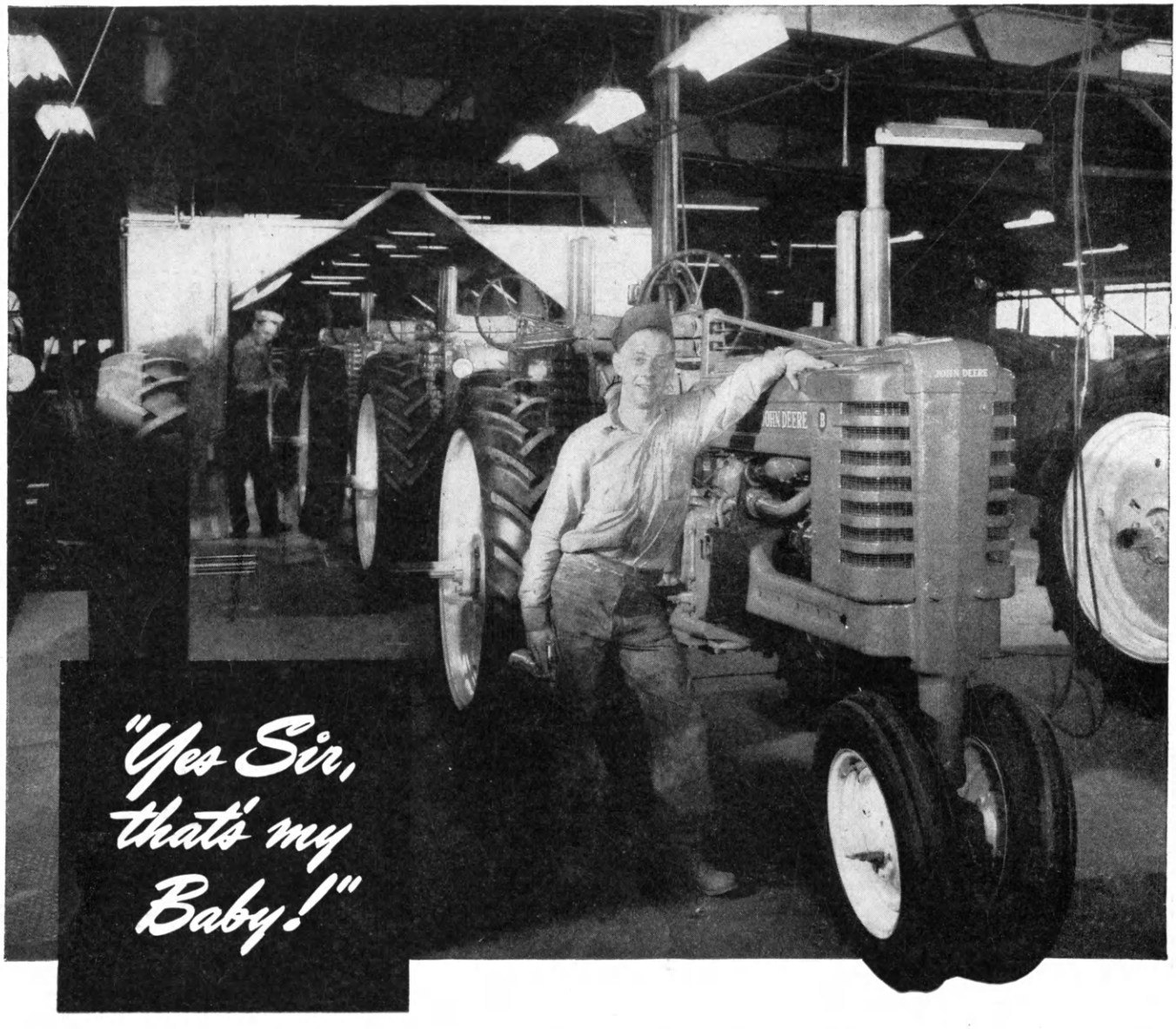
kansas AGricultural STUDENT

MAY, 1952 v.28:4

Throck Retires .... page 6



It's hard to hide—that good and down-deep-inside feeling a fellow gets when he's done a job and he's done it well and he knows it. It just won't be concealed—no matter how modest a fellow is.

You see, there's a something called "sense of accomplishment" that seems to run all through a man when he's done a good job. It's like an electric current, and it lights up his eyes like broad daylight so that you can't mistake it. It's a dead giveaway to downright honest pride.

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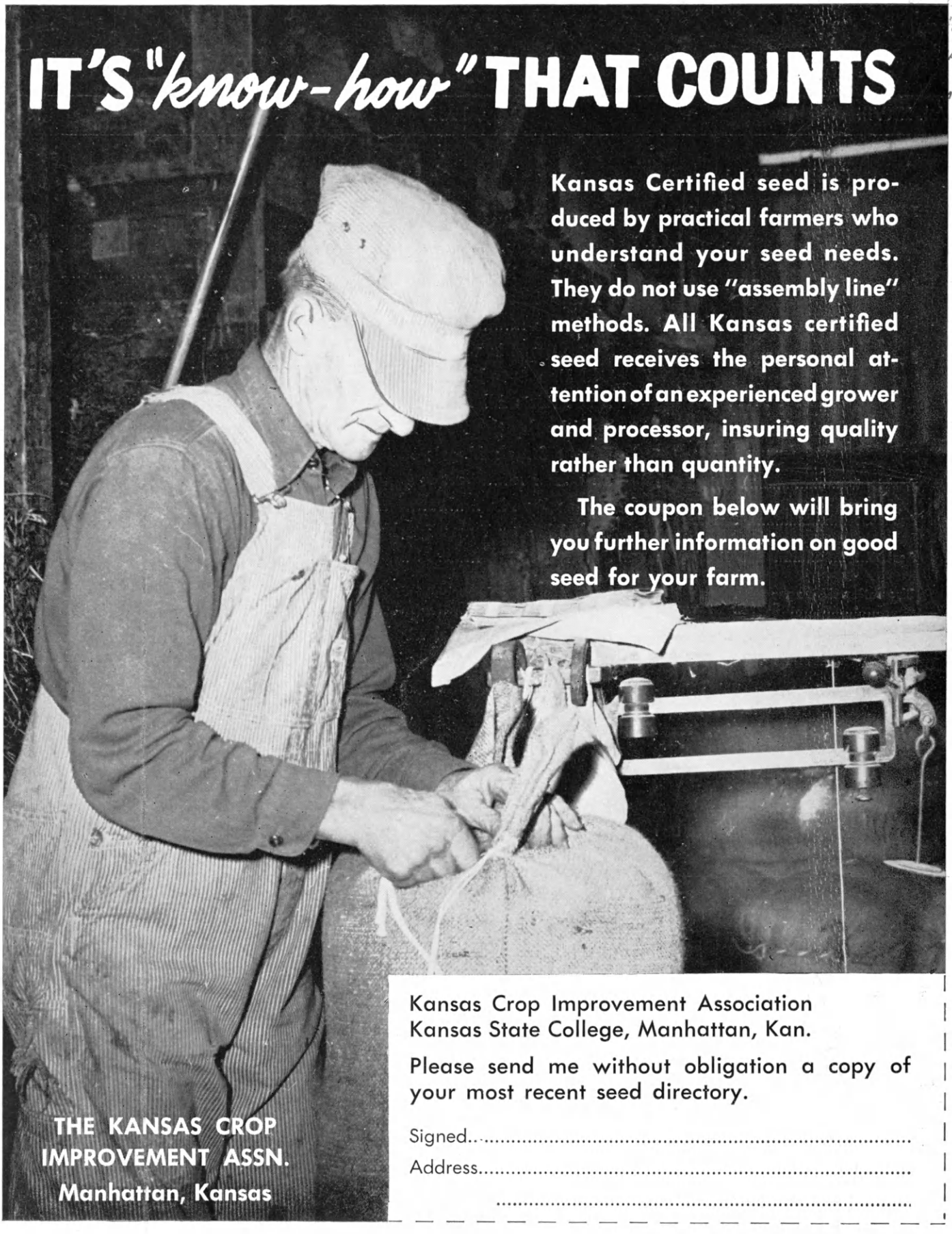

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THE KANSAS
Agricultural Student

Vol. XXVIII May, 1952 No. 4

IN THIS ISSUE

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ON THE COVER

GOING FISHING seems to be the new theme of Dean R. I. Throckmorton, Dean of the School of Agriculture at Kansas State. As soon as the Dean, one of the most outstanding agricultural leaders in the country, steps down from his position at the head of the Ag School July 1 he plans to do quite a bit of fishing. (Turn to page 6 for the story of the retiring Dean.)

O'BRYAN RANCH

Features

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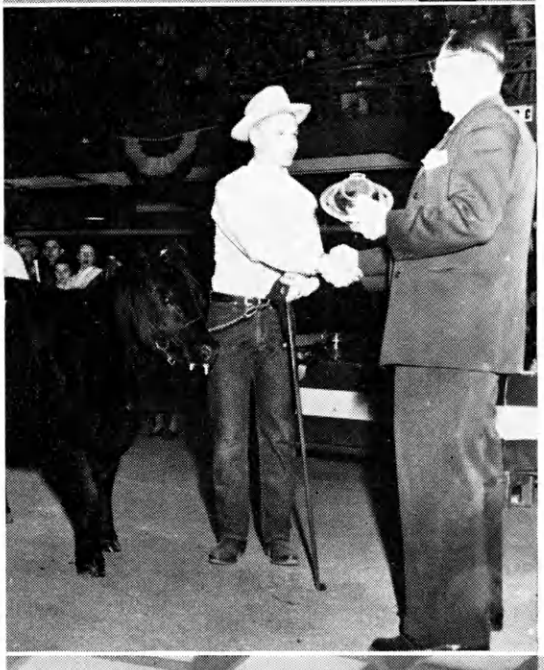
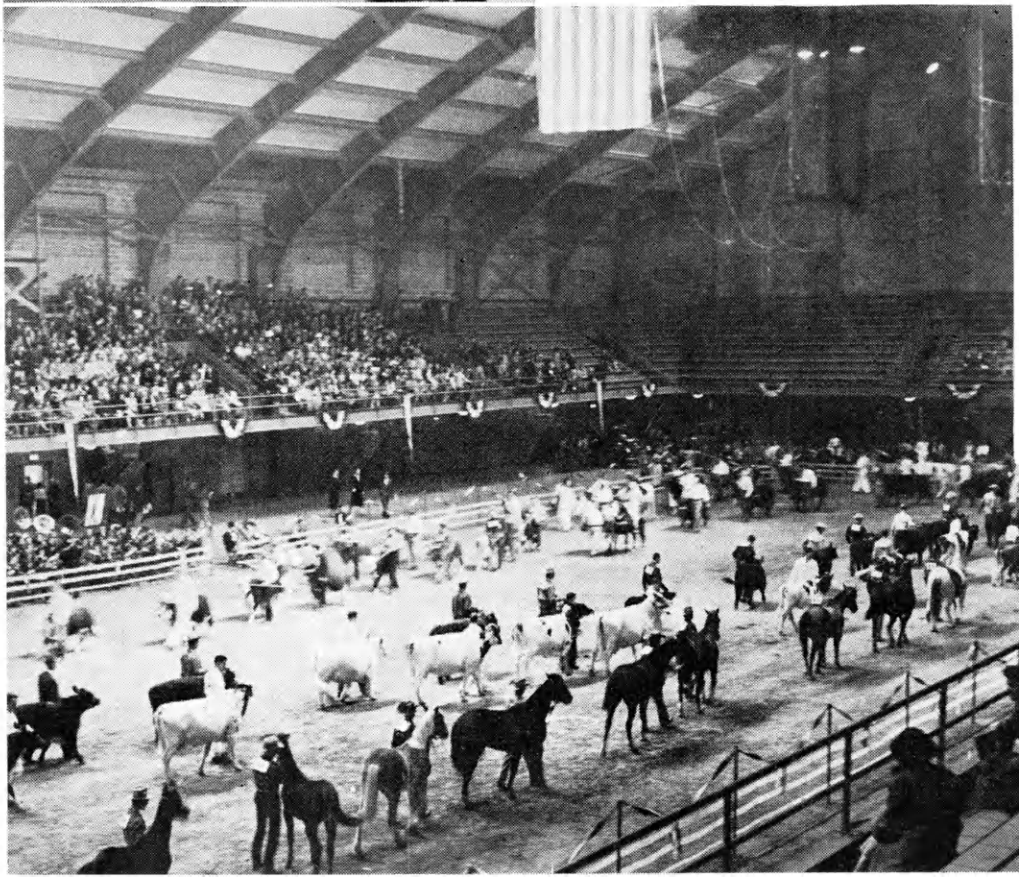
GRAND CHAMPION showman in the dairy division of the show was freshman Sherlund Prawl shown receiving the award from Roy Freeland, secretary of the state board of agriculture.



LARRY SANKEY, Grand Champion showman in the livestock division, receives a ribbon from Bill Preston, secretary of the KC Royal. Helen Gardiner, reserve champion in the beef cattle class, is at left of Sankey.

