The Development of Extension

The men who made the plea for an Iowa Agricultural College in 1858 knew that such an institution, if operated directly on the farmers' land and in their homes, would lead to better farming, better farm homes, and better farm communities. With this in mind, President Welch conducted a farmers' institute at Cedar Falls in December, 1870, and later that winter one each at Council Bluffs, Muscatine and Washington.

Since no money was available for such activities, Welch worked out a plan for local support. A written request signed by fifty farmers who desired to attend all the meetings was required. In addition, local people provided a meeting place and paid current expenses of lecturers and all other local costs. From this shortage of College funds was established the principle of helping people to help themselves which is fundamental in Agricultural Extension everywhere today. These three-day institutes have been credited with being the first off-campus work by an agricultural college.

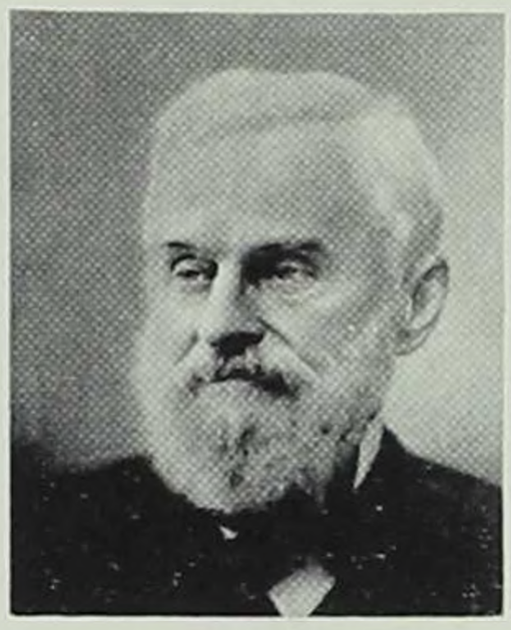
Mrs. Welch reported that she had received requests for several lectures in 1882-1883, including a course of six lectures to a class of sixty women

in Des Moines — possibly the first example of extension work in home economics. These two events were forerunners of the present-day philosophy that regards every farm, every home, every factory, and every place of business in the state as a proper place for the educational endeavors of the College.

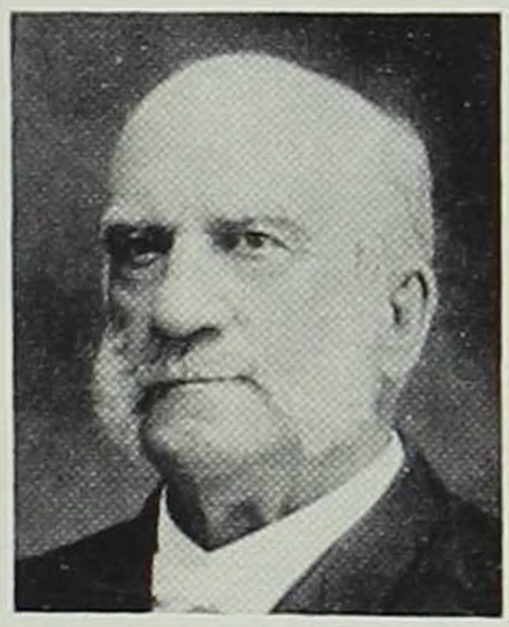
Beardshear also advocated taking the College to the people and bringing the people to the College. His excellent speaking voice was heard at conferences in all parts of the state, and other staff members learned to leave the campus and mingle with the people. Railroads were induced to provide special rates for excursions to the campus, and thousands of Iowans took advantage of these educational trips.

In the winter of 1901 Curtiss organized the first short course on campus — one dealing with livestock. It was so successful that another was planned for the following winter, this to include the subject of corn. Perry G. Holden, formerly of the University of Illinois but at that time with Funk Brothers seed corn company, conducted the course. His enthusiastic farmer audience clamored for more, but the tight program which lasted from early morning until evening would not allow it. Finally Holden suggested, half in jest, that the only open time was from 2 a.m. to 8 a.m. The farmers decided to come at 5 a.m., bringing lanterns and breakfast with them!

Presidents of Iowa State College



ADONIJAH S. WELCH
1868-1883



SEAMAN A. KNAPP
1883-1884

LEIGH S. J. HUNT
1885-1886

W. I. CHAMBERLAIN
1886-1890

W. M. BEARDSHEAR
1891-1902

ALBERT B. STORMS
1903-1910

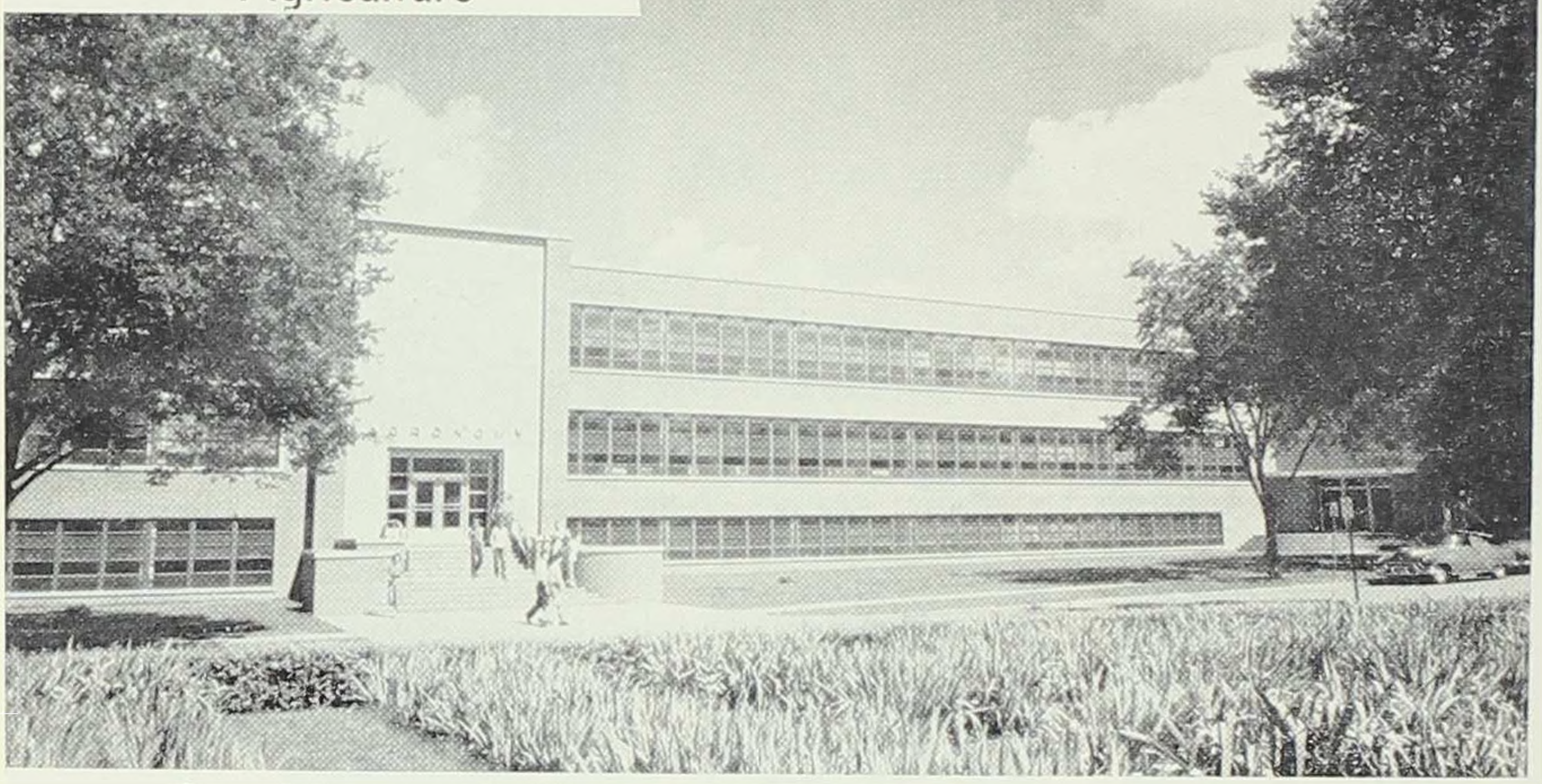
R. A. PEARSON
1912-1926

R. M. HUGHES
1927-1936

CHARLES E. FRILEY
1936-1953

JAMES H. HILTON
1953-

Agriculture



One of the newer buildings on campus is the Agronomy Building which was completed in 1952.

FLOYD ANDRE
Dean, Agriculture,
1949-

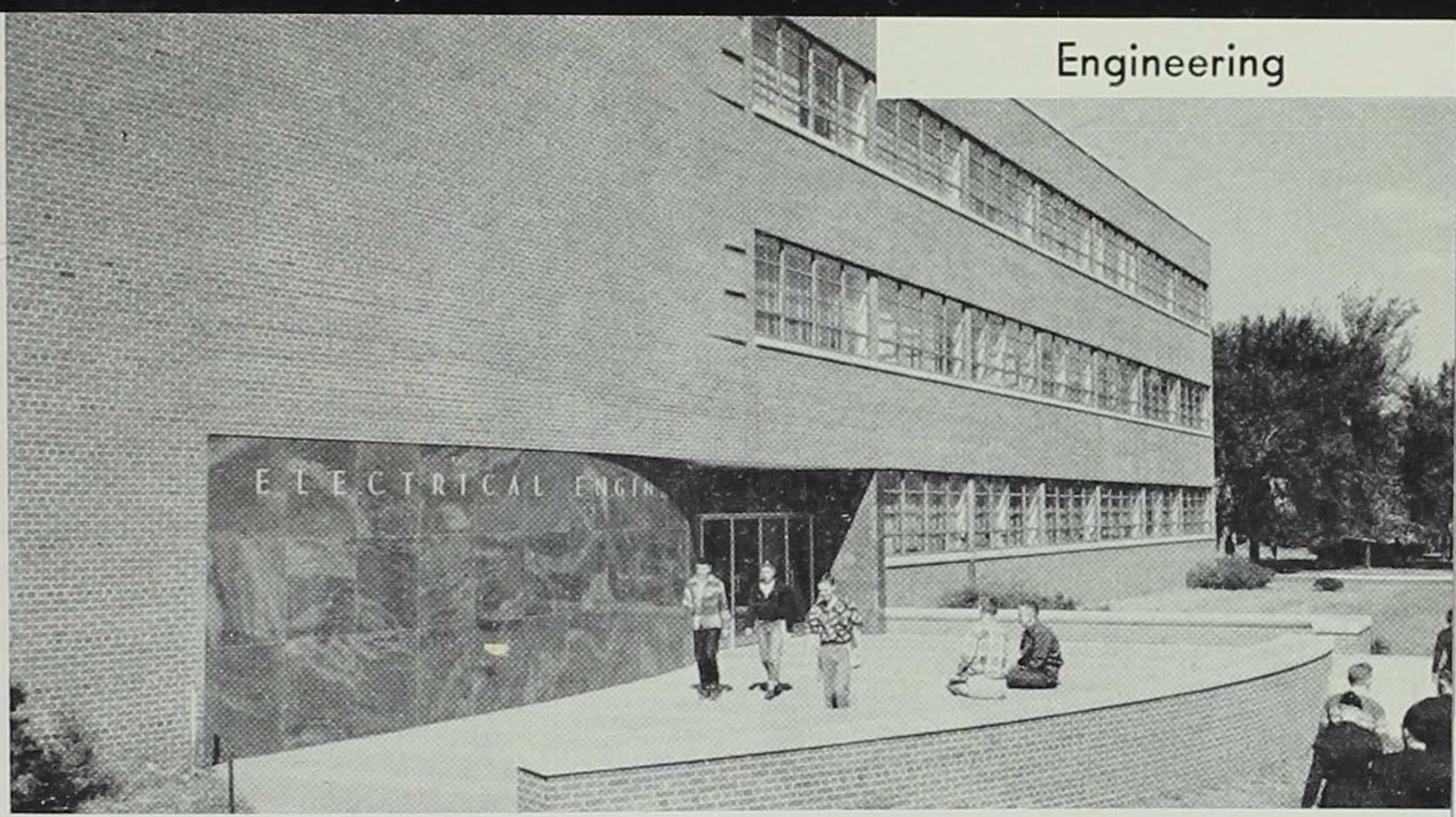
R. K. BLISS
Dir. Agr. Extension
1912-46

R. E. BUCHANAN
Dean, Science, 1913-19;
Dean, Grad. Coll.,
1919-48; Dir. Agr.
Exp. Sta., 1933-48

H. H. KILDEE
Dean, Agriculture
1933-49

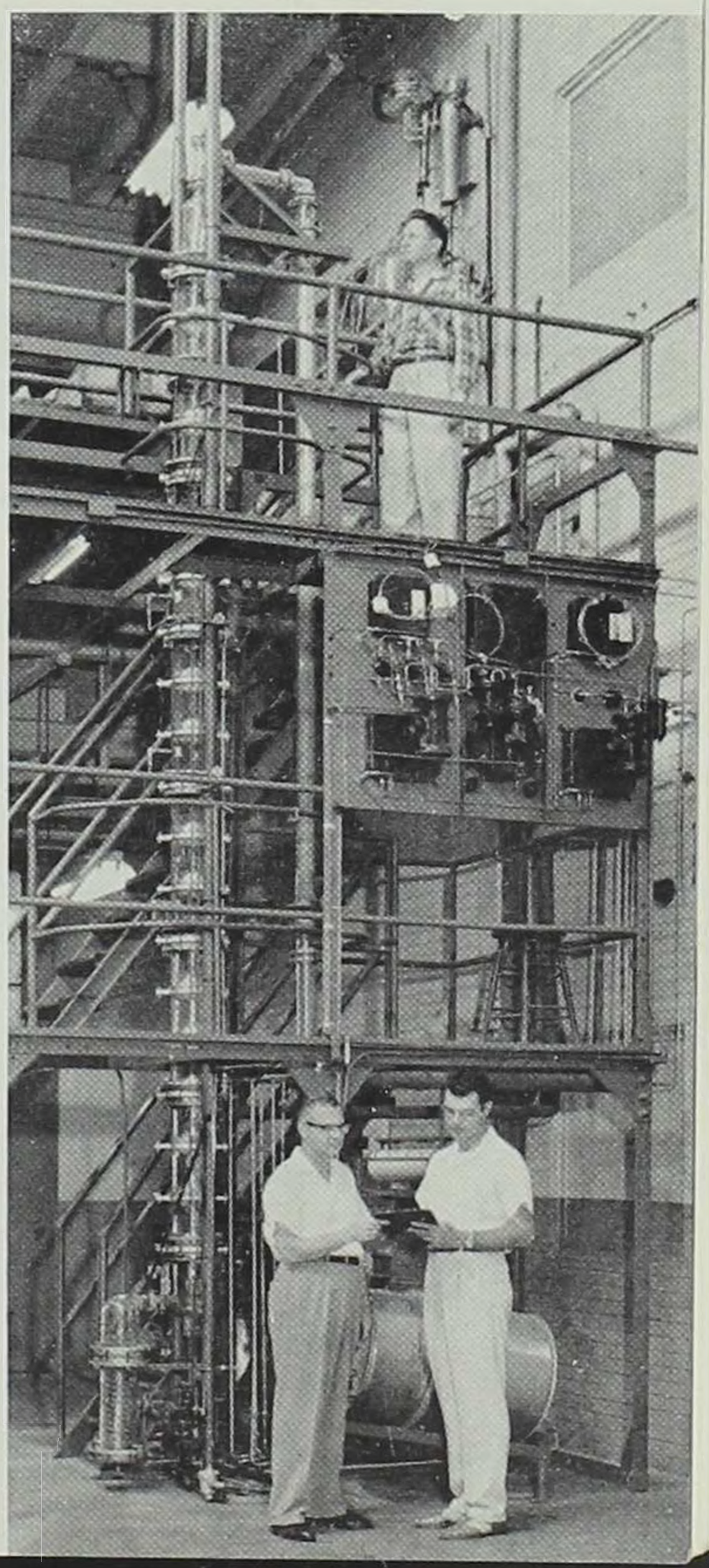
A class learns grafting technique at the Horticulture Farm.

