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March 1961

KANSAS STATE UNIVERSITY  
**AG STUDENT**

3 Kansas

"Up the River" . . . page 10

# Ag Science Day

10:00 a.m.

# Home Ec Hospitality Day

10:00 a.m.

# Little American Royal

7:00 p.m.



Little American Royal Grand Entry

## Saturday, March 25

• Entertainment

• Exhibits

# KANSAS STATE UNIVERSITY AG STUDENT

Vol. XXXVII

March 1961

No. 4

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### EDITOR

Norman Werner

### ASSOCIATE EDITOR

Arnold Good

### ASSISTANT EDITOR

Claudette McInnis

### HOME EC EDITOR

Margaret Cooper

### PHOTOGRAPHER

Jerry Hiatt

### FACULTY ADVISER

Lowell Brandner

### BUSINESS MANAGER

Dave Schawe

### BUSINESS STAFF

Jerry Hedrick                      Steve Wright  
Kalen Ackley                      Barbara Trellogen

### CIRCULATION

Neil Dowlin                      Clinton McDiffett

### STAFF WRITERS

David Good                      Nancy Smith  
Terry Knowles                      Linda Hitchcock  
Donald Haberer                      Doris Imhof  
John Dicken

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## Editorial....

# Will Your Child Finish College?

I'M SURE you have heard someone say lately, "I can't afford to put my children on a farm. Yet in order for them to get a decent job today they've just about got to have a college degree, and I'm going to make sure my children have the opportunity to go to college." The question I want to raise is this: will these children have a sufficient elementary and secondary education to get them through college? In Kansas this depends on which one of the state's 2,788 school districts they happen to live in.

It is part of the American dream that all children should have equal educational opportunities. In Kansas, even by stretching our imagination, we cannot say that we offer equal educational opportunities to all boys and girls. So far as the child is concerned, it is the incident of where he lives that determines the quality of his or her education. This condition will remain as long as Kansas has numerous small school districts.

During 1958-59 there were 1,028 districts holding eight-month terms for 17,975 pupils. By losing a month each year, these children sacrifice the equivalent of a year of school time by the end of the eighth grade. This is an age when the push should be for more, not less schooling. There were 2,733 Kansas children last year who were the only pupils in their grades at school. Here competition between pupils was missing. Competition between fellow students stimulates learning, and children can learn much from each other.

Because of the low salaries offered, small schools do not attract the best qualified teachers. They teach with a minimum of resources and with little professional assistance. Under these conditions it is difficult for even the best of teachers to arouse interest in pupils.

Numerous districts create a high school problem too. Last year there were 9,383 pupils who were enrolled in high schools with 60 or fewer students enrolled. A high school of this size generally has a maximum of about 15 pupils in a grade. In these small schools all pupils must take essentially the same study programs regardless of abilities and interests.

Besides a limited offering, the small school usually is more expensive. The cost per student in small high schools runs between \$700 and \$1,000 as compared to

\$300 and \$400 in larger schools. Actually, Kansans are paying a premium for low-quality education.

When a school district performs the task of providing first-class educational opportunities for its children, it is doing its job well. But when a school district cannot or does not provide a quality program for its children, then it is time for a change. Many small districts merely offer a convenient tax advantage to their patrons rather than a means to further educational growth of children. When this is true, the school district has lost its moral right to exist.

Another factor that plagues our educational efforts is the dual-district system. Under this organization, some districts operate only elementary schools, other districts have only high schools, and a few operate both elementary and high school grades.

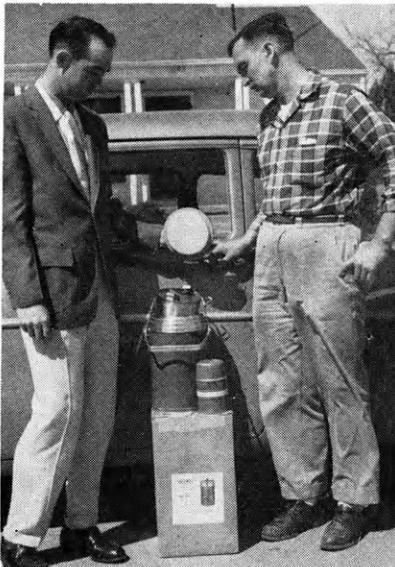
The dual-district organization makes it difficult for a coordinated elementary-secondary school program. In some areas where d-u-e-l would be a more correct spelling, coordination is impossible. The dual setup also aggravates finances. In many counties the dual district results in plenty of money for high schools, but financially starves the elementary schools.

There is no excuse for varying standards of educational opportunities here in Kansas. The education of the children of any district becomes the concern of every Kansas citizen. If we in Kansas do not become concerned about the educational program in all our schools, the federal government some day may have to assume complete control.

*Norman Werner*

# KABSU Improves Service Through Research

by Terry Knowles



KABSU distributes frozen semen to field technicians at regular intervals. In addition to dairy breeds, Angus and Hereford semen is available to you.

**A**RTIFICIAL insemination, mainly through efforts of the Kansas Artificial Breeding Service Unit (KABSU) at Kansas State University, is a practical and profitable breeding method for Kansas dairymen. It has steadily increased and improved its methods and equipment over the ten-year period that KABSU has been in existence.

Since the first service in March of 1950, over a half million services have been administered by trained technicians throughout the state. KABSU service is available to dairymen in 75 counties through 73 county associations. Although the basic purpose of KABSU is the improvement of Kansas dairy cattle, Angus and Hereford semen was made available in 1959. There were a total of 1,874 first services by Angus bulls and 1,580 cows were bred to Hereford bulls.

