

Illinois

Rural Electric News

August, 1954

O. J. FORMAN, CHAIRMAN
502 NORTH A ST.
MOUNTAIN VIEW, ILL.



Electricity Speeds Farm Chore

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IN
THIS
ISSUE

The Voice of 128,000 Members

Rural Electric News

VOL. 12. NO. 2.

AUGUST—1954

Published Monthly By

Association of Illinois Electric Cooperatives
 Publication Office: Corner W. Madison and Jackson Streets
 Waterloo, Wisconsin

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EDITORIAL ADDRESSES
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 416 S. Seventh Street
 (or)
 Box 1180
 Springfield, Ill.

Advertising Representative
 Richard M. Hausler, Director
 Rural Electric Consumer Publications
 412 5th St. N.W., Washington 1, D.C.

Entered as second-class matter October 28, 1946, at the post office at Waterloo, Wisconsin, under the Act of March 3, 1879.

Members, Per Year, 60 cents Non-Members, Per Year, \$1.00
 Postmaster: In using Form 3579, address to Illinois Rural Electric News, Box 1180, Springfield, Ill.
 Please do not clip off keynumber.

What About The Future?

ONE OF THE hardest things for the human being to do is to remember. Aside from the relatively few things that have been branded indelibly on the mind because of some highly emotional association, most people forget with phenomenal rapidity.

In many ways, man's weak memory is a blessing for it permits him to forget depressing experiences and failures, which would make life unbearable if the full impact of them haunted him from day to day.

On the other hand, however, man's forgetfulness makes him prone to committing the same errors of judgment continually.

And those who get information secondhand or thirdhand, have many times harder a job remembering it than those who learned directly from their own experience.

But what has human forgetfulness got to do with rural electrification? Quite a lot. In fact, it is a matter that one day may threaten the existence of rural electric cooperatives.

Even today, when rural electric cooperatives are still young businesses, the intense motivation which led to their inception and the dramatic struggle for the right of farmers to have electricity, are dimly recalled and then only by a handful of farmers who pioneered rural electrification.

As age forces the pioneers to relinquish their places on co-op boards to younger men, the matter of human forgetfulness assumes disturbing proportions. And when it comes time in another 10 or 15 years for these now younger men to make way for another set of leaders, the early motivations which inspired rural electrification, may be as well forgotten as ancient history.

Though financial solvency determines in an important measure the success of electric cooperatives, a co-op that puts all the emphasis on financial achievements many end up in being a very successful business, but a very unsuccessful cooperative.

Each co-op must first recognize the threat that human forgetfulness poses before it can take steps to see that its future leaders will be well-schooled in the cooperative philosophy and the cooperative aims. At present, little is being done by any co-ops because the extent of the need has not been fully recognized.

Rural electric cooperatives had as their original aims, bringing electricity to their members at the lowest cost possible, without profit to the co-op. Should these aims be forgotten and replaced by the motives of building up over-large financial reserves, then the cooperative will have gone out of existence perhaps unbeknown to members or directors. Some method of keeping the original co-op aims alive in the memory of co-op leaders is necessary to keep electric co-ops alive.

What Our Readers Say

INSPIRATION

You may not realize the great job you are doing for the people when you print stories of people like Mr. Robinson (June issue) and others who are handicapped so seriously.

I know, for I was pronounced a total invalid and given a slim margin of survival if I survived. This was nearly two years ago. I pulled through a cerebral hemorrhage, plus double pneumonia, as a result of this I was totally paralyzed in the left arm and leg. I want to say this, I wished to live and work again. I can not work as an engineer, but I am selling by mail and foot or trying to. I will have an ad in your next issue and wish to say to anyone who reads this—don't give up. Do like Mr. Robinson and others you have written of. Keep going, keep praying, hoping, fighting. Somewhere, somehow it will break your way again.

I know I am able to hope a bit again. Thanks to you again for your last two issues. They brought me to the top again after reading them . . .

T. O. Gilliam
 Milburn, Ky.

I enjoy the paper very much.
 Mrs. Jesse Milligan
 Elizabethtown

As interesting and helpful as any farm paper we get. . .

Mrs. Edward J. Schenck
 Media

I think the pattern page is just grand, and for free too. Entire magazine is helpful. Thank you.

Mrs. Lucas Bick
 Fieldon

The patterns are sure wonderful. I enjoy using the recipes. All Rural Electric News is a wonderful paper.

Mrs. Leslie Wiley
 Cambridge

I think you have a nice paper of interest to everyone. We have purebred Spotted Poland hogs which are sold to people in different states. Your woman's page has some good recipes which I want to try.

Mrs. Clarence Hillman
 Vincentouri, New Jersey

Washington Report

By William S. Roberts

THE most heated debate of the 1954 session focused on Administration power policies during the waning days of the 83rd Congress, with rural electrification leaders watching with intent interest.

The debate, lasting almost two weeks in the Senate, was on the bill to allow international exchange of atomic information and to "encourage participation of private enterprise" in atomic energy developments.

The Administration's power policies dominated the Senate debate on the bill which lasted almost two weeks, because of the recent Presidential directive and lack of safeguards against monopolistic advantage the private power industry may acquire through the new legislation.

Viewed As Threat

For rural electric leaders this was a double barreled threat. The Presidential directive to the Atomic Energy Commission to contract with a private syndicate for power to be used by TVA was seen as a threat to the future of that agency.

Possibly on an even broader scale, of course, power company monopoly of the knowledge and processes of producing power with atomic energy would deprive rural electric systems of any direct benefits of the \$12-billion research program the Federal government has already carried out.

The elected representatives of rural electric systems from throughout the country, members of the board of the National Rural Electric Cooperative Association, unanimously voiced the view that atomic energy for peaceful use is "in the public domain" along with our rivers and public lands, and not to be exploited monopolistically.

Assail Directive

Furthermore, these leaders assailed the President's directive as "a deplorable attempt to use the Atomic Energy Commission to open the way for invasion of TVA" through the Dixon-Yates contract.

They declared the Atomic Energy Act amendments are "primarily electric power bills," and the \$12-billion public investment should be "recognized and safeguarded against monopolistic restraint and exploitation, through licenses, patents, subsidies

for atomic fuel and any and all other devices."

Both the AEC-TVA directive and the legislation to open use of atomic energy to private enterprise are reflections of the Administration's views on Federal power policies. Although not under the Interior Department, where the specific statement of Administration policy was issued, they follow the disavowal of any Federal "utility responsibility" for wholesale power supply.

Not Alone

The 58 electric co-ops which obtain all of their power from the Tennessee Valley Authority are not alone in having a stake in the struggle. The nation's rural electric systems depend upon Federal sources for 29 per cent of their wholesale power supplies. Although that takes only six per cent of all the power generated at Federal projects throughout the country, it is far more important to rural electric systems, both as their lowest cost power and as a potent bargaining weapon in buying the biggest proportion of their power—49 per cent of it—during private power companies.

During the debate, Senator Herbert H. Lehman (N.Y.) expressed views of many opponents of the bill as it was drawn up by the Joint Committee on Atomic Energy when he said that, while he believed in private enterprise, he opposed the "unjustified subsidy of private enterprise contained in the bill."

Public Domain

He pointed out that the bill would grant license to a very few large and monopolistic companies to develop industrial atomic power "from what is by its very own nature the public domain—atomic energy made possible by public investment and national genius mobilized in public service."

All of the National Rural Electric Cooperative Association members themselves earlier this year made a more general statement of that principle when they adopted a resolution deploring either private monopoly or government monopoly in the production of electric power.

The amendments to the original Atomic Energy Act of 1946 debated in the Senate would be acceptable to

(Continued on Page Fifteen)

Senate Votes Priority For Co-ops For Atomic Power

CNS — The Senate voted to give farmers' electric co-ops, cities, and other public bodies first chance at buying atomic power. The voice vote came on the motion of Senator Guy M. Gillette (Ia.), July 22.

During all-night debate on the atomic energy bill, Senators thus succeeded in extending the 50-year-old federal power marketing policy to by-product electricity from atomic reactors. "Atomic Energy Commission," says the amendment, "should at all times, in disposing of such energy, give priority to public bodies and cooperatives."

Senator Hubert H. Humphrey (Minn.) also won approval for two amendments. The first would grant cities and co-ops preference where applicants ask AEC for power licenses. The second would give cities and co-ops within transmission distance of atomic power plants the right to intervene in any federal power contract.

Approves Right

Earlier, the Senate gave AEC the right to produce electric power. Action came on the motion of Senator Edwin C. Johnson (Colo.), 45-41.

As the Senate continued work on 30 other proposed amendments to the bill, the House unexpectedly took up the same measure, July 23. Administration plans for the House to wait on

the Senate bill were ditched as leaders saw they couldn't stem major revisions in the upper house. The House scheduled only four hours' debate. Apparently, administration leaders hoped to shove an unamended bill through the House and kill Senate amendments in conference.

Senator William F. Knowland (R Calif.), administration leader, characterized attacks on the bill as a "filibuster." Said Senator Wayne Morse (Ore.), "We must not sell the American people into a monopolistic economic bondage for decades to come."

AEC Can Sign

On July 21, the Senate refused to keep Atomic Energy Commission from signing a contract with two private power companies to supply Tennessee Valley Authority with power. The vote was 55-36 coming after seven days of debate on the highly controversial proposal.

The board of directors of the National Rural Electric Cooperative Association, representing nearly 1,000 rural electric systems, had by resolution strongly opposed the signing of the contract. This action came at the NRECA board meeting, July 21, in Wausau, Wis.

President Eisenhower had directed

(Continued on Page Ten)



ROSALIE ANN Cadwell of Carthage was named Miss Western at the Western Illinois Electrical Cooperative annual meeting, held July 20 at Carthage.

Annual Meeting Caravan Drawing Record Crowds

HIGHLIGHT of this year's Annual Meeting and Electrical Show is the beauty contest. At the first three meetings, held at Carthage, Winchester and Auburn, 22 contestants vied for the chance to represent their co-ops at the Association of Illinois Electric Cooperatives annual meeting in September.

The annual meeting caravan is being sponsored by 10 electric cooperatives this year and is held in conjunction with their annual meetings. It is operated and managed by personnel from the State Association.

In addition to the beauty pageant, the caravan features a home-town talent contest, General Electric's House of Magic show, and a demonstration on line safety by the job training and safety instructors of the co-ops in Illinois.

Draws Large Crowds

The caravan is housed under two giant tents, one for the meeting, and the other for exhibits of some of the latest in electrical equipment for the home and farm. Nearly 12,000 persons have attended the first three meetings.

The first show was held at the Western Illinois Electrical Cooperative meeting in Carthage on July 19 and 20. The next stop was on July 22 and 23 at the Illinois Rural Electric Cooperative meeting at Winchester, followed by a stop at the Rural Electric Convenience meeting, July 26 and 27 at Auburn.

During July, the show also appeared at the meeting of the Southwestern Electric Cooperative on July 29 and 30, at Greenville. This month it will stop at the Adams Electrical meeting, the Wayne-White Electric, Clay Electric, Southeastern Illinois Electric, Southern Illinois Electric, and Egyptian Electric meetings.

Western Meeting

Miss Rosalie Ann Cadwell of Carthage was named Miss Western at the Carthage meeting. There were 10 contestants. Miss Cadwell is 16 years old and a senior in high school. Runners-up were Miss Carol Owings of Colu-

sa, and Miss Nancy Metternich of Carthage.

Cooperative President Robert R. Wagner reported the co-op was operating with a reasonable margin. "However," he added, "we are just beginning to enter the period of maximum debt service." That's when the payments to REA will be highest, he explained.

To prepare for this condition, the co-op has invested reserve funds in bonds. In addition they have made prepayments on loans to serve as cushions of credit, "should a condition arise where we could not meet our quarterly payments," Wagner explained.

Wagner said the co-op was in the process of making a new system study of its future needs. "You users have already exceeded the plans of the previous study," the president pointed out.

Manager Reports

Manager Lee Leonard reported that the average monthly consumption of electricity per member last year was 283 kilowatt-hours. It has already jumped to 328 kilowatt-hours per month during the first five months of this year.

He also explained that the co-op now has a power use adviser, who is available to help the members with electrical problems.

An amendment to the by-laws, staggering the terms of the directors, was passed before the election was held. It provided that the directors would serve three-year terms instead of one-year.

The present seven-man board was re-elected. It included Wagner, Lee Junk, Harold S. Huey, Grover Meeker, Lloyd Dickson, Lee Murphy, and Wendell Thompson.

ILLINOIS RURAL MEETING

Reports of Manager S. R. Faris, and President F. J. Longmeyer highlighted the Illinois Rural Electric Cooperative meeting, July 23 at Winchester. Miss Bonnie Bunch of Kampsville was named Miss Illinois Rural.

Faris related how the co-op has

grown since it was organized. He said, "Our system was originally designed for a load of 100 kilowatt-hours per member per month. This was considered tops by the experts."

However, it wasn't long before this figure became obsolete, he explained. "Then, the board recognized the fact that we would have to plan far ahead and to build our lines accordingly." An exhaustive study was made and the present system was designed to handle 375 kilowatt-hours per member per month.

Planning Ahead

So far, this has proven adequate. However, if additional loads are needed, there are plans for further system improvements, Faris pointed out.

Longmeyer stated that all indications point to continued progress for the co-op. "The areas in which we operated, noted for their stability, diversification of farming, and good farming practices, afford opportunities for substantial increase in the uses of electric service.

Depends Upon Members

"With our members realizing that the success of the cooperative depends upon their using their electric power for every job they can, we should realize a full return on our investments in the very near future," the co-op president declared.

The 11-man board of directors was unanimously re-elected. They included Longmeyer, Howard Hurrelbrink, Walter Strubinger, Leonard Wood, Roy Wieneke, Henry Day, V. T. Parks, R. J. Meyers, Louis Osterman, Harvey Vortman, and Robie Wallace.

RURAL ELECTRIC

A near-capacity crowd turned out July 26 and 27 for the third stop of the caravan, the annual meeting of Rural Electric Convenience Cooperative at Auburn.

At the business meeting, July 27, President Fred W. Harms spoke of the achievements of the cooperative during the past year. He singled out

the completion of a new headquarters building as the most significant of the entire year's accomplishments.

"Our new building implies permanency to our cooperative enterprise. We're a big business and we're doing a good job. Our new building shows that we are here to stay," Harms said.

Manager Ralph White, in his report, told the members that they had definite obligations as owners of the cooperative. He said it was their duty to take a continued interest in the affairs of the organization.

Manager White pointed out that there are many people against the rural electrification program including Congressmen. Of the latter, he said, "It's up to us to find out how our Congressmen stand in regard to rural electrification."

He urged members to lend their full cooperation in reporting outages, paying bills on time, and in informing the office of any hazardous conditions on the lines.

He said that the past year had been a successful one. The co-op had a surplus of \$60,000.

He said that rebuilding existing lines to carry the heavier electric loads is now the main work of the line crews since nearly everybody in the co-op area who wants electricity has it.

In the beauty contest, Miss Marla Johnson, 16, of Harvel, won out over four other contestants. Runner-up was Roberta Allen, 18, of Raymond, and third place was Sonja Ann Peters, 16, of Taylorville.

The schedule of the remaining stops of the caravan is as follows:

Southwestern, July 29-30, Greenville.

Adams, Aug. 2-3, Camp Point.

Wayne-White, Aug. 5-6, Fairfield.

Clay, Aug. 9-10, Flora.