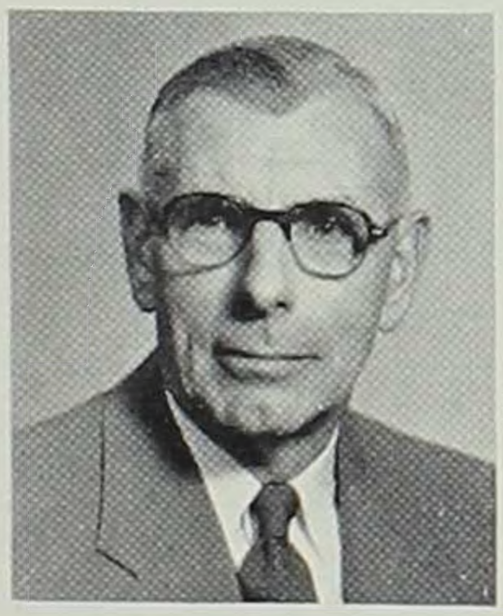
Engineering



The latest electrical laboratories are to be found in the Electrical Engineering Building which was completed in 1950.

New glass bubble cap distillation column in Chemical Engineering Laboratory was designed and erected by chemical engineering seniors.





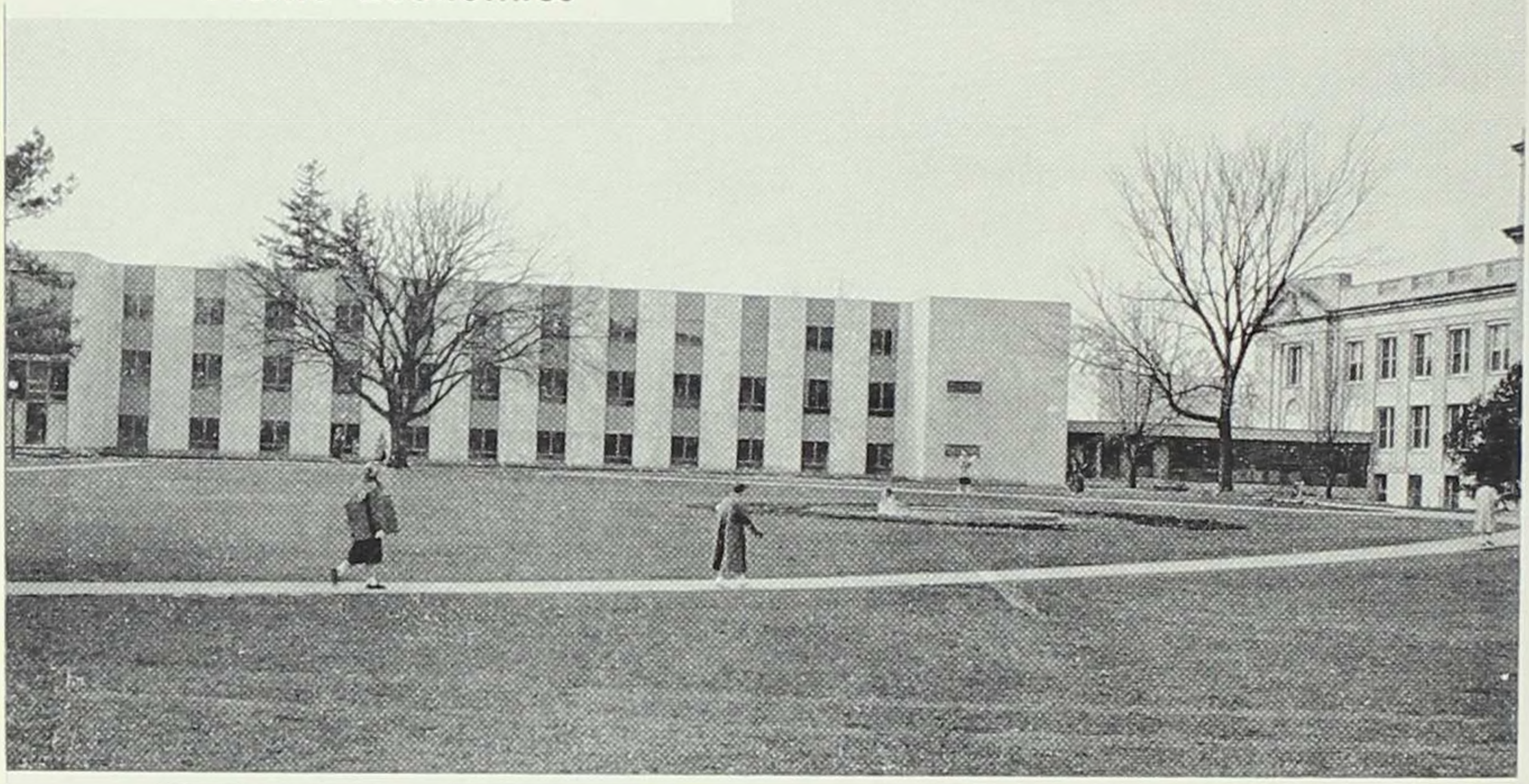
M. S. Coover
Acting Dean, Engineering, 1958-

W. L. Cassell
Distinguished Prof. in Engr., 1939-

Anson Marston
Dean, Engineering 1904-32

Glenn Murphy
Distinguished Prof. in Engr., 1932-

Home Economics



The latest campus addition is the new wing to the home economics building, MacKay Hall. It is ready for use this fall.

HELEN LEBARON
Dean, Home Economics, 1952-

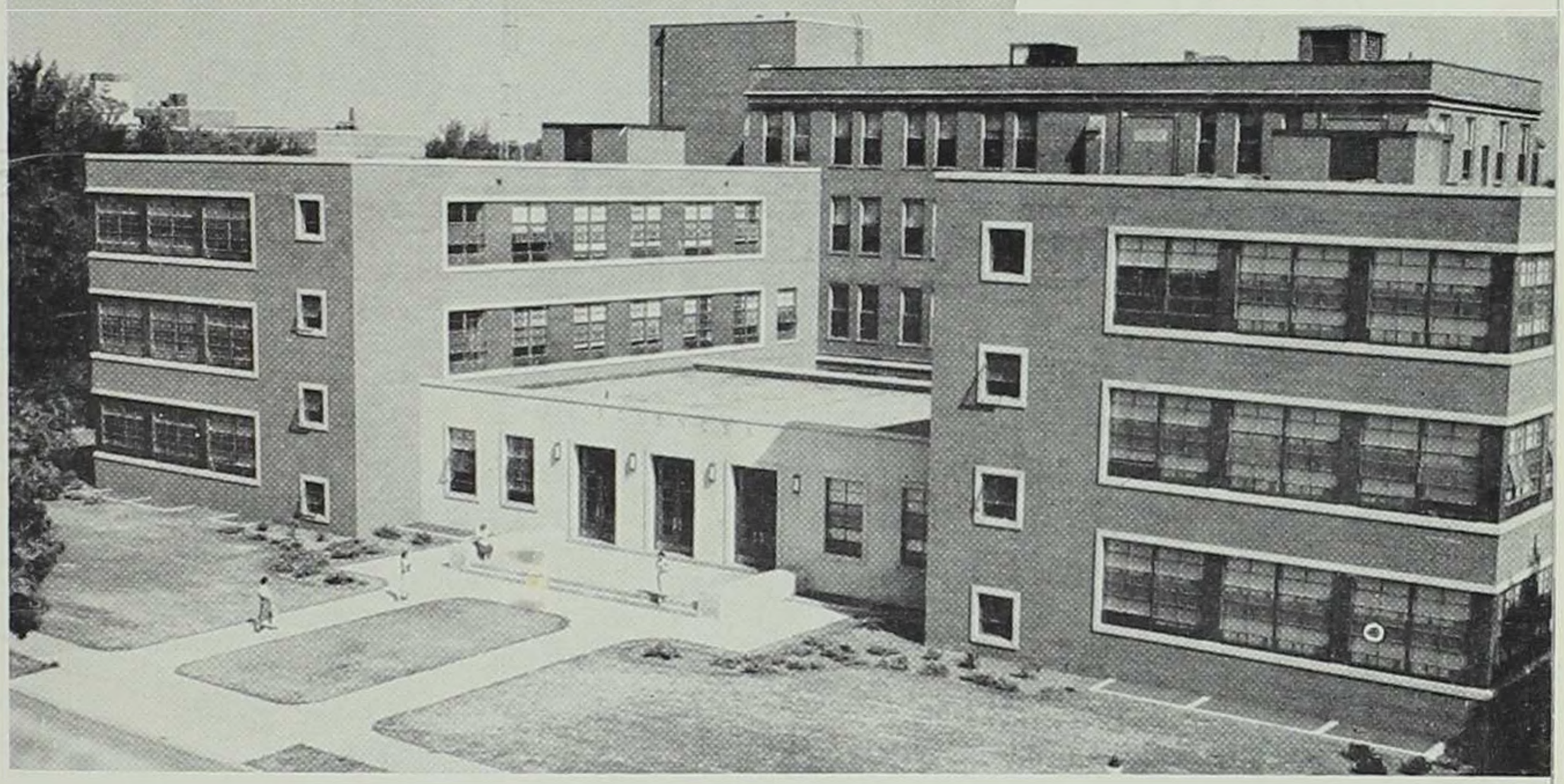
F. FALLGATTER
Head, Home Economics Educ., 1938-58

BELLE LOWE
Prof. Foods & Nutrition, 1918-56

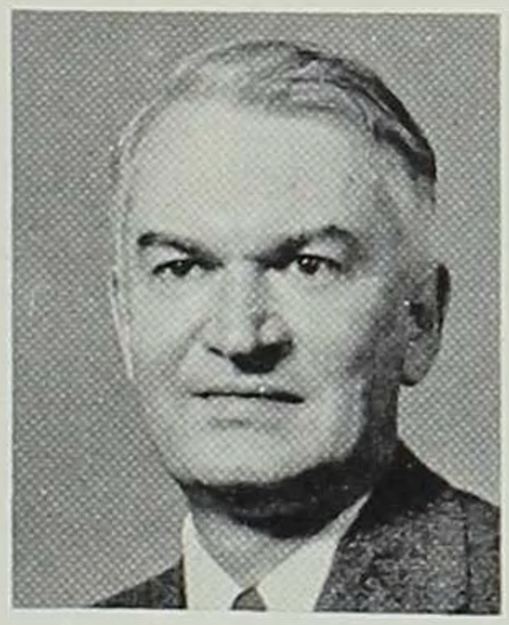
PEARL SWANSON
Asst. Dir. Agr. & Home Ec. Exp. Sta. in charge of Home Ec. Research, 1944-

Dinner at a home management house.

Science



The addition to the Science Building, finished in 1955.



