

THE KANSAS

COPY 1

# Agricultural Student



V. 3314

## WINNING PICTURE

Photo  
Contest



MAY • 1947

# *Campus to* GENERAL ELECTRIC

## TOMORROW'S APPLIANCES

### *The Story of* **JIM YOUNG**

THE General Electric refrigerators, ranges, washers and other appliances that homemakers will be buying in 1950 are already under development. James F. Young, ten years out of Lafayette College's mechanical engineering school, supervises the engineering of these appliances-to-come.

Jim, graduating magna cum laude, chose General Electric's job offer over others because, as he says, "G.E. offered more different fields of engineering, had a better program than any other company, and could provide better experience."

The varied experience that Jim sought came to him fast. While on "Test" with G.E., he worked in four different plants and at six different assignments, ranging from supercharger tests to studies in unbalance of hydraulic systems. Following "Test" he enrolled in the G-E Creative Engineering Program and drew five assignments in laboratories and design departments.

When he had completed the course he was appointed supervisor of it. While organizing this course and lecturing to the class, he studied another—the C course in mechanical engineering. He also wrote and edited "Materials and Processes," published in 1944.

His first "real work," he says, was in helping to develop large-size rocket launchers, both airborne and land types. The creative engineering ability he showed on this assignment, and on later problems, insured his steady progress to the top of the Advance Engineering Section of his company's Appliance and Merchandise Dept.

Next to schools and the U.S. Government, General Electric employs more college engineering graduates than any other organization.



LAFAYETTE 37



Jim became interested in mechanical problems early. In his teens he found a hobby in rebuilding old autos.



As an early job with G.E. he organized and taught engineering courses, became supervisor of all mechanical engineering training.



During the war he helped develop the airborne rocket launcher, important factor in smashing Nazi armor. A second war job: development of gyroscopes for torpedoes.



Today Jim supervises the engineering of G-E household appliances to be marketed two to five years from now. He still directs the training of many new engineers.

# GENERAL ELECTRIC

# THE KANSAS *Agricultural Student* KANSAS STATE COLLEGE OF AGRICULTURE AND APPLIED SCIENCE MANHATTAN, KANSAS

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No. 4

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This shot of Jean Pfeifer holding the nicest little chicken in Manhattan won second place for Harold Ray in the photo contest. Jean's father is a freshman here at Kansas State.

## On the Cover--White Wins Photo Contest

By SHANNON NICKELSON

Cover picture for this issue is the winning print of the Ag Student Photo Contest. Other prints which placed in the contest are reproduced on this and following pages.

Wyman White, sophomore in Ag Education, took the winning photo while on a field trip in search of pictures for the contest. Winning contests is getting to be a habit with Wyman; he won a 1946 Chevrolet last fall.

Other winners in order of placing were Harold Ray, Calvin Swindler, Lester Crandall, Keith Mull, and John Parsons. Marvin Lundquist won the special award for pictures taken with box cameras. There were 54 entries in the entire contest.

The active interest shown by the students in the School of Agriculture has led to a discussion of making the contest an annual event. No definite plans have been made by the Ag Student staff, but it might be well for Ags to take a few good shots of agricultural interest this summer.

Pictures entered in the contest were taken with many makes and sizes of cameras. The winning picture and several other entries were taken with Speed Graphic press cameras. For the men who plan to use a camera for publicity in connection with their work the Speed Graphic or Crown Graphic is an excellent choice.

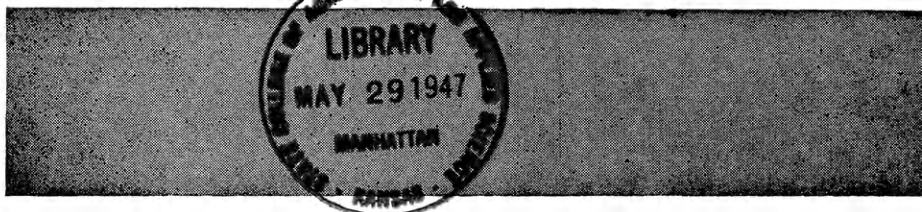
Several entries were taken with 35 mm. cameras. These small cameras are very good for use with color or black and white. They do require more attention to small details in taking and finishing than do the cameras having a larger film size.

Several students have inquired as to the best camera to buy. This depends largely upon the amount of money that can be spent and one's experience in using a camera. The box camera is obtainable at most photo stores at the present time for around \$5. The simplicity of operation and the low cost make this type an excellent choice for the beginner. Many fine pictures can be taken within the limits of a box camera.

Joining the Ag Student in furnishing prizes for the contest were Wright's Appliance Store, Guerant's Photo Shop, Palace Drug Store, Burk Photo Service, and Wolf's Camera and Sports Mart.

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CREIGHTON BROTHERS Use

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Ten million eggs! Three quarters of a million chicks, many pedigreed, shipped to 22 states and several foreign countries! That is the number Hobart and Russell Creighton, Warsaw, Indiana, will sell this year from 60,000 White Leghorns housed last fall. Not always so large, their business has grown from a few hundred quality chicks bought on credit in 1925. Their progressive breeding, management and marketing program has so influenced the poultry industry in Kosciusko County, Indiana, that it today ranks first nationally in the production of market eggs. Their leadership extends to state and national affairs. Hobart Creighton, elected to eight terms in the House of Representatives of the Indiana General Assembly, served the last three as Speaker. He is President of the Poultry and Egg National Board. To keep his appointments, he flies his own plane. For their numerous contributions to the betterment of agriculture, both Hobart and Russell Creighton were among the first to be elected to membership in the Champion Farmers Association of America.

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**AND TAKES A "CENTER BITE"**

# Four of Ag School Faculty Recognized for Long Service

By JOHN PARSONS

Last November the Council of Deans decided to recognize those faculty members who, by long service to the College in administrative positions, had achieved emeritus standing. Within the School of Agriculture four men have attained this status.

The Ag Student joins in honoring these veteran faculty members of the School.

*Robert J. Barnett*

A native Kansan, Robert John Barnett, professor of horticulture, emeritus, has served on the faculty for 48 years. He was born in Denison



R. J. BARNETT

in 1874. Upon graduation from grade school, he entered Kansas State College.

The student of agriculture had only one book to carry in those days, according to Professor Barnett, and that was used for the entire four-year course.

He received the degree of bachelor of science from Kansas State College in 1895 and the degree of master of science in 1911.

He played football for his alma mater three years after his graduation, and has held numerous positions with the college since that time.

For over 20 years Professor Barnett has been chairman of the Editorial Committee of the agricultural



L. E. CALL

experiment station. He is the author of more than 30 technical articles, bulletins, and circulars. He has been with the horticulture department since 1920 and was head of that department from 1930 to 1938.

*L. E. Call*

After graduating from Ohio State University, Leland Everett Call, dean of the School of Agriculture, emeritus, and director of the Kansas Agricultural Experiment Station, emeritus, came to Kansas State College in 1907. Since that time he has progressed from assistant professor of soils to the position of dean of the School of Agriculture and director



C. W. McCAMPBELL

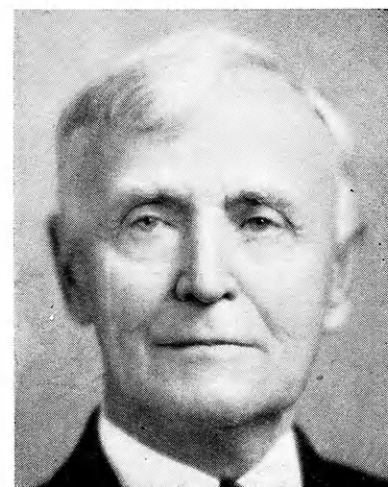
of the experiment station in 1925.

Mr. Call was born in 1881 near Kent, Ohio. He is the author or joint author of more than 50 published bulletins and reports, has presented many technical papers before scientific societies, has contributed many articles for the farm and technical press, and is the author of two textbooks on agriculture.

Except for four leaves of absence, Mr. Call has been with Kansas State College continuously since 1907.

In 1912 the first leave was granted to complete work for his master's degree at Ohio State and to spend a short time in the United States Department of Agriculture.

The second leave was to serve in France after World War I in the Army Educational Corps. In 1934 Mr. Call left Kansas State College for 13 months while acting as president of the Federal Land Bank in Wichita.



C. O. SWANSON

His last leave was after his retirement in 1946, when he headed an agricultural mission to the Philippine Islands for six months.

Since his return this year he has become professor of rural institutions and is continuing in a three-fourths time capacity.

*C. W. McCampbell*

Another native Kansan is Charles Wilbur McCampbell, professor of animal husbandry. Born near Frankfort in 1882, he moved to Alma with his parents in 1884.

After graduating from Alma High School, he entered Kansas State College, enrolling in general science in 1902. After receiving his bachelor of

(Continued on page 29)

# New Insecticides Produce Problems for Entomologists

By EVELYN NICKELSON

Complaints that "DDT isn't what it's cracked up to be," are frequent. Spectacular advertising claims for DDT, and the war-born shortages of old pest-controls, have combined to create high optimism and consequent disappointment among a public which wants to believe in black magic. The later insecticides, acclaimed in papers and magazines, are still foreign to most readers. Confusion reigns in the wealth of new insecticides.

Nevertheless, many of the new chemicals have given striking success against specific insect problems. Certainly not all the facts are in, for research takes time, money, and good investigators. Entomologists assert that they cannot hope to keep up with all the new insecticides.

Production of these materials has

been far behind the demand, but many have been slated for distribution this year. A Manhattan dealer, when asked for some of the new piperonyl compounds for roach control, retorted that "those new-fangled powders and sprays are just newspaper insecticides!" This one wasn't, however. On his shelf was a roach mixture which included piperonyl.

Most of the new materials are sold mixed; they are usually ready to use or to dilute. Dusts, sprays, or the aerosol emulsions are recommended for different jobs, and the manufacturer's advice should be followed closely for a fair test and for safety's sake.

Warnings of the toxic effects of DDT on humans and some animals are included with directions on every container, but when press dispatches carry news of an infant's surviving

a cocktail of DDT, users may become careless.

Other serious questions are being investigated. How does the DDT on treated feeds affect livestock, their young, and dairy or meat products? Does DDT interfere with the normal microbiology of the soil? Is the use of DDT dangerous to the balance of nature, and particularly to wild game, bees, birds, and fish? Are treated vegetables and fruits dangerous to humans?

Investigators, faced with all these problems and more, still place DDT at the top of the list of wonder-working new insecticides. It is an impressive weapon against the horde of chewing, biting, sucking, and disease-carrying pests we loosely call "insects".

When German U-boats cut off our supply of pyrethrum from Kenya, and the Japanese invasion of Malaya and the East Indies knocked out our imports of rotenone, a search was organized for substitutes for the standard insecticides. Copper was diverted from paris green and copper sulfate

(Continued on page 18)



The hard-working initiates of Alpha Zeta take a short break. Don't worry though, the actives soon put them on the job. Strangely enough, none of the group developed blisters from handling those tools.

# Bacon, Massey Take Livestock Judging Honors

By JAMES COLLIER

Charles Bacon of Hutchinson and Nathan Massey of Sun City are the champion livestock judges at Kansas State. They earned this title in the annual livestock judging contest sponsored by Block and Bridle Saturday, May 10. This was the first such contest in animal husbandry since during the war. A total of 134 men judged in the Junior and Senior Divisions of the contest.

About \$400 worth of prizes were presented to the winners at a meeting on the following Tuesday evening. Prizes were contributed by organizations from all parts of the country. Entrance fees to the contest were used to provide a lunch for those present.

Charles Bacon, with a score of 421 points out of a possible 450, was high individual in the Senior Division. He was awarded an original lithograph of the race horse, Whirlaway. Bacon was closely followed by Charles Nesbit with 420 points, Hal Ramsbottom with 418 points, James Collier with 415 points, and Linton Lull with 409 points. All of these men with the exception of Bacon are juniors in Animal Husbandry.

Nathan Massey topped the Junior Division with 417 points out of the possible 450. Another original lithograph, this time of Dan Patch, was his award. Fred Germann was second with a total of 416 points. A tie for third place with 412 points for each man was broken on the number of correct placings and the total reason grade. Douglas George squeezed out Robert Hendrickson. Another tie, for fifth place, was broken in the same way as Cliff Houghton won fifth over Norman Minks. Each had a total of 406 points.

Two classes of cattle, two of sheep, and two of swine were judged. Oral reasons were given on three classes by the Senior Division, and the Juniors wrote reasons on three classes. The high man on cattle in the Senior Division was Dick Warren. John Massey and Charles Bacon tied for second on cattle in the Senior Division. L. B. Johnson topped the Junior Division on cattle. He was fol-

lowed by Allen Honeyman and Richard Spare.

Top individual on swine was James Collier. Charles Bacon and Dave Schirmer tied for second in the Senior Division. Richard Konold was high in the Junior Division. He was followed by Walter McKee and Melvin Winger.

Charles Bacon and Charles Nesbit tied for top honors on sheep for the Seniors while Linton Lull and John Massey tied for second place. Cliff Houghton was high for the juniors on sheep, and Nathan Massey and Milton Thomas were second and third respectively.

## Flannagan-Hope Act Aids Ag Research

By ROY D. GEAR

From the beginning of time, agriculture has borne the burden in the civilization of the world, but agriculture has never been rewarded for the great service that it has performed for the people of the earth. The United States is the only country in which agriculture has even momentarily approached the levels of well-being attained by other economic activities, and this has been only at the expense of war. To help agriculture reach economic parity with industry is a huge undertaking. But, having faith in results that can be attained by research workers, the 79th Congress created Public Law 733, better known to many as the Flannagan-Hope Act.

A broadened agricultural research program is authorized under the terms of PL 733, which was signed by the President August 14, 1946. A feature of the legislation is its emphasis on research and services to improve the marketing, handling, storage, processing, transportation, and distribution of agricultural products.

No funds have been appropriated as yet, but the amounts authorized range from \$9,500,000 in 1947 to \$61,000,000 in 1951 and each suc-

ceeding year thereafter. The act provides for dividing a part of the annual appropriation among the states, territories, and Puerto Rico.

