

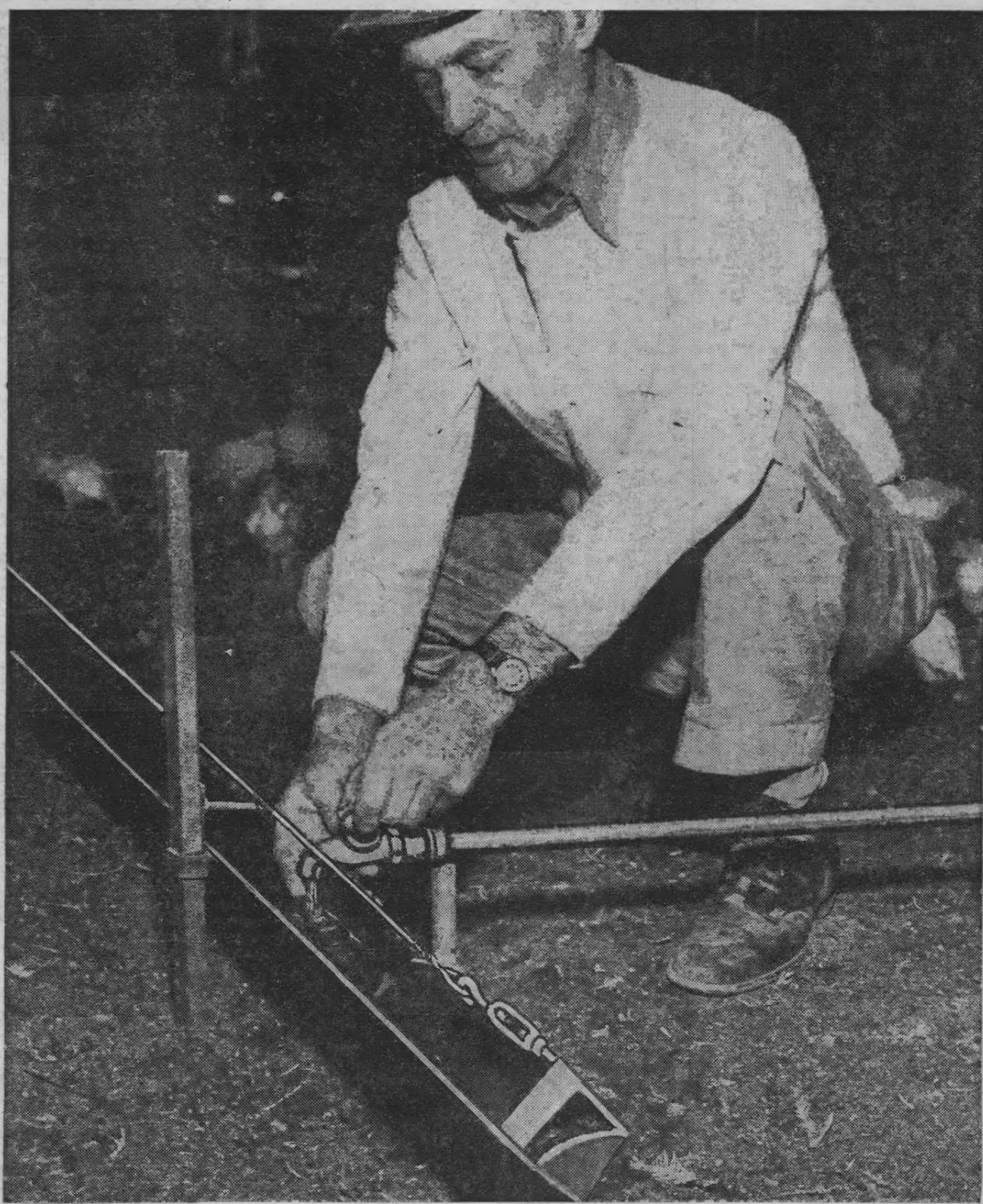
Illinois

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Rural Electric News

March, 1954



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ISSUE

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The Voice of 128,000 Members

Rural Electric News

VOL. 11. NO. 9.

MARCH—1954

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Look At This Record!

EVERY time you light a lamp, watch television, toast a slice of bread, or use electricity in any other way, you're helping to repay Uncle Sam the money he loaned you to make rural electrification possible.

You and thousands of other rural people, borrowed the money through the electric cooperatives you organized. And now, a part of your electric bill goes to pay off the debt.

What kind of a job are you doing?

Very good. That's what REA Administrator Ancher Nelsen says. Here are the facts he recently made public:

As of last month, only 12 out of a total of 1045 REA borrowers in the electric business, were behind in their payments. None of the 27 electric co-ops in Illinois were included in the delinquent group.

Compared to the more than \$2.78 billion REA has loaned, the amount overdue from 12 borrowers was very small. Only \$250,078 on construction loans.

That's only part of the record. Here's the other part: You've repaid \$62,500,000 ahead of time. In other words, you're not only meeting each payment plus interest as it comes due, but you and your fellow co-op members, have been paying off faster than you are required to—\$62,500,000 faster.

According to Administrator Nelsen the amount you've paid ahead of time, equals the amount, both interest and principal, that fell due last year.

You co-op members in Illinois have borrowed \$76 million to build the 44,000 miles of line needed to bring electricity to your farms and homes in the rural areas. So far, you've returned \$12 million to Uncle Sam in principal payments and another \$6½ million in interest. On top of that, you've paid \$3½ million in advanced payments.

That's a record you can be proud of.

What Our Readers Say

PREFERS GAS

Just received the Illinois Rural Electric News. It is a fine paper but I get very much disappointed in it when it resorts to boasting about how much better and cheaper electricity is than gas. The sky is the limit in pointing out the good points of your product, but it is not good business to undermine the others. I have a gas stove but am not interested in any way in the sale of gas.

If electric stoves are so much cheaper and better, the public will discover that without cheapening your fine paper, for by so doing one even becomes doubtful for a good thing sells itself.

I have worked in a lot of homes, and I prefer the gas stove. It is more simple to use. Don't have to wait for it to heat up, and there is no wasted heat after it is turned off. It can be regulated to the exact heat you want as for processing in a pressure cooker. There is not nearly the mess when anything boils over. And mighty nice when there is an outage.

And as to which is the most economical to use, a tank of gas which runs around \$9 lasts us well over 3 months for a family of 3. Have to heat our own water as we don't have a water system. But that is all beside the point. They are both wonderful but a good salesman does not use such tactics.

Mrs. Kate Burgess

Dorsey

COMMENTS

The Illinois Rural Electric News continues to be by far the outstand-

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ing statewide rural electric cooperative monthly newspaper. I'm enthused about it every time it arrives.

Malcolm W. Wehrung
 Washington, D. C.

We enjoy the Rural Electric News and I also want to thank you for the patterns I have received from you.

Mrs. Joe Mizeur
 Pana

I enjoy the Rural Electric News very much and look forward to the next issue.

Mrs. Frances Morris
 West Union

I look for the paper and read it through. The patterns are grand . . .

Mrs. J. K. Richardson
 De Land

I enjoy this paper so very much.

Mrs. W. H. Baker
 Ina

We enjoy your paper very much and thanks for the patterns.

Mrs. W. L. Martin
 Patoka

I like to read the Rural Electric News very much. It is very helpful.

Mrs. Hilliard Allen
 West Frankfort

I have ordered your patterns before and think they are wonderful. Thank you.

Miss Evadine Radcliff
 Vandalia

Washington Report

By William S. Roberts

LOCAL rural electric systems will feel a further pinch in services available to them next year, if REA loan funds are not increased over the amount requested in the fiscal '55 budget. This would follow a trend of less financing and fewer services available through the Rural Electrification Administration in Washington; both have been declining for several years.

Meantime, however, the telephone phase of REA's lending program has been speeded up. A large proportion of the REA employees formerly assigned to the electrification program have been transferred to telephone loan duties. As a matter of fact, 40 per cent of REA's employees are now assigned to the telephone lending program.

That is only part of the story. The total funds available to REA for administering both loan programs, according to the fiscal 1955 budget, will be \$1,144,000 less than the peak year of REA four years previous.

How Adequate?

With this, REA plans to finance a \$100-million electrification program next year, \$35-million below estimates for the current year, and a telephone loan program on the same scale as the \$75-million goal for this year.

How adequate are these reduced funds to meet the real need for rural electrification and telephone financing? That question is being carefully studied by both government and private officials representing REA and its borrowers.

As for rural electrification, the intensive construction period of the program is past. As they acquired more experience and assets, REA's electric borrowers have been forced to assume more "responsibility" for buying private services in place of those REA formerly provided.

Many officers and managers of local rural systems financed by REA believe that curtailment of services has been carried too far in the guise of "economy." Not only the financial burden on their systems, but the discontinuance of REA bookkeeping audits pose a threat to the financial security of REA itself, they believe. The conclusion of their thinking is that curtailment of REA services, due to reduced administrative funds, is "false economy."

Reasons For Concern

Concern over the rapid decline in funds available for electrification loans is becoming an equally grave problem, in the opinion of many of these local officials.

Rural consumers are doubling their use of electric power every four years. This has two effects, requiring increasing loan funds not entirely taken care of by the decline from the new peak construction. Financing for increasing the size of all distribution facilities will be needed eventually, no matter how much larger they were originally built than the immediate load demand was at that time. A growing proportion, now a third of all REA loans has been necessary for these system expansions and improvements.

But the greatest danger, these electric co-op officials believe, is that such curtailment of electrification loans as the 1955 budget proposes, will eliminate the possibility of generating their own power when rates for other wholesale power sources are unreasonably high.

Anxious Over Right

The right of REA's borrowers to generate their own power will become meaningless if loan funds are not available for generation facilities when needed. A restriction in the amount loanable from the Congressional authorization each year, according to states, would preclude

the sizable investment in new generating and transmission facilities. Thus, commercial power companies would have rural wholesale customers at their mercy.

In the face of this, REA's report for fiscal 1953 demonstrates again that the rural electrification program is a singularly successful, and even profitable lending venture for the Federal government.

Since 1935, the 13th annual REA administrator's report shows borrowers have paid interest or will pay accrued interest totaling \$233,972,367. Even allowing for the possibility of losses on some loans, the administrator figures that an accumulated interest income in excess of interest expense of the government during these 13 years amounts to \$45,543,819.

Continuation of reliable service with adequate facilities provided by REA borrowers is an obvious necessity if that kind of a financial record is to be carried on through the years ahead. Loads must continue to grow, and facilities be expanded, to meet a greatly increasing debt service repayment schedule during the next few years.

Will Rise Sharply

According to the REA administrator's report, "Half of the total amount loaned to electric borrowers had not yet reached the repayment stage at the close of the year. The debt service of electric borrowers rises sharply during the next few years. In 1958 the payment due will be almost double the amount due in 1953."

Congress will be asked to look ahead even beyond fiscal 1955 when appropriating the funds necessary for REA to carry on borrower services and the essential continuing electric loan program. Members of rural electric systems financed by REA have a twofold stake in that kind of a forward view, as both taxpayers and electric consumers.

RESENT CHARGES

Farmers, being the greatest remaining individualistic group of enterprisers in America, have a right to resent the distorted charges sometimes flung at their cooperative enterprise. Nowhere is it more flagrant than in the electric power industry.

The term "private power companies" has been a misleading and damaging term, some rural electric cooperative leaders are beginning to think. After all, electric co-ops are just as "private" a business as any other, and certainly possess more local control and home ownership than utility ventures financed and controlled from Wall Street.

"Commercial" power distributors or "profit power" companies have perhaps been successful in disguising electric co-ops, their local independence and payment of taxes. The electric co-ops themselves have been led to refer to the commercial utilities as the private power companies, not entirely by default. Private ownership, as contrasted to government ownership, is determined by the measure of management control, not by financing.

Attempt To Confuse

Commercial utilities have tried to confuse the picture even more by depicting the REA-financed rural electric and telephone systems as "Federal encroachment." TVA has been used vaguely as a corollary, although there is no comparison in the actual ownership of a cooperative and a valley authority. One rests with the membership of the local cooperative business enterprise, the other with the American people through their Federal government. This corollary also, deliberately, completely ignores the predominant local control present in the TVA case.

Senator Douglas Denounces Charges by REA Enemies

Until "that bad old REA came along" only one-eighth of the farms in Illinois had electricity, but by this year, 185,000 or 95 per cent of the farms in Illinois have electricity, declared Senator Paul Douglas at the annual meeting of the Monroe County Electric Cooperative, Waterloo, February 6.

"Some persons—the enemies of REA — would have you believe that this is 'creeping Socialism' or 'creeping subsidism' or something equally horrible," Douglas asserted.

"However, the total amount of funds advanced for this Illinois program, as of January 1, 1954, was \$76 million, to build the 44,000 miles of lines. But now get this. Of this amount, the REA cooperatives of Illinois had repaid by last June 30, almost \$12 million of principal, 6½ million in interest, and actually were paid up in advance to the tune of over \$3½ million.

Payments From Earnings

"These payments came out of earnings. If that is creeping socialism I'll bet a lot of bankers wish they had more creeping socialists on their notes" he declared.

Surveys of 10 REA-financed systems, according to Douglas, indiscriminately picked, show that for every dollar of REA loans invested to bring power to the home, \$4 is invested by the owner in appliances—electric ironers, radios, washers, deep freezers, machine tools, and the equipment that takes the drudgery out of man's and woman's work. In Illinois it is \$4.33. For every home electrified by REA in Illinois, \$2,410 is spent on wiring and appliances.

"If this is creeping socialism, there are thousands of communities that

are still thirsting for a large dose of it," the Senator said.

Danger Signals

"I wish I could paint a rosy picture of REA's future that would match its glowing past. But I can not. The danger signals are up all around. They are flying from the Interior Department which manages the government's power program. They are flying in the budget, where REA has been hit hard. They can be read in actions of Congress, in the attitude of this administration. After 20 years of brilliant success, I believe REA is in mortal danger," asserted Douglas.

Douglas warned that in the next three years co-ops will have to fight with all their energies and abilities "to preserve rural electric cooperative systems, to obtain power, to keep the government power projects out of the hands of the heartless greedy, and to preserve local autonomy for the electrical systems.

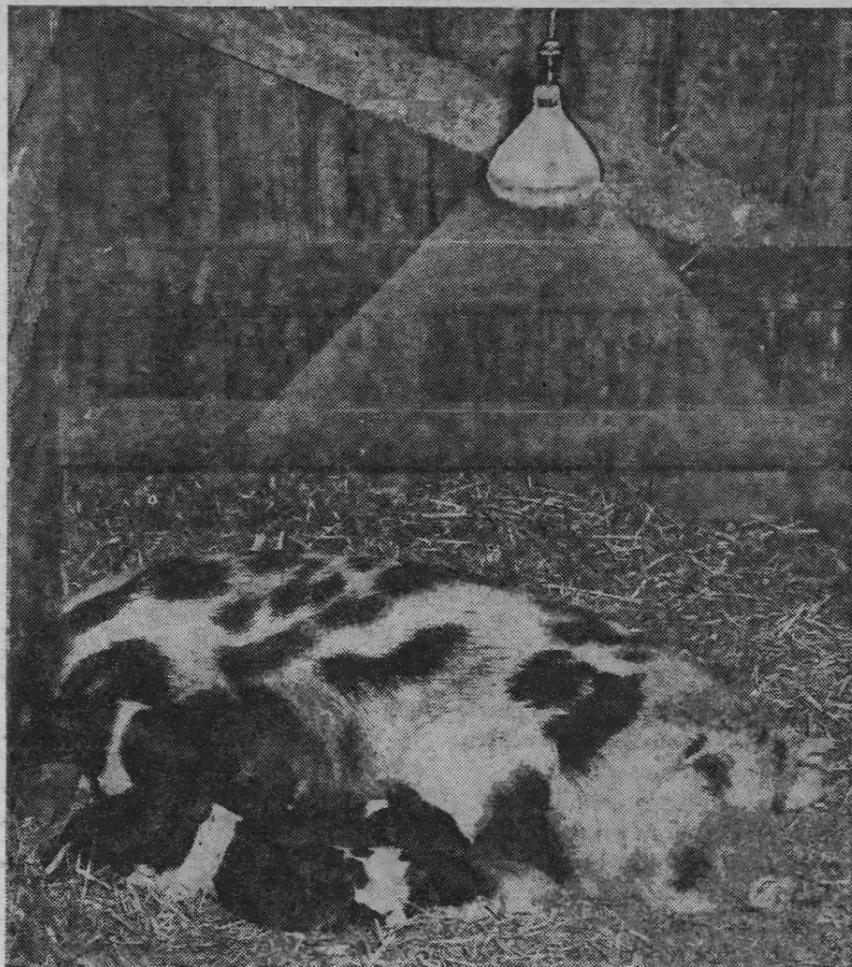
Denounces Outcry

"But first," he urged, "let's explode this creeping socialism outcry. It is not surprising to meet such an outcry from the utilities. We have heard it for 20 years. And utilities have been making money every year. But to have this wrong bill of goods sold lock, stock and barrel to the administration is shocking."