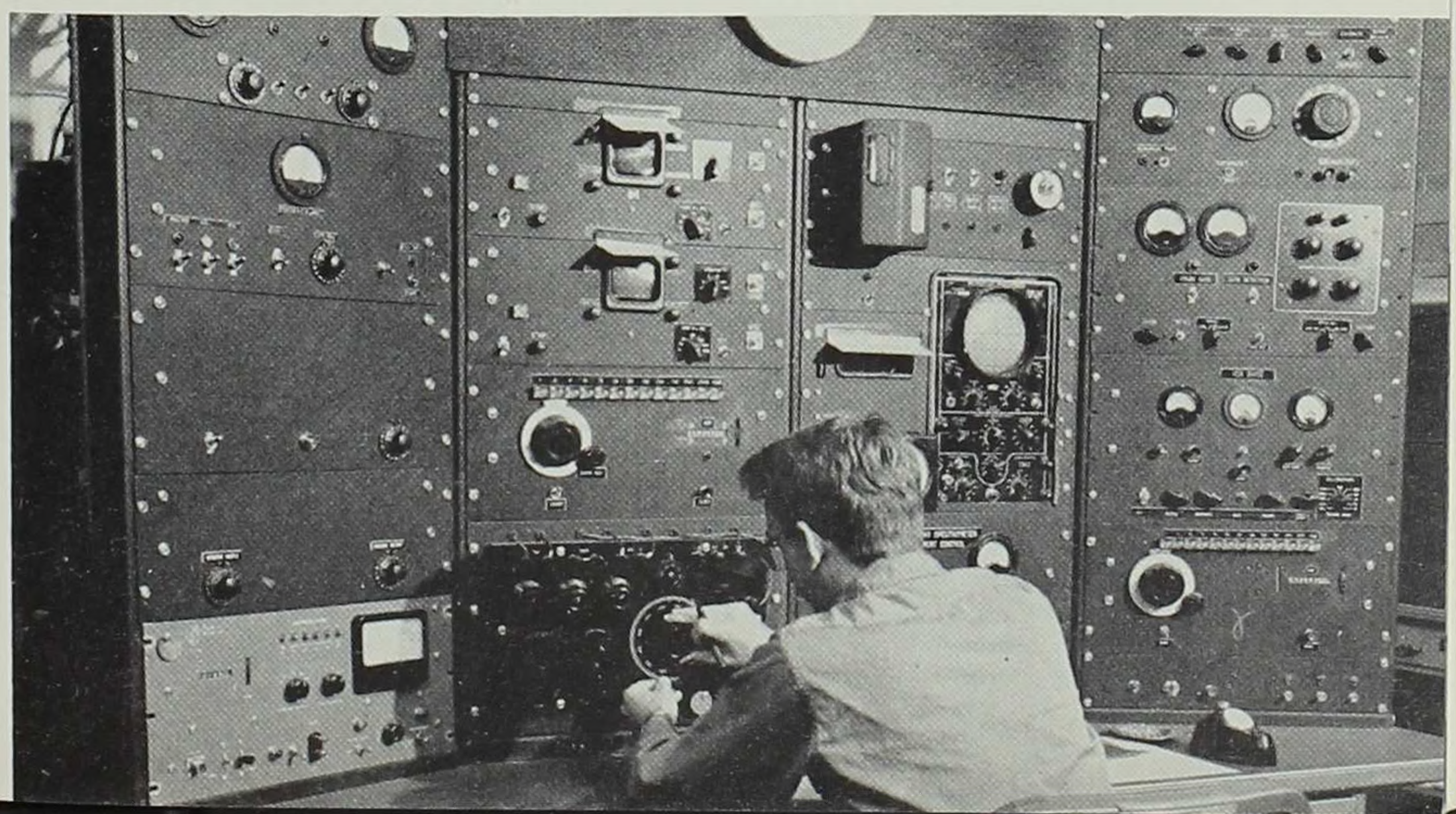
RICHARD S. BEAR
Dean, Science
1957-

HENRY GILMAN
Prof. Chemistry
1919-

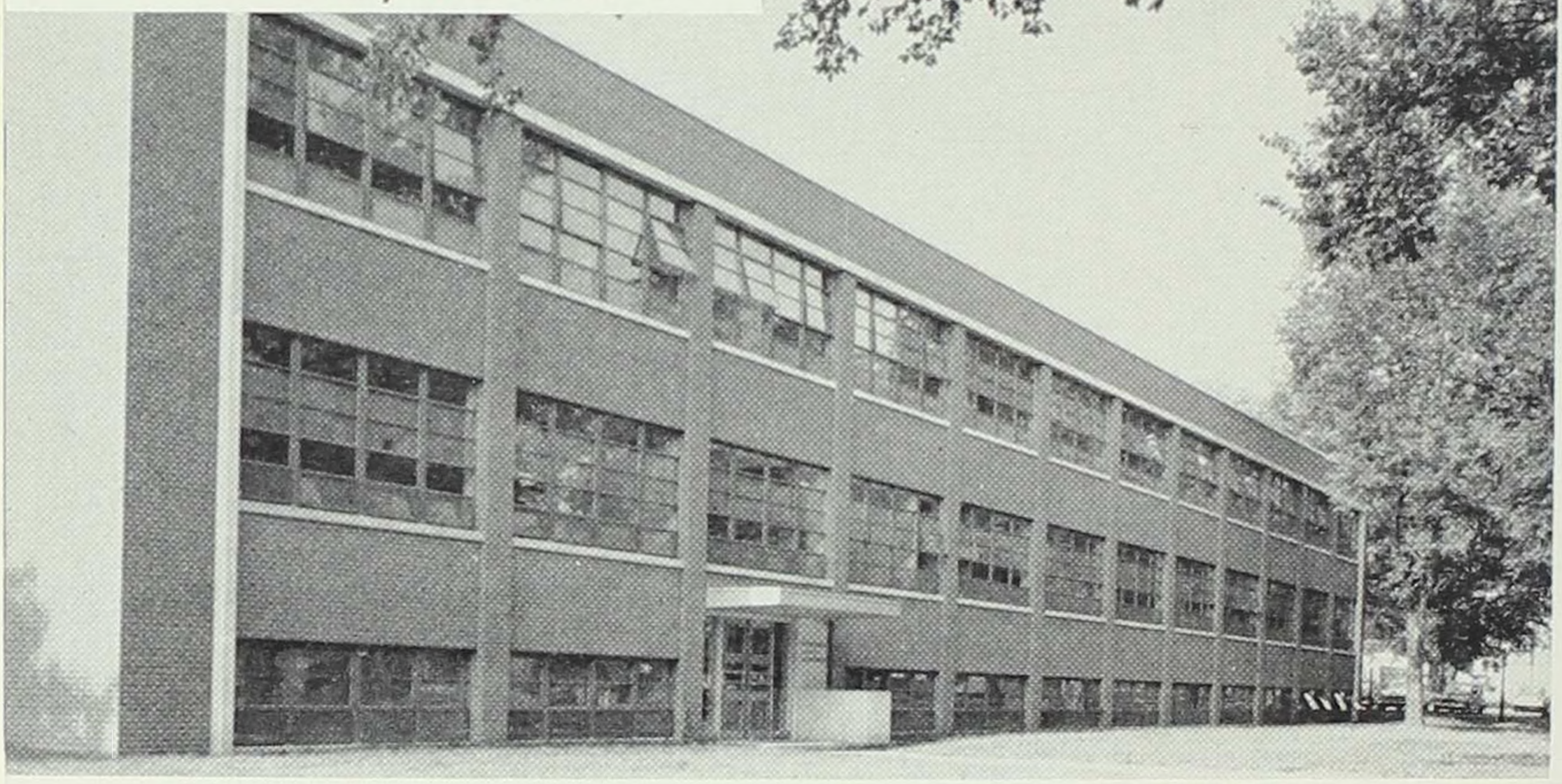
G. W. SNEDECOR
Dir. Statistical Lab.
1933-47

F. H. SPEDDING
Dir. Institute for
Atomic Research
1945-

The control panel of the intermediate-image beta-ray spectrometer in a physics laboratory.



Veterinary Medicine



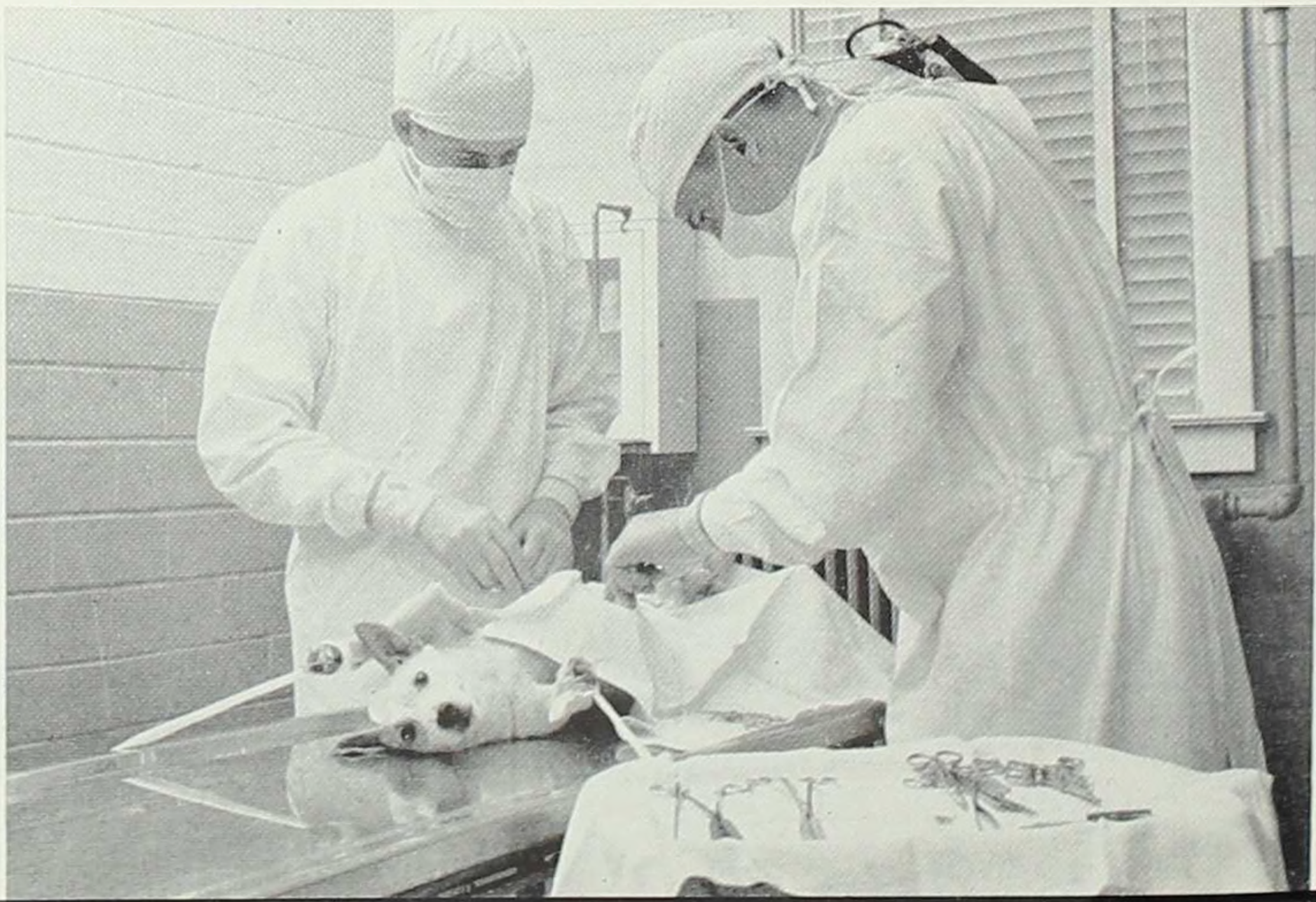
The Veterinary Diagnostic Laboratory was completed in 1956.

I. A. MERCHANT
Dean, Vet. Med.
1952-

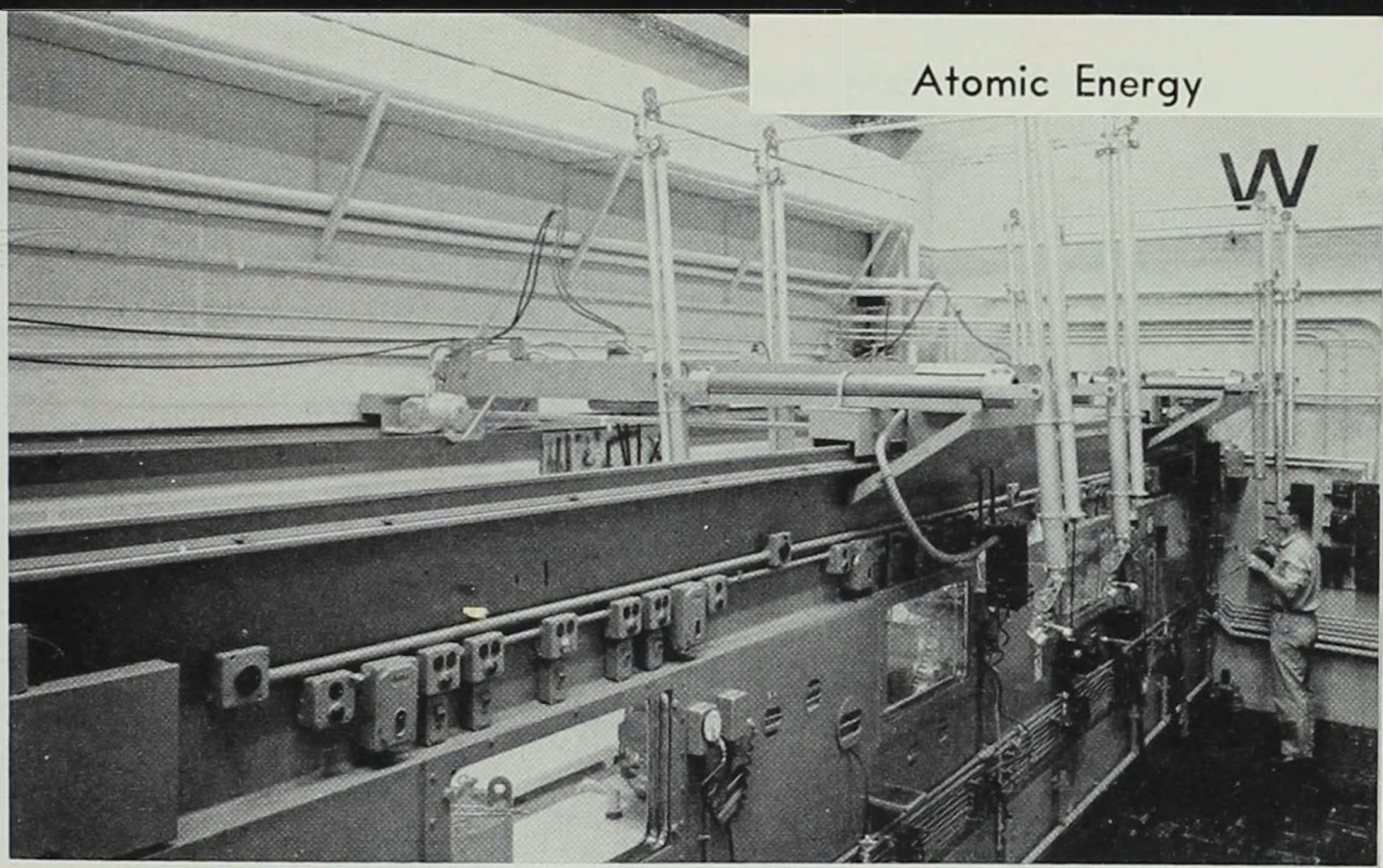
H. D. BERGMAN
Dean, Vet. Med.
1943-52

C. H. STANGE
Dean, Vet. Med.
1909-36

In the small animal clinic, veterinarians are preparing to help a pet dog.



