Laton
Floyd Fike, Caruthers
Charles Harding, Modesto
Lex Murray, Santa Rosa

COLORADO
Lowell Bland, Fort Collins

DELAWARE
Harry Webb, Greenwood

FLORIDA
Myron Grennell, Homestead
John R. Jones, Jr., Sanford

GEORGIA
R. H. Kimsey, Clarksville

HAWAII
Yasuki Nakagawa, Holualoa

IDAHO
Ben Dobson, Horseshoe Bend
Melvin Ehlers, Twin Falls

ILLINOIS
Arnold C. Wittmus, Alden
Harvey Schweitzer, Jr., Malta

IOWA
Darwin DeLong, Lamoni
Clarence Dean, Iowa Falls

KANSAS
Arnold Sawyer, South Haven
John C. Dart, Newton
Thello Dodd, Linn

KENTUCKY
James McConathy, Lexington

LOUISIANA
Sims Gauthier, Avoyelles Parish
Louis Mamer, Lafayette
David Hillier, Plain Dealing

MAINE
Owen H. Smith, Presque Isle

MISSISSIPPI
James O. Jones, Wheeler

MISSOURI
Raymond Powell, Buffalo
Quentin Still, Steele
Harold Pontius, Bethany
Ralph Davis, Napton

MONTANA
William Davidson, Miles City

NEBRASKA
Edwin Rousek, Sargent
Marvin L. Kruse, Loretto

NEVADA
Mario Perado, Fallon

NEW MEXICO
John R. Hadley, Texico

NEW YORK
G. Elmer Drummond, Rossie

NORTH CAROLINA
Loy Crowder, Shelby

NORTH DAKOTA
Lloyd Nygard, Edinburg

OHIO
Robert King, Thronville
William Stiers, Alexandria
Kermit Grener, Amlin
Charles Calhoun, Savannah
Robert Walker, Crestline
Richard L. Kuhn, Hilliards

OREGON
Robert Stults, Cloverdale
Verlin K. Hermann, Broadbent

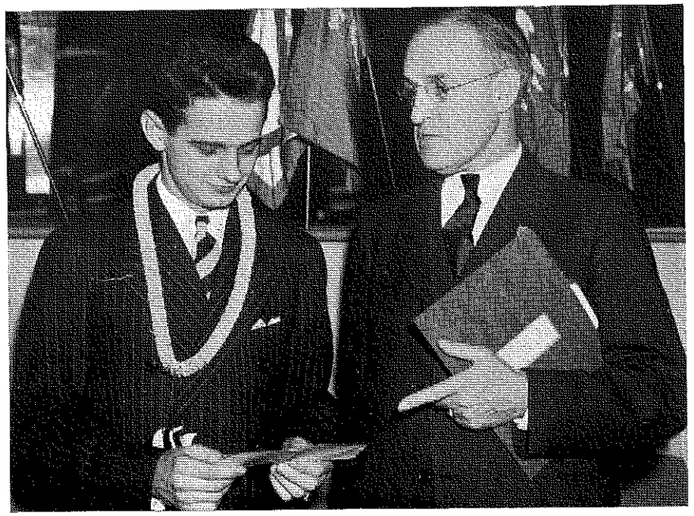
TENNESSEE
John Weaver, Knoxville
Hobert Johnson, Limestone
Talmage Crihfield, Ripley
Houston Gillespie, Nashville
James N. Maddux, Silver Point

TEXAS
Leland Knight, Beeville
Afton Poindexter, Colmesneil
Floyd Saufferer, Edcouch
Leroy Engdahl, Rochelle
Hubert Moseley, Rochelle
J. P. Sharp, Jr., Tulia

PENNSYLVANIA
Francis Putman, Troy
Glenn Maines, Newville

UTAH
Rex Funk, Smithfield
Ross Wheatley, Brigham
Lawrence Hinton, Hurricane

VIRGINIA
John A. Yowell, Peola Mills
Robert Bristow, Churchview
Amos Healy, Saluda
R. W. Moffett, Staunton
Warren Good, Jr., Mt. Jackson



L. H. Dennis presenting award to Jack Gunning

WASHINGTON
Ernest Hamilton, Chehalis

WISCONSIN
Hugo Henry, Basco

WYOMING
Wayne Macy, Pine Bluffs

Star Farmers

American—Robert Lee Bristow, Saluda, Virginia
North Atlantic Region—William Stiers, Alexandria, Ohio
Pacific Region—Lex Murray, Santa Rosa, California
Central Region—Ralph Davis, Napton, Missouri
Arkansas—Eugene Warren, Calico Rock, Arkansas
Kansas—Arnold Sawyer, South Haven, Kansas

Star American Farmer and Star Farmer, Southern Region

ROBERT LEE BRISTOW, a young farmer of Saluda, Virginia, was declared Star American Farmer for 1936–37, at the national Future Farmers of America convention at Kansas City, for his outstanding accomplishments in farming and farm economics, in the face of what might seem to have been overwhelming obstacles.

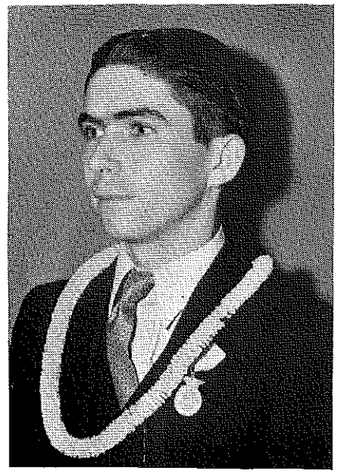
In addition to carrying on a successful farming program under modern practices, Robert Lee's outstanding achievement was to take over a run-down farm when both parents died, refinance it, pay off all the debts and ultimately to buy the 203-acre tract from the heirs. Today, at the age of 21 years, this orphan looks across his broad acres toward a future of farming of his own planning.

The Bristow farm is not a good farm, judged by the standards of rich soil and large painted barns. But under Robert's management, it is going to be as good a farm as is possible considering the sandy loam soil and generations of poor management. In 1932, the cash sales from the farm were less than $200. In 1936, they were nearly $900, and this year will top that figure considerably.

The heirs did not want to sell their interest to a green youth barely out of high school, with four years of vocational agriculture and Future Farmers of America activities training behind him. The land bank which held a seemingly over-optimistic loan, wanted to sell Robert Lee out and pocket its loss. But the high school agriculture teacher, and local people who had seen the boy's determination said, "Wait."

Their faith is being justified. The farm that a few years ago was scarcely worth $2,000 will be worth $5,000 in another year. Last year Robert's production included 20 acres of corn, 18 acres of small grain, 27 acres of legumes, 4 acres of snap beans, 1,050 chickens, 3 dairy cows, 4 sows and litters, 4 acres of clover to turn over to improve the run-down soil.

The projects that he is carrying now he was a boy studying vocational agriculture. His first enterprises back in 1931-32 when he was a freshman were 175 baby chicks, 67 pullets and 2 acres of corn. The swine, dairy cattle, and crops enterprises of today grew as Robert's enterprises were consistently and regularly expanded, year after year.



Robert Lee Bristow

This boy not only had a program, but has made it pay in cash income as well as increased increment. During the years he has been concerned with soil conservation and building, farm building and repair, soil erosion control and farm refinancing, his enterprises have paid him more than $1,200 over and above expenses. At the present time, he has $4,300 invested in farming and farm operations, which represents what he salvaged from that which others were ready to scrap.

Young Bristow has not confined all of his activities to the economic side of farming and farm living. He has been an active member of his local Future and reporter of the chapter, district president, and state association reporter. He has found time to improve his farming ability by taking part in agricultural judging and selection contests, and now as a young adult, is participating in educational affairs for the out-of-school group. Robert is treasurer of the Wild Life Association of his county and an advisory board member of the Southern States Co-operation Association.

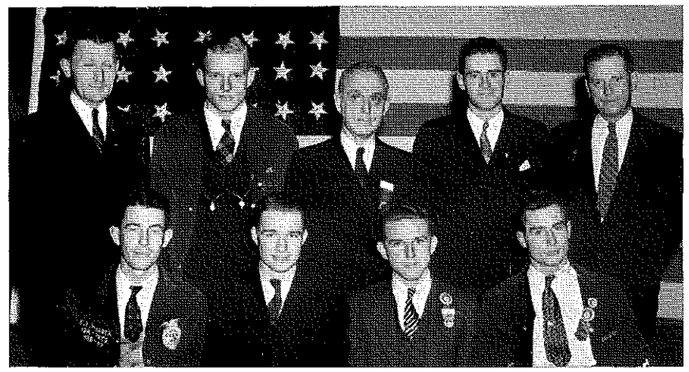
A few years ago, cotton was the staple crop on the Bristow farm, but at best it was marginal cotton land. Today, under Robert's management, there is not a cotton plant on his farm where it does not belong. This boy is practicing farm building, and the $500 award he receives for being acclaimed Star American Farmer, will go far toward the most permanent investment in the world—a better farm.

Robert Lee has done all these things, but it has not prevented him from being a good student, with an average grade of 93 and a rank of fourth in his graduating class of 24.

His plans for the future are definite and orderly. Under his influence, direction and ownership, the old farm will continue to improve, and to be a financial and economical asset to America. Under previous conditions, it was a liability. Other boys have made more money than Robert; their activity career has been more spectacular, but none have followed a more basic program for better rural living.

Chapter Contest

First—Stamping Ground, Kentucky
North Atlantic Region—Little Valley, New York
Southern Region—Stuarts Draft, Virginia
Pacific Region—Fort Collins, Colorado



NATIONAL F.F.A. OFFICERS 1937-1938

Seated left to right: Eugene Warren, Third Vice-president, Calico Rock, Arkansas; Arden Burbidge, Fourth Vice-president, Park River, North Dakota; J. Lester Poucher, President, Largo, Florida; Lex Murray, Second Vice-president, Santa Rosa, California; Standing: W. A. Ross, Executive Secretary, Washington, D. C.; William Stiers, First Vice-president, Alexandria, Ohio; J. A. Linke, National Adviser, Washington, D. C.; Lowell Bland, Student Secretary, Fort Collins, Colorado; and Henry Groseclose, Treasurer, Blacksburg, Virginia.

Stamping Ground's Record

Winner—Chapter Contest

A RECORD unsurpassed in accomplishments upon a program of work ranging from individual supervised farm practice programs, on the one hand, to complete co-operative activity upon the other.

The Stamping Ground chapter is composed of 38 members, all of whom are enrolled in vocational agriculture in the Stamping Ground high school. In this small rural high school, located in a village of some 500 people, all of the boys except one enrolled in high school are members of the vocational agriculture class.

The outstanding activity of the Stamping Ground chapter, without any doubt, was their program of co-operative work. The chapter engaged in 11 different kinds of co-operative activity, chief among them being buying and selling feed, fertilizer, poultry, and poultry products, preparing and offering for sale mixed minerals, and financing individual productive projects for members. One hundred percent of the chapter members engaged in a group broiler production project, participated in three community farm surveys, and in publishing a monthly news letter. Ninety percent of the membership participated in the co-operative buying and selling of feed. In the above activities the chapter handled 180,000 pounds of feed, 19,000 pounds of fertilizer, 3,000 head of poultry, 3,800 pounds of mineral, and loaned $700 to chapter members.