BELOW — The spectacular Grand Entry of the 1952 Little American Royal in the new K-State Field House.



OVER 100 STUDENTS, including eight coeds, climaxed a month and a half of training and fitting College livestock by showing at the Little American Royal in the Field House April 5.

More than 3,500 spectators watched the show where contestants were judged partly on the improvement animals made during the fitting period and partly on show appearance and performance.

Freshmen Larry Sankey and Sherlund Prawl took top honors in the event that is modeled after the Kansas City livestock show.

Roy Freeland, secretary of the state board of agriculture, presented the grand champion showman trophies to Sankey in the livestock division and Prawl in the dairy division.

Reserve champions at the 24th annual event were Ray Sis in the livestock division and John Speicher in the dairy division.

The use of four show rings sped up the show. Two rings were located on either side of the traditional sawdust centerpiece.

A considerable amount of work was involved in creating the attractive four-color centerpiece that highlighted the huge Field House floor.

After the horseshoe design was lected the students made a pattern of it to guide them in reproducing it on the structure's floor.

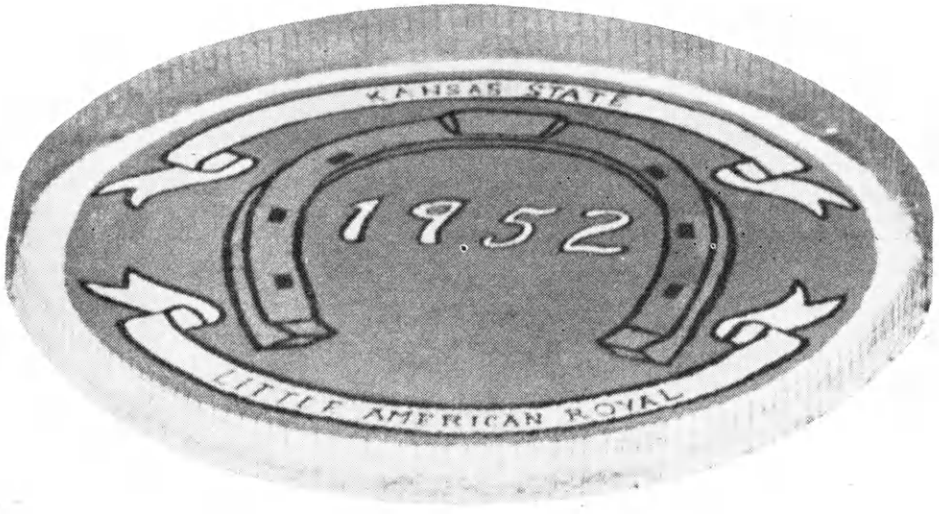
Sawdust for the large production had to be run through a hammermill and dyed.

This year's Royal was the second one to be held in the Field House. Last year 3,000 people attended the show in the new building.

In the past, the show that originated as a part of Farm and Home Week in 1924, took place in the judging pavilion.

Added entertainment at the show

FRANCIS CLARK, Ayrshire winner, receive his trophy from Bill Preston, Kansas City



this year was given by trick riders Jimmie Adams and Marilyn Clark and the Clay Center high school band.

Bill Preston, secretary of the Kansas City American Royal, presented the dairy class and the livestock class awards.

Other awards were presented by the master of ceremonies Dick Brown, the show's publicity chairman. Eight prizes were given in every class and all entries received souvenir ribbons.

In the dairy classes the grand champions and reserve champions were:

John Speicher and J. Mark Alley, Holstein breed; Speicher and William Bergman, Holstein cows; Alley and Lambert Mills, Holstein heifers; Sherlund Prawl and Joe Armstrong, Jersey breed.

Prawl and Clarence Creger, Jersey cows; Armstrong and Roy Harkrader, Jersey heifers; Francis Clark and Donald Shoup, Ayrshire breed; Clark and Shoup, Ayrshire cows.

Ronald Miller and Richard Hartkopf, Ayrshire heifers; Duane Traylor and Lawrence Odgers, Guernsey breed; Phyllis Esch and Dale Hewitt, Guernsey cows; and Traylor and Odgers, Guernsey heifers.

By Nick Kominus

Grand champions and reserve champions in the animal husbandry classes were:

Larry Sankey and Helen Gardiner, beef cattle; Sankey and George Wingert, Angus; Gardiner and Vernon Lindell, Herefords.

Hugh McDonald and Wayne Walter, Shorthorns; D. W. Zimmerman and Monte Dutcher, horses; Bob Rizek and Alvin Wendland, hogs; Wendland and Rizek, Duroc hogs.

Dave Schoneweis and Tom Maxwell, Poland China hogs; Ray Sis and Dwight Wingert, sheep; Wingert and Ray Burns, Southdown sheep; and Sis and Dale Davies, mixed sheep.

The grand champion showman in the livestock division was selected by Professor Tom Dowe. In the dairy division, judges Glenn McCormick and W. G. Ransom worked together to select the grand champion.

McCormick, a Holstein breeder from Cedar, judged the Holsteins and Ayrshires. Ransom, a Guernsey breeder, judged the Guernseys and Jerseys. Both are K-State graduates.

Three other K-State grads, Phil Ljungdahl, Fred Germann, and Orville Burtis, judged in the livestock division. Ljungdahl, manager of the Sunbeam Angus farm at Miami, Okla., judged the beef cattle classes.

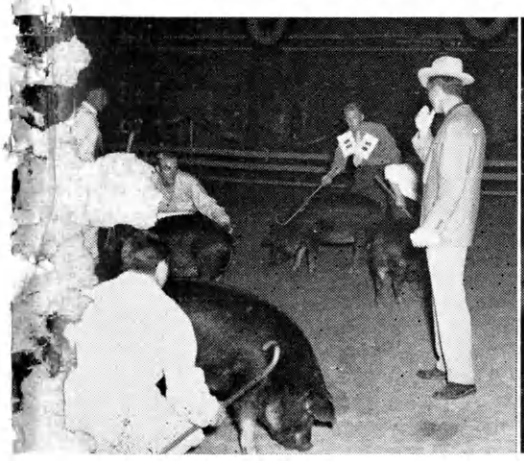
Germann, a local Duroc breeder, judged the hog classes. A prominent local cattle rancher and one of America's foremost Quarter horse judges, Burtis handled the horse class.

The sheep classes were judged by one of the state's leading purebred Hampshire breeders, L. G. Wilson of Louisburg, Kans.

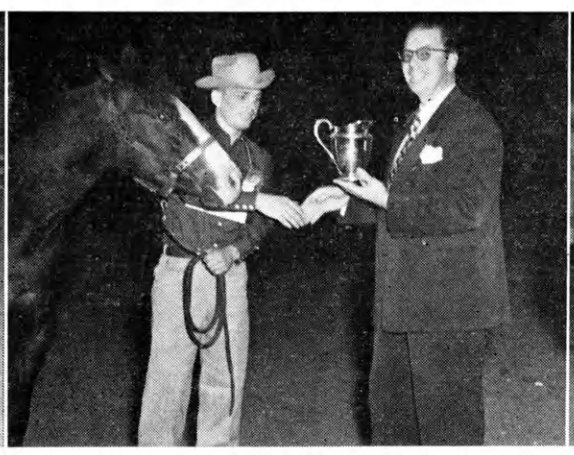
Trophies for the show were donated by the Kansas City Chamber of Commerce, the Kansas City Union Stock Yards company, and the American Royal livestock show.

The show was sponsored by the Dairy club, Block and Bridle club, and the Agricultural Association.

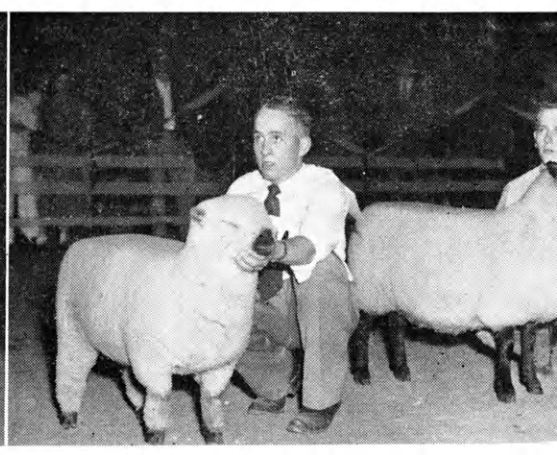
GUIDING HOGS before judge Fred Germann keeps Little Royal contestants busy.



DONALD ZIMMERMAN topped the horse class to get his trophy from Bill Preston.



DWIGHT WINGERT, left, and Ray Sis, later declared winner, watch the sheep judge.



THAT CHARACTER on the left is, of course, Ray I. Throckmorton, due to shed his dignity as Dean July 1. He says he's going to take up fishing as an occupation first, then teaching duties later.

Dr. A. D. (Dad) Weber will assume the weighty title—Dean, School of Agriculture and Director, Agricultural Experiment Station—and the load that goes with it. As the cartoon implies, a mountain of work and responsibility rests upon the Dean and Director. Since Throckmorton has been moving that mountain for six years now, one can well imagine the relief and humor behind Throck's wish, "Luck to you, Dad!"

Throck will change his title because a rule says he's too old at 65, but he probably will continue to work as hard as ever during his past 40 years at K-State. President McCain says he is trying to "devise some subterfuge under which the College can continue to exploit his (Throck's) professional skill and rare capacity for human relationships."

Throck snorts that his "retirement" will merely give him time to do more of what he wants to do in the way of research, teaching, and writing . . . and plenty of fishing. Like the Ag School's two other administrative emeriti, F. D. Farrell and L. E. Call, Throckmorton plans to accomplish as much after retirement as he did before a rule intervened. He's as full of plans as a 10-year-old boy released from school for the summer.

Next fall he plans to teach a sophomore class in soils. He will continue to write as consulting editor for the Country Gentleman magazine. And the USDA wants him to stay on as consultant for that department in regard to High Plains agriculture. Then there are other important agricultural committees such as the one for Irrigated Agriculture and Water Resources of Land Grant Colleges and Universities. Problems in soil research are on his list for study. And he will be in demand as a speaker.

At his desk in East Ag, he works with fierce concentration. Walk into his office and you'll find him completely absorbed in the problem of the moment, his head cocked over a stack of papers.

His hair is iron grey, contrasting with a deep tan. His voice has a growling rumbling quality about it.

By Stan Creek and Dick Fleming

His explosive questions or comment tend to frighten the timid—a rough, gruff, old bear he seems. But stand your ground, search for the real Throck, and you'll find him just the opposite—warm and full of humor. Those lines around his eyes crinkle when he grins and he's as understanding as they come.

While he has a birth certificate that claims his age is 65, his actions are alert and quick like a much younger man in his prime rather than one about to retire. His "retirement" will certainly not be a rocking chair affair as his calendar age might indicate. If you think that, you should try to keep up with the tanned and wiry Dean on a fishing trip in the mountains of Wyoming. Throck wades fast water, just melted off the snow line. He wades on rock washed slippery slick and rounded for treacherous footing. He goes into back country which can be penetrated only on foot—real fishing country where you're never bothered with crowds of tourists and where the streams never have to be re-stocked with trout.

The streams he fishes are pinched with underbrush so the only way to stalk the Rainbow is by wading. Wrist action on a fly rod may not seem like much exercise to you when you lay out one lure or two. But by the time you've dropped bait for bait with Throck all day long, your arm

will ache to the shoulder and your legs will be numb from being in icy water so long. And, like Throck, you probably will be soaked a time or two before the day is out. Those streams are filled with pools which may drop a man just enough to fill his hip boots or deep enough to float his hat away.

That's the kind of fishing Throck loves—something he intends to do for two months after July 1.

At the Ag School, Throck has acquired a reputation for strict, fair play. He has the ability to permit students to enjoy study rather than making it a disagreeable task. Those who've studied under him say he's a straight shooter.

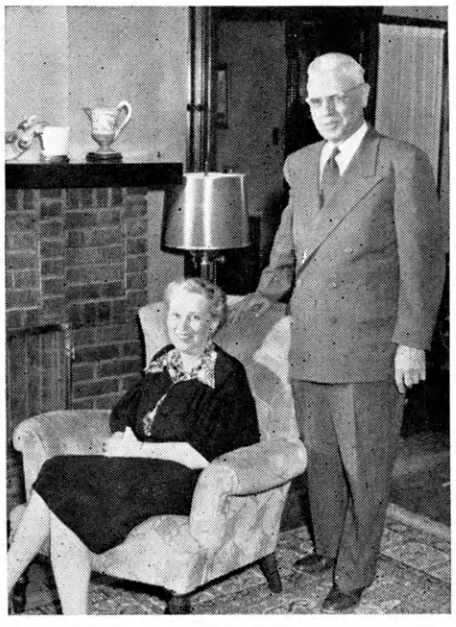
Lowell Brandner, head of the College News Bureau, tells about news stories Throckmorton has released which both men knew would create a wave of complaint for Throck. Brandner says the Dean's usual reply was, "That's all right. I expect it. I expect it." He put the truth out to the public no matter what might be the consequences to him. He doesn't fear public opinion.