A major share of the expanded research work will be done by state agricultural experiment stations. Utilization research is to be conducted as much as possible by Department of Agriculture laboratories; but the secretary may enter into a contract with public or private organizations or individuals in order to carry out certain research work. Some of the funds allocated to the states must be matched by state funds if they are to participate in the research program.

In the past, research in agricultural marketing has lagged far behind production research. This is because marketing is not an exact science, and takes on such a broad meaning that research work is very difficult.

After work under Public Law 733 gets under way, it is hoped we will see a reduction in the spread between farm prices and costs to consumers, and an ultimately higher standard of living for the American farmer.

## Poultry Club Edits National Magazine

By GLENN L. SHRIVER

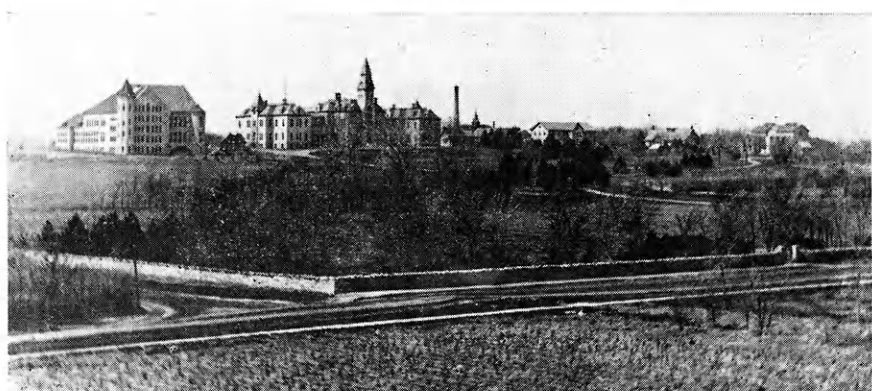
A feather has recently been added to the caps of members of the Kansas State chapter of the Poultry Science Club. The club had the honor of editing the March issue of the "National Collegiate Poultry Club" magazine. This publication is sent to all clubs in the nation.

The honor goes to the editorial staff which includes Tom James, editor-in-chief, assisted by Floyd Hixson, Carroll Mogge, and Dorothy Cochran. In previous publications issued by this and other poultry clubs the material had been assembled and mimeographed. In keeping with school spirit, the entire magazine was printed on glossy white paper in purple ink; pictures have added much to its appearance.

Richard Eaton, president of the local club, has also been honored by his election as vice-president of the National Poultry Science Club.

The local chapter now has 28 members who meet the first and third Mondays of each month at 7 p. m. in West Ag 211. Students interested are invited to attend.

# Campus Beauty Is Result Of Thoughtful Planning



Careful planning has been necessary to develop the beautiful campus of to-day from this early date.

By GLENN L. SHRIVER

"What a wonderful wooded area on which to build a campus!" Many of us have heard this exclamation time and time again. Each time the campus management hears this remark, it swells with pride for it is a compliment of the highest order.

Contrary to the conclusions drawn by the average campus visitor, the campus site originally was not a wooded area. According to records (largely by word of mouth) the only trees originally on the campus were the maples along Lovers Lane north of the President's home and the two cedars north of Anderson Hall.

Most of us know that the original location of the college campus was about a mile west of the present site. It was then Bluemont Central College, which first opened its doors to 52 students in 1863. In 1871 the township of Manhattan voted a \$12,000 bond issue for purchasing the college farm near town. This is the present site of the Kansas State College campus.

The first building to be constructed was the present Farm Machinery Hall, which was then used as a barn for the new farm. The soil of the new site was found to be more fertile and better adapted to the creation of charming floral and arboreal effects than that of the old site.

In January, 1885, Prof. Maximilian Kern, of Columbia, Mo., was employed to prepare a general plan for the campus, including drives and plantings. These still constitute the

fundamental framework of the landscape architecture, but unanticipated building has caused changes in the drives.

In his plan, Professor Kern grouped the different species of trees and shrubs so the campus might be a convenient outdoor laboratory for the use of students. These plantings have proved useful for horticulture, botany, and landscape design classes since the beginning.

Prof. L. R. Quinlan, in charge of campus plantings, states that later efforts were directed to include an arboretum of the campus to try out trees and shrubs for this section of Kansas as an educational project.

Professor Quinlan said that several attempts have been made in the past to locate buildings on the lower part of the campus to the east, but these plans have always been discarded in favor of keeping the buildings on the hill. The aim is to keep the campus as natural as possible by leaving the meadows open as they are found in nature, to eliminate horticultural monstrosities, and in doing so, to create one of the naturalistic beauty spots in Kansas.

In nature, trees are found grouped according to species or at least with one species being dominant. In keeping with this, trees are grouped on the campus in the same manner.

"Why are pines included since they are not native to Kansas?" is a question often asked. Professor Quinlan narrated that this withdrawal from the usual is to give color to the campus during the winter months.

Pines are native to adjoining states, but Kansas is the only state with no native pine.

Professor Quinlan states that when he came here 20 years ago few records were being kept of the trees and shrubs on the campus. Feeling the need for some sort of permanent data, he drew a map showing every tree and shrub on the campus. Four or five trees of each species are tagged with a corresponding number in the card index. Periodically these are checked for growth, disease, and surgery treatment needed. If a tree or shrub dies or has to be removed, the cause is noted. Much scientific information has been gathered in this way.

All the permanent buildings on the campus are constructed of native limestone from the vicinity of Manhattan, much of which has been dug from the college quarry. Most of the buildings are at least partially covered with Virginia Creeper, a five-leaf ivy native to Kansas that blends into the beauty of the surrounding vegetation. The lawns are covered with bluegrass which adds further color the greater part of the year.

Dr. J. T. Willard, historian, has records showing that in the history of the college up to and including 1945-46 there have been 16,216 graduates with degrees and 1,923 graduates with advanced degrees, not counting the thousands of students who were never graduated. All of those who have attended Kansas State look back with pride to their alma mater, associating fond memories with a picturesque campus that grows in beauty from year to year.

## Build Laying House On Poultry Farm

By DON MCWILLIAMS

A new laying house, 24 x 140 feet, has just been completed at the College Poultry Farm featuring a hollow tile floor, running water, electric lights, open front, straw loft, and a metal roof.

This house is divided into four units with 250 birds in each. The college strain of improved White Plymouth Rock pullets will be placed in this house next fall. This will increase the present laying quarters of the poultry farm by 50 percent.

# Eyestone, Stuckey Top Dairy Judges

By ROBERT K. PETRO

Frank Stuckey and Merle Eyestone, both of Leavenworth, were the winners of the Student Dairy Cattle Judging Contest held at Kansas State College April 19, 1947. This event is sponsored each spring by the Dairy Club of K. S. C., and many valuable awards are given to the boys who "know their cattle".

A spring shower did little toward dampening the spirits of the 95 Aggies who joined in the competition. The judging had to be carried on under crowded conditions in the Pavilion, but the high scores indicated that this was not a big handicap. Frank Stuckey carried away top honors in the Senior division with a total of 303 points of a possible 350, and runner-up was Fred Foreman with 300. High man in the Junior division was Merle Eyestone who totaled 318 points, and second with 310 was Dick Eaton.

Five classes of stock were judged by both divisions. Oral reasons and placings were required on classes of Ayrshire and Jersey cows. Placings, only, were turned in on Holstein heifers, Guernsey heifers, and Guernsey cows. There were many outstanding scores made on each class, including a perfect 50 on the perplexing class of Holstein heifers by Earnest Christie of Netawaka.

Glenn Weir, president of the Dairy Club, announced that a bronze plaque is being purchased from registration receipts and the names of the Junior and Senior division winners will be engraved on it. The plaque will be placed in the dairy department display case, and the winners' names in future years will be inscribed thereon.

## Locker Operators Plan Short Course

By LORENE SMITH

Frozen Foods, Locker Plants, Deep Freeze—these are terms becoming more and more familiar to Kansas residents as the frozen food locker industry expands.

In 1935, there were less than a dozen locker plants in Kansas. Today there are more than 400 plants with an average of 500 individual units per installation, according to Dr. G. A. Filinger of the Department of Horticulture.

Last year, Kansas State College offered one of the first short courses in frozen food locker operation ever presented. From this class came 54 graduates. However, to meet the increased demand in the frozen food locker industry for trained personnel, the college has been asked to offer another short session covering similar subject matter. Consequently the College will offer a five-week Freezer Locker Operator's Training School

from June 3 through July 12, 1947.

This school will train operators in the processing of meats, fruits, vegetables, poultry, and dairy products for preservation by freezing. It will give training in the construction, repair, maintenance, principles of refrigeration, and general operation of frozen food lockers as well as in servicing home units. Some attention will be given to bookkeeping methods, general business practices, public relations, and nutritive values of frozen foods.

Enrollment of 20 is necessary before the training school will be offered, although facilities are large enough to accommodate 40. The persons selected for this course are to be notified this month. A fee of \$61.50 for residents of the state and \$71.50 for nonresidents will be charged to help cover expenditures necessary in conducting the school.

A certificate of accomplishment will be awarded to persons completing the course satisfactorily. This course can not be applied to college credit.

## Announce \$6,150 In Ag Scholarships

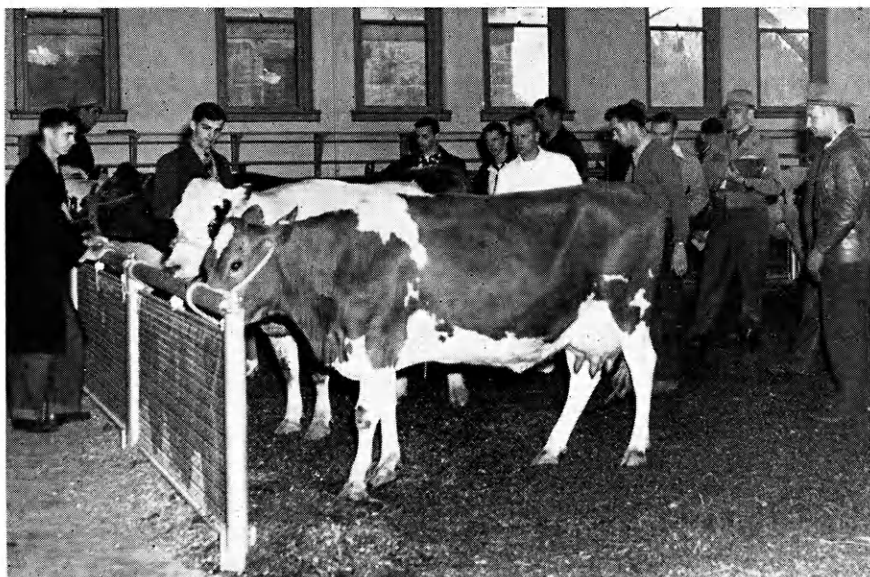
By DAVID E. BOGART

This fall 53 high school seniors will have the opportunity to enter Kansas State College through agricultural scholarships. Last year some of the \$6,150 offered in scholarships went unclaimed because too few boys entered the different contests.

Sears, Roebuck and Company offers 15 agricultural scholarships of \$150 each. They are awarded to leading high school graduates who have distinguished themselves in 4-H Clubs or in vocational agriculture, and whose attendance at college is dependent on such an award.

Scholarships of \$100 are awarded each year by the Union Pacific Railroad Company to one student in vocational agriculture in each of the 36 counties in Kansas it serves. The scholarship may be used to enroll for a full-year course in agriculture at Kansas State College.

Any high school student interested in attending college should consult his vocational agriculture teacher or county agent for details on these and other scholarships.



'I place this class . . . ' Nearly a hundred Aggies pondered over this and other classes in the annual student judging contest.

# Herbicides May Replace 'Man with the Hoe'

By JULIUS F. BINDER

Mention of dandelion-day ordinarily brings to mind a group of earnest students armed with hoes, spades, or other instruments of torture, scouring the campus in search of dandelions while everyone else takes a half-day vacation. With herbicides coming into the picture, the weed killing job is being taken over by power spraying equipment. Perhaps dandelion digging is gone forever.

A large number of chemicals are known to be destructive to growing plants. Several of these have been used for the control or eradication of undesirable plants such as weeds, shrubby plants, and tree sprouts. Among these are 2, 4-D, Ammate, and Dinitro compounds.

The chemical designated as 2, 4-D is classified as a hormone or growth-

regulating substance. Pure 2, 4-D is a weak organic acid in the form of a white powder which is practically insoluble in water. To be effective for killing weeds, it must be made soluble by being changed chemically. The most striking features of 2, 4-D are: (1) it is potent and requires but a low concentration to kill weeds; (2) it is non-poisonous to animals; (3) it is not inflammable; (4) it will not corrode spray equipment; and (5) it is highly selective in that it will kill certain plants, such as broad-leaved weeds, without injuring grass.

The selective action of 2, 4-D makes possible the complete control of such weeds as dandelion, plantain, chickweed, and henbit in lawns and other turf without injuring bluegrass. However, buffalo grass and bentgrass may be damaged by a

single application and should not be sprayed twice in the same season. Most broad-leaved annual weeds can be killed with the chemical if treated when they are young. All species become more resistant as they approach maturity.

A few perennial weeds such as artichoke, bull and pasture thistle, dandelion, and plantain have been consistently killed by one application of 2, 4-D. Complete destruction has not been obtained with many of the perennial weeds, particularly those that spread by lateral roots, such as bindweed, hoary cress, and Canada thistle. Russian knapweed and swamp smartweed usually are not seriously injured by treatments with this chemical.

Commercial preparations of 2, 4-D appear on the market either as liquid or powder, and are sold under various trade names. These vary in the percentage of 2, 4-D contained, and their relative value per unit weight is determined largely by this percentage figure. All of the various preparations can be grouped into three

(Continued on page 28)



"In the memory of those gallant lads who can never return"

DWIGHT D. EISENHOWER  
GENERAL OF THE ARMY

This panel made up of pictures of Ags who gave their lives in the service of their country was recently hung in the Publications Room of East Ag.

# President Farrell Continues Kansas Rural Life Studies

By MERLE EYESTONE

One of the busiest men on the campus is Dr. F. D. Farrell, former president of the college and founder of the Kansas Agricultural Student. He now holds the title of President Emeritus and teaches two courses in agriculture.