The activities of the chapter in community service almost paralleled those in co-operation. A community fair was was sponsored, full responsibility for premiums, catalog, and physical preparation for the fair being undertaken by the chapter; a central water supply for the village of Stamping Ground was promoted and established, largely thru the efforts of the chapter, with a final evaluation of $35,000 and installed thru the co-operation of W. P. A. The chapter held public meetings, wrote letters, employed an engineer, took options on land, and sold bonds in the furthering of this project. The beautification of city property in Stamping Ground was undertaken by the chapter and they secured an appropriation of $500 from the town council for the purchase of shrubbery which was planted in the fall of 1937. A home beautification and improvement campaign is being sponsored for Scott County, in which Stamping Ground is located. Pamphlets have been distributed, public meetings have been held, programs have been conducted in each consolidated school in the county, and $112.50 in prize money has been raised for this activity. One hundred and five farm homes have been entered in the contest and to date more than 250 gallons of paint have been spread, 662 shrubs have been purchased, 31 homes landscaped, and over $200 spent for shrubs, trees, and other perennial plants as a result of this promotional activity.

The chapter erected a building in which to house the co-operative association. This building has been enlarged three times and now has a capacity for holding 80,000 pounds of feed, mineral, and fertilizer. It has been constructed and remodeled entirely by the members of the chapter, money for which has come from selling shares in the co-operative, from plays and programs put on by the chapter, and from money given the chapter by the county board of education. Every member of the chapter is engaged in some form of productive enterprise project and all except one have complete managerial control. A total of 100 productive enterprise projects were undertaken by members of the chapter with an average of 2.6 per member. There were 17 sow and litter projects, 21 dairy cow and calf projects, 12 ewe and lamb projects, and 18 tobacco projects. A total of 196 improved practices in swine, 126 in dairying, 77 in sheep, and 129 in tobacco production were instituted by the chapter members in the carrying out of the above projects. The labor earnings of the chapter members are immense. Tobacco production, which is the major farming enterprise of the community, headed the list with $6,428.82, dairying was second with $1,650.96, with $1,131.20 coming from swine, and $907.83 coming from sheep. A total of $11,382.14 labor earnings were reported for the chapter members. Eighty-one percent of the productive projects carried in 1936-37 were continued over from 1935-36.

In June, 1937, eighteen members of the Stamping Ground chapter went on a 33-day tour, covering 5,989 miles thru 16 states and into Mexico, at a total cost of $35 per boy. This was a co-operative project from start to finish, each boy being assigned to a particular squad having definite responsibilities thruout the entire trip.

The Stamping Ground chapter is one of the few chapters in the United States which has a chapter house built exclusively for its own use. For three years the Stamping Ground boys labored and saved in order that they might have money enough to build a place where they could meet and conduct the business and recreational affairs of their association. In September, 1936, a building 22 x 36 feet was erected and today it stands as a monument to the ingenuity and stick-to-it-iveness of a group of young men who know how to work together. The building and equipment represent an investment of over $1,200, all of which was raised by the chapter members themselves except $250 donated by the county board of education. Finished in walnut, lighted indirectly, and furnished with studio couch, radio, venetian blinds, and occasional chairs, this chapter house presents an inviting atmosphere for doing the kind of things for which the Stamping Ground chapter has become famous.

(Editor's Note—Ivan Jett is the teacher of agriculture and a more detailed account of the chapter house was printed in the November, 1937, issue, page 96.)

State Association Contest

First—Louisiana
Second—Texas
Third—Utah
Fourth—Georgia

State Association Contest

LOUISIANA Association won *first* place in the state association contest of the Future Farmers of America for 1937.

Every high school department of vocational agriculture in the state of Louisiana has a chartered F. F. A. chapter with an active state membership of 4,705. This is an increase of 32 chapters and 1,651 members over last year. At the present time 152 of the active members in the Louisiana Association hold the State Farmer degree and 7 hold the American Farmer degree.

During the year the state association budgeted and spent $746 in conducting its affairs. Chief items of expense were $310 traveling expenses of judging teams, delegates, and candidates to the 1937 and $150 for Future Farmer keys for those members winning the State Farmer degree.

The state association was outstanding in its efforts at community work, having 63 chapters in the state participating in their community in local welfare activity, Thanksgiving and Christmas baskets and provisions were distributed, food and clothing were given to the needy flood sufferers and Red Cross workers were aided. Sixty chapters conducted safety campaigns and 122 chapters published news articles on the average each month. The state association publishes a news letter and 91 chapters published local news letters. More than 4 articles per year on the activities of chapters in the districts were published in daily papers and 26 articles were published by the state association.

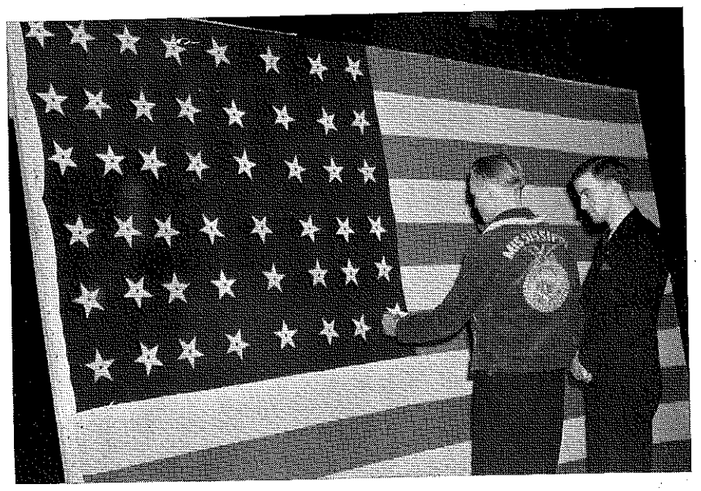
Over 3,000 members of the Louisiana Association participated in the activities of the Louisiana State Fair in various contests and other activities.

Much emphasis has been placed by the Louisiana Association upon libraries. Ninety-two of the chapters have local libraries. One hundred three chapters held parent and son banquets, while 123 chapters held a local public speaking contest with 3,147 members participating. One hundred nineteen chapters entered the National Chapter Contest.

The Louisiana boys believe in co-operation. Conservation work was one of the items receiving a major share of their attention when 80 chapters organized activities along those lines. Eighty-one chapters participated in buying and selling activities, 32 engaged in organized rural fire prevention, while 72 participated in organized pest eradication programs. Eighty-one of the chapters have prepared and given one or more radio programs, while 96 either own or have access to the use of radios in their chapter rooms.

These Louisiana boys not only know how to make a success at farming but they also know how to save. On January 1, 1937, they had invested in thrift banks no less than $4,985.51 and had invested in farming a grand total of $181,138.96.

S. M. Jackson is state adviser.



THE "BUILDING THE FLAG" PAGEANT, a feature of the convention. One boy from each state or territory placed a star in the flag until it was complete. Placing the last star in the flag is Gay Morehead, Hickory Flat, Mississippi, president of the state Association of F. F. A., representing the last state to join the national organization.

Organizing a State Future Farmer Band

L. R. HUMPHERYS, Professor Agricultural Education,
Utah State College

THE organization of a state-wide F. F. A. band is possibly the most difficult co-operative enterprise in the annual state program of work. A successful band depends upon many factors and the work of many people. In Utah it involved the active co-operation of more Future Farmers, teachers, principals, music teachers, administrators, parents, business interests, local chambers of commerce, and farm organizations than any enterprise that was ever undertaken.

L. R. Humpherys

No state association project in Utah has so completely tested the ability of agricultural teachers and Future Farmers to do team work. No group project so nearly represents a cross-section of the type of rural boy that is engaged in learning the business of farming. In return for this investment the Utah State F. F. A. Band of 112 members which took part in the official proceedings of the Tenth Annual Convention of Future Farmers of America, will possibly do more to promote the growth of Future Farmer activities in Utah than any other one project that could be selected over a period of years.

Several times in recent weeks I have been asked this question: "How are you able to organize a band with such wide chapter representation, with such a high quality of music, and finance a trip of 2,500 miles from Salt Lake City to Kansas City and return?" The answer to this question is a long story and not easy to sketch in a few words. However, a few glimpses may be helpful in giving a "birds-eye" view of this type of project. At the outset it may be stated that the organization of the Utah F. F. A. Band which performed at Kansas City represented the partial efforts of the work of the writer for a period of over 16 months. More than 2,000 letters, personal and circular, were written in connection with the work incident to the organizing and perfection of this band. These efforts included the making of a careful census of all the Future Farmers in each of the chapters who could play instruments, securing a complete report of the ability to play certain instruments, determining the posibilities of individual members financing the trip to Kansas City, checking on the illegibility of prospective members as Future Farmers to make the trip, and finally selecting the membership giving due consideration to both representation by chapters and balance in instrumentation.

The Spirit of Band Work
A. Winso and Jack Dunn, Utah Band

Once the personnel was determined it was necessary to select the music to be played and arrange for its purchase and distribution; establish a basis of co-operation with agriculture teachers, high-school band masters, and others concerned in the project; select a band uniform and arrange a procedure for ordering and distributing the suits; make plans for transportation of members to and from the point of departure for Kansas City; negotiate for reduced rates and a special train; make plans for hotel accomodations, eating, first aid, transfer of baggage, and a thousand other things that go to make up the movement of a delegation of 145 enthusiastic venturesome Future Farmers halfway across the continent and return without loss of property or disaster.

This project would not have been possible without the closest of co-operation of the State F. F. A. Director, local band masters, agricultural teachers and others concerned. Every one of the 44 chapters in Utah had from one to nine members in the band. Most of these young men were strangers to each other until they met for the first practice of two days in Salt Lake City in June. In addition to the two day practice in June the members had an opportunity to practice for one day before leaving for Kansas City by special train. The band leader knew very few of the members of the band prior to their first practice. He, like all others concerned, was happily surprised when, at the appointed hour for the first practice, a marvelous response of harmony burst forth when his baton was brought down, calling for the first strains of the first number to be played.

The value of the instruments in this band is approximately $12,000, and most of them are owned by the individual members. The uniforms were furnished by the Universal Uniform Company and the music was secured from one music house. A rate of one cent per mile was secured on a special train with air-conditioned cars. The cost of the trip from Salt Lake City to Kansas City and return was approximately $60 per boy. The finances were furnished for the most part from the boys own earnings with some help from the local chapter, the local high school, parents, and other local agencies. The appropriation from the National Association of Future Farmers was very helpful in meeting the general expense of the organization.

The young men in the Utah State F. F. A. Band worked hard and diligently in learning their music. All the members religiously followed instructions in training, conduct, and exhibited a fine spirit of co-operation and public service. Except for this set of conditions, it would not have been possible to secure the quality of music which was rendered. The boys in the Utah band represent the best in manhood. The high schools from which they come have a pride in music. The quality of music rendered

by the F. F. A. gives a cross-section of what is being done in the state as a whole.