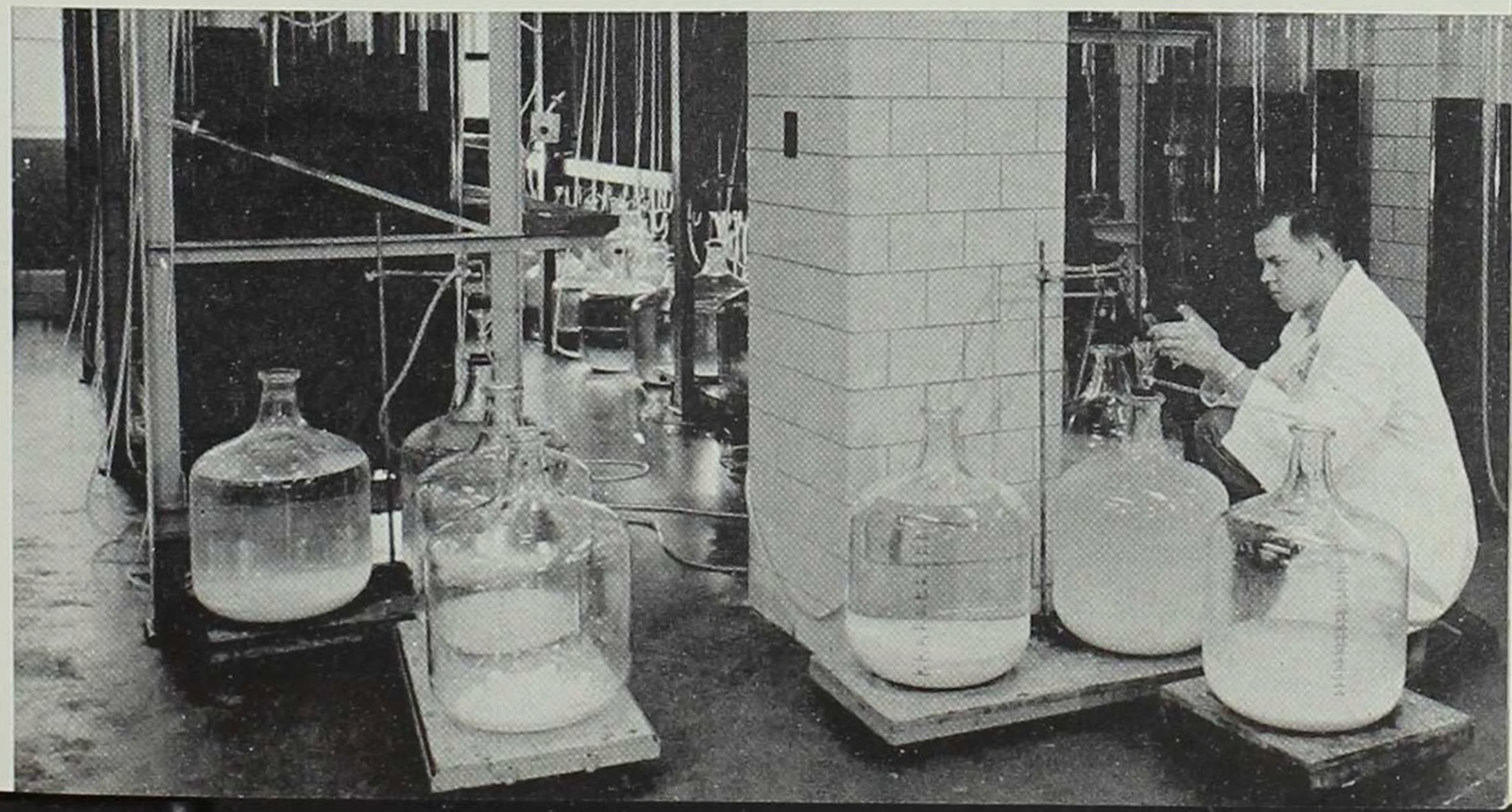
Atomic Energy



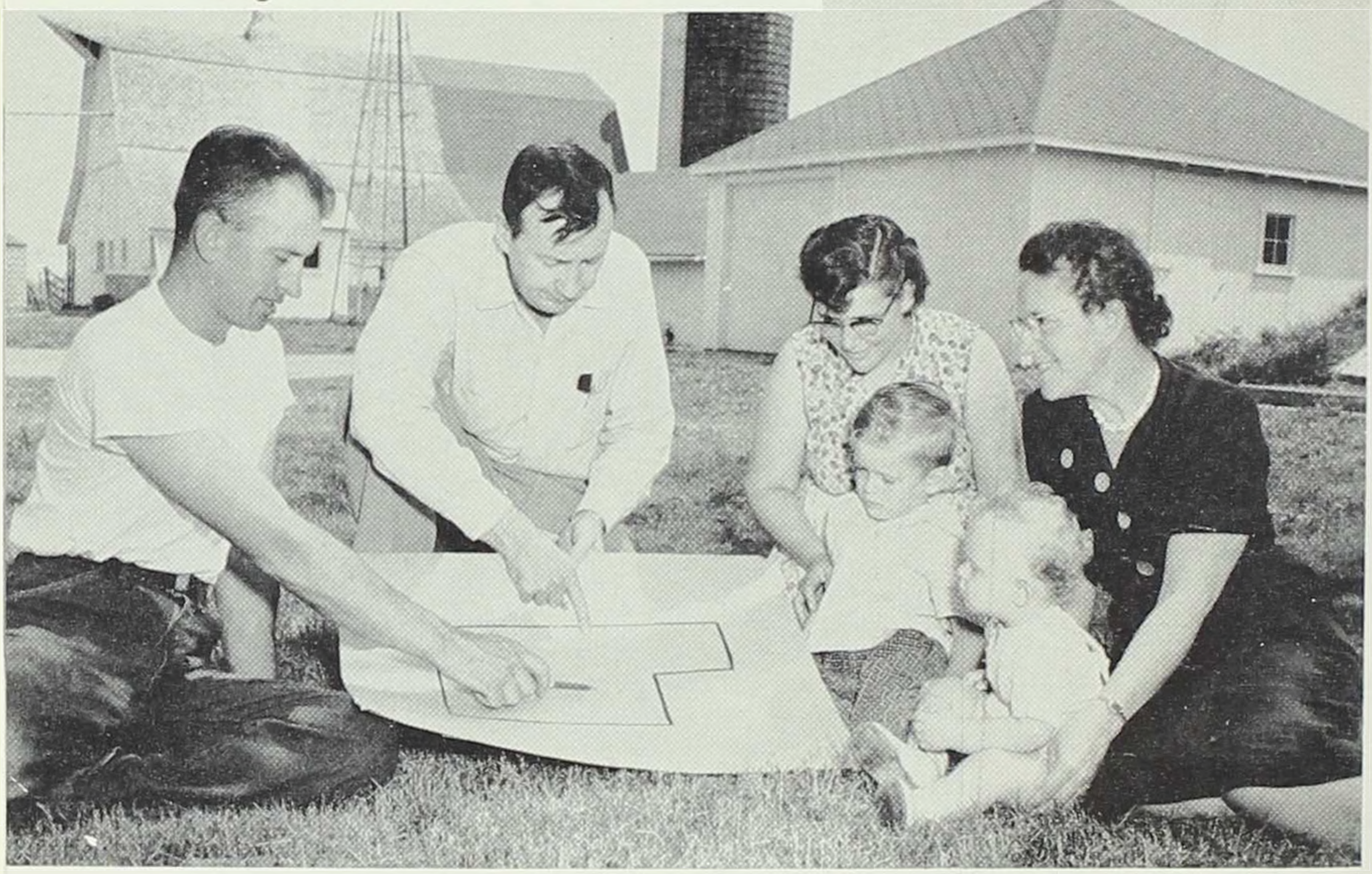
Facilities for handling radio-active materials. The lead glass windows which are eight inches thick have the same shielding qualities as steel.

The Research Building, completed in 1951, provides laboratories for important research.

Pilot plant for separation of rare earths in the Research Building. Bottles contain rare earth solutions in various stages of purification.



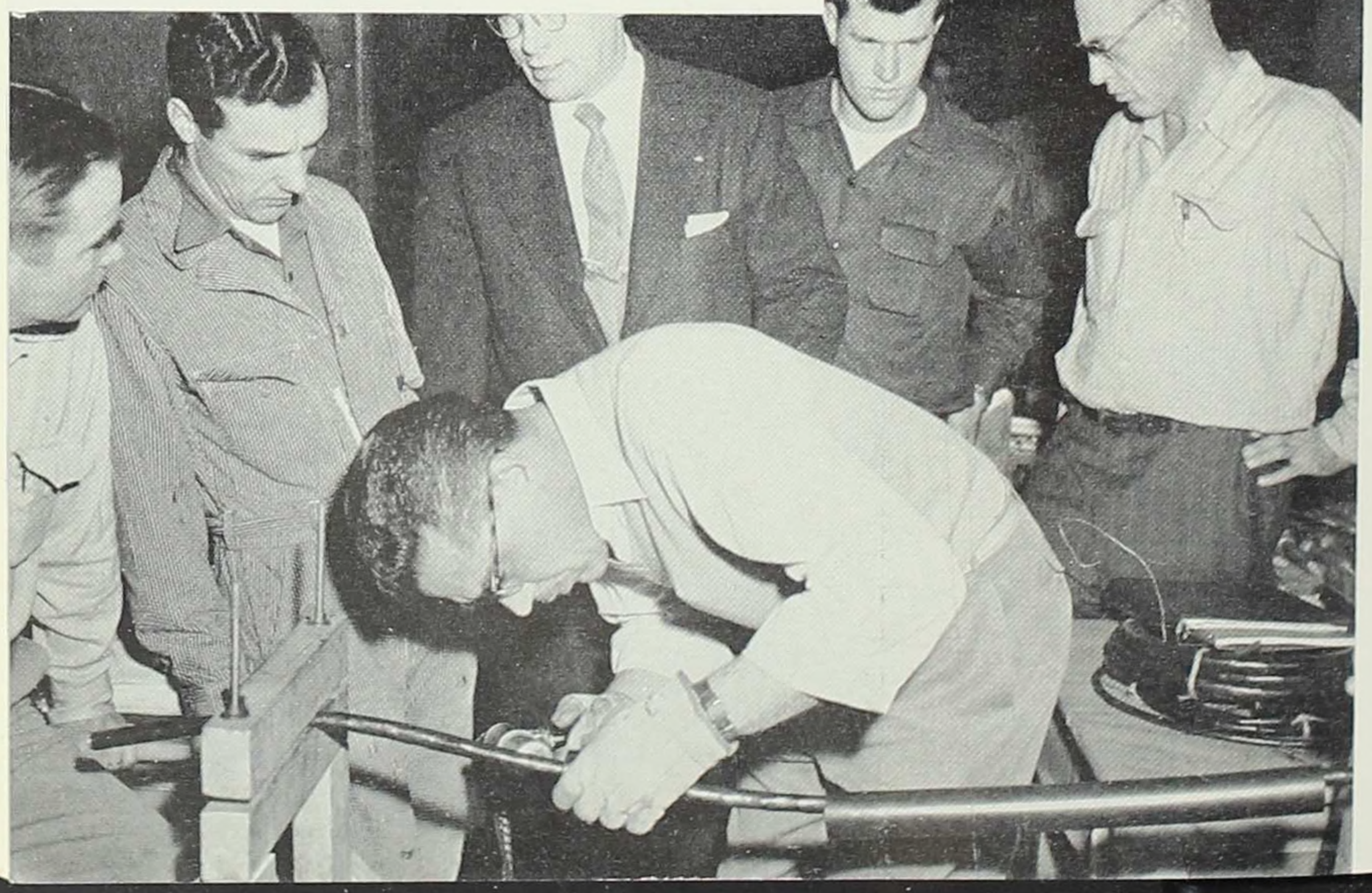
Agricultural Extension



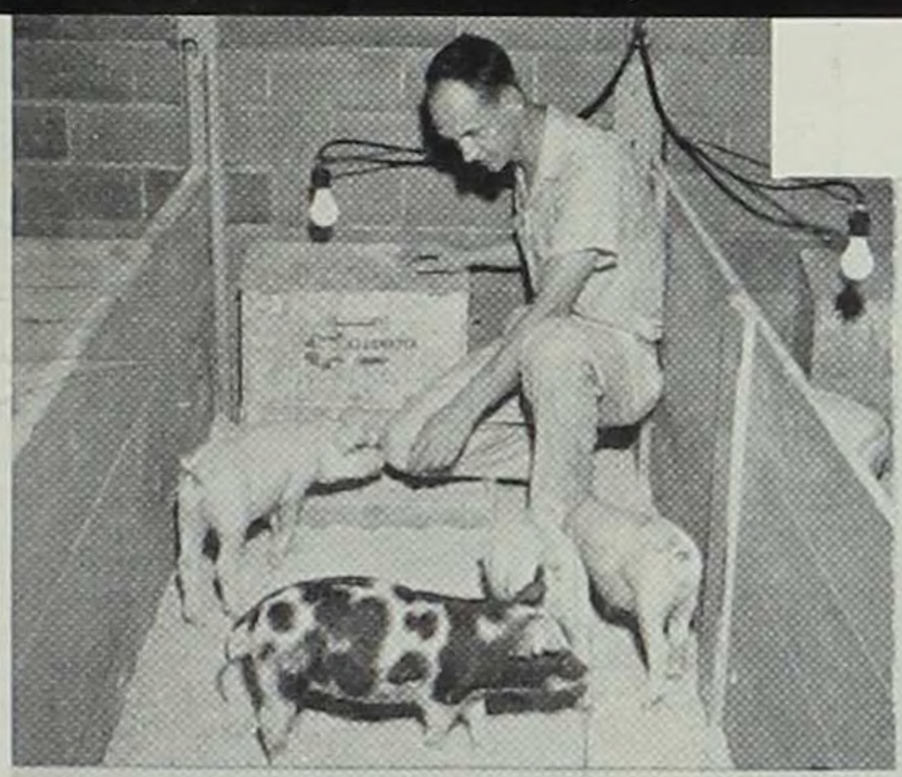
A county extension director helps a farm family with future planning.