As consulting editor for the Country Gentleman, Throck wrote a hard-hitting lead article last fall called "The Organic Farming Myth." He blasted at ideas advanced by many for their own gain, that organic fertilizers were the only ones fit to use. Howls of mortification from professional manufacturers of compost and their disciples brought telegrams and letters of indignation from throughout the nation. Though loud and noisy, these were more than offset by other letters of commendation.

"Well, someone read it anyhow," Throck remarked. "I'd have been disappointed if it had brought any other reaction."

He began writing for the Country Gent back in 1925, the year he took over as head of the Agronomy department here. Some short articles were requested of him. The editors like his writing style so well they asked him to continue. Without any formal training in journalism, he advanced to his present post as consulting editor on one of the nation's leading farm magazines.

E. H. Taylor, associate editor of Country Gentleman, says the magazine intends to make greater use of Throck's services after his retirement. "He possesses four qualities especially valuable to us," Taylor said, while visiting K-State recently. "Throck has a thorough knowledge covering a wide area throughout the Mid West—he knows the agriculture, climatology, the character of the people, and developments being made. He is a man of national repute, a recognized authority. Most important, he has the ability to write clearly, interestingly, with a knowledge that carries conviction. And finally, he has more real friends than almost anyone I know."



MRS. THROCKMORTON and the retiring Dean of Agriculture relax at their home.

He has not confined his writing to magazine articles alone, however. Numerous bulletins and circulars published by the Experiment Station have been written by Throck and he's had charge of preparation of three biennial reports.

Dean Throckmorton's friends are collecting money now to purchase an oil portrait of him in recognition of his 40 years service to Kansas State college, and to agriculture in Kansas and the nation. Along with contributions, letters of commendation are pouring in from his friends scattered throughout the country, according to Elbert Macy, secretary-treasurer of the recognition committee. The letters are to be bound into a large volume to be presented to the Dean and Mrs. Throckmorton at a reception May 11.

(Continued on page 26)

THROCKMORTON Steps Up the Ladder:

1911—Assistant on K-State soil survey after graduation from Penn State.
1913—First began to teach.
1916—Associate Professor of Soils.
1918—Professor of Soils.
1922—Completed Master's at K-State.
1922-23—Graduate assistant, Cornell university.
1925—Head of Agronomy department.
1937—Became consultant for USDA.
1946—Appointed Dean and Director; Consulting Editor, Country Gent.

ORCHIDS in His Lapel

1936—Citation banquet and gold watch gift for 25 years service at Kansas State.
1951—Penn State award for "professional eminence," his alma mater's highest honor.
1952—Citation for Distinguished Service to Kansas Agriculture by the State Board of Agriculture.
1952—Oil painting to be hung in Waters hall; recognition letters to be bound in volume and presented at reception.

European and Southwestern Borers

Villains of the Cornfields

By Francis Bennett

A SEVERE CORN BORER outbreak could occur this year despite the unfavorable weather conditions that have hampered the pest for the last two years, warns C. C. Burkhardt, research specialist at Kansas State college.

Over 50 per cent of the corn fields in northeast and north-central Kansas were infested last year by the European corn borer. Similarly other parts of the state have been invaded by both European and Southwestern corn borers, leaving eggs and setting the stage for an outbreak this year.

Other insects creating extensive losses are the corn earworms, corn rootworms, corn leaf aphids, and armyworms. The two biggest villains, however, are the European corn borer and the Southwestern corn borer.

The European corn borer was recognized in Eastern Kansas in 1945, but no extensive damage occurred until the 1946 season. Now this borer has spread until it is found in all the corn-growing counties in the state, Burkhardt said.

In 1951, European corn borer damage was minimized by rain. A wet spring delayed planting long enough that much of the corn crop missed infestation by the first brood of borers. The presence of only an occasional pupal case in corn stalk dissections made later further substantiates low first-brood infestation in 1951 and resulted in a low second-brood infestation.

Field infestations by the second brood of European corn borers ranged from none to 70 percent, according to the tests Burkhardt made. Here again, the populations were localized and spotty. Unseasonably wet weather through the summer tended to hold the number of borers to a low level.

In 1951, 443,348 bushels of corn were destroyed by the European corn borer alone, amounting to $797,000 worth of damages. During 1950, 472,871 bushels were lost, accounting for $657,291 of damages.

But surveys were hampered by weather conditions too. Corn fields in 1951 were generally weedy and grassy. Smartweed growth was encouraged. Smartweed borers—similar to corn borers—increased the difficulties in making accurate surveys, Burkhardt said.

He told about finding one corn field, smartweeded, which harbored both European corn borers and smartweed borers in corn stalks. Larvae had to be examined under a microscope to determine their species. Approximately 30 percent of them were smartweed borers.

Burkhardt said he experimented with parasites last year in controlling the European corn borer—a form of biological warfare. He has found an undetermined species of parasite on the Southwestern corn borers also, which may prove beneficial. Results from this are not available yet. Varietal resistance is also under investigation, and results will be announced later.

Southwestern Corn Borer . . .

CORN BORER DAMAGE has been hampered for the past two years by wet weather conditions, but the pest could do extensive damage this year.

Sprouts in the Greenhouse

Making Florists

By Diane Blackburn

EVERY FRIDAY AFTERNOON you may find a group of future florists in the College greenhouses learning the techniques of good floral arrangement. These students not only come from the Hort department but also from the Schools of Home Ec and Arts and Sciences.

The art of arranging flowers may be studied in two courses which are offered in the curriculum of floriculture and ornamental horticulture under Prof. W. W. Willis. The first course in floral arrangements stresses the use of flowers in the home. Floral arrangements II involves the commercial angle of floral art. This includes the operation of a flower store and the processing of flowers for commercial trade.

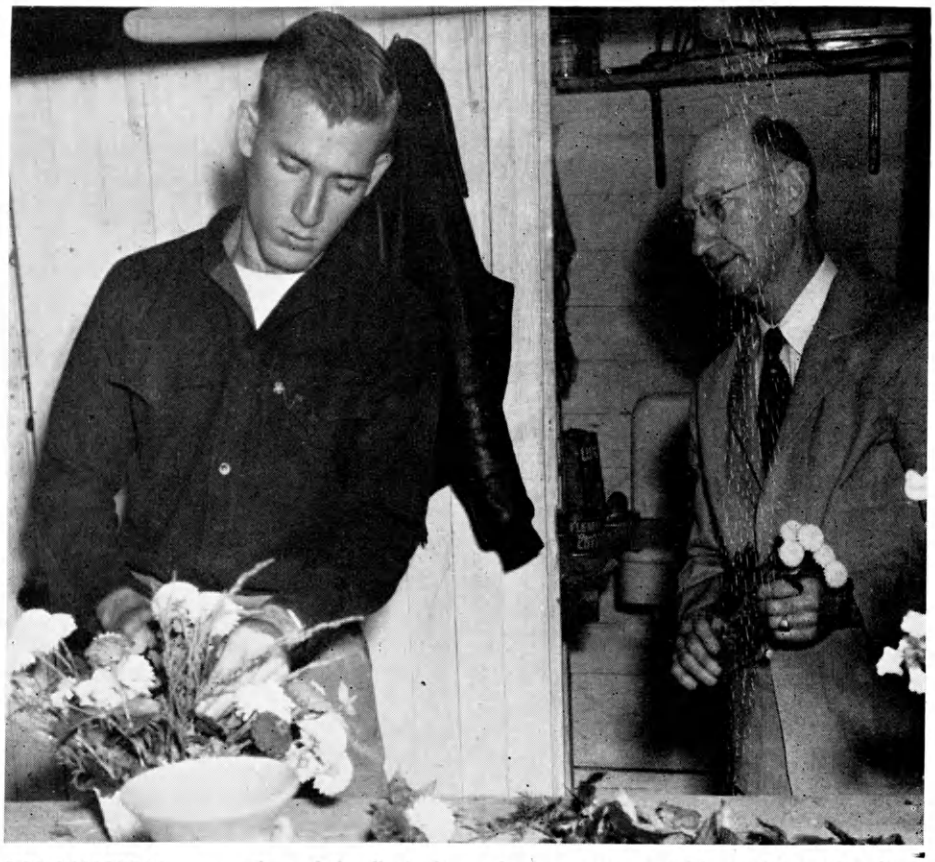
Students soon learn that arranging a bouquet of flowers is more than simply sticking a few flowers into a vase and filling it with water. A good floral arrangement requires careful planning.

A designer should always keep in mind the principles of design, scale, balance, and harmony when making an arrangement, according to Professor Willis.

The form or shape of the arrangement is considered the design. There is a planned relationship between all parts of the arrangement; between the flowers and the foliage; between the flowers and the container.

Scale includes the size relationship of the various parts of the composition as well as the relation of the size of the arrangement to the room. Good balance in a floral arrangement makes the arrangement appear more stable.

Color harmony is important in making the arrangement appealing to the eye, Willis explained. A florist must have a general background of the psychological effect the different colors have on different people. Psychological colors are also important to remember in making arrangements for the sick room.



BOB LANGFORD, a member of the floriculture class, arranges a table setting under direction of Professor Willis. The class makes up most of the table settings for girls' dormitories.

Each student has actual practice in making arrangements with flowers grown in the College greenhouses. Mums, carnations, zinnias, and snapdragons are some of the flowers used for class work.

In the first course in floral arrangements the student learns to make table arrangements, floral favors, and corsages. The use of foliage and dried material in floral designing is also studied. Identification and care of house plants is another item stressed.

The work of the floral arrangements II class consists of practical experience in making funeral sprays, corsages, and wedding arrangements. Also this class arranges the table bouquets for many College banquets, Willis said. The students in this class are usually floriculture majors.

The size of the floral classes ranges from ten to twenty. To give each student personal instruction the class should not exceed fifteen students, Willis explained.

"The floral industry cannot be covered in two semesters' work," Willis said. "There is a need for a third floral arrangement course."

Flower arranging offers students a chance for self-expression, Willis believes. A student may express his creative ability through floral arrangements.

Professor Willis began teaching at K-State in the fall of 1944. Before teaching Willis had been with the Manhattan Floral Company since 1922.

Dr. Pickett represented KSC in Washington, D. C., February 11, in a conference with representatives of other land grant colleges, universities and the USDA.

A portion of the program concerned foreign visitors coming to the college campus. Also included in the discussion was recruitment of trained agriculturalists to engage in the Mutual Security Administration and Point IV program in foreign countries.

Each year in the United States about 40,000 persons are bitten by rabid animals and require the Pasteur treatment.

New A.H. Chant?

Sheep Barns Is a-Moving

By Dale Davies

COLLEGE SHEEP BARNS, north of the campus, will be moved north of the radio tower to an area about one and a half miles northwest of the campus.

"We just had to have more room for our expanding enterprises," said Dr. T. Donald Bell, head of the sheep division of the animal husbandry department, in explaining the move.

Plans for moving the barns started several years ago when the department realized the present site was inadequate to meet new and expanding research and feeding projects that the sheepmen wanted to perform. However, it was not until last year—the 1951 biennium—that money was appropriated to meet the cost of moving, Bell stated.

Foundations for the new buildings have been poured, a new well has been dug, and power lines are being built. This work was started last July and is expected to be completed by next August.

Plans call for the actual moving to be done by a contractor, but, as yet, the contract has not been let.

There are two large sheep barns—the long building to the west is the experimental barn and the larger one to the east is the building that houses the purebred flocks. Both are east of the beef barn.

Dr. Bell said the experimental barn would be moved first. Work has already started. The main barn will not be moved until early summer. The main reason for keeping the large barn in its present location until then is for the protection and housing of the young lambs. They cannot stand cold weather too well so it was decided to move during the warm season.

The experimental barn will be moved as one complete unit, but the large barn will be divided into three parts—the west wing, the east wing, and the center section. This work will require the work of experts, as many braces will be needed to hold the building rigid and square.

The new site covers 60 to 80 acres. The building will be in the northern part of this area, midway between the east and west boundaries, and will have an east frontage. At present the area is in bluegrass and bluestem. Some of this grass will be retained in the new set-up and some will be reseeded to brome, lespedeza, rye, sudan, and other plants more desirable for sheep production.

A rotation grazing system will be used and the entire area will be fenced and new pens built around the buildings. The twin silos that are by the barns now will be moved also.

Upon arrival at the new location, the buildings will be partially remodeled. "The greatest change," Dr. Bell said, "will be in the center section where living quarters for two or three students will be provided—something entirely different from the barn as it is now.

"The east and west sections of the main building and the experimental barn will have extra large doors in either ends, with alternating large and small doors along the east side. This will make cleaning easier and will help in separating the flocks. Cement runways will be provided and the feed bunks will be fixed so that they may be turned or suspended at will.

"One hundred forty Western range ewes were purchased last fall and will be bred this summer to different breeds of native rams to determine the best possible combinations for mutton and wool purposes," Bell stated.

In addition the College keeps 20 to 30 animals of five different breeds—all purebreds, that are for show purposes and class work. These include Hampshire, Shropshire, Suffolk, Southdown, and Rambouillet.