Every individual member of the Utah F. F. A. Band who attended the Kansas City Convention will be a special ambassador in his chapter for the high ideals represented in the organization of the Future Farmers of America. It is equivalent to saying that 112 special delegates attended the National Convention at Kansas City. Every chapter in the state will receive a special report of the National Convention from a chapter representative who attended the convention. More enthusiasm and a constructive aggressive year's work should result from this adventure.

Judging Contest

High Teams in Contests and Classes

LIVESTOCK

(All classes)

Rank	*Score*	*State*
1	2,035	Iowa
2	1,996	Kansas
3	1,988	Washington
4	1,982	Oklahoma
5	1,915	South Dakota

Beef Cattle

1	575	Kansas
2	566	Iowa
3	559	Oklahoma
4	552	California
5	546	Utah

Draft Horses

1	545	Tennessee
2	543	Washington
3	522	North Dakota
4	510	Virginia
5	507	Pennsylvania

Sheep

1	468	Oregon
2	454	Minnesota
3	421	Iowa
4	419	North Dakota
5	415	Kansas

Swine

1	564	Illinois
2	561	Washington
3	546	Ohio
4	543	Kentucky
5	543	Iowa

Guernseys

1	262	Arizona
2	249	Illinois
3	249	Michigan
4	242	California
5	236	Colorado

Holsteins

1	575	Idaho
2	550	Michigan
3	538	Mississippi
4	519	Arkansas
5	519	Nebraska

Jerseys

1	505	Virginia
2	474	Utah
3	474	New Mexico
4	455	Iowa
5	454	Missouri

MALTBY TROPHY

(Combined score livestock and dairy)

Rank	*State*	*Live-stock*	*Dairy*	Total
1	Iowa	2,035	1,118	3,153
2	Kansas	1,996	1,099	3,095
3	Utah	1,891	1,160	3,051
4	Michigan	1,833	1,215	3,048
5	Oklahoma	1,982	1,055	3,037

Milk Judging

Rank	*Score*	*State*
1	84	California
2	96	Wisconsin
3	108	Ohio
4	110	Kansas
5	110	Oregon

Meat Identification

1	292	Texas
2	291	Missouri
3	286	Illinois
4	279	Utah
5	264	Wisconsin

Poultry

1. Minnesota
2. Illinois
3. Oklahoma
4. Kansas
5. California

Grading Market Poultry

Rank	*Score*	*State*
1	2,243	Iowa
2	2,233	California
3	2,086	Nebraska
4	2,040	Virginia
5	2,040	Montana

OUR COVER

Farm Shop Work Pays

GEORGE R. ISAMAN, Teacher, Chewelah, Washington

Editor's Note: The two boys and their work, shown on the cover picture, are Edwin Lundquist, a senior, complete overhauling and repair of mowing machine, and Edward Woodbury, a sophomore, repaired, sharpened, and painted a "junked" harrow.

THE vocational agricultural department instituted its farm shop work in an exhibit hall on the old fair grounds in the fall of 1929. Since then it has been moved into one end of the school garage and has a space of 30 by 30 feet. The department is now building its own farm shop which will have a floor space of 40 by 60 feet in the clear with twelve-foot double doors in each end, a truck high loading platform at one end, and approximately 300 square feet of windows, all on the south side. This arrangement of lighting has been found to give the best results in this locality in other types of buildings, and the chapter thinks it will give corresponding results in the shop. The building will be rough stucco on Thermax on 2 x 6 studding, with trussed roof. Plans and details are being worked out by the students and the work done by them, under the instruction and supervision of the VO-Ag instructor, a mason and plasterer, and a contractor, who pass on all plans and work done. Thermax is a local product which is fireproof, has exceptional strength, and has very high insulating properties. The farm shop work endeavors not to overlap the work of the manual arts department, but offers instruction in the repair, sharpening, care, and operation of farm tools and machinery, and the manufacture of things needed on the farm that are possible to manufacture in an ordinary shop such as might be found on any farm.

The department is equipped to do, and has done, work in tinning, plumbing, and pipe fitting; farm carpentry and blacksmithing; tool sharpening and repairing; gas engines; general repair of farm machinery; concrete work; and some electrical work.

Tillage tools and general farm carpentry and blacksmithing tools come in for the biggest share of work done, probably because they need it most; then hay harvesting and milking utensils and gas engines. The making of feed hoppers and other like articles shares quite a place in the minds of students in this community. Repairs on grain drills and seeders, potato planters, harrows, plows, wagons, discs and disc harrows, and the making of singletrees, doubletrees, eveners, wagon tongues and reaches, and various other things needed by parents of the boys in the classes have, in a single year, represented an investment of as high as $7,500 to the farmers. Water wheels and pumping plants, poultry and dairy barn equipment, have constituted a goodly share of the shop time of many of the boys.

Students furnish their own shop projects and materials except greases, oils, and blacksmith coal, and the shop tools.

Approximately 500 square yards of concrete walks have been put down by the department during the past four years. This is all the walks on the high school grounds, and the superintendent has asked the boys to hand in an estimate on the cost of putting in a concrete tennis court for the high school.

The farm shop work in connection with the agricultural instruction has become popular enough that farmers are asking for an evening school in the shop and will get one as soon as the new shop is in readiness. At present, the crowded quarters of the shop prevent such work.

Agriculture Teachers and County Agent Organize

C. H. NEITZKE, Teacher, Clear Lake, Wisconsin

THE county agricultural agent and the vocational agriculture instructors of Polk County, Wisconsin, their wives, and lady friends enjoyed a picnic at Lake Wapagasset, Amery, Wisconsin, on Sunday, August first. This was the eighth get-together of this kind for this group of workers.

It was a common belief that a more effective program of work, common to all, could be established and carried out in the county if this group would organize. They proceeded to do so, and an official organization was set up, which was named the "Polk County A T C A" composed of the county agent and eight teachers of agriculture.

(Continued on page 131)

Vocational Education in Agriculture, and Life's Values

ARETAS W. NOLAN, Teacher-Training, University of Illinois

IN THESE days every curriculum asking a place in the public schools is subjected to a searching scrutiny. What does it have to contribute to life's values? We shall have to state some of the generally accepted values of life, before we can proceed with this discussion.

A. W. Nolan

There are the economic values, dealing with the production, consumption, and conservation of goods, and with the earning, spending, and saving of money. There are the physical values, concerned with the body and its health. There are the recreational values, recognized everywhere as indispensible to health and happiness. There are the social values, in which people live together efficiently in various human relationships, as good citizens. There are the intellectual values, concerned primarily with knowledge, and with the acquiring of a world of ideas. There are the aesthetic values, dealing with the creation and appreciation of beauty. There are finally, the spiritual values, including attitudes of reverence toward God, and good-will toward man. Many of these values overlap and are often described in other terms. They will be more fully treated in the various sections of this article as agricultural education is brought into relation with them. An educated man is one alive to all true values.

We now raise the question again, "What has vocational education in agriculture to offer to life's values?" But first we must define vocational education in agriculture. This has been well done by a committee of the National Education Association: "Vocational education in agriculture (a) gives the skill and the knowledge necessary to the control of plant and animal production, to the end of economic profit and (b) is so articulated with other education as to promote the most desirable farm community life." The Smith-Hughes National Vocational Education Act says: "The purpose of such education is to fit for useful employment, for those who have entered upon, or who are preparing to enter upon, the work of the farm, or of the farm home."

In this discussion we shall consider education in agriculture to include the work in Nature-study; elementary agriculture in the public schools and in 4-H Club work; vocational agriculture in secondary schools; agriculture of collegiate grade; educational work in agriculture as carried on by farm organizations, the press, the radio; and all other agencies contributing to the education of the farmer in technical agriculture and its related subjects.

I. Economic Values

Since agriculture deals almost wholly with things having economic value, it is evident to all that education in vocational agriculture makes direct and positive contributions to economic values. The report of the state supervisor of agricultural education in Illinois for the year ending June 30, 1934, is an excellent example of the truth of the above statement. The net earnings of the projects of the farm boys studying agriculture in the high schools of the state for last year, was $240,000. The total reinbursement from Federal and State taxes for this form of education was $179,000. Here is a clear case of economic gain from an investment in agricultural education. The whole program of agricultural education deals with the scientific production, conservation, and distribution of agricultural resources, to the end of economic gain. An era lies just ahead in which the natural sciences, especially chemistry, will make possible a greater use of the organic raw materials of the farm in the industries. For that new day of agriculture, in which unheard-of economic values will appear, more education in agriculture and the related sciences will be the demand of the people.

To Teachers of Vocational Agriculture

The Agricultural Education Service of the Office of Education is in need of a large and continuous supply of pictures related to vocational agricultural instruction; instruction of day school, part-time, evening school and day-unit classes.

Action pictures are needed showing activity in supervised farm practice, group projects, demonstrations, F. F. A. activities, project and educational tours, farm shop work, and other forms of educational effort.

All pictures to be usable should be sharp and clear, *not* posed, should show activity, and carry a legend telling *who*, *when*, *where*, and *what*.

We will appreciate the cooperation of teachers of vocational agriculture in helping us meet this need.

J. A. LINKE,
Chief, Agricultural Education Service

It should be shown that all true education is an economic asset. Educated people require higher standards of living, this calls for the consumption of more goods, and this in turn stimulates business. Vocational education not only creates higher ideals and standards of living, but at the same time enables the beneficiaries of such education to create, with their own hands, the standards of living they desire. Agricultural education directly teaches how to earn, how to spend wisely, and how to save money. Thru this type of education lies economic security for millions of our people.

II. Physical Values

For a half a century or more the teaching of physiology and such hygiene as accompanied it in the elementary rural schools, had little effect upon the health and sanitation of rural life. It was not effectively related to life. Consequently we have such survey reports that the health in the open country is not up to the standard of that of the city. But with the introduction of agriculture into the curriculums of the rural schools, early in the present century, an improved situation in health and sanitation among the people is noted. This is not a coincidence either. There is, and has been, a definite contribution to rural health thru the study of scientific agriculture. Labor-saving machinery has lifted health-destroying burdens from the backs of the farmer and his wife. Sanitary house construction and equipment, a branch of agriculture, has added more healthful environments. When the farmer learns that cleanliness, sunshine, and other good sanitary measures are good for his cows, pigs, and poultry, it is an easy carry-over to provide these things for his home and family. When he learns in agriculture that a balanced ration is necessary for the health of his livestock, he must surely know that the same biological laws apply to human beings. Scientific agriculture makes for greater prosperity, and with this comes the ability and the desire on the part of the farmer to provide for the good health of his household. The fact that insurance companies accept the vocation of farming as a high-class risk merely confirms what is common knowledge, that life and work in the agricultural pursuits are conducive to physical health and well-being. Education in agriculture enhances this value.

III. Recreational Values

As has been shown, education in agriculture brings to the vocation economic values. With better economic conditions, the farmer is in a position to purchase or to provide home-made recreation for himself and family. Under improved agricultural conditions the farmer has more leisure time in which to enjoy recreation; furthermore, the work of scientific agriculture, in itself, is a pleasure.