Shortly after Dr. Farrell had returned to his office from teaching a class in agricultural industries, I entered to find him busy at work. As I walked in, he removed his green visor, which he wears while doing close work and laid aside a sheaf of papers.

"Come in and have a chair," he invited graciously.

The doctor is a handsome figure, tall, well over six feet, and carries himself gracefully erect.

He smiled and nodded his assent when I told him I had come to interview him for the Ag Student.

My first question was concerning hobbies. "Oh yes, I have a number of them," replied Dr. Farrell, "I like to be out-of-doors. I play golf, do some gardening, like to walk, and then I do a great deal of reading, especially of biographies."

"How's your golf game?" I queried.

"During the early 20's, I thought I would become quite a golfer. My scores ran in the lower 80's," he replied, smiling faintly. "But it seems that lately my scores don't compare with those at that time."

We had talked several minutes before I knew that Dr. Farrell had started the Agricultural Student magazine. I was curious to know why he started the publication. He explained that in 1921 only the Collegian and engineers' publication were being issued, and he felt a definite need for an agricultural publication. "Not only would it be beneficial for the reader, I thought, but it would give the staff members excellent experience in preparing it," the former president said.

A tireless worker, Dr. Farrell has planned his research work 10 years ahead. One of his titles is "Professor of Rural Institutions." He has

just finished his third publication on a series of Kansas rural institutions. The name of the bulletin is "A County Agricultural Center." His first two bulletins were "The Fort Hays Branch Experiment Station" and the "A Pioneer in Rural Electrification."

His next work will be a study of the Upland Mutual Insurance, Inc., whose central office is in Dickinson County. This company was started 51 years ago. After this project is completed, he plans to study a 64-year-old Wilson County church and its relationship to the rural community life. After that he plans to compile bulletins on some representative school and district, and later still, one about a newspaper.

As his work indicates, Dr. Farrell is primarily interested in out-of-doors, countrysides, and rural people. "The older I get the more important these things are to me," he stated.

Francis David Farrell was born March 13, 1883, at Smithfield, Utah. His family operated several farms, and much of his early training was received on them. He was graduated from Utah State College in 1907 with a bachelor of science degree in agriculture. Later he was employed by the U. S. D. A. In 1910 he organized the agricultural extension service at the University of Idaho where he was an assistant professor of irrigation and drainage.

In 1911 he returned to the U. S.

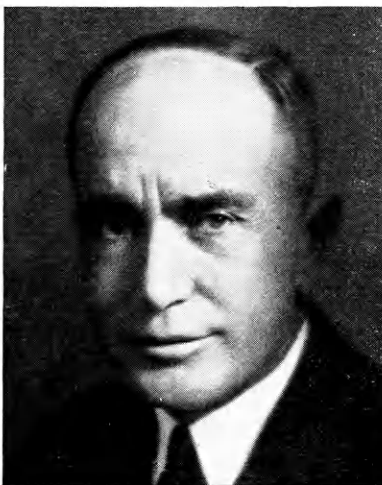
D. A., and from 1914 to 1918 was assistant agriculturalist in western irrigation investigation in charge of government reclamation project. During this period he made extensive studies in range utilization and plant and animal industries.

He came to Kansas State College September 1, 1918, as dean of agriculture and director of the agricultural experiment station. He succeeded William M. Jardine, March 1, 1925, as president of the College. He served as president of K. S. C. for 18 years, retiring on June 30, 1943. An honorary degree of Doctor of Agriculture was conferred on President Farrell in 1925 by the University of Nebraska.

A statement from the Board of Regents upon acceptance of Dr. Farrell's resignation was as follows: "It is a magnificent contribution that President Farrell has given during his 18 years as head of K. S. C.—Under his guidance there has been steady and solid progress. His plans and acts always were for his college, first; however, he also used his alert mind and great energy in serving Kansas in many organizations not connected with the school. Always he was available to aid Kansas and Kansans. President Farrell was able to blend inspirational action with practical directness, to which were added common sense and fairness.

"His opinions were valued by many and his judgment highly respected. The board has gained much lasting value through association with President Farrell. It pays especial tribute to him as an extremely able administrator and cherishes the friendship that has grown out of the years of his fruitful services."

At the present time Dr. Farrell is serving as an officer in numerous organizations and committees. He is president of Phi Kappa Phi; president of the K. S. C. research foundation since it started; chairman, since 1925, of the Kansas Conservation on the Relation of Electricity to Agriculture; chairman, Federal Affairs Council of the Kansas State Chamber of Commerce; member of board of trustees of Farm Foundation; editorial committee member of the Kansas Agricultural Experiment Station; president of the Manhattan Rotary Club; and college representative to State Board of Agriculture on Farm Organization.



F. D. FARRELL

# Bob's Bees Bring Buzzing Business



Bob Yapp demonstrates a few of his techniques in handling bees. Score for the afternoon: Bob six stings, Photog off scott free.

By SHANNON NICKELSON

A sideline while going to college and a vocation after graduation was offered to Bob Yapp, sophomore in horticulture, and he snapped it up with enthusiasm. Bob is fascinated—knows it—shows it—talks about it as he plans to expand his buzzing business of keeping bees.

Bob's first encounter with bees was while a junior in high school. He helped take care of some bees for the College during that year, 1939, and obtained his own first bees soon afterward for the large sum of \$5. The other fellow had received a rather discouraging number of stings.

While he was in service, Bob's stock dwindled from 40 hives to 14; he has restocked to 70 hives by purchasing and by dividing hives. To maintain strong hives and avoid outright starvation in 12 of his hives, Bob has been forced to provide sugar to feed them. Last fall was not a good storage season.

"Come on up. They won't sting", was his comment as we approached one of his yards near St. George. Bees were circling about the hives as if anticipating a likely spot to settle down and start drilling. Bob gave the first hive a puff of smoke, definitely not a nationally advertised

blend, and started opening the hive for inspection. There was little or no opposition.

"Here is a strong hive," commented the collegiate bee enthusiast. "Just look at that brood!" "There must be at least seventy or eighty thousand bees in this hive." These comments came in rapid fire as Bob pointed out a queen and told the differences in worker, queen, and drone cells. Other interesting items occurred to him as he moved about his work.

Bob is constantly on the outlook for the disease, foul brood, which is a menace to all bee men. It is not too hard to detect in the bee hive, says Mr. Yapp, since it has a distinctive odor, and the caps of infected cells have a greasy, perforated appearance. The disease is caused by a spore which affects the larvae.

Around 500 hives will be required before Bob's sideline will be a satisfactory financial setup for a fulltime business. He is gradually increasing his numbers so that not too heavy a drain will be placed on him financially in after-graduation expansion. Bob is approaching his problem realistically and is studying and working hard to make a success of his work. With his enthusiasm it looks like a sure-fire success.

## Raymond Gulley Wins Burpee Award

By LORENE SMITH

Raymond A. Gulley, junior in Floriculture and Ornamental Horticulture, is the winner of a \$100 cash prize.

The award, offered annually by the W. Atlee Burpee Company of Philadelphia, was presented to Gulley during the Horticulture Club meeting on March 27.

Dr. W. F. Pickett, head of the Department of Horticulture, explained that the winner was selected by the department faculty who based their decision on an outstanding scholastic record, leadership, and financial need.

Sears, Roebuck and Company is compiling a directory of students who attended Kansas State on Sears Scholarships. There are 113 Sears students who have graduated and 37 now attending school.

## Prof Makes Pancakes From Sorgho Flour

By JAMES COLLIER

Flour, just plain ordinary flour, has been added to the growing list of products now manufactured from grain sorghums! Using the screenings from seed Atlas Sorgho obtained at the College agronomy farm, the Department of Milling Industry has recently manufactured several hundred pounds of the new flour in the College mill.

The Atlas was milled in the conventional manner, yet its flour appears to be of finer texture than that milled from wheat. However, the yield of flour is slightly under that obtained from wheat. The bran and shorts obtained appear very like those from wheat but they are of a lighter color and the yield is higher.

"If the flour proves satisfactory in laboratory tests, it may have great commercial possibilities", stated Prof. R. O. Pence of the milling department. While tests are soon to begin, the only ones to date have been in the home kitchens of several faculty members. When mixed with an equal amount of wheat flour the Atlas flour produced pancakes that were much lighter and more tender than those from ordinary flour.

Research with sorghum starches was prompted during World War II because of serious decreases in some types of starch imports. Some of the new products have permanently replaced their forerunners because they are of such high quality and are more economical to produce.

Some types of sorghum starches are also similar in nature to corn starches. Processing methods are very like those for producing corn starches, with the exception that a wax cuticle must first be removed from the sorghum. Oil and other by-products coming from the sorghums resemble closely those from corn. The wax provides an additional by-product.

Because they are widely adapted to Kansas and other Great Plains states, and because of their wide variety of products, sorghums provide the basis of an industry that will probably be developed to a large extent in the next few years.

# KSAC Expands To Serve Kansas

By MERRILL WERTS

"Good afternoon everybody. This is KSAC, the radio voice of Kansas State College in Manhattan, bringing you another Farm Hour."

Six days a week those words go booming out across the plains of Kansas, bringing to nearly every farmer who has a radio in his parlor the opportunity of listening to the messages of Kansas State's extension specialists during the noon hour. These messages are designed solely for the purpose of aiding the Kansas agriculturist in every way possible.

Radio programs originating from the campus of Kansas State College are not a new development. It was over 22 years ago, on December 1, 1924, that radio station KSAC was dedicated. Two of those who were instrumental in the establishment of the station are still active on our campus. They are Prof. E. R. Lyon

of the physics department and Prof. L. C. Williams, assistant dean and director of the Division of College Extension.

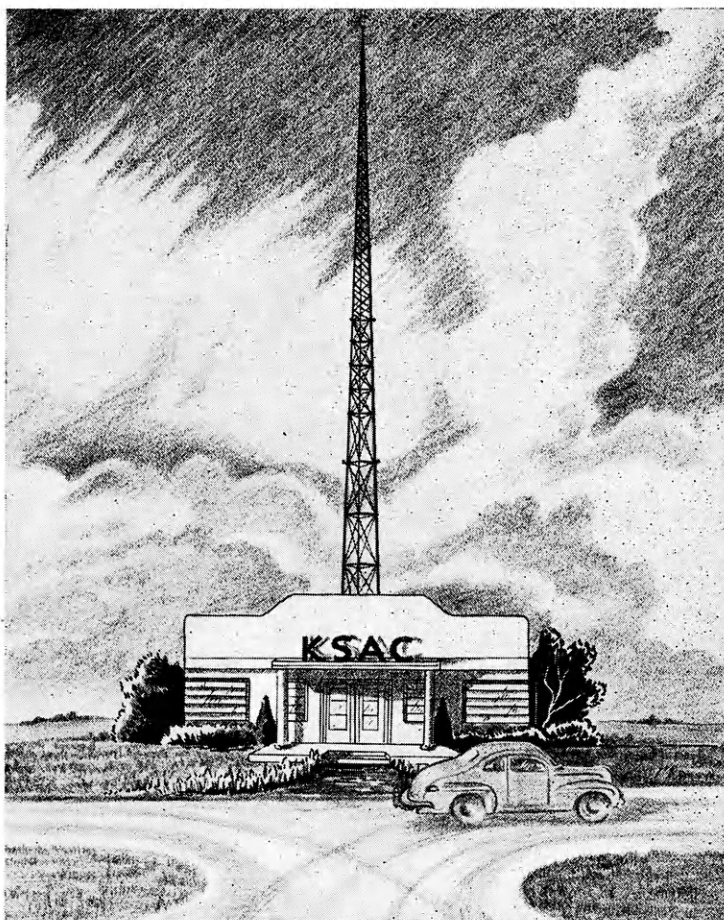
Since that day back in 1924, KSAC has gone far. Under the direction of Prof. L. L. Longsdorf, radio program director, and his staff of announcers and technicians, many and varied programs are broadcast each week day.

A question, "Why doesn't our radio station present more entertainment programs?" is frequently heard on the Kansas State campus. The answer to that question is simply this. The agencies which appropriate funds for the operation of KSAC designate that the station be used for education in the fields of agriculture and home economics and, since KSAC shares its assigned frequency with WIBW in Topeka, it necessarily must allot the major portion of its broadcasting time to informational programs relative to those fields. Only by efficient utilization of this time can KSAC accomplish the purpose for which it was intended.

At the present, our campus radio station is experiencing a series of 'growing pains.' By mid-July, Chief Engineer Bernard Holbert hopes to have the new 5,000 watt transmitter operating; and in the studio in Nichols Gymnasium, Chief Announcer Grant Salisbury is completing remodeling plans which will greatly increase production facilities. The new transmitter being installed on the animal husbandry farm two miles north of the stadium will increase the transmission radius to include all parts of Kansas, a feat which cannot ordinarily be accomplished with the present 1,000 watt transmitter.

Kansas State students may well be proud of their radio station. Upon completion of the expansion program now under way, our own KSAC will be one of the finest and most powerful campus radio stations in the country.

The Agricultural Association has joined the list of contributors to the All-Faith Memorial Chapel. The Ags, in their May seminar, voted to give \$200. The campaign for funds is led by Dean Schowengerdt.



KSAC serves every corner of Kansas. This slogan will become a reality when the new transmitter is put into operation.

## You Can Select Your Graduation Gifts

*with Confidence*

from our stock  
of standard nationally  
known brands

THE College  
DRUG STORE  
ASHLEY L. MOHANAN  
621 North Manhattan Avenue



Keith Mull demonstrated what can be done with the 35mm with his fifth place entry in the photo contest.

## Compact Cameras Make Photography Fun for Amateurs

By DONALD W. GEORGE

"A picture is worth a thousand words". This is a time-worn expression but a true one. It might well be the motto of those of us who plan to help show the way to a more stable and productive agriculture.

The time of the slow, bulky camera and bag of gadgets is past as far as most of us are concerned. With modern equipment, the camera, exposure meter, sunshade, filters, and extra film will scarcely crowd a coat pocket. The inexpensive film can be made into positives and mounted, ready for projection, easily and quickly. The slides are small and may be filed in a minimum of space.