Female lambs are kept for replacements and the males are either sold as rams or castrated and shown in the various shows and then sold to packer buyers.

Tommy Dean, College shepherd, will continue to supervise the flocks as he has done since the early '20s. He has served under four different sheep division heads during his time: Andy Patterson, former secretary of the American Royal, Harry Reed, now employed by the PMA, Dr. Rufus Cox, head of the College animal husbandry department, and Bell, the present head.

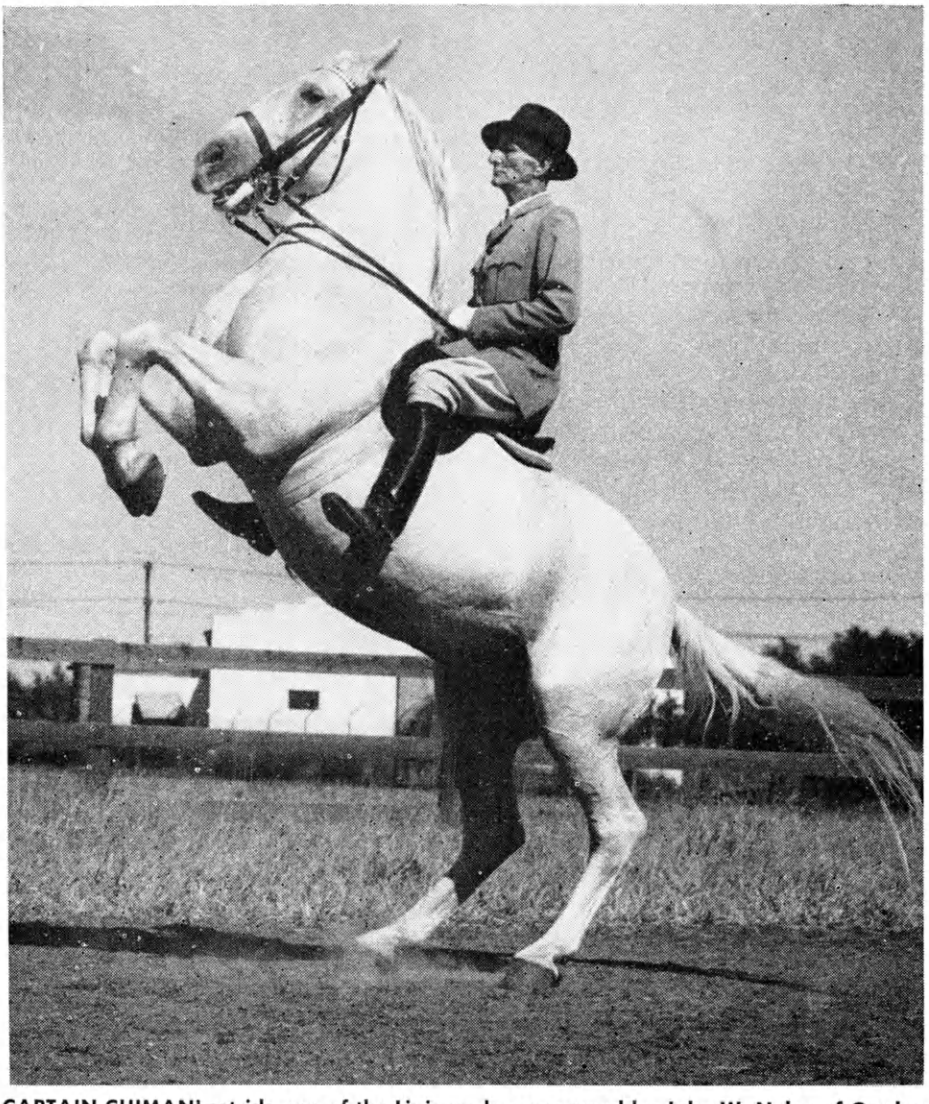
Bell came to K-State in August, 1950, from Utah State. He was located at a branch station in southern Utah at the time he accepted the K-State position. He is now supervisor of all the sheep projects carried on here as well as coach of the wool judging team.

Next Move . . .

COLLEGE SHEEP BARNS will be moved to a new location north of the radio tower next summer. The new area will provide more room for experiments.

Down, Boy . . .

Courtesy John W. Nolan



CAPTAIN CHIMANI astride one of the Lipizzan horses owned by John W. Nolan of Garden City. Nolan obtained them from the army which brought them from Europe as war booty.

Lipizzans

Old Line Breed

By John Walters

THE COLTS ARE BORN solid black. But they turn white at about two years and become one of the world's most beautiful breeds of horses.

That's the Lipizzans—the horses that knights of old sat astride, the breed that the Royal House of Habsburg in Austria monopolized for centuries so that the breed became as symbolic as a crest or a crown.

But in Kansas we have that Lipizzan breed of horses, out of the pages of history books, right at our door waiting to show off.

At Garden City, John W. Nolan has a stable of Lipizzans, the famous big white beauties. These famed horses were brought to this country by General George Patton as war booty, and are considered some of the most valuable horses in the world. Nolan acquired the horses from the army in 1949, and has showed them in many shows including the American Royal.

Because they develop and mature slowly the Lipizzans reach an average age of 25 years. Their good dispositions, strong bones, and other attributes make them valuable for cross-breeding, particularly with Arabian horses.

They are far from being extinct, for the Austrian government has organized a stud farm which supplies the Spanish Riding School. Members of the school are currently touring the world with Lipizzans.

Nolan recently had Captain Chimani, a former officer in the Austrian Cavalry, take charge of training the Lipizzans. Nolan's daughter, Gladys, a talented rider, has broken most of the colts herself.

In Vienna, the Lipizzans were given their training in a course called "high school." There are about 12 different gaits taught in the school. Four of the principal gaits are the piaffe, passage, pirouette, and levade. Each stallion is trained to master about 4 of the 12 gaits, depending on the horse's ability.

In Olympic competition every rider has to show the piaffe, and the passage, the piaffe being a well-cadenced trot in one spot, and the passage an extended trot.

Nolan has two stallions in his stable, Florian and Pluto. He also has Seriph, a registered Arabian stallion. Florian was brought to this country by Mrs. Jaritza, a famous Austrian singer, and was featured in the motion picture "Florian." Nolan later purchased the stallion from the western star, Tim Holt, in Hollywood.

He also has six Lipizzan mares. Lipizzan colts are born solid black. With white mares it might make a layman worry, but the black colts turn white at two years of age.

Nolan also has the carriage which belonged to the Royal House of Habsburg. It is a beautiful six-horse carriage and has a harness that is highly polished and inlaid with diamonds.

The Lipizzans are very spirited and for this reason, Nolan has recently refused to hitch them to the carriage. This is due to excitement caused by crowds at previous showings, he says.

MODERN CARPENTERS know that wood on the farm can be preserved by chemical treatment, conveniently and inexpensively, to save farmers thousands of dollars annually.

Farmers Realize

Fence Posts Ail Too

By Warren Shaw

A SICK COW may often be cured by paying a veterinarian $5. A 10-cent box of aspirin takes care of many human ills. But, a sick fence will cost a farmer several thousand dollars. So can a sick barn.

Wood on the farm can become seriously ill—ill from the attack of boring insects, fungous growth, or a variety of other "diseases" that constantly attack such things as posts, fence planking, barns and other wooden buildings. Preventive medicine can save Kansas farmers thousands of dollars annually in fence posts alone. When a fence post goes, the entire fence is worthless.

Since wood is a form of life, it invites disease attack, just as does animal life. Unfortunately, few farmers have access to such fungous and insect resistant woods as Black Locust, Osage Orange, Mulberry, or Heart Cypress for fence posts. As a result most fence posts are of varieties less resistant to wood-rotting fungi, termites, powderpost beetles and other wood-eating insects that turn posts into honey-combed shells.

But now farmers can treat low-resistance woods to make them last longer. Chemical companies have worked on wood preservation, with results that today's farmer can treat wood conveniently and inexpensively.

A new material called Pentachlorophenol, better known as "Penta," has proved effective. On-the-farm experiments show that an untreated post may last from 3 to 5 years, but the same post properly treated with Penta will give good service for 15 to 20 years. Thus an untreated post costing 20 cents which fails after three years, costs 7 cents a year. Penta-treated posts frequently last five times longer. Treatment cost is less than 3 cents per year. In addition there is the saving in time and labor for replacement.

To get this extra long fence post life, proper seasoning of the wood before treatment is necessary. It is best if posts are cut in the spring when the sap is rising, then peeled, because Penta will not go through the bark. Pile the posts in some shade through the summer and treat them in the fall when they weigh only one-half or two-thirds as much.

Treating is easy in a 55-gallon oil drum filled with a solution of one gallon of Penta concentrate to ten gallons of stove or distillate oil. The tank can be heated or used cold or the material can be applied with a brush or by pressure.

Besides giving posts long life, Penta is colorless, does not swell or distort the posts, and is not corrosive to common metals. It does not cause injury or death to livestock that come in contact with treated posts.

Until recent years, creosote was the one really good post preservative, but the development of Penta has changed the picture since it is cheaper as well as easier and cleaner to apply.

Post hole digging is just about the hardest work on the farm, but not nearly as hard when you know that the post placed in the hole will last 20 years or longer. Just a simple dip in a drum of preservative can prove to be a fountain of youth for ordinary posts.

"That man over there just cheated me out of fifty thousand bucks."

"Fifty thousand bucks! How did it happen?"

"He wouldn't let me marry his daughter."

"The bumble bee is a humble soul
Who gives no thought to birth control
That's why in trying times like these
He meets so many sons of bees."

Experiment Station Produces

Bulletins by the Pound

By Phil Lukert

BULLETINS! CIRCULARS! There must be a million of them! What are they for? Who sends for them? These are questions which could be asked by anyone who visits the Agricultural Experiment Station office.

There are three types of experiment station publications. First is the technical bulletin. It is used by scientists and other experts who use and can understand highly technical and scientific terms. Next is the bulletin which is used by the average person. It is written with a few technical terms, but is still easily read and understood. Then there is the circular. It is smaller than the other two types and is written in simple everyday language to be easily understood, quickly read.

The publications are stored in bundles on shelves around the wall of the office. Each bundle has two numbers on it. One is to tell the number of publications in that particular bundle and the other is to tell the number of bulletins that are stored on the shelves. When the supply of a certain bulletin is exhausted a reserve supply kept in the vault goes into use. These are sent to people who need them badly. When the reserve supply gets low, they can be obtained on a loan basis only.

Requests for these publications are great and come from many places. Requests from individuals are greatest. They usually ask for a small number of bulletins. High school vocational agriculture teachers consistently ask for large numbers of bulletins.

It is not uncommon to get requests from foreign countries for bulletins. One day there were requests from Israel, England, Japan, and the Philippines. Colleges exchange bulletins with one another too.

There is usually no charge for bulletins unless the request is from a high school or some large industry. High schools pay two cents per copy while large industries are charged according to the size of the bulletin.

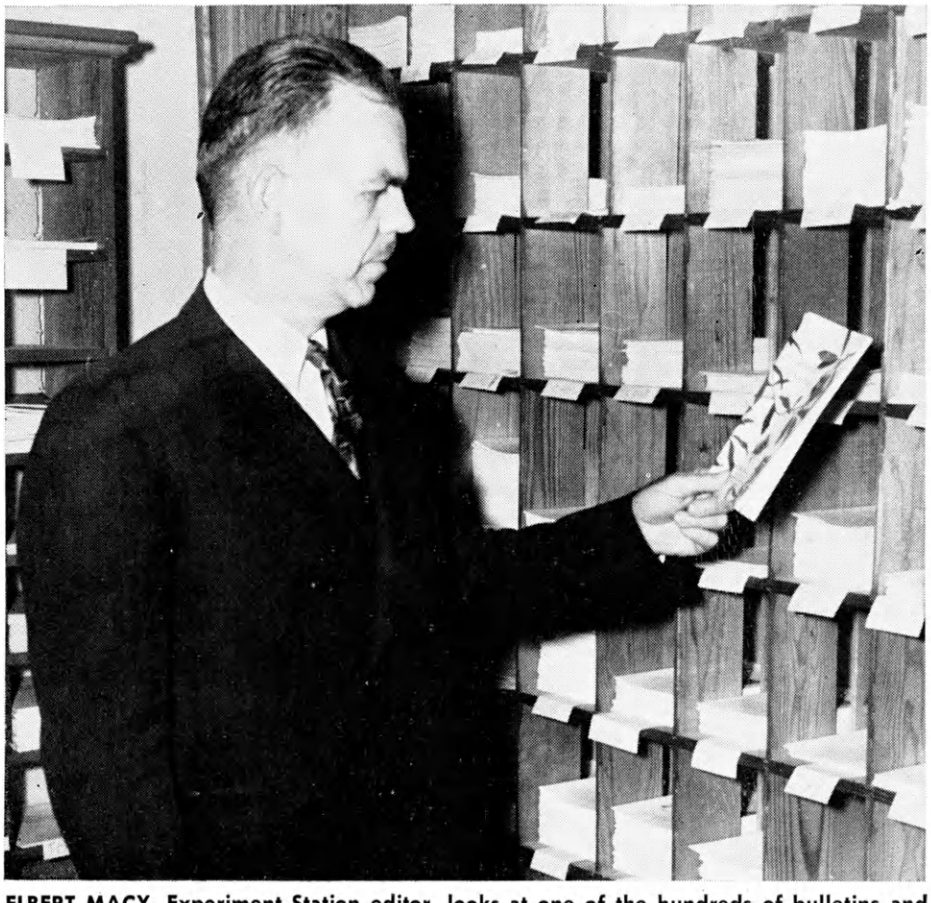
No postage is required on bulletins if they are sent to addresses in the United States unless so many are ordered they weigh four pounds or more. In such cases, the person ordering the bulletins will stand the cost of mailing. Publications may also be sent free of postage to countries that have such an agreement with the United States.