Pointing to REA's record of \$2,780,000,000 loaned to co-ops, of which only \$733,450 is now in arrears, and \$62,500,000 of advance payments already made on the principal, the Illinois Senator pointed "the creeping socialism" finger at private utilities.

"It so happens," he said, "that the

(Continued on Page Sixteen)



HEAT LAMPS prove their worth in the open shed type farrowing pens of T. O. Logsdon of near Shawneetown. No other kind of heat would be as practical in the kind of farrowing house Logsdon built. One side is completely open to the southwest. In November he wired the shed and put a 250-watt lamp in each of the 36 pens.

Clyde Duvall, who manages Logsdon's hog raising operations, says that the electric heat is a big help and has saved many pigs this winter.

"The lamps have cut our losses

from chilling. They give the new born pigs heat when they need it the most. We've averaged between seven and eight pigs a litter this winter. Before we had the lamps, we could only bed the litters in straw and hope," he adds.

Six circuits are controlled from a central panel which enables Duvall to turn on as many of the lamps as are necessary at any time. There are six lamps on each circuit. He runs the lamps for the first three days, for each litter and then turns them on according to the temperature.

Approve Final Plans For Meeting With Congressmen

Final plans for a dinner meeting of rural electric cooperative representatives and Illinois Congressmen, were approved by the State Association board of directors at its monthly meeting, February 18, in Springfield.

Invitations have been sent to all members of the state's Congressional delegation. Each co-op in the state has been asked to send representatives. The meeting will be held in Washington, D. C., March 9. It is for the purpose of acquainting Congressmen with the problems and needs of the rural electrification program.

A letter received from Clyde T. Ellis, manager of the National Rural Electric Cooperative Association, informed the board that its resolution asking that employees of electric co-ops be disqualified from serving on the national association board, had been tabled.

St. Louis In 1956

Ellis also reported that St. Louis had been selected as the site of the 1956 NRECA annual meeting. The 1955 meeting will be held in Atlantic City. The State Association and member cooperatives had previously requested that NRECA conventions be held in the midwest.

A resolution from District 4, asked "that the Illinois Rural Electric News publish the voting record of all Illinois Congressmen on all issues pertaining to the rural electrification program."

A beauty contest, a talent contest, a tractor-driving contest, and General Electric's House of Magic, will be added features on the annual caravan meeting program this summer, Caravan Manager Lyle Dunham reported.

Approves Prizes

The board approved the following prizes to be awarded to winners of

the state finals in the beauty contest. First place will be an all-expense trip to Atlantic City to compete for the title of Miss Rural Electrification at the NRECA annual meeting next February. A trophy will also go to the winner. A wrist watch will be awarded for second place and a ribbon for third.

Prizes for winners at co-op annual meetings will be given by the sponsoring co-op.

For talent contest winners the board approved the following prizes to be given by the State Association: First, \$50; second, \$35; and third, \$25.

The board authorized Dunham to purchase an additional 30-foot tent.

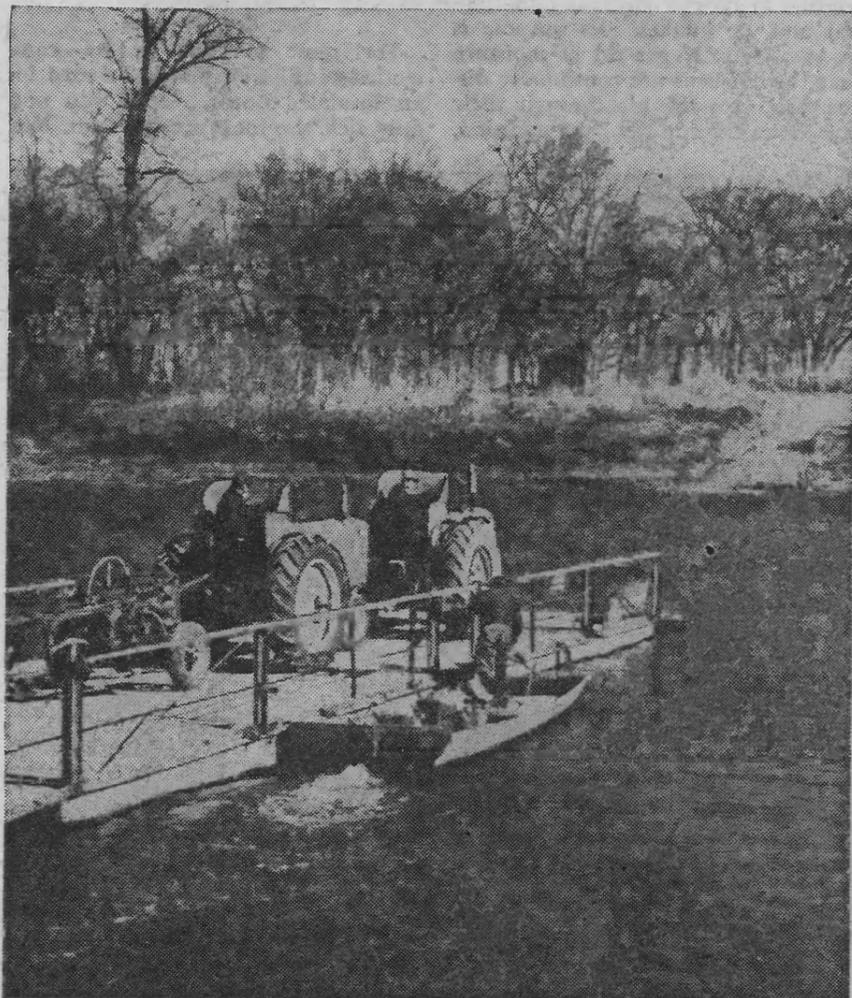
Report on IFEC

Manager A. E. Becker reported on recent activities of the Illinois Farm Electrification Council. He said that efforts were being made to secure the use of some of the facilities of Southern Illinois University at Carbondale. The annual meeting report of IFEC is expected to be ready for distribution within the near future, he said.

The board approved further meetings with representatives of the Illinois Agricultural Association to discuss mutual problems. Becker was instructed to make the necessary arrangements.

Another report by the state manager summarized the support being given by Illinois electric co-ops to the Illinois Future Farmers of America Foundation. Becker was recently elected chairman of the Illinois FFA sponsoring committee. In a resolution, the board urged all member

(Continued on Page Sixteen)



ON THE bank of the Wabash River, southeast of Marshall, in the area served by the Edgar Electric Cooperative of Paris, Otis McGee operates a river ferry.

"I've been running ferries all my life," the co-op member explains. "I've been all the way down the Ohio and Mississippi Rivers from Pittsburgh to New Orleans. I wouldn't feel right if I ever got away from a river."

Called the Darwin Ferry, the one Otis operates is owned by 18 Illi-

nois farmers, who also farm land across the river in Indiana. "It's the only way, they can get across as there isn't a bridge for 20 miles," he points out.

While waiting to transport the farmers across the river, Otis, sits in his house atop the bluffs, enjoying the comforts of rural electricity. "I don't have many appliances, but I wouldn't want to be without electricity," he says.

Here's The Way To Lick Moisture In The Laying House!

A Ventilating System Will Reduce Work; Cut Down On Dirty Eggs, And Save You Money

A CONTROLLED ventilating system in your laying house means more profits in your pocket and less work for you. Here's why:

1. Controlled ventilation keeps the litter dry. You get fewer dirty eggs. Wet, soupy litter is the chief cause of dirty eggs.
2. A lot of hard work is eliminated. Litter doesn't need to be changed as often. Eggs don't need as much cleaning. Windows and ventilators do not have to be opened and closed once or twice a day.
3. Housing and equipment lasts longer because of the removal of moisture.
4. You save feed because the birds don't have to eat as much to keep the house temperature above freezing if insulation is used along with ventilation.

A controlled ventilating system consists of an electric fan, a thermostat and air intakes. Its purpose is to automatically get rid of moisture that the chickens are continually discharging into the air through their breath and droppings. In addition,

some moisture comes into the laying house with the outside air.

Water Stays In House

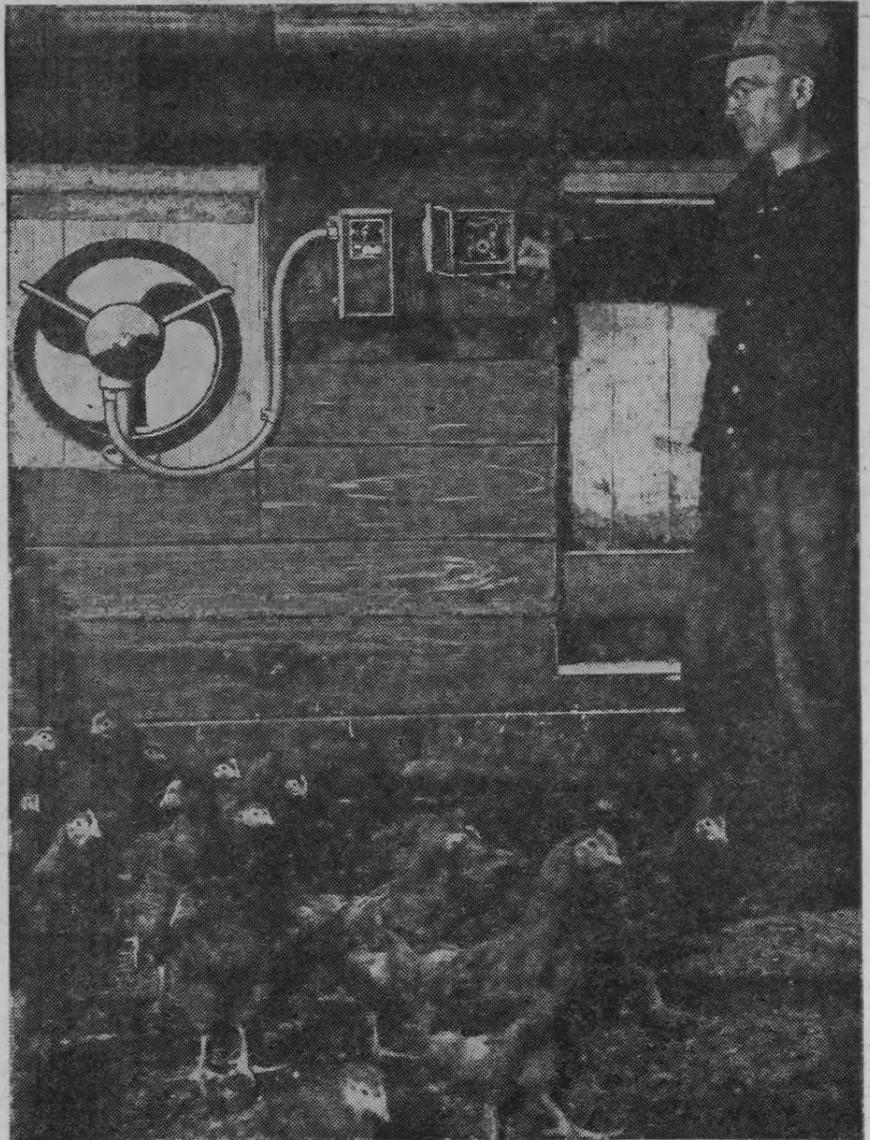
Without ventilation most of the water your chickens drink remains in the house accumulating on walls and ceilings and soaking the litter.

You can get an idea of the amount of water that hens produce by the amount they consume. One hundred heavy breed hens will drink about six gallons a day. Less than a gallon of this goes into their eggs. That leaves more than five gallons in the house. Most of the water, nearly four gallons, is in the droppings. About a gallon is given off in the hens' breath.

Of course, the problem of moisture is most acute in the winter months. When it is warmer outside than inside the poultry house, it is not too difficult to eliminate moisture. During the late fall and winter, however, controlled ventilation is the only reliable method.

For Best Results

For most effective results, controlled ventilation should be used in an insulated house. Then you not only lick the moisture problem, but



ELECTRIC FANS offer the most reliable solution to the problem of getting rid of moisture in the laying house.

you save money on feed too. That is because more of the heat generated by the birds stays in the house, and they don't have to eat as much to keep warm.

One poultryman, who recently discovered the advantages of fans in the laying house is August O. Voges of near Evansville. "Before we had fans, we used to have to change the litter every two weeks," Voges says. "Now we don't have to do it more than once a month."

"That means less work and less straw. But what we like best is the fewer dirty eggs we're getting. That's important to us because we're selling on the grade market in St. Louis." Voges has been averaging 47 cents a dozen for his eggs.

Another Advantage

Another advantage of having controlled ventilation Voges points out, is that it eliminates most of the ammonia fumes. "Before we had fans, the fumes nearly made us sick." He has both a sidewall and a ceiling fan in his 64 by 20-foot house.

There is more to a controlled ventilating system than just having a fan. You should have a thermostat to turn the fan on or off as needed, and, in insulated houses, air intakes. The fan also must be large enough to do the job for which it is intended.

In a small poultry house, 20 by 30 feet, with a flock of 150, a 10-inch fan should be satisfactory. These sell for \$40 and under. A thermostat would cost another \$14, and two air intakes, \$20. The total ventilation system would be around \$75.

Costs About \$200

In the average size poultry house, 20 by 40 feet, with a flock of 200 to 250, a 13-inch fan would be needed, plus six air intakes and a thermostat. This equipment bought new would cost about \$200.

Fans with two-speed motors are frequently used in poultry house ventilation. They automatically increase the flow of air when the temperature inside the house continues to rise

above the thermostat setting. They start out at a slow speed and go into high speed according to the temperature.

With a single-speed motor, the fan should have a damper to reduce air flow when temperature drops or to increase the flow when the temperature rises.

Suggests Timeclock

One hatchery man, L. A. "Butch" Schafer of Schafer Hatchery of Springfield, and president of the Illinois Poultry Improvement Association, suggests the use of a timeclock with a sidewall fan.

He explains: "That's to make sure the fan runs periodically. Otherwise, there may be intervals of several days when because of cold outside temperatures, the thermostat setting on the fan wouldn't be reached. That means your ventilating system would not work and gallons of water would be deposited in the litter."

Another advantage of ventilation is avoidance of exposing layers to sudden drops in temperatures. On this point, Schafer says that "while dampness" may not be too harmful, exposing hens to cold, outdoor air for extended periods to dry out litter, is not healthful.

Not Healthful

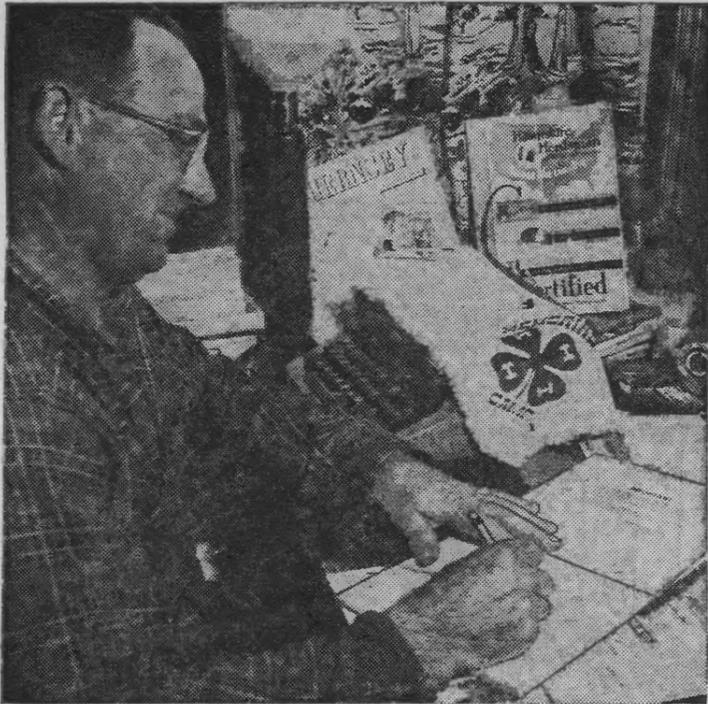
"A lot of poultry raisers open all the windows on a cold day to try to get rid of moisture in the laying house. In a few minutes, the house temperature drops from 40 to 25 or perhaps lower. The hens are left to shiver for long periods. Such exposure, in my opinion, certainly isn't healthful and, I think, often causes sickness.