The 35 mm. camera, with black-and-white or color film, has placed photographic illustration in the reach of every field worker and made picture-taking a relatively painless operation. The "candid camera" of 15 years ago has grown into a precision instrument, capable of a wide variety of uses.

Many box camera users are frightened away from the 35 mm. by the wide variety of adjustments possible. Such an attitude is based on a lack of familiarity with the problem. The 35 mm. may be used with fixed

focus, shutter speed, and lens opening and take good pictures. However, a few simple adjustments will improve the product. These adjustments will also permit a photographer to take good pictures under a wider range of conditions.

Anyone can learn to take good pictures. It's easy and it's fun. Every dealer in photographic supplies has a selection of books covering every phase of the art, books written in simple informative style designed to instruct. Their cost is low; many of the smaller pamphlets are free.

The beginner may well get one or more of these pamphlets, study them until he understands the principles, and *take pictures*. The only way to learn to use a camera is to use it. Keep a record of the camera settings used and study the resulting prints. You'll soon be making your own suggestions for improvement.

Once the principles of black-and-white photography are understood, the use of color might be considered. Many competent amateurs are frightened away from color by reports of its difficulty. There is no basis for these fears. Color film is not so fast as black-and-white and cannot be used under so wide a range of conditions; but within its limits, color calls for only a little more attention to fundamentals.

The satisfaction color gives pays well for the extra effort. In addition, 35 mm. color film is processed into positives ready for projection at only slightly more than the cost of

black-and-white prints by a commercial finisher. The value of an illustration in color is much greater than the value of the same picture in black and white.

Few of us have the talent for concise description. A few well-chosen slides which supplement and illustrate a discussion add greatly to the understanding by an audience. Properly used, a picture presents a fact for all to see; even though the spoken word may fall on deaf ears, the picture will make an impression and be remembered.

## Writers Compete For Chicago Trip

By BERNARD KNOWLES

The Swift College Essay Contest for 1947 has been announced by G. H. Beck, associate professor of dairy husbandry. The contest requires an entrant to write an essay not to exceed 1,500 words, discussing the methods employed by the meat packing business in marketing meats, poultry, eggs, butter, and cheese.

The winning essay-writer at Kansas State will receive a cash award of \$65 to be used in participating in a market study trip to Chicago, November 29 to December 6, 1947. Winners from the nation's schools of agriculture will attend.

Essays prepared this spring may be submitted before June 2 or entered next fall if the student is also enrolled at that time. Entries may be submitted with the Departments of Animal Husbandry, Dairy Husbandry, or Poultry Husbandry. Contestants may obtain information from any one of these departments which will be helpful in writing the essay.

Mike Burns won the 1946 contest with his essay, "Packer's Progress". The text of this prize-winning essay was carried in the December issue of the Ag Student while Mike's account of the Chicago trip was reported in the March issue.

Essays are judged on the basis of subject matter, journalistic style, and English proficiency. Prof. L. F. Payne, head of the Department of Poultry Husbandry, G. H. Beck, and D. L. Mackintosh, associate professor of animal husbandry, make up the local judging committee.

# Deaver Practices Balanced Farming

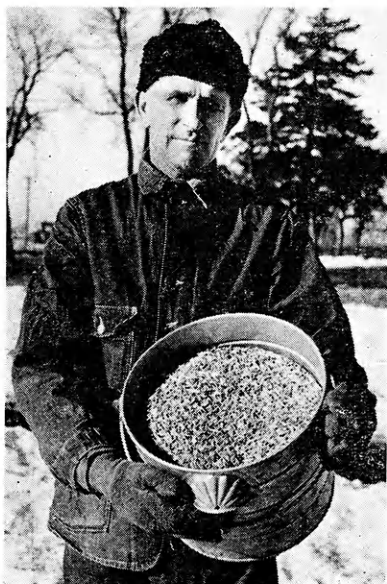
By CAROL C. MONTGOMERY

A Kansas State alumnus and his wife have the honor of being the first husband and wife in the United States to be named a Master Farmer and Master Farm Homemaker in the same year. This recognition was given Mr. and Mrs. Harlan Deaver at Farm and Home Week in 1929 for their achievements on their Brown County farm near Sabetha.

Mr. Deaver was graduated from Kansas State in 1910 as an agronomy major. He then returned to his father's farm in Brown County, the place of his birth.

It wasn't long until World War I broke out and Mr. Deaver's draft number was the first one drawn in his county. After a short training period in this country, he was sent to France. His knowledge in agriculture was utilized as he was placed in charge of all vegetable gardening work for a large military camp. Mr. Deaver and his detail of men raised fresh vegetables for the camp personnel and especially for the large hospitals there.

After the war ended, Mr. Deaver was sent to the AEF University at Baune, France. He taught a cereal crops course to veterans awaiting that important boat. At the same time, Dean Emeritus L. E. Call was in charge of the agricultural section of courses taught in regimental schools.



HARLAN DEAVER

## 46,000 Kansas FARM FAMILIES

are united in

## Kansas Farm Bureau

*to work for a sound and progressive program for agriculture.*

### THEIR OBJECTIVES INCLUDE:

- Parity Prices for Farm Products.
- Soil Conservation Advances.
- A Strong Extension Service.
- World Peace Through Abundant Production and Efficient Distribution.
- Cooperation Between Business, Industry, Labor and Agriculture for the best interests of all.

About 8,000 soldiers attended this school while waiting their turn to go home.

Upon returning to this country, Mr. Deaver went back to his farm. Here, hard work and industrious operations not only made him a leader in his community but also won him state and national recognition.

Besides being named a Master Farmer, he was recognized as a premier seed grower in 1931. He was chairman of his county U. S. D. A. War Board during World War II, has been a member of the Kansas Farm Bureau Board of Directors for eight years, and is treasurer of the Kansas Farm Bureau Mutual Insurance Company.

In 1940, Mr. Deaver was made an honorary member of the scholastic society, Phi Kappa Phi, at Kansas State College. He received further national recognition in 1943 from the Skelly Oil Company for "Superior Achievement in Agriculture."

Mr. Deaver attributes his success as a farmer to a diversified system centered around certified seed production, good cattle, and purebred hogs. He maintains a herd of registered Spotted Poland China hogs.

Each year he sells the best boars and gilts for breeding purposes and markets the rest.

Returning to Mrs. Deaver's accomplishments, besides being named Master Farm Homemaker, she was selected as the "Home Community Chairman" to direct the women's work with the Farm Bureau in the First District. In 1939, she was a delegate to the International Conference of Affiliated Country Women of the World held in London.

Through hard work and skillful management, Mr. and Mrs. Deaver have made their farm one of the best in the state.

Three students from the School of Agriculture have been named to membership in Phi Kappa Phi, scholastic society. They are Lewis Schaffer, Laureston Withee, and Harry Cowman.

### HOLSTEINS—THE FARM COW

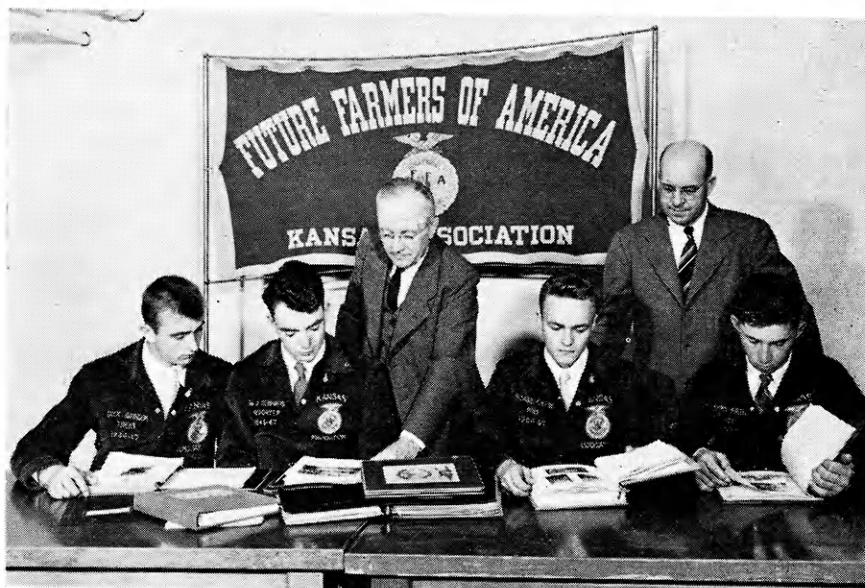
Holsteins lead all breeds in yearly milk and butterfat production — and make most profitable use of farm-grown roughages. The calves are large, easily raised for herd replacements, or they bring good returns for veal — and the old cows are valuable for beef when their milking days are over.

**HOLSTEIN-FRIESIAN ASS'N**  
OF AMERICA • Brattleboro, Vermont • Box 1098





Glenn Shriver and Bob Leonard watch intently as FFA students judge in the crops contest.



Richard Johnson of Lawrence; William Richards of Emporia; A. P. Davidson, executive adviser; Richard Chase of El Dorado; L. F. Hall, executive secretary, and Tommy Figs of Effingham judge the better chapter contest.

## Beloit, Newton Win FFA Meet

By MELVIN COTNER

Kansas State was host to approximately 1,000 high school students and instructors in the annual Vocational Agriculture Judging and Farm Mechanics contest and State Future Farmers of America convention, April 28 and 29. Twenty-two students competed in the state FFA speaking contest.

Honorary State Farmer Degrees were conferred on Governor Frank Carlson, Dr. A. D. Weber, and Dr. H. E. Myers. Governor Carlson attended the FFA banquet the last evening of the convention.

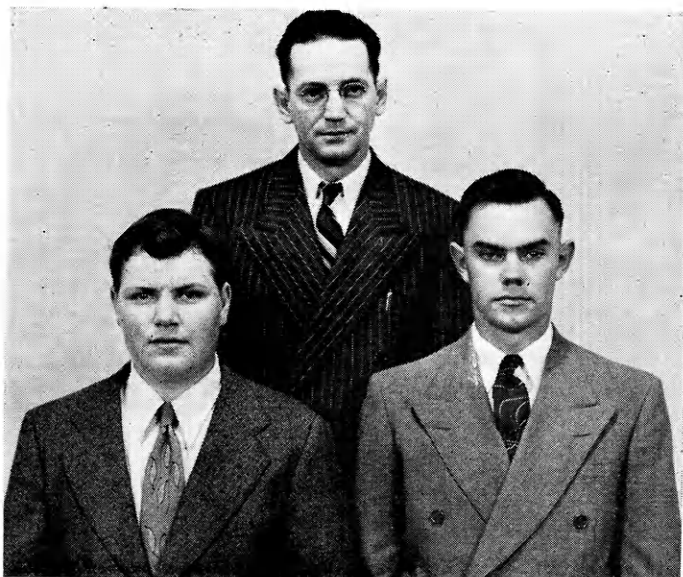
At the House of Delegates meeting, new state FFA officers elected for the ensuing year included Harland Priddle of Haven, president; Bob Greve of Harper, vice-president; James Boucek of Ottawa, secretary; Leroy Spicher of Simpson, reporter; and Eugene Brinkman of Coffeyville, treasurer. Eighty-one State Farmer Degrees were conferred on the outstanding high school students with excellent balanced farming programs. This degree also recognizes scholarship and leadership.

Ninety-one teams of three men each competed in the agricultural judging contests and 68 teams of two men each in farm mechanics contest. Results of the two-day meet were announced at the final banquet.

Newton High School coached by R. M. Karns was high in the agricultural judging section. Runner-up teams and coaches in order were Be-



Newton High School won the agricultural judging contests. Back row, Ralph Karns, coach, and Kenneth Williams, high man of the entire contest; front row, Vincent Gatz and Wilbur Kurr.



The winning farm mechanics team represented Beloit High School. The winners: David Williams, high man of the entire contest, H. R. Bradley, coach, and Keith Wiles.



Richard Chase, state president of the FFA, awards Gov. Frank Carlson an honorary State Farmer Degree.

loit High School, Howard Bradley; Inman Rural High School, William Braun; Cherryvale High School, C. H. Young; and Stafford High School, Elmer Schrag. Five high individuals in judging were Kenneth Woods, Newton; Nicholas Schmidt, Inman; Ray Van Pelt, Beloit; Harold Thole, Stafford; and Jim Adams of Beloit.

Winner of the Farm Mechanics contest was the Beloit team, coached by Howard Bradley. Runner-up teams and coaches were Washington High School, I. E. Peterson; Smith Center High School, Charles Mantz; Stockton High School, Floyd Blauer; and Solomon High School, Clyde Venneberg. David Williams from Beloit was high individual in this con-

test. Other high individuals were Fred Zillinger, Phillipsburg; Doyle Holvombe, Stockton; Kenneth Keim, Washington; and Richard Nickelson, Lyndon.

Harland Priddle, winner of the speech contest, gave his winning speech at the final banquet. Honored guests were President Milton S. Eisenhower of Kansas State College; C. M. Miller, chairman of State Board for Vocational Education; and Phillip Shober, secretary of the national FFA.

The four classifications in the State FFA Chapter contest are Gold Emblem, Silver Emblem, Bronze Emblem, and honorable mention. The 1947 Gold Emblem winners were Olathe, E. L. Raines, adviser; Buhler, J. A. Johnson, adviser; Highland Park, F. E. Carpenter, adviser; Beloit, Howard Bradley, adviser; Stockton, F. A. Blauer, adviser; Winfield, Ira Plank and John Lowe, advisers; Effingham, J. A. Jensen, adviser; Minneapolis, J. Willis Jordan, adviser; and Coldwater, L. E. Melia, adviser.

George W. Kleier, graduate in animal husbandry in 1940, will join the staff of the American Hereford Association, with headquarters in Kansas City, as soon as a man can be found to fill the post he will leave with the Stockman magazine, Memphis.



New officers of FFA elected during the convention were, back row, A. P. Davidson, executive adviser; LeRoy Spicher of Simpson, reporter; Eugene Brinkman of Coffeyville, treasurer; L. F. Hall, executive secretary; front row, James Boucek of Ottawa, secretary; Harland Priddle of Haven, president; and Bob Greve of Harper, vice-president.