Southeastern, Aug. 12-13, Eldorado.

Southern, Aug. 16-17, Dongola.

Egyptian, Aug. 20-21, Steeleville.

State Board Asks Extension Of Loan Amortization Time

A resolution calling for the extension of the REA loan amortization period for co-ops experiencing financial difficulties, was passed by the board of directors of the State Association at their regular monthly meeting, July 15, in Springfield.

The resolution was requested by the three cooperatives in District 4 which had asked for State Association support of the proposition. The resolution asked that the REA act be amended to provide the REA administrator with the authority to lengthen the repayment period for rural electric systems which might need extra time to meet their financial obligations to the government. At present, REA loans are for 35 years.

Another resolution from District 4 asked that the State Association lend its assistance to a movement to locate the offices of the Illinois Agricultural Association in Springfield. The offices are now in Chicago.

Expresses Appreciation

A letter from Senator Paul Douglas read at the meeting expressed the Senator's appreciation for the commendation that the board had extended to him last month for his leadership in getting the REA loan funds boosted by \$35-million.

Approval was given to Manager A. E. Becker's suggestion that Lyle Dunham of the state organization, be placed in charge of all two-way radio trucks which Illinois co-ops are making available during the National Plowing Contest, September 16, 17, 18, at Olney.

President Clay Trimble informed the board that joint meeting of Illinois and Missouri electric co-op lead-

ers scheduled for October in St. Louis had been called off.

Manager Becker gave detailed reports on the progress of plans for the State Association annual meeting to be held in Springfield, September 2 and 3, the annual meeting caravan, and the recent meeting of Illinois job training and safety committee. He reported that W. L. Walker, manager of Shelby Electric Cooperative, had been elected chairman of the committee.

The board approved a donation of \$25 to the Illinois Foundation of FFA.

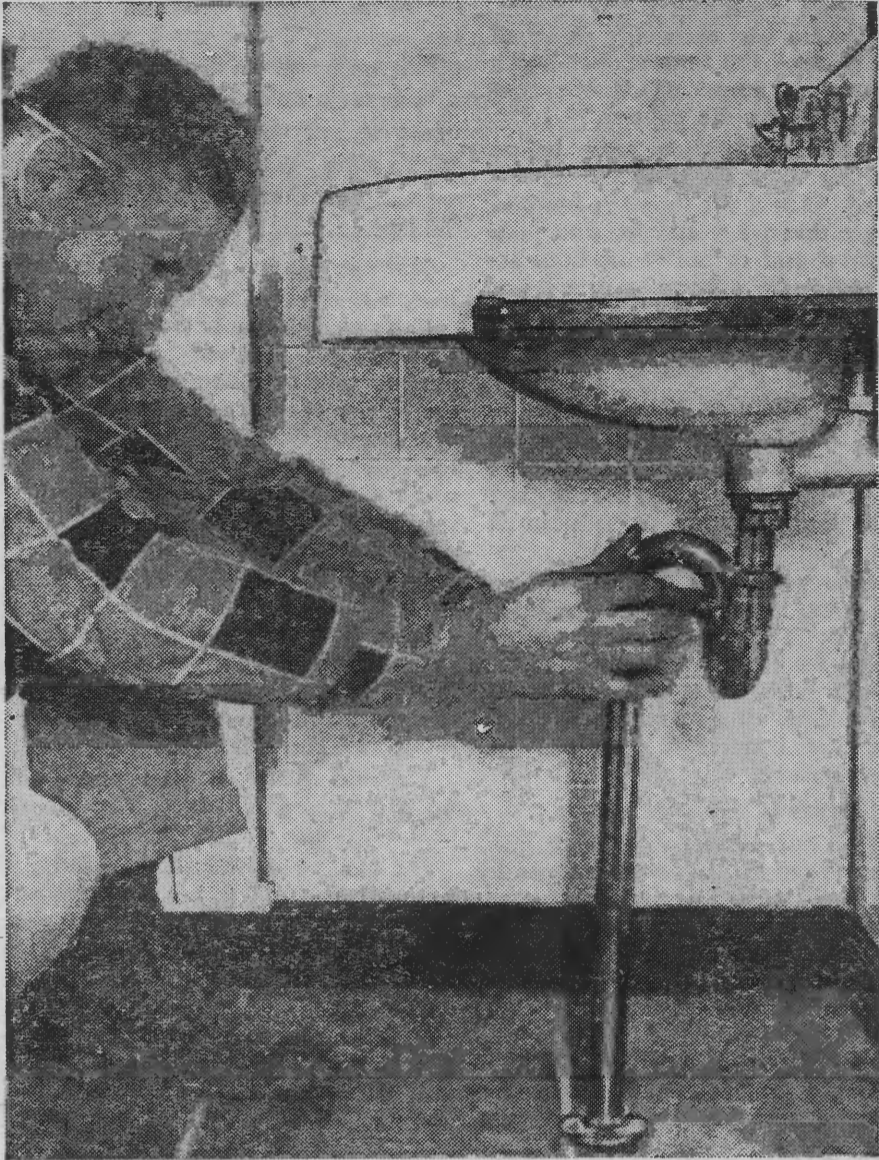
The August meeting of the board was postponed until September 1 at 10 a.m.

Our Cover

The air compressor is one of the handiest pieces of equipment a farmer can have. That's how Ralph Edge of Pawnee feels about his. Edge's son, Howard, is pictured painting the many fences on the farm with the compressor.

Besides painting, the compressor is useful in inflating the tires on field machinery. During the summer, Edge uses it to clean out tractor radiators. He says it keeps the tractors from overheating.

The compressor, with a few attachments, can also be used to lubricate machinery, the farmer explains. And when electrified, the compressor is "The number one piece of farm equipment," according to Edge, a member of the Rural Electric Convenience Cooperative of Divernon.



LINDELL Austwich, a member of the M.J.M. Electric Cooperative of Carlinville, installed his own bathroom. By doing so, he figures he saved as much as 40 per cent. He also installed his septic tank.

Put In Your Bathroom And Save As Much As 40% Of The Cost

YOU can have a bathroom! With some planning and a considerable amount of determination, you can do the job yourself. Others have and they have done mighty good jobs too.

For instance, there's Lindell Austwich of Carlinville, member of the M.G.M. Electric Cooperative. He put one in himself, installing it before his busy field season started.

A modern bathroom is well worth all the time and trouble. Actually, when you do your own work, the cost can be reduced by as much as 40 per cent.

Cost of Fixtures

Austwich put all the fixtures in himself. They cost \$250. A plumber who figured on the job wanted \$350 for the same materials. Outside labor for the installation would have just about doubled the cost.

Austwich decided to go ahead with the job himself after studying the figures on costs with several plumbers. In order to be able to have a bathroom, he also installed a metal septic tank system.

One bit of extra work this co-op member ran into which you may not be bothered with, was to make a room for the bath. In his case, he had to re-locate the basement steps and move several doors. This was done to convert a hallway into the bathroom. Perhaps you have a location for a bathroom which will not require so much preliminary work.

Preliminary Checks

From a central Illinois plumbing firm which does a great deal of work for farmers comes this advice for those who wish to make farm bathroom installations:

Before you install a bathroom, the source of water should be considered.

If it is possible, connect a spring up to the stool and use cistern water for the other fixtures.

An adequate pumping system is needed to handle all the water needs. If the water is required at several places, smaller pumps just won't handle the load.

Pumping Water

An ideal farm water system for a farm bath setup is to have two pumps and to use well water or spring water for flushing purposes and the soft or cistern water for the lavatory and tub.

In planning a farm bath, a water system must be installed.

For shallow wells, according to the plumbing experts, a piston type of pump is best, because it is relatively trouble free and the maintenance is less expensive.

A farmer should also have a septic tank. A pre-cast concrete tank will cost about \$90 plus the installation.

No Two Alike

What are the estimates of total costs for a bathroom? Plumbers estimate that you can figure around \$1,000 for a complete job, including plumbing and carpentry.

Using that figure as a base, you can begin to estimate how much you can save by doing the work yourself. This can be as much as \$400. The \$1,000 figure assumes a complete job including tub, lavatory and stool.

No two installations are alike. On one job, for instance, it cost \$300 just to put in a tub, stool and wash basin. Ordinarily this portion of the work could be figured at \$200.

Mail Order Costs

Since there is a wide range of prices involved, the actual differences in costs of installation may depend on the style of fixtures, the types of materials used on the job and the source of your supplies.

The manager of a plumbing department of a large chain mail order store has this to say about the cost of bathroom equipment from his organization:

"We have a wide choice of fixtures ranging in price from \$142.50 for a three-piece outfit to \$284.95. For farm homes, a unit type toilet outfit is suggested, which includes a vitreous china 19 by 17 inch lavatory and a five foot steel tub with chrome plated faucets and standard chrome waste which sells for \$142.50.

"One can get a combination toilet outfit, a cast iron bath tub with chrome faucet and drain, and a 22 inch by 18 inch vitreous china lavatory with chrome faucet drain and chrome legs for \$169.50.

Many Choices

"There are other combinations that may be chosen which would range in price between these two figures all of which we think are low cost bathroom equipment. Savings are affected by simplicity of design and in case of the lavatories by the sizes."

As to other costs, the same store manager said: "All rough-in material on an average first floor bathroom in a one story house installed in accord-

ance with standard state requirements will cost approximately \$145.00. This includes pipe to five feet out from the foundation."

The home plumber may if he is ingenious be able to cut costs. For long runs, money may be saved by using plastic pipe. Copper tubing is suitable for both hot and cold water. It is easy to install and has a long life. Because long lengths of copper tubing can be used, it requires fewer fittings.

Precautions To Take

Because of his inexperience the home workman must be cautious in planning and setting up as important a project as installation of a bathroom.

One of his problems is the installation of the bathtub. Considerable care must be taken with it. Recessed tubs, for example, require that the wall work be at one end. Water pipe connections must be put in accessible locations. A bathroom installed where there was formerly a porch, may prove that there is not enough room to move around in doing the work.

Certain sanitary standards are set up by state health authorities or by county boards. These requirements must be met in order to keep the value of the property up. Information on plumbing standards are available from your farm bureau, the state university or the state health department.

Choosing A Room

Many farm home owners have converted an old-fashioned pantry into a suitable bathroom. Others have used a porch, cutting a door into the house and blocking off part of the porch for its new use.

Other farm bathrooms are often made from converted closets. Or, from part of a former bedroom. In this last case, the remaining section of the room can be made into a sewing room, a play room, an office or closets for the other bedrooms.

Specialists in farm home planning suggest that a bathroom should be at least five by seven feet in size, if at all possible. There should be room enough for a door to open wide into the room and enough space around the fixtures for cleaning.

Ventilation Important

Ventilation is of utmost importance in planning the bathroom. If a window is not in the space set aside for the bathroom, or one cannot be installed, it is necessary then to put in some type of roof ventilator or fan system.

In addition to the convenience and accessibility of the water lines, other considerations include heating and lighting arrangements. The room must be protected against freezing temperatures and the light should be adequate.

Small electric heaters, of which there are many types and preferably those permanently installed, may solve the heating problems. There is a wide range of fixtures from which to choose for lighting needs.

Other Aids

If the new bathroom is located near the kitchen, it is possible to use the same water lines for serving both rooms. Fundamentally, the water supply for the bathroom is the great problem on farms. This must be adequate before any plans can be made.

The largest water use is in flushing. Each flush for the common type of stool used in most homes requires about four and one-half gallons of water. The larger the family, or the greater the number of users, the more pressing the water supply needs become.

Inexpensive Protection For Costly Motors And Home Appliances

Time-Lag Fuses Give Convenience Of Circuit Breakers And With Adapters End Over-Fusing Danger

YOU CAN protect costly motors in your home appliances and others used to power farm equipment with time-lag fuses.

Time-lag fuses may be compared with the automatic fire protection sprinkler systems. Sprinkler heads do not open needlessly. Neither do time-lag fuses. Unlike ordinary fuses, time-lag fuses open only if the motor or wiring is in actual danger of burnout. This may not happen once in the life of the motor, but the protection is always there.

Further, because the fuses will open the circuit only under unusual conditions, checking the causes becomes easier. For example, motor conditions can be studied in terms of whether or not the motor causes the fuse to blow when it is started or while running.

Protective Devices

These special fuses, for all practical purposes, behave like circuit breakers making them ideal for use on older circuits. They give needed protection against motor overloads, yet give complete circuit safety.

The time-lag fuses protect motors from overload and low voltage. If ordinary fuses are used, they blow frequently when washing machines, refrigerators, oil burners and other motor driven appliances start.

How They Work

Some motors have acceptable temperature control devices built in them. If this is so, then the time-lag fuse protection is not needed.

The time-lag fuses are made to fit the ordinary Edison base of the typical household fuse. Inside it is different, although it may look like an ordinary fuse. It has the regular fuse link (low melting alloy) and a thermal cut-out.

Any excessive current causes the thermal cutout to heat up and if the overload is continued long enough, the solder in the thermal cutout softens and permits a spring to pull out the end of the fuse link, thus opening the circuit.

Holds Starting Loads

Because it takes time to melt solder, even with a heavy current, the thermal cutout cannot open quickly, and the fuse link is heavy enough so it won't open quickly on starting currents, hence the fuse will not open on motor-starting currents that last only a short while.

Protection against dangerous short circuits is provided because should the load amperage jump to a danger-

ous point, a 15 ampere fuse of the time-lag type will open the circuit in less than one-tenth of a second. This is faster than a regular fuse can respond to the heat produced.

Additional Protection

A more recent development of the time-lag type of fuse, is the type using a special socket. This is further check against fuse tampering and over-fusing to prevent blowouts. The fuse cannot under any circumstances be bridged by pennies or slugs.

In this type of time-lag fuse, a special adapter is screwed into the Edison base socket of the fuse holder. The adapter locks itself in and cannot be removed without destroying the holder.