"There have been several recent developments that have greatly in-

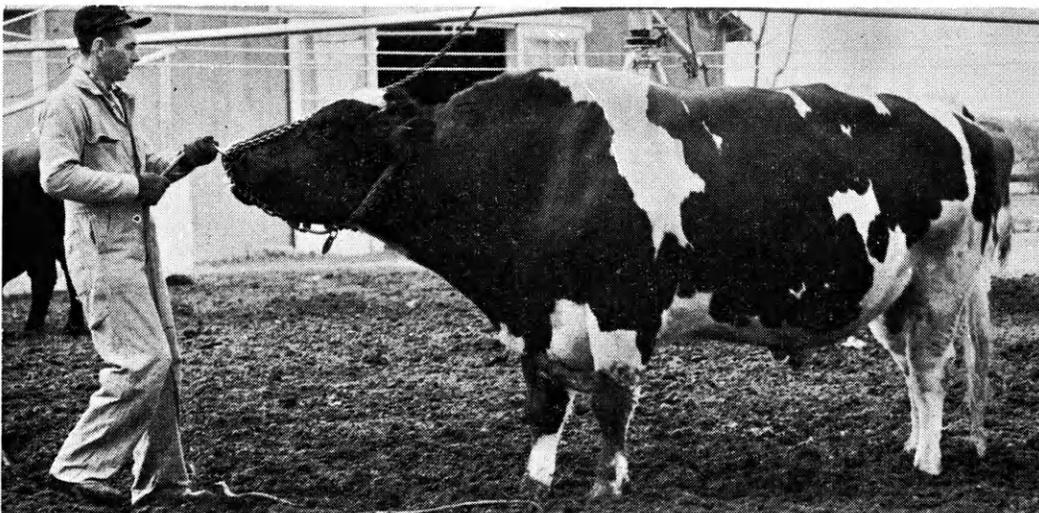
creased the efficiency of artificial insemination," Dr. Fayne Oberst, a fertility specialist in the Department of Surgery and Medicine at Kansas State, explained. "There are also a number of advantages in artificial breeding.

## First-Rate Bulls Improve Herds

"The prime advantage of artificial insemination is better herds. With the use of first-rate bulls, the dairyman can expect to improve his herd," Dr. Oberst said. "Other advantages are the elimination of most of the breeding diseases and the reduced costs, since there isn't the expense of keeping a bull."

The widespread and rapid increase in the use of artificial insemination has been the result of technical improvements at certain key points in the process. The invention and improvement of the artificial vagina provided methods of collecting a relatively uncontaminated sample of

(Continued on Page 18)



It is possible for the small dairyman to improve his herd economically through the use of first rate bulls available from KABSU. For service, call local technician.

# More Grain on Fewer Acres

## Hybrids Are Tailored to Do

by Arnold Good



Grain sorghum reached top production in Kansas last year, as yields were the highest in the state's history. Shown is a field of hybrid grain sorghum grown under sparse moisture conditions, that came close to the century mark. This is one of the advantages of hybrid sorghums over standards. Hybrids are tailored to fit the conditions affecting production.

**G**RAIN SORGHUMS aren't new in Kansas. In fact they have been around a long time, but last year was the top grain sorghum production year in Kansas, and hybrids helped make this possible. Average yields per acre as well as total production were highest in the state's history.

What made this a banner year? For one thing conditions were very good. Rainfall was adequate and widespread over much of the state.

Other things that helped make this a banner year were the new hybrid

varieties of grain sorghums—or milo, as we will call them here. Many commercial companies have been working on the development of hybrids suited to certain climatic conditions for some time now.

Many of these were tested in the 1960 Kansas Grain Sorghum Performance Tests, carried on under the direction of Ted L. Walter of the Agronomy department at K-State.

### Hybrids Produce Good Yields

Ten test plots were planted in various parts of the state, but due to

Select a hybrid suited for your area and get more bushels per acre.

various reasons only eight of them were harvested. In those harvested the hybrid average was well above the average for the standard variety.

If you irrigate or if you have very good moisture conditions, then a good bet to produce a lot of grain per acre is an experimental hybrid titled 55HH1792. The HH stands for Hays Hybrid, and is not commercially available from the Hays origin. It is available through William Turrentine of Garden City, who has titled the variety T-700. It is identical to the Hays hybrid because Turrentine produced his commercial hybrid from the same parent plants that the Hays hybrid came from.

This hybrid seems to be adapted to areas where moisture is plentiful,

# the Job



Here is one of the old standbys, Westland, which under irrigation produced a yield of 105 bushels an acre. In the 1960 grain sorghum tests it was beaten on average yields by many of the newest hybrids. Top yields reached 170 bushels.

either naturally or irrigated, and where it has time to mature, since it has a relatively late maturity date. It has a semi-closed head.

In northeastern Kansas under natural moisture conditions the top hybrids were 55HH1792, P.A.G. 665S, DeKalb D-50A and P.A.G. 515S. All of these hybrids made better than 96 bushels to the acre. In that test, differences of less than 6.9 bushels per acre were not considered to be significant.

## Irrigation Makes a Difference

In north central Kansas the top varieties were Frontier 410-E, NK 310, Miller 79, and Frontier 411, with yields from 75 up to 83 bushels an acre.

In the irrigated north central Kansas test, the top hybrids were 55HH1792, KS701, Frontier 400-C, Lindsey 788, and KFU 444, with yields from 145 up to 153 bushels per acre. Moisture percentages ran high, from a top of 19.1 down to a low of 16.1. The plot received, along with irrigation, a total of 125 pounds of nitrogen and 100 pounds of  $P_2O_5$  per acre.

In Reno county in south central Kansas the top yields ranged from 73 up to 78 bushels an acre. There were three hybrids in this top-yielding group, NK 210, Miller 79, and Amak R-12. Harvesting moisture data was not kept, since all the grain was dried with low heat and air, down to 12 per cent.

Growth conditions were good until September, when drouth conditions resulted in premature ripening.

The Ford county tests showed 25 hybrids in the top-yielding category. The yield range for these hybrids was from 53 up to 64 bushels. The low-yielding variety on test was Westland, at 40 bushels per acre.

In Finney county in southwestern Kansas there were two tests, one irrigated and one non-irrigated. In the non-irrigated test there were 17 hybrids in the top-yielding group, with yields from 46 up to 62 bushels per acre.

In the Finney county irrigated test the top yields ranged from 151 up to 170 bushels per acre. There were seven hybrids in this group. They were 55HH1792, NK310, 56HH-5632, Lindsey 788, KS701, Frontier 400-F and P.A.G. 665S.

In Wichita county under irrigation the test showed ten hybrids in the top-yielding group, with yields ranging from 129 up to 142 bushels per acre.

## Hybrids Top Standard Varieties

The ability of the hybrids to outperform the standard varieties is shown by the fact that in the tests the margin ranged as high as 34 bushels in the average of the hybrids over the average of the standard varieties. The margin also ranged as low as 6 bushels. The only standard variety tested consistently was Westland. In the irrigated test in Finney

county the range between Westland and the top hybrid was 80 bushels.

What is evident is the fact that the hybrids are tailored to fit the situation. They are just another step in the pattern of producing more and more off fewer acres.