## Perfect Blue White DIAMONDS

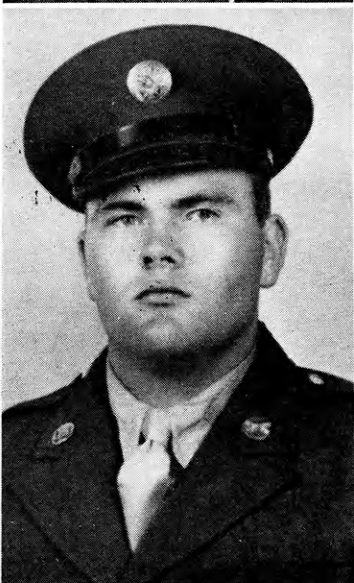
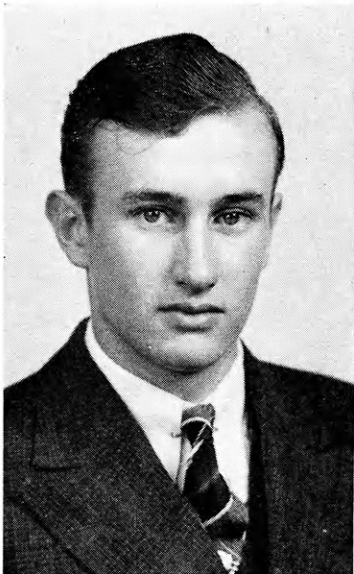
- Free from carbon spots and flaws—
- Beautiful color—
- Full cut and perfectly proportioned for greatest possible brilliance—
- All of which means **QUALITY** in Diamonds—
- And **QUALITY** is our pride and satisfaction will be your pride thru years to come should you select a **REED QUALITY DIAMOND** for HER.
- Mountings—a big selection we have—and—we mount the diamond for you in this store—ourselves.

## REED'S TIME SHOP

SOSNA THEATRE BLDG.

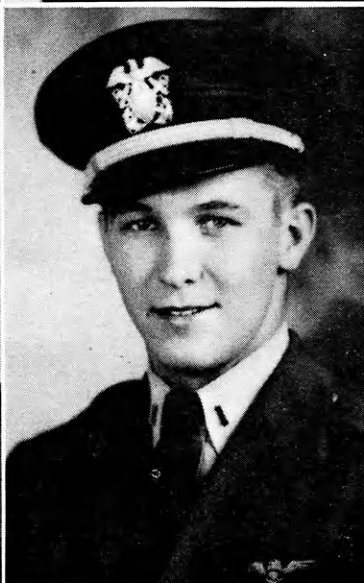
AGGIEVILLE

# IN MEMORIAM



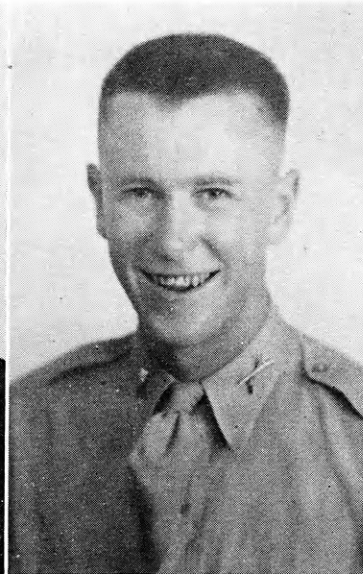
LEONARD ROBINSON, F. S. '43  
Viola, Kansas  
USAAF  
Killed in Action  
Japan

WILBUR W. SOEKEN, F. S. '43  
Clafin, Kansas  
U. S. Army  
Killed in Action Dec. 1944  
Germany



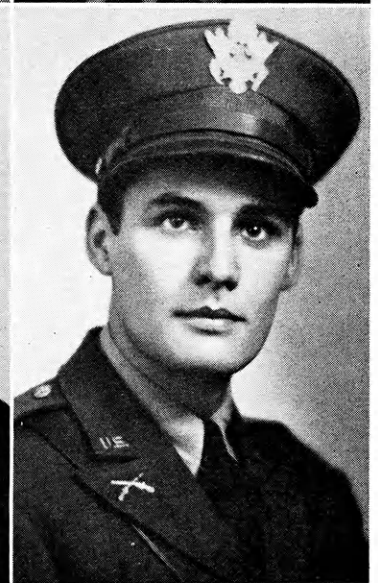
EDWARD G. SEUFERT, '43  
Tonganoxie, Kansas  
U. S. Army  
Killed in Action Oct. 1944  
France

RALPH L. TICHENOR  
Russell, Kansas  
USNAC  
Killed in Action 1944  
Pacific



BILLY B. SLOAN, F. S. '45  
Leavenworth, Kansas  
U. S. Army  
Killed in Action March 30, 1945  
Germany

GERALD S. WAGSTAD, F. S. '41  
Osseo, Wisconsin  
Killed in Action 1944



HAROLD A. SNYDER, F. S. '43  
Winfield, Kansas  
USAAF  
Killed in Action Aug. 9, 1944  
Europe

WILLIAM J. WERTS, '42  
Smith Center, Kansas  
USAAF  
Killed in Plane Crash Nov. 1943  
United States

By LINTON LULL

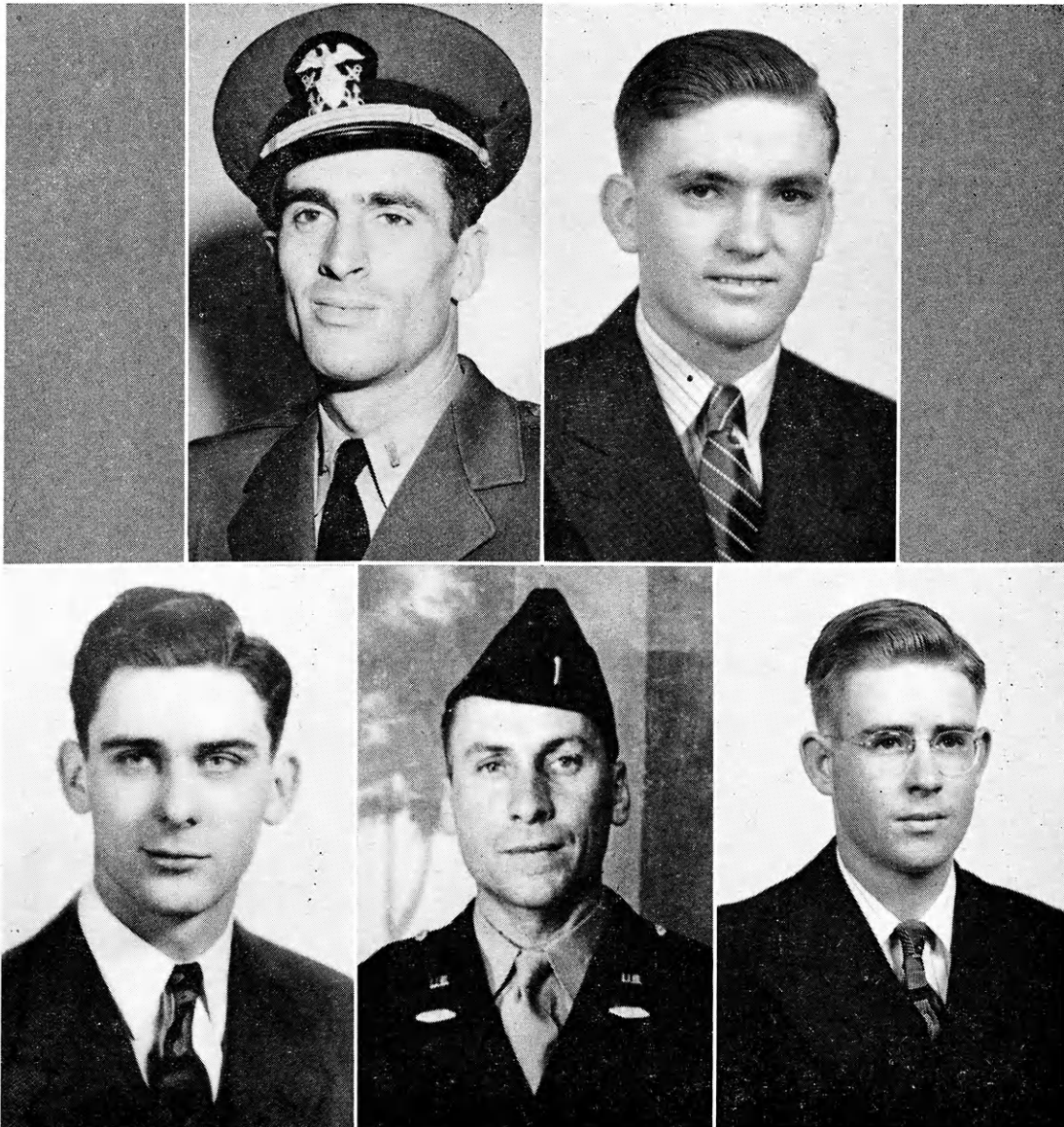
On these pages the Ag Student concludes its tribute to 61 former students and graduates of the School of Agriculture who gave their lives in World War II.

We hope no omissions were made. Our list was compiled in the dean's office and information was gathered from parents' reports, newspapers, and from friends of the former students. It is possible that some men

have not been reported.

The pictures of these men have been permanently mounted in a memorial which now hangs in East Ag.

We will long remember our friendships and associations with these men.



WILLIAM H. WINNER, '43  
Topeka, Kansas  
USNAC  
Killed in Action Oct. 1944  
Southwest Pacific

ROBERT L. WRIGHT, F. S. '43  
Holton, Kansas  
U. S. Army  
Killed in Action Jan. 1945

JOSEPH ZITNIK  
Scammon, Kansas  
U. S. Army  
Killed in Action Oct. 1944  
Holland

CHESTER B. WOOD, F. S. '44  
Trousdale, Kansas  
U. S. Army  
Killed in Action Feb. 10, 1945  
Germany

EDWARD E. MITCHELL, F. S. '46  
Cimarron, Kansas  
USAAF  
Killed in plane crash June 9, 1946  
Panama Canal



Third place in the photo contest went to this silhouette of Anderson Hall taken by Calvin Swindler.

## New Insecticides Produce Problems for Entomologists

(Continued from page 4)

to war equipment. Farmers, manufacturers, and domestic users were sure only that the substitutes which they could obtain were likely to disappear, at a time when crops and public health were critically important.

The U. S. Department of Agriculture organized the mad scramble by testing and listing the minimum effective amounts of old materials. During the last months of the war, continued work on new effective insecticides provided enough for military and domestic use.

Although there are other important insecticides, DDT is getting the lion's share of research for it is considered the most efficient all-round insecticide available. The military success of DDT in infested areas of the world helped to control typhus, Bubonic plague, malaria, dysentery, and the gamut of diseases borne by mosquitoes, flies, lice, and fleas. As a civilian weapon, it has added comfort, profit, beauty, and safety to the home, garden, cattle, crops, and orchard. Where DDT fails, another insecticide usually does the trick.

In the home, DDT commonly used as a 5 percent spray or a 10 percent powder or in aerosol form, wages a lethal war on bedbugs, moths, flies, and mosquitoes. It is not effective against the larvae of houseflies. Newer insecticides are effective.

The non-toxic piperonyls are gain-

ing favor for home use. Because they are effective in very weak dilutions, these sprays and dusts spare humans and dogs and cats. Their heliotrope scent has made them valuable for perfume; now they are cheap, long-lasting, and fast-acting against roaches, flies, ants, and mosquitoes. Testing panels treated with a piperonyl solution continued to kill flies seven months later, roaches two months later.

Garden pests require a variety of even the new materials. DDT kills many of these insects, but a combination of piperonyl, pyrethrin, and rotenone is a "one-shot killer" even for Mexican bean beetles, aphids, and cucumber beetles. Only a few years ago an exasperated gardener declared that the only safe way he knew to kill cucumber beetles was to tickle the little fellows under the chin, then when they laughed, blow dust down their throats.

Control of insects which attack livestock is a job cut out for DDT. Hornflies are the main problem, and require power spraying at 400 pounds or more. Four pounds of 50 percent wettable DDT in 100 gallons of water will protect 100 head of grown cattle about 15 days; increased to 8 pounds, the spray will kill lice. Stable flies attack legs and cause huddling; house flies do not bite the animals, but spread disease. Both are victims of DDT, but blowflies, screwworm flies, and most fly eggs are not harmed by it.

Spraying the barn with DDT eliminates swarms of flies, particularly

stable or "leg flies," which hitchhike into the barn on the cows, then rest on the walls. Ordinary spraying lasts two or three weeks. The college dairy found, however, that even with DDT diluted to .25 percent, sprayed surfaces of the barn and creamery killed flies for 30 days. Oil mixtures and emulsions may be used in buildings only where there is no danger of fire, contamination of feed or feeding and milking equipment, nor exposure of animals to the spray. Cows, sheep, and their offspring show no damaging effects on digestive organs, healthy reproduction, and normal milk production after eating DDT-treated feeds; however, white rats fed the milk from such animals have shown marked toxic effects.