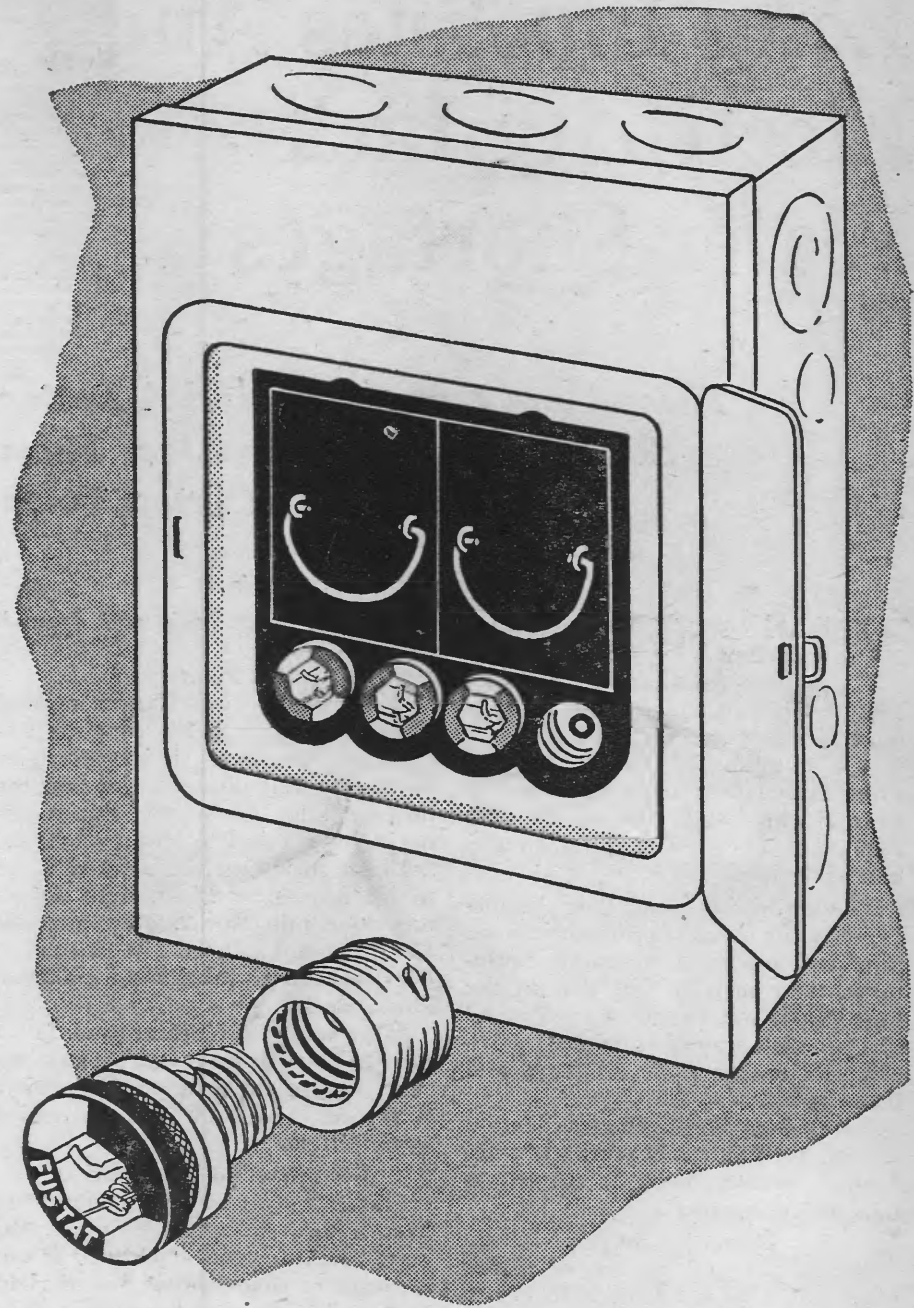
The fuse itself has a special base to fit only the special adapter and is colored for the various amperage ranges. A slight variation in the amperage sizes of these special protective fuses, further prevents fitting of different ones in the special adapters. They can be set in for one size only.

Special Motor Protection

While time-lag fuses of either regular or special adapter types may be used in a circuit on which several lights or appliances are connected, the time-lag fuses may be used on special circuits for protection of the motor only.

This type of protection can be given in several ways. Where the motor is on a separate circuit and fused with an ordinary plug, a time-lag fuse of proper amperage (with or without special adapter) can be inserted. This is the simplest set-up possible.

If the motor is controlled by a switch fused with an ordinary fuse of the plug type, the fuse can be re-



moved and a time-lag fuse, regular or adapted, can be inserted.

On The Motor

Special receptacles, for regular based and adapter-based time-lag fuses are available which may be mounted directly on or near the motor. They can be mounted inside or outside the cabinet or frame of any type of electrical machine.

These can be covered units, designed for the fuse alone, or with switch; switch and pilot light; grounded receptacle; single or double contact switches and for two-receptacle fuses.

For farm uses, these offer many possibilities. For a fan motor, attic or window type, a single pole switch and pilot light with time-lag fuse would be ideal. Other combinations are available for freezers, for furnace blowers, and for water pump controls.

Wide Variety

A study of the equipment available for use with the time-lag type of fuses shows that a greater variety of combinations is available. This makes every motor and circuit combination completely protected.

Time-lag fuses mounted in the Edison-base sockets will give adequate protection on regular circuits now in use. Only the use of the special adapter-base time-lag fuses will prevent tampering, give absolute control of fuse sizes and prevent the switching of fuses from one circuit to another.

Convenience

For heavier equipment, time-lag fuses are obtainable in the cartridge types. For farm shop owners, the fact that a series of motored-appliances can be hooked to a single circuit is of interest.

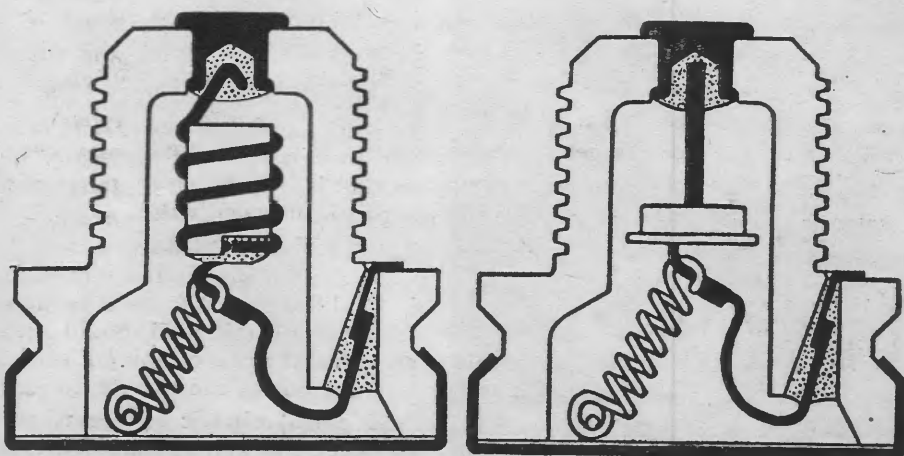
In this arrangement, instead of adding new circuits to the panel board, the motors can be added to the existing lines and each in turn operated off individual time-lag fuse protected circuits. This reduces wiring costs.

Other equipment such as transformers, coils and solenoids as well as motors are protected against burnouts. The longer time-lag in the fuse permits the circuit to hold all normal current surges and harmless overloads, yet will open to prevent burnouts from a dangerous overload.

Not Expensive

The cost for this added fuse protection is low. For a typical house fuse of the regular (Edison) base type, the costs will be from nine to 12 cents each, a few pennies higher than a regular fuse. The special fuses with adapter bases are slightly higher.

For the little extra cost for fuses to be used with ordinary home and farm equipment, it is inconceivable that such protection for valuable motors should be neglected. The replacement of a burned out motor or damaged circuit would run many times the cost of the protective fuse.



TIME-LAG FUSES provide protection for your expensive motors from overheating, but allow for starting loads. When overload continues, solder in fuse melts and the spring pulls out the end of the fuse link opening the circuit. Model at left, is Fustat, Type S for 15 to 30 ampere circuits. At right is Fustat, 0 to 14 ampere type for either motor or circuit protection.

Long Pipelines And Electricity Lick Water Shortages

These Four Farmers Found A Better Solution To Water Problem Than Trucking It From Town

"WE had water, but not where we needed it!"

That's how four farmers describe the problem they faced in solving water shortages on their farms. It was a question of either trucking water from town or going after it with pipeline of between 1,500 and 2000 feet. They all decided on the latter solution.

Though piping water long distances called for considerable cost in both pipe and electrical pumping equipment, these men all felt that in the long run it was the most economical and practical way of furnishing sufficient water for their livestock and home needs.

Here's how Frank Hamer, Marvin Isringhouser, Curtis Bradley and John Mollet, literally "brought the mountain to Mohammed".

Electricity Helps

Hamer put in 1,500 feet of plastic pipe, which he ran from a spring to his barnyard.

Isringhouser installed 2,000 feet of galvanized pipe from a hillside spring to his farmstead.

Bradley laid 1,800 feet of copper pipe from a well to his home.

Mollet connected his pond to his home with 1,800 feet of plastic pipe.

However, without the help of rural electricity, "It would probably have been a different story," they all say. Other sources of power would have been troublesome and unreliable whereas, electric power makes the

water pump automatic and dependable.

Cost Worth It

Although it cost Hamer around \$1200 to complete his pipeline system, he still figures, it was worth it. He used to rely upon a pond near the farmstead for his supply, but it was drying up. "I had to look elsewhere."

In the meantime, he trucked water to his farm near Piasa, from Brighton, four miles away. The cost was \$5 a thousand gallons. The 50 head of hogs and cattle used around 2,000 gallons a week.

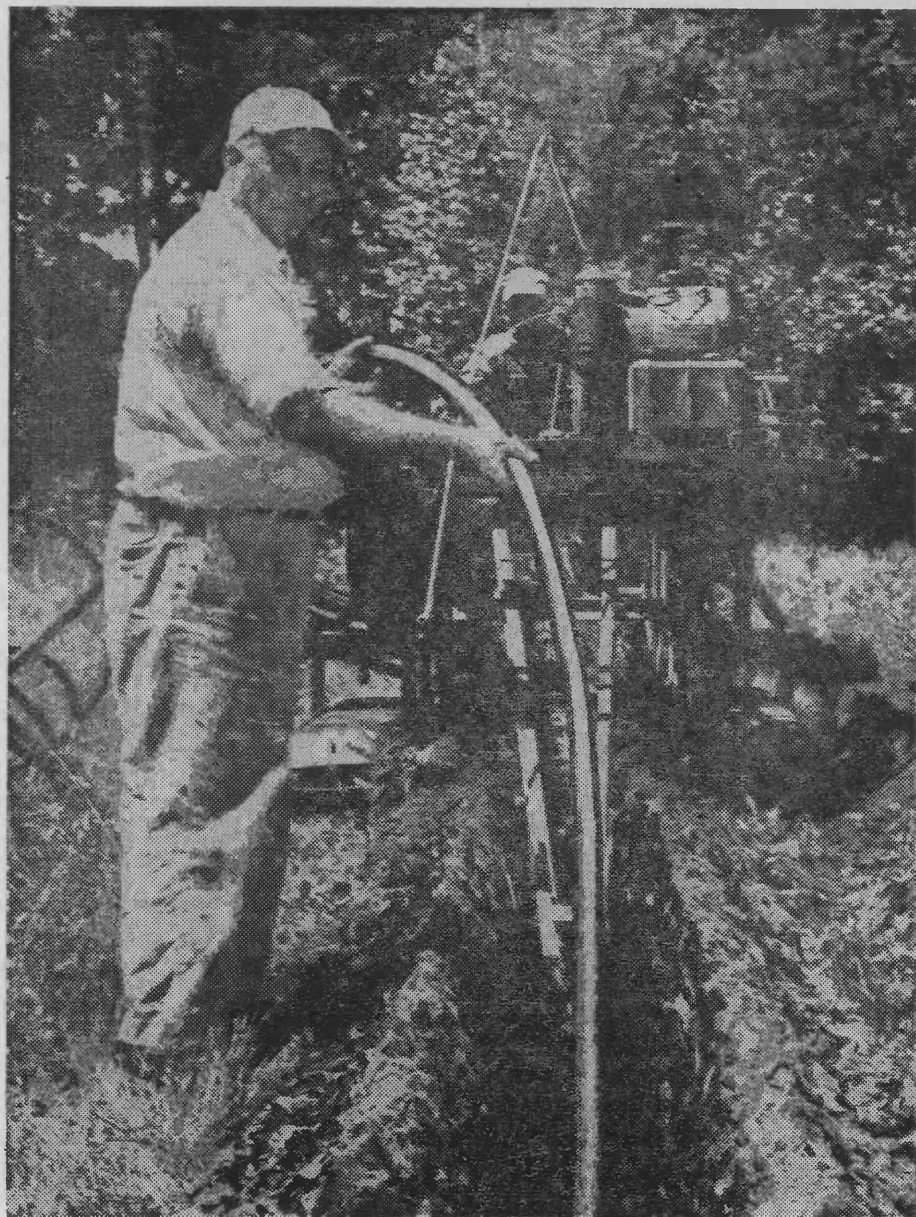
"Our water bill ran around \$40 a month. You can see it won't take many years before the cost of the project is repaid. And look at the convenience I have."

Fortunate To Have Spring

Hamer knows he was fortunate to have a good spring on his place. "It's been here for years. I cleaned it out a couple of times and it flowed right back in." He says he has measured its flow at one gallon a minute.

In order to provide enough pressure and supply for his pump, Hamer constructed a 3,100 gallon reservoir at the spring. He is a member of the M.J.M. Electric Cooperative of Carlinville.

Marvin Isringhouser, like Hamer, also trucked water for a time, when his wells went dry. However, Isringhouser got his supply from a nearby stream. He didn't have to go clear into the town of Fieldon, about 10 miles



TWO FARMERS laid plastic pipe from the water supplies to their farmsteads to solve their water shortages. The pipe is easily installed and can be laid in lengths of 300 feet.

from his place near the Mississippi river.

Still A Problem

Though the water was free for the taking, getting it was a problem. First of all, "We had to stop whatever we were doing and go and get some water when the stock started bawling." On the average it took, three trips a day to fill the stock tanks.

Besides that, the house supply was low, but Hamer couldn't use the creek water. "I first thought about drilling a deeper well.

"I even went to a well-driller and asked him for a price. All the time, I knew I had this spring. The driller told me I would be better off tapping it than drilling a well. He said 'you're sure of that water at least'."

Uses Steel Pipe

The spring was 2,000 feet away. Isringhouser figured galvanized pipe would be better suited to do the job. So, for around \$2,000 he installed the pipe, and a pump at the spring. Now he has plenty of water for the stock, and also for the home.

"The water tests good. We use it for drinking, cooking and bathing purposes." It also provides enough water to fill the needs of the 250 head of livestock on the place. Like, Hamer, Isringhouser used the services of the M.J.M. Electric Cooperative to power the water pump.

Bradley previously had drilled a 230-foot well at his farmstead site. But, the water was salty and there was not enough of it, he explains, "This ground is full of quick sand and it is hard to find good water."

Found Good Water

He did find good water though, but it was 1,800 feet away from the house. "Some people told me I should put up an elevated storage tank." Electricity put this out of the picture entirely.

"We had electric service where I had the good well so I decided to use it to pump the water all the way to where I needed it," he points out.

The distance was partly uphill and Bradley had to figure some way of overcoming the 20 feet rise in elevation, plus the friction loss in water



FRANK HAMER inspects his water supply, a spring, on his farm near Piasa. Hamer ran 1,500 feet of plastic pipe from this spring to his barnyard because he was almost out of water and the spring seemed to have plenty.

pressure. He solved these two problems by using copper pipe, which cut friction loss to three pounds.

Cost Ran \$1,000

He used a deep well pumping head and an half-horsepower pump. He says it cost \$1,000 to install the system four years ago, "But it was money well-spent."

Besides an adequate supply at his home place near Omaha, Bradley has connected taps on the main pipeline. "The main line acts as a distribution system. I can take off at either of two fields, or at the feedlot." He is a member of Southeastern Illinois Electric Cooperative.