"With a fan," Schafer adds, "you don't have to take a chance on exposing your birds to sudden temperature drops to eliminate moisture from the house. And that's why I feel that controlled ventilation contributes to keeping birds healthy."

An adequate ventilating system will pay for itself many times over in elimination of wet litter, reduced labor, feed savings and cleaner eggs.



AUGUST O. VOGES of near Evansville sets thermostat on his poultry house ceiling fan. In winter, the setting is usually 15 to 20 degrees higher than the outside temperature. Voges says he gets fewer dirty eggs because the fan keeps the litter drier. Nor does he have to change litter as often. He is a member of Egyptian Electric Cooperative of Steeleville.



BRYON KOTTER keeps accurate records on his sows and their litters. According to the purebred hog raiser, that's the only sure way of making a success.



AUTOMATIC WATERERS in each of the hog lots cut the work load on the Kotter farm.

There's More Than Luck To Making Money From Hogs!

You've Got To Have A Good Plan Based On Good Records, This Successful Hog Raiser Says

BRYON Kotter contends there's only one sure way of making money consistently with hogs, and that's to have a planned program.

That means a little extra pencil work, the Schuyler county farmer explains, "but you can't have a good working plan unless you've got the facts in black and white."

He should know too. Until seven years ago, he was "just raising hogs. I didn't really know whether I was making money, or not. I had hogs since 1934. I thought I was making something on them, but now I wonder."

'Got the Proof'

Today, however, Kotter presents the assurance of a successful businessman. "I may not be able to tell you the margin of profit on each hog, but I can show you where these hogs have increased my net worth from \$5,000 to \$50,000. I've got the proof," the mild-mannered farmer declares.

Kotter's program is by no means large and showy. From the road his Lucky Lane Farm appears the same as most farms. There's the house, barn and other outbuildings, clustered together. And, in the fields on either side of the road, are small farrowing houses.

Yet, the 160-acre farm is an efficient production plant, rivaling farms twice its size. "What I've done, others can duplicate," the farmer explains.

Steadier Income

"I'm not much of a gambler. I don't like to take chances. That's why I went into the purebred hog business. I raise breeders and commercial pigs. I'm sure of a steadier income."

Kotter recalls that it was back in 1947 when "I decided to improve my farming. I figured if I was going to get ahead, I had two choices to make. I either had to quit raising hogs, or do a better job than I had been doing."

Short of capital, Kotter says he stayed away from ribboned animals. Instead he bought a foundation herd of proved Hampshires and became a member of the purebred Hampshire Association.

Want Results

"Commercial breeders want facts and results, not ribbons," he is quick to point out. "I know of one champion boar which sold for less than a purebred boar with a proved record."

According to Kotter, meat-type hogs can be raised for the same cost as lard-type animals. "Inherent qualities determine the results. Pigs out of registered litters gross more than pigs out of standard litters."

And, adds Kotter, pigs out of large litters don't always grow faster and provide the biggest profits. "I had a litter of eight which outgained a litter of 11 by nine pounds at weaning time."

Get Faster Start

Pounds are the secret of the hog business, Kotter emphasizes. "The faster you can put them on, the more profit you make. A seven-pound advantage

at weaning time means a 21-pound advantage at market time."

Here's where accurate records help, the hog raiser explains. "Sows, whose litters are constantly poor gainers, should be culled. By reading the past history of a hog family, I can pretty well predict what the litters will gross."

By careful culling, Kotter has been able to maintain a high production registry in the Hampshire Breeders Association. Last fall, 11 litters of 179 pigs averaged 242 pounds per litter at 56 days, considerably above the national average of 175 pounds.

Farm Program

Kotter's whole farm program centers around hog production. His acreage is in a four-year rotation of corn, oats, hay and pasture.

"All the corn and oats I raise, I feed to the stock. The pasture and ladino cut my supplement feed cost in half. I always have 40 acres of fresh pasture every year to start the hogs on."

The pasture is separated into four lots, and not more than eight sows are placed in a lot when they are farrowing. "In this way, I can keep a better check on the sows and their litters."

More Practical

Kotter uses small, individual hog houses for farrowing. He reasons they are more practical and cheaper than a central farrowing house. "The individual houses only cost \$65 apiece, while a central house would run better than \$2,000.

"A fellow can start with a smaller investment if he uses my system," Kotter explains. He started with seven houses, but now has 30 of them, which he says will last from 15 to 20 years.

Kotter also figures, the individual houses are easier to clean than one large one. "I use fresh straw every week to build the bedding. I put the hogs on clean pasture every year. You just don't have much of a sanitation problem."

Harvest Pasture

Fall pigs are put on the oat stubble and the spring pigs harvest the pasture. In the winter, the houses are placed together and insulated with straw bales for maximum warmth.

For convenience, Kotter ran electricity underground to each of his hog lots, where from pole-mounted outlets he can plug in heat lamp connections, and his water warmers.

"The additional expense of wiring all the fields, cut my labor and headaches a lot," he says. The benefits of heat lamps alone have almost paid for the cost of the electrical connections.

"I had 74 pigs farrow in freezing weather this year, and I didn't lose a one because of the cold," he explains. Heat lamps prevented chilling of the newly farrowed shoats.

Heats Water

Water, under pressure, is available year-round in each of the hog lots, where an automatic drinking



KOTTER IS proud of the record he has made with Hampshires. He says the hogs have paid for his 160-acre farm.

cup quenches the thirsty hogs, winter and summer. In winter, heating elements warm the water.

This is quite the work-saver. "I couldn't possibly carry enough water for the hogs," Kotter remarks. And plenty of fresh water means faster gains and larger profits.

Besides raising hogs, Kotter is also a dairyman. Nevertheless he is convinced that one Hampshire sow provides twice as much return as an average milk cow. "My girl has a 4-H sow project and my boy has two Guernsey heifers. When we looked at the returns on each, they were equal."

One-Man Program

That's why Kotter is satisfied in his own mind that his Hampshires have paid him well. But, the "secret" has been the planned program, "a program one man can handle."

Here's how Kotter spends a typical day during the farrowing season: "First, I go to the barn and do the milking, then I feed the calves and go to the chicken house and to where the boars are penned.

"After giving them their ration of ear corn and supplement, I go to the lot where I have the growing hogs. I check their feed and water and give them some ear corn. Then I check the sows and their litters."

Spends Three Hours

In all, Kotter figures he spends around three hours a day with his hogs when they are farrowing. He only spends one hour after that. "I spend another hour in the evening though filling out the reports."

Here's Kotter's feed program: Sows about to farrow are fed a complete mixed feed of 600 pounds of corn, 600 pounds of oats, 600 pounds of wheat bran and 600 pounds of sow supplement.

After farrowing, they are fed a mixture of 1,400 pounds of corn, 400 pounds of oats and 200 pounds of 40 per cent supplement. All the feeding is done from self-feeders both for sows and for young pigs until they weigh around 100 pounds.

Kotter's farm, north of Rushville, is connected to the lines of the Adams Electrical Cooperative of Camp Point.

In The Battle of Hells Canyon

EDITOR'S NOTE

On the Snake River on the boundary of Oregon and Idaho, is one of the last great dam sites remaining in America. It is called Hells Canyon. A heated controversy is raging over who and how this dam site should be developed. The Idaho Power Company wants to erect a series of small, single-purpose dams. Under a plan proposed by the Federal government, there would be one huge, multi-purpose dam, which would provide more electricity than the smaller dams in addition to other benefits including irrigation, flood control, navigation and recreational facilities.

Proponents of the Federal multi-purpose dam also point out that the big dam would make it possible to develop the tremendous phosphate deposits in the Idaho area. They contend that cheap electric power is necessary for such development. The area contains 60 per cent of the nation's phosphate supply. It is with this aspect of the Hells Canyon question that the following article deals.

★ ★ ★

AMERICAN farmers would receive multi-million dollar benefits by production of highly concentrated phosphate fertilizers from low cost Hells Canyon Dam power, according to officials of two leading farm cooperative organizations. In statements prepared for the Hells Canyon hearing before the Federal Power Commission, Glen W. Bunting, manager of Central Farmers Fertilizer Company of Chicago, and Charles Baker, manager of Pacific Cooperative Supply and vice-president of Western Fertilizer Association, emphasized that farmers of the west and midwest were forced to depend on the phosphate fertilizer of low food content because the supply of highly concentrated fertilizer was insufficient to meet demand.

Bunting and Baker represent companies planning to invest nearly \$25,000,000 in electric furnace phosphate fertilizer plants if low cost power is available from Hells Canyon Dam. They serve more than one and one-half million farmers in 19 western and midwestern states.

Superior Phosphate

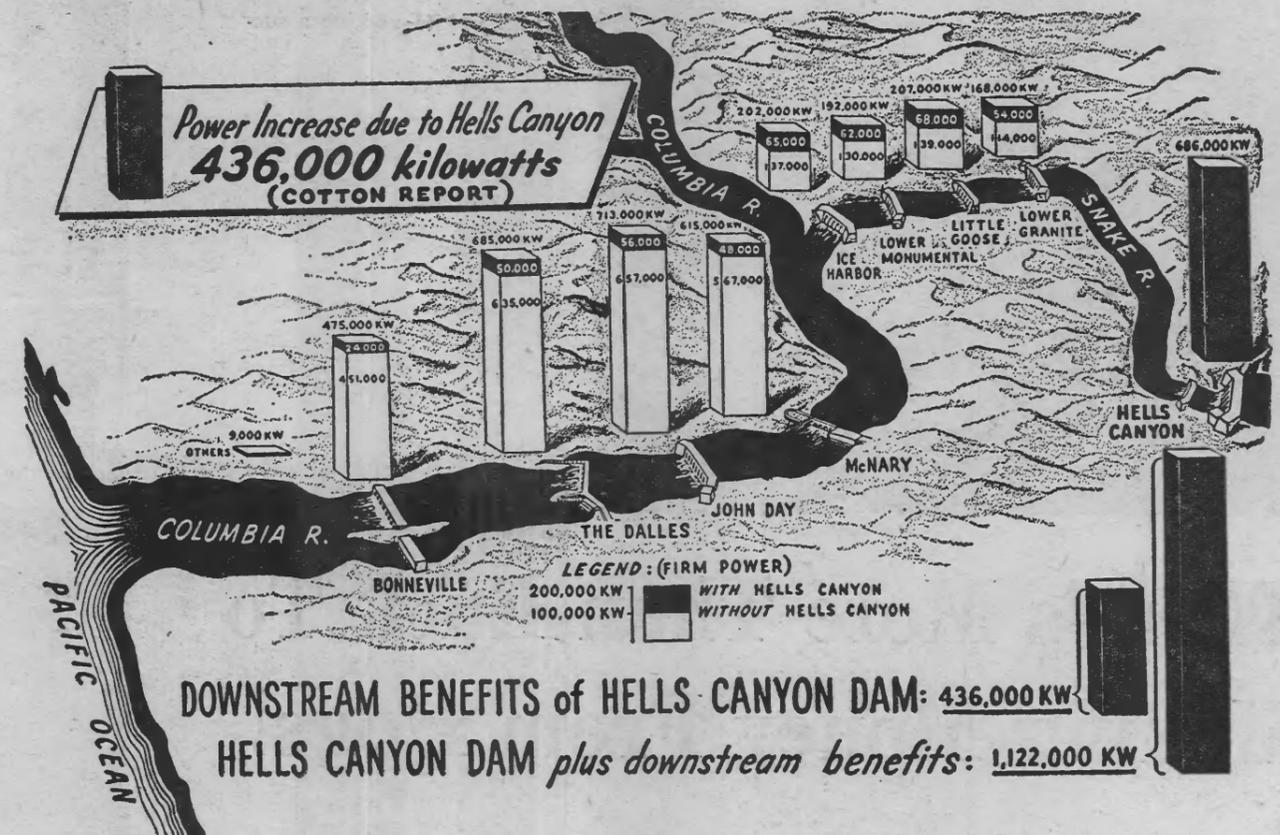
Bunting said that the fertilizer generally available to farmers now compares with the concentrated metaphosphate, which could be produced electrically with low cost power from Hells Canyon Dam, as the model T compares with a V-8 model.

"The ordinary superphosphate, like the model T, performed a useful purpose when nothing better was available," Bunting said. "The V-8 Model Ford for most purposes represents a more desirable form of transportation and likewise calcium metaphosphate represents a more desirable type of phosphoric fertilizer and is more in keeping with the technological advances of our time."

Bunting estimated the farmers served by Central Farmers would make an immediate saving of \$3,000,000 annually in fertilizer costs if concentrated fertilizer were produced electrically in the southern Idaho area which contains nearly 60 per cent of the nation's reserves. Throughout the nation farmers would save many million dollars more.

Claims Large Savings

Baker said the major savings to farmers from high concentrated fer-



NOT COUNTING the flood control, navigation and other multi-purpose benefits of the proposed Hells Canyon dam to the comprehensive river development program, this drawing illustrates how Hells Canyon storage would add 436,000 kilowatts

of power to other plants on the system. According to the Cotton report, these downriver power benefits would almost equal the total output of the present Bonneville dam.

tizer would come in the form of reduced freight charges. "It costs just as much to ship a ton of single superphosphate containing 18 per cent plant food as it does to ship a ton of calcium metaphosphate containing 63 per cent plant food," Baker stated.

"Thus it is readily apparent that the higher the analysis of a ton of phosphatic material, the less the unit costs in plant food from a transportation standpoint.

"There are many advantages to the farmer in using higher concentrated fertilizer. For example, concentrated superphosphate contains approximately two and one-half times as much plant food as single superphosphate. The farmer needs to handle only one sack of treble or concentrated superphosphate instead of two and one-half sacks of single super to apply the same quantity of plant food per acre. Handling hauling and storage costs would be reduced. The farmer needs to fill his fertilizer spreader less frequently as one filling will cover 2½ times the area when concentrated materials are used," Baker said.

Not Enough Power

Electric power provided by a group of small dams as proposed by the Idaho Power Company in the Hells Canyon area would not fill requirements for electric furnace processing of phosphate in the Idaho area, according to John W. Sims, manager of Farm Bureau Cooperative of Ohio and president of Central Farmers Fertilizer Company of Chicago.

Hells Canyon Dam would produce 1,120,000 kilowatts helping control Columbia River basin floods, provide navigation in a mineral-rich area now inaccessible, and help finance new irrigation projects.

In a deposition taken for use in the present Hells Canyon hearing before the Federal Power Commission, Sims said that the cost of power from the company dams "would be much greater than would be the case if one large dam were built such as proposed Hells Canyon. He added that it would be a "waste of natural resources of our country," if the Idaho power company were to be allowed to develop the

dam site with the three smaller, single-purpose dams.

Does Not Serve Area

Sims' statement was confirmed by figures presented by Bunting. According to Bunting's figures the Idaho Power Company does not serve the Idaho area in which Central Farmers seeks to build a \$16,000,000 phosphate processing plant to serve its patrons in the west and midwest.

Likewise the rate of 6.804 mills per kilowatt hour quoted by the Utah Power and Light is nearly 60 per cent higher than the maximum cost his company could pay to make operations feasible, Bunting said. He said that he was told by the Bonneville Power Administration that the Hells Canyon Dam could deliver power to the phosphate plant at 3 mills per kilowatt hour or less.

Explaining the advantage of developing phosphate through the use of electric furnaces, Bunting said that the electric method has the advantage of providing more concentrated plant food in fertilizer and permitting the use of both low and high grade ores.

Fraction of Savings

In addition to the \$3,000,000 annually that farmers served by Central Farmers Cooperative would save, Bunting said, "This is but a fraction of the total savings to American agriculture that would grow out of the more concentrated fertilizer program we intend to initiate.