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# For Clothes You'll Be Proud to Wear

## Press as You

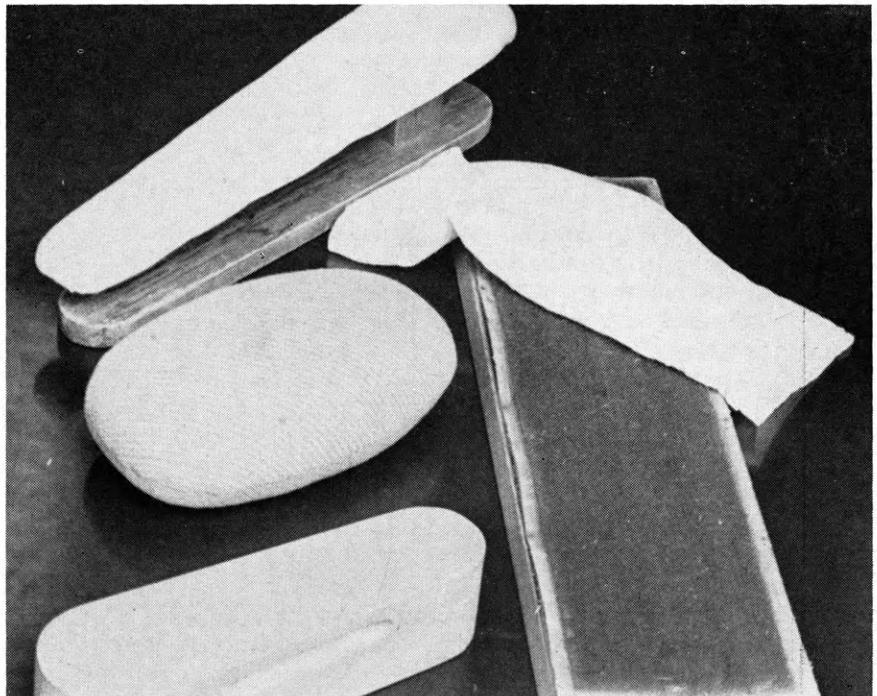
Proper pressing while sewing your garment will make it look tailor made.

by Margaret Cooper

**A** GARMENT well made is a garment well pressed. Even the finest seamstress can't turn out a quality-looking garment without first mastering the techniques of professional pressing. The hurried sewer does not see the need of taking time to press after every seam is sewn, and often pressing time takes longer than sewing time. Following a few pressing hints will make the difference between a garment you are proud to wear and one you permanently hang in the closet because it looks and fits "terribly."

### Press for a Smooth Appearance

A well-pressed garment is characterized by smooth inconspicuous



**These basic pressing tools will help you do a professional job of pressing your garments as you sew. Even a professional seamstress can't produce a nice looking article without use of these aids. They need not be elaborate and can be home made.**

seam lines and smoothly molded set-in sleeves. Dart ends are merged into the fabric to give a three-dimensional shape to conform to body curves. Fullness at the elbow or hip line is shaped to fit the contour of the body. Faced edges and hem lines have sharp, flat lines.

Pressing at the right time in the right way, and using proper equipment will result in these earmarks of professionally pressed garments.

Pressing the garment on the inside while it is being constructed and again on the outside when it is completed are two types of pressing. Construction pressing follows the rule of never pressing over a seam or dart with another seam until the first seam is completed. A completed seam is one that is permanently stitched and the bastings removed. Construction should be planned so that pressing is done in small areas.

# Sew

When the garment is completed the final pressing is done on the outside. The quality of work done in construction pressing, and the care given the garment during construction determine how much time needs to be spent on final pressing.

## Directional Pressing Is Important

The essential thing to remember when pressing is to press in the direction of the fabric grain. This will allow shaping of fabric, but will prevent stretching. All seams are pressed open except the seams at the back of

pressed or unpressed pleats, the waistline seams, yoke seams, and armhole seams. Darts and tucks are pressed toward centers, front and back. Elbow and bust darts are pressed down toward waistline. When pressing hems of skirts or dresses, move the iron upward from the bottom of the hem. You want to remember that pressing is not ironing. A back and forth movement with the iron is used in ironing. A lifting and lowering motion is pressing.

## Proper Tools Are Essential

Using proper equipment is important in shaping and molding the garment, which is the primary purpose of pressing. In addition to a steam iron and a well-padded ironing board, basic pressing tools include a tailor's ham, a pounding block, a sleeve board, and a piece of cheesecloth. Curves should be pressed over curves in order to protect their shapes. Back skirt darts, lapels, curves of side seams, waistline seams, bodice darts, and shoulder and sleeve seams are curves of a garment pressed on a tailor's ham.

Pounding blocks are used to obtain sharp, thin edges. The block is used on the outside of the garment in a slapping motion after the steam iron has been quickly removed from the fabric. Buttonholes, lapels, collars, facings, hems, pleats, and pockets are made less bulky after being pounded. The block should never be used on

zippers. To revive naps on wool fabric, use a stiff clothesbrush, briskly brushing the fabric while it is still steaming. This works as well as old-fashioned needle boards.

Sleeve boards are useful in pressing small units of a garment as well as getting to the "tight spots" of sleeves.

## Use a Pressing Cloth

A pressing cloth of muslin with a wool backing or of cheesecloth is a *must* when working with wool. Cheesecloth holds moisture when more than a steam iron is needed to mold the garment, such as on heavy wool fabrics.

Another helpful pressing tool is a point presser. Made of wood about one inch wide with one end pointed, the point presser is used to press open seams of stitched points on collars, revers, and cuffs.

These basic pieces of pressing equipment can be made at home with little trouble. The tailor's ham is oblong shaped, made of firmly woven cotton, and is filled with dried sawdust or wool clippings. The pounding block and point presser are made of smoothly sanded and correctly shaped wood.

## Pressing Differs with Fabrics

The kind of pressing you do, the amount of pressure you apply, and the amount of moisture you use are determined by the kind of fabric you are working with. To prevent damage to the fabric, experiment on a sample before beginning construction. To save time, keep the iron heated so you will be ready to press as you sew. When pressing darts, press the dart fold together before pressing the dart to the garment. This will give a sharper line and prevent the dart line from showing on the right side. Paper slipped between the garment and the seam or dart allowance will also help to prevent a seam imprint on the right side, as will pressing over a steam board or padded roll. Always arrange the garment in the position it is to be worn. Do not press curves inside out.