Four years ago, Mollet built a three-acre pond on a back pasture on his farm near Pocahontas. "I was sort of hedging against the future," he

(Continued on Page Twelve)



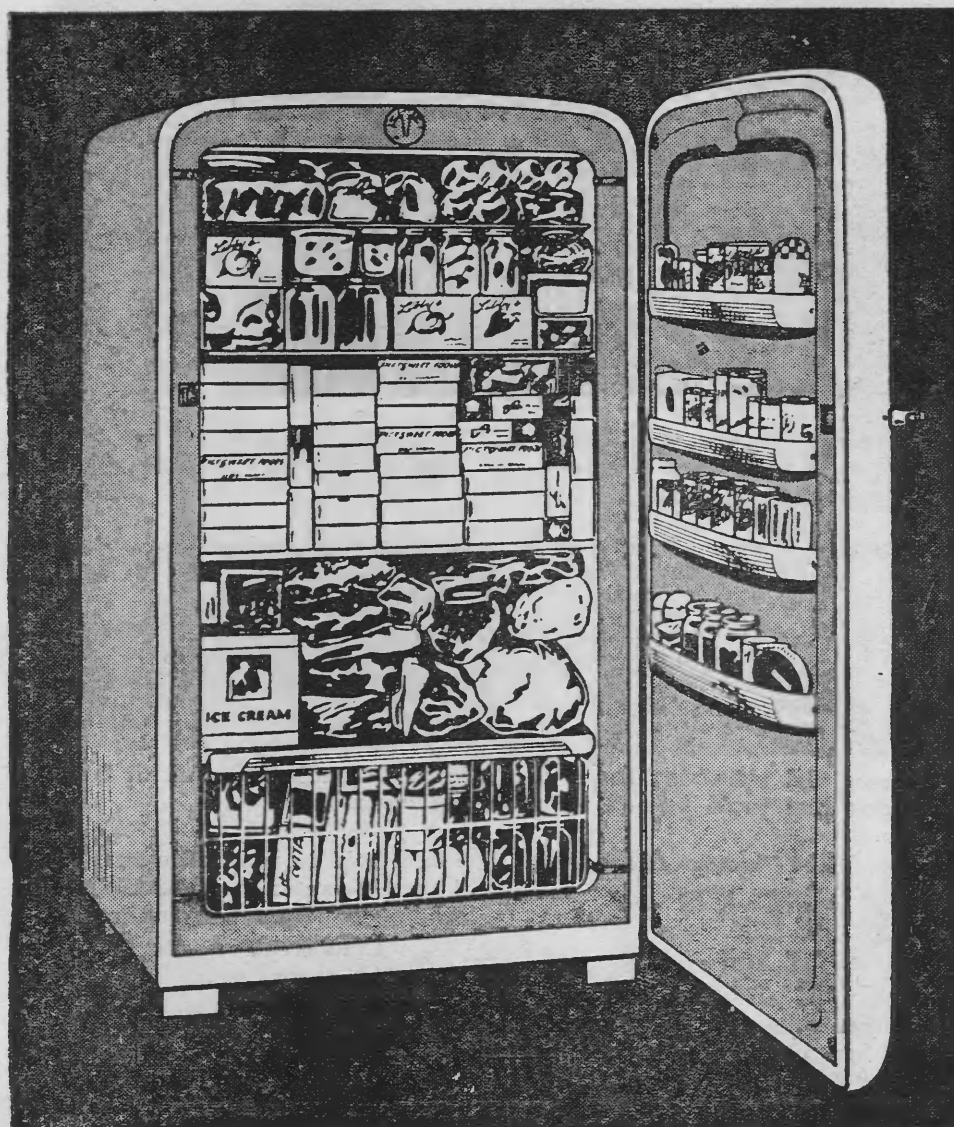
CURTIS BRADLEY laid 1,800 feet of copper pipe from a well to his home because of the availability of electric service. This pump provides the Bradley farm with all its water.

Before you buy any home freezer
SEE THE NEW 18^{cu.}ft. KELVINATOR

Holds 630 lbs. of food...costs

\$120⁹⁵ less

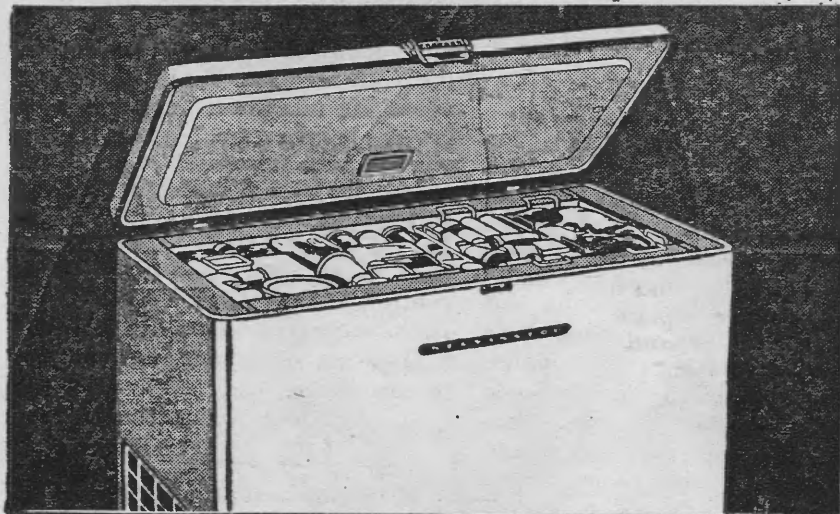
Here's large capacity in today's most compact freezer . . . and priced at \$120.95 less than previous comparable models.



Model FR-18V Illustrated. 18 cu. ft.—630 lbs. Frozen Storage

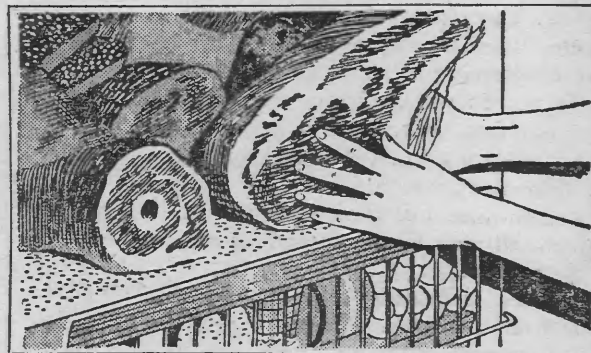
This revolutionary new space-saving design, exclusive in the new Kelvinator, gives more frozen storage in less wall space than any other freezer made. The only freezer so compact that it gives you 18 cu. ft. of freezing space in a cabinet only 31" wide. Looks like a refrigerator . . . fits the same space as a 10 or 11 cu. ft. refrigerator. It is Kelvinator quality construction throughout and will give more years of trouble-free service.

Model FR-15D—15^{cu.}ft.—525 lbs. Capacity.



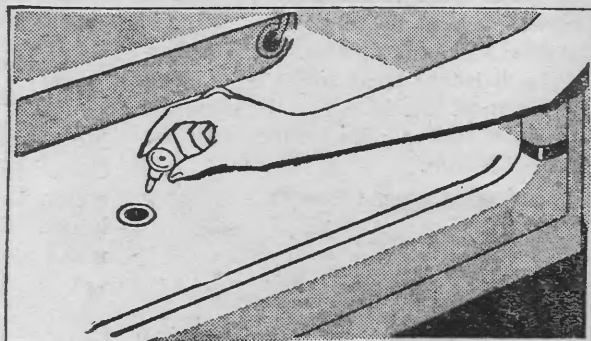
Faster freezing

New concentrated cold shelves . . . each a sub-zero, fast freezing surface. Adjustable top-shelf and big slide-out storage basket for odd shaped packages.



Easier defrosting

Special drain outlet eliminates the messy mopping up of defrosting water . . . exclusive with Kelvinator. Kelvinator's famed Polarsphere cold-maker assures long life and dependable performance.



PERFECT SHOPPING BAG FOR FROZEN FOODS

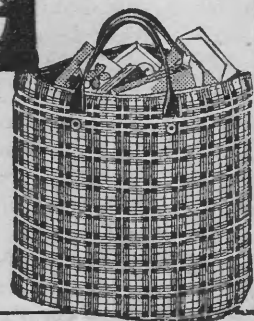
"VALUE DAY" SPECIAL!
THERM-ALL BAG

Fully insulated. Perfect for bringing frozen foods home without thawing. Ideal for picnics. 17" x 18". Zipper top. Red and black plaid vinyl cover. Double stitched. Water proof plastic lining. Only at Kelvinator dealers.

\$2.95
 Value

ONLY

99¢



You get most space at less cost in chest-type Kelvinators, too.

Freezes fast with 5-Wall Cold. 36" counter height makes convenient work surface. Self-raising lid opens at a touch of the latch.

Roomy storage basket simplifies storage. "Pastrack" with 3 shelves for storing fragile pastries and baked goods.

See the 40th Anniversary Kelvinator Home Freezers at your Kelvinator dealer's. You will find the type and size to best fit your purpose.

See your **Kelvinator** Dealer!

Division of American Motors Corporation, Detroit 32, Michigan



Home-makers' Page

Edited by Kay Conlan

August Menus Call For Frozen Desserts

A frozen dessert seems just right for an August menu—and there are so many countless variations on the ice cream theme, that ice cream can be depended on to fit any occasion.

Ice cream and sherbets made at home are not necessarily more nutritious than those sold by reliable commercial firms, but many homemakers feel that they can be more certain of satisfactory condition, variety, quality and wholesomeness when they make it themselves. Then, too, the family can derive much pleasure from the experience.

Here are some helpful suggestions for getting best results with refrigerator frozen desserts:

Five Hints

1. Have layer of ice cream in tray rather thin. Use more than one tray if necessary.

2. Turn control of refrigerator to coldest point about one-half hour before freezing time. Keep at this temperature until the ice cream is frozen.

3. Place the tray or trays containing the mixture to be frozen in the fastest freezing position. Usually this is the bottom of the freezing unit.

4. Do not freeze ice cubes at the same time.

5. After beating ice cream quickly return to tray. Refreeze. Hasten freezing by pouring one-fourth cup of water over freezing compartment where tray is to be placed.

The Coconut Cooler, (as illustrated) is a frozen treat you'll be making again and again. You'll love the delicate flavor of coconut and the tangy lemon.

Coconut Cooler

¾ cup evaporated milk
¾ cup granulated sugar
¼ cup light corn syrup
1 egg, well beaten
¼ cup lemon juice
2 teaspoons grated lemon rind
½ cup shredded coconut.

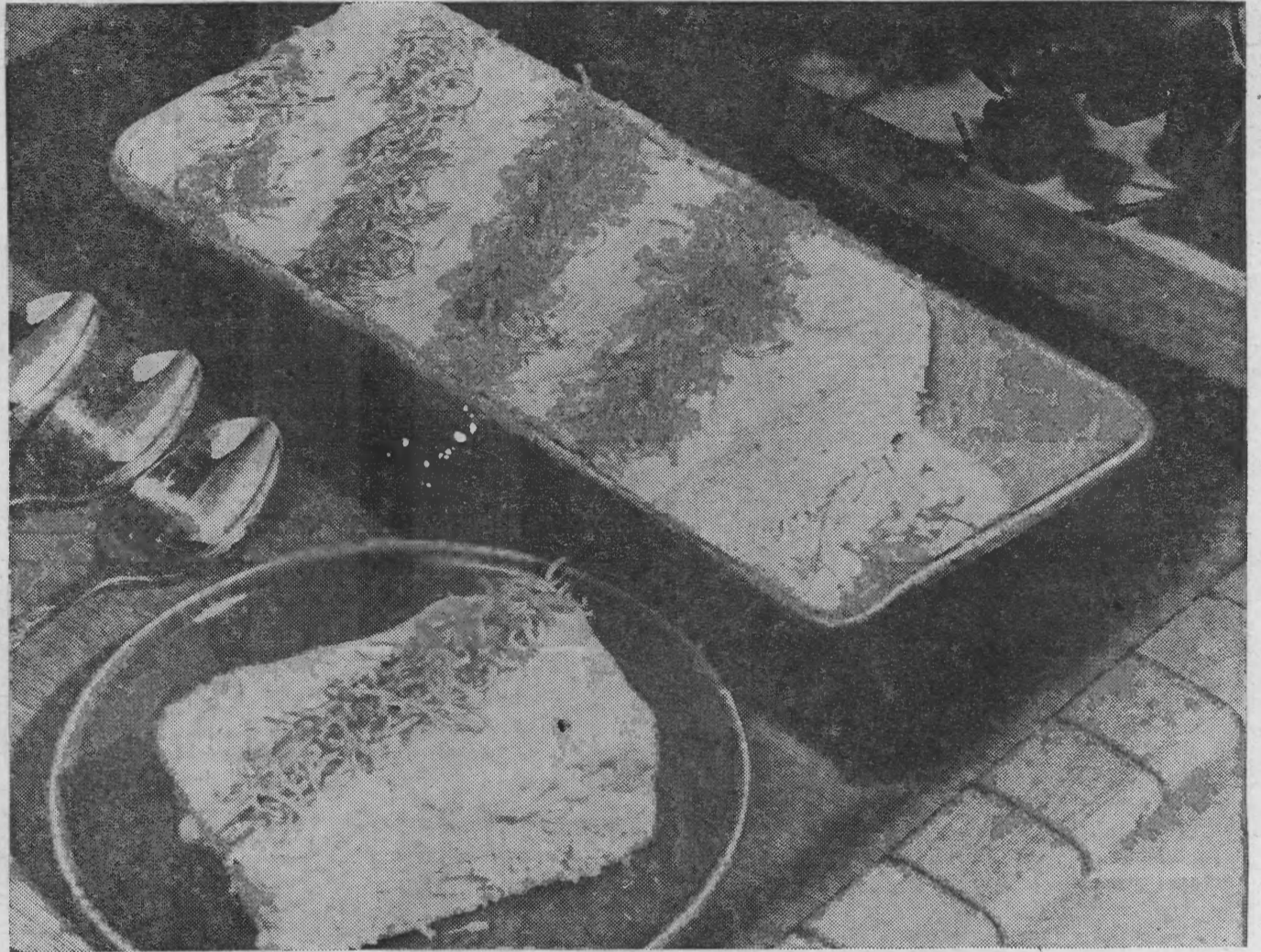
Pour evaporated milk into freezing tray of automatic refrigerator and chill until ice crystals form around the edges. Meanwhile, add sugar and corn syrup gradually to egg, beating thoroughly. Turn milk into chilled bowl and beat rapidly until milk thickens and holds its shape. Beat in lemon juice, lemon rind, and egg mixture. Fold in coconut and turn into freezing tray. Set control for coldest freezing temperature and freeze until firm—one to two hours. Serve topped with additional coconut, toasted, if desired. Makes four to six servings.

Six to eight people can be served with these Vanilla Ice Cream recipes. With the exception of ice cream containing marshmallows, these desserts will fill a freezing tray of usual size. The yield of the recipes containing marshmallows is ordinarily somewhat greater than that obtained with the other recipes.

Vanilla Ice Cream (Using gelatin)

1¼ cup milk
½ cup sugar
2 egg yolks
2 egg whites
2 teaspoons gelatin
1 teaspoon vanilla
1 cup whipping cream

Mix milk, sugar, egg yolks, and gelatin. Cook to custard or until coating forms on spoon, and cool. Add vanilla. Whip egg whites, and mix with custard. Place in freezing tray and freeze to a slush. Whip cream. Remove tray from refrigerator, mix partially frozen custard with whipped cream, and return promptly to freez-



You'll love the delicate coconut flavor and refreshing lemon tang of this Coconut Cooler. This frozen treat is a variation on the ice cream theme that you'll be making again and again.

ing compartment of refrigerator. Cover with parchment paper if ice cream is not to be served for several hours. The above proportions will make about a quart of ice cream.

2. Vanilla Ice Cream (Using flour or cornstarch)

1¼ cup milk
1 cup whipping cream
½ cup sugar
2 egg yolks
2 egg whites
1 tablespoon flour
1 teaspoon vanilla

Proceed as in the above recipe, cooking the flour with the custard. A tablespoon of cornstarch may be used in place of the flour.