When bulletins are sent to countries that have no agreement with the United States they are first sent to the International Exchange at the Smithsonian Institution in Washington, D. C. From there they are sent to the country desired.

The Experiment Station also has a mailing list. Whoever is on this list receives an abstract of recent publications everytime some new bulletins come out. They can then send for the ones they desire.

When orders for USDA or Extension bulletins are received by the experiment station, they are sent on to either the USDA office in Anderson Hall or the Extension office to be filled.

Pigeon Hole . . .



ELBERT MACY, Experiment Station editor, looks at one of the hundreds of bulletins and circulars published by the station. Requests for bulletins come from all over the world.

New Greenhouse for

Wheat Streak Mosaic

By Bob Schulte

KANSAS STATE WILL soon be the world center for investigations on wheat streak mosaic disease, according to Dr. L. E. Melchers, head of the department of Botany and Plant Pathology.

"This virus disease is as baffling to plant pathologists as polio is to medical science," Melchers said.

Known in Kansas since 1929, wheat streak mosaic has increased greatly in recent years. In 1949, wheat mosaic caused an estimated loss of over $30 million in Kansas. All commercial varieties of Kansas wheats now are susceptible to the disease.

Before plant pathologists can recommend control measures, they must find answers to such questions as: How is the virus transmitted and spread? What reservoirs harbor the virus? What cultural practices influence the control of the disease? How do environmental factors influence the symptoms and injury from the mosaic virus? Can resistant varieties be developed?

Some of these questions can be solved only under controlled conditions of an especially equipped greenhouse, Melchers stated. In accordance with these requirements, the 1951 Kansas legislature appropriated $60,000 for construction of a greenhouse and $10,500 per year for wheat mosaic research.

The new greenhouse will be the most elaborately equipped in the state, Melchers said. It will consist of two units, each 21 feet by 100 feet, connected by a glassed-in passageway. Each unit or house will be divided into four insect-proof compartments. The house will have automatic heating and ventilating controls, sinks, drains, benches, and work tables. The electrical wiring will produce any desired lighting effect. One unit will have a concrete floor, the other a dirt floor.

A site between the present research greenhouses and the new ones back of the Institutional Management houses has been chosen. Those back of the houses are used by Horticulture for floral research. Construction will begin as soon as the materials arrive.

Wheat mosaic investigations are carried on co-operatively between the departments of Botany and Plant Pathology, Entomology, and Agronomy, and the USDA Division of Cereal Crops and Diseases and Bureau of Entomology at the College.

Mosaic Expert . . .

DR. LEO MELCHERS, professor of Plant Pathology, examines a plant for mosaic.

Dr. Hurley Fellows, plant pathologist, is conducting the plant disease studies for the USDA, and Dr. W. H. Sill, Jr., is heading the Kansas Agricultural Experiment Station investigations of the disease. A third plant pathologist, Roscoe Bellingham, will be stationed at the Hays Experiment Station to work in Western Kansas on wheat mosaic. Co-operating in this study are Dr. R. H. Painter, and Tom Harvey, of the Entomology department, and R. V. Connin of the USDA Bureau of Entomology.

Chit Chat . . .

By Dean Clyde W. Mullen

SOMEONE SHOULD commend faculty sponsors and participating students for the splendid job done in putting on the Little American Royal this year. There can be no doubt, it was the best display of thoughtful management, smooth succession of events, efficient handling of livestock and good showmanship we ever have seen at the Little Royal.

The "grand entrance" had much of the color and thrill of a real circus. The fine high school band from Clay Center under the leadership of Wayne Snodgrass did an excellent job of adapting its selections and rhythm to the event of the moment.

There can be no doubt that continuity by Dick Brown was tip-top, but we cannot say that we caught the meaning of one single statement that was made. It would have been as well, or better, to have stood in the balcony at the north end of the arena and to have made use of a megaphone.

Attendance at the Little American Royal was very good. It would be no surprise if, next spring, most of the balcony seats are occupied.

* * *

We talk about an Ag Day for the School of Agriculture. Except that the LAR places emphasis on only two departments of the School, we already have a spectacular Ag Day that no one has recognized for what it is.

Right now the Dairy Club and the Block and Bridle Club and the staffs of the two departments concerned are giving consideration to the proposition of giving their blessing to an Ag Day in combination with the LAR.

In general, the proposition would be for the other departments of the School to put on displays representative of their respective departments, and to hold "open house" at the north end of the campus all day on Saturday before the LAR that night.

It would take a lot of well-organized, hard work, but it would be worth it to the College, to the School of Agriculture, and to those who would have the satisfaction in participating in a big and successful event.

From Sugar Cane To Surgeon's Scalpel

By Richard Selby

IN THE FALL of 1940 Kansas State had an energetic Hawaiian-born student enroll. He was raised on a sugar cane plantation, but an interest in veterinary medicine and agriculture brought him to Kansas State.

Today, Dr. Howard Furumoto is serving as assistant professor in Surgery and Medicine with the School of Veterinary Medicine. He was directed here by Mrs. J. D. Brown, his senior adviser at Laubahoehoe high school. Mrs. Brown is a K-State alumna who graduated in 1921 in General Science. She was known as Jessie Bell Evans in those days.

Dr. Furumoto's first opportunity to visit the campus came when he attended the national F. F. A. convention in Kansas City as president of his Hawaiian club and finalist in the public speaking contest. He was interested in Veterinary Medicine and with this view in mind, stopped over in Manhattan.

In the summer of 1941, he enrolled in the School of Agriculture. He was accepted in the School of Veterinary Medicine in the fall of 1942. One half semester later he volunteered for service, and went directly into the language section of the Military Intelligence Service.

After formal training at Ft. Snelling, Minn., he was shipped overseas. Dr. Furumoto served in India, Burma, and China.

After the war, he returned to Minnesota and got married. Following this, he came back to Manhattan, where he enrolled in a dual curriculum of Agriculture and Veterinary Medicine. Dr. Furumoto received his degree in animal husbandry in 1947 followed by a master's degree in parasitology in 1948. He finished Veterinary school in 1950.

During his college career, he was active in Alpha Zeta, Gamma Sigma Delta, Phi Kappa Phi, Junior AVMA, and the Hawaiian club. He was selected for Who's Who among students in American colleges and universities. He served as president of the Cosmopolitan club for three terms, and also served on the National Student Association committee, a special committee of the Student Council.

Upon graduation from Veterinary school, Furumoto served an internship with the Angell Memorial animal hospital at Boston, which veterinarians consider like doctors do the Mayo clinic, he said. Upon completion, Dr. Furumoto was offered a junior staff position, but he accepted an assistant professorship in Surgery and Medicine at Kansas State instead.

Furumoto is looking forward to the new veterinary hospital. "Present available facilities," he said, "are not adequate to cope with the need today. It is hoped that the new hospital will present opportunities for the dissemination of scientific and technological knowledge gained at the Angell hospital and for research here."

His family consists of his wife Viola and two sons, Bill, 5 years old, and Wesley, 1. Mrs. Furumoto, a graduate of the University of Minnesota, has taught zoology and parasitology at Kansas State.

Dr. Furumoto has always looked forward to the time when Hawaii would become a state. He can see no reasons other than political why it has not been admitted. He said he believes that eventually it will become a member of the union.

In addition to his academic duties, Dr. Furumoto is sponsor of the Cosmopolitan club, an appointed member of the Committee of Critical Thinking, and a faculty member of the Hawaiian club.

With an eye for the future, Furumoto is aware of the many problems in small animal surgery and diseases that are yet unsolved. He plans to do research in thoracic surgery and the distemper complex.

DR. HOWARD FURUMOTO came to Kansas State from Hawaii in 1941 to be a doctor.

ELBERT MACY, associate professor of journalism and Agricultural Experiment Station editor, has asked for a year's leave of absence beginning July 1. He is the faculty adviser of Ag Student.

He plans to take over the farm where he was raised near Woodston, in Rooks county. Macy will operate a wheat and livestock farm.

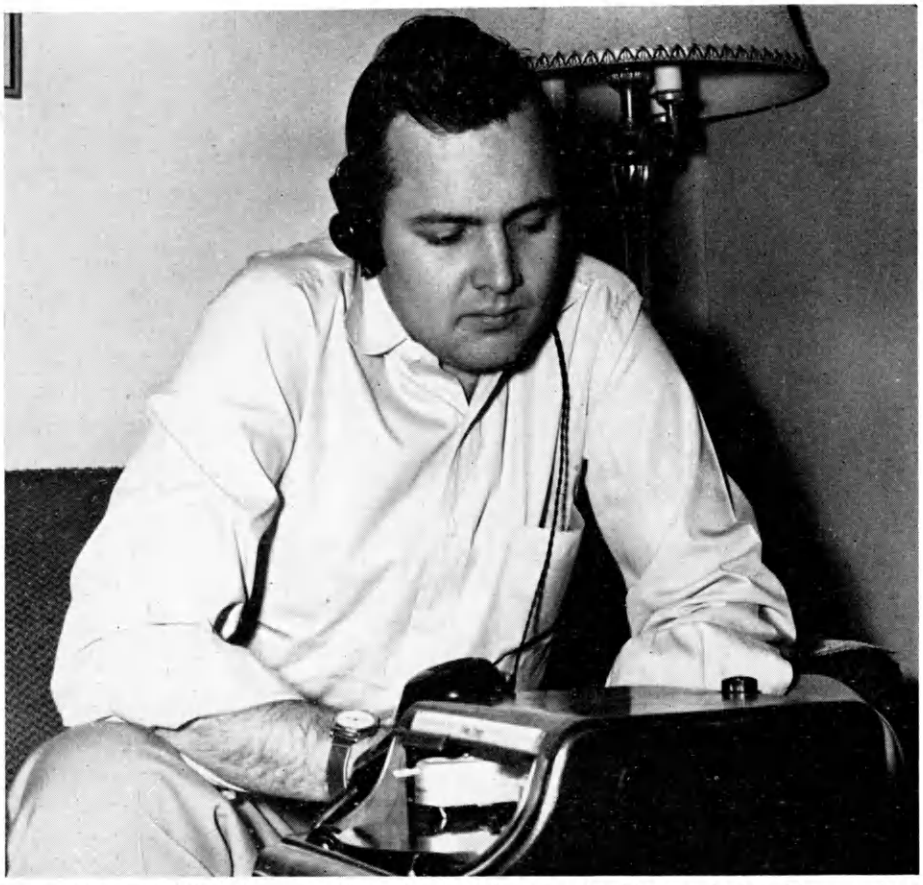
Macy received his bachelor's in general science in 1930 from K-State and taught in high schools for 10 years. In 1939 he received his master's in journalism from the College.

In August 1943 he went to work in Extension information at K-State. Then he entered the Navy for two years. In February 1946 he returned to the College as Experiment Station Editor and instructor in Agricultural Journalism.