Just think—no more baggy, puckery seams and hems. The pieces of fabric will fit together easily and the finished garment will look expertly sewn. Why? Because you have professionally pressed as you sewed. You have learned the essential art of good sewing.



Shoulder and sleeve curves, side seam curves, and waistline curves should be pressed over a tailor's ham to protect the curve. This oblong shaped tailor's ham of firmly woven cotton filled with sawdust is little trouble to make and is a great help to the seamstress. When pressing curves, remember to use an up and down motion following the grain of the cloth. Do not use a back and forth motion as in regular ironing.

# Will Kansas Surpluses Go 'Up the



## Lower Transportation Costs May Move Surplus Grain Out of the

by Neil Dowlin

**M**OTORS rev-up and propellers bite into the muddy water to begin another shipment of grain on its way to the coast. But this isn't Chicago; it's Omaha, Kansas City, or any of the other 20 barge-loading points along the Missouri river. It's part of the marketing operation which moves grain to the growing livestock industry and to export outlets in the southern states. Besides getting the grain to the feed lots cheaper than before it is also getting rid of part of the surplus in the Midwest. It is hoped that this will raise prices for you and other grain farmers in the land-locked central states.

### Barges Are Filled Quickly

Loading wheat into a barge with a 900-ton capacity isn't a small job, but it's done several times a week at docks along the Missouri river. Loading these floating granaries at the rate of up to 20,000 bushels an hour makes a relatively short job of the operation. In other words, a 900-ton barge (30,000 bushels) of wheat, and slightly more of feed grains, can be filled in about one and a half hours. It takes time to move a barge in and out; therefore only two to three barges can be filled in a 10-hour day.

The core of a loading operation is the conveyor belt between the eleva-

tor and the river's edge. One terminal elevator at Kansas City has an endless rubber belt about 36 inches wide, about one-half inch thick, and more than 600 feet long when doubled. This belt is capable of moving 17,000 to 20,000 bushels an hour. After the grain leaves the elevator and reaches the river bank it is run into a barge and distributed with a telescoping spout which can be pivoted around to load the front and back of the barge without moving it.

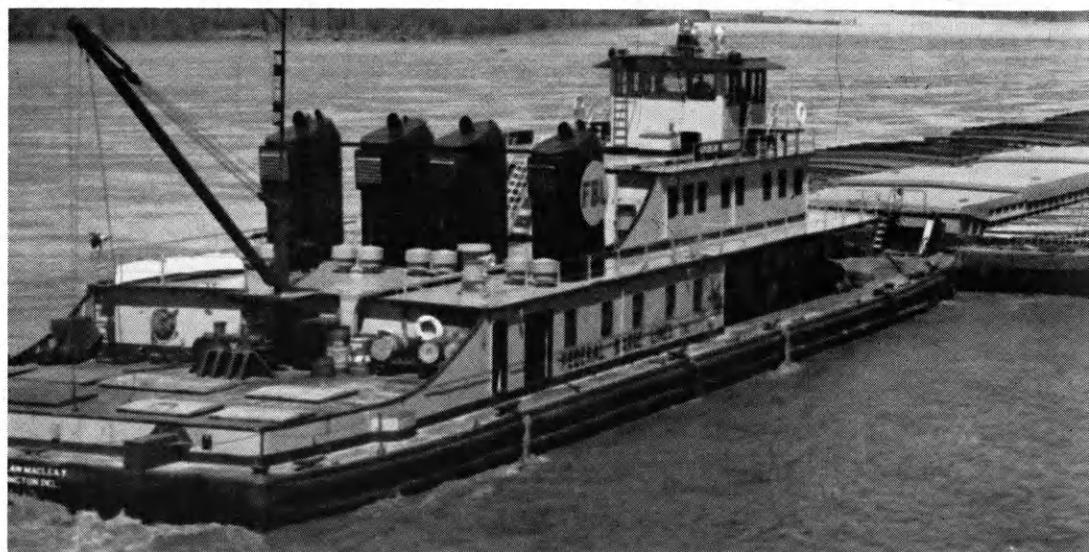
### Trip Takes 12 Days

When loaded, the barge is floated downstream on the end of a two-inch rope which unwinds from an electric-powered windlass. It is then tied to a piling until the tug picks it up. Under perfect conditions the barge we have loaded in Kansas City could be in New Orleans in about 12 days and make the round trip in about

25 days, but the average is about a 30-day round trip.

The capacity of a barge isn't rated by the volume it can carry, but rather by the depth to which it settles into the water. This in terms of tons is the load limit of the vessel. The draft or depth to which the barge settles can't be more than six feet because of the Missouri's shallow channel. The Mississippi river has a deeper channel, so it can carry heavier loads.

The future outlook of barging grain and grain products from Kansas City and other points on the Missouri depends on many factors including rail and truck rates, and channel improvements. At present the Kansas City markets have the alternatives of moving products up to three times faster by truck and rail or at several cents a bushel cheaper by water. If water transportation is used grain can be moved



Today 5 of 20 barge loading facilities along the Missouri river are located in Kansas City. Grain from Kansas City moves down the Missouri to the Mississippi, then either north or south to the growing livestock industry, or export outlets. This is a cheap way of moving grain out of the Midwest.

# e River'?

## Midwest

up the Mississippi to Chicago or downstream to New Orleans. It can also move up tributaries, as the Ohio, Tennessee, or Illinois rivers.

Terminal markets on the Missouri sell to other markets over the country, so it is difficult to determine where the product finally goes. A large part of wheat leaving Kansas City is thought to go to foreign countries, as well as being processed here in the U.S. Much of the feed grain goes to livestock and poultry in southern states. Using the waterways, Midwestern states can, in most cases, supply grain to these outlets just as cheaply as anyone else. This could cause more demand for the quality grain raised in these states.

### Grain Moves Down the Missouri

During last year's navigational season (April to November) more than 680 thousand tons of grain and



Grain flowing into a barge at the rate of 20,000 bushels an hour means getting rid of the surplus in the Midwest and getting the grain to the feed lots at more economical prices.

its products moved down the Missouri river. This compares with almost 500 thousand tons in 1959 and almost 300 thousand tons in 1958.

By 1967 a nine-foot navigation channel is to be available on the Missouri, which will greatly increase barge activity on the river. The deeper channel will enable barges to move as far upstream as Sioux City, where previously the channel was kept open only as far as Omaha.