Wherever and whenever agricultural education is carried on, whether in school or among farmers, there soon appear recreational activities. Fairs, pic-

nics, tours, dramatics, concerts, banquets, athletic contests, are among the recreational activities sponsored by 4-H Clubs, Future Farmers of America, Farm and Home Bureaus, Granges, and other agricultural groups. The primary interest of these groups is agricultural education, but naturally their relationships and progress have lead to the re-creation of rural life and brought to the farmer and his family a greater enjoyment than they ever had under older systems of education and farming.

IV. Social Values

Recreational values carry certain evident social values. The first essential of scientific agriculture in farming is the organization and co-operation of the farmer for improved practice and business. Education in agriculture leads directly into co-operation for buying and selling of the farmers' goods. Herein lies the gaining and exercising of social values. There must be getting together, giving and taking, and getting along successfully with people. Thru the New Deal in agriculture with its controlled production and necessary co-operation, such education in agriculture must be provided. Agricultural education on all levels has brought the people of the country together, working intelligently to improve conditions in the home, in the school, in politics, and in the church, as well as in the economic improvement of the vocation.

V. Intellectual Values

One of the best concepts of education is the idea of "growing." This is the idea of all life. The study of agriculture deals largely with living and growing things. The farmer, living intelligently among growing things, cannot himself escape growing, thus obtaining intellectual values. There is more to learn from "the clods in the valley to the cattle on a thousand hills" in agriculture than the best minds can ever compass. Agricultural education is not a narrowing culture. It leads the student into chemistry, physics, biology, geology, sociology, economics, business, mechanics, pathology, art, law and political science. Education in agriculture has opened the door to ever-widening vistas of learning and culture for thousands of men and boys who never would have profited by the rich intellectual values of life in this or other fields. Subject-matter has educational value when it relates to life's problems. It is evident that the subject-matter of vocational agriculture does relate to life's problems. Subject-matter deals with the creature-comforts of man, his food, clothing, and shelter; his physical environment and its control; and his use of all these related interests in creating for himself a satisfying life. Herein lies true educational value.

VI. Aesthetic Values

Human response to life with its colors, sounds, designs, and activities is natural. To appreciate an adequate expression of human emotion is to enjoy the beauty of art. Herein lies a great source of happiness. Rural life is entitled to this value, and one way of securing it is thru agricultural education. The art of landscape gardening, taught in agricultural courses, provides this aesthetic value. "To be able to produce and to appreciate any one form of art will lead to a greater appreciation of all other arts, and thus open an avenue to larger joys in living."[1]

A well-kept farm with good architecture at the homestead and good livestock grazing in the pastures, adds beauty to the landscape and contributes to the aesthetic culture of the farmer and his family. When scientific agriculture results in greater economy of time and means, then men and women will have more heart and ability to produce and appreciate not only the landscape art but other fine arts such as music, painting, architecture, and literature.

VII. Spiritual Values

Spiritual values in human life refer to the emotions of love and good-will toward God and man. A constructive spiritual philosophy teaches a purposeful Universe and social justice. There is chaos in a life that does not have such philosophy. Now education in agriculture has contributions to make to these spiritual values. Living intelligently as the scientific farmer does amidst the natural forces of the Universe, he develops a reverence for God. From the shepherds on the Judean hills to the modern farmers of the twentieth century, agriculture has always looked up toward the heavens as well as down toward the soil.

"The conservation of all things of real worth, whether material or spiritual, is possible only when the moral standards of men are high and progressive. There can be no permanent agriculture without the spirit of Christendom, as there can be no Christendom without a permanent agriculture."[2] Good teaching of agriculture results in a spirit of service for the common good. Such ideals as permanent soil fertility, improved plants and animals, preserved forests, better roads and rural institutions, for the benefit not only of the present generation but for the future as well, grow out of agricultural education, and these are of spititual value in social welfare. No small factor contributing to the moral training of farm youth is the work of caring for plants and animals and the association with life and its realities in the open country. Furthermore, education in agriculture teaches good sportsmanship in square dealing with our fellow men.

Any subject contributing so much to life's values, as agriculture in its various branches, surely merits a welcome place among the curriculums of our public schools.

1. *The Teaching of Agriculture*, Nolan, Houghton Mifflin Company.
2. Ibid.
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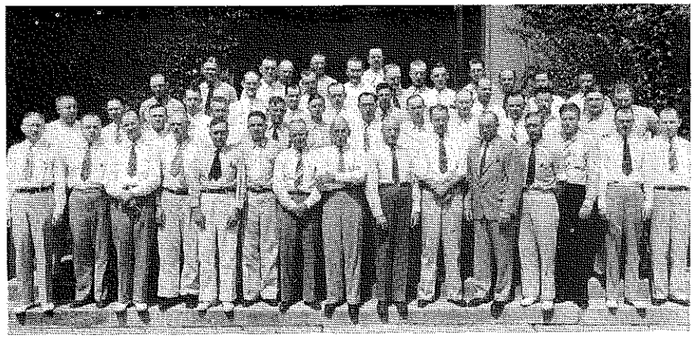


Ten-Year Indiana Vocational Agriculture Teachers

Agricultural Inspection as an Agricultural Career

W. E. COURT, Instructor,
San Luis Obispo, California

IN MANY of the Smith-Hughes agricultural departments thruout the nation we have a rather new plan being used for the basis of the beginning agricultural course. This plan is the study of the different enterprises or carcers offered to students studying agriculture. A new career that might be added to the list is the one of agricultural inspection.

While California is an unusual agricultural state in that it produces many specialty crops and there is an unusual demand for agricultural inspectors in the State of California, it is not unreasonable to suppose, that with the increasing of Federal and state regulations of private endeavors, that there will be an increase in other parts of the nation for agricultural inspectors. This article will be limited to agricultural inspection as found in California and will also be limited to plant crops.

The agricultural inspectors in California may be employed by Federal, state, or county agencies.

Men working on a Federal basis are those who have to do with the inspection of agricultural crops that are sold on a Federal grade basis. It is the purpose of the service to definitely label a car of produce as to its quality so that this quality will be recognized over the United States. Thus, a man in New York buying a car of No. 1 lettuce in California knows without coming to California that he is going to get a product of a definite quality.

Agricultural inspectors operating on a state basis in California are those who have to do with the enforcing of state laws in regard to quality and agricultural procedure. The principal functions that they have to do may be listed as follows:

The inspection of fruit, nuts, vegetables, honey, and eggs for quality and honesty of pack.

The inspection of fertilizers, feeds, economic poisons, and spraying residues.

Plant quarantine, wheat and rodent control, and the inspection of nursery stock.

The grading of coarse grains, hay, beans, and rice, and the registration of bonded warehouses.

Assistance in disease and pest control.

The work that the men do who are working on the county basis is very similar to that of those on a state basis. Each county has an agricultural commissioner whose duty it is to enforce the state laws and the county laws in regard to agricultural inspection. The state men enforce the state rules and regulations; the county men enforce the county rules and regulations. The greatest number of men are probably employed by the counties. They are also the ones who actually make most of the contacts with the growers and producers.

In the above list of duties I have not included all the lesser functions and activities in which these men engage, but only those that are most important and those that engage the greatest number of agricultural inspectors.

Now it might be of interest to know something about the type of man needed to fulfill a position of this type, something of the training, and the opportunities for advancement.

Most men who fulfill agricultural inspectors' jobs are policemen. They have the power of a peace officer. And it is necessary that they have the ability to meet people, to tell them of the agricultural laws, and make them live up to them without creating a lot of hard feelings. The good inspector uses his police powers just as little as possible. An agricultural inspector must have an abundance of tact.

Usually a boy with a high-school education, one who has had some experience in the particular field into which he wishes to go (for example, if it is the standardization of fruit, it would include experience in packing sheds) and studies on the side, it is possible for him to pass an examination, which will allow him to enter the standardization service. It is to be understood that all agricultural inspectors in California are operating on a civil service basis. Agricultural college graduates go into this work and often with a little studying they pass the civil service examinations.

It seems as if there might be an opportunity for Smith-Hughes agriculture teachers to teach more of the agricultural inspection laws. This is good information for the future farmer and boys who are interested in becoming agricultural inspectors. They will have an idea of the program and requirements and may even be able to pass some of these examinations thru their high school experience.

Now, something as to the opportunities that agricultural inspection offers. First, it is very probable that there is going to be more demand for agricultural inspectors in the future instead of less. This is true because it seems as if we are living in a period of more and more state and Federal regulations of activities for the betterment of farmers. Second, the salaries paid at the present time are usually rather desirable, averaging in California from $120 to $200 a month. Third, there is an excellent opportunity for a student to gain first-hand practical information as to the quality of products. This information, coupled with the right type of personality, will make a boy an excellent buyer or seller of farm products, and very often many of the agricultural inspectors change their occupation when they have made the necessary connections, to go into business as producers or sellers of agricultural commodities. It must be noted that there is one drawback to this particular type of life because it is necessary for an agricultural inspector, particularly at the beginning of his work, to travel from place to place as the crop or the season demands. So we have somewhat of an undesirable situation in that these men must be moved from time to time. For a young man who is not married, this is undoubtedly an excellent experience.

In California we have a number of Future Farmer boys who have gone into agricultural inspection work and have a greater number who are preparing to enter that service when they leave high school. It does not seem unreasonable that in other states we are going to have a similar increase in interest in this rather new career.

Jersey Film Strip Available

A NEW strip film, entitled "Facts about Jerseys and the Jersey Breed Improvement Program" that has been designed especially for the benefit of groups interested in the study of Jerseys and Jersey breed history, is now available. Beginning with the origin and early history of the breed on the Island of Jersey, this film traces the progress of Jerseys during the last two centuries, and outlines the program that has been formulated for the advancement of the breed in this country. The first ten frames deal with the early development of Jerseys on the Island and contain many points of interest about the Island itself. The next four frames present, chronologically, the important policies that have been adopted by The American Jersey Cattle Club since its organization in 1868. Other frames give photographs of typical individuals and explain the production testing system, Jersey creamline milk marketing program, etc. The film is 35 mm. in width, adapted to strip film projectors, and may be purchased at the cost price of 25c per film from the American Jersey Cattle Club, 324 West Twenty-Third Street, New York, New York.

Field Study of Farmers

C. C. HADLEY, Instructor,
Noblesville, Indiana

I HAVE contacted local Hamilton County farmers who are doing a practical, successful job of farming and started in farming on a basis which any young farmer can duplicate today. Fortunately, most of these farmers have been recognized in a state or national way for their abilities. In class, the boys develop questions which they want to ask the particular farmer about his farm operations and how he operates his business. I run these off on a ditto machine, and after sufficient preliminary study to acquaint the boys with general practices, we make the trip, and the farmer, whom we find out among his dairy cows or hogs, etc., answers the questions and gives his ideas of his methods of operation. The boys have stated they are the most interesting and The farmers have been impressed by the earnestness of the boys in vocational agriculture work, and I am sure they are 100 percent for the work.