3. Vanilla Ice Cream (Using marshmallows)

1½ cup milk
1 cup whipping cream
¼ cup sugar
2 egg yolks
2 egg whites
15 marshmallows
(4 ounces)
1 teaspoon vanilla

Slice marshmallows with kitchen shears and mix with milk, sugar, and egg yolks. Cook to custard and cool. Add vanilla. Whip egg whites and mix with cooled custard. Freeze to a slush in freezing tray, fold in whipped cream, and let harden.

Lemon Ice Cream

2 eggs
½ cup sugar
½ cup white corn syrup
1 cup milk
1 cup coffee cream
¼ cup lemon juice

Beat eggs until creamy; add sugar and beat thoroughly. Combine egg mixture with rest of ingredients. Freeze at lowest temperature until firm. Turn into a chilled bowl, break with a fork; whip until light and fluffy but not melted. Return to tray and refreeze. Serves six to eight.

Pineapple Cream

½ cup orange juice
1 cup pineapple juice
25 marshmallows, diced or 1 pint
marshmallow cream
1 cup whipping cream, whipped
1½ cups graham cracker crumbs

Heat fruit juices to boiling; add marshmallows; stir until dissolved. Chill. Fold in stiffly beaten whipped cream. Put between layers of graham cracker crumbs in refrigerator tray. Freeze. Make eight servings.

Red Plum Ice Cream

1 teaspoon gelatin
2 tablespoons cold water
8 red plums
¾ cup sugar
1½ cups water
2 tablespoons corn syrup
juice of 1 lemon
1 cup heavy cream, whipped

Soften gelatin in cold water. Cook together plums, sugar, and water about 15 minutes. Remove stones and force pulp through sieve. Add corn syrup and softened gelatin, and stir over heat until dissolved. Cool. Add lemon juice and fold in cream. Pour into freezing tray of automatic refrigerator, set temperature control to coldest point and freeze two to four hours, stirring once during freezing.

Strawberry or Pineapple Ice Cream

2 egg whites
¼ cup sugar
½ teaspoon salt
¾ cup white corn syrup
3 tablespoons water
2 cups fresh or frozen strawberries or
1 cup crushed undrained pineapple
½ cup evaporated milk (icy cold)

Wash and hull fresh strawberries. Put fresh or frozen strawberries through a coarse sieve. Mix together egg whites, sugar, salt, corn syrup and water in the top of a double boiler. Place over boiling water and cook beating constantly until mixture stands in peaks. About six minutes. Cool. Add strawberries or pineapple to cooled egg white mixture. Chill thoroughly. Whip cold evaporated milk vigorously with rotary beater until stiff and fluffy. (If milk does not whip, it is not cold enough). Fold whipped milk into fruit mixture. Freeze at lowest temperature in tray of automatic refrigerator. Do not stir. Serves six.

Frozen Applesauce

2 cups unsweetened applesauce
¼ cup sugar
¾ cup orange marmalade
1 cup whipping cream, whipped

Add sugar and marmalade to apple

sauce. Fold in whipped cream. Pour into refrigerator tray. Freeze without stirring at lowest temperature.

Cranberry Fruit Sherbet

1 cup sugar
¾ cup water
½ cup molasses
3 bananas
½ cup orange juice
¼ cup lemon juice
1 cup fresh cranberry pulp or
1 cup canned cranberries
2 egg whites
2 tablespoons sugar

Boil sugar and water for five minutes. Add molasses and chill. Force bananas through a sieve. Cook two cups of cranberries with one cup of water until soft, then force through a sieve and chill. Combine banana pulp. One cup of the cranberry pulp, and the fruit juice, and add to the molasses syrup. Beat the egg whites until foamy, then beat in the two tablespoons of sugar. Combine with the fruit mixture. Place in tray of automatic refrigerator and freeze at lowest temperature. When frozen one-half inch from sides of pan, beat thoroughly with a spoon, being careful not to allow mixture to melt. Return to refrigerator and continue freezing to right consistency. Turn control back to normal storage temperature. Serves six or eight.

Here are some delicious toppings for ice cream.

Chocolate Mint Sauce

1 cup chocolate mints
2 tablespoons honey
½ cup heavy cream

Melt chocolate mints in top of double boiler. Add honey and cream. Beat until smooth.

Honey Butterscotch Sauce

½ cup brown sugar
½ cup water
1 teaspoon cornstarch
½ cup honey
2 tablespoons butter

Mix sugar and cornstarch, add water, honey and butter. Cook to the soft ball stage. Cool slightly before serving.

Looking For A Few New Handiwork Ideas?

Another Group Of Patterns To Keep Hooks, Needles Busy

If you enjoy crocheting and sewing, like most other homemakers you are undoubtedly always on the lookout for new ideas and patterns. From our list of the eight free pattern leaflets available this month, perhaps there is something you'd like to order.

As always, our pattern leaflets are available without charge. You will find the coupon below a handy and convenient way to order patterns. All you have to do is enclose a clearly SELF-ADDRESSED and STAMPED envelope (the larger size, if possible) for every THREE pattern leaflets you are requesting. Orders for patterns on this list must be postmarked on or before August 31, 1954.

1. **STRIPED BAG AND PURSE**—this comfortable tote style combines flamingo, yellow, white, blue and killarney green. Firm body and novel effect is guaranteed by crocheting over six strands of rug yarn.

2. **CROCHETED ROUND RUG**—if you want to perk up your home with color and gain lots of pleasure by doing so, you'll want to make this round rug. Without knotted fringe, the rug measures 33 inches in diameter.

3. **SQUARE DOILY—ROSE CENTER**, made of white mercerized crochet cotton and edged with green and featuring a pale pink rose with raised petals in the center.

4. **ROUND BIB**—crocheted in single crochet stitches with a triple row of popcorn stitches for the edging. Tiny buttons and button loops form neat closing at back of neck.

5. **CROCHETED HAT**—the narrow brim of this simple hat flares slightly on one side, and twisted cord ties in bow at side. It is made in single crochet stitches and can be made to fit any head size.

6. **TARTAN PLACE MATS**—You'll be amazed when you see how easy and quick this place mat is to make. Start with a filet crochet base and weave strands of thread vertically and horizontally to form tartan design. Each place mat measures 12 by about 18, including fringe.

7. **BEDROOM ENSEMBLE**—Softly ruffled chintz is a beautiful choice for covering a vanity table and companion pieces, and complete directions for all are included in the pattern.

8. **CHUNKY JACKET**—perfect to slip on over a silk dress or to wear with a skirt and blouse. The jacket ends just above the waist in a bolero line. It is crocheted in a diamond pattern using either single or double yarn throughout.

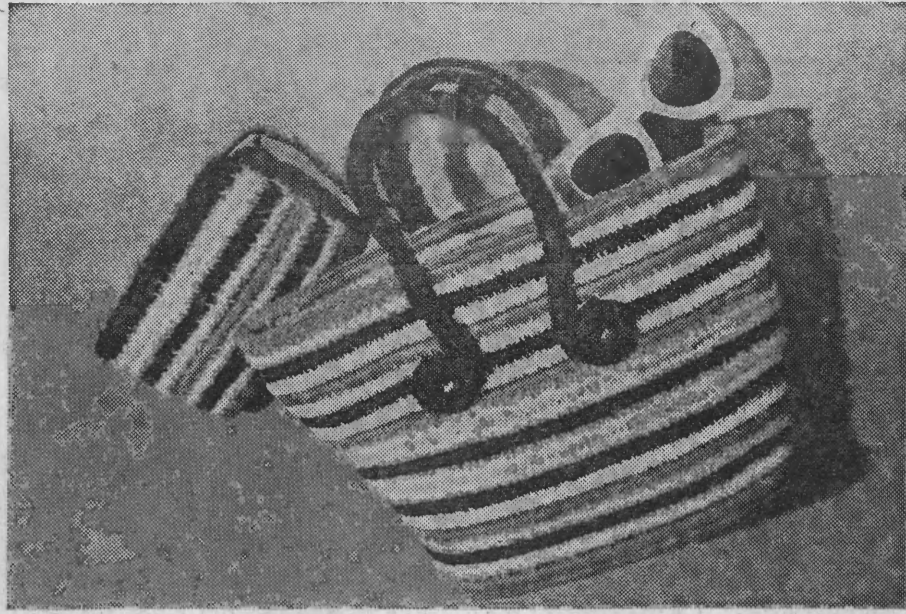
Dress Pattern Size

When you buy a pattern for a dress, remember that patterns are based on actual body measurements. But in ready-made clothing, the measurements are not based on actual body measurements.

If you don't already have accurate measurements, have someone take them for you. Measure the fullest part of your bust, your waist and the fullest part of your hips.

Then when buying a pattern, let the bust measurement be your guide. It is usually easier to alter the hip or waistline than the bust.

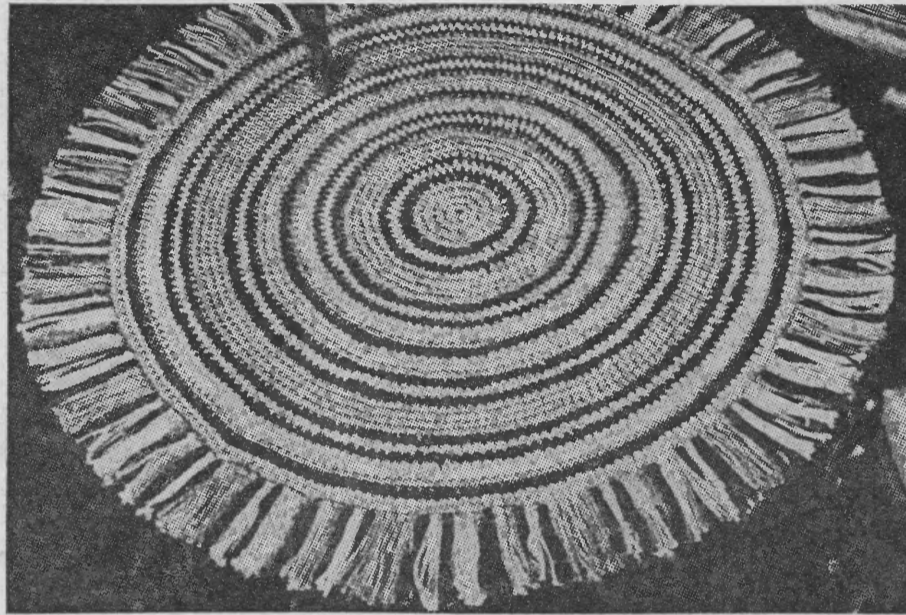
When your actual hip measurement varies several inches from that of the pattern, you may want to buy two patterns—one according to your bust size and the other according to your hip size. The waistline would then be the only part you'd need to alter.



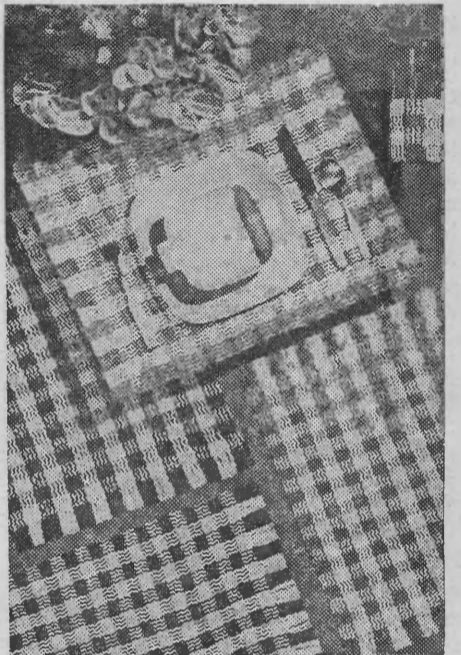
1 Striped Bag And Purse



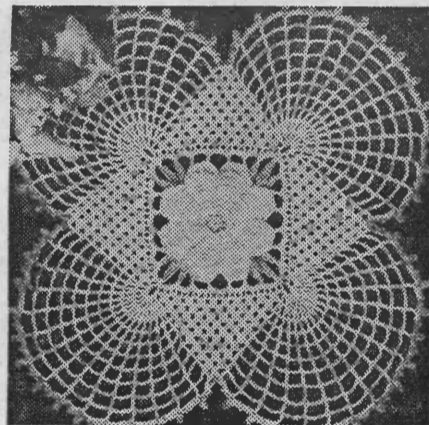
5. Crocheted Hat



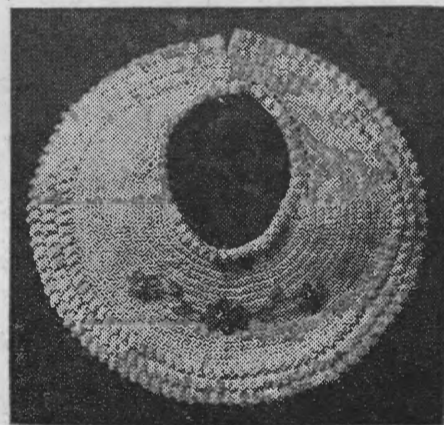
2. Crocheted Round Rug



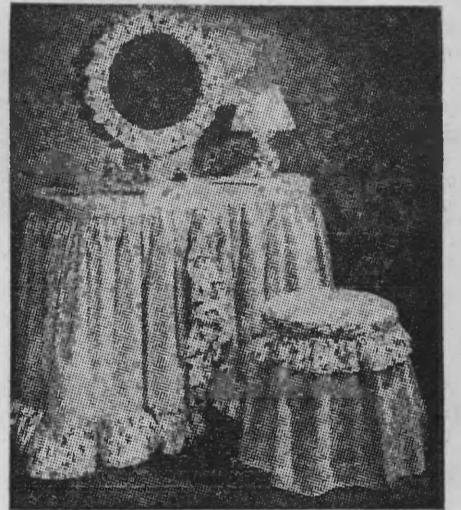
6. Tartan Place Mats



3. Square Doily—Rose Center



4. Round Bib



7. Bedroom Ensemble

Pattern Order Coupon

Kay Conlan
ILLINOIS RURAL ELECTRIC NEWS
Box 1180
Springfield, Illinois

Please send me without charge the pattern leaflets which I have checked below. I am enclosing a STAMPED, SELF-ADDRESSED envelope for every THREE patterns requested. (If possible, the envelope which MUST accompany all pattern orders should be of the larger size.)

- | | |
|--------------------------------|-------------------------|
| 1.....Striped Bag And Purse | 5.....Crocheted Hat |
| 2.....Crocheted Round Rug | 6.....Tartan Place Mats |
| 3.....Square Doily-Rose Center | 7.....Bedroom Ensemble |
| 4.....Round Bib | 8.....Chunky Jacket |

My name is.....

Address

Comment (if any)

This coupon EXPIRES AUGUST 31, 1954. Orders must be postmarked by that date.



8. Chunky Jacket

Electric Farming

By BOB PEART

Agricultural Engineer, University of Illinois

THIS new column is written to inform you of new agricultural engineering developments and how Illinois farm families are using them. Applications of electricity will be emphasized.

You are paying for some of the agricultural engineering research and field work here. This is not only through taxes, but through your electric co-op's membership in the Illinois Farm Electrification Council. Your contribution is about a half cent a month.

The Illinois Farm Electrification Council is made up of rural electric co-ops, power companies, and the University of Illinois. Associate and advisory members include associations of manufacturers, dealers, electrical contractors, insurance companies, the I.A.A., Illinois Home Bureau, and vocational education groups.