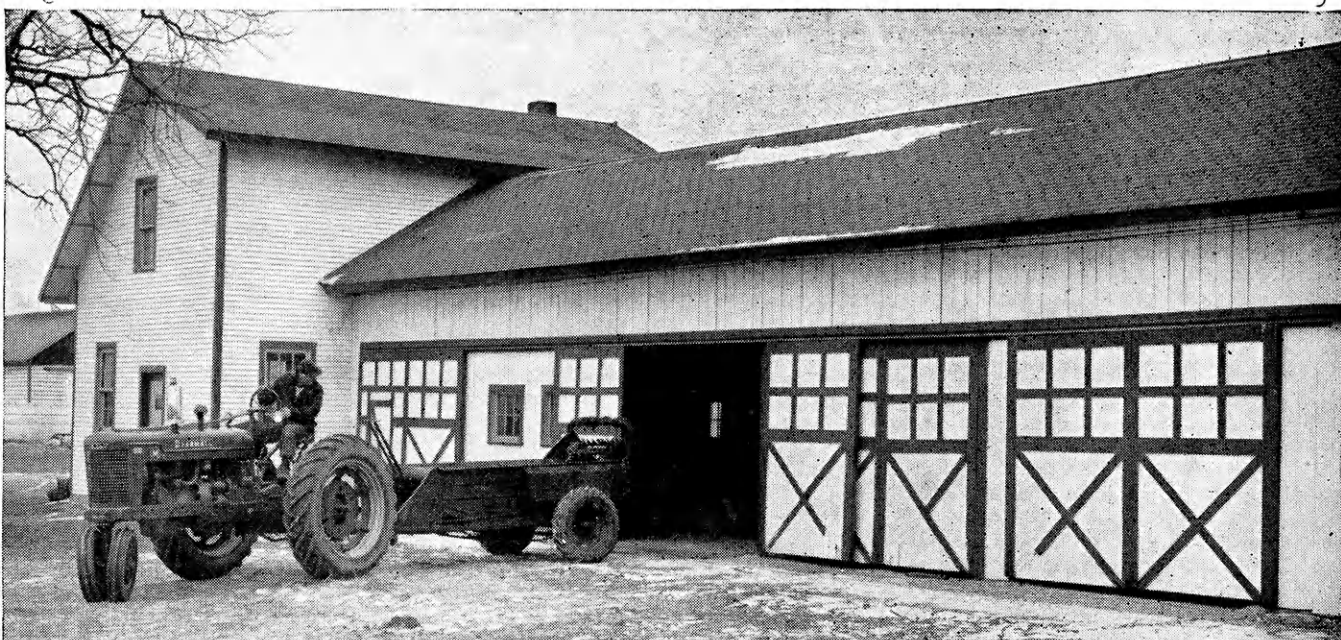
Porous materials and flat finishes give poor results after spraying unless a plasticizer or sealer is used. Wettable powders with water give better results than oil bases for DDT. "1068" is good on unfinished cement.

Effects of the new insecticides on bees, particularly DDT, worry bee men. California bee-keepers have formed associations to protect their colonies from the new poisons. New appreciation for the bees' pollination service is winning cooperation of seed and fruit growers in timing spraying to avoid the nectar-bearing period.

Continuous research and cautious use promise better health, better production, and fewer losses from man's constant pests, the harmful insects.



Judy, the family favorite, provided Marvin Lundquist with subject matter for a special box camera award in the photo contest.



Farm equipment placed in this roomy, well-constructed storage shed will receive thorough protection from snow and rain. The taller building at left is the farm shop.

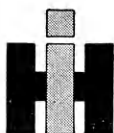
# “Preventive Maintenance Pays”

That's the title of a 40-minute sound slide film being distributed now by International Harvester that demonstrates just *how* Preventive Maintenance can pay. It's available to departments of agricultural engineering.

Just what goes to make up Preventive Maintenance when it's applied to farm equipment? One definition might be “the proper storage, care, operation and adjustment of equipment resulting in better performance and longer life.” Certainly it's only sound business and good farm management to extend the investment in machinery this practical way.

“Preventive Maintenance Pays” covers the jobs that are necessary to carry out PM on the farm, focusing attention on off-season storage and correct preparation of tractors for their seasonal work.

Your nearest International Harvester branch office can furnish you with this slide film and record. No makes or models of tractors are identified and the PM principles explained can be applied to any tractor.



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# INTERNATIONAL HARVESTER

# Alpha Mu Gains Industry-Wide Recognition

By EUGENE SWENSON

In the fall of 1934 a group of milling students came to the faculty and asked if part of the seminar for milling students could not be held off

the campus so that they could have an informal meeting.

In October a group of milling students met with Warren Keller. Armond Rousseau of Washington was elected chairman; Forest Wolf, vice-chairman; and Gene Farrell, scribe for the group. Dr. Swanson suggested calling the organization Alpha Mu after the initials of the Greek letters for flour milling, which are Aleurone Mule.

In the spring of 1936 Harold Lindahl began looking into Alpha Mu

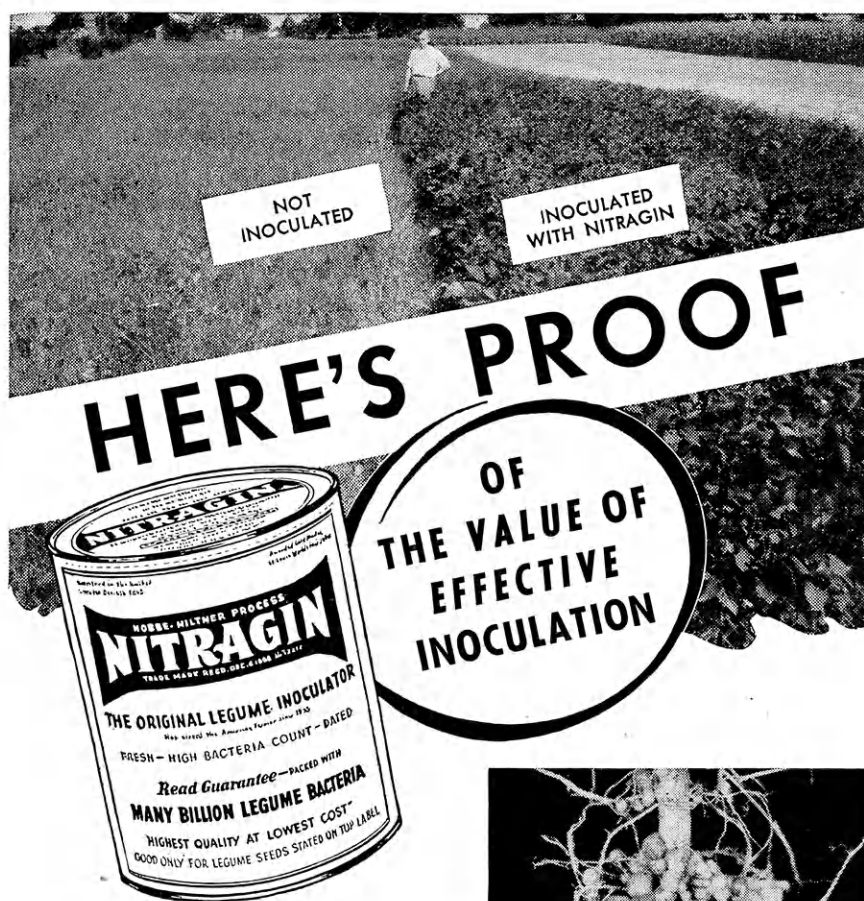
material and decided to reorganize the lost fraternity. The boys he contacted about the reorganization became very interested in getting Alpha Mu started in the right direction this time. A meeting was called and the old constitution was revised to include scholastic requirements which must be attained, thus making it an honorary milling organization. At this meeting officers were also elected for the coming school year. Harold Lindahl was elected president; Fred Zutavern, vice-president; and Robert Anderson, secretary-treasurer.

From the beginning Alpha Mu gained recognition, first from Kansas State College, and then in the entire milling industry as its members went out and proved themselves. Regular meetings were held from year to year and three traditional events came into being. These were the annual fall smoker at which the highest ranking freshman miller was presented an award, the Christmas milling project which provided flour for needy people of the Manhattan community, and the annual spring banquet for all Alpha Mu members.

The coming of World War II interrupted the progress of Alpha Mu and the fraternity was temporarily inactivated. The last meeting before the war was held in Calvin Lounge on May 6, 1943. Reorganization activity started in December of 1945. Prof. R. O. Pence, Prof. J. A. Johnson, and Ronald Billings were the nucleus of the new Alpha Mu. Informal meetings were held and new members initiated. The fall smoker was given for all milling students in September of 1946. The first officially recorded meeting convened at the home of Arlin Ward with all 16 active members present. Officers elected were J. W. Fitzsimmons, manager; Harold Bellairs, head miller; and Marlo Dirks, auditor.

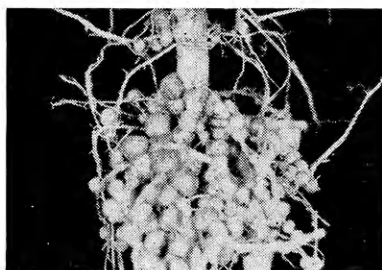
Next year, Alpha Mu will be led by Harold Ross, manager; Marlo Dirks, head miller; Ben Grogg, auditor; and Donald Abbott, sales manager.

Those who were taken into Alpha Mu this year included: William Richards, Homer Elling, James Conn, Vincent Feeney, Harold Shields, Donald Abbott, Ben Grogg, Harold Ross, Kenneth Fields, Steven Loska, Gerald Miller, William Hanser, Boyce Dougherty, Donald Pitts, and Don Vandergriff.



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Two stands of winter peas show the difference between strains of inoculants. Peas on left were inoculated with NITRAGIN, on right another inoculant was used.

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## Chaparajos Sponsor First KSC Rodeo

By R. G. CLENNIN JR.

Cowboys will don their boots and spurs and slick down their favorite riding horses when the wild-west rodeo comes to Kansas State next month. The Chaparajos, college riding club, is holding an inter-collegiate rodeo May 23 and 24, in Grif-fith Stadium.

Riding clubs from seven colleges and universities have been invited to participate. The schools are Oklahoma A & M, Texas Tech, Arkansas University, Colorado State College, Wyoming University, New Mexico State College, and Arizona University.

The forthcoming rodeo will be the first ever to be sponsored by any group at K-State. Since it was organized last spring, the Chaparajos have hoped to put on an event of this kind.

Last spring Dick Warren, now the club's president, and Tex Clennin became interested in organizing a college riding club to promote better horsemanship and love for horses. Through notices, posters, and interviews, they were able to reach other students interested in organizing such a club.

The name, Chaparajos, which was selected for the club causes even the most wary to stumble. It is a Spanish word meaning "overalls of leather" and is pronounced "shap-p-ra'-hos". Horsemen will recognize the word as simply chaps.

It wasn't until last fall that a constitution was drawn up and attempts were made to find places to keep members' horses. Finding facilities

for stabling horses, which is no easier than finding a 4-room apartment for an ex-GI with ten kids, is still a major problem because the bank account is practically nil.

Once members thought the barn situation was solved. An agreement was made between the club and the Ag school to let them use the barn at the old horticulture farm until June, 1947, when the dairy department would take it over for experimental work. Tragedy struck! The barn burned between semesters.

There are both professional and amateur rope artists, bronc riders, trick riders, and calf ropers in the club. However, it is not necessary to be a rodeo "pro" to belong. Any student or faculty member interested in horses is welcomed to club membership. Other qualifications are a knowledge of horse "tack" and technical terms. The club's faculty adviser is Prof. R. B. Cathcart of the animal husbandry department.

For the first time since 1942 the traditional ping pong tournament sponsored by the Horticulture Club was held on March 21.

The event, open to contestants representing the eight departmental clubs of the School of Agriculture, was held in the handball room of Nichols Gym. Both singles and doubles eliminations were held.

Tom Evans and Lyle Engle won the doubles contest and Evans took the singles to make their Club, Block and Bridle, recipient of the Hort Club plaque.

Block and Bridle was also awarded the plaque in 1938, the first year the contest was held. The plaque is now displayed in the Block and Bridle trophy case.

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Gives the Plan in Detail.



# Spring Grads List Variety of Plans

By FLOYD FRISBIE

The question "What are you going to do when you are graduated?" is probably the most often repeated inquiry on the campus these days. Approximately 58 seniors, graduating in the School of Agriculture this spring, have reached the stage where they are giving serious thought to that all-important question. The following answers received should prove interesting to senior classmates as well as to undergraduates in the School of Agriculture.

Merrit C. Atwell is going back to his farm near Utica.

Charles Bacon will return to his farm near Hutchinson.

Jay Bayha plans to teach vocational agriculture, but has not decided which school to take.

John Bishop is going back to his wheat farm near Minneapolis.

Earl Bondy plans to work in soil conservation.

Joseph Chilen is going back to his cattle ranch near Miltonvale.

Marvin Clark plans to work in extension or with the Consumer Coop Ass'n.

Oscar Collings will be the next vocational ag instructor at Iola.

Harry Cowman is going back to his farm near Lost Springs.

Harold Cox will return to his farm near Anthony.

Roy Currie plans to work with the Soil Conservation Service.

Jackson Dunbar plans to go into salesmanship work with some fertilizer company.

Lawrence Duncan expects to work in dairy manufacturing.

Homer Elling is going to do graduate work in milling chemistry here at K-State.

Merle Eyestone plans to be a 4-H club agent.

Vincent Feeney plans to work in the milling industry.

Floyd Frisbie is going back to his wheat farm near McDonald.

Corlis Gowen will return to wheat farming near Cunningham.

William Hanser plans to work in a cereal or wheat mill.

Earl Hart plans to go into extension work.

Dean Hoppas plans to teach vo-

cational agriculture when he has decided which high school he wants.

Everett Janne plans to do landscape design work.

Vernon Keim also expects to enter the landscape design field.

Charles Kier plans to work in the dairy manufacturing field.

Richard Knobloch is going back to the regular army as a lieutenant colonel.

Glenn Koby will do graduate work in land use.

James Leker plans to study veterinary medicine here at K-State.

Robert McClymonds is going back to his farm near Walton.

William McMillan is going to do graduate work in Ag Education.

Justin McNish plans to work with the Soil Conservation Service.

John Massey is going back to his livestock ranch near Sun City.

Edward Mayo plans to work in a milling control lab.

Frank Miller plans to do extension work or work with the Consumer Coop Ass'n.

Carol Montgomery is going to work for the Kansas Crop Improvement Ass'n.

Dean Orem is going to be a field man for the Pet Milk Co. in Neosho, Mo.

William Phillips is going to do graduate work while assisting C. O. Grandfield on alfalfa improvement.

Donald Pitts plans to work as a cereal chemist.

Lewis Schafer will do graduate work in plant pathology and instruct in botany here at K-State.

Glenn Shriver plans to go into extension work.

Cecil Siebert will farm near Pretty Prairie.

Dalbert Smith is going back to his farm near Macksville.

Lorene Smith is going to Pasadena, Calif., to work with her brother in landscape architecture.

George Stephens will be the vocational agriculture instructor at McCune.