I have found that the boys could not quite believe the statement of the farmer as they tend to do when they read about recommended practices in good references, but when the farmer stood by the side of the cow and said, "This cow made me $265.75 above feed cost last year," and had the record in his pocket to give them other like information on any of his cows, they really believed and remembered. I also have considerable fun watching the boys as they realize that this farmer is telling them plain facts about his business.

Progress by Honest Effort

FRANK H. SHIRLEY, Instructor,
Osgood, Indiana

I AM relating to you what I feel has been the greatest accomplishment achieved during the year. The work has been very slow but improvement has been noted—one boy has added a mule to his stable and now is making doubletrees in farm shop so that he can hitch the mule with the horse.

Going into a locality in which the people were somewhat backward about accepting new educational ideas, the greatest problem confronted was that of promotion of the department. The boys in the classes proved to be able supporters and consequently made promotional work much easier. However, complete co-operation with a very efficient local newspaper existed, and the publishing of the four-year course given to agriculture students, arranged seasonally, seemed to place the department before community discussion and criticism, and eventually a favorable spirit prevailed in regard to the new department, which has now been accepted thruout the community.

Teachers and Agent Organize

(Continued from page 128)

The primary purpose of this organization is to better serve the agricultural interests of Polk County. Meetings will be held every four to six weeks in the various communities in the county where the members live. At these meetings the agricultural needs of these communities and the county as a whole will be discussed and then a program of activities for meeting these needs will be planned. It is hoped by all the members that the purpose set up will be realized.

The first activity to be sponsored by the new organization is a county wide Prairie Farmer-Home Talent Show. A special meeting was called on August fifth to make preliminary arrangements for holding the show at three places. The proceeds will be divided equally among the Future Farmers of America chapters in the county.

V. G. MARTIN

Farmer Classes

J. B. McCLELLAND

Ten Years in Evening Classes

L. E. PETTYJOHN, Instructor,
Whaleyville, Virginia

ON August 1st, 1926, a new instructor of vocational agriculture came to Whaleyville, to assume his duties in the high school. The department had been in existence two years but was still in an embryonic condition. An effort had been made to start an evening class but with very little success. The new instructor, born and reared in Illinois but just graduated from Virginia Polytechnic Institute, had his first sight of the Tidewater area and its agricultural problems.

The first step was the formation of an advisory board. A leading farmer of each of the five sections comprising the Whaleyville School District, together with the county superintendent of schools, the principal, the cashier of the local bank, and the member of the county board of supervisors, from Whaleyville, made up the advisory board. Several meetings were held that fall to formulate a program, outline the principal needs, and select those problems to be taken up in evening class. The local school board member, being the local doctor, was of great assistance to the program in that he talked the new program to every patient he had and probably had more to do with the attendance the first year than any person. Each farmer agreed to get the farmers of his section to come out. It was agreed that the board would get the farmers to come and if they did not continue, it would be the instructor's problem.

Whaleyville is in the heart of the Jumbo peanut belt and because of the peanuts, grew a great many hogs. There were no pastures, the farmers depending upon wood forage to raise the summer pigs, with corn, allowing 15 to 18 months for a pig to become large enough to kill. The first evening class therefore used seven meetings discussing hogs, breeds, sanitation, pastures, etc. Four lessons were taught on corn production, fertilizers, varieties, cultivation, etc. One lesson was devoted to peanut production. During that winter, one of the hog lessons was on tuberculosis of hogs and cattle. So much interest was manifested that the following year the board of supervisors passed a ruling that every cow in Nansemond County should be tested for tuberculosis. During that winter 53 farmers attended three or more meetings and carried out two or more practices that were taught.

During the months of January, February, and March of each year, the farmers look upon Wednesday night as meeting night and come out to the agricultural room. Ninety-three percent of the farmers in the Whaleyville district have become affiliated with the evening class and if at all possible are attending the meetings. The enrollment has steadily grown each year until 99 farmers attended three or more meetings in 1936. So far in 1937 the room has been more than crowded every night. There are seats in the room for 92 farmers and many have been forced to stand up every night this year. It has rained or snowed every meeting night except two, so far this season.

When the class started in 1926, the sowing of fall oats or rye was almost never done. Only one man had planted any crimson clover, and red clover was supposed not to grow in the Tidewater section. Last fall the co-operative purchasing committee of the evening class group, purchased enough rye to plant 142 acres, fall oats for 144 acres, crimson clover for 252 acres, red clover for 25 acres. So far this spring the purchasing committee has secured 508 bushels of seed potatoes for 67 farmers, 505 bushels of spring oats have been purchased for 61 farmers, 223 bushels of soybeans have been purchased for 73 farmers. Orders are now being taken for dolomitic limestone. Last year 447 tons of this product was purchased from the state lime grinding plant, at Staunton, Virginia for the members. When this class started, the lime that was used was some form of oyster shell lime, supplying some calcium but no magnesium.

All our soils are practically without magnesium, which is very necessary for the proper production of peanuts. In 1927, three cars of the limestone were tried out in the community and in every case produced more and better peanuts. Since that time the orders for dolomitic limestone have increased rapidly, not only making greater returns for the users but also costs nearly three dollars per ton less than any form of shell lime.

In the winter of 1925, we discussed riding cultivators, with surface type of cultivation. Fifteen farmers agreed to permit a riding cultivator to be demonstrated on their farms. The instructor secured the loan of a cultivator from a hardware concern in Suffolk, carried it behind his Ford from farm to farm. Most of the farmers had never seen such an instrument and two men who had agreed for demonstrations, refused to permit the machine on their farms. However, one farmer purchased the machine and used it and liked it. Since that time the number has grown to 16 cultivators in this district. One year six machines were purchased co-operatively at a saving of nearly $20 per machine. Fertilizer hoppers are now used on the machines and fertilizer is placed in the furrow, ridged upon with two disk blades, drug down with a railroad iron on the back shanks, and one man fastens his planter to the cross bar of the cultivator, walks behind the planter and drives, doing the entire job of fertilizing, ridging, dragging off, and planting, each time he crosses the field. This is done with corn, cotton, soybeans, and peanuts.

During the past two years much interest has been manifested in soil testing. During 1935, 107 fields were tested and limed, or fertilized, according to the needs as shown by the soil test. The results were secured and analyzed during the evening classes of 1936, with a result that 285 fields were so handled during 1936.

It has been more or less a common practice in this section to raise peanuts on a two-year rotation, resulting in the land becoming poorer all the time. In 1934 the Chilean Nitrate of Soda people agreed to help conduct two field tests of proper fertilizers and proper rotations. Each test field comprises four acres, 1½ acres on each side and 1 acre in the middle used as a check plot. The farmer conducts the one-acre plot as he does the balance of his farm, growing the same crop as is grown on the test acres. The farmer uses the kind of fertilizer in the amounts specified by the agricultural instructor and cultivates the test acres according to the recommended practices. During 1936 cotton was grown and the test acres were showing the effects of the proper fertilization, cover crops to such an extent that not only evening school members attended the field day meeting at the testing plot but farmers from all sections of the county were there. Each summer a field day is held at the test plots and the farmers come, see, ask questions, go home, and put into practice what they have learned. The test plots are running on a three-year basis on one half of the land and a two-year rotation is used on the other half. The proper fertilizer is mixed at school as recommended by the state experiment station, at Holland, Virginia, ten miles from here. After corn we plant rye, and crimson clover is sown in the cotton. The check acre in the middle receives no cover crop and is fertilized the same as the owner fertilizes the same crop on the balance of his farm.

During 1935, 19 farmers treated their seed corn with a mercuric product before planting. That fall each field was tested by the instructor. The treated seed showed an increased yield from 2 to 11 bushels per acre, with an average increase of a little over six bushels per acre. In 1936, 504 acres of seed corn were treated by members before planting.

During 1936, eleven members treated a part of their cotton seed before planting and picked the experimental rows and adjoining rows, separately. This practice showed over 200 pounds of seed cotton per acre increase. The results of this practice will be submitted to the members during the classes and orders taken for powder to treat seed with this year. The cost of treating corn, when purchased in large quantities, is less than two cents per acre and less than three cents per acre for cotton.

During 1936, three farmers tried out a new idea of spraying peanuts. Mr. E.

(Continued on page 138)

My First Part-Time School

LEO FITZPATRICK, Instructor,
Carroll, Iowa

THE vocational agriculture department of Carroll, Iowa, conducted its first part-time school during the past winter. Twenty weekly meetings were held, beginning on the first Monday in November and continuing each Monday, excepting Christmas week, until March 22. In addition to the regular meetings the part-time group held two dances and went on a tour to study a series of soil conservation projects.

Attendance

The average attendance at the meetings was 54. Seventy-four men attended five or more of the meetings, and 39 were present 75 percent of the time. Ten of these men attended all 20 meetings, three attended 19, nine attended 18, four attended 17, eight attended 16, and five attended 15. The men traveled an average distance of 6.5 miles to school. The distance ranged from one-half to 14 miles. Nine townships were represented by the group. The boys alternated at driving and in most cases several boys came in one car.

Age and Previous Training

The young men attending the Carroll part-time school averaged 19 years of age. The range in age was 16 to 22 years with the following distribution: five boys were 16 years old; 10 boys 17; 12 boys 18; 17 boys 19; 15 boys 20; 12 boys 21; and three young men were 22 years of age.

One-fourth of this group of men were high school graduates and one-fifth of the number had had 4-H Club training. Forty-seven percent of the members had been reached by high school training or 4-H work, or both, and 53 percent had not been reached by supervised training or guidance since their elementary education. None of the group were enrolled in high school during the past year.

Nature of Meetings

Twelve of the 20 meetings were devoted to the study of farm management, and eight meetings were devoted to studying soil conservation. The sessions continued from 8:00 to 10:00 p. m. Recreation consumed the last half hour of each session.

Questions to be discussed were handed out previously and the procedure followed at each meeting was of a semi-discussion nature. Five examinations were given during the course. No fee was asked of the men attending.

The vocational agriculture instructor conducted 16 of the meetings, the county agent conducted one, and extension men had charge of the remaining three. The group plans to meet each month during the summer.

Recreational Features

Recreation and social functions were provided by committees chosen by the group. The social committee arranged two dances and the recreation committee provided entertainment and recreation at the close of the meetings.

The recreation consisted of: games—two nights; entertainment by members of high school band—one night; amateur contests in which members of the group took part—four nights (these contests consisted of singing, instrumental numbers, novelty numbers, etc.); Christmas program—one night; intergroup basketball—six nights; entertainment —two nights; entertainment by high school vocal groups—two nights.

Continuity Aspect

The vocational agriculture department at Carroll plans to consider four years of part-time work a complete course. The group attending will be a continuous body. Different subject matter will be offered each year. When members satisfactorily complete four years, they will be issued a diploma.

Eligibility for a diploma will be determined by attendance, examination grades, supervised practice, etc.