Stated Purpose

The stated purpose of the group is "to advance agriculture through the economical, efficient, and safe use of electricity". This means to find out, through research, and then tell you about new ways to save or make money, save labor, or live more comfortably through the use of electricity. All of the participating groups have this common purpose as part of their work, so it makes sense for them to combine and cooperate on them. For example, your insurance company, your electric co-op, and your electrician want you to have adequate and safe wiring. In the Council they can combine their educational efforts on that subject.

Council work includes voluntary committee work by many interested representatives and also research and education. Research work in developing the Illinois Feed-O-Mat, automatic feed grinding system, has resulted in getting this equipment on the market. The system is in use on about 25 farms in the state. Field research includes getting information on new equipment under actual farm conditions. The field work also includes helping with field demonstrations.

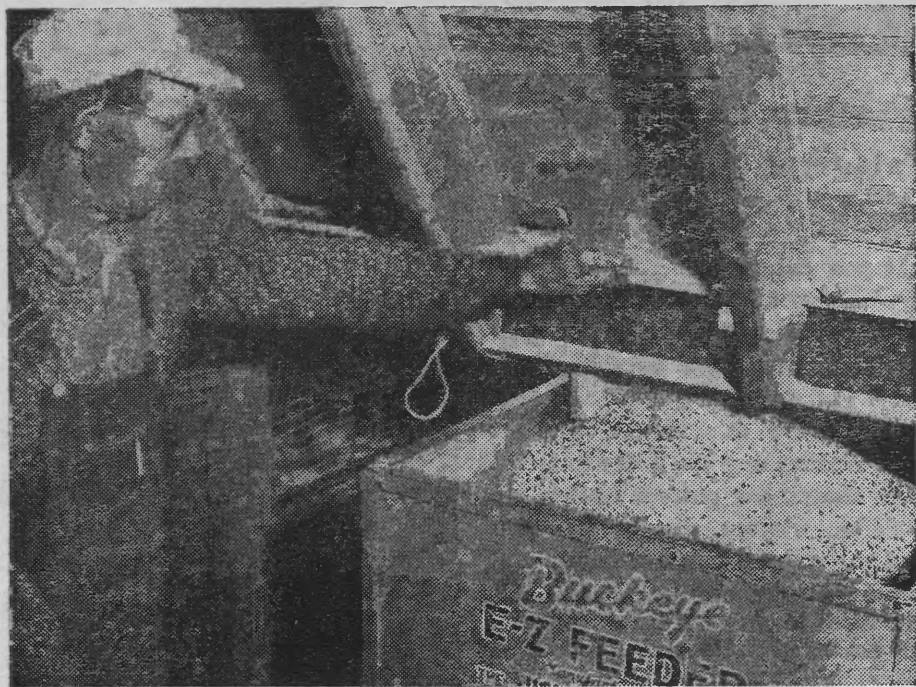
In the Council there are commit-

tees on vocational agriculture and 4-H electric projects, handbook for electrical leaders, farm safety, research, exhibits, farm lighting, farm water systems, and information.

An example of the committee work is the Vocational Agriculture Electric Project Committee's help with electric motor kits used in high school vocational agriculture classes. The University has provided these kits, and almost 50 power supplier representatives all over the state train vocational agriculture teachers in the use of the kits. They also store them and give additional help to the teachers when needed.

Another example is the work of the Council's 4-H committee. About 60 people from power suppliers helped instruct some 1530 4-H members in farm electricity projects last year. Cash awards and educational trips to Chicago for 4-H members were sponsored to encourage good work in the projects.

Illinois has one of the few Farm Electrification Councils in the nation and can be proud of its progressive program.



FIVE TONS of chicken feed, packed in 200 sacks is a lot of weight to move around. That's one reason why N. N. Vann of Ripley changed over to bulk feed at his 15,000-broiler house. (His overseer, Robert Portwood is pictured.)

Vann says a truck used to deliver the feed twice a week. But, now that he has gone in for bulk feeding, the truck comes only once a week. Besides saving work, he figures the bulk system saves him around \$2.50 a ton.

In his two chicken houses, Vann has installed large bulk bins. These bins empty into the hoppers of automatic feeders. Neither Vann, nor Portwood have to lift a sack of feed in the two houses.

According to Vann it cost around \$500 to construct the feed bins. But, he figures to retire the investment with the savings realized from buying bulk feed. Vann gets his electric service from the Adams Electrical Co-operative of Camp Point.

Senate Votes—

(From Page Two)

AEC to sign a 25-year contract with the two firms—Middle South Utilities and Southern Company—to furnish TVA with 600,000 kilowatts of power from a \$107 million plant at West Memphis, Ark. This new power would supply Memphis, Tenn. so TVA wouldn't need a proposed \$100 million steam plant at Fulton, Tenn. Under the agreed rates, however, TVA and AEC would together pay between \$90 and \$140 million more for power than AEC would pay TVA.

President Comments

Senator John Sherman Cooper (Ky.), only Republican senator in the TVA area, joined 33 Democrats, Senators William Langer (R N.Dak.) and Wayne Morse (Ind. Ore.) in opposing the AEC-private power contract.

Earlier that day, reporters asked President Eisenhower if he wasn't interfering in AEC's operations. AEC had originally turned down the contract. The President said he didn't regard AEC as an independent commission but as one requiring his supervision. He said he would continue to support TVA as it is now with his full strength.

After the Senate refused to prevent AEC from signing the contract, Senator Homer Ferguson (R Mich.) moved to approve the contract. Opponents of the AEC-private power deal asked for a roll call vote but lost, 35-56. Ferguson's motion then carried by voice vote.



LINEMAN:

Hi, Ed! In a minute you'll have all the REA power you can use.

FARMER:

I'm sure glad. We need it!

LINEMAN:
What equipment are you buying first?
FARMER:
An electric water system.



LINEMAN:

What type of pump do you need?

FARMER:

Don't exactly know.

LINEMAN:

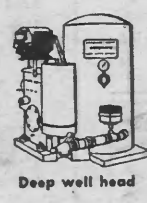
Why don't you ask the Fairbanks-Morse dealer?

that's right...ask your

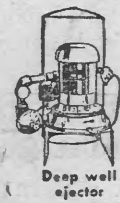
FAIRBANKS-MORSE PUMP DEALER

He has shallow well and deep well pumps, deep well heads for farmers who must go to great depths for water, submersibles—the kind in which both motor and pump operate under water, convertibles—that can function as shallow or deep well units, pumps that operate on the ejector principle and others that use pistons . . . all in a wide range of pumping capacities.

The next time you go to town, ask your Fairbanks-Morse dealer to help you plan a water system to meet the needs of your family and farm. If you do not know where to find the nearest Fairbanks-Morse dealer, write directly to Fairbanks, Morse & Co., Chicago 5, Ill.



Deep well head



Deep well ejector



Shallow well ejector



Shallow well piston pump



Multistage pump



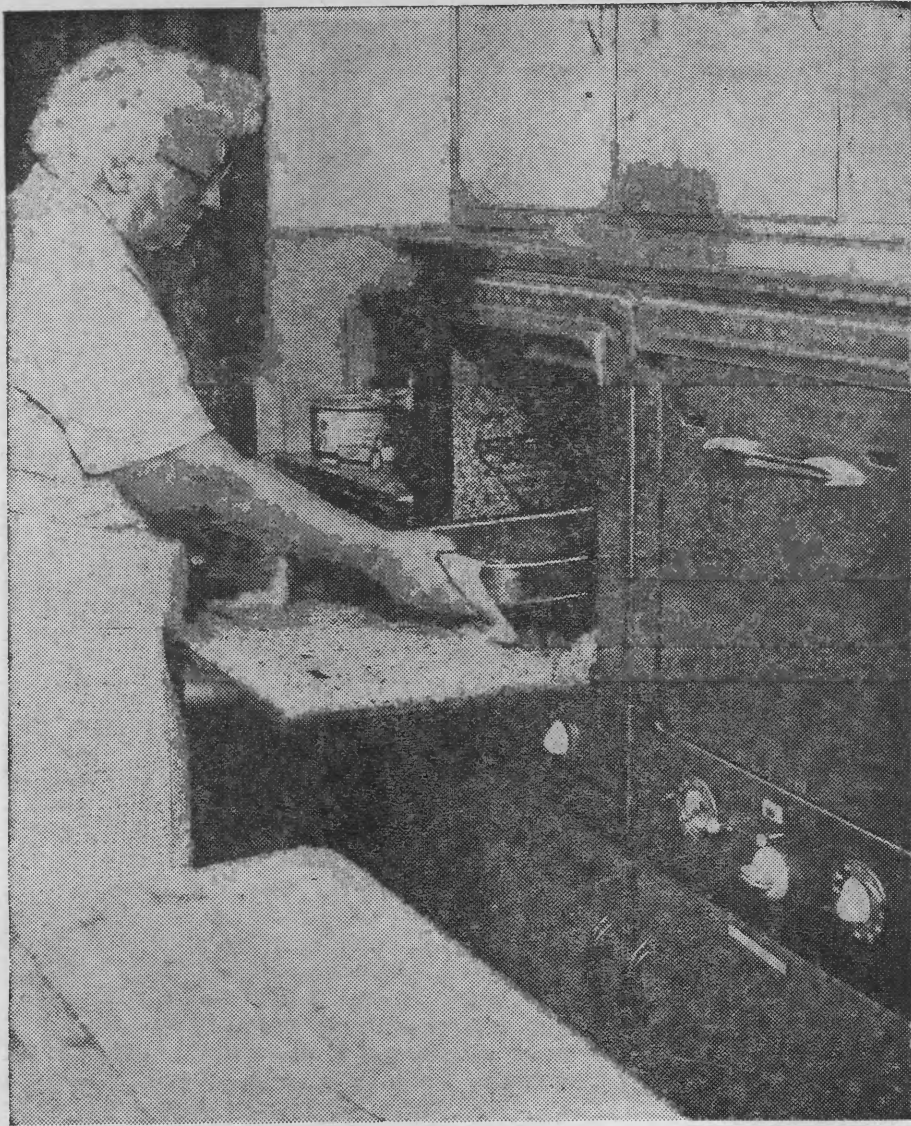
Submersible pump



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MAGNETOS • MOTORS • SCALES • DIESEL LOCOMOTIVES AND ENGINES



ELECTRIC WALL ovens were just the thing for Miss Amy Angleton, when she remodeled her country home into a tea-room. "I needed an oven I could reach and which would be out of the way," These wall-ovens neatly fitted the requirements.

In addition to the ovens, Miss Angleton installed two table-top electric ranges, almost in the center of her kitchen. "Electric appliances can't be beat," says the tea-room owner.

"I used to think electricity didn't

get hot enough. And, for a while I was going to put in gas ranges." However, Miss Angleton says she read about these new ranges, and decided to try them instead of gas.

Miss Angleton's business caters to large, or small groups. All the food is prepared according to prior reservations. "My business isn't large enough for me to stay open all the time," she explains. "I'm only trying to make a living out of cooking." She is a member of the Shelby Electric Cooperative.

* * * * *

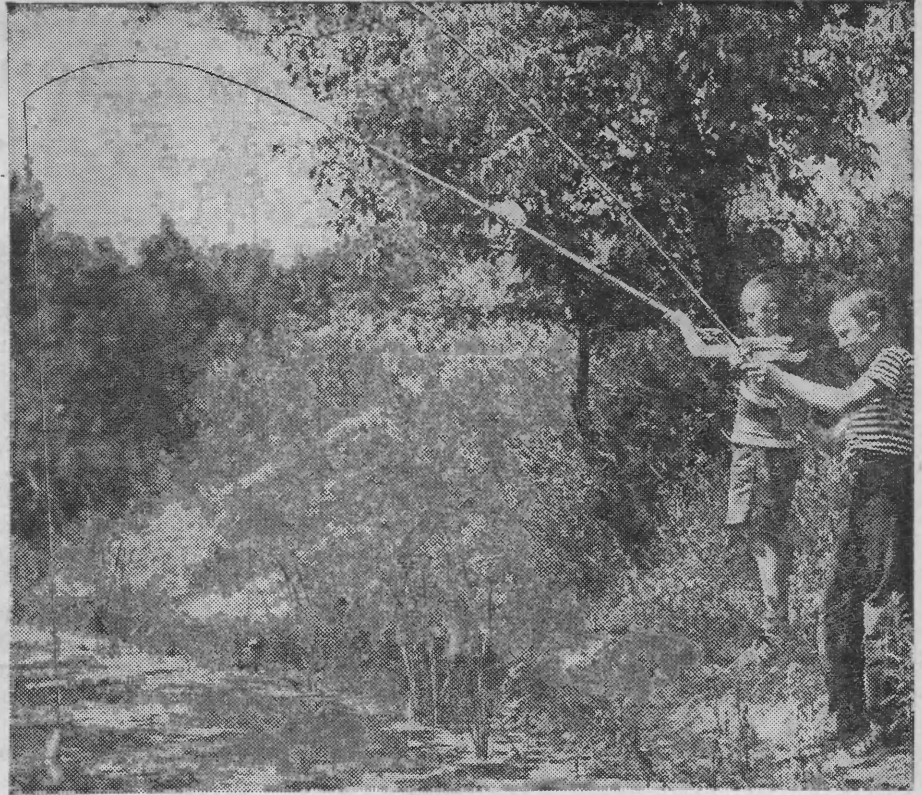


GUS HAAS of Elizabeth believes nothing can compare with electricity. That includes handpower, gasoline motors and tractor engines. At one time, or another he has used all.

Still, his co-op electricity rates number one, he says. "All you have to do is turn the switch. No cranking, no backaches." According to Haas, who is a dairyman, "I just don't believe I would have kept dairying without it."

Haas, like other dairyman, uses it to milk, cool the milk, and also to clean his barn. He also uses electricity to help with other chores around the place, like powering this portable saw, pictured.

A member of the Jo-Carroll Electric Cooperative of Elizabeth, Haas, also says that electricity has enabled him to increase his milk herd by four cows. He maintains a herd of 30.



THE FISH are always biting at Indian Trails ponds, a new business enterprise recently launched along the lines of Illinois Valley Electric Cooperative of Princeton.

Norman Hulse, an undertaker in Ottawa, bought three ponds in western LaSalle County, near Starved Rock State Park. He stocked them with 80,000 pounds of assorted fish including catfish, crappies, blue gills, bull heads, large mouth bass and northern pike. He adds more fish to keep the volume up to 80,000 pounds and the fishing prospects are good

for the anglers who pay \$1.50 a day for the privilege of pulling out 10 big ones or a limit of 20 small ones. The minimum size of the stocked fish is said to be six inches.

The youngsters above display samples of the ponds' stock. Ronald Kutz, 10, of Oglesby and his cousin, Donald Kutz, seven, of Chicago, each had a string of fish to take home after a few hours of angling.

Hulse is adding a concession stand, rest rooms, and picnic stands for the convenience of his many customers. He is also building a fourth pond.

* * * * *



RURAL COOPERATIVE electricity is assisting the further development of small farm industries. Harold Hall, operator of a feed processing plant near Bible Grove, attests to this fact, as he pours feed into the electric mixer.

According to him, "Electric power is more economical and easier to handle than gasoline engines. We wouldn't be here if we didn't have it. I work the place myself and I wouldn't have

enough time to start and stop the gas engines."

Hall's small plant, located in the heart of a rural area in Clay county, does custom grinding and mixing. The customer brings in his grain, and "We grind it and mix it according to his specifications," Hall explains.