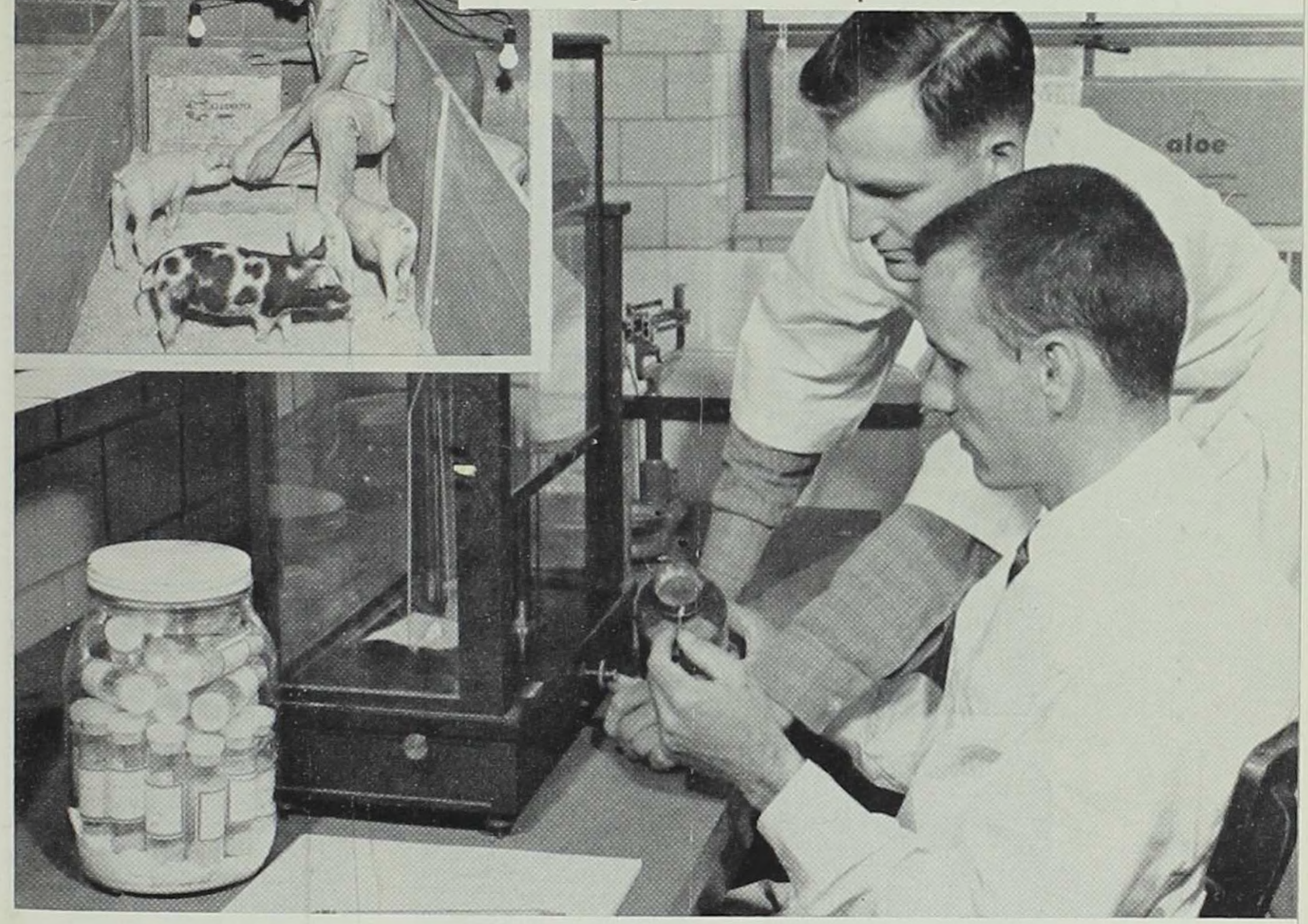
A telephone plant school is one of the many schools sponsored by Engineering Extension.

Engineering Extension



Agricultural Experiment Station

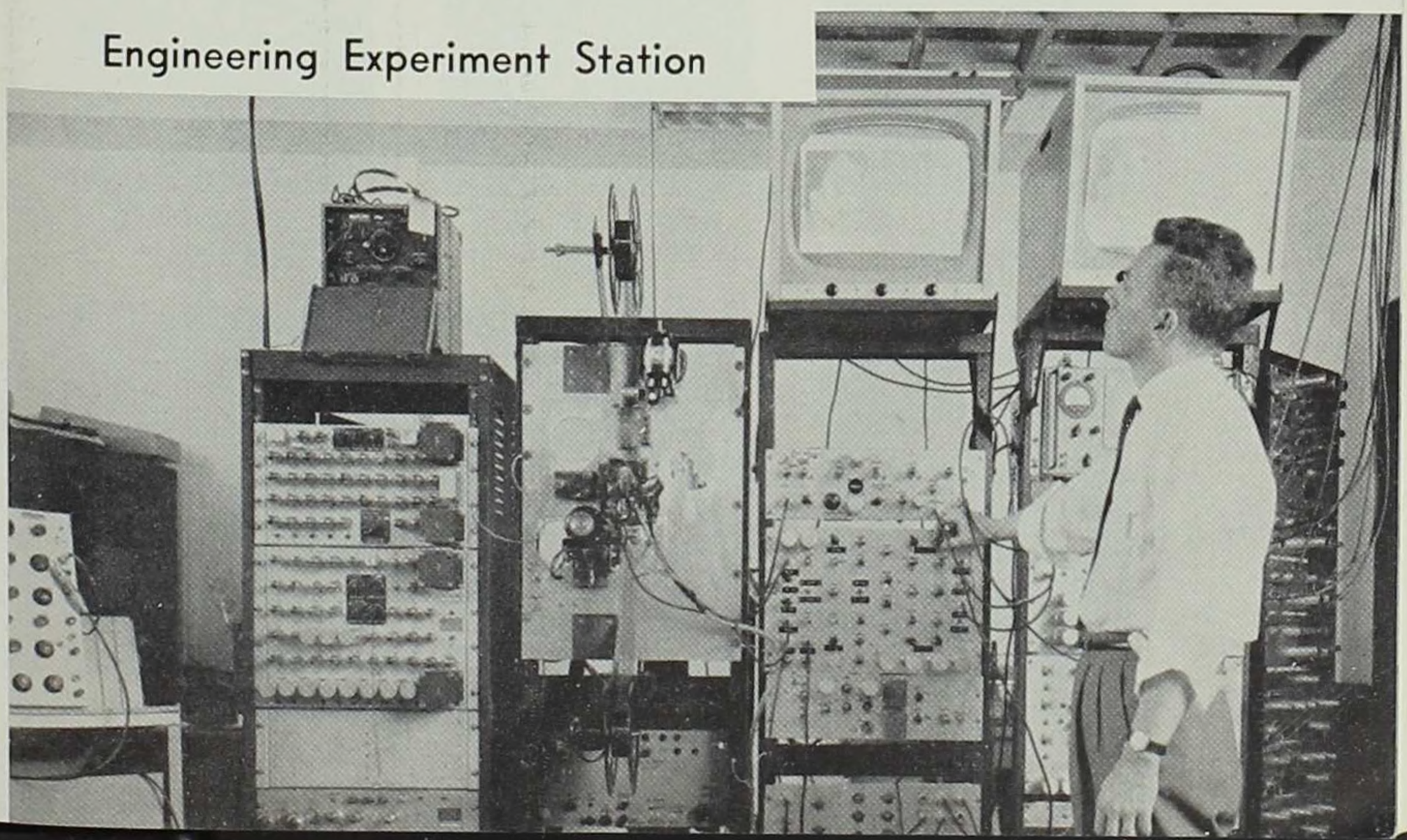




Weighing enzymes to supplement baby pig rations in swine nutrition research.

ISC color television system for broadcasting in color from black and white film.

Engineering Experiment Station

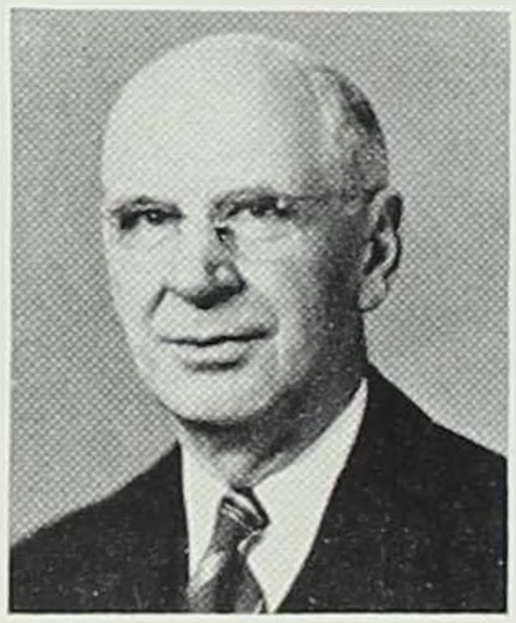


Prominent Deans & Professors

C. H. Brown
Librarian, 1922-46

O. H. Cessna
Chaplain, 1900-32

C. F. Curtiss
Dean, Agriculture
1902-32



J. B. Davidson
Prof. Agric. Engr.
1905-56

M. D. Helser
Dean, Junior College
1933-55

Jay Lush
Prof. Animal
Husbandry, 1930-

Catherine MacKay
Dean, Home Economics
1913-21

P. Mabel Nelson
Dean, Home Economics
1944-52

L. H. Pammel
Prof. Botany
1889-1931

Maria Roberts
Prof. Math.
1891-1942

E. W. Stanton
Prof. Math.
1872-1920

O. R. Sweeney
Prof. Chem. Engr.
1920-52

Prominent Alumni

H. J. Brunnier
'04, Past Pres. Int. Rotary

Geo. W. Carver
'94, Scientist

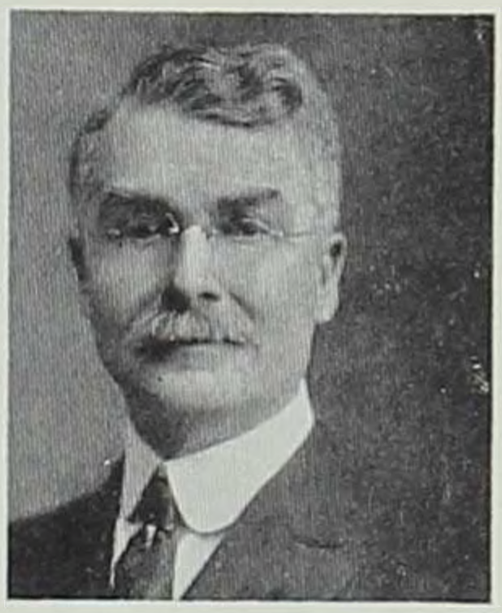
Carrie C. Catt
'80, Woman Suffragist

B. B. Hickenlooper
'21, U. S. Sen., former Gov.

Allan B. Kline
'38, Past Pres. Amer. Farm Bureau

T. H. MacDonald
'04, Chief, U. S. Bur. Pub. Roads

Elwood Mead
'83, Reclamation Engineer



Herbert Osborn
'79, Zoologist

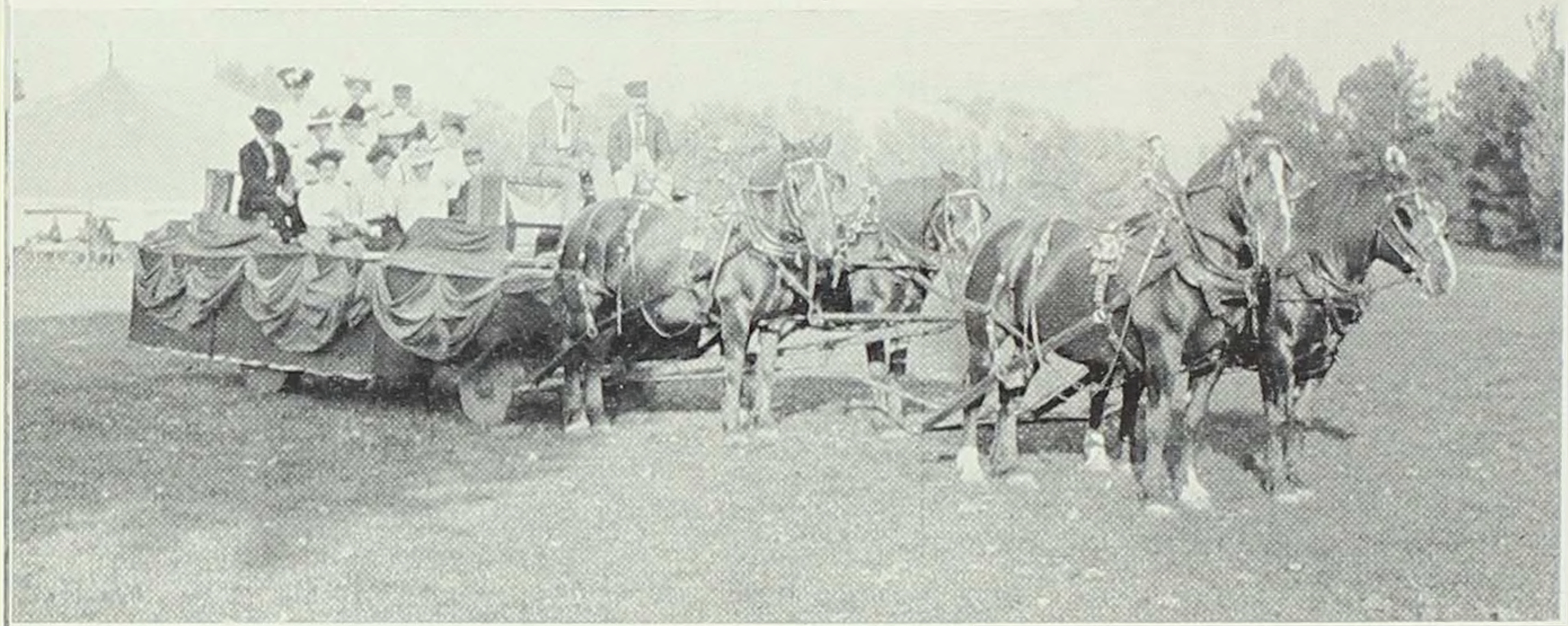
Earl O. Shreve
'04, Pres. U. S. Chamber of Commerce

Henry A. Wallace
'10, Vice Pres., Secy. of Agric.

Henry C. Wallace
'92, Secy. of Agric.