The group voted to study swine and beef cattle next year. The group was almost evenly divided between these two topics, and we are making plans to study both of them. I believe the fact that there was a marked difference of opinion regarding the topic to study was the chief reason a majority of the group voted in favor of studying two topics instead of concentrating on one—in the questionnaire included in this article.

Supervised Practice

Forty-eight young men have enrolled for supervised practice work. Several of this number have more than one enterprise. The table below lists the projects, scope, and numbers of boys participating.

SUPERVISED PRACTICE SELECTED BY CARROLL PART-TIME GROUP

PRODUCTIVE PROJECTS			IMPROVEMENT PROJECTS		
Type	Scope	Boys Enrolled	Type	Scope	Boys Enrolled
Beef calves	19	9	Farm records	2320A	15
Swine	25	13	Rearrange rotations	160A	1
Ewes	10	2	Apply limestone	50A	4
Colts	2	1	Test for acidity	80A	2
Corn	35A	½ 2	Erosion control	90A	4
			Manure management	1565T	11
			Hog lot sanitation	21 Litters	2
			Pasture improvement	120A	5

Reaction of Members

The average grade of the entire group for the five tests was 83 percent. The members who had finished high school had an average of 86.6 percent and the non-high school group averaged 81.5 percent.

At one of the last sessions of the school, the group filled out a questionnaire pertaining to their attitude towards part-time schools, the type of meetings they preferred, and similar questions. Fifty-nine men were present at the meeting. The results of the questionnaire follow:

Question	Reply	
1. Will you be interested in a part-time school next year?	Yes	58
	No	0
	Blank	1
2. Do you recommend starting the meetings earlier next fall to avoid cold weather, drifts, etc.?	Yes	29
	No	28
3. Do you prefer two meetings per week—over a shorter period?	Yes	15
	No	43
4. Do you recommend studying one topic more thoroly next year, instead of two as we did this year?	Yes	14
	No	45
5. Which type of meeting do you prefer: (1) questions handed out followed a week later by a discussion—lecture furnished to be studied during the week followed by a recitation—discussion procedure?	First Method	39
	Second Method	18
6. How many outside speakers do you recommend—same as this year, more, or fewer?	Same number	35
	More	23
	Fewer	0
7. Will you be willing to pay a small fee next year to offset the cost of lights, heat, printing material, etc.?	Yes	59
	No	0
8. What fee do you think about right?	$1	32
	2	16
	3	5
	5	4
	?	2
9. Which had the greatest influence in causing you to attend the meetings this year—educational value or the recreational features?	Educational value	28
	Both	28
	Recreational	3
10. Are you in favor of meeting once monthly during the summer?	Yes	44
	No	12
	Blank	3

Organization of School

In organizing the school the vocational agriculture instructor, aided by the agriculture classes, selected ten key men living different directions from town to be his advisory council. He met with this group, explained the nature of the proposed part-time school, received suggestions from them regarding topics to cover, the best night to hold meetings etc., and asked them to make a list of four or five young men in their neighborhood whom they thought would be interested in this type of school.

Each councilman agreed to contact the neighbor boys he suggested, explain the work to them, and determine whether they were interested. The councilmen further agreed to inquire of their prospects the night they would rather meet and the subject matter in which they were most interested.

The council reassembled a week later to report their findings. The second meeting disclosed that 40 young men in addition to the ten councilmen were quite interested in a part-time school, that they preferred Monday night, and that their interest was quite evenly divided between farm management and soil conservation. Monday night and the above two topics were selected.

The instructor sent a circular follow-up letter to each of the prospects, and the regular meetings started two weeks after the second council meeting with an attendance of 51 men at the first meeting.

Theory without practice is idle speculation, and practice without theory is mere mechanism.—*White.*

L. B. POLLOM

Farm Mechanics

Farm Shop Contest in West Virginia

Dr. F. D. CORNELL, Jr., In Charge of Farm Mechanics,
West Virginia University, Morgantown

A FARM shop contest for vocational agriculture pupils has been held annually for the past several years in connection with the Junior Farmers' Week program at West Virginia University. This contest is a part of the whole program which is carried out in three days, and includes livestock, dairy, poultry, horticulture, agronomy, and plant pathology judging contests. The farm shop contest has been varied from year to year in order to prevent duplication, thus giving each school equal opportunity in the contest and preventing any advantages to accrue due to the fact that some instructors have had several years of experience in preparing contestants for these contests and have knowledge of the work that has been done previously.

Since the inception of this contest, each school has been represented by a single individual. During the first two years this was the only restriction placed on entry in the contest. However, it was found that a few instructors entered boys in the contest who had received no farm shop instruction but who they felt possessed mechanical ability and might stand a chance of winning.

Altho no such entry ever became a serious contender for the cup and medals, it was felt advisable to limit entry to those who had received at least one year of instruction in farm shop work. Also, no person having once competed in the contest may be entered a second time.

All shop contests held thus far have been divided into two main parts; one consisting of a problem in the farm shop to be worked out by the boy with tools, the second part being made up of some other phase of work, such as reading drawings, making drawings, tool identification, etc. By arranging the contest in this way it was felt that a better balanced contest could be held, and that natural mechanical aptitude and skill would not be the chief deciding factor. Perhaps this explains why contestants possessing some skill with tools, but having had no instruction in the farm shop, failed to be serious contenders for honors in the early years of the contest. It also helps to explain to some instructors why their representatives do not make a better showing. For example, this fall in our contest each boy was given a working drawing of the simple job he was to complete in the shop. Some of the boys who apparently were fairly adept at handling the tools could not read the drawing and could not figure out what to do without watching someone else.

A score sheet checking each contestant on each phase of the operation showed all these defects so that the boy's score was not determined by the job after he was thru, but by what he did and how he did it from beginning to end. Also, some of these same boys fell down badly on the other phases of the contest where head work and not hand work was required.

It has been felt that by organizing the contest in this way, the advantage some individuals might possess due to natural mechanical aptitude would be minimized, and each would have a fair chance of winning. Results have shown that those well-grounded in the essentails, both of farm shop information and manual skills, were the ones who finished at the top.

If one might draw any conclusion as to farm shop instruction from the experience of several years with these contests, it would be that instructors are too prone to turn the boys loose in the shop and let them work out something or other without developing and following a definite planned method of shop instruction. Perhaps the lack of ability of some to read one of the simplest of drawings, as already cited, may illustrate the point. Or, we have found many who can use a plane but if given the parts of a plane cannot reassemble it; as simple and fundamental a bit of knowledge as that is. These same boys probably could not sharpen one to save their souls.

Lest I give a faulty impression of shop instruction in the state, let me hasten to say that the examples I have cited are extremes, of course. I use them merely to emphasize a point and not to portray a general situation. I believe the competition each year has become closer and keener, indicating that there has been improvement in general shop instruction. We hope this is true—that is one of the objectives which it is hoped such contests will achieve.

I have mentioned that this year Part I of the contest was a simple woodworking problem in the shop. Another part (see Part II below) of the contest consisted of answering a series of questions on a simple drawing, a copy of which was supplied to each boy.

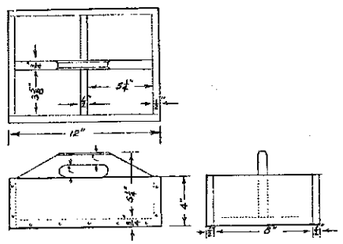
The third part given this year for the first time was a true-false quiz, testing a general knowledge of shop information.

The attempt was made to choose questions to which a fairly thoro bit of instruction in the farm shop would have provided the answer. In some cases a little sound reasoning would be all that was required. Only one contestant got three fourths of the answers correct. The rest ranged from this percentage to one who missed about two thirds of the questions.

It was an interesting and revealing innovation in our contest. Strangely enough, however, the contest this year called forth not a single complaint from coaches.

The list of questions referred to above is presented here as a matter of information. Although this is the first word and not the last in an attempt of this sort by us in our contest, it may prove of value in stimulating more definite shop instruction. We may never use the device again. However, I believe that this time it worked. Those boys are still wanting to know the answers to those questions, and I have a pretty strong suspicion that they are going to find out. Did we tell them? Certainly not. Here they are:

Part II



Answer the following questions on the above drawing in the space provided.

1. How long is the box?.....
2. How wide is the box?.....
3. How deep is the box inside?.....
4. Give length, width, and thickness of piece for the bottom.....
5. Give length, width, and thickness of lengthwise center partition.....
6. What size would you cut the end pieces?.....
7. What size would you cut the side pieces?.....
8. The interior of the box is divided into four equal cavities ....inches wide by....inches long by .....inches deep.
9. How long, wide, and thick are the pieces used as crosswise partitions? .....

Part III

Mark T before those statements which are true.

Mark F before those statements which are false.

.. 1. The chief difference between a rip saw and a cross-cut saw is the size of the teeth.
.. 2. A hack saw is used for cutting metal.
.. 3. The Jack plane has only two adjustments.
.. 4. The *blade* of a steel square is 24 inches long.
.. 5. A T-bevel is used for planing chamfers on boards.
.. 6. A marking gauge is used primarily by cabinet makers for setting hinges.
.. 7. A working drawing is composed of three views: top, end, and cross-section.
.. 8. The purpose of setting a saw is to permit each tooth to do a maximum of cutting.
.. 9. An oak plank 3″ x 6″ x 10′ contains 15 board feet.
..10. A counter sink is used for setting the heads of stove bolts.
..11. Each tooth in a rip saw is filed exactly like the one next to it on either side.
..12. Drills are sharpened with a special auger bit file.
..13. Some steel squares contain tables for aid in calculating board feet, length of rafters, and length of braces.
..14. The sweep of a brace is the overall length from head to chuck.
..15. A 1″ firmer chisel is longer than a 1″ butt chisel.
..16. All firmer chisels have beveled edges.
..17. A cold chisel is used for cutting metal only.
..18. Chisels are obtainable in a variety of sizes from ⅛″ to 2″.
..19. A plane iron is the main frame of the tool which holds the cutting parts.
..20. A number 10 screw is heavier than a number 8 of the same kind and length.
..21. A four-penny fine common nail has no head and is used in finishing fine cabinet work.
..22. Ninety-five board feet of lumber at $45 per thousand will cost $40.50.
..23. One square of roofing will cover 100 square feet.
..24. A tank 72″ wide and 48″ deep must be 15′ long to hold 360 cu. ft. of water.
..25. A tank 6′ x 4′ x 15′ will hold more than 2,000 gallons of water (231 cu. in.=1 gal.)
..26. Carriage bolts are seldom used by carpenters any more.
..27. In sanding wood for finishing, it should always be sanded with the grain.
..28. A flux is an ingredient used in making concrete.
..29. Concrete comes in bags weighing approximately 94 pounds.
..30. A soldering iron is made of copper.
..31. A machinists punch and a center punch are one and the same thing.
..32. Kiln-dried lumber is preferable to air-dried lumber for outside construction.
..33. The best time to joint a saw is before filing.
..34. Solder is an alloy of lead and tin.
..35. "Butts" are used in hanging doors.