Some of the customers feel they save as much as \$20 a month by mixing their own feed this way. The plant is connected to the lines of the Clay County Electric Cooperative of Flora.

REA Will Have \$245 Million In New Loan Funds For Year

A total of \$245,000,000 in new REA loan authorizations and \$7,285,000 for administrative expenses of the agency is provided in the 1955 Agriculture appropriation act, which became law June 29 with signature by President Eisenhower. Of the new loan funds authorized, \$170,000,000 are for the rural electrification program and \$75,000,000 for rural telephones.

As a result of this appropriation, REA estimates that during the year which began July 1, 1954, it will have \$225,000,000 available for electric loans. This is accounted for by the regular loan authorization of \$135,000,000; \$47,000,000 as a carryover from last year, \$8,000,000 in rescissions of previous loans, and a contingency fund of \$35,000,000.

The contingency loan authorization is a special fund provided by Congress to be drawn upon by REA in case loan demands cannot otherwise be met. The chief use of the fund is to meet loan demands in specific states which could not otherwise be taken care of because of the state allotment formula in the Rural Electrification Act.

Contingency Fund

The contingency fund is subject to the formula but it can be used to provide additional lending authorization when required in a state.

During the past year, for example, REA had a contingency authorization of \$45,000,000 and found it necessary to use \$38,000,000 of it to meet loan demands in certain states. The balance of \$7,000,000 was not needed and was not drawn from the Treasury.

The regular electric loan authorization of \$135,000,000 for 1955 was agreed upon in conference after the House had originally provided \$100,000,000. The \$35,000,000 was added on the Senate floor June 2 by a roll call vote of 42 to 40. A proposal to increase the contingency authorization by \$35,000,000 was defeated the same day by a roll call vote of 61 to 22.

In the telephone program, total

Long Pipelines—

(From Page Six)

admits. "I didn't expect the drought we had though."

Couldn't Supply Needs

And, when the drought came, Mollet says his wells couldn't produce enough water for his 35 to 50 head of feeder cattle. "I had to do something. I knew for sure though, I wouldn't truck water. I would have gotten rid of cattle entirely before I did that."

Mollet looked for a way to use his pond. He decided he could pipe it in with plastic pipe. For around \$1,000 he installed a pump at the pond and 1,800 feet of the plastic pipe.

Along the way, Mollet installed three hydrants, so as to be able to put water in anyone of four fields and three feedlots. "All of this farm is in grass," he explains. "I use it only for the cattle."

Saves Much Work

This system saves Mollet a lot of work and as long as the water in the pond holds up, "I won't be hauling any." Electricity from the Southwestern Electric Cooperative helped to make this possible.

loan funds of about \$85,592,000 will be available for the fiscal year. In addition to the new authorization of \$75,000,000, there will be \$8,592,000 in carryover from last year and an estimated \$2,000,000 in rescissions.

In fiscal year 1954, \$215,000,000 was available for electric loans and \$82,000,000 for telephone loans. Telephone loans last year were the highest in the history of the program, and electric loans were the largest since 1951.

REA's 1955 administrative fund authorization of \$7,285,000 is \$200,000 more than was originally provided in the President's budget estimate for this year but it is less than the amount spent for administration of the program last year.

In raising the budget estimate by \$200,000, the Senate recommended that REA use the money "to handle new problems and developments in both the electrification and telephone programs, including the additional workload occasioned by the increased loan authorizations, and the giving of appropriate attention to the possibility of utilization of atomic energy for electric power generation in rural areas."

New Manager



The board of directors of Edgar Electric Cooperative of Paris announced last month the appointment of Maurice Johnson as manager of the electric cooperative.

Before he assumed his new position, Johnson had been system engineer for the Parke County Rural Electric Cooperative of Rockville, Ind. for four and a half years. He is an electric engineer having taken his degree at Purdue University. At one time he was employed by the United States Navy as an instructor electrician at Pearl Harbor.

Johnson was born and raised on a farm in Indiana. He is married and the father of two children, Maurice Jr., eight, and Linda Jean, three.

Latest Crop Drying Equipment Shown At Field Day

Farmers who attended the two-day field day near Wyoming, July 15 and 16, saw in actual operation, some of the latest crop conditioning equipment available.

A tour of the exhibits conducted by F. W. Andrew of the University of Illinois, explained how each piece of machinery worked. Included were a variety of hay and corn drying outfits, storage units, moisture testers, and fans. Also on display were a wide assortment of tractors, picker-shellers and other harvesting equipment.

Following the tour of exhibits, was a discussion program on feeding values, storage, harvesting and marketing as related to crop drying.



CO-OP MEMBERS of Southeastern Illinois Electric Cooperative of Eldorado, can find out how superior an electric range is to any other kind, without buying one. The co-op recently started a range rental service.

According to Joe Ladley, power use adviser, the service was inaugurated mainly for tenant farmers who can't get their landlords to install three-wire service and don't feel they can afford to do so themselves.

"However, we're finding that many of the people who rent the ranges, decide to buy them after they've used them a short time," Ladley adds.

Under the rental arrangements, the co-op installs a \$191 range and charges \$6 a month rental for the

first 12 months. The rental scale decreases downward each year. At any time during the first year, the member can apply the entire amount paid in rent to the purchase price of the range.

Mrs. Sherman Waller (pictured) of Thompsonville, rented a range from the co-op in June. "We wanted a new range but couldn't afford to pay for it at the time." She formerly had an oil stove.

Mrs. Waller says she is delighted with her new electric stove. "It's a whole lot cooler and cleaner and quicker than oil," she explains. She and her husband plan to apply the rental fees against the outright purchase of the range. The Wallers farm 60 acres on which they raise mostly grain crops.

To Crown Beauty Queen At Association Meeting

The Association of Illinois Electric Cooperatives will hold its annual meeting, September 2, 3, at the Abraham Lincoln Hotel in Springfield. The selection of Miss Illinois Rural Electrification will be a highlight of this year's meeting.

President Clay Trimble will call the first day's meeting to order. Association Manager A. E. Becker will report on the activities of the state organization. Director R. L. Stanford will give the secretary-treasurer's report.

There will also be reports by S. R. Faris of the Managers Association; A. L. Hinrichs, Illinois Job Training and Safety Committee; Glenn E. Strong and C. M. Scott, safety instructors; John J. Perino, Bookkeepers and Accountants Association; and Robert Yeast, Power Use Advisers Association.

Vice-President Carl Bloome will preside over a luncheon on Thursday in the hotel's Palm Room. Roy Zook, assistant administrator of the Rural Electrification Administration, will address the afternoon session.

A panel type of work session will be featured at this year's meeting. Following Zook's talk, discussions will

be held on research and co-op management.

A banquet will be held Thursday evening at which time Lt. Governor John W. Chapman will speak. He will also crown Miss Illinois Rural Electrification. She will be chosen from candidates selected at recent cooperative annual meetings.

Winners of the talent contests, also held at the local co-op meetings, will be presented and judged at the banquet. John LaMothe will provide musical entertainment.

The election of three directors will be held during the Friday morning session. There will also be reports of the credentials committee, the budget committee, and the resolutions committee. A power use skit and a report by Raymond Pitchford, Illinois director on the National Rural Electric Cooperative Association board, will also be heard.

Panel discussions on job training and safety, power use, and the rural telephone program will highlight Friday's afternoon work sessions. Summary reports of the various workshop topics will be presented to the convention by panel chairmen.

A special ladies program is being planned for the opening day of the meeting.

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YOUR Co-op NEWS COLUMN

NEWS FROM Southern Illinois

Dongola, Illinois
George Endicott, Mgr.

Office Hours—7:00 a.m. to 4:00 p.m. Monday through Friday also the first two Saturdays of each month. Outage reports during office hours should be made to Dongola 79-R-3, after office hours to Dongola 39-R-20 or 74-R-30. Members in Metropolitan area call Metropolis 3100 or Tom Willis Round Knot Exchange.

We are planning very strongly on seeing you at the annual meeting. Fun and entertainment will be provided for everyone, so you can enjoy yourself while transacting co-op business.



George Endicott

There is to be a show put on by General Electric, called the House of Magic, which will last over an hour. This is highly mystifying as well as informative.

Ortheldo, and Dorthea, well-known entertainers from Springfield, will provide feats of hypnotism and other entertainment. There will also be a local talent contest.

The winner of the talent show will receive an expense paid trip to Springfield and represent our co-op at the state annual meeting this fall. From each county in our area will come a talented beauty to compete for the honor of Miss Southern Illinois Electric Cooperative.

The winner and her chaperon will go to Springfield this fall where she might win the honor of being Miss Rural Electrification of Illinois and to represent Illinois at the N.R.E.C.A. meeting in Atlantic City, N. J. next January, where Miss Rural Electrification of America, will be chosen.

MUCH MORE

There will be displays of electrical equipment and appliances and other labor-saving devices. The 4-H electrical clubs will have an exhibit of their projects.

Sandwiches, cold drinks, pie, ice cream and cake will be on sale at the meeting by the Pulaski-Alexander County Home Bureau. Along with the day's program, time will be taken to conduct co-op business. As a member you should be there.

It took interested people attending meetings to get your rural electric service. Opposing interests fought it then, and are still fighting it. Now is a poor time to lose interest and take a "Let the other fellow do it attitude."

It is going to take all members pulling together to keep cheap and efficient rural electric service available to ourselves and to those who are still waiting for it.

Your annual meeting is a day of planning and altering for a bigger and a better co-op. There is strength in numbers so come to your annual meeting.

FREE MINIMUM BILL

From now until further notice there will appear in our monthly news column three farm and non-farm line locations of members and non-members. If you find your line location listed notify your co-op office and you will be allowed a credit of your minimum monthly bill on your next light bill.

The office must be notified before a new list of line locations appear in this news column. Your line location is printed on your billing book or you can find it on the transformer or meter pole. Now is the time to check and memorize your line location. It may mean a \$1.50 or a \$3 saving for you. Here are this month's line locations: A7 P.3E; B13 P.237A; C29 P.61.

* * *

Reorganization is under way to set up one-man operation crews, one in the northern and one in the southern part of our area. Maintenance and general operation has become such that one man crews are feasible. When the reorganization is completed we will let the members know of the plans concerning the matter.

NEW RATE SCHEDULE

We are bringing to your attention again that the new rate schedule will be mailed with a year's supply of billing sheets the last week in August. This will be in time for your September payment. An explanation will accompany this mailing on how to use this new rate sheet.

The new rate sheet after the first 30 kilowatt-hours will be listed by fives. For example, if your meter reads 37 kilowatt-hours you use the

closest corresponding number of kilowatt-hours.

If your meter reads 38 kilowatt-hours you would use 40 kilowatt-hours on your rate sheet. The only exception is on your final bill. Use the actual number of kilowatts shown on the meter.

In order to eliminate future mistakes, please destroy all of your old rate sheets when you receive the new rate sheet. This will be the only rate sheet you will need. There will not be a separate rate sheet for water heaters. Be sure to read your instructions carefully as it will be advantageous to both of us.

NEWS FROM Clinton County

Breese, Illinois
Joseph Heimann, Supt.

TELEPHONE NUMBERS

From 8:00 a.m. to 5:00 a.m., Monday through Saturday, call Breese 76.

To report Line Outages or any other Emergencies before or after office hours, call Ernest Becker, Breese 69.
Robert Vander Pluym, Breese 278.
Robert Hintz, Shattuc 24R2.
Joseph Huelsmann, New Baden 88-3262.

When reporting an outage first check with your neighbors to see if they have lights, if not report it as a line outage. Keep this list near your phone or in your phone directory at all times.

The co-op office will be closed on Saturdays. Any emergency calls which must be made on dates when the office is closed or after office hours should be made to the phone numbers listed at the top of this column.



J. H. Heimann

Efficiency, economy, speed, and convenience; those four words are what you get when you use electricity for all chores on the farm and in the house. All four—and more—are yours at the flick of a switch. Electricity, in addition, is clean, safe, cool, dependable and modern.

Why be satisfied with less than the best? Only electricity does all the jobs. It alone cooks, washes clothes and dishes, heats water, refrigerates, irons, cleans, provides radio and TV news and entertainment, pumps water, dries hay and grain, shells corn, helps unload corn, and hundreds of other household and farm chores.

Electricity needs no other fuel to fill in and help it do some of the job. It does them all. It is an extra hired hand on the farm and a servant in the home.

MORE EFFICIENT

Electric ranges, refrigerators and water heaters are more efficient than gas-operated appliances. These are the long awaited results of impartial comparison tests of electricity versus bottled gas made by the U.S. Department of Agriculture.

Conducted by the Bureau of Human Nutrition and Home Economics at Beltsville, Md., a series of scientific tests showed that electric ranges are more efficient than bottled gas ranges by a ratio of two to one.

Electric refrigerators were over bottled gas refrigerators 11.6 to one and electric water heaters proved more efficient than bottled gas water heaters by ratios ranging from one and six-tenths to one to two to one.

NEW APPLIANCES

Electric range: Herschel Johnson.
Water heater: Paul Bach, Henry Klumke, Bernard Suhl.
Home freezer: Alvin Beckemeyer, Menard J. Luebbers.
Clothes dryer: Lester Ranz.
Brooder: Oscar Dickhaut, G. L. Emerich.
Milk cooler: Clinton Beckemeyer, Ray Laux, Oscar Dickhaut.

Refrigerator: John Henry, Herschel Johnson.
Window fan: Phillip Golder, Earl Allen.

Room air conditioner: Gene Fritz, Gerhard Kampwerth.
Electric pump: Fred Huges.
Television: George French.

OPERATING REPORT

	May 1954	June 1954
Miles energized	732	735
Revenue per mile	30.69	31.35
Connected members	2068	2084
Density per mile	2.82	2.84
Ave. bill per farm	10.10	9.76
Ave. kwh. per farm	391	399

NEWS FROM Shelby Electric

Shelbyville, Illinois
W. L. Walker, Mgr.

Office Hours—8:00 to 5:00 Monday through Friday. Telephone 1540. To report outages after 5:00, Saturday, Sunday and holidays call—Shelbyville 1227 855 1038, Assumption 291, 16, Stonington 4195, Pana 4333, Mode 513, Shelbyville 891 Shelbyville, 589.

Television is definitely in our area to stay as an educational as well as an entertainment medium. While we heartily endorse TV, we feel it only fair to warn of a few of the dangers of an improperly installed set or antenna.



W. L. Walker

Listed below are a few recommendations for television installation, compiled from information prepared by North Central Electrical Industries.

Antennas — 1. A lightning arrester shall be provided for the lead-in unless a metal shielded lead-in, properly grounded, is used.

NEED GROUNDS

2. Conductive supports for antennas should be grounded and when they are more than 10 feet in height, they must be grounded. Poles or masts which are themselves the antenna are, of course, exempt from this rule.

3. Grounding conductor shall be at least number six.

4. If antenna ground is within six feet of electrical system ground at any point, they shall be bound together with number six or larger.

5. A driven ground rod measuring $\frac{3}{4}$ by eight inches minimum, shall be used in such a manner as to provide a path to ground with not more than 50 ohms resistance.

6. Lead in conductors shall be so installed that they cannot swing within two feet of conductors carrying 250 volts or less, or within 10 feet of higher voltage conductors, these lead-in conductors shall be supported at intervals of not less than 10 feet.