"Concentrated fertilizers would provide savings in manufacture, wrapping, bagging and freight costs of at least \$14.50 per ton, with savings up to \$34 a ton for longer hauls. On the basis of 1950 consumption, when 707,605 tons were used, farmers would save more than \$20,000,000 annually by using more concentrated fertilizer which Hells Canyon Dam would make possible," Bunting declared.

Another advantage of using electricity to develop the phosphate fields of Idaho, proponents of the multi-purpose Federal dam point out, is that it would be possible to get max-

imum utilization of this great natural resource.

Advantage of Furnace

By using the electric furnace method of development instead of sulphuric acid process, the entire strata of phosphate rock deposits in southern Idaho can be mined and utilized. With the sulphuric acid method, however, proponents say, only high grade rock of 30 per cent or greater can be used. The phosphate rock deposits in the southern Idaho strata contain from 20 per cent to 34 per cent phosphorus.

In other statements prepared for the Hells Canyon Dam hearing, Roscoe Bell, former northwest region director of the Bureau of Land Management, W. A. Minor, former assistant to the Secretary of Agriculture, both favored the proposed high dam over the three single-purpose dams of the Idaho Power Company.

In explaining the significance of the availability of low cost power to develop phosphate deposits in the area, Bell said, "The greatest opportunities for reducing the cost of fertilizer to the consumer lie in using methods that will reduce the cost of transportation and handling of the product.

Greatest Demand

"The largest domestic area of increasing fertilizer demand is in the mid-west at a point 1000 or more miles from the sources of phosphate fertilizer raw material. Transportation costs have become a very significant item in the final cost of fertilizer. In some studies I have made, as high as 45 per cent of the final cost of the fertilizer to the farmer at the point of delivery is transportation costs.

"The electric furnace method has the advantage of being able to produce more concentrated fertilizer products as a means of combating the high transportation and handling costs that are one of the most significant cost items in providing a fertilizer to the farmers throughout the large part of the most rapidly growing market area in the United States," he added.

Cost of power is of the utmost importance. (Continued on Page Sixteen)



Here's our birthday gift to you—a bonus broiler in a single oven range.

Imagine, with this Electric Range you can now broil and bake at the same time with the same ease as with a double-oven range . . . and at a single-oven price!

The separate bonus broiler on the left cooks steaks and chops as tender and tasty as an open charcoal fire . . . and the giant oven at right bakes evenly and exactly, assuring professional results with every cake you make.



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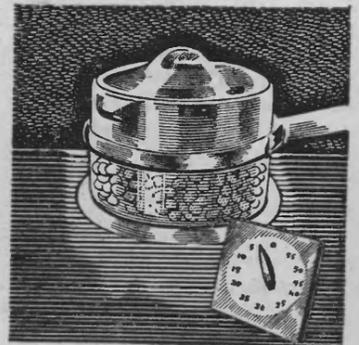


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drip pans make cleaning so easy.
They lift out and can be washed
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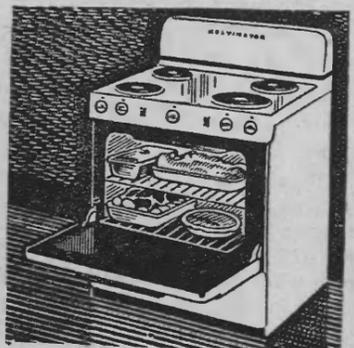
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out the new removable
oven bottom and wash it off
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better baking . . . it's
wonderful!



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It's the new Kelvinator range
—only 30" wide! A wonderful
space-saver in the kitchen, yet
gives you a giant size oven.
Yours at a sensationally low
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\$199⁹⁵*

*Manufacturer's suggested retail price.



Electric Hotbeds Speed Plant Growth

THE sun is losing a job to electricity. Experiments have shown that electrically-heated hotbeds are hurrying vegetables to the table 10 days ahead of the old-fashioned beds.

Besides speeding plant growth, electric hotbeds give a higher percentage of germination, thus producing more uniform, sturdier plants.

Tests made by the Department of Agriculture reveal that seeds germinate and plants take root in from 20 to 30 per cent less time in electric hotbeds, than in those heated by the sun and manure.

Two Methods

The two most commonly used methods of heating the plant bed with electric power are through the soil-heating cable placed under the bed itself, or through the use of ordinary 25-watt, inside-frosted bulbs suspended over the bed.

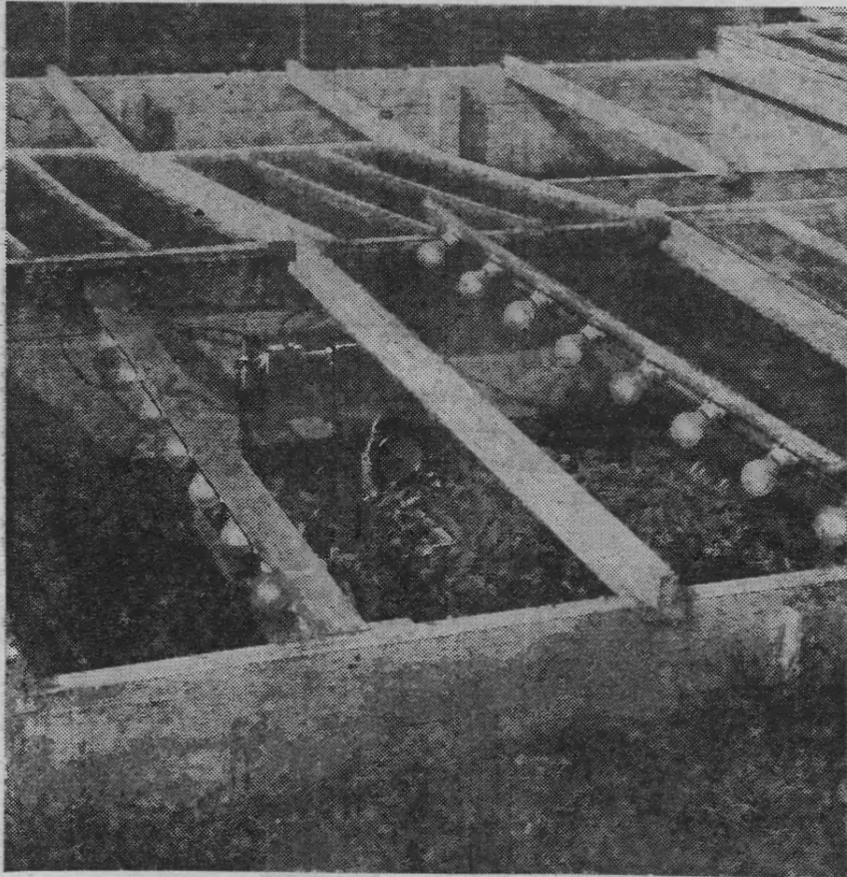
Soil-heating cable is easy to install. It can be buried from four to six inches below the surface, or laid flush with the ground. It does not injure plants, even if they come in direct contact with the cable.

A six-foot square hotbed can be heated with 60 feet of the cable. Strands should be placed seven inches apart and laid uniformly back and forth across the ground.

How To Set

Temperatures above 90 degrees are almost as damaging to plants as extreme cold, hence the need of a thermostat. The bed should be started at 60 degrees and lowered progressively five degrees per week for three weeks.

Use of a thermostat will save current and labor because it automatically guards against sudden



THIS SIXTEEN-bulb hotbed will furnish sufficient heat for a six-foot square bed at an average of only three-tenths of a cent per plant for electricity. Bulbs of 25-wattage are recommended.

changes in temperatures. It enables careful regulation of soil temperatures, suitable for delicate plants.

The lamp-bulb method is considered 30 per cent cheaper than the

cable. Sixteen, 25-watt bulbs will furnish sufficient heat for a six-foot square hotbed at an average of only three-tenths of a cent per plant for electricity.

This bed can be made in a few hours with less than \$20 worth of materials. Sockets for the 16 bulbs can be wired, eight in series, on wooden crosspieces. These should be suspended 19½ inches above the soil.

The small wattage bulbs are recommended because higher wattage bulbs are more apt to create hot spots in the soil, stunting seed growth or scorching the tender, young plants.

In order to hold the heat and reduce operating cost, a clear plastic screen, or glass covered sash is used. A thermostat bulb planted just below the soil surface will operate the lamps.

Flower seedlings have sprouted in from four to five day in the lamp-heated hotbed. Vegetable seeds require at least 10 days to sprout.

Can Preheat

Preheating of the beds will promote quicker germination. Still better results will be obtained if the soil is sterilized. There is an electric soil sterilizer on the market.

If the plants are to be set out directly in the field from the hotbed, they should be toughened first. Removing all heat for the last week will do the job.

Tightly constructed frames, well banked with earth, use less electricity and thus are more economical to operate. And, it is advisable to locate the hotbed in a well-drained location.

For day-by-day control of plants, the electric hotbed is hard to beat. It requires only minimum attention. And, once installed, the equipment is ready for use, season after season.



Raises 12,000 Broilers Under Heat Lamps

FRED Porter raises broilers on a production line scale. He starts 6,000 chicks about every fifth week in a battery brooder house in Easton, transferring them when they are four weeks old to a broiler house in the country, outside of Easton.

This house is a two-winged structure with a feed room in the center. Each wing is 105 by 44 feet and is capable of handling 6,000 chickens.

The started broilers are placed first in the east wing, which is heated by 48 heat lamps. This heat is supplemented with hot water pipes, laid in the floor.

Heat is Supplemented

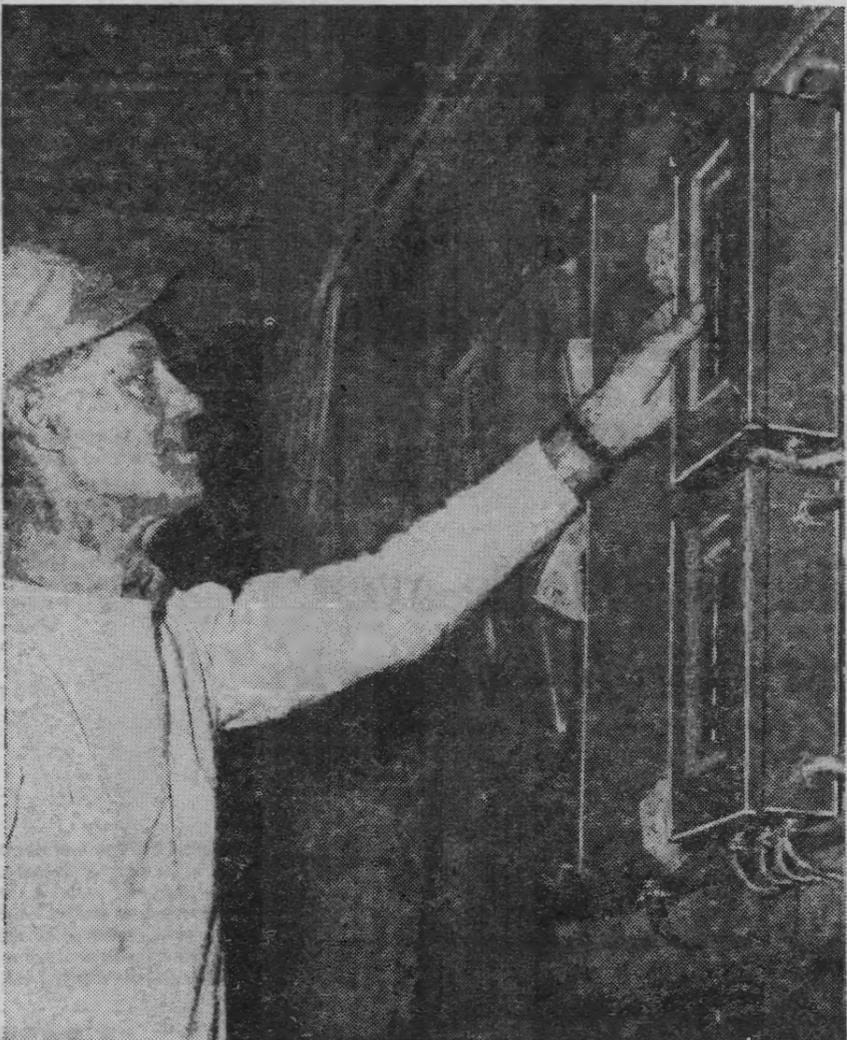
According to Porter, "During the extreme cold weather, the heat lamps cannot provide enough warmth, and the hot water system has to be used." But, when the weather remains in the high 30's, he has been able to get along with the heat lamps.

All of the lamps are controlled from a central panel in the feed house. Porter can easily regulate the number of lamps he wants on at one time. The lamps are in clusters of four.

Porter uses mostly white lamps, but has a few red lamps scattered in the clusters. His theory is that the red lamps keep cannibalism down.

Transfers Chicks

After the chicks are around eight weeks old, "and well on their way", Porter transfers them from the east wing to the west wing, which is heat-



FRED PORTER controls all of the heat lamps in the two, 105 by 44 foot wings of broiler house near Easton, from panel in feed room. Supplemental hot water heat is used in one wing when weather is near freezing, while lamps are sole source of heat in the other section.

After the transfer, new birds are put in the east wing, providing Porter with salable birds about every fifth week. Each flock is completely finished in 10 or 11 weeks.

The broiler plant is owned by Frank E. Dumser of Lincoln and managed by Porter.

Constant Water Flow

All the watering is done automatically. There is a constant flow of water from a 300 gallon tank. Water drips into a two-inch angle iron which is welded to pipes running the length of each wing. This angle iron falls one-sixteenth of an inch every foot, providing gravity flow throughout the building.

The water that reaches the end empties into tile outside of the building. The tile, in turn, carries the water to a tank in the hog lot. Thus, not only do the chickens have a constant supply of water, but so do the hogs.

Porter says he hopes to install a bulk feeding system with automatic feeders. Then it will be an easy matter for one man to care for 12,000 chickens.

The broiler plant is now raising Arbor Acres and White Rocks, which are sold to a packing plant in Lincoln. The electric service is provided by the Menard Electric Cooperative of Petersburg.

Porter says the co-op has been very helpful. On one occasion a transformer blew, and the lineman was out and had it repaired in less than an hour. "The cooperative really gives us fine service," he adds.

ed exclusively with the heat lamps. have gotten a good enough start and "By that time I figure the birds can go on their own," he explains.

Edgar Members Seek More Information On Finances

Members of the Edgar Electric Co-operative called for a detailed accounting of the financial transactions of the co-op. This was presented as a motion which was passed at the co-op annual meeting, February 20, in Paris.

Approximately 1,000 persons turned out for the meeting. More than once members from the floor rose to voice their opinions about the operation of the co-op.

In all, four motions were made by the assembled members and passed. The first called for another audit of the co-op books for the year 1953, showing all receipts and disbursements. This report, when completed, will be mailed to the co-op's membership.

Empower Board

The board of directors was empowered by a second motion to hire an auditor to do the job. Following a discussion of the cost of such an audit, it was decided that the co-op would finance it, but would list it on the financial report, so that all members would know.

A discussion was held on the number of representatives the co-op should send to state and national meetings. A motion passed which authorized the co-op to send the manager, president, or the secretary, to attend these meetings.

A fourth motion dealt with handling of the election of directors. The

members called for an open tabulation. The tellers were instructed to count the ballots in full view of the membership, and to retain the ballots for six months.

In the ensuing election Herbert Morrissey, Zollie Marrs, Harry Fulwider and Bryon McCoy were elected. Morrissey defeated incumbent director Vern English, while McCoy was elected to fill the unexpired term of Homer Myers, who had resigned a few months ago.

Approval of the financial statement was tabled by the membership until next year's meeting.

Explanation of bookkeeping practices was made by Manager J. E. Hardy and by the co-op's bookkeeper, Mrs. Mary Hawkins. It was pointed out that the Rural Electrification Administration established the bookkeeping methods, and checks to see that they are being carried out.

Praises Directors

Cooperative Attorney Benjamin Redman, told the members that it was to their best interest to know the affairs of the co-op. He praised the work of the present board of directors and reminded the members, that the board runs a \$2-million business.



HERE'S WHAT tomorrow's refrigerator may look like.