For those questions you have marked "false" prepare a statement which is correct and number it just as the one under consideration. For example, if question 6 had happened to be: "*F* 6. Block planes are larger than smoothing planes but are used for the same purpose." You would have marked it "false" and below would state: 6. Block planes are smaller than smoothing planes and are designed for an entirely different purpose.

In closing, let me say that when the contestants come to us we know them only by a number they wear. We have no key to the numbers. They are graded and the grades turned in opposite that number. We find out who wins when we open the envelope and give the cups and medals away. Thus there is no chance for any accusation as to favoritism of any kind. The boys are all strangers to us. However, we hope they all leave our friends—win, lose, or draw.

PROFESSOR M. A. Sharp has become head of the Department of Agricultural Engineering at the University of Tennessee, Knoxville, Tennessee. This is a fine promotion which has been well earned. Professor Sharp made an important contribution to the Iowa program of vocational education in agriculture. He was one of the first men in the United States to be assigned the responsibility of preparing teachers of agriculture for their farm mechanics responsibilities. He has been regarded as one of the very outstanding men in his field for many years. His books are widely used. Readers of *The Agricultural Education Magazine* appreciate the past contributions which he has made to the magazine. They wish him well in his new position.

Making Butcher Knives

FRANKLIN DOLLY, Teacher,
Fullerton, Nebraska

I HAVE given this phase of metal work more attention this year than ever before, and much enthusiasm and interest have been manifested by the boys with excellent results.

To begin with, I am going to discuss the kind of materials desirable for this type of work. For butcher knives a boy can select from home an old worn out flat steel file, the size depending upon the size of knife desired. The following steps are necessary in making the knife:

First, take the file and grind both sides and edges on an emery wheel, enough so that the sharp edges are gone, otherwise these marks will pound into the metal and be plainly seen after the file is drawn out. Second, heat the file in the forge fire to a cherry red color, drawing the file out by pounding on both sides with a heavy hammer, being careful to re-heat whenever the cherry-red color disappears and also striking the file with direct, sharp blows so as not to cause unnecessary hammer marks. Draw the file out to approximately a sixteenth of an inch thickness thruout its length, keeping the file straight and not curved.

Since plans or blueprints of knives seem to be rather hard to secure, we have used patterns, shaped from actual knives the boys have obtained from home and found them to be successful, laying the pattern on the drawn-out file and marking out with a chisel. The file is then heated and cut out with a hot chisel according to desired shape. Be careful to caution the boys not to get their knives too hot or pound them when too cold, as there is danger of the material cracking or breaking. After the knife has been cut out, straighten it out on the anvil and then grind on emery wheel somewhat until sides and edges are smooth.

The next step before tempering is to mark the holes for the rivets in the handle with a center punch and drill the holes with a ¼″ bit. Thru the advice of Mr. Runnals of the forge department of the agricultural college, we have been using the aluminum wire ¼″ to an advantage.

forge and tempered. This is one of the most important steps. We have had excellent success with oil tempering. We made a tempering vat out of a 2″x8″ piece of fir, approximately two feet long. On one edge, take a ¾″ chisel and chisel out a furrow, approximately 15″–18″ long and 1½″ deep.

Fill the vat about three-fourths full of linseed oil. Heat the knife to a dull red color, plunge the cutting edge into the vat and leave until cool. The effect of oil on the knife tempers it to a hard but tough edge, desired on a good knife. To temper with water, would cause the knife to be too brittle. Only the lower fourth or half of the knife need be immersed in oil to be tempered. To test for proper temper, rub a file across the tempered portion and if it causes a grating noise and does not mark it, the knife is tempered properly. Grind the knife and polish it before fitting the handle and inserting the rivets.

The procedure for making meat cleavers is approximately the same, except that broken truck springs are used instead of files, and of course, they need not be drawn out nearly as thin as for knives.

These two projects in our shop are by no means the major articles which are made. This is mainly an exercise for advanced students in shop work who have had the preliminary exercises of bending, drawing, upsetting, and tempering.

I feel that we, as instructors in agriculture, can encourage boys to make quite a few of their things from materials which they can obtain from home or elsewhere at little or no cost, and if properly supervised and planned out, can be converted into worth-while projects, which might help advertise our shop and receive enthusiasm from the boys' parents.

Trying Out Drouth Resistant Crops

GERALD KROEGER, Teacher,
Newman Grove, Nebraska

WE PLAN an experimental field of 10 acres in which we will have a variety of crops. The objective of the plan is to see what drouth resistant crops will do in the area and to determine, if possible, the advisability of growing sorghum in this community. Hybrid corn will be given a tryout along side of common varieties. This project, under F. F. A. sponsorship, will not be finished until next fall.

In a cursory survey made among the boys in class we found very few farmers in this area growing a drouth resistant forage crop for feed.

We have enough boys living close to town that will take care of all the field work and we have several boys from town whose job will be to observe and make a complete record during the summer of the work on the plot. Last year's crops here were a total failure. We believe by growing demonstration crops the farmers will have a chance to see how these drouth resistant crops will grow. We believe the enterprise will carry interest and commercial value. Profits from the sale of products will be turned into our F. F. A. treasury.

Studies and Investigations

E. C. MAGILL E. R. ALEXANDER

A Suggested Technique for Constructing Tests in Vocational Agriculture

O. C. ADERHOLD, Teacher-Training,
Athens, Georgia
and
G. F. EKSTROM, State Supervisor,
Des Moines, Iowa

ONE of the major problems that confronts instructors of vocational agriculture is that of evaluating their teaching. This is essential as a basis for diagnosing student needs; as an indication of points to be emphasized in teaching, and, under the present type of school organization, as a basis for grading.

While many types of tests have been formulated for evaluating instruction in vocational agriculture, most of them are concerned only with measuring facts. Teachers of vocational agriculture are aware that these types of tests have not measured progress toward the major purposes for which their programs are intended. Agricultural education is tremendously concerned with measuring other outcomes from teaching in addition to the mere accumulation of factual information.

Dr. R. W. Tyler has developed a technique for evaluating other changes in student behavior. This article is an illustration of his techinque applied to agricultural education.

Setting Up Objectives

The first step in the evaluation of results from agricultural instruction is that of setting up objectives. These should consist of (1) general objectives for the entire program of the department, (2) objectives for the given courses or age groups, and (3) specific objectives for the several units being taught.

In this paper only the specific objectives for an illustrative unit, that of landscaping the farm home of the high school vocational agriculture pupils, are shown. A suggestive list of objectives for this unit are:

A. To interest young farmers in making the farm a more enjoyable place in which to live.

B. To acquaint students with the information needed to make and execute a landscaping plan.

C. To teach students the skills required in making and executing a landscaping plan.

D. To teach students how to apply landscaping principles to home situations.

E. To teach students how to care for the materials and grounds after landscaping.

F. To acquaint students with sources of information and how to obtain information from these sources.

G. To make for a better appreciation of trees, shrubs, lawns, and flowers.

H. To improve the intrinsic value of the home surroundings.

Analyzing and Organizing Instructional Material

After the teacher has formulated the specific objectives of the unit, the next step is the analysis and organization of appropriate and functional material to use in developing the desired abilities of the students. This analysis should show specifically: (1) the decisions to be made, (2) the factors to be used as a guide in arriving at the decisions, and (3) the pertinent information essential to the sound solution of problems.

Since it is impractical to illustrate tests for the evaluation of all these objectives, four from this list have been selected, namely: (A) Information and technical terminology, (B) reasoning, (C) location of relevant data, and (D) skills.

Evaluation

In constructing tests for evaluation following the instruction, the teacher should sample the content of the unit and the behavior of students in the light of the objectives previously established. Below are samples of tests for evaluating behavior as they relate to the four designated objectives.

A. Information and technical terminology

1. Familiarity with factors which must be taken into account in making decisions in setting up a landscaping plan. The objective here stated is in terms of both human behavior and content to be covered. It may be more specifically defined as the ability to recognize and use factors which are important in making decisions about landscaping.

Directions:

Below are several factors arranged alphabetically which may be taken into account in landscaping. Following this is a list of decisions that are to be made in setting up the landscaping plan. Place in the blank space beside the statements of decisions the number or numbers of the factors which should be considered in making the decisions.

Factors to Consider

1. Age for transplanting
2. Amount of shade on lawn
3. Attitude of parents
4. Availability of trees
5. Availability of shrubs
6. Availability of seeds
7. Care required
8. Cost
9. Growth habits
10. Growing season
11. Labor available
12. Materials available (rocks, etc.)
13. Ownership of home
14. Rainfall
15. Soil type
16. Shade qualities

Decisions

.... What kind of plan to make
.... Where and what kind of trees to plant
.... When to plant trees and shrubs
.... How to prepare the lawn for seeding
.... What grass mixture to plant

2. Familiarity with factors which characterize well-planned walks and drives and which determine where trees, shrubs, and flower gardens should be located. Familiarity is ordinarily shown by a knowledge of the factors which are used in locating walks, drives, and flower gardens.

Directions:

Following are a number of incomplete statements, each of which may be completed by one or more of the phrases given below the statement. Place a check mark (x) before the phrase or phrases which will make the statement true.

a. Well-planned walks have the following characteristics:

.. (1) All walks should be straight.
.. (2) A front walk of individual stones is more artistic than a solid cement walk.
.. (3) All walks should be at least two inches above the lawn level.
.. (4) Gentle grades are preferred to steps in the walk.
.. (5) All walks should be at least four feet wide.

b. Well-planned drives have the following characteristics:

.. (1) The main drive should be near the house.
.. (2) All drives should be straight.
.. (3) Forty feet is adequate for a turnaround.
.. (4) Separate drives should be provided for farm service.
.. (5) Entrance posts should be massive and decorated.

c. Trees should be located as follows:

.. (1) Planted in straight lines.
.. (2) Placed at the rear of house for background.
.. (3) Shade trees on the north side of the house.
.. (4) One or more trees in the center of lawn.
.. (5) Fruit trees planted in yard near the house.

d. Shrubs should be located as follows:

.. (1) Tall shrubs should be used at entrance to walk.
.. (2) Should always be planted in groups.
.. (3) Should be planted in straight lines.
.. (4) In foundation plantings tallest shrubs should be placed nearest the house.
.. (5) Flowering shrubs should be distributed among all the shrubs rather than grouped together.

e. Flower gardens should be located as follows:

.. (1) At side or rear of house
.. (2) In full sunshine.
.. (3) May be grown in vegetable garden, in separate flower garden, or in beds around the lawn.
.. (4) Should never be placed in front of shrubs or along the fence.
.. (5) Round beds in the center of the lawn are desirable.

B. Evaluation of reasoning in landscaping

1. Ability to determine the kind or kinds of trees which should be used for framing the house in a given situation. The student should be able to name the appropriate trees for framing a house and to enumerate reasons for the selections made in any particular case.

Directions:

Suppose you are confronted with the problem of landscaping a new farm home layout in X community. One of the specific problems with which you will be confronted is that of selecting trees for "framing" the house. Name the kind or kinds of trees you would use for this purpose.

Answer: .....
.....

Reasons for your choice:

1. .....
2. .....
3. .....
4. .....
5. .....