7. Where antennas are so located that in falling they could fall across an electrical distribution overhead line, the supporting structure for the antenna shall have a drop line equal in strength to the guy wires attached to the top of the mast and so located that it will cause the mast to fall clear of transmission lines.

8. If the building is equipped with lightning rods, the metal mast structure shall be bound to the lightning rod system.

9. The use of any chimney having a cross sectional area of less than two square feet is not recommended for the support of any antenna mast. Under no circumstances shall a plumbing vent stack be so used. When chimney is used, two or more metal bands or straps completely encircling the chimney must be used.

NOTE: The use of chimney stacks is not a good practice, as vibration caused by wind can cause the chimney to crack just below the roof. This can lead to furnace gases escaping inside the house which is an extreme fire hazard.

TELEVISION SETS

These are a few precautions in regard to the set itself.

1. Do not push a set into a tight corner or flat against a wall. Each set uses from 200 to 300 watts of electrical power, so it generates a good deal of heat. If the set is flat against a wall or in a tight corner it may cut off air circulation and damage the set.

Do not put decorative mats or coverings on top of your set. With a table top model do not allow magazines or newspapers between the bottom of the set and the tabletop.

2. Television manufacturers provide for set ventilation by putting small vent holes in the cabinets—usually at the top or bottom of the set. The blocking of these vents even partially can cause damage by heating.

With these admonitions in mind, install your TV set or check its installation and settle back to some pleasant viewing.

FAN CONDITIONING

The past two months have caused the most of us to think more and more about getting an air conditioning system for our homes.

Since we cannot take the air conditioner unit to the grain cribs and use it for drying it might be well to consider a

crop dryer. Using either free air or heated air with a fan in the grain bins and then in the corn cribs this fall has been gaining popularity.

The corn and beans will net you more clear profit per bushel when harvested early and avoid the loss of grain in the field. Since everyone has been praying for rain, this may be the harvesting time when we get more rain than we ask for.

Those who have made arrangements for crop drying will not lose the grain in the field and will be assured of good crib drying. Most any crib or grain bin can be easily converted to some type of forced air drying without too much expense.

NEWS FROM Clay Electric Cooperative

Flora, Illinois
Elmo A. Cates, Mgr.

TELEPHONE NUMBERS
Office—(8 a.m. to 12 noon, 1 p.m. to 5 p.m.) 78-R.

Homes—(Nights or Sunday)
E. A. Cates, Flora 389-J.
James Erwin, Flora 312-J.
Henry Mix, Flora Rural 8-F-31.

Isn't it hard to realize that a year has rolled around so quickly? It has though and it is annual meeting time again.

This year, we are again showing the caravan which will have John LaMothe at his electric organ, the General Electric House of Magic, and the job training and safety program showing "How to Save a Life".

These programs are well worth seeing but that is not all. We will also have the Great Ortheldo and his wife Dorthea. They put on a very spectacular performance.

In addition to all this, we will have that wonderful beauty contest we have been telling you about. Just think 13 beautiful young ladies, looking their loveliest, competing for a chance to go to Springfield to compete for the title of "Miss Illinois Rural Electrification of 1954."

BEAUTY CONTESTANTS

These girls are all from farm homes getting their electric service from the Clay Electric Cooperative. So plan to come to the annual meeting and show the girl from your neighborhood that you are proud to have her enter. At present the following girls have indicated they will be here: (there may be more)

Mildred Anderson, Louisville; Joyce Compher, Louisville; Nancy Eytchison, Louisville; Carolyn Gill, Flora; Greta Hardin, Louisville; Cathy Mearns, Louisville; Linda Jane McGee, Louisville; Lulu Mae McGee, Louisville; Beverly McManaway, Louisville; Shirley Ann Rush, Flora; Donna Thompson, Flora; Dona Wolfe, Louisville; Myrtle Wyman, Xenia.

In addition to all this the three winners of the amateur contest of the night before will be present to show you what they did to become winners. We will also have a business session and elect three directors for three-year terms.

FREE ELECTRICITY

Any new user of the following appliances can get 12 months free electricity as shown if you buy it on August 10, from some dealer who has booth space at the annual meeting show and you are registered at the annual meeting.

Electric range (new user)	100 kwh. per month
Electric water heater (new user—30 Gal. or over)	150 kwh. per month
Water systems (new user)	30 kwh. per month
Automatic washer (new user)	25 kwh. per month
Automatic dryer (new user)	50 kwh. per month
Home freezer (new user)	50 kwh. per month

APPLIANCE USERS

Ira Hasler, clothes dryer, automatic washer and water heater.
James B. Dawkins, water heater.
Ira Combs, water heater.
George Kessler, water heater.
Max Carroll, air conditioner.
Claude Gibbons, range and refrigerator.
Thomas Thompson, water heater.

JUNIOR RURAL ELECTRIC NEWS

PEN PALS

Hi Pen Pals!

Well, summer vacation time will soon be over—so let's take advantage of the long days we still have ahead to write to some of our Pen Pal friends. The girls and boys whose letters appear on this page are also anxiously waiting to hear from you. So let's get busy.

Letters for publication should be addressed to Kay Conlan, Junior Rural Electric News, Box 1180, Springfield, Ill.

TEXTILE PAINTING

I am a girl 12 and I am five feet, two inches tall and weigh 103 pounds. I have blue eyes and brown hair and I go to Waverly Grade School. I live on a 480 acre farm. My hobbies are textile painting, collecting movie star photos and cheerleading. My birthday is January 21. I would like to have a picture of every pen pal, and would like to hear from boys and girls between 11 and 15.—Ora Lee Campbell, R.R. 1, Modesto, Ill.

RIDES PONY

My birthday is October 19 and I am 10. I have yellowish-brown hair and weigh 85 pounds. I have a brother who is 11. My favorite sports are riding horses and roller skating. I am four feet, seven inches tall and go to New Abingdon Community Graded school. We live on a 67 acre farm and I have a pony to ride in the pastures. Would like to hear from girls and boys 10 to 13.—Judy Bogard, R.R. 1, Abingdon, Ill.

MARCH BIRTHDAY

I am 14 years old and my birthday is March 23. I have dark brown hair and green eyes. I am five feet, four inches tall. My hobbies are cooking, horseback riding and most any sports. Would like to hear from boys and girls between 12 and 15.—June McKinney, R.R. 2, Bluford, Ill.

MAY BIRTHDAY

I am 13 years old and my birthday is May 10. I have black eyes and brown hair and I am four feet, eight inches tall and weigh 81. My hobbies are baby sitting and listening to the radio. I would like to hear from girls between 10 and 15.—Wilma Elizabeth Van, R.R. W, Shawneetown, Ill.

DECEMBER BIRTHDAY

I am 13 and my birthday is December 22. I am four feet, 10 and weigh 80 pounds. I have black hair and brown eyes and my hobbies are drawing, horseback riding, sewing and reading. Would like to hear from boys and girls between the ages of 13 and 16.—Florence Ellen Young, R.R. 1, Sims, Ill.

To Sponsor Feed Handling Exhibit At State Fair

The Illinois Farm Electrification Council will sponsor an exhibit on automatic feed handling at the State Fair, August 13 to 21.

The Council, which is supported by power suppliers in Illinois including rural electric cooperatives, has as its objective the promotion of agriculture through the economical, efficient, and safe use of electricity.

The feed handling equipment will be demonstrated each day of the Fair. It is one of the latest devices in the era of "push-button" farming. Feed is automatically measured, mixed, ground and blown to point of use by the operation of automatic control equipment. Personnel will be on hand at the exhibit to give detailed information to farmers requesting it.

ENJOYS FISHING



Young, R.R. 1, Sims, Ill.

I am 11 and my birthday is September 12. I am four feet, seven and weigh 75 pounds. I have brown eyes. My hobbies are playing ball, reading, horseback riding and fishing. Would like to hear from boys and girls between nine and 11.—Loyd Eugene

PLAYS SOFTBALL

I am a girl 13 years old and my birthday is September 20. I have brown hair and blue eyes and I am four feet 10 and weigh 95 pounds. My hobbies are playing softball, riding horses and writing letters. Would like to hear from boys and girls between 13 and 16.—Alice Bruce, R. R. 2, Bluford, Ill.

DRIVES TRACTOR

I am 11 and my birthday is September 19. I weigh 110 pounds. I have two sisters. My hobbies are driving a tractor and playing the piano. I go to church and Sunday School all the time. Would

like to hear from boys and girls between 10 and 14.—Lawrence Michels, Route 1, Albion, Ill.

KIND TO ANIMALS

I am 10 years old and my birthday is November 9. I have light brown hair and brown eyes and I live on a farm. I am four feet, nine and weigh 78 pounds. I have two sisters. My hobby is being kind to all animals. I would like to hear from boys and girls between nine and 11. I go to Franklin Grade School.—Elsie Torrence, R.R. 3, Farmer City, Ill.

COLLECTS STAMPS

I am 13 years old and my birthday is August 23. I am four feet tall, have brown hair and brown eyes. My hobbies are playing the clarinet, writing letters and collecting stamps. I live on a farm three and one-half miles from town. Would like to hear from boys and girls between 12 and 15. I would like to have your picture, too and I will answer all letters.—James Johnson, R. R. 3, Cambridge, Ill.

HAS PETS

I am 10 years old and my birthday is March 18. I am four feet four and weigh 80 pounds. I have brown hair and blue eyes. I like pets and have three cats, one dog and two goats. My hobbies are writing letters and going to school. I will answer all letters received and I would like to hear from girls and boys between eight and 12.—Patricia Ann Davison, R. R. 1, Brookport, Ill.

Washington Report—

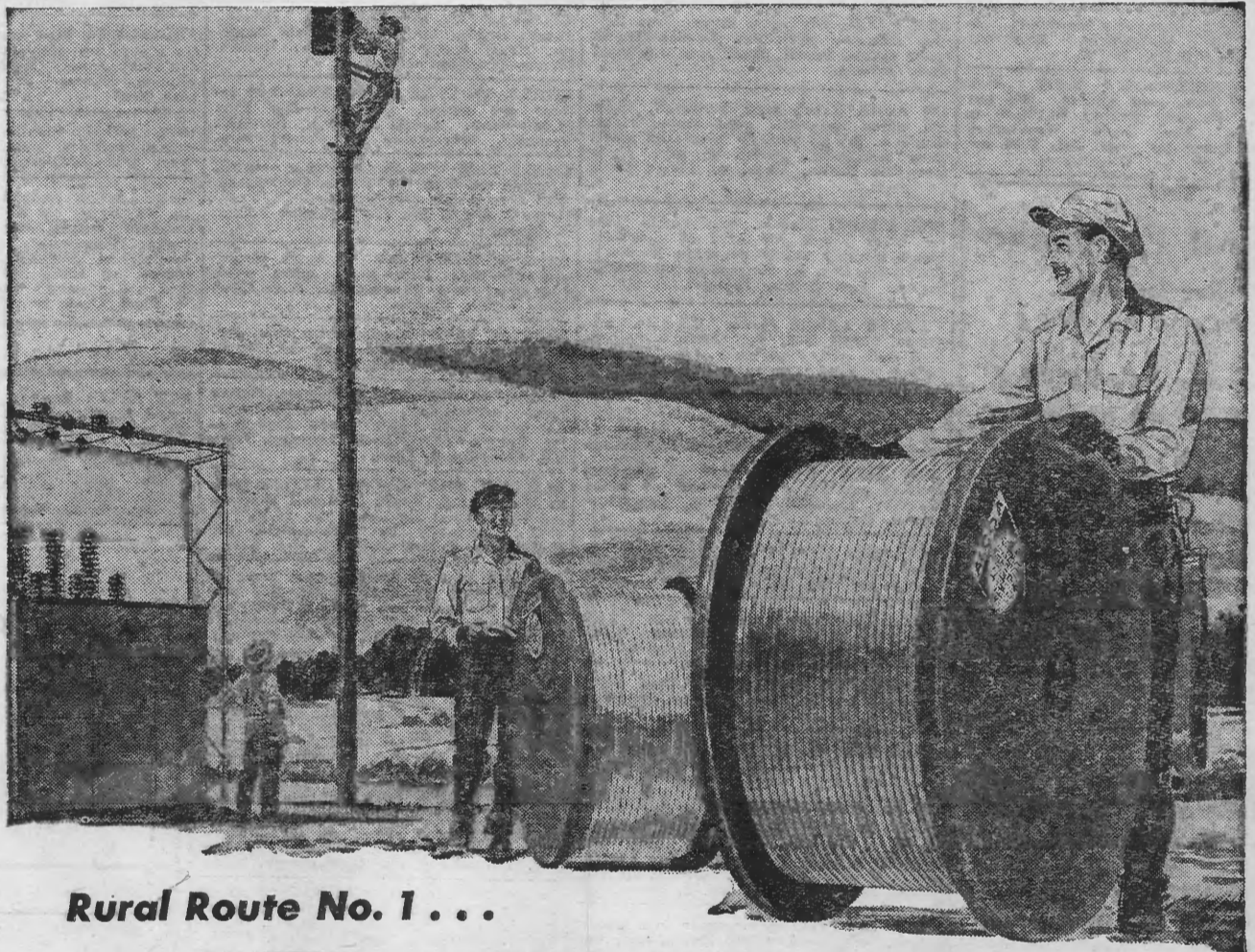
(From Page Two)

the rural electrification program's leaders if some regulatory safeguards were in the bill.

Ask For Ban

They asked for a ban on AEC's interference with TVA's power business, for Federal Power Commission regulation of licensees for atomic power production, for access to all groups private, public or cooperative to the use of atomic energy for power, for limits on atomic licenses and to prevent exclusive private patents.

Recent history shows that our modern development of new processes and materials tends to be dominated by a few giant producers—in the aluminum, chemical, plastics and electric power industries, for instance.



Rural Route No. 1 . . .

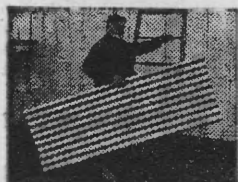
ALCOA ALUMINUM ELECTRICAL CONDUCTOR

Primary distribution lines stretching away from rural substations are the routes through which your Co-op starts delivery of the electricity that lights lamps, powers pumps, spins sewing machines on thousands of American farms.

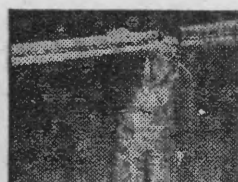
Number one choice among Co-ops for their rural route No. 1 is Alcoa® Aluminum ACSR. Its light weight requires fewer poles. Its strength resists unexpected snow and ice loads and wind storms. Its low cost per foot means your Co-op can build better lines with lower capital investment.

All these advantages of aluminum electrical conductors result from work Alcoa has done. We developed the aluminum alloys that have the best conductivity. We perfected the methods of drawing and stranding aluminum wire. We designed connectors that made aluminum conductors feasible.

Our headquarters and field engineering staffs are working side by side with rural electric Co-ops and their contractors toward a common goal—to bring you better electrical service for less money. ALUMINUM COMPANY OF AMERICA, 2084-G Alcoa Bldg., Pittsburgh 19, Pennsylvania.



Alcoa Aluminum Roofing keeps poultry and livestock cooler, more productive. Write for your copy of Alcoa Farm Roofing Manual.



Alcoa Aluminum Irrigation Pipe brings ease of handling, reduced labor costs to sprinkler irrigation. Write for Alcoa Pipelines to Profit.



Alcoa Aluminum Pigments give quality brands of aluminum paints better coverage, longer life. Write for your copy of Painting with Aluminum.

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