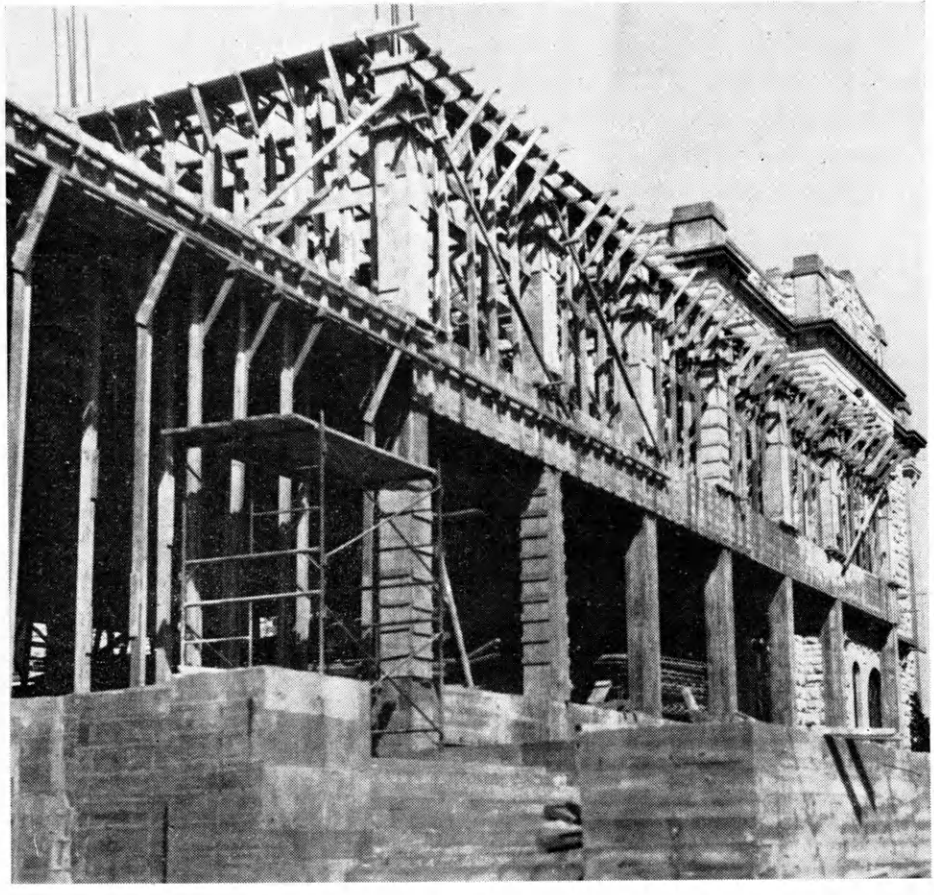
Nearly 100 persons attended the 85th annual horticultural conference and the annual meeting of the Kansas Sweet Potato society December 4.

"The horticultural meeting was a very successful one," Dr. W. F. Pickett, head of the Hort department, said.

Key horticulturalists of the nation, Julian C. Miller of Louisiana State, Aubrey D. Hibbard, H. G. Swarthout of Missouri university, and W. W. Magill of Kentucky university, were included in the program.



JOHN SLAVEN, blind honor student due for his master's this month, has his own farm now and plans to operate it himself after graduation. He studies here with tape recorder.



CONSTRUCTION on the new Ag wing, expected to be completed in the fall of 1953, is in full swing now that many of the workers have returned from working on the dorm.

L. C. AICHER
31 years as su
Branch Experi
with developi
years ahead

DR. ARTHUR D. WEBER has been selected as 1952
of Animal Production. His oil portrait will be hung

Stories

By Pix

. C. AICHER retires July 1 after serving 1 years as superintendent of the Fort Hays ranch Experiment Station. He is credited vith developing farm machinery which was ears ahead of his time at the station.

ed as 1952 honor guest of the American Society vill be hung in Chicago's Saddle and Sirloin Club.

FARM MARKETING class gathers in the pit at Kansas City's grain exchange. Each semester groups go on market tours of that area to watch the terminal exchanges in action.

FORTY-ONE Ag and Vet Med students were initiated into Alpha Zeta, honorary agriculture fraternity, this spring. Here are most of them gathered in the Thompson hall lobby.

Tech Director Turns Teacher

By Dan Henley

LOREN V. BURNS, who became head of the new Feed Technology curriculum January 1, is the first member of the Feed Technology staff. He teaches an introductory course in feeding, and Elements of Feed Manufacture. His main task, however, is development of the new curriculum.

Burns came here last fall with a wide background of experience in the feed industry. He was technical director for several formula feed manufacturing companies and has been active as consultant in the feed industry for years.

He entered the milling industry in 1929 as an analytical chemist for the Willis Norton Company, then located in Topeka. Later he served as a baking technologist for Western Star Milling Company in Salina.

His interest shifted to the feed industry in 1939 when he was appointed director of laboratories for the Missouri Farmers' Association Milling company. He designed and installed the first laboratory for the MFA.

In 1941 Burns joined the navy and served until 1945, attaining the rank of commander. He was on the staff of the Chief of Naval Operations and was awarded a commendation for coordinating a major electronic equipment development program.

After the war he returned to MFA as technical director. In 1949 he went to Kansas City to become vice-president and technical director of Spear Mills Inc. In 1950 he established the consulting firm of Loren V. Burns and Associates. This organization will continue to operate under his direction.

Feed Man . . .

LOREN V. BURNS is developing the College's new curriculum in Feed Technology.

He has established technical programs and supervised operations of cereal milling and feed manufacturing plants producing from 300 to 200,000 tons of feed a year.

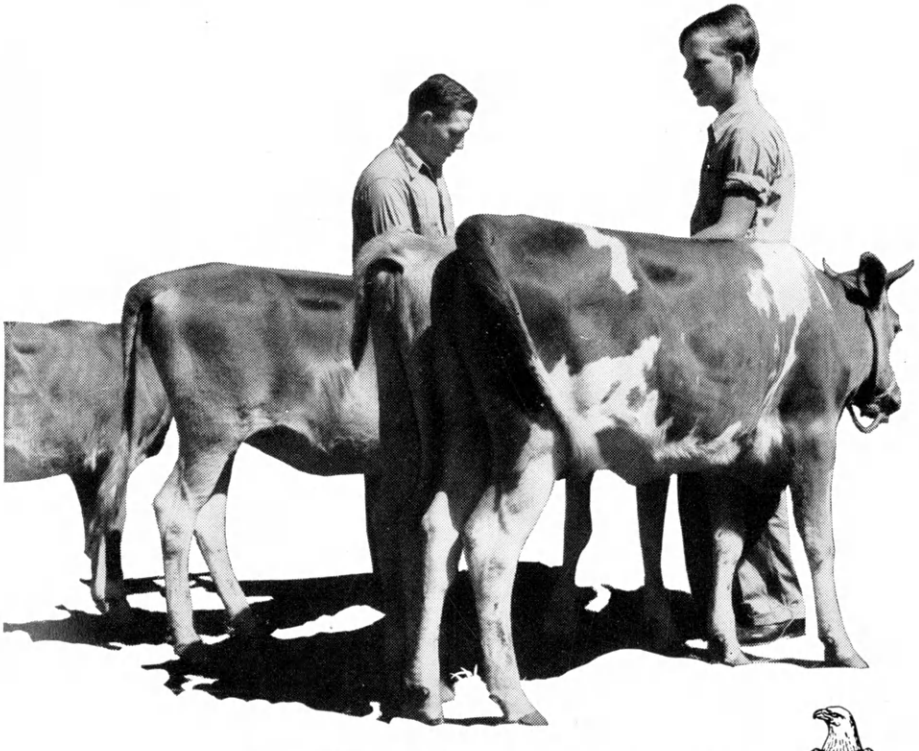
Burns is a graduate of Washburn university at Topeka, and has done advanced study at Kansas university. He is a member of the American Association of Cereal Chemists, American Chemical Society, Animal Nutrition Research Council, and Alpha Chi Sigma, national professional chemical fraternity.

A GIFT....
to Take With You

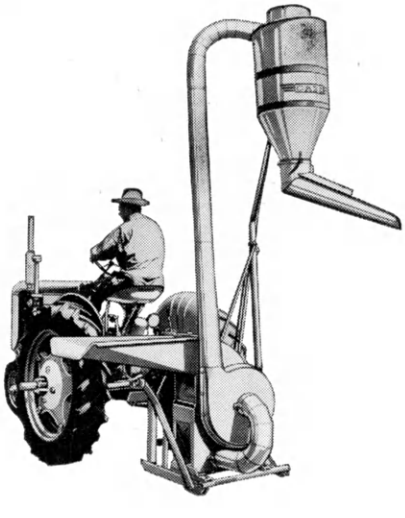
You have known the friendly trust of animals, their dependence on you for their very existence. You know the taste of sweat, the ache of weariness, the race with the storm at harvest. And you have exulted in the market place at the material rewards for your work, your care, your planning—and your self-denial.

Responsibilities . . . toil . . . working and living with animals and with Nature. Farm life has given you the gift of maturity, a gift more earned than bestowed, a gift long in coming to others who have lived the soft life. For maturity is not measured in years alone, but in what those years have brought to the muscle and mind of the man.

Take this gift with you through college and beyond. It will make your college years more fruitful, your whole life more rewarding. Life will have fuller meaning for you. You will mean more to the world, both in accomplishment and in good citizenship.



No belting up, no staking down, with a Case Tractor-Mounted Hammer Mill. Mounts in a jiffy on the Eagle Hitch of Case Tractors. Pick it up with hydraulic power and whisk away to the job. Saves your time and boosts production from start to finish. High-suction fan keeps chamber clear to speed the work, avoid wasteful powdering and heating of feed. J. I. Case Co., Racine, Wis.



CASE

SINCE 1842

Atrophic Rhinitis

Snout Twister

By Bryce Orr

ATROPHIC RHINITIS, a recently recognized infectious and contagious swine disease, may become more costly to the swine industry than any other hog disease, says Dr. E. E. Leasure, dean of K-State's School of Veterinary Medicine. Its seriousness is magnified because few producers are able to recognize the symptoms of this malady in its early stages.

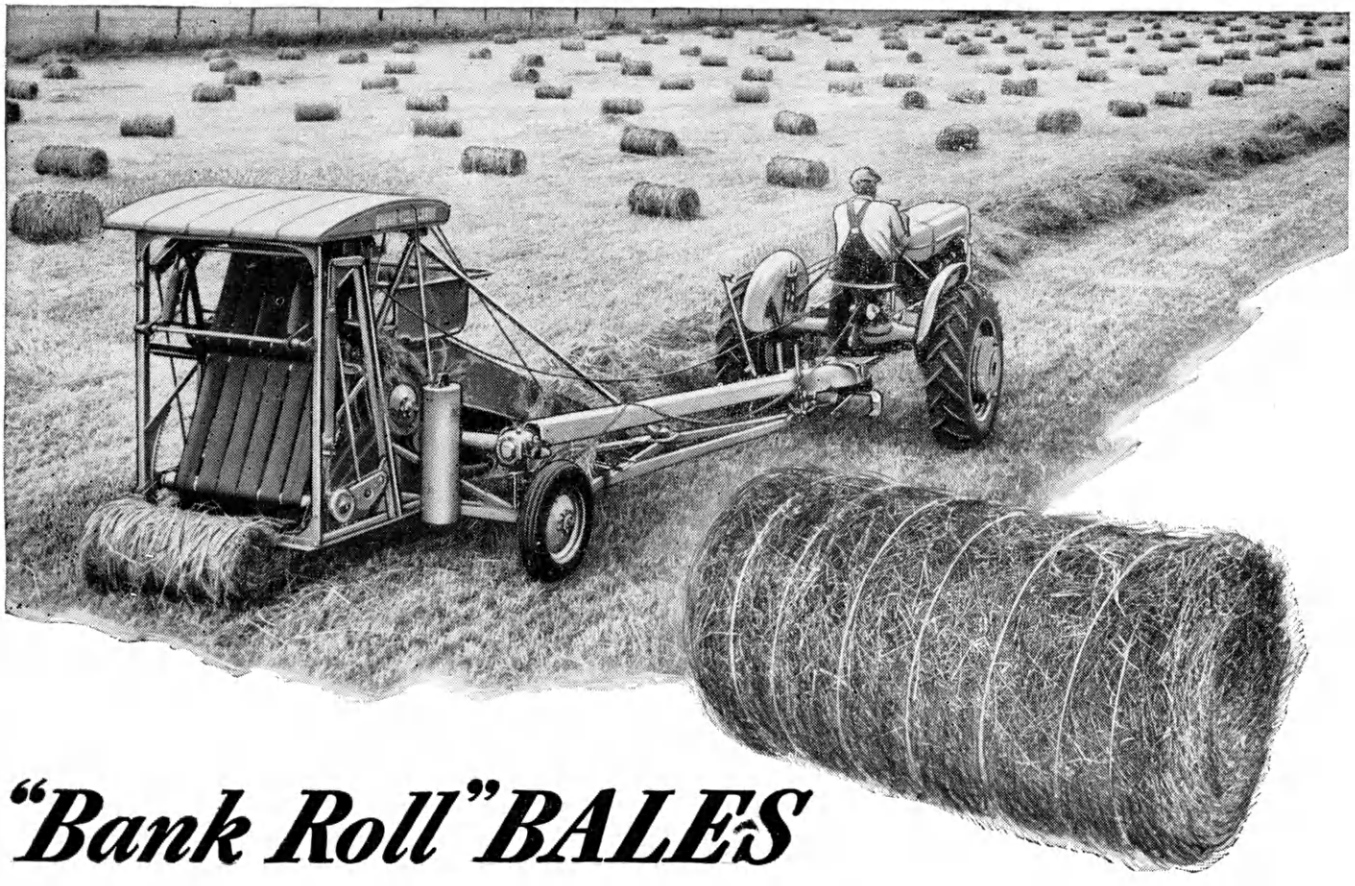
Rhinitis may be in a producer's herd for several months before it becomes evident. Atrophy of the affected parts with subsequent distortion of the snout and face are the characteristic results which give away the presence of the malady. Early symptoms of rhinitis are characteristic sneezing, snout rubbing, a watery serous discharge from the nose, and bleeding from the nose. Retarded growth and distorted snouts are symptoms of more advanced stages.