The development of a new type of vacuum insulation, which reduces refrigerator-wall thicknesses from three inches to one-half inch, permits the refrigerator to be mounted on the wall, like kitchen cabinets.

The unit occupies only about two-thirds the area of today's conventional upright refrigerator of the same capacity. It is 10 cubic feet, 64 inches

wide, 38 inches high and 16 inches deep.

This new thin-wall insulation is 10 times more efficient than that in common use today. Though still in the experimental stage, the model points to radical changes in kitchen equipment in the foreseeable future.

According to the manufacturer, plans for possible production of the wall-mounted refrigerator are still indefinite.



LAWN CUT-OUT

The real charm of this lawn and garden cut-out is in the life-like proportions and pose of the figure. The secret in painting life-like figures so that they appear three-dimensional, is in keeping clean, sharp edges where the colors join. This is not difficult if you follow a few simple rules in the selection of materials and in their use. The figure is traced directly from the pattern to the wood. Good results are assured. Nothing is left to guess work on pattern No. 326, which is 25c.



KITCHEN HANDIES

This two-deck shelf with graceful back and slots for utensils is just what is needed over a stove or work counter. Pattern 232 gives actual-size cutting guides for shelves and string box, with a cat peeking from behind the bright flower. Price of pattern is 25c.

Order Patterns From—
Workshop Pattern Service
Illinois Rural Electric News
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Now cook 7 exciting ways without an extra pot, pan or skillet!

1. Deep-fat fry potatoes, chicken, shrimp with new built-in fryer. Nothing to plug in. Fully automatic.
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3. Griddle pancakes, fry eggs and bacon on new Kant-Slide Griddle. Fits into surface cooking unit.
4. Broil steaks, chicken, chops on special broiler pans. Two broilers give double capacity.



Here's the world's easiest-cooking range! Easier top-of-the-range cooking with 5 correct heats in each Radian-tube unit. Simpler automatic cooking with the Imperial Cook-Master Oven Clock Control. And you can bake and

broil at the same time with 2 Even-Heat Ovens! Lifetime Porcelain finish and Quick-Clean Ovens for easy cleaning, lasting beauty. Oven Visi-Door; with Touch-A-Light, available at slight extra cost.

Ask your Frigidaire Dealer to show you all the Frigidaire Electric Ranges. Or, for a free descriptive folder, write Frigidaire, Dept. 2216 Dayton 1, Ohio. See, hear Arthur Godfrey's Frigidaire shows on CBS radio and television.

5. Roast meats and poultry in deep roasting pans with V-shaped rack. Sealed oven makes juicier meats.
6. Pop plenty of popcorn in Multi-Duty Thermizer. Snap-on stirrer assures uniform results, no scorching.
7. Thrift-bake potatoes or apples in Multi-Duty Thermizer on special baking rack. Saves current.

Frigidaire
Electric
Ranges
Built and Backed
by General Motors

Corn Belt Meeting Features Line Safety Demonstration

Approximately 900 persons attended the 16th annual meeting of the Corn Belt Electric Cooperative held February 19, at the armory in Bloomington. A demonstration on safe practices related to electric lines, was presented by Gienn E. Strong, a job training and safety instructor for Illinois co-ops.

Utilizing standard transformers and line equipment, Strong showed how electricity reached the member's home. He also demonstrated how co-op linemen restore service disrupted by natural or man-made causes.

The members saw what happens when a tree falls on the line, or a wet kite string is caught across the line. And, by "electrocuting" a hot dog, Strong dramatically demonstrated what could happen to a human who comes in contact with the highline.

Not The 'REA'

Manager T. H. Hafer called particular attention to the co-op's name. "It does not say REA," he pointed out. "REA is our banker and nothing more. We are the Corn Belt Electric Cooperative."

In regard to where the co-op dollar goes, Hafer explained that about one-third went for power costs, one-third for everyday operating expenses, and the other third to repay loan obligations and establish reserves.

"A great part of operating margin is used to retire our debt obligation to REA," he explained. Today, the members have an equity of almost \$1-million in the co-op. "This is

something you can justly be proud of."

Introduce Employees

Employees of the co-op were introduced to the members. The departmental supervisors explained their jobs. The co-op has an office force, service personnel, and two outside line departments, one of which is stationed in Clinton.

The financial statement showed that the co-op had an operating margin of \$137,000 last year. In addition, there were \$250,000 in bonds set aside as a reserve.

Last year the co-op paid in direct taxes the amount of \$29,917 as property, social security, electric energy taxes. In addition the co-op pays several indirect taxes for gasoline and material "which mount up," the manager declared.

Headquarter's Building

"As announced last year your directors approved plans for a much needed new headquarter's building." This building is being constructed near the intersection of Routes 150 and 66 on the outskirts of Bloomington.

Four directors were elected to serve. They were W. B. Ellis, Edward Kearney, Harry Miller and John Alpers. Alpers replaces Mrs. Ethel Moon, who resigned from the board because of ill-health.

A. E. Becker, manager of the Association of Illinois Electric Cooperatives gave a short talk. E. C. Collier, a representative of REA also attended the meeting and gave a few comments.



IN ADDITION to light, the ceiling fixture in Mrs. Roy Serven's kitchen radiates heat. "It's not enough to warm the whole kitchen," the farm housewife explains, "but it does very well what it was intended to do."

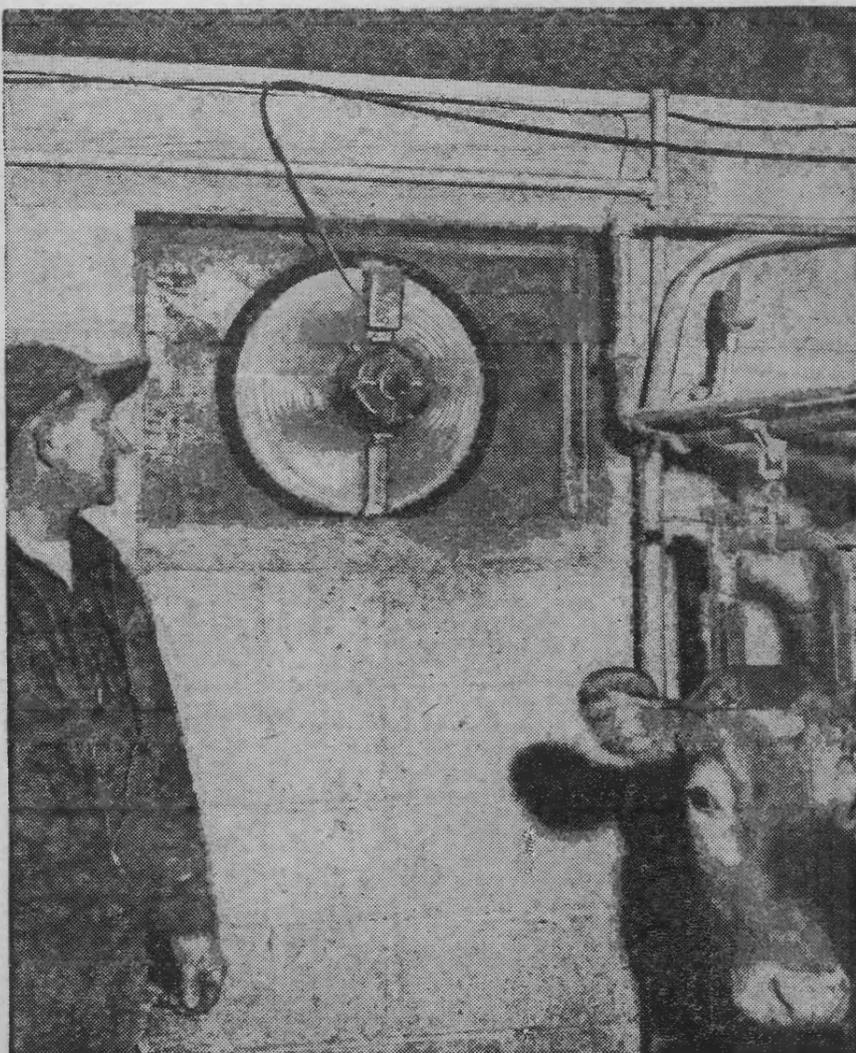
According to Mrs. Serven, the kitchen was added on the home soon after they got electricity in 1939. "And we had no heat in it until we got this light." The Servens of Bushnell are members of the McDonough

Power Cooperative of Macomb.

"Whenever I feel a little chilly, I step under the light," Mrs. Serven explains. The lamp is rated at 500 watts. It is controlled manually from a three-way switch which gives separate control of the heating and lighting elements.

The fixture makes an ideal installation for a cold bathroom, or milk house, where heat is needed periodically. It retails for around \$60, and operates on 110-volt current.

Barn Ventilators Can Prevent Costly Repairs



VERL SHREVE made this fan for less than \$18. Though manually operated, Shreve credits it with eliminating moisture in his barn and improving the health of his cows.

BARN muggy? Walls wet? Sills rotting? If so, then your barn needs a fan. It will eliminate these troubles.

Moisture accumulation, if left in the barn, can curtail production, and can lead to costly repair bills, as Harry A. Miller of Saybrook found out.

Miller's problem was this: Every morning during cold weather, there was moisture on the inside walls of his milk parlor. This moisture blistered the paint on the north side of the barn.

Not Ideal Condition

"It was getting so I had to repaint the one side about every other year." And Miller also felt that his cows were suffering too. "It just wasn't the ideal condition to have," he explains.

Looking for a solution, the dairyman called his farm adviser and also talked to his power supplier's representative. "They both said I should install a ventilating fan, and should control it with a thermostat," he points out.

For the best results, it was decided that the fan should be installed in the east wall of the parlor, away from the prevailing wind. And, since only 14 cows were to be housed, a 20-inch fan was found sufficient.

Need 50 Degrees

It was explained to Miller, that a properly installed system should keep the barn temperature at 45 to 50 degrees, no matter what the outside winter temperature may be. When these conditions are met, costly deterioration of buildings and equipment is avoided.

According to Miller, the cost of the fan was around \$140. But, it cost him \$100 to have the side of the barn painted. It isn't hard to see that the

fan will pay for itself, "if it does nothing more than save the paint," he declares.

In some cases, a dairyman need not go to such an expense. A simple ventilation system can provide a comfortable place for the cows. Verl Shreve of Wayne County has such a system.

Shreve Makes Fan

He made his own fan for less than \$18. However, it is manually controlled. But Shreve says, "After four years of experience with the weather around here, I can pretty well judge when to turn the fan on and off.

"If the day is cold and there's not much wind, I usually run the fan." The only disadvantage is that if the

(Continued on Page Fifteen)



HIREDHAND LEO Morefield demonstrates force of suction of fan in barn of Harry Miller of Saybrook.

Manager Outlines Duties Of Directors At Norris Meeting

The 16th annual meeting of the Norris Electric Cooperative was held February 20, at the Newton Community High School. Nearly 1,600 persons were present, making the meeting the largest in the co-op's history.

Highlight of the meeting was a demonstration of pole-top resuscitation presented by Glen Strong and C. M. Scott, job training and safety instructors.

In the manager's report, Damon Williams presented a brief outline of the duties of the board of directors. "They are a well organized, sincere and honest group of people who take their responsibility as directors seriously," he pointed out.

Work On Committees

They are divided into three active committees: Purchasing; Labor; and Building. The purchasing committee is made up of Directors Ray Deters, Webster Barthelemy and Floyd Hill.

"This committee handles all major purchases made by the cooperative and has adopted the policy of letting to the lowest bidder all such items that require any large sums of money," the manager explained.

Directors Henry Homann, Oscar Sloan, John Adkisson and Clay Trimble are on the labor committee. "This group has the very important job of handling our labor relations and the negotiation of our labor contracts.

"They handle all problems which arise concerning the personnel working for the cooperative." The directors have a tedious job and they handle it well and efficiently, the manager added.

Directors Joe Crews, Lawrence Brit-

ton, Oris Musgrave and Paul Deisher represent the building committee. "This group has had the responsibility of overseeing the construction of our new building, the maintenance of it, and the neat, attractive appearance of the grounds around it."

Williams said, "The co-op owes them a debt of gratitude for negotiating an agreement whereby we could secure water from Newton. They wisely decided two years ago that wells would be unreliable for water for the building."

The co-op manager asked the members, if they ever stopped and realized how much thought it takes to hold an annual meeting. "These committees all work together in planning these meetings in advance."

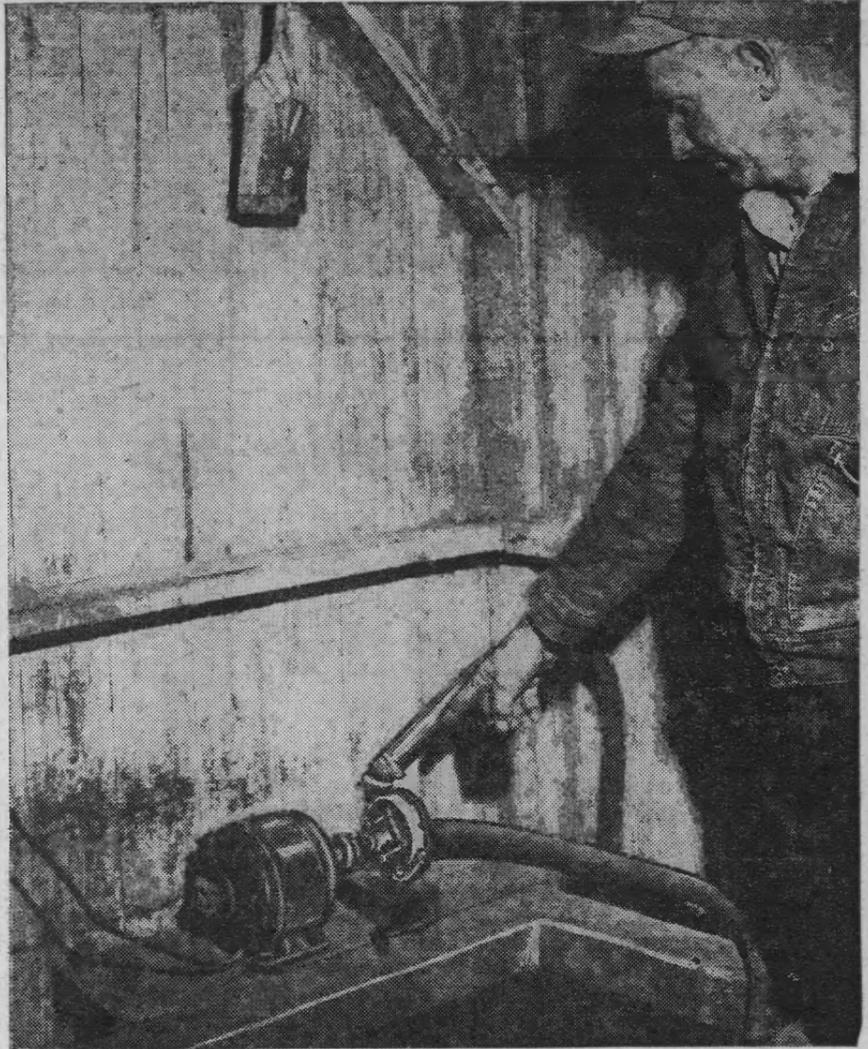
Major Duty

A major duty of the board is to see that a careful audit is made of the co-op books. "The directors take this job seriously," Williams explained, "and you can rest assured that the co-op's finances are as well kept as it is humanly possible."

Williams also mentioned consumption of electricity by members last year. The co-op experienced a substantial increase, the manager noted, the highest in its history.

The financial report showed that the co-op had a net operating margin last year of \$129,427. The co-op has borrowed nearly \$6-million from the Rural Electrification Administration and has repaid around \$660,000.

The present board of 11 directors was re-elected for another year. They include: Clay Trimble, Joe Crews, Paul Deisher, Lawrence Britton, Henry Homann, Floyd Hill, John Adkisson, Oris Musgrave, Oscar Sloan, Ray Deters, and Webster Barthelemy.



An Inexpensive Water System Solves This Tenant's Problem

Joy Ganzer's simple, inexpensive water system saves him countless steps and backaches. It illustrates how even the smallest use of electric power can provide benefit to the farmer.