E. N. Wentworth
'07, Livestock Specialist, Historian

Campus Life of Yesterday

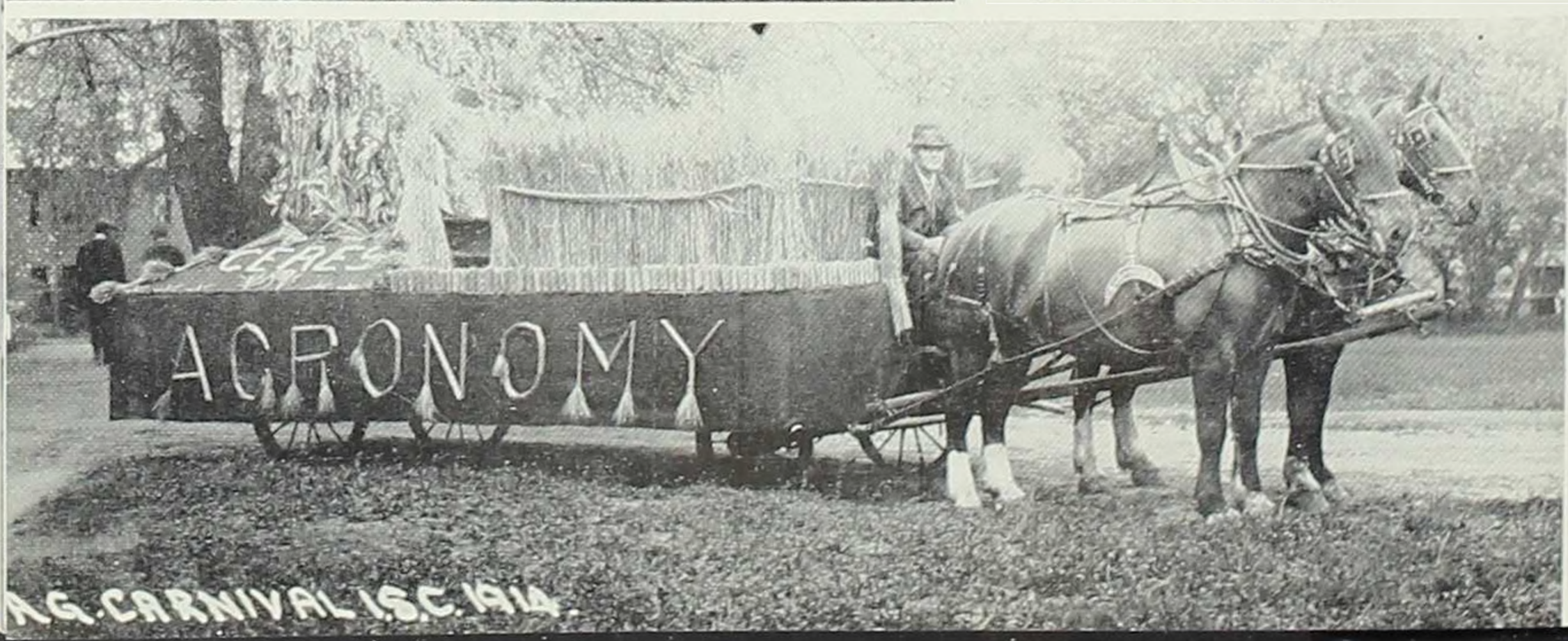


The big tent (background) made its appearance on campus on Excursion Day as well as graduation day in the early 1900's. Open houses, a planned program and picnic lunches were the order of the day. Coeds are shown taking a ride in a wagon all dressed up for the occasion.

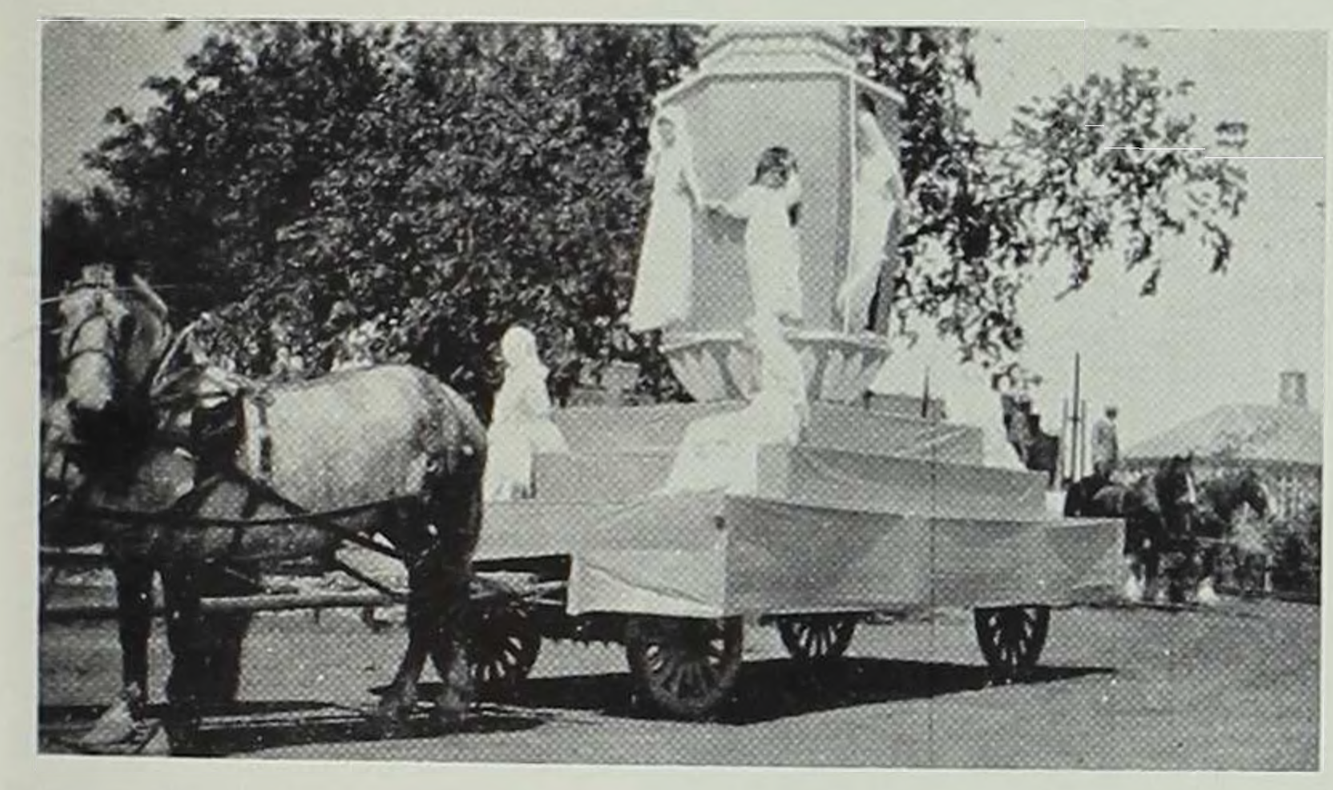
In 1909 coeds wound the maypole at their May Day celebration honoring senior women.

The Engineers honored their patron saint with top hats, clay pipes and the "wearing of the green."

This is a typical float in the Ag Carnival parade in 1914. Other attractions of the Carnival were the midway, saddle show, races, and minstrel show.

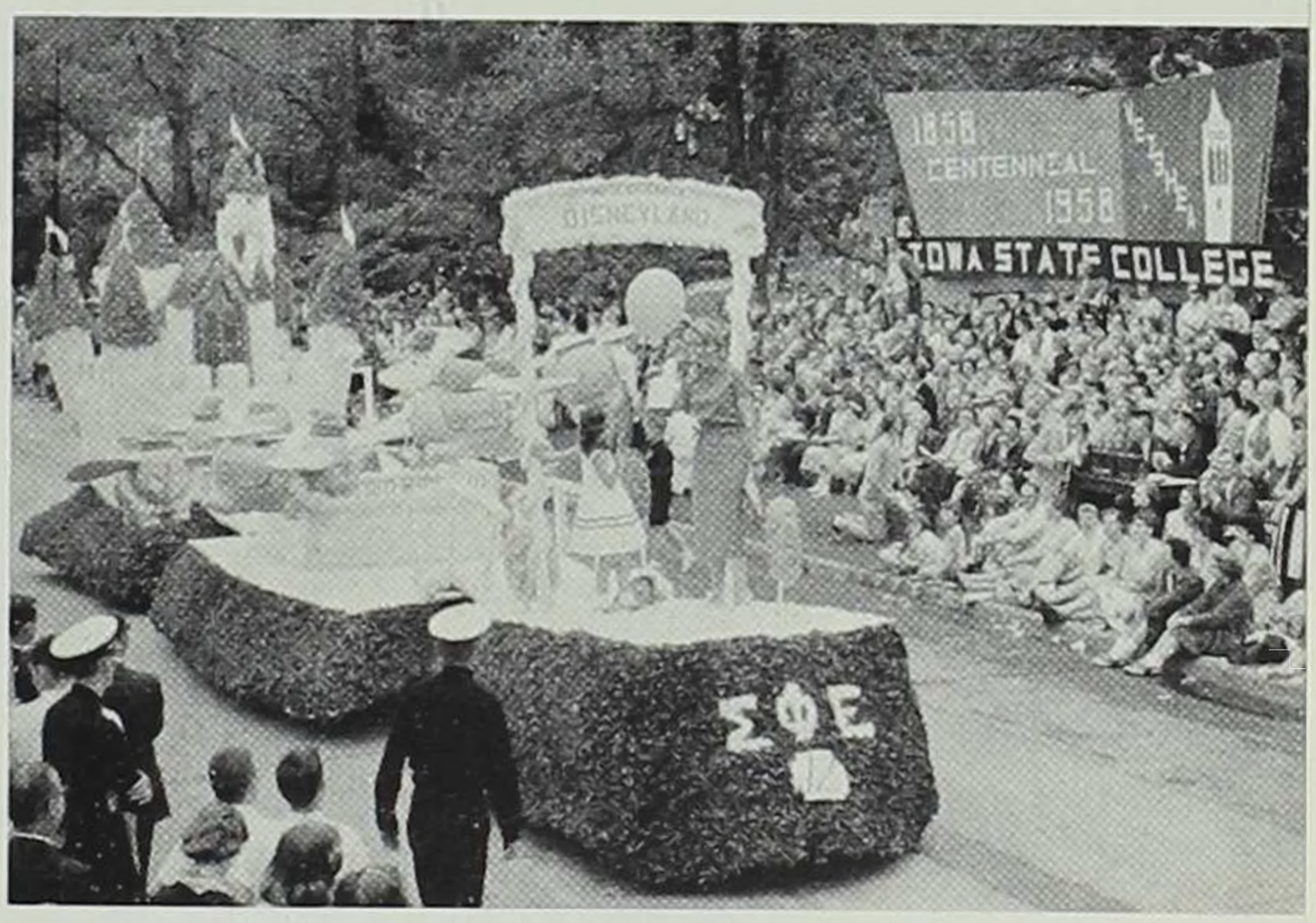


Veishea

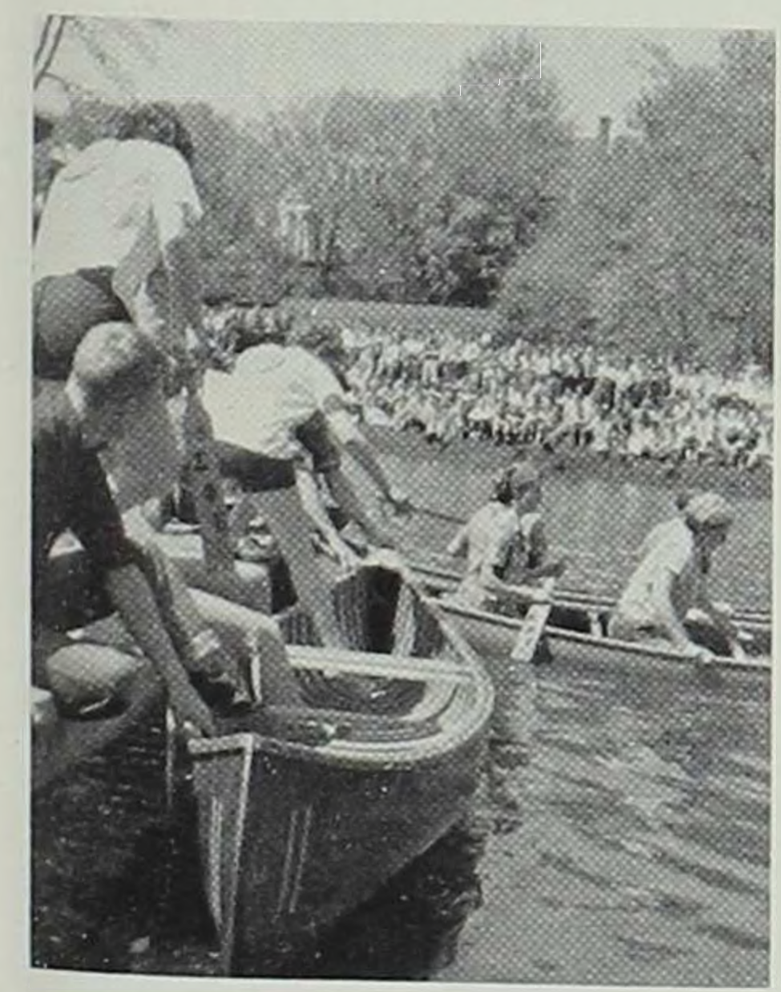


This replica of a Wedgewood vase was a winner for the Ceramic Engineers in the Veishea parade of 1926.

Sweepstakes winner in the 1958 parade was created by Sigma Phi Epsilon fraternity.