### Rail Rates Are High

For various reasons railroad rates are generally higher than either truck or barge rates. Rail rates usually include extensive services along the way, such as stops for milling, processing, or storage. Therefore it is often cheaper to truck the grain from the country elevators directly to the barges for the final trip to market. The combined expenses of truck and barge movement from a western Kansas elevator to New Orleans are often about 4 cents less per bushel than for the same distance by rail.

### Water Transportation Is Cheaper

Water traffic is cheaper because more tonnage can be moved than with the same horsepower used on rail or pavement. Four thousand horsepower will haul 5,000 tons on rails or 400 tons on pavement. A newly built towboat to be in use soon boasts 9,000 horsepower and will push 40,000 tons in a single tow. The horsepower of this tug moves 4

times more tonnage by water than it could by rail. Forty thousand tons is equivalent to what could be hauled with eight 100-car freight trains, according to a transportation official.

### KC Has Barge Loading Facilities

Kansas City now has 5 of 20 barge loading facilities along the Missouri, and more are being built each year. Some firms own the barges and tugs used to move their grain down the river, but most lease the equipment from shipping companies. As is the case when you harvest grain here on the plains, shipping facilities are crowded during the busy seasons, so it is often hard to get barges for the trip down the Missouri. This is expected to change when the Corps of Engineers makes the deeper channel available. Heavier loads and expectations for a boom in water traffic will bring more barges onto the Missouri.

It's hard to tell what the future will bring but it surely looks as if the Missouri river will play a big part in the attempt to get the surplus grain of the Midwestern states where it will do the most good. Right now it seems the southern states will use a lot of these surpluses. And more grain might be fed in the central states and the meat sent to market on the waterways. But it will take some work to find a market for the rest of our abundance. We hope all this will mean more money in our pockets.



# How to Get Better Freezing

Keep five rules in mind for simple, safe food freezing.

by Linda Hitchcock

**P**UT YOUR home freezing unit to work. It's time it did more than freeze ice cubes and keep ice cream from melting.

Home freezing is one of the most satisfactory ways of preserving foods and storing those that are perishable. More and more persons are finding this out as the freezer has become an important appliance in many homes today, as well as being used in conjunction with locker-plant facilities.

Although freezing foods is relatively easy, carelessness or lack of know-how can result in poor products and an unhappy homemaker. If the following five points are kept in mind, freezing food can be the simplest and safest method of food preservation:

1) Careful selection—If quality products are to be taken from the

**Use paper wide enough to completely envelop the meat at least once and a half.**

**Place the meat in one corner of the paper, leaving enough to cover half the meat.**

**Fold one end in. Pull the paper as snug as possible to eliminate all the air you can.**

**Make the second fold so it forms a lock. This will hold the paper in the right place.**

freezer, only quality products should be put in.

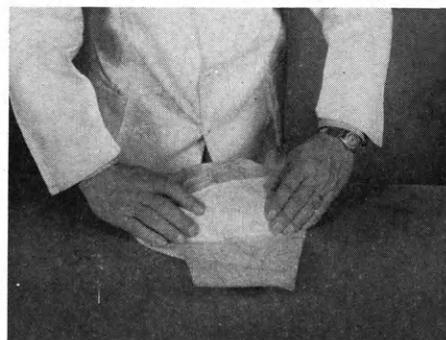
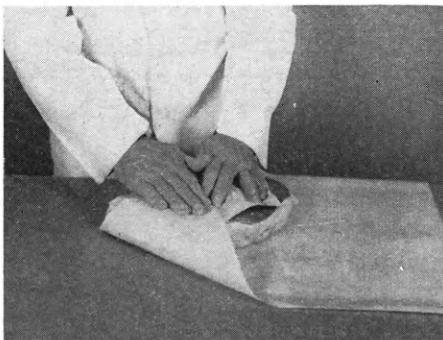
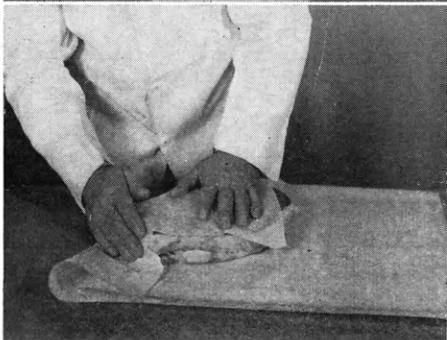
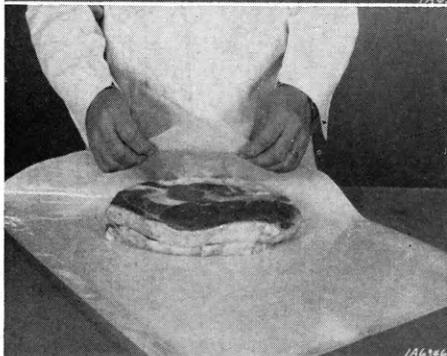
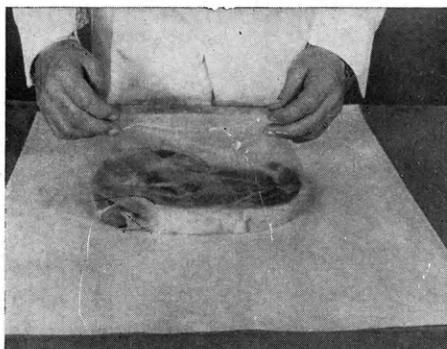
2) Proper packaging—Use a high grade of packaging material which will adequately protect the product. Be sure to wrap all packages air-tight for protection against freezing losses. The manner in which a package is wrapped is as important, if not more so, as the quality of wrapper used.

3) Freezing at zero degrees or lower—Foods should be frozen at zero degrees or lower. The packages should also be loosely arranged until completely frozen, then they can be tightly stacked.

4) Storage at zero degrees—To best preserve the taste and nutritive value of foods, store them at zero degrees or below. Research indicates that temperatures should not fluctuate above zero but fluctuations below zero do not cause serious damage. If ice or snow appears on the inside of the package, variations in temperature above zero have occurred.

5) Avoid long storage—Contrary to popular belief, a frozen product will not keep indefinitely. There is

**To finish, turn package over, repeat steps three and four and fasten with cord or tape.**



# Results

some progressive deterioration even during the frozen state, so it is better to plan for a normal seasonal turnover. When considering meats, beef should be eaten within twelve months, fresh pork within six months, and ground meat (especially pork sausage) within four to six months.