Thomas Stockebrand plans to attend summer school here at K-State and teach vocational agriculture next fall.

Frank Stuckey plans to be a field man in the milk industry.

Wilbur Tendick expects to go into soil conservation work.

Max Timmons plans to do appraisal work for an insurance company.

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Dick Turner is going to be the vocational agriculture instructor at Arkansas City.

Herbert Vanderlip plans to work for the Kellogg Cereal Co. or the Richmond Manufacturing Co. in New York.

Walter Vandeventer is going to do graduate work in agronomy here at K-State.

Glenn Weir will go back to his wheat farm near Hazelton.

Merrill Werts is going to take graduate work in journalism here at K-State.

Pierce Wheatley plans to work in flour production or milling engineering.

Frank Wilson is going to be a field man for the American Hereford Ass'n.

Vernon Woestemeyer will do farm management work or go into agricultural research.

Laureston Withee plans to work for the soil survey department.

Staley Pitts, recent addition to the College football coaching staff, graduated from the School of Agriculture in 1939. He majored in Hort.

# Floyd Has Habit Of Winning Prizes

By ROBERT L. HENRICKSON

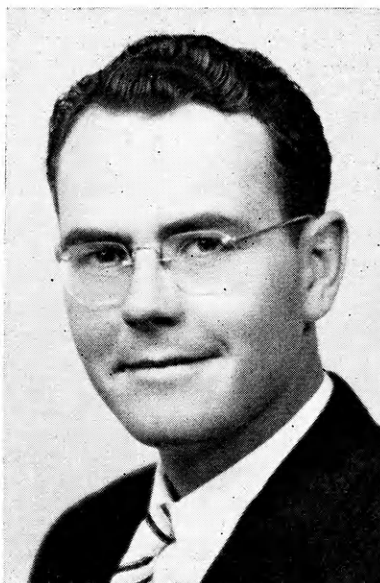
Becoming king among wheat growers of western Kansas will be the ambition of Floyd Frisbie after graduation this spring. From the many students graduating in agriculture, Floyd is one who actually plans to till the soil.

Quick thinking, ability, and the willingness to work which Floyd has shown at Kansas State should make this a minor task. He has 460 acres in wheat this year and plans to farm 960 acres next year. His farm is located in Rawlins County, near McDonald. He has a new tractor and sufficient other machinery to carry on the farm work, so when the dust rolls in from the west this summer, we can rest assured that Floyd will be hard at work.

During his four years of high school training Floyd was active in the Future Farmers and 4-H Club work. He was a member of the F. F. A. livestock judging team which placed high at the Fort Hays Experiment Station Contest in 1938. After graduation from McDonald High School, Floyd came to Kansas State in 1940. Interested in livestock, he joined the Block and Bridle Club; through leadership ability, he was elected vice-president in 1942. As a sophomore he scored high individual honors in the 1942 Poultry Judging Contest.

Like many students, Floyd interrupted his studies to answer the letter of congratulations sent out by the President of the United States. He went on active duty with the army June, 1943, and served 16 months in the Southwest Pacific. He received his discharge January 31, 1946, with the rating of staff sergeant in the Signal Corps.

Floyd resumed his college studies and extra-curricular activities in February, 1946. Taking advantage of his drive and leadership, his fellow students elected him president of the Block and Bridle Club, vice-president of the Klod and Kernel Klub and treasurer of the Agricultural Association. On the basis of outstanding scholastic achievement, he is now a member of the Alpha Zeta honorary fraternity. He is one



FLOYD FRISBIE

of the two students from the School of Agriculture representing the college in the Manhattan Lions Club.

Floyd was a member of this year's meat judging team and was awarded a 21-jewel wrist watch for highest individual scoring in the contest sponsored by the Morrell Packing Company of Topeka. He was also a member of the meat judging team at the American Royal and the International Live Stock Show at Chicago last fall.

When the time came for Block and Bridle to select its "outstanding member" candidate for national competition, the selection committee awarded Floyd the honor. The national winner will be chosen next fall. At the annual Block and Bridle banquet held May 3, the club presented Floyd with a plaque in recognition of his scholastic achievements and service to club and school.

Mrs. Frisbie, the former Helen Pierpoint, graduated in home economics at Kansas State in 1943 and is fully prepared to make Floyd's home life pleasant. Their son Kirk is only 6 months old, but already he is active and alert. So about 1967 we will look for Kirk Frisbie at K-State as student chairman in charge of the dedication ball for the new Student Union Building.

Elmer Russell of St. John is acquiring considerable recognition for his work in landscaping. He makes the four shelter belts on his farm a thing of beauty as well as utility. He was graduated in 1929.

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The stresses in complicated structures required for new equipment frequently cannot be calculated by conventional methods of analysis. Research engineers, trained in mechanics, must develop, experimentally and theoretically, new methods to apply to such structures.

Prior to the construction of the plant, research engineers, trained in mechanical and electrical engineering, must study in the laboratory such problems as heat trans-

fer, fluid flow, power reduction, and noise elimination. Later, they will check their theories and experiments by tests in the plant itself.

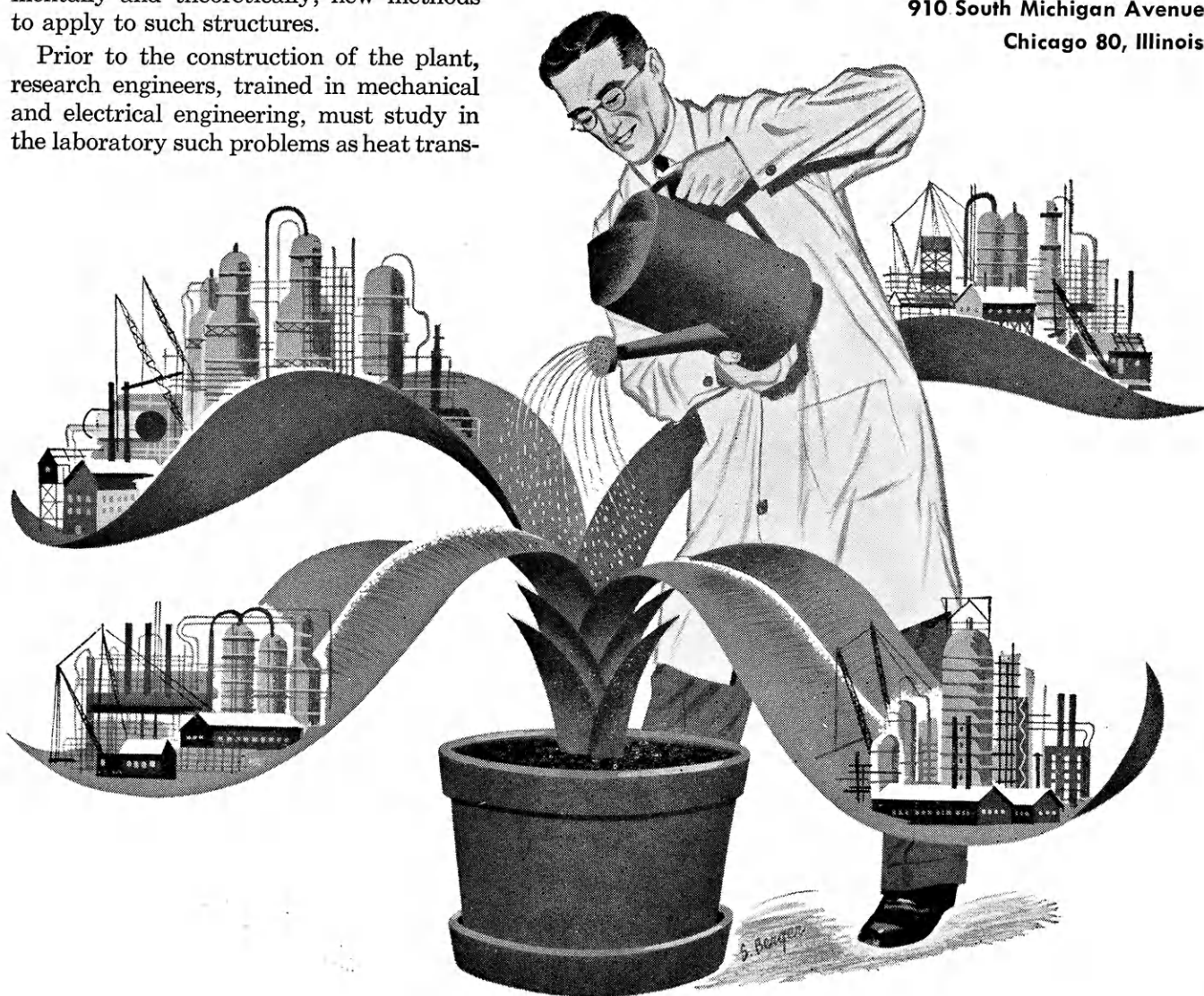
For checking the physical parts of the plant, new inspection methods—including such glamorous ones as the x-ray and ultra-sonics—will be required. Our physicists will develop them.

And with the plant in operation, there comes the battle against deterioration—into which corrosion engineers throw their full weight. It's a fight not only to lengthen the life of plants in operation but also to discover—even after a plant is junked—how succeeding ones can be built to last longer.

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## Bob Randle Writes

April 14, 1947

Dear Emery,

It was good to hear from you and we certainly did enjoy our copy of the March issue of the Ag Student. You asked about my job here so I will tell you a little about it.

Eastern New Mexico College is located in Portales which has a population of approximately 8,000 people. The town lies in a basin which formerly was an inland lake. Irrigation by deep well pumps is quite well developed with alfalfa, peanuts, beans, and other commercial truck crops as the principal crops under irrigation. Dairying is an important livestock enterprise on irrigated farms.

The area surrounding the valley consists of dry land farms and ranches. The largest portion of the dry land under cultivation is used for the production of grain sorghums. Moisture and soil blowing are the major problems here as the soil is quite sandy and the average yearly rainfall is only 18 inches. There are many good herds of beef cattle in this area which resembles West Texas much more than it does New Mexico.

Eastern New Mexico College is a four year liberal arts college. The college, which is about 15 years old, has grown rapidly and was accredited in March of this year. The students come from West Texas and the eastern part of New Mexico to make up the present enrollment of about 800 students. The first two years of agriculture are taught here. Agriculture is a part of the School of Vocations of which Mr. O. M. Williamson is the head. Mr. Williamson holds a B. A. and M. A. in agriculture from Kansas State College. He is now at K. S. on a sabbatical leave to do graduate work in genetics.

We have a modern college dairy and experimental farm. It would be very desirable to have a branch experiment station located here since climatic and soil conditions are so different in this section from those sections in the state where the experimental stations are now located. E. N. M. C. will have the ground and buildings if such legislative action should take place in the future.

As ever,

Bob Randle

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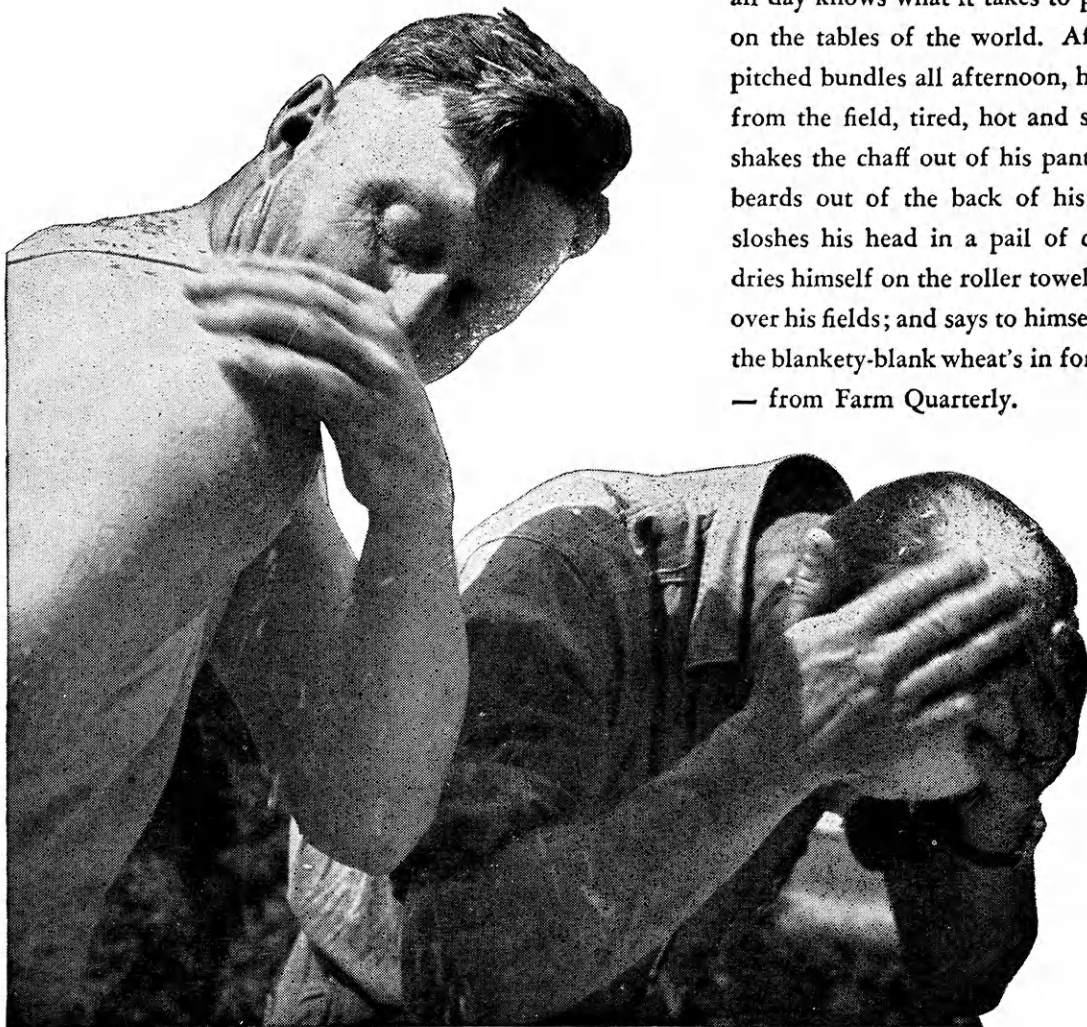
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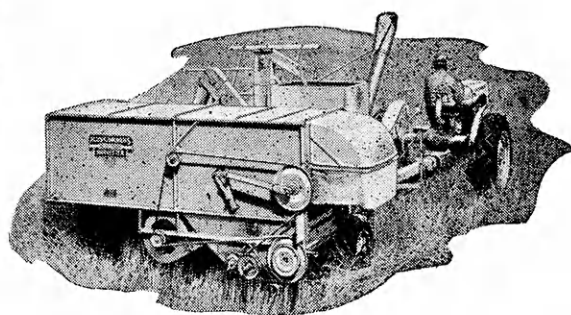
**A MAN** who works in the wheat all day knows what it takes to place bread on the tables of the world. After he has pitched bundles all afternoon, he comes in from the field, tired, hot and sweaty; he shakes the chaff out of his pants and digs beards out of the back of his neck. He sloshes his head in a pail of cold water, dries himself on the roller towel, looks out over his fields; and says to himself—"Well, the blankety-blank wheat's in for the year."  
— from Farm Quarterly.