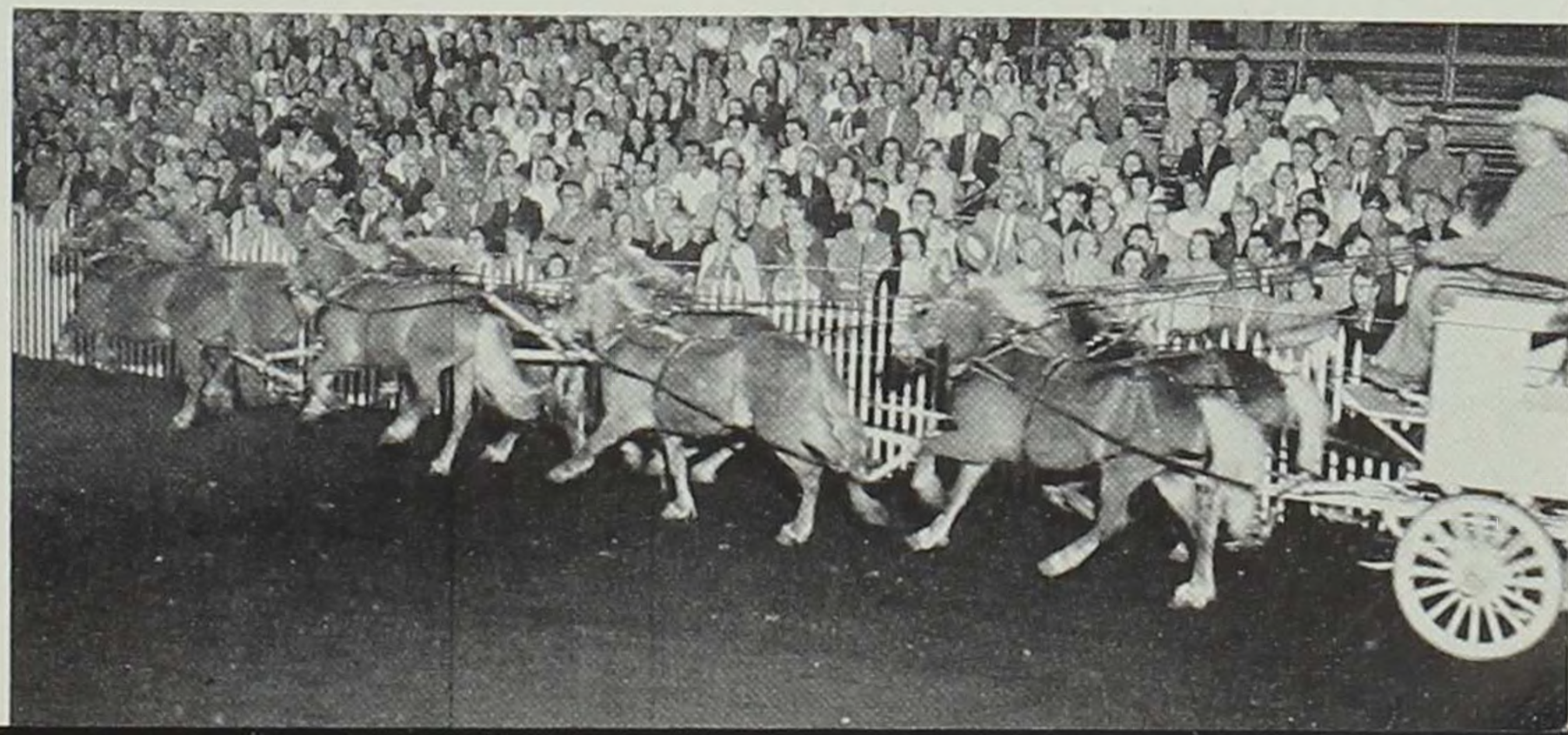


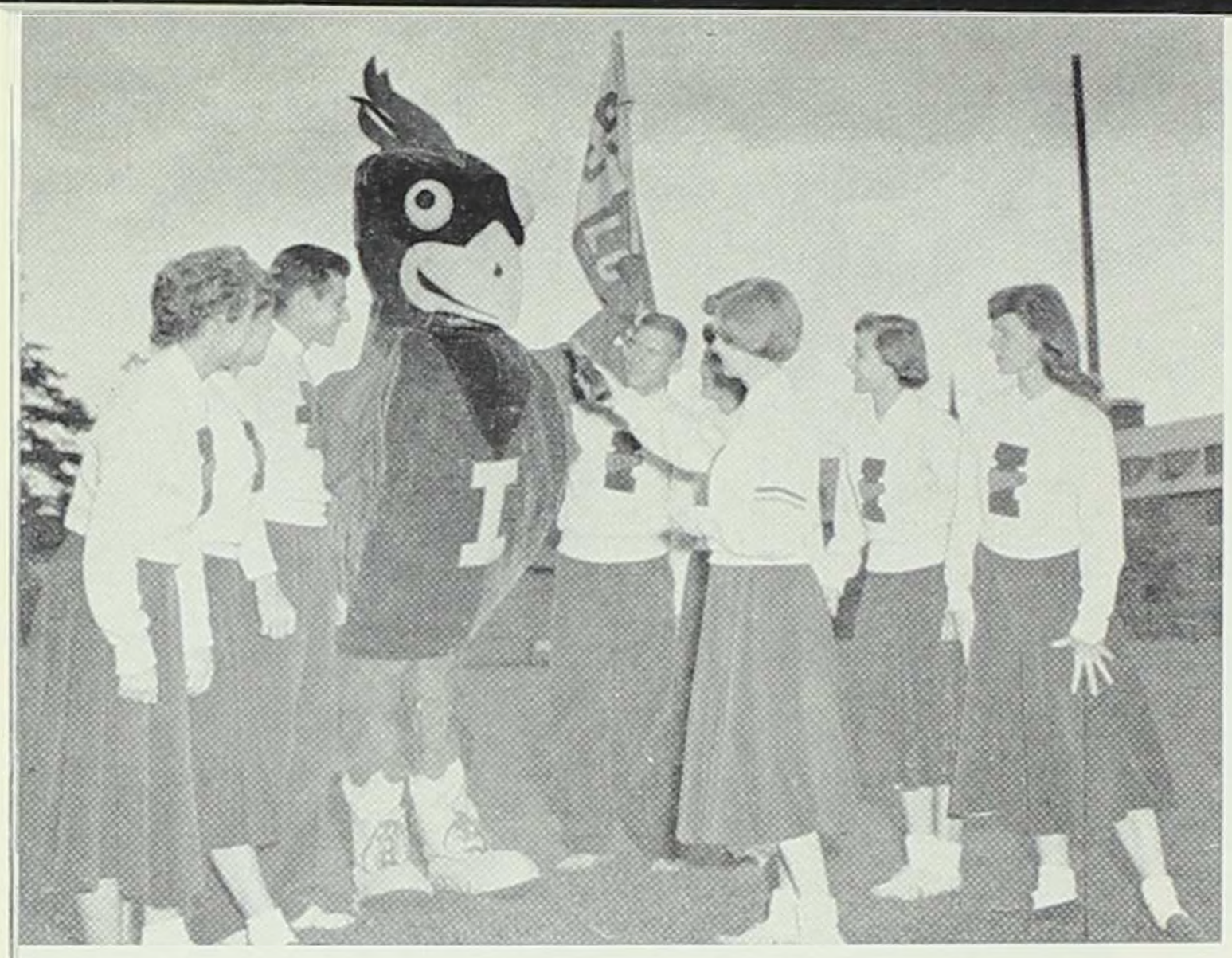
Veishea canoe races are about to get under way.



A student demonstrates equipment at a chemistry open house.

The horse show is a popular event at Veishea.

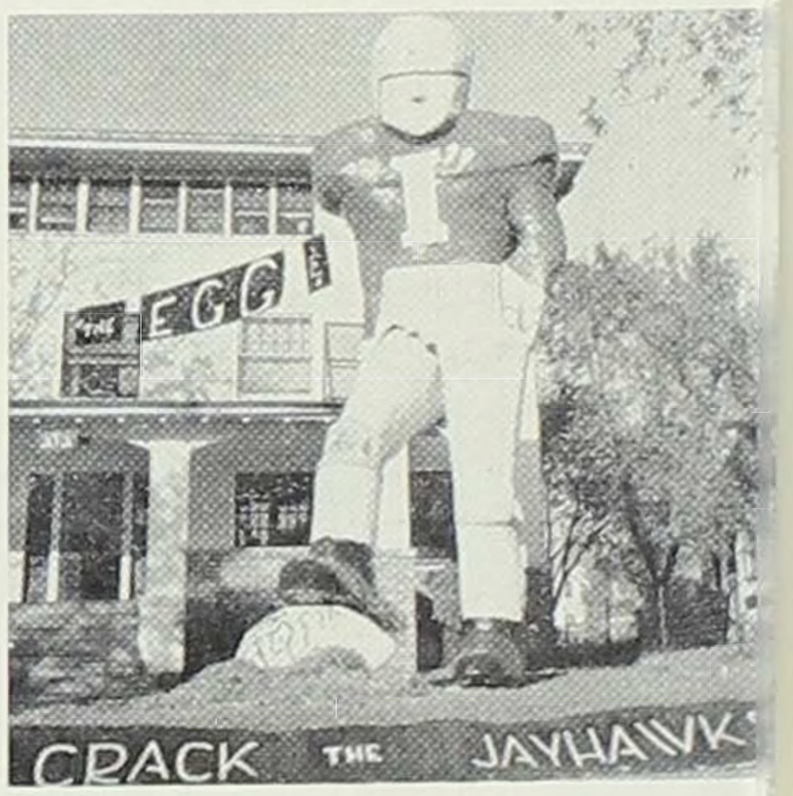




Campus Life

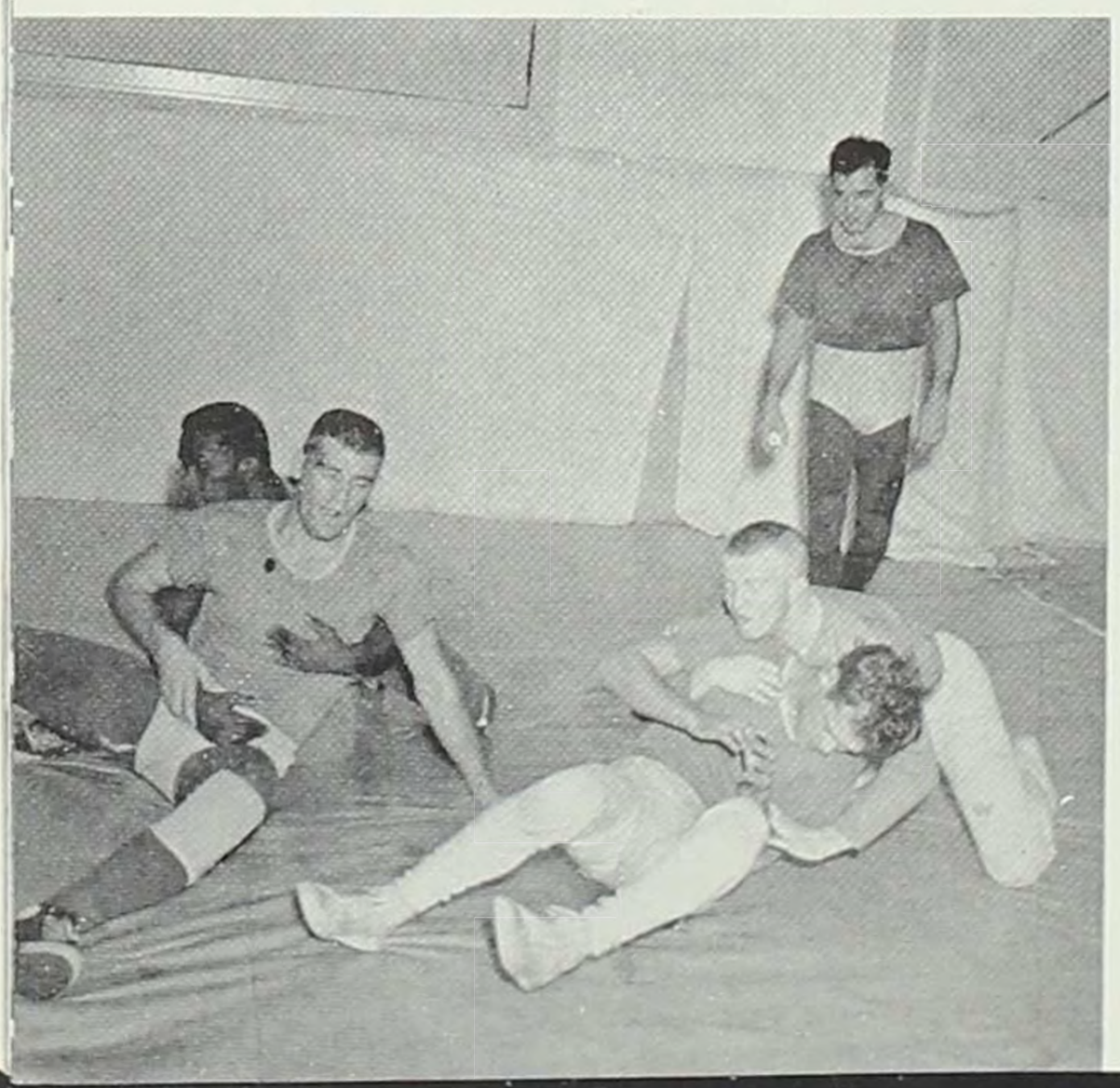
Cy, the campus mascot, and the cheerleaders help create enthusiasm at Homecoming as well as at all home games.

The Scrapheap Scramble and fraternity house decorations add color to the Homecoming celebration.



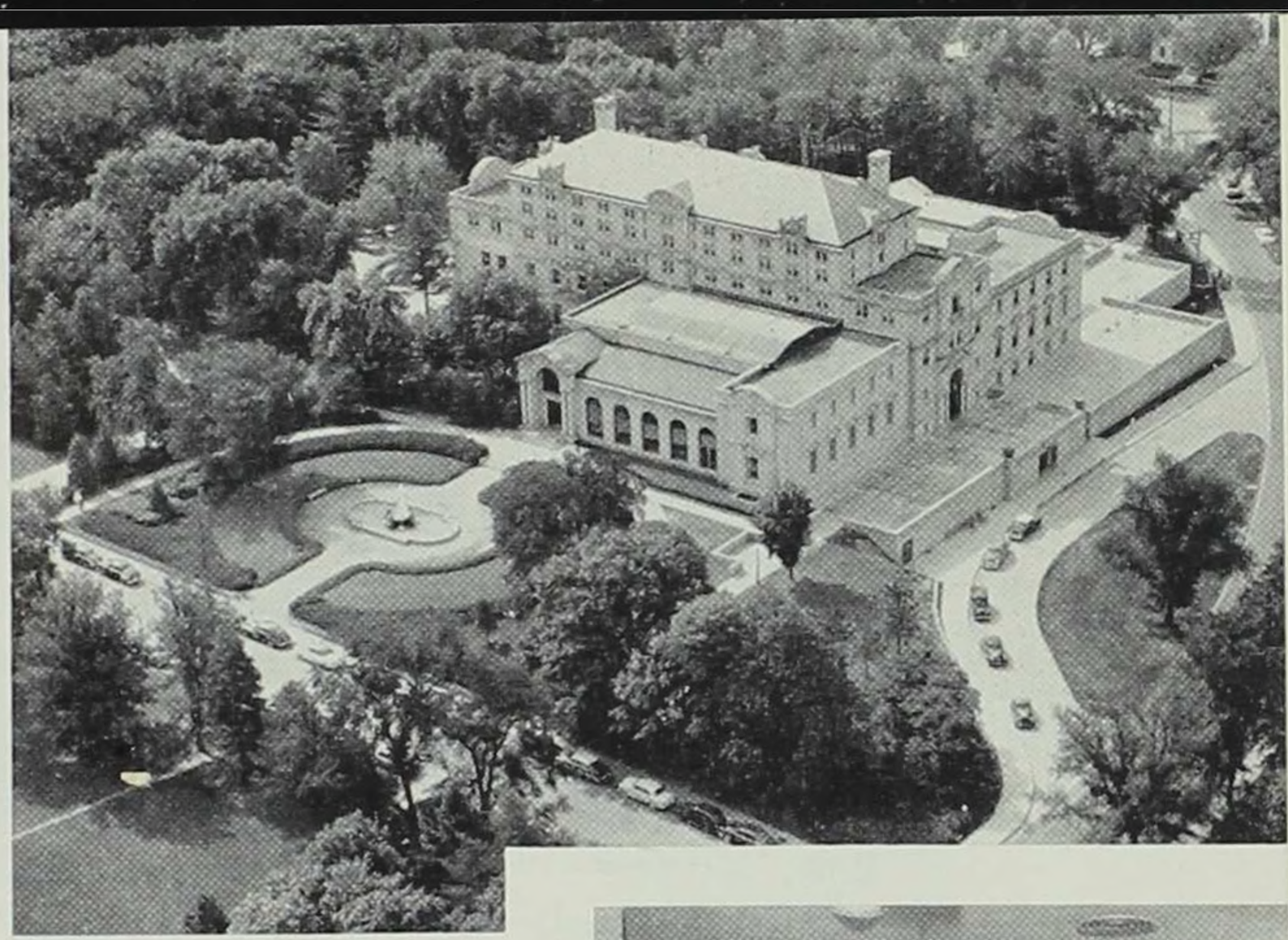
An intramural softball game.