It is not known what causes atrophic rhinitis, Dean Leasure said. The disease affects one or both turbinate bones and also the ethmoid processes and results in the partial or complete absorption of these bones. Pigs from birth to weaning are most susceptible; however pigs are usually six to eight weeks old before obvious symptoms are visible.

Veterinarians explain that rhinitis usually is not a killer disease such as cholera. But it takes its toll in unthriftiness. Hogs will not gain normally when infected. An infected hog will take several hundred pounds more feed to make normal gain than will a healthy animal. The loss is also great for the breeder of purebred hogs who expects to sell breeding stock.

As yet there is no treatment for rhinitis. The best procedure seems to be to quarantine infected herds and use them for slaughter purposes only. The disease is usually spread by bring-

(Continued on page 29)



"Bank Roll" BALES

SEAL IN MORE LEAVES

Open a rolled bale and you'll see the "rolled-in" green leaves that set a new value standard for hay.

Like the curved surface of a Quonset roof, the outer stems of rolled bales turn moisture and rain—protect the sealed-in layers beneath.

They're bales that can take rough handling, too. They elevate, load, and store compactly, without buckling or breaking.

And they're *easy* to handle. Unroll them down the feedway or simply feed them whole. Weather-resistant, they are perfect for outdoor feeding.

A home-owned ROTO-BALER is ready to roll when hay and weather are just right. It's the baler you can bank on!

★ ★ ★

This beats loading bales by hand! The Allis-Chalmers Bale Loader attaches minutes-quick to the WD, WC or C Tractors. Picks up rolled bales lying at any angle. A sturdy, economical, durable loader.

ALLIS-CHALMERS
TRACTOR DIVISION • MILWAUKEE 1, U.S.A.

ROTO-BALER
and
BALE LOADER

ROTO-BALER is an Allis-Chalmers trademark.

Departmental Clubs

Man-Makers

By Warren Nettleton

DESPITE Time magazine's report that extracurricular activities are not worth while, opinion around the North End of the campus still is highly in favor of such things as the Little Royal, judging teams, and departmental clubs. The clubs especially play an important part by helping with such things as the Farm and Home Week, Formula Feed Conference, and FFA judging contest. Furthermore, the clubs are the groups which sponsor all the different departmental judging contests and events like the Royal.

Time magazine was the one which predicted Truman would not win in the last election. Perhaps its judgment might be wrong again in another area.

Some Ag faculty members feel that if you are not active in your departmental club you are missing an important part of your education. Job application blanks almost invariably have a space for putting down the different extracurricular activities in which the individual has participated.

Faculty members are ever encouraging lower classmen to join clubs in their respective departments. A freshman friend and I were walking toward West Ag a while back. We started talking about some of the courses that are required of a student enrolled in agriculture. My friend asked me why it was that the different instructors and speakers in Freshman Assembly and the elements classes thought that belonging to one's departmental club was so important.

Well, after telling him the usual things—leadership, faculty connections, jobs, etc.—I decided that the answer could not be boiled down to a simple statement but that there were many reasons and all of them centered around one's earning a good living and being a leader after he is out of college.

Later I asked some of the veterans of the various clubs to give me their opinion on the subject.

Eugene Brinkman, senior in animal husbandry, puts it this way. "If a person knows in which department he wishes to major and knows the kind of people he will be working with, he should get in and learn the way people in his field do things. If he has never had previous contact with the people in his major field, he

(Continued on page 24)

AT JOINT Technical Meetings of Standard Oil Company and its subsidiaries, many opportunities are presented for an easy exchange of ideas. From formal meetings, where technical papers are read, to small discussion groups and conversations between individuals, a healthy and stimulating air prevails throughout the five-day meeting.

How Exchanging Ideas Advances Petroleum Progress

WHEN MORE than 150 scientists meet for five days and exchange views on their work during the past year, the American consumer is likely to benefit, through improvement of products for his use. Conversation between scientists can often accomplish a more complete and satisfactory coordination than mere exchange of written reports.

From May 5 through May 9 this year, the Standard Oil Company (Indiana) and affiliated companies held their tenth annual Joint Technical Meeting at French Lick, Indiana. The key scientists and engineers from the parent company and all its subsidiaries attended. More than eighty technical papers were presented.

In addition to the research men, the manufacturing, production, sales, chemical products, and patent departments of the companies were represented. This helped give a broad view of company problems.

The Standard Oil Joint Technical Meetings are outstanding in their field. The company has been a pioneer in bringing together scientists and engineers from all the branches of its activities.

This is another example of leadership in engineering and research, and well illustrates the progressive atmosphere men with technical training may find in a career at Standard Oil.

Standard Oil Company

910 South Michigan Avenue, Chicago 80, Illinois

STANDARD

Man Makers

(Continued from page 22)

should become a member of his departmental club to find out what kind of people he will be dealing with."

Brinkman went on to say, "College students are expected to go out and become leaders in their work, not just be 'sit-at-homes.' The best way to become a leader while you are in school is to take an active part in the activities of your departmental club. It is a good idea to learn the men with which you are to associate and to see how they get things done."

Armin Grosse, senior in agronomy, says, "The different clubs give you a chance to meet a lot of people with similar interests and provides a place for a person to get up and express himself."

Grosse went on to say, "Clubs are a definite supplement to a student's studies as far as education is concerned. They even help students to realize the value of some of their class training. Membership in a departmental club teaches you how organizations function so that you can do a leader's job in the organizations in your community after you graduate."

Don Shoup was hard to corner but I finally got him to give his idea on clubs. Shoup says, "Departmental clubs give the student a broader understanding and greater insight into his field of studies and acquaint him with the members of his curriculum. The clubs certainly develop one's leadership ability. They furnish a means of tying faculty and students more closely together. I guess you could say that the club gives an organized voice to the students of a department."

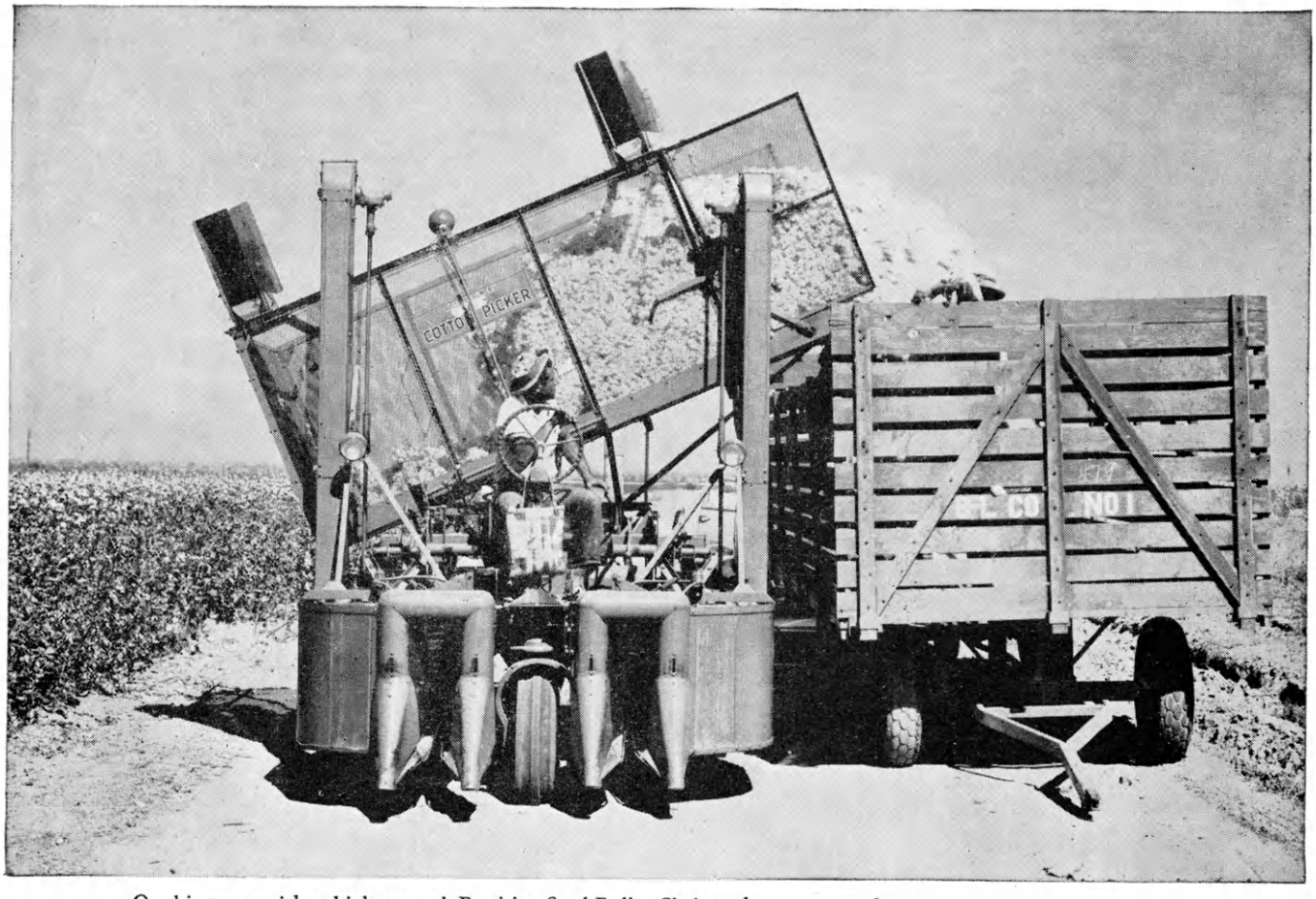
Most of the departmental clubs meet on week nights and usually start around 7 or 7:30 p. m. They usually start off with the business meeting followed by a movie, a speaker, or some sort of entertainment. The entertainment is usually followed by refreshments.

Dues range from fifty cents to $2.50 for a semester, which won't even pay for a semester's refreshments usually.

To sum it all up, leadership, contacts, knowledge, and jobs are the benefits which departmental clubs help to provide a student enrolled in agriculture.

RESEARCH AND ENGINEERING BY LINK-BELT MAKE FARMING EASIER, MORE PROFITABLE

The right chain for each specific job boosts efficiency of today's farm machines



On this cotton picker, high-strength Precision Steel Roller Chain and Steel Link-Belt were selected to match different requirements.

LINK-BELT has worked hand-in-hand with America's farm machinery manufacturers since 1875 to step up farm production

THE economics of good design demand that a component's strength and weight be checked with its initial cost—both weighed against probable maintenance and life expectancy.

That's why so many of America's top farm machine designers rely on Link-Belt for drive and conveyor chain. They know they can get the *one* chain—from the complete Link-Belt line—that *best* meets each specific requirement.

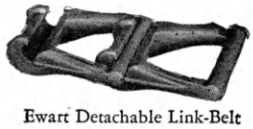
Link-Belt's laboratory facilities and field research staff have played a vital role in developing today's high standard of agricultural machinery. In many cases, the right chain for the job increases design flexibility . . . lengthens chain life while reducing maintenance . . . actually steps up crop yield.

LINK-BELT

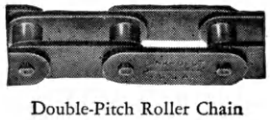
CHAINS AND SPROCKETS

Typical chains from the complete LINK-BELT line

Steel Link-Belt



Ewart Detachable Link-Belt



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Throck

(Continued from page 7)

Mrs. Throckmorton has not occupied quite so prominent a spot in the public eye as her husband, but incoming letters from close friends of the family credit her, too, for much of the Throckmorton success. President McCain introduced them at a banquet recently as the "team of Throcks."

Marcia Story was the Manhattan girl Throck met and married after coming to K-State. She was a graduate of K-State's home ec department and had taught school before their marriage in 1916.

Their three children are grown and married and two have children of their own now. But the Throckmortons are not "Grandpa" and "Grandma," names which carry a connotation of old age. Instead, they answer to "Daddy Ray" and "Mama Marcia." Some of the older grandchildren are going to Wyoming with them this summer. Mrs. Throckmorton says she doesn't like to fish. While Throck's busy casting in a stream, she climbs around some of the neighboring mountains, often coming out on some cliff where she can watch her husband cast.

Around Manhattan, Throck and Marcia are famous for their caustic repartee with one another. Outsiders would think they were quarreling. Actually they just have fun with teasing based on some three dozen years of devotion to each other. It's amusing, Marcia says, to watch the expressions of dismay on the face of some newcomer.

Their home on Houston street reflects Throck's ability to make soil produce. Even though their home and yard were flooded last summer, they have the greenest lawn in the neighborhood. Most of the other lawns nearby are still brown.

Some 40 years ago, on a hot day in 1911, the 25-year-old Throckmorton stepped off the train in Manhattan into a midsummer heat wave. He mopped his face and decided Kansas was about the hottest place he'd been. The youth from Pennsylvania had obtained a job as assistant on a soil survey, but unaccustomed to Kansas summertime heat, he did not relish the job. He had written to President Waters of Kansas State offering his

services in soil research, provided there were no teaching strings attached. Throck now terms it a sassy letter, and says that, strangely enough, Waters agreed to accept him.