As meat composes about 75 per cent of all frozen foods, it might be well to briefly point out certain things for you to keep in mind in addition to the five points mentioned above.

## Make Family Size Packages

All meat should be cut and packaged to suit the family needs and in quantities that can be used to the best advantage. No roast should weigh more than six pounds, and other meats should be packaged accordingly.

Since bone takes up valuable freezer space and adds neither flavor nor tenderness, most of it should be removed. This makes neater packages as well as saves space.

Improper or delayed chilling is the most common cause of meat spoilage. Before freezing all fresh meat should be cooled to an internal temperature of 40° or lower within 24 hours after slaughtering.

To preserve fruits and vegetables, the quick-freezing method (temperatures lower than -20°) is best for retaining the flavor, color, and vitamins. The degree of maturity, the condition of the product, and the methods of handling usually are more important than the variety.



Vegetables can be stored in your freezer for long periods of time and not be hurt if you follow certain rules. First, every vegetable to be frozen must be blanched to destroy enzymes that cause off flavors, then frozen immediately.

Polyethylene, pliofilm, cellophane, and aluminum foil are all satisfactory for packaging fruits to be frozen. Wide-mouthed jars made of tempered glass may also be used but must not be completely filled to the top, in order to allow for expansion. It is best to serve fruit before it has completely thawed to prevent it from turning brown and becoming soggy.

Those vegetables usually eaten raw and prized for their firmness and crispness, such as tomatoes, lettuce, and radishes, are not too desirable for freezing, as freezing will change their flavor and physical characteristics. Otherwise, vegetables of good quality that have been frozen will yield an excellent product.

All vegetables must be blanched or scalded before freezing and storing because they contain enzymes that must be destroyed to prevent off-flavors. Vegetables must be frozen promptly after blanching and cooling to avoid vitamin and mineral losses.

Prepared and precooked foods are also finding a prominent place in the home freezer.

Prepared frozen foods consist of rolls, cakes, pies, casseroles, and other foods in which the ingredients have been combined and frozen, but not cooked until just before serving. They may or may not be thawed before cooking.

Precooked foods are those cooked and quickly cooled and frozen to preserve the quality, such as soups, fish, meats, poultry, and other foods. French fried potatoes and onions are exceptions to the rule that fried foods with their crisp tasty brown crust do not freeze successfully.

## Label Frozen Food Packages

Don't forget to label all of your frozen food packages. Use the name of the product or the cut of meat, the date packaged, and the weight of meat.

The nutritive value and the original taste and quality of frozen foods will compare favorably with freshly cooked food, if frozen with proper care. So why don't you move those ice cube trays over and make room for all kinds of frozen foods? You'll be glad you did.

# Ag and Home Ec Schools Go on Display

by *Barbara Sawyer*

**B**E SURE and circle March 25 on your calendar. High school students and teachers, 4-H members, county home economics agents, and all homemakers are invited to attend Hospitality Day, the School of Home Economics annual open house.

The day will provide a chance for visitors to become acquainted with opportunities and careers in home economics and with the home economics program at K-State.

The entire day has been planned by Home Ec students and is scheduled the same day as Ag Science Day and the Little American Royal. This is a wonderful opportunity to bring the whole family to visit the campus.

Justin Hall, K-State's new Home Economics building which was dedicated last fall, will be the center of Hospitality Day activities. This is the second year that the open house has been held in the new building. Formerly exhibits and events were presented in four buildings, and visitors traveled from building to building for various events.

Visitors will register in Justin from 8:30 to 10 a.m. and will receive a copy of the day's program, a map of the campus, and luncheon tickets.

Doretta S. Hoffman, dean of the School of Home Economics, will welcome the guests at the opening assembly at 10 a.m. in the K-State auditorium. Following the welcome there will be a skit introducing campus activities, and several talent acts.

From 8:30 a.m. to 3:30 p.m., classrooms in Justin will be used to outline the opportunities in eleven fields of Home Economics. These include art, nursing, dietetics, teaching, extension, journalism, family economics, foods and nutrition, clothing and textiles, institutional management, and family and child development.

Each exhibit will occupy a separate classroom to show the various courses offered in the curriculum, textbooks used, and activities which are combined with classwork. Professors, and students majoring in each field will be on hand to answer questions.

A noon luncheon will be served from 11 a.m. to 1 p.m. in Justin Hall. Students in dietetics and institutional management will prepare the luncheon in the foods laboratories. Tickets for the luncheon will cost 60 cents.

From 3 to 4 p.m. there will be a tea in the freshman women dormitories, Putnam (Southeast) and Boyd (Northwest). Tours of the halls will also be taken.

## LAR Features Student Showmen

by *John Stuckey*

**T**HE 33RD ANNUAL Little American Royal will be held in the Animal Industries arena March 25, 1961, at 7:00 p.m.

Its history dates back to 1924 when it consisted of a livestock parade and exhibition sponsored jointly by the Block and Bridle club and the Animal Husbandry department in conjunction with Farm and Home week. The Dairy club held its first show in 1927 and two years later the two shows were combined. The Little American Royal has been an annual event since then with the exception of the war years, when decreased enrollment led to its cancellation.

The show is now held in conjunction with Ag Science Day and Home Economics Hospitality Day, which bring hundreds of visitors to the K-State campus to view activities and facilities of the Agriculture and Home Economics schools.

The Royal is a showmanship contest with no consideration given to the conformation of the animal. Placings are made on how well the animal is groomed and the showing ability of the student.

The contest consists of two divisions, the Dairy division in which students show dairy stock only, and the Block and Bridle division in which beef cattle, swine, sheep, and horses are shown.

Finalists in each division will exchange animals in the ring and demonstrate their ability to show the other types of livestock.

Any K-State student is permitted to compete. Students pay a small entry fee and are given a first and second choice as to the class of animal they wish to show. The animals that they will show are determined by drawing for University-owned stock. As soon as the animals are drawn, the students begin preparation for the show. The student spends his weekends and spare time after classes in grooming, training, and other necessary tasks needed to get his animal ready to show.

There is no grand champion of the Royal; instead, the honor is shared by the champion showmen of both the Dairy and the Block and Bridle divisions. A trophy is awarded to the winner in each class of livestock. The champion showman in each division receives an additional trophy for his achievement. Place ribbons and showmanship ribbons are given to the other contestants. Trophies are donated by private business concerns and the ribbons are furnished by the Little Royal sponsors.