A wrestling workout.



Life

Today . . .



The Memorial Union is the hub of the campus — inside, students relax in the Browsing Library.

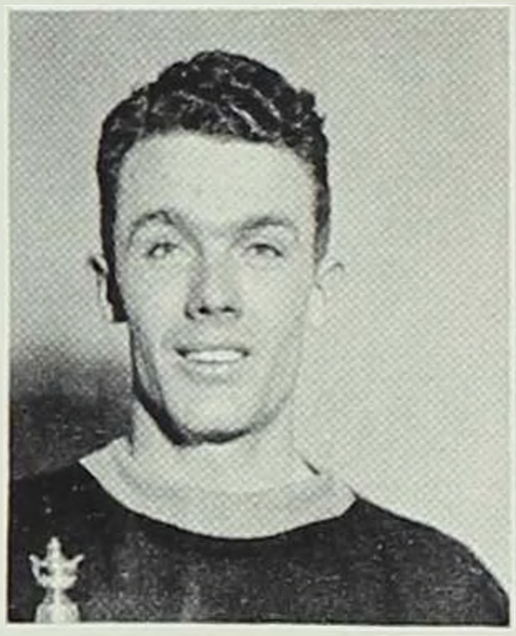
Barchje is a production which features modern dance.

Fraternity and sorority exchanges are part of college life.

These College Players are enjoying their production of Othello.

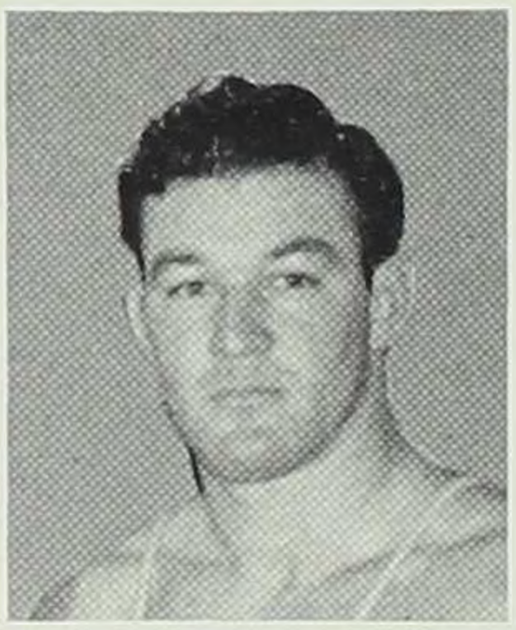
Stars of the Past

L. A. Wallace
"Polly," Football
All-American, 1920

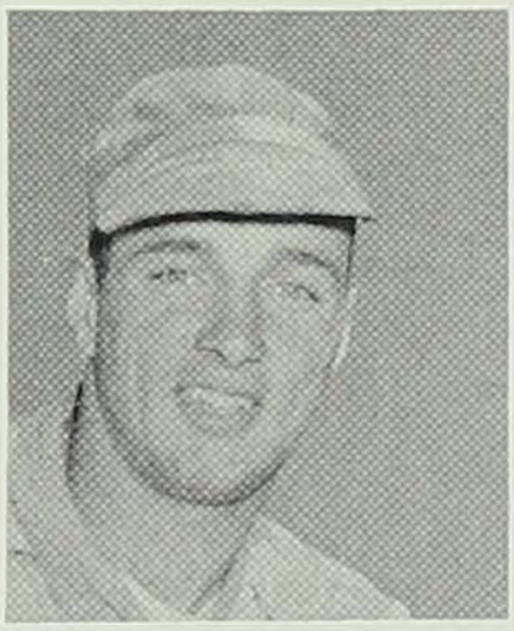


Ray Conger
Track, All-American,
1928

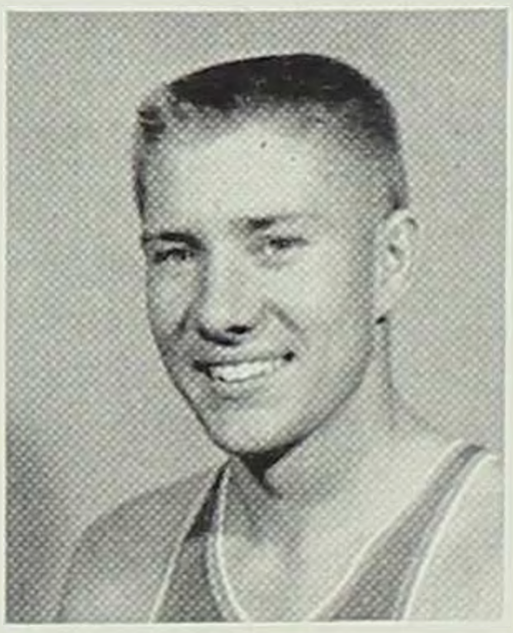
Ed Bock
Football All-American,
1938



Glen Brand
Olympic Wrestling
Champion, 1948



James Doran
Football All-American,
1950



Gary Thompson
Basketball All-
American, 1957

1957 Baseball Big Seven Champions and 3rd in National Collegiate baseball world series.

Holden later joined the College staff in agronomy. His knack for holding the attention of farmers, coupled with his evangelistic zeal and untiring devotion to agricultural education, gave him a prominent place in early extension work.

The two-week short courses around 1900 brought farmers to Ames from the far corners of the state. Two from Montgomery County, Uncle Henry Ebert and a man named Milner, told about one young neighbor who had been doing just about the poorest job of farming in the whole community. Milner paid the young farmer's way to Ames on condition that the money be returned from the next harvest if the courses were worth while. The young fellow promptly produced an excellent corn crop. When a surprised neighbor asked Milner how this happened, Milner credited the College short course. "If a short course in Ames did our neighbor that much good," the man replied, "why don't we have one down here for the benefit of this community?"

Ebert and Milner promptly approached Storms and Curtiss, each of whom turned him down. Without telling of their failures, they then went to Holden, who was delighted and predicted the idea would spread all over the state. Holden warned that the College had no money for such ventures, and local people would have to provide a large room for corn judging, a warmed room for night meetings, a room with raised seats for stock

judging, and an exhibit room. He ended by saying he wondered if they had enough gumption around Red Oak to do all this.

Apparently they did, for when the short course opened three hundred people had paid $2.50 each for a ticket. At the end of the show the local sponsors sold the exhibit corn to raise the rest of the money. The idea quickly spread all over the state. A large short course usually required about $1,000 in addition to plenty of volunteer help from both town and country.

Another "first" for Holden was at the Sioux County Farmers' Institute at Hull in 1903. B. F. Hawkins, the program chairman, referred to Holden the question of whether crop experiments at the College were equally valid in Sioux County. Holden replied that demonstrations close to the people would be of great value, especially with someone in the county to direct them, consult with farmers on their problems, and also work with farm boys and girls. He promised educational and technical help from the College.

Acting upon the suggestion, the Institute requested the Sioux County Board of Supervisors to provide land, labor, storage, and a cash fund. The board met these requests and in addition appointed a committee to work with farmers in conducting the demonstration farm. Here, for the first time, was educational work begun at the request of a group of farmers, with support from the

county government, and with the backing of state and federal governments through the College. This is the fundamental organization under which county cooperative extension work is now conducted throughout the United States.

Holden evolved another effective teaching plan at the Sioux County Farm. In those days farmers generally picked their seed corn from ordinary corn cribs. Holden took samples from the planter boxes of about seventy farmers and secured twenty additional samples from commercial sources. Each sample was planted in several places in the field to reduce errors due to differences in soil. The plots were numbered so that each farmer could find the one grown from his seed. Careful records were kept of growth and yield, and farmers were invited to view the plots which showed striking differences. When high-yielding corn was discovered, more of the same corn would be procured from the grower and tried another year. In this way, the highest yielding varieties of corn were located, publicized, and distributed. Later, oat variety tests were made, alfalfa was tested, and demonstrations in the elimination of noxious weeds conducted.

With railroad cooperation, Holden started his famed "Seed Corn Gospel Trains" in 1904. The trains usually contained three cars, two devoted to equipment for demonstrations and lectures and the other providing a place to eat and sleep.

Schools in the small towns where the trains stopped were often dismissed, and the entire population assembled to hear the message.

A good speaker, Holden understood crowd psychology. While people laughed with him they took in what he had to say about corn. He worked day and night. In the evening, when the gospel train lay over, a public meeting was held, usually in the courthouse, school, or opera house. In his first annual report Holden told of 96 counties and 670 towns visited in 10,000 miles of travel. More than 30,000 bulletins were distributed and 1,085 talks given to 127,000 people.

The Iowa Extension Act was suggested by "Uncle Henry" Wallace on one of these trains returning from Mason City to Des Moines. "Uncle Henry" asked Holden: "Now, what is the future of it all? Does this end it, or is there something we can do in the future to make it more valuable?" Holden outlined his idea of a force of people from the College helping to stimulate the study of agriculture and suggested a state appropriation to finance it. Wallace asked Holden to draft a bill, and this bill, considerably trimmed down, finally became law on April 10, 1906.

The first director of the Extension Service was Perry G. Holden. On his early staff were R. K. Bliss, Murl McDonald, Paul C. Taff and Neale S. Knowles, all destined to play key roles in Iowa Extension. When Holden left to run for gover-

nor, Bliss, after serving as head of animal husbandry at the University of Nebraska, returned to become director from 1912 until 1946.

Each of these persons had something of Holden's zeal and fervor. They and fellow workers spread out from Ames every Sunday by rail to begin work in the field early Monday. Seldom returning before late Friday or Saturday, they spent busy week-ends on campus preparing for the same thing next week. Mary Rausch, first full-time home economist, in 11 months gave 90 lectures, 41 demonstrations, and conducted 17 judging contests. Besides a two-week short course at Ames, she offered others at Red Oak, Mount Pleasant, Lenox, Spencer, and Dows. She also wrote a pamphlet — "Healthy Homes." Another lecturer, Miss Knowles, arrived in Ames for her job at 2:00 a.m. in a blinding snowstorm. The next morning she was sent off for a demonstration in Coon Rapids without preparation. The audience, she reported, "most fortunately was made up of the kindest people with whom one can possibly meet."

After "Seed Corn Gospel Trains," special trains were used to promote all sorts of agricultural education — in potatoes, oats, pork, home economics, and other areas. Later the specialists were met at the depot by farmers. Using automobiles, they would fan out to give lectures and demonstrations, then return to the train and go on.

One night in Orient, Holden remained out so late that the train crew reached the end of its legal time for work and quit. The schedule was tight. When Holden returned, a railroad official offered to handle the throttle if one of the extension specialists would fire. Henry Eichling drew the task and scooped coal all of the way into the Creston yards, but the schedule was maintained!

C. E. Miller, superintendent of schools in Keokuk County in 1904, had the first countywide rural youth organizations in the nation — a club for boys and one for girls. Superintendent O. H. Benson of Wright County is credited with developing the 4-H emblem in 1909. Later he went on to organize 4-H work on a national scale. The 4-H work of Jessie Fields in Page County attracted nationwide attention.

By 1913 seven full-time county extension agents were at work, and the Iowa General Assembly passed a law whereby counties, under certain provisions, could appropriate up to $5,000 for such work. The following year Congress passed the Smith-Lever Act that required cooperation between the Land-Grant colleges and the United States Department of Agriculture. It also provided funds for their programs. The first home demonstration agent was employed in Black Hawk County in 1916.

World War I and its slogan of "Food Will Win the War" channeled extension activities to-

ward drastically increased food production, conservation of foodstuffs, and elimination of waste. Twenty-five additional home economists were used in 1917 in a program of food canning and preservation. More were added the next year. As a war emergency, all Iowa counties were brought into the county extension program by 1918.

Reduced funds cut personnel after World War I, but the movement continued to grow. It dealt not only with emergencies such as the drouth and depression and the new food demands of World War II, but contributed to the long-range well-being of nearly every Iowa farm family.

The Farm Bureau was the sponsoring organization of extension work in the counties through more than thirty years of cooperation with the College. A separation of Farm Bureau and Extension was accomplished smoothly and with the good will of both parties in 1950. Today an elected council handles county extension administration, but it is still a grass-roots proposition, with programs planned by local people and supported in part by them.

The success of the Extension Service in Agriculture and Home Economics brought demands for similar service in other areas. By 1913 the Iowa Manufacturers Association, supported by organized labor, asked the General Assembly to provide for "trade and engineering" by establish-

ing Engineering Extension at Iowa State College. The scope of Engineering Extension has been constantly widened. For example, about 5,000 Iowa firemen now receive direct instruction through extension service.

Because Engineering Extension does not enjoy federal and county funds, along with state appropriations, its program has been smaller. It is concentrated more in industrial groups, industrial plants, craftsmen, technicians, and engineers. With the growth of Iowa industry, however, services have been extended not only to private business, but to municipalities, counties, and the state government.

An experiment begun in Electrical Engineering in 1914 grew to be an important arm of the extension services and to be perhaps the outstanding single public service function of the College. Under Professor F. A. Fish the department had a highly efficient amateur radio station, 9YI, even prior to 1914. It evolved into a broadcasting station which went on the air November 21, 1921, with Harmon B. Deane as engineer of the project and Andy Woolfries, an engineering student, as his assistant. In 1922 the call letters WOI were assigned, and the station began featuring education, news, good music, and public service, in addition to extension information. An FM transmitter was added in 1949, and television in 1950.

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