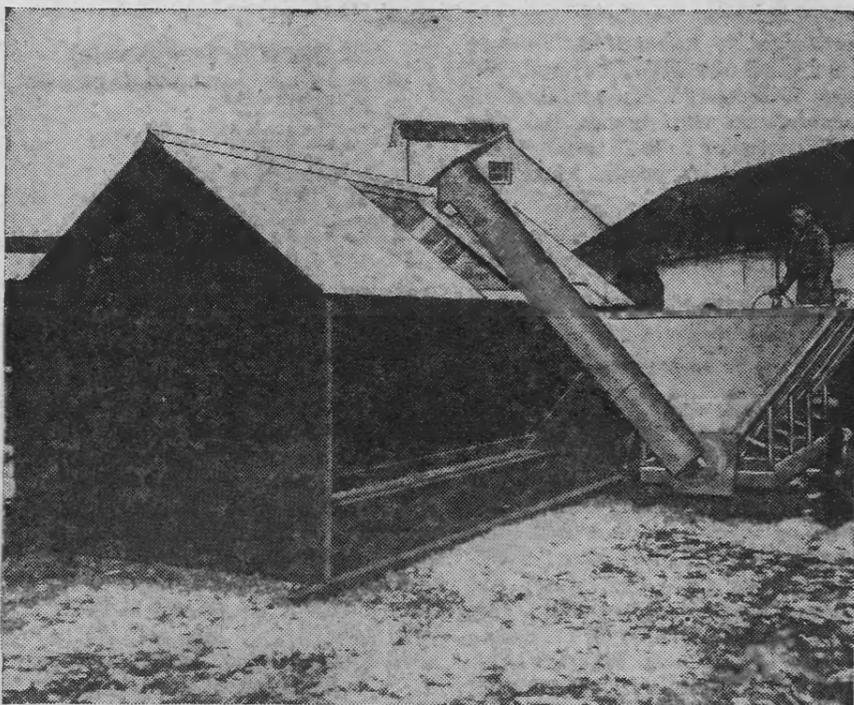
Ganzer is a tenant-farmer, and lives 10 miles west of Greenville. His problem was: How to get water from his well to his hog pen, 250-feet away without carrying it? He solved it with a \$6.95 centrifugal pump and 245-foot of galvanized pipe.

From his well, located inside of his pump house Ganzer pumps the water first into a concrete milk cooling tank. And with the small pump, pictured above, he is able to pump the water from this tank to the watering troughs in the pig pen.

He has the pipe above the ground, along the fence row, so as to be out of the way. "I didn't feel I could install a permanent system," he explains, "since I'm a tenant."

Cost of the pipe was 12 cents a foot, making the whole installation, less than \$37. This according to Ganzer, was money "well-spent." I'd hate to have to carry all the water." He has around 40 head of hogs and the same number of cattle.

At the end of the pipe, the farmer has connected a small piece of hose to simplify the filling of the tank. This is shown in the bottom picture. Ganzer is a member of the Southwestern Electric Cooperative of Greenville.



VERNON JOHNSEN of near Princeton couldn't buy the kind of pig feeder he wanted so he built

one. There are several advantages to the home-built feeder which Johnsen likes particularly well. It is portable. He mounted it on skids and can take it to the field or wherever he wishes.

The sloping wall permits all of the pigs to feed without standing sideways. It also saves a lot of corn since that which falls from the trough to the board floor is not trampled into the ground.

The feeder holds 325 bushels and will feed 225 hogs. He fills it automatically from his self-unloading wagon. He says the feeder cost him \$325 to build. Johnsen is a member of the Illinois Valley Electric Cooperative of Princeton.

Weeds caused an estimated five billion dollar loss in the United States in 1952.





Stop Rusty Red Water

...use MICROMET

Low Cost • Safe • Easy to Use

See your plumber or pump dealer For Free Folder, write to CALGON, INC. HAGAN BLDG., PITTSBURGH 30, PA.



Home-makers' Page

Edited by Kay Conlan

There's Nothing So Good To Eat As A Savory Meat Pie

MEAT pies have much to recommend them. Cubes of flavorful meat in rich brown gravy combined with the goodness of tender vegetables, the whole topped with flaky pastry or light, feathery biscuit — ground cooked meat added to a well-seasoned thick white sauce and used as the filling for golden-brown turnovers—what better examples of downright good eating could you ask for?

From the standpoint of economy, meat pies deserve consideration, for they prove that, with proper cooking, you can transform the inexpensive, less tender cuts into a wonderfully delicious meat dish. The economy angle applies to time, too, while the meat is simmering, you can go on about other duties, and you'll need to prepare little else to supplement the meat pie for a complete, satisfying meal.

"Chicken-In-The-Corn" Pies

3½ pound stewing chicken
4 teaspoons salt
1 stalk celery
1 small onion, sliced
2 cups cooked peas
Cornmeal pastry

Cover chicken with hot water in deep kettle. Add salt, celery and onion and simmer, covered, for two to two and one-half hours, or until tender. Remove meat from bones, cube meat and place in six individual casseroles. Add one-third cup peas to each. Thicken three cups broth with six tablespoons flour mixed with one-half cup cold water, and divide among casseroles. Top with rounds of cornmeal pastry, crimp edges and prick with fork to allow steam to escape. Bake in 425° F. oven for 25 to 30 minutes. Makes six servings.

New World Meat Pie

1½ cups sifted enriched flour
½ teaspoon salt
½ cup shortening
3 tablespoons water (about)

Sift together flour and salt. Cut or rub in shortening. Sprinkle with water, mixing lightly until dough begins to stick together. Wrap in

waxed paper and let stand while preparing Hamburger Filling. Divide dough in half. Roll out one half to circle one-eighth inch thick and line eight inch pie pan with it. Fill with Hamburger Filling. Roll remaining half of dough to make top crust. Arrange over filling. Trim and flute edge. Bake in moderately hot oven (400° F.) 40 minutes.

Hamburger Filling

½ pound ground beef
1 cup thinly sliced carrots
1 cup chopped onion
1 teaspoon salt
¼ teaspoon pepper
1 tablespoon chili sauce
¼ teaspoon Worcestershire sauce
½ cup shredded American cheese
2 tablespoons butter or margarine

Combine first seven ingredients. Mix well. Spread on bottom crust of pie. Sprinkle cheese over meat mixture and dot with butter or margarine. Makes four servings.

Meat Turnovers

¼ cup butter or margarine
3 tablespoons flour
¼ teaspoon salt
1 cup milk
¼ cup chopped green pepper
1½ finely chopped cooked meat
Pastry for 2-crust pie

Melt butter, blend in flour and salt to make a smooth paste. Add milk and cook over low heat, stirring constantly, until sauce is thickened. Add green pepper and meat and set mixture aside to cool. Make pastry. Roll out, cut into five-inch squares and place about one-quarter cup meat mixture on each square. Fold pastry over to form triangles, pressing edges together with a fork. Prick tops to allow for escape of steam. Place on cooky sheet and bake at 425° F. for 30 to 40 minutes. Serve with mushroom gravy or favorite sauce. Makes six turnovers.

Veal - Sausage Pie

½ pound pork sausage
1½ to 2 pounds boneless veal, breast or shoulder, cut in 1½ inch cubes
¼ cup flour
1½ to 2 teaspoons salt
¼ teaspoon pepper
2 cups hot water
1 medium onion, sliced
1 cup coarsely chopped green celery

Break sausage into pieces in cold deep skillet and fry slowly for about



Chicken-In-The-Corn Pies

12 minutes, until evenly browned. Remove sausage from pan. Dredge meat in flour combined with seasonings and brown slowly in hot sausage drippings. When meat is evenly browned, return sausage to pan and add hot water and onion. Cover and simmer for one and one-half hours. Add celery and continue cooking about eight to 10 minutes. Thicken with a paste of a little flour and cold water, if necessary. Place mixture in casserole, top with pastry. Bake in 425° F. oven for 20 to 25 minutes, until crust is golden brown. Makes six to eight servings.

Beef Pot Pie

1 pound beef chuck, cut in 1½ inch cubes
¼ cup flour
2 teaspoons salt
¼ teaspoon pepper
2 tablespoons lard
1 cup tomato juice
2 cups hot water
1 teaspoon Worcestershire sauce
1 bay leaf
1 clove garlic
½ cup chopped onion
6 medium-sized carrots, cut in 2 inch lengths
4 medium-sized potatoes, quartered
4 stalks celery, coarsely cut

Dredge meat in flour combined with salt and pepper, and brown slowly on all sides in hot lard. Add remaining ingredients except for carrots, potatoes and celery. Cover and simmer for one and one-half hours. Add vegetables, salt lightly and cook, covered, for 20 to 30 minutes, until vegetables are tender. Remove meat

and vegetables to casserole. Thicken liquid with a paste made of a little flour and cold water, season to taste, and pour over meat and vegetables. Make favorite drop biscuit dough and drop on meat. Bake in 425° F. oven for about 25 minutes, until biscuits are golden brown. Makes eight servings.

Pork Pie With Sage Biscuits

1½ to 2 pounds boneless pork shoulder, cut in 1½ inch cubes
¼ cup flour
1½ to 2 teaspoons salt
¼ teaspoon pepper
2 tablespoons lard
1 cup chopped celery
½ cup chopped onion
2 chicken bouillon cubes
2 cups hot water
2 cups cooked peas.

Dredge meat in flour combined with seasonings and brown slowly on all sides in hot lard. Add celery, onion and bouillon cubes dissolved in hot water. Cover and simmer for one and one-half hours. Thicken with a paste made of a little flour and cold water, add peas, reserving about one-quarter cup for a garnish, and season to taste. Place mixture in casserole and top with sage biscuit rings. (Add one-half teaspoon powdered sage to two cups flour in standard biscuit recipe.) Bake in 425° F. oven for 15 to 20 minutes. Fill centers of biscuit rings with remaining

(Continued on Page Fourteen)



New World Meat Pie



Meat Turnovers



Veal Sausage Pie

Photos Courtesy Armour & Company

If You Enjoy Crocheting And Knitting . . .

Here Are A Group Of Free Patterns To Keep Needles, Hooks Busy

Each month we receive a few inquiries from readers who want to know whether it is possible for us to send out copies of patterns listed in back issues—anywhere from a month to several years ago. We are sorry to say that this is not possible. Each pattern order coupon includes a postmark expiration date. Once all patterns postmarked before this date are filled, the patterns are discontinued. So in ordering patterns from this coupon, for instance, be sure your order is mailed in time so that it will be postmarked on or before March 31, 1954.

On our list this month:

1. **RIPE WHEAT DOILY**—cluster stitches are the basis for this doily. The pattern includes instructions for crocheting it in three thread sizes, resulting in a 13, 15½ or 17½ inch doily.

2. **CHAIR BACK SEAT**—formed by rows of bows and mesh work. Only three balls of crochet cotton are needed to enhance your favorite chair in this way.

3. **STOCKING CAP**—the active young miss in your family will welcome this cute stocking cap with a fat pompon dangling from the end. If she's a knitting beginner she could make it for herself.

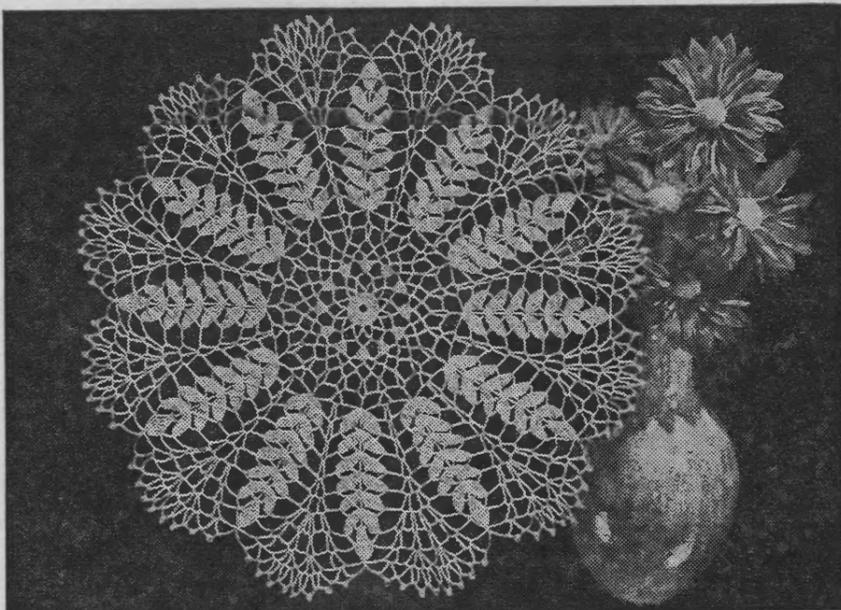
4. **WESTERN DOLLS' CLOTHES**—Their crocheted outfits are done in brilliant shades of green, red, yellow, black and white cotton. Notice the detailing fringed chaps, high boots and miniature holsters holding tin foil pistols.

5. **FLORAL STOLE**—this novel style is feminine, dainty and attractive. It's crocheted in individual motifs in a dark green background with yellow-centered white flowers. Completed stole measures 20 by 72 inches.

6. **MARYLAND MODERN BEDSPREAD**—the striking simplicity of this platinum and white crocheted contour spread and bolster will enhance the appearance of your entire bedroom. Show it on top of a dust ruffle in a vivid solid color.

7. **EMBROIDERED MITTENS**—pattern includes directions for knitting the mittens and doing the embroidery. To transfer your design, trace onto a piece of tracing paper and baste the tracing paper to the wool. Embroider over the design and pull out the paper when completed.

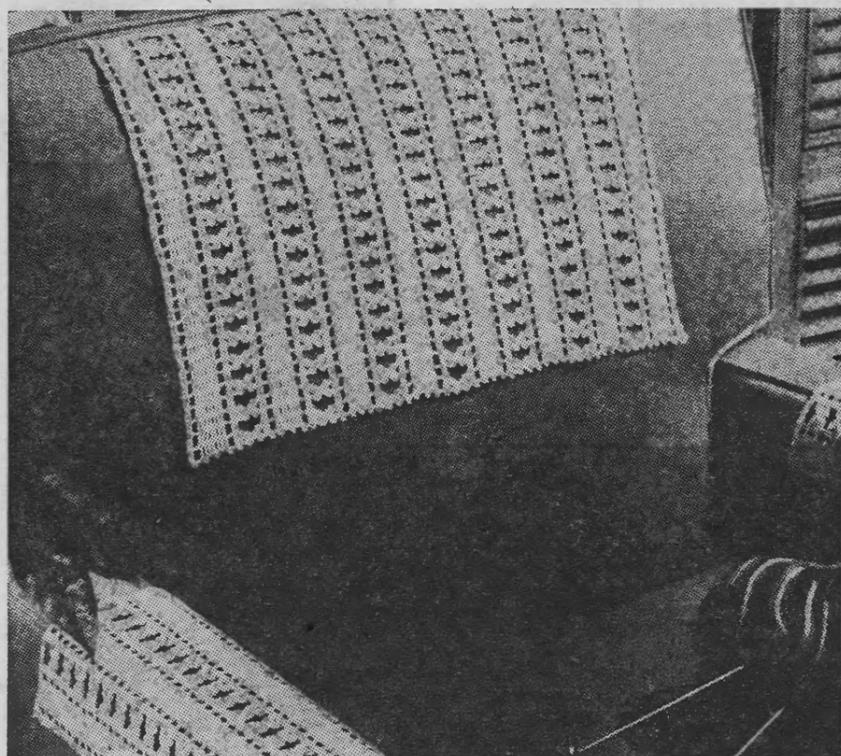
8. **TWO SWEATERS**—directions for making a wide range of sizes are available in these sweater patterns. The woman's pattern stitch cardigan comes in sizes 34 to 50. The man's V-neck cardigan comes in sizes 38 to 50.



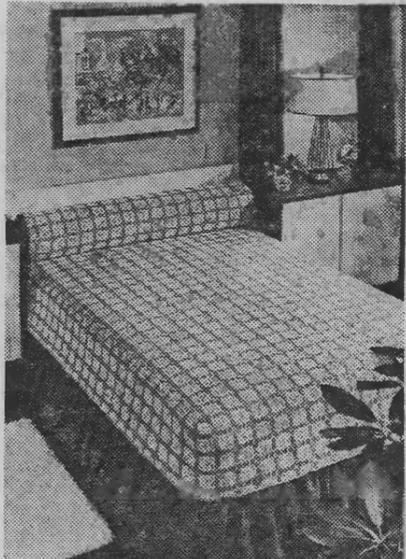
1. Ripe Wheat Doily



5. Floral Stole



2. Chair Back Set



6. Maryland Modern Bedspread



3. Stocking Cap



4. Western Doll's Clothes



7. Embroidered Mittens

Rug Names

Broadloom, when used in connection with rugs, is not the name of a particular kind of rug nor an indicator of quality. It simply means what it says, a rug that is woven on a broad loom.