Photo Courtesy Farm Quarterly

## UNLESS...

Most every farmer knows the above experience all too well. That is . . . unless he has discovered, as thousands have, that one man can harvest grain or seed crops sitting comfortably on the tractor seat, out of the chaff . . . that straw in the field can be handled with ordinary hay tools . . . that lodged, weedy crops can be saved where a binder would be helpless and tangled grain a nightmare.

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## Herbicides May Replace 'Man with the Hoe'

(Continued from page 8)

general types: sodium and ammonium salts, amine salts, and esters.

The sodium and ammonium salts are dry powders which usually dissolve readily in water. The content of 2, 4-D varies from 60 to 90 percent in different preparations that are on the market. They act more slowly than the esters, but when applied under favorable conditions to susceptible plants their ultimate effect is the same.

The time of applying 2, 4-D is determined mainly by the stage of growth of the weeds. In general, weeds are more susceptible when young or in a stage of rapid growth. In the case of annual weeds, best results will be obtained when the plants are young, usually in early spring. Winter annuals and biennials may be treated in late fall. The common lawn weeds, dandelion, plantain, and chickweed, should be treated in early spring, March, or early April, or in the fall when growth conditions are favorable.

Best results are obtained on most perennial weeds from applications made before bloom. Those which form rosettes in the fall and spring, such as hoary cress, can be effectively treated at the stage in either fall or spring.

Uniform coverage of the leaves of all weeds in the treated area is the first essential. The spray should be applied under a pressure of 30 to 100 pounds; for treating near valuable plants, 50 pounds should be the maximum. Higher pressure usually causes a greater loss of spray material by wind drift and run-off. A spray nozzle with a slotted opening to deliver a fan-shaped spray gives more uniform coverage than one that delivers a cone-shaped spray. Complete coverage of the plants must be emphasized.

The usual concentration of 2, 4-D in the spray solution, when applied to small areas, is one part by weight of 2, 4-D acid equivalent to 1,000 parts of water. Since the commercial preparations vary widely in percentage of 2, 4-D contained, the concentration must be computed on the basis of this percentage. Therefore, 10 times as much must be used of a preparation containing only 10 per-

cent 2, 4-D as would be required of one which contained 100 percent 2, 4-D. Sufficient spray solution to wet all the foliage should be used. The amount required will depend upon the height and density of the vegetation and may range from  $\frac{1}{2}$  to  $2\frac{1}{2}$  gallons per square rod.

The rate of application is usually stated in pounds of 2, 4-D acid per acre when large areas are to be treated. For most weeds,  $1\frac{1}{4}$  pounds of 2, 4-D acid should be mixed with 100 to 150 gallons of water and applied to one acre. If 150 gallons per acre is sufficient to wet all the foliage, increasing the dosage should be accomplished by increasing the amount of 2, 4-D in the solution. Applying more gallons of the original concentration will result in waste due to more run-off.

Useful plants may be seriously damaged by the improper handling and use of 2, 4-D. Spray equipment used for applying this chemical should not be used for applying insecticides or fungicides to garden, fruit, or ornamental plants. Even after thoroughly washing the sprayer, there is likely to be sufficient 2, 4-D remaining to damage these crops. If treatments must be made near ornamental shrubs or trees, they should be protected against drifting spray.



Dorcas Wilson, Royal Purple Beauty Queen, scores an assist in Lester Crandall's fourth prize in the photo contest.

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## Faculty Recognized

(Continued from page 3)

science degree in 1906, he enrolled as a special student and worked for the degree of doctor of veterinary medicine which he received in 1910. In 1918 he received his third degree, bachelor of science in agriculture.

Professor McCampbell has the remarkable record of having completed more than 37 years of continuous service to Kansas State, 26 of them as head of the Department of Animal Husbandry.

He has done important work in the field of beef cattle research and instruction and is known throughout the nation for research in the field of animal nutrition.

Dr. McCampbell has developed three outstanding feeding procedures: use of ground limestone as a source of calcium in cattle fattening rations; the Kansas deferred feeding plan of fattening cattle for market, also called the "McCampbell system"; and the use of silage alone in cattle fattening rations.

C. O. Swanson

The millers are represented by Charles Oscar Swanson, professor of milling industry, emeritus. He came to the United States from Sweden as a child, about 1870, and grew up in Illinois and Indiana.

When he was 29 he was graduated from Carleton College at Northfield, Minn., and has since received degrees from the University of Minnesota and Cornell University.

Doctor Swanson's activities at Kansas State College have been as teacher, research worker, and writer. He is the author of over 100 bulletins, technical journal articles, and papers presented before technical societies or groups. He has written three books, "Wheat Flour and Diet", "Wheat and Flour Quality", and "Physical Properties of Dough", the last being published in 1943.

Professor Swanson has done most of his work in cereal science but has also made contributions in other lines of chemistry, such as soil and fertilizer investigations, chemistry of legume silage, swine nutrition, and hydrocyanic acid poisoning of sudan grass.

If the 57½ billion eggs produced in 1945 were placed end to end they would go around the earth 87 times.

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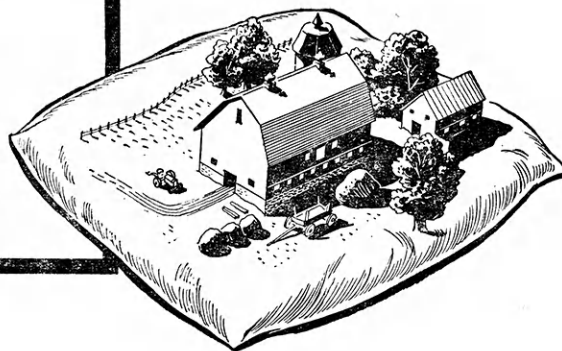
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## The Kansas Crop Improvement Association

MANHATTAN, KANSAS

## Lesson on a Cushion



When—in future years—you have to decide how much of your cereal crops to feed to livestock, remember this. The surplus you feed to livestock—after humans are fed—acts as a cushion against drastic changes in the grain market. The cushion will vary in thickness as supply and demand change, but as long as it is there, you have some protection from great price fluctuations. Marketing your crops through livestock is sound farm economics in another way, too. The more animals you keep in your feed lot, the more productive your land will be then—and in years to come.

## ARMOUR and Company



Samuel Claar, Billie Reid, Arthur Jacobs, Thomas Bentley, and Elton McCormick demonstrate the proper way to show Jersey cattle.

## KSC Dairy Herd Takes Five Firsts

By ARTHUR JACOBS

Dairy cattle owned by Kansas State College and exhibited by students majoring in dairy husbandry carried off high honors at the Jersey Parish show in Abilene April 29.

A six-month-old Jersey heifer calf owned by the college placed first in her class, was junior champion, and later won the grand championship.

Three junior yearling heifers placed first, second, and third in the yearling class. A yearling Jersey bull owned jointly by Kansas State College and Heep Jersey Farm of Buda, Texas, placed first in his class. Forty-five head of Jerseys were exhibited at the show in Abilene.

On the preceding day three K. S. C. Holstein heifers were exhibited at the district Holstein show in Linn. Two entries in the calf class received blue ribbons in competition with 26 other heifer calves.

A yearling Holstein heifer placed in the red ribbon group. Competition was keen in the Linn show, with 94 head of Holsteins being exhibited.

This is the first time Kansas State College has entered these annual events.

All of the animals owned by the college and exhibited at Linn and Abilene were fitted and shown by members of the dairy cattle feeding and management class. Since the Little American Royal has been discontinued, these shows give students an opportunity to gain experience in fitting and showing dairy cattle.



Getting a flock of sheep to pose is a problem according to John Parsons. He succeeded and won sixth place with this shot.

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FOR NEW IMPROVED HYBRIDS  
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What was new in corn last year may be far behind the times a year from now—for DeKalb's "search through research" for superior hybrid varieties never stops. Working in close harmony with leading scientists, DeKalb's corn breeders combine the pure science of genetics with their practical knowledge of corn growing and the farmer's corn requirements, to build a new efficiency in corn—better hybrids this year than last—still better hybrids in the years to come.



**PROGRESS  
IN CORN IMPROVEMENT OPENS  
NEW OPPORTUNITIES FOR AMERICAN YOUTH**

Today's youth has probably seen more "history in the making" than any one other single generation. In the span of a few short years, man's way of life has undergone change after change. Science and invention have decreased labor, increased production, lowered cost and added to profits. New frontiers have been opened in every walk of life—a new standard of living has arisen and youth today stands on the threshold of a new freedom which embraces more opportunities than ever before offered mankind.

The development of hybrid corn has been, and will continue to be a contributing factor in helping American farmers, both old and young, reap more wealth from their land. DeKalb works hand in hand with men of the soil—devoting tireless effort in developing hybrid varieties which will make farming easier, faster, more productive, more economical. To our American youth of today, this means hope, ambition and wealth. To their fathers, it means contentment and security.



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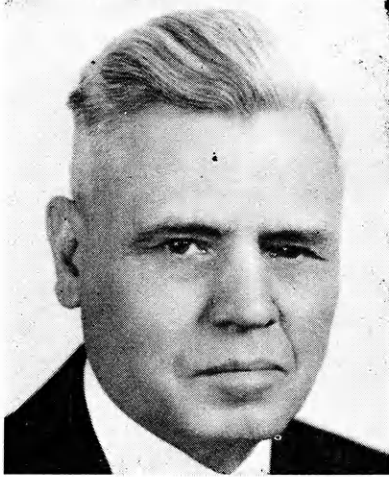
*A Great Yielding Corn*

# The Last Word

## Editorial Comment



### College Training Is Challenge to Youth



By DEAN R. I. THROCKMORTON

In this, the last issue of the *Agricultural Student* for this year, I wish to express to the students of the School of Agriculture the deep appreciation of the staff for your excellent cooperation. The student enrollment in the School is the largest it has been in the history of the College. The lack of teaching personnel and classroom space has worked a hardship on students and instructors alike, but the splendid way in which these hardships have been met speaks well for the spirit of all. Present indications are that the enrollment will be still larger next year. A material increase in the teaching staff for next fall will give much relief, but the shortage of classrooms will continue to be a problem.

To you men who will complete your undergraduate training this semester, may you find work to your liking and to your abilities. Regardless of where you go, may you be good citizens in the communities where you decide to locate. May you render a real service to those communities, and, by so doing, render a real service to yourself and to the College. The reputation of the College is dependent primarily upon the attitudes

and actions and services rendered by its graduates.

You men are more mature than are most men at the time of graduation. You know your obligations to society and to yourselves. You have a heritage and a training of which you may well be proud. Your opportunities are greater than have been those of any previous class. By continuing to study and to think, you can take advantage of these opportunities. If, however, upon being graduated, you cease to study, think, and plan, you will not stand out above your fellow men. Through studying, thinking, working, co-operating with others, and maintaining a sound philosophy of life, you can take advantage of opportunities and attain much.

### Aggies Receive Lesson in Democracy

When Article V is mentioned to students in the School of Agriculture, one is apt to receive a variety of answers. No doubt there are many who would like to forget the whole thing. On the other hand, a few remarks might be made concerning the final outcome.

In the first place, the creation of an Ag Council is a step in the right direction. If it functions properly, it can do more than just serve as a sounding board for the student council member. These men will represent all departments, and their thoughts should be a good index of just what the Ag School as a whole is thinking. A body such as this can be beneficial from the standpoint of both faculty and students.

Also, Article V as it now stands represents a product of democratic procedure. True, there was considerable disagreement from time to time, and there are probably those who are far from satisfied with the final result. But there are few important documents in United States history

that do not represent compromises and disagreements. Difference of opinion is not necessarily evil and may, at times, be quite beneficial.

In summary, then, it would seem the School of Agriculture has spent considerable time and effort on this matter but has been rewarded with a workable plan and a lesson in democracy. Several of us have learned something about parliamentary procedure.—E. N. C.

### Thanks, Aggies

As we prepare to write '30' to the last issue of this year's *Ag Student*, I'd like to take time out to express my appreciation to those who have helped put out the magazine.

Many of you have commented favorably on material presented in the publication. We are proud of the number of contributors to the *Ag Student*. These students have worked faithfully to prepare interesting and informative features. Their resourcefulness and originality in developing their subjects earned our respect. In many cases, the original idea as well as the development was the author's.

Keeping the content balanced, insuring material from each of the fields of agriculture, were the departmental reporters. Many features would have remained unpublished but for the initiative of the departmental reporters. We have relied a great deal, too, on the *Ag Journalism* classes for material.

Finally I'd like to express my appreciation to Mr. Macy and the staff. As each problem arose, they were ready with a solution.

Inadequate as it is—I haven't the facility with words of those who write for the *Ag Student*—I'd like to say "Thank You" to each who has contributed to the success of the *Ag Student*.—J. T.

Ivan Tompkins, '28, is greatly impressed by the potentialities of irrigation in Southwest Kansas. He is now the Meade County supervisor for Farmers' Home Administration. Tompkins has done considerable work in different phases of irrigation and believes that new power developments will make it practical over a larger area.