Two years later, however, Throck completely changed his mind and decided he liked to teach—after being forced into a taste of it. Since then, Throckmorton says he feels his greatest contributions to agriculture have been through the classroom. He plans to teach again mostly because he enjoys it.

He emphasizes the necessity for a well-rounded education with plenty of extracurricular activities in addition to grades. "Although scholastic standing is important, it's not the only thing to be gained during your college days," he says.

Perhaps no other administrator on the hill takes his title more lightly or his work more seriously than Throckmorton. He's always pressed for time in maintaining strenuous travel schedules along with administrative duties. Yet he always takes time to interview each graduating senior, attempting to help each to a better start in his chosen career.

Last year he was picked by Penn State as one of the five most outstanding graduates of that school. The citation was for "professional eminence," which Penn State awarded in place of the usual honorary doctorate degree. It was the first time any such citations had been made by that institution, which means that Throck is ranked among the all-time tops of his alma mater.

In tribute to his colleague, Dr. Farrell says Dean Throckmorton is superior in three fields which often tend to block out one another. "These activities are research, teaching, and administration," Farrell says. "Any one of them would justify the man's existence. He's got all three."

Along with clean milk production, the dairyman must have good healthy cows as the source of wholesome milk.

He: "I guess you're pretty mad at me for coming home with this black eye last night."

She: "Not at all, sweetheart. You didn't have it when you came home."

Ag Teams Dine

By Ed Brandner

MEMBERS OF SEVEN Kansas State college agricultural intercollegiate judging teams were honored at the 25th annual dinner for the teams in the College cafeteria January 25.

Started in 1923, the dinners since have been an annual event at K-State, except for the war years 1943-'47 when they were omitted. The dinner this year was given by President James A. McCain, Dean R. I. Throckmorton, Prof. W. F. Pickett and heads of departments with participating teams.

The poultry judging team successfully defended its national championship in Chicago during the International Livestock Exposition there this fall.

Members of the teams and their coaches were:

Poultry judging team—Donald Grisham, Donald Bigge, Truman Diener, Lyle Lagasse, alternate, and Prof. Thomas B. Avery, coach.

Livestock judging team—Herman E. Brinkman, Kenneth T. Boughton, Larry M. Seaman, William G. Kvasnicka, Edwin H. Horstick, Harland E. Priddle, Robert D. Edwards, Roy W. Handlin, alternate, and Donald L. Good, coach.

Dairy cattle judging—John Speicher, Raymond F. Sis, William Baker, and Dr. G. H. Beck, coach.

Dairy products judging—Walter Floyd, Frank Albora, Raymond Williford, William Hunter, alternate, and Prof. W. H. Martin, coach.

Crops judging—Dale M. Davies, Richard Golladay, Armin Grosse, Robert L. Schulte, alternate, and Prof. Ernest L. Mader, coach.

Wool judging—Kenneth Newell, Stanley Slyter, Byron Taylor, David Schoneweis, Maurice McClure, Kenneth Urban, and Dr. T. Donald Bell, coach.

Meats judging—Dale M. Davies, Phil D. Lukert, Raymond F. Sis, Richard Ward, Wayne S. Stitt, alternate, and Prof. Ralph P. Soule, coach.

Snout Twister

(Continued from page 20)

ing in infected breeding stock to clean herds. The first litter from this new stock will produce only one or two infected pigs. The number of infected pigs seems to become greater with each litter thereafter, Dr. Leasure stated. After the disease has gained entrance into a herd the only thing to do is to sell the hogs for slaughter purposes, clean the premises and disinfect and restock after three or four months with normal hogs. Rhinitis will stay as long as there are infected hogs present.

Atrophic rhinitis was first recognized in Kansas in October, 1950. It is believed that it was imported about 1945 and several times since with registered breeding stock which was diseased. This malady is widespread throughout Kansas and all other swine producing states, Dean Leasure stated. It has been known to exist in Denmark, Poland, and Germany for over 70 years. It is believed to have been imported into Canada from Denmark and into the United States from Canada.

Research Confirms

Nitrogen Is Essential

By Duane Arment

WHAT IS THE BEST TIME, rate, and method of applying nitrogen fertilizers on wheat and oats? What combination of phosphorus and potassium should be used with various rates of nitrogen applications?

These are just a few of the questions facing Kansas farmers since fertilizers came into extensive use to increase crop yields here during the last decade. Experiments being conducted by Joe Gingrich, graduate student in Agronomy, are designed to find the answers to some of these problems.

In general, Gingrich found nitrogen the limiting factor to maximum wheat production over the eastern half of Kansas. Phosphorus also tends to increase yields slightly, Gingrich found. Potassium showed no effect on wheat yield in Eastern Kansas. Oats, too, are limited by a lack of nitrogen in the soil. In all the tests, highest yields were received from applications of fertilizer at seeding time, he found.

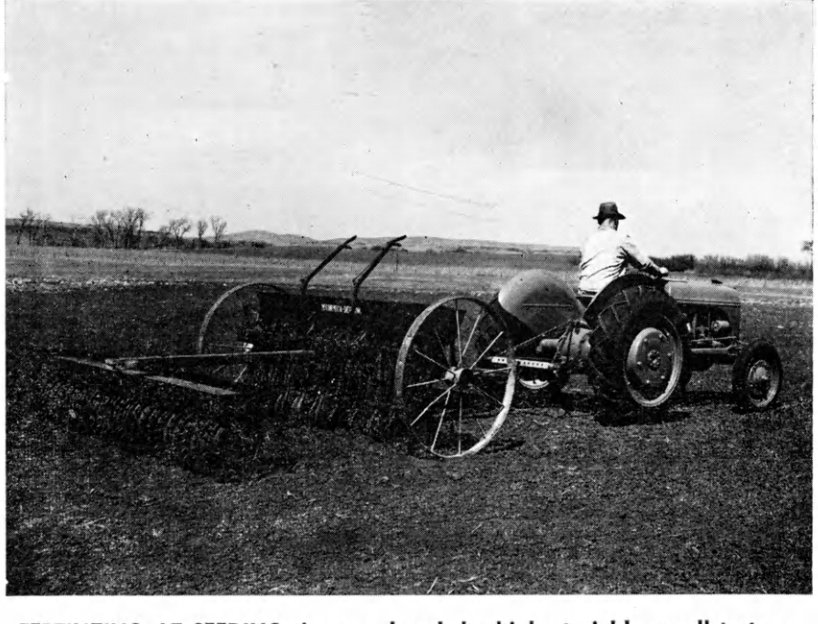
Experimental wheat plots were located in the eastern half of Kansas at Hutchinson, Belleville, Mound Valley, and Manhattan. Three oat fertility plots were located at Thayer, Belleville, and Manhattan.

Each experimental plot was divided into four blocks of 25 squares each. Twenty-five different treatments were carried out on each block. This arrangement allowed each treatment to be repeated four times on every field. A randomized block system of arranging the plots was used.

At Manhattan the average yield of the four blocks without treatment was 30.7 bushels of wheat. Fifty pounds of nitrogen produced 44 bushels of wheat per acre when half of it was applied at seeding time and the rest top-dressed later. Fifty pounds of available phosphoric acid and 25 pounds of potash produced very slight response at Manhattan, indicating that nitrogen was the limiting factor in this area.

Mound Valley yields varied from 6.5 to 19.8 bushels of wheat. The lowest yield was produced on the plot receiving no nitrogen, 50 pounds available phosphoric acid, and 25 pounds potash. Highest yield was produced by the treatment of 100 pounds nitrogen, 50 pounds phos-

Fertilizer Combination . . .



FERTILIZING AT SEEDING time produced the highest yields on all tests run on wheat and oats at Hutchinson, Belleville, Mound Valley, and Manhattan.

phoric acid, and 25 pounds potash. The significant increases in yield were generally due to the application of nitrogen. A wind storm before harvest possibly decreased the yield of the phosphorus treatments. Phosphorus creates earlier maturity and makes shattering easier, Gingrich said.

Hutchinson yields varied from 27.1 bushels on plots without treatment to 54.2 bushels per acre on plots treated with 50 pounds of nitrogen, 50 pounds of available phosphoric acid, and no potash. The plots at Hutchinson were on an old alfalfa field which had been broken up about two years before the experiments were conducted. Phosphorus accounted for the biggest increase in yield because there was already a good supply of nitrogen in the soil, Gingrich said. Soil tests also showed the soil low in available phosphorus.

At Belleville the lowest yield of 20.3 bushels per acre was from untreated plots. The highest yield of 37.9 bushels of wheat was from plots treated with 50 pounds nitrogen—one-half added at seeding time and one-half top-dressed December 20—50 pounds available phosphoric acid, and 25 pounds potash. The application of nitrogen showed the biggest increase in yield.

Oat experiments at Manhattan proved nitrogen to be the limiting factor. The high yield of 60.4 bushels was produced with the application of 100 pounds of nitrogen and no potassium or phosphorus. The low yield of 47.8 bushels was produced on land without treatment.

Nitrogen was also the limiting factor at Belleville. The lowest yield of 15.5 bushels was produced by treating the plots with 25 pounds of potash only. The high yield of 48.6 bushels was from plots treated with 100 pounds nitrogen, 50 pounds available phosphoric acid, and no potash.

At Thayer the plots receiving no nitrogen produced the lowest yields. The low yield of 34.3 bushels was from plots receiving no nitrogen, 50 pounds available phosphoric acid, and 25 pounds potash. The high of 51.1 bushels came from plots receiving 100 pounds nitrogen, 50 pounds available phosphoric acid, and 25 pounds potash.

The Last Word

LET'S HAVE an Ag Day somehow!

As most of you know, the proposal to combine an Ag Day with a rodeo has been cancelled, mostly because departmental heads did not like the idea of a rodeo. Now the proposition to combine Ag Day with the Little American Royal is under consideration, particularly by the Dairy and Block and Bridle clubs, sponsors of the Royal.

Whether or not Ag Day is merged with the Royal, let's keep this idea of an Ag School show hot. We need a show in which every department takes part—a show where everyone helps—a show which will picture Kansas State College School of Agriculture to the best advantage.

Why? . . . there's competition on the hill. We're tired of having Engineers and Home Ecs throw Open House and Hospitality Days in our face, while we have nothing better to offer.

But more than that, there's a deeper sense of pride in Ag School that abides in most of us. We who have been around here a little while know there's some wonderful work in the way of research and teaching done on the North End. We want the rest of the world to know about it too.

Some argue we can't show our wares as do the Engineers, for instance, with all their mechanical gadgets and their latest brainchildren. Granted it might not be as easy to do, but we've got something to show that they haven't got—life itself. Plants, animals, poultry, hosts of insects! Growth is a phenomenon more spectacular than anything yet conceived by the human mind or put together by human minds. Plant and animal reaction to nutrition is startling.

If we remember the basic fact that Ag Day must entertain first, with teaching and instruction as seconds, we can make it a success. But if teaching is made the primary objective, Ag Day will flop no matter what crowd-pulling event is used.

Here's what happened last month which should not be allowed to happen again. Departmental heads, meeting with Deans of the Ag School, decided an Ag Day program and a rodeo were contradictory. They believed Ag Day would work better combined with the Royal.

This was the first inkling Ag Day planners had that indicated departmental staffs were not in favor of the proposal, despite faculty representatives from each department who had worked with the committee all year. No disfavor of the rodeo combination had been registered previously.

Thus seven months' work has been wasted.

George Wingert, member of the planning committee, expressed it this way: "We have been planning and, we thought, making a little progress toward an Ag Day. It seemed all the departments were with us. Now we discover we have been on the wrong track all of this time."

—smc

Advertisers' Index-May

Readers Write

Dear Editor:

This will thank you for sending me a copy of the March, 1952, Kansas Agricultural Student Magazine. I enjoyed reading it very much.

In one of your feature articles, "Power Grows Up," by Everett Browning, the statement was made that a recent survey shows that only 61% of Kansas farms have electricity. Though this is not a criticism, I think your students will want to have the facts.

Each year this Commission conducts a rural electrification survey to determine the number of farms receiving electrical service in the state of Kansas. This survey showed that some 104,654 farm customers were receiving electrical service as of December 31, 1950, which was more than a year ago. Percentage wise this amounts to 79.7%, and I am certain that as of this date more than 85% of Kansas farms have electrical service.

We are in the process now of making our 1952 rural electrification survey and I will be glad to send you a copy when it is completed sometime in July. A copy of our 1951 rural electrification survey is enclosed for your information.

Yours very truly,

L. Duane Walrafen
Chief Engineer
State Corporation Commission

The difference in percentages noted by Mr. Walrafen results from surveys at different periods. The Ag Student article was based on the recently released College bulletin, "Electricity in Southwestern Kansas." According to that bulletin, on June 30, 1949, 61 percent of Kansas farms had power. We appreciate Mr. Walrafen's interest and especially his data on the 1951 survey. It shows the extremely rapid growth that power on Kansas farms is making.