# Mechanical Feeding Will

# Save You Time and Labor

by David Good

**M**UCH HAS been said and written about the revolution in farming but let's just consider one part of it, the revolution in cattle feeding. Where it once took a scoop shovel and sweat to feed your cattle, feeder wagons, auger-type bunks, horizontal bunker silos, and silo unloaders can do the job for you now.

There may be several reasons why you may want to mechanize your feed-handling system but one most often heard is, "I'm not as young as I used to be." And it's true—it takes

a young healthy man to feed cattle with an ensilage fork and shovel. Other reasons given by Leo Wendling, extension specialist at Kansas State University, are: a desire to take some of the drudgery out of present feeding methods, a desire to expand the livestock enterprise without more labor, or a desire to add a new livestock enterprise with a minimum of labor.

Whatever your reasons, you should study the different systems and choose the one that is right for you.

If you follow a fairly definite feeding program; that is, if you buy the

same number of cattle each year, feed them in the same manner, and market them at regular intervals, then a mechanical feed bunk coupled with a silo unloader may work for you. An auger conveyor enclosed in a tube plus a permanent feed box with an eight-foot concrete feeding slab on each side will cost about \$20 a running foot. The driving mechanism and hopper for this outfit will be about \$200 more and the silo unloader will be from \$1,000 to \$1,500, according to Wendling.

An open auger set in a trough will cost about \$4 a foot less but will not mix silage and grain as effectively.

As you can see, an auger conveyor set-up is expensive but it offers true push-button feeding. The story goes, "Just push the button and go back to the house for breakfast. Your feeding is done." Feeding your cattle in this manner will take little time from your other chores or field work.

## The System Has Disadvantages

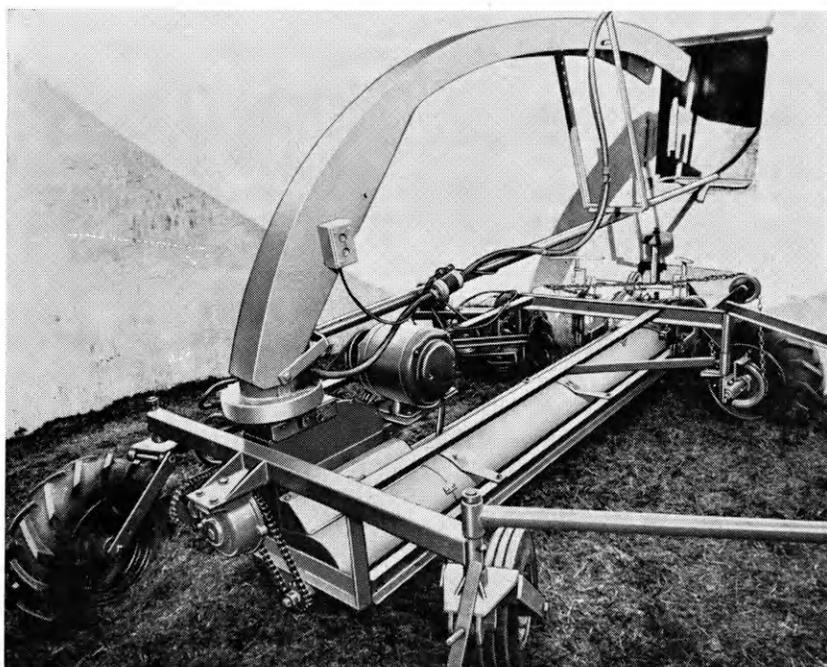
But this system has its disadvantages too. It is expensive, and it is not flexible. True, with the addition of a directional feed gate underneath the auger you can feed a different ration on each side of the bunk. If you have more than two groups of

(Continued on Page 18)

**A silo unloader can make your chores a lot easier. Add a mechanical bunk and you have push button feeding, but it is costly.**



Big rigs such as these are becoming popular as farmers try to produce more without using more labor. Of course it takes a lot of cattle to justify owning an outfit like this but it is flexible. You can feed with it, fill silos, or haul grain.



# Refinishing Will

## Restore That Eyesore



Old furniture can be restored by refinishing it yourself. Glue is the main item needed to perform the operation. When applying the glue, first be sure all old glue has been removed. Second, your glue job will be unsuccessful unless you apply pressure to the joint while the glue is drying. One method of applying pressure to the furniture is by the use of a clothesline or rope wrapped securely around the article being refinshed.

*by Nancy Smith*

**Y**OU CAN TURN that dusty old desk or rocking chair in your attic into a useful and attractive piece of furniture if you apply a few helpful hints about refinishing furniture.

First you need to check the piece of furniture (let's say it's a table) to see if it's solid and if the wood is worth spending your time and labor on. If the legs are wobbly and the table isn't steady, it probably needs to be reglued. There's no substitute for glue. You can easily ruin a piece of furniture by haphazardly adding a screw or nail where you should have used glue.

### **Remove Old Glue**

To prepare for gluing you must remove all of the old glue, since new wet glue will not stick to old dry glue. Scrape the surfaces to be glued with a knife or a half-inch chisel. If there is an excess of dried glue, hot vinegar will help to dissolve it. If the joint is loose after removal of the glue, tear narrow strips of cloth and place them across the end and down the sides of the dowel. Cover these thoroughly with glue and put plenty of glue into the hole.

### **Pressure Is Important**

No matter how carefully you have proceeded to this point, your glue job will be a flop unless you apply proper pressure to the joint while the glue is drying. This can usually be

Before you start your refinishing chores it will pay you to make a trip to a store for the things you will need. They will include paint remover, steel wool, garnet paper, wood filler, and a paint scraper.

accomplished with clothesline or rope. Be careful to protect the wood by folding newspapers where the rope touches wood.

Check the top of your table for burned spots, rings where dishes have been set, or other blemishes. Perhaps with careful camouflaging you won't have to refinish the top. White spots can be removed by polishing or by chemical action. If possible, avoid chemicals; they can permanently damage the finish. Ammonia, however, is comparatively safe if used carefully. A soft rag pad wet (wrung out) with ammonia should be brushed quickly and lightly across the spot. For bad white spots do the same thing with lacquer thinner on lacquer finishes.