A number of other names used for rugs merely tell the type of rug, or the method of weaving, and have no reference to quality. Wilton and Axminster, chenille and velvet are all names that indicate a type of rug. Within each type there will be many different grades of quality.

When you choose a color and pattern for your rug, remember that the floor covering is the background for much of the rest of your decorating. Your rug will probably outlast your draperies, your slipcovers and your wallpaper, so choose a rug that you will like to look at for many years.

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.....Ripe Wheat Doily | 5.....Floral Stole |
| 2.....Chair Back Set | 6.....Maryland Modern Bedspread |
| 3.....Stocking Cap | 7.....Embroidered Mittens |
| 4.....Western Dolls' Clothes | 8.....Two Sweaters |

My name is.....
Address.....
Comment (if any).....

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



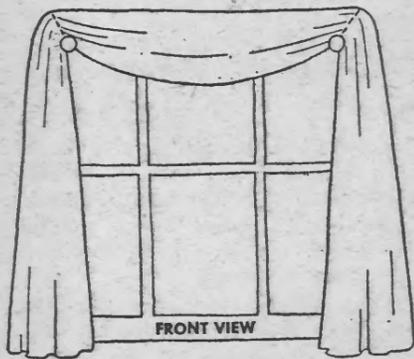
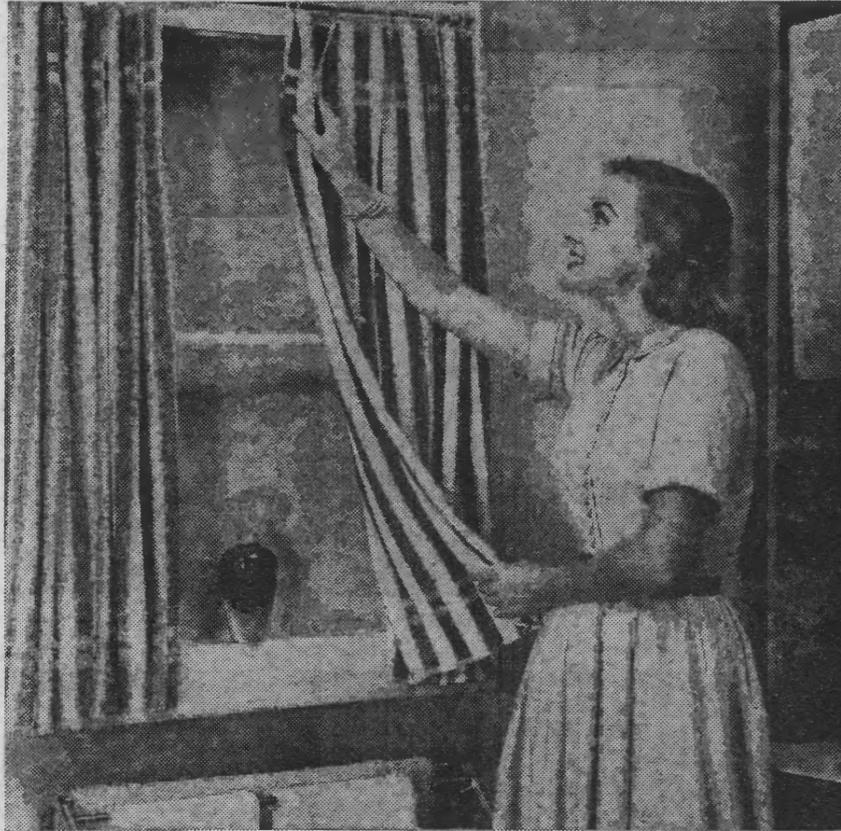
8. Two Sweaters

Colorful Towel Curtains—So Easy To Make

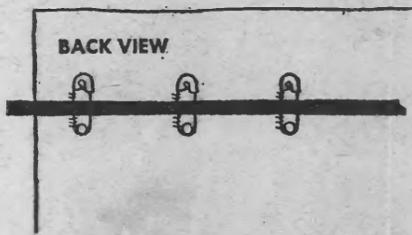
WHAT could be more appropriate for the bathroom than curtains from fluffy terry towels. They're original and colorful, and of course, as easy to care for as an ordinary bath towel.

The best part of towel curtains for your bathroom is that they are easy as pie to make—even if you've had no previous needlework experience—and they can be hung at the window in so many different ways.

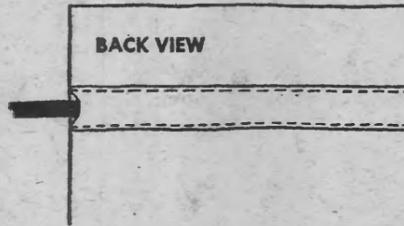
You can pin them over the curtain rod, or sew them to curtain rings, or drape thin in swags, or make a simple basted heading. Just choose the style that suits the window best—the illustrations will give you many ideas. Most important, with all these methods, the curtains slide easily on and off the curtain rod. They can be tossed into the washing machine for laundering with the rest of your towels.



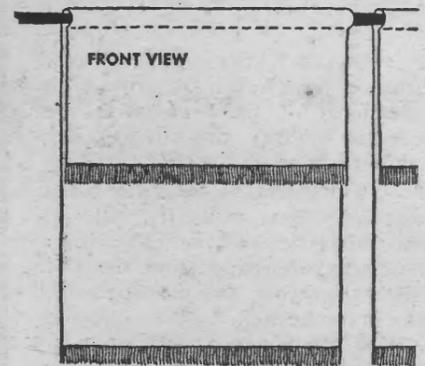
Three towels sewn at ends for draped swag over curtain hold backs.



Safety pins stitched to curtain back.



Wide tape stitched to top for slot for curtain rod.



Tiered curtain for small window. Fold towel one-third over, edge with fringe.

★ ★ ★

★ ★ ★

★ ★ ★

Get Your Money's Worth In Work Clothes

By Sidney Margolius

WORK CLOTHES are a farm man's biggest clothing expenditure, a USDA survey in Minnesota found. How wisely you select overalls, cotton trousers, shirts, and socks can make a big difference both in your expense and your satisfaction with them. Two pairs of pants may look almost alike when new but there can be a big difference after a few washings.

The quality of cloth used in work clothes is generally based on the weight. That gives you one handy yardstick for comparing values offered by different catalogs and stores, and also for judging which quality you want to buy. Always look for the weight of the cloth on the label or in the catalog specifications. A pair of dungarees at \$2 may look like a buy, but is no bargain if it is only six-ounce cloth.

For trousers or overalls that you give really hard wear, choose the eight-ounce weight, or even nine-ounce. For less severe use, seven-ounce cloth may be satisfactory. But don't pay the eight-ounce price.

Combed Cotton

A work garment made of combed cotton will generally give better wear than those made merely of carded cotton. In combed cotton, only the longest and strongest fibers are used.

If you're seeking long wear, generally the hardest-wearing materials are those that have a twill weave, which you can distinguish by the diagonal ribs in the material. Twill-weave cottons include cotton gabardine, twill, whipcord, drill, cotton covert, jean cloth, and cotton serge.

The more noticeable and pronounced the diagonal ribs, the stronger the cloth.

Nylon-fortified cotton twills, and other cottons with nylon added, do give more abrasion resistance than the equivalent weight of all-cotton, if you don't have to pay too much extra, and if there is sufficient nylon. At least 12-15% nylon content is necessary for noticeably greater wear. Chief usefulness of the nylon-cotton blend—about one-third higher than plain cotton—is that your work clothes tend to rub out at certain spots, as at the knees. Work trousers and shirts made of a blend of Orlon-nylon also are being promoted. But these cost almost three times as much as ordinary cotton garments, and don't seem to have that much additional value, although they are easier to launder than the traditional cotton.

Flannel-Lined

One recently-introduced boon for cold weather is flannel-lined cotton work pants. These have better abrasion-resistance than wool work clothes. However, compare cloth weight on these, too, to get best value. Some are eight-ounce, some only seven-ounce.

Besides the type of cloth, better make sure it's pre-shrunk. If the label says "Santorized," you need expect only one per cent shrinkage. If it says merely "preshrunk," expect two per cent shrinkage. If there's no label at all, better get the next largest size, because you can anticipate as much as five per cent shrinkage. One simple clue to quality of work

trousers is the pockets. Those made of ribbed twill-weave cloth not only will wear well but indicate the manufacturer has taken the trouble to turn out a carefully-finished garment.

Besides the quality of material, notice the way the garment is cut and constructed. It's always instructive to take different brands of shirts and lay them against each other to see which manufacturer gives you the most generous cut for your money. A work shirt should be especially full across the chest and shoulders.

Seams of work clothing should be triple-stitched preferably, but at least double-stitched. Points of strain such as pocket corners should be bar-tacked (an extra row of close stitching at right angles to the pocket). Buttonholes should be evenly and closely stitched, with no loose threads. Heavy-duty garments are preferably copper-riveted at points of strain.

Double Section

A double section at the elbow is a sign of good manufacture in heavy-duty shirts. The grain of the material in the extra section should follow the grain in the sleeve and be sewn as flat as possible.

Men who wear wool socks much of the year will find that even five per cent or 10 per cent nylon content blended with the wool protects wool socks from their notorious tendency to fray quickly at the heel and toe. A blend of cotton and wool also wears better than all-wool and is less costly if not quite as warm.

The new Dynel socks (a synthetic material) have good abrasion-resistance, are warm and easily washable without shrinking or felting as wool does. They are a good choice except that some men whose feet perspire

excessively find socks made of synthetic materials uncomfortable to wear. This applies to socks made of nylon and Orlon too.

Savory Meat Pie

(From Page Twelve)

hot buttered peas. Makes six to eight servings.

Pork and Vegetable Pie

1½ pounds diced pork shoulder
½ cup sliced onions
2 cups water or bouillon
1 teaspoon salt
¼ teaspoon pepper
1 cup sliced carrots
1 cup sliced celery
1 cup cooked beans or peas
2 teaspoons Worcestershire sauce
Baking powder biscuits

Cut pork into one inch cubes. Trim off fat and fry out for browning meat. Remove pieces. In a heavy pan, brown pork and onions in fat. Add water or bouillon and salt and pepper. Cover and simmer over low heat for 45 minutes, then add carrots and celery and cook 15 minutes. Thicken liquid with two tablespoons flour mixed to a smooth paste with a little water. Add green beans or peas and Worcestershire sauce. Pour into a one and one-half quart casserole. Top with baking powder biscuit dough cut into circles, squares or triangles. Bake at 450° F. for 20 minutes or until biscuits are well browned. Four to six servings.

Pizza Pie

1 pound ground beef
1 teaspoon salt
¼ teaspoon pepper
1 cup well drained canned tomatoes
½ cup shredded American cheese
2 tablespoons chopped parsley
¼ teaspoon dried basil
2 tablespoons finely chopped onion

Mix meat with salt and pepper. Pat out into bottom and sides of a nine-inch pie pan. Fill with tomatoes and sprinkle with rest of ingredients. Bake at 375° F. for 20 minutes. To serve, cut in wedges. Four servings.

Between The Poles

with Bill Murray

THOUGH we celebrate the birthdays of most great inventors, you notice that there is one which is completely ignored. And whose may that be? you ask.

The inventor of the dish! The name of that ignominious individual has long since slipped the memory of history.

For centuries, the demoralizing effects of this infamous invention have burdened the lives of women and now enslave millions of heroic husbands, who feel conscience-bound to roll up their sleeves and pitch into the pile of detestable dishes after the evening meal.

Little Thought Given

So thoroughly established is the curse of dishes, that most of the great minds of science have given absolutely no thought to how to eliminate this wearisome burden from the backs of mankind. Instead, the powers of gigantic scientific brains are concentrated on splitting atoms, complicating income tax forms, and increasing the horsepower of automobiles.

A few of our vast army of industrial technicians have made feeble attempts to alleviate the demoralizing drudgery which the invention of the dish caused. The electric dishwasher, for example, has been one such feeble attempt, and to a lesser extent, soaps and detergents, which are claimed by their makers to practically do the dishes for you.

These attacks on the dish problem have been, at best, futile because they do not recognize that mankind's battle against dishes cannot be a compromise. The dishwasher is just that. So are the "miracle" detergents. They do not reflect a true understanding of the problem to be solved.

Two Aspects

There are two insidious aspects about dishes. And the first is the sight of them in their dirty, slovenly state following a meal. Since more and more people are eating in the kitchen this aspect of the dish problem is becoming more debilitating.

What was a few moments before a charming piece of decoration on the table, 10 minutes later is a garbage-stained mess, repugnant to the sight, creating great mental anguish in the eyes of the beholder particularly if that party is responsible for restoring the plates to their pristine purity.

Transferred to the sink counter, they sprawl in sloppy disarray detracting immeasurably from the pleasures of dessert.

The second part of the problem is summoning up the moral fortitude and physical energy to scrape the garbage from soiled dishes and immerse in soapy suds to restore their usefulness. And they are washed, clean and wiped dry so that they can be dirtied all over again in a few hours.

No Compromise

Well, now it can easily be understood that compromises like dishwashers cannot hope to rid the curse of dishes from the home. The only strategy that can bring complete victory to mankind in this domestic warfare is to eliminate dishwashing entirely.

How can that be done? Why eliminate the dishes, of course. Hold on. Don't be so quick to laugh. If our great minds can split an atom, could they not figure out a way to free man from his demoralizing dependency on chinaware? Surely it can be done. In fact, we are submitting a few ideas which more technical brains

than ours might experiment with and perfect.

We envision a specially-constructed kitchen table with permanent plastic eating compartments inset below the table's surface. Under the center of the table is a garbage disposal. After eating, a push of a button starts a paddle (something like those used in barn cleaners) in motion. This paddle or blade, scrapes the refuse off the eating surface and deposits the dregs, etc., into the garbage disposal unit.

Then another button slides a water-tight cover over the eating compartments. Hot, soapy water is sprayed under pressure into the compartments, followed by the clear rinses. A jet of warm air then does the drying.

In a matter of minutes, the eating table is ready for the next meal. The eaters get up from the table, push a few buttons, and go into the living room and watch television.

Glasses and silverware could be taken care of in a special section of the table. They would merely be placed in the proper receptacles and stored there until next needed.

The Pots and Pans

That would leave the pots and pans. As yet, we have not figured out exactly what to do with them. However, completely frozen meals that needed only heating might be the solution. Individual portions of meat, vegetables, etc., could be placed in each eating compartment of the table. By infrared heat, these foods could be warmed in a few minutes. The compartments would have to be equipped with such heating devices.

We are not too concerned with the pots and pans. After all, the wife could do them. She should have something to keep her busy, while her husband is looking at the wrestling matches on TV.

To demonstrate our unselfish desire to assist mankind, we are making the above ideas available to the world of science in hope that someday soon, hardworking wives and particularly husbands will be freed forever from the painful and demoralizing task that the invention of the dish has for so long imposed upon them.

RECEIVES LOAN

Corn Belt Electric Cooperative has received approval of a \$260,000 loan from the Rural Electrification Administration. The loan will be used to finance the cost of headquarter facilities for the co-op.

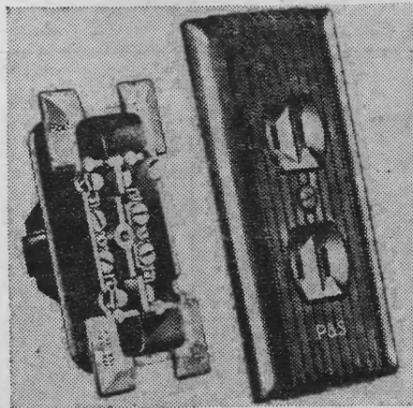


FIVE-WEEK-OLD piglet orphans make 'hogs' of themselves at an ingenious milk bar designed by a British pig specialist. The 14-tap feeder, brainchild of pig breeder John Percy of Chislehurst, Kent, England, has a heated tank containing milk and added nutritional ingredients designed to

wean baby pigs at two days instead of the usual eight weeks with a sow.