2. Ability to determine which fertilizer elements should be used to correct certain problems in managing the lawn. The student should be able to name the elements necessary to correct the condition and to characterize the element named by indicating its effect upon the soil.

Directions:

Suppose you are confronted with the problem of buying fertilizers for your lawn. If the soil were acid and the grass failed to grow vigorously, which two of the following fertilizer elements would you secure? Show this by placing check marks before the two numbers selected.

.. 1. Nitrogen	.. 6. Iron
.. 2. Phosphorus	.. 7. Potassium
.. 3. Hydrogen	.. 8. Sodium
.. 4. Oxygen	.. 9. Carbon
.. 5. Sulphur	.. 10. Calcium

Reasons for your choices:

Element, number and name .....
.....

.. Sweetens soil
.. Makes for more vigorous growth
.. Causes seed to mature earlier
.. Improves soil structure
.. Changes soil texture
.. Prevents damage from early frost
.. Adds organic matter

3. Ability to adjust landscaping principles to home situation. The student should have the ability to follow sound landscaping principles in sketching a plan. Evidence of this ability may be demonstrated in locating certain items, such as walks, drives and the like.

Directions:

Take your home place and make a rough sketch showing where you would locate the following:

1. Walks	4. Foundation shrubs
2. Drives	5. Flower garden
3. Group shrubs	6. Trees

Indicate general characteristics, e. g. concrete walk, shade tree, tall shrubs, flowering shrubs.

C. Location of relevant data

1. Familiarity with sources of information pertaining to landscaping. This ability involves a knowledge of sources of data and skill in locating and getting information about landscaping from reliable sources.

Directions:

Below is an alphabetical list of possible sources which might be drawn upon for this purpose. Place a figure 1 before the source which you think is most reliable, a figure 2 before the second most reliable source, and so on thru the list.

.. Books
.. Bulletins
.. College of Agriculture
.. Experiment station
.. Experts
.. Local seedsmen
.. Observation
.. Neighbor
.. Seed catalogs
.. U. S. Department of Agriculture

D. Skill in landscaping

1. Demonstration of skills in setting out trees and shrubs. The abilities involved here are the skills necessary to execute the plans formulated. There are three important elements involved in each operation. They are: quality, time, and sequence.

Time began .....
Time finished .....
Time consumed .....

Directions:

Provide the following material at the approximate location at which the tree is to be planted; one hardwood tree, approximately 10 feet high; one pick; one spade; one shovel; one "tamper"; 300 lbs. barnyard manure; three guy wires; three stakes; two yards burlap; hand pruning shears.

Directions:

Direct the student to set out the tree with the use of one or more members of the class as assistants where help is needed. Time him in minutes from time he starts until all operations are completed. Observe his actions and check items in columns 1 and 2 against standards of practice set by teacher using the symbols (v) and (x). In column 3 trace his actions by placing a figure 1 after his first action and figure 2 after his second action and so on in the order of his performance. In Part II check student's noticeable behavior

Part I. Skills

Student's Actions	(1) Quality	(2) Time	(3) Sequence
1. Locates according to plan			
2. Lays out diameter of hole to fit root system of tree			
3. Loosens soil with pick			
4. Removes dirt with spade or shovel			
5. Makes separate piles of surface soil and subsoil			
6. Digs hole six inches deeper than tree originally stood			
7 Mixes 4-inch layer of equal quantities of rich top soil and manure and places in bottom of hole			
8. Tamps mixture			
9. Prunes all broken and bruised roots			
10. Places in hole two inches deeper than in nursery			
11. Places so roots lie normally			
12. Holds tree erect			
13. Places top soil in hole with shovel			
14. Tamps soil each four inches			
15. Mounds dirt two inches above ground level			
16. Drives three stakes for guy wires in triangular fashion about six feet from tree			
17. Places guy wires, with host protections, above branches about 5 ft. above ground			
18. Mulches a 6-foot circle by digging in at least 6 inches of barnyard manure			
19. Wraps burlap around trunk and ties with strong cord			
20. Removes broken and diseased limbs			
21. Makes smooth, clean cuts			
22. Prunes to balance the tree			

Part II.

Noticeable Characteristics of Student's Behavior	Check v	Check v
1. Awkward in movements		
2. Slow and deliberate		
3. Obviously perturbed		
4. Does not take work seriously		
5. Unable to work without specific directions		
6. Obviously satisfied with his unsuccessful efforts		
7. Works well with others		
8. Exercises care in handling tree		

(Continued on page 138)

Constructing Tests

(Continued from page 137)

characteristics by use of similar symbols. From examination of columns 1, 2, 3, make a list of actions that need improvement and record them under "comments."

Scoring:

The primary purposes of these evaluations are: (1) To determine the weaknesses of the student as a basis for improving instruction, (2) to point out to the student the areas of emphasis in the unit, and (3) as a basis for grading the student.

Two illustrations are submitted to indicate the appropriate method to use in scoring should the teacher desire to use these types of tests for grading students.

The first illustration is unit number 2 under objective A, "Familiarity with factors which characterize well-planned walks and drives and which determine where trees, shrubs, and flower gardens should be located." The test is divided into five questions which involve the selection of given phrases to make correct statements. There are five phrases listed under each statement, making a total of 25 phrases. Ten of these are correct and 15 incorrect. Allow ten points for each correct phrase checked by the student, a deduction of five points for each incorrect phrase checked by the student. The total possible score on this unit is 100 points.

The second illustration is unit 2 under objective B, "Ability to determine which fertilizer elements should be used to correct certain problems in managing the lawn." The test is organized in two parts. Part one involves naming the appropriate fertilizer elements. The elements are listed. Two of these are correct and eight incorrect. Allow 25 points for each correct element checked by the student and deduct five points for each incorrect element checked. In Part two, "Reasons for your choices," seven reasons for each choice are listed. One reason is correct for each element and seven are incorrect. Allow 25 points for each correct reason checked and deduct five points for each incorrect reason checked by the student. The total possible score on this unit is 100 points.

The other units may be scored in a similar fashion and the scores of the several units weighed and combined into a grade.

*This paper is adapted from a project developed by the writers under the direction of Dr. Tyler at The Ohio State University. Mr. Tyler is in charge of the evaluation program for the 30-school experiment sponsored by the Progressive Education Association. He is recognized as an outstanding authority in the field of evaluation.

Ten-Years

(Continued from page 132)

T. Batten, Director of the State Experiment Station at Holland, Virginia, comes to the last meeting of the class each year and gives the outstanding results obtained at the station during the previous season. Last year he mentioned that in spraying peanuts to control thrip, it was found that all plants sprayed with Bordeaux, gave increase yields of over 50 percent. Twelve members arranged with the instructor, to conduct experiments during 1936. Only three of the experiments were carried thru, one of them was eaten by the hogs after they were dug, but the other two were picked off and it was found that one experiment showed an increase of 68 percent and the other an increase of 123 percent. During 1937, 20 acres will be treated as orders have already been placed for 1,000 pounds of the powder to be used.

Over 50 percent of the members have built modern hen houses and brooder houses and are mixing their feeds at the school house. The co-operative purchasing committee purchases all the ingredients except corn meal, the members bring the meal to the school and mix their feed. Over twelve tons of feed are mixed every month. It has also become a general practice to mix feed for pigs and nearly every member is now mixing pig feed. Many of the members now market their hogs in Richmond, Virginia, alive at six to eight months of age. Instead of losing hogs from cholera practically every member is now treating his pigs to prevent cholera. During 1936 there were 1,734 pigs treated under the supervision of the instructor. No member has lost a hog from cholera for several years.

We are now on the last month of the 1937 meetings. One member, 32 years old, has not missed a meeting in six years. This farmer lives three miles from the school. Another member lives three miles in another direction over a dirt road and has not missed a meeting in five years. This member is well over 60 years old. During this year this member has had to drive 17 miles to get to the school, every Wednesday night except two. Twelve members have not missed a meeting for three years. One group of eight farmers, living seven miles from the school, take their wives and families to one home, and all come together in two cars if the roads are good or in one truck when the roads are bad. So many of the farmers' wives object to staying at home alone at night, the practice has become general, for those living close together, to pick one home for the families to stay in while the men attend the meeting at school.

Boys Practice Soil Conservation

FLOYD SHIRLOCK, Reporter,
Lorenzo, Texas

A FOUR-WAY soil conservation project on the A. B. Terrell farm is the culminating activity of the soil conservation unit of the vocational agriculture department of the high school. The farm, which consists of 141 acres of land, has a lake on the west and shows the effects of both wind and water erosion. Millions of gallons of water collected on two sides of the farm and ran down the barren slopes for nearly half a mile and then across part of the farm to the lake. About six miles of terrace have been built and the water cut in from the road behind high terraces in five different places. The native pasture on the south side of the lake has been contoured and 1,000 trees set around the north side forming a grove of Chinese Elm, Honey Locust, Osage Orange, Black Walnut, and Paradise Trees. Mr. Terrell, who has been a member of the evening school for adult farmers for two years, asked the Future Farmers to plan the improvements on his farm and gave them a contract to water the trees and care for them two years. This is a part of the community program set up by the vocational boys at the beginning of the year and will be an excellent demonstration project showing the work and practices advocated by the soil conservation program sweeping over the country and what can be done by farmers themselves without special government aid.

Okanogan County Apple Show

JAMES NEVINS, Teacher,
Tonasket, Washington

AS ONE of their projects of community improvement, Tonasket Future Farmers have, during the past two years, sponsored and managed the Okanogan County Apple Show. The first was held in December, 1935, and proved a very popular show. Two hundred and eleven entries made a colorful setting for a minstrel show, pet show, cowboy band, a box-making contest, and a free barbecue. An admission of 700 proved the popularity of the three-day show.

In December, 1936, the second show was held in the high school gymnasium. Entries were doubled and banked high one side of the large hall. Booths entered by the different school organizations lined the wall and the attendance packed the hall each afternoon and evening of the show. When it was over, it was estimated that well over 1,500 had attended the show. The cowboy band again proved its popularity, while the pet show and amateur night were also popular. One event, the box-making contest, proved outstanding. In this, Harold Merrill, last year's champion retained his crown with the amazing time of two minutes and thirteen seconds for five boxes. Different warehouses also entered displays and set up some very attractive exhibits.

The show was handled by a show board composed of Future Farmers, who handled all details connected with it. Financing is done by selling advertising space at the show, by a dance, and by a nominal gate charge. Both shows have resulted in a profit to the chapter and this has been set aside as a scholarship fund which goes to the outstanding senior.

Farm Shop Program

WALTER C. KOLB, Instructor,
Anderson, Indiana

THE Anderson department of vocational agriculture is putting into operation a complete farm shop program that will answer the problem of the farm boy in doing his own repair work in so far as possible. The F. F. A. Chapter will conduct a night school for men up to the age of 30 during April and May and again next fall. In competitive agricultural contests Anderson competed in 17 contests in 1936 and won five county championships, one district, four state, and one national championship. Anderson is in its third year, and competition has given these boys a new agricultural interest.

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