### Abrasives Remove Stubborn Spots

To remove a stubborn spot that still persists after the above procedure, try rubbing the spot with abrasive until it disappears. The abrasive used will depend on the type of finish. For a dull finish, use fine steel wool moistened with oil or furniture polish, or a kitchen scouring powder wet to a creamy consistency. A shiny or glossy finish should be worked with rottenstone and water.

If your tabletop has a cigarette burn in it, remove the finish and black part of the of the burn with a knife blade. Then smooth the whole spot with steel wool or very fine sandpaper. Aniline dyes dissolved in alcohol are used to restore color to this area. To provide finish to this area, apply shellac and linseed oil mixed on a small gauze pad. Rub lightly at first, then harder until the finish is of the same level as the surrounding finish. Use steel wool or rottenstone to get the shine you need.

If the finish on the top of your table is damaged too badly for repair, sometimes you may turn the piece of wood over and finish the under side for a new top.

The problem of warped tabletops is not as large a problem as may be thought at first. Warping is caused



by the absorption of more water on one side of a piece of wood than the other. The way to correct warping is by heat and moisture.

Strip the leaf of old finish by letting it soak fifteen minutes with paint remover. Wash it off with rough steel wool and wood alcohol. Take the leaf outside in the hot sun, and pour hot water on the concave side. Then turn the concave side down, and let the sun dry the humped side. This procedure may be repeated more than once if it doesn't work completely the first time.

### Basic Items Are Needed

Here's a list of basic things you'll need for refinishing: wood alcohol (for removing clear finish), steel wool, paint remover, oxalic acid, clorox (for removing spots), wood fillers, garnet paper, and a paint scraper.

To put the finish back on you will need: shellac, wood alcohol (thinner for shellac), clear varnish, dull varnish, turpentine (thinner for varnish), steel wool, pumice, and boiled

linseed oil (used instead of wax on a shellac finish).

The easiest way to remove old finishes is to apply wood alcohol generously. This alcohol is a solvent for shellac and almost any other old finish. Pour about a cup of alcohol in a small bowl. Using steel wool saturated with this alcohol, simply scrub off the old finish. A little lacquer thinner added to the alcohol will give even better results. Always use alcohol in a well-ventilated place—never in a closed room.

Shellac is a widely used home refinisher. Shellac should be applied in three or four coats, each coat thinned with three or more parts of wood alcohol to each part of shellac. Let each coat of shellac dry at least over night. Don't shellac on extremely humid days. Rub each coat down with fine steel wool before applying the next. Polish the finished product with linseed oil, then wax.

If you have proceeded carefully on your project, you will have a beautiful piece of furniture you can point to proudly and say, "I refinished that table myself."

## KABSU Improves Service

(Continued from Page 5)

semen at will. New substances have been developed which not only allow the semen to be extended and used for hundreds of inseminations, but also lengthen its life. The discovery that temperatures lower than body heat best preserve semen destroyed a belief which had long acted as a brake on progress. The development of satisfactory methods of preserving bull spermatozoa at extremely low temperatures for long periods presents new opportunities to the cattle breeder and his veterinarian.

### Diseases Are Controlled

In the field of disease control, the advantages of artificial insemination are becoming more and more apparent. Herd infections with Vibriosis, spread by the bull and not easily detected in the cow, present extremely difficult problems in control. The introduction of a clean bull into such a herd will result in his infection if he is used naturally on other than virgin heifers. Artificial use removes

that risk, provided that reasonable precautions are taken in semen collection.

### Conception Rate Is Improved

One of the big improvements in KABSU is its improving conception rate. In 1959, the conception rate based on 60-90 day non-returns was 69 per cent. This is a definite improvement over the 67 per cent non-return rate reported in 1958. This advancement has enabled KABSU to operate with fewer bulls without affecting sire performance.

### Research Improves KABSU

Research has played a big role in improving the laboratory techniques used in KABSU. Improvements in semen extender not only helped increase the conception rate but made it possible to use semen for a longer period of time. KABSU was also one of the pioneers with frozen semen research.

Now for artificial breeding services, dairymen only have to contact the technician in their county or area in order to receive services for their herds.

## Mechanical Feeding

(Continued from Page 15)

cattle to feed, however, you must use some other means.

The self-unloading feed wagon looks like the best bet if you have several types of cattle. The initial investment will be from \$1,300 to \$2,000, depending on the model and amount of equipment you get on it. With it you can feed almost any number of cattle and just as many rations as you need to feed. In addition, the wagon can be used to fill your silos, to haul grain, and some models may even be used as manure spreaders.

Of course, the feed wagon has disadvantages also. To make maximum usage of it, you must construct fence-line bunks, and it will take twice as much bunk length to feed the same number of cattle because they can eat on just one side. In addition, you must maintain roads beside the bunks, and you can figure on driving your tractor in all kinds of weather. This can be pretty miserable for the operator.

### Make Your Facilities Do the Work

If you have a bunker silo or a lined trench and are full-feeding ensilage to some of your cattle, why not make them do the work? All you need to do is put a movable feed rack across the front of the silo and turn the cattle to it. As they eat, they push the rack ahead and all you have to do is push the top down occasionally so that it doesn't fall over the rack, and clean the manure out behind the cattle.

But in your haste to mechanize, remember this: Roy N. VanArsdall, University of Illinois, in a study of mechanization of feeding on dairy farms, found that if you feed less than 200 tons per year it is cheaper to do all the work by hand.

If you plan to mechanize, study your program well and decide which feeding system will best fit your needs. Then you can make minor adjustments as you go along.

First Drunk — Say, know what time it is?

Second Drunk—Yeah.

First Drunk—Thanks.



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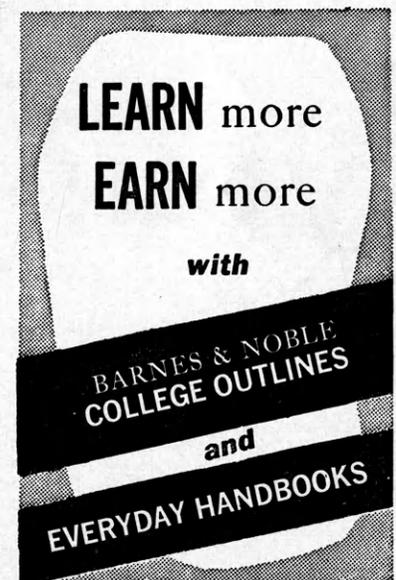
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