British husbandry experts hope the machine will increase the country's much needed bacon and pork output by speeding up the production of hogs.

What's New?



This new duplex electric outlet can be easily installed by the home electrician. It has no metal box to screw into the wall, no holes to punch out, and no extra clamps, soldering, or taping to do.

The outlet is locked solidly in the wall with metal strap clips regardless of plaster thickness or type of lath behind it. It is suited for installation in composition board, or in narrow baseboards.

It is approved by insurance underwriters. It is manufactured by the Pass and Seymour Company of Syracuse, New York. It is available in brown or ivory bakelite with an attractively styled plate.

When writing the manufacturer of a What's New? product, please mention you saw it in your Illinois Rural Electric News. Thanks.

Announces Plans For Beauty Contest

Plans for a beauty contest to be held in conjunction with the annual meeting caravan have been announced by Lyle Dunham, caravan manager. There will be a winner at each one of the meetings.

These winners, in addition to valuable prizes, will be awarded a trip to the state convention of the Association of Illinois Electric Cooperatives where a state candidate will be named to represent Illinois at next year's meeting of the National Rural Electric Cooperative Association in Atlantic City, N. J.

Dunham said the young ladies will be judged on beauty, poise, and personality. Points ratings will be: 25 for face; 25 for figure; 15 for posture; 10 for grace; 15 for charm; and 10 for grooming.

Complete data will be available soon in the offices of the participating co-ops, Dunham said.

Barn Ventilators

(From Page Ten)

wind should happen to change direction, or increase in velocity, Shreve has to be there to turn his fan off.

"But, it does the job I intended it to do," he is quick to explain. "There's no moisture on the walls and my cows are healthier."

Stopped Sickness

Before he installed the fan, Shreve says his milk cows were troubled with winter dysentery, which cut his milk production as much as one-fourth. With a daily average of 15 gallons, the dairyman figures he was short about \$1.50 a day when the cows were sick.

"I don't know what caused the sickness. But, since I put in the fan, the cows haven't been troubled with it," he points out.

Both of these dairymen are members of electric cooperatives. Shreve belongs to the Wayne-White Counties Electric Cooperative of Fairfield. Miller is a director of the Corn Belt Electric Cooperative of Bloomington.



KILL Power Failures

Protect your farm and home NOW with this low-cost stand-by generator that operates from tractor belt or gas engine. Complete with water-proof safety switch. Why wait until your lights go out, stoker, refrigerator, water, radio stops?

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House Committee Defeats Mason's Co-op Tax Bill

The House Ways and Means Committee last month defeated a move by Congressman Noah M. Mason of Illinois to tax co-op refunds as profits. The vote was 13-10 not to penalize co-ops by taxing their non-cash refunds to patrons.

Mason, in a surprise move, had proposed that when co-op patrons take their refunds in some other form than cash, the co-op should be taxed as if it had not made these refunds at all.

Committee members crossed party lines on the issue with Chairman Daniel A. Reed of New York leading the opposition to Mason's proposal.

Last year, Mason introduced a bill to tax all refunds that a co-op makes to its patrons.

The House committee also defeated Mason's proposal that mutual savings banks and savings and loan associations be taxed on money they credit to depositors' accounts at the end of a year.

Hells Canyon Battle

(From Page Six)

importance in economical processing by electric furnace. One mill per kilowatt hour added to the cost of power is reflected in \$13 added cost for a ton of phosphate, Bell said.

Rates Differ

Officials of both the Central Farmers Fertilizer Company of Chicago and of the Pacific Cooperative Supply Company, have testified that private power companies in southern Idaho had offered power rates at between five and six mills whereas power from Hells Canyon Dam would cost only three mills. The high power company rates would add between \$26 and \$39 to the cost of a ton of phosphate, they said.

In his statement, Minor, who served as chairman of the committee on national fertilizer policy since 1944, said one of the main problems in getting increased production of phosphate fertilizer has been the shortages of sulphur used in processing phosphate by the sulphuric acid method.

High concentrate fertilizer cannot be produced by the acid method. Even if sulphur were available in large quantities, farmers would lose the freight savings possible through electric furnace processing, he said.

"One of the most promising opportunities for lowering the cost of plant nutrients to the farmers is by increasing the concentration of fertilizers, thereby reducing transportation, storage, handling and bagging costs per unit," Minor declared.

Should Reduce Freight Rates

According to Dr. Charles E. Kellogg, a Department of Agriculture official, there will be a "serious deterioration of the productivity of American agriculture in the quality of food and fiber unless the use of phosphate on farms is increased substantially.

"To meet the greatly increased needs," he observed, "the aim should be to reduce freight charges. This can be done by judicious location of plants and by emphasis upon high analysis products. It is imperative that we develop the western phosphate deposits, especially by producing high analysis phosphates."

At its annual meeting January 11-14 in Miami, the National Rural Electric Cooperative Association, representing about 950 rural electric cooperatives and 3½ million members, passed a resolution supporting the development of Hells Canyon by the Federal Government.

Douglas

(From Page Three)

office of Defense Mobilization has granted private utilities a \$2.8 billion tax write-off subsidy over the next 33 years. This is \$20,000,000 more than the total REA outlay to date, and it's the biggest job of melon snitching in a generation.

Commission Ruling

"The Republican Federal Power Commission, against violent protests, has ruled — and get this, please — that the utilities need not pass on the benefits of these tax subsidies to their consumers.

"Talk about creeping socialism! And talk about REA. Nobody has ever suggested that REA get such a huge subsidization. It has to repay its borrowings. This is an unconscionable gratuity to big business."

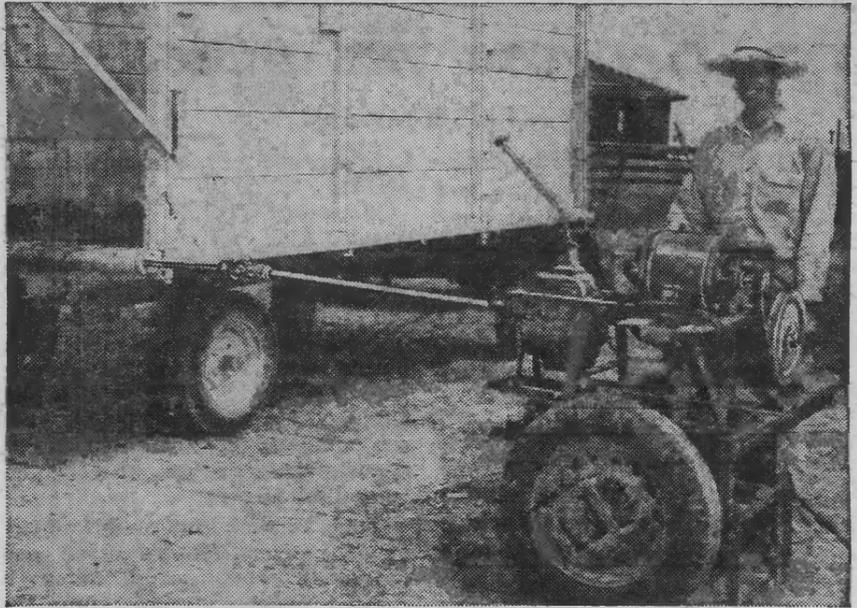
Congressmen

(From Page Three)

cooperatives to lend support to the youth group.

The board voted not to sponsor a special train to the NRECA convention in Atlantic City.

William E. Murray, editor, Illinois Rural Electric News gave a report on the effect of proposed Congressional legislation to increase mailing rates. He also reported on the progress of a national advertising program which is being sponsored by 22 statewide publications.



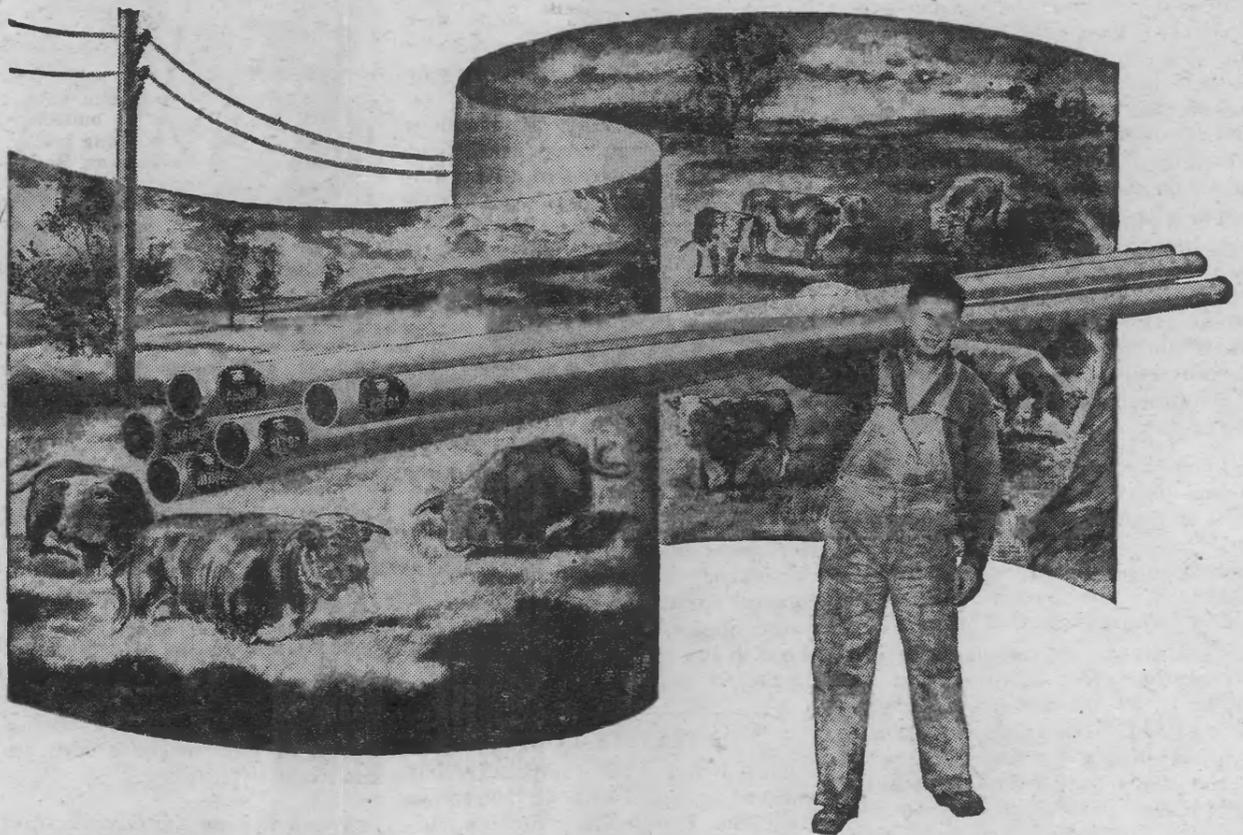
WITH THE addition of electrical power, J. P. Gallahue unloads his silage with half the effort now. He has a homemade, self-unloading wagon and an electrically powered wagon unloader. "I'm through with the pitchfork," he says.

Gallahue says the work used to take him about a half hour to do. Now, "I can unload a wagon in 10 to 15 minutes." The unloader was made from old auto transmissions, a discarded garden plow, and angle iron.

The two automobile transmissions

are connected in series so as to reduce the ratio of the electric motor 45 to one. "I run them in dual low," he points out. The unloader is rubber-mounted making it portable.

The unloader connects by a shaft with a roller mounted on the end of the wagon. As this roller turns, it wraps two cables, connected to a movable end gate, around it. This in turn pulls the silage out of the wagon. Gallahue is a member of the Eastern Illinois Power Cooperative of Paxton.



Greener pastures through— ELECTRICITY and ALCOA ALUMINUM

Alcoa's pioneering in the development of aluminum conductors brought electricity for the first time to thousands of farms. The use of this electricity to power your farm equipment and machines resulted in greater productivity and a higher standard of living.

Speaking of productivity—farmers in many states have reported that their sprinkler irrigation systems have paid for themselves in one

year. The increased profits are that high.

Available through leading systems dealers, Alcoa® Aluminum Irrigation Pipe is carried in diameters to suit individual system requirements. To identify pipe made to these rigid specifications, look for the blue and yellow Alcoa label on the pipe you buy. ALUMINUM COMPANY OF AMERICA, 2080-C Alcoa Building, Pittsburgh 19, Pennsylvania.

ALCOA ALUMINUM

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YOUR Co-op NEWS COLUMN

NEWS FROM McDonough Power

Macomb, Illinois
Arthur H. Peyton, Mgr.

On Friday, February 5, the managers of District 2 met at the cooperative office. Those attending were Lee Leonard, Western Illinois Electrical Cooperative at Carthage; Ralph White, Rural Electric Convenience Cooperative at Divernon; Floyd Ruble, Illinois Valley Electric Cooperative at Princeton; S. R. Faris, Illinois Rural Electric Cooperative at Winchester; Dean Searls, Adams Electrical Cooperative at Camp Point; L. C. Arthur Peyton Groat, Spoon River Electric Cooperative at Canton; Howard Bell, Menard Electric Cooperative at Petersburg and Arthur H. Peyton, manager of your cooperative.



At the same time the managers held their meeting, the power use advisers and bookkeepers held their meeting.

4-H DISTRICT MEETING

On Wednesday, February 10, a district meeting was held at the Farm Bureau office in Macomb. This district consists of 19 counties and representatives of power companies, cooperatives, farm advisers, home advisers and youth assistants were present.

The 1953 electricity project was reviewed and discussed. Plans were made for this year's project. To be included this year is a home economics activity. It is tentatively planned to conduct meetings in the various counties on adequate lighting.

Harold Marx, field editor for the Illinois Rural Electric News, visited your cooperative on Tuesday, February 9, to obtain information on lightning arresters and Thermolites.

SELF-BILLING

By the time this paper is received, we will have completed our second month on the new self-billing procedure. Many members have made comments regarding the new procedure and we are happy to report that the majority of them have been favorable.

As with many new systems, there are those who will not be in favor of making a change. But after using it a few months we feel certain they, too, will be pleased with the new system.

Our monthly newsletter, Watts New, will be mailed to you each month to remind you to read your meter and send in your electric bill.

Many of you have undoubtedly noticed that the penalty has been changed. Under the new plan, if your payment is not received in our office by the 23rd of the month, a penalty of 50 cents will be added in addition to your monthly bill.

INFRARED LAMPS

Infrared heat lamps put out heat in the form of radiant energy. It is a very economical source because it heats the animals, not the air in the pen. Each animal acts as his own thermostat taking advantage of the radiant warmth of the light as the outside temperature changes.

Heat lamps reduce mortality and will increase your profits if used correctly. A few suggestions for correct usage are:

1. Use only porcelain sockets.
 2. Use a metal reflector.
 3. Suspend the heat lamp by a chain rather than by the rubber cord.
- If you plan to use several heat lamps for brooding, follow these wiring rules for safety and efficiency:
1. Do not use more than four heat lamps on a circuit of Number 14 wire.
 2. Do not use more than six lamps on a circuit of Number 12 wire.
 3. If you plan to use more than six lamps, we recommend a 220 volt service so that the load may be balanced.

With poor wiring, you do not have the margin of safety and it will cause the lamps to deliver less heat at a higher cost. If you are in doubt as to what your needs are, contact your power use adviser to make sure the transformer and wire sizes are sufficient to meet your needs.

RETURNS FROM SERVICE

Wayne Evans has returned to work for your cooperative after serving with the army for approximately two years. He worked as a lineman for your co-

operative before being called to military service and has resumed this position upon his return.

OFFICE ADDITION

Workmen have recently completed a fireproof storage vault for the records of your cooperative. Many of the records pertaining to the business of your cooperative must be kept on file for five and 10 years; others must be retained indefinitely.

This addition was constructed between the office and the garage by putting in a west, south and east wall around the unloading pit. The south wall of the garage was utilized for the other side. Zonolite cement was poured for the ceiling and a fireproof door installed, making it completely fireproof.

NEWS FROM Jo-Carroll

Elizabeth, Illinois
Charles C. Youtzy, Mgr.

TELEPHONE NUMBERS FOR OUTAGE CALLS
Office—Mondays through Fridays, from 8 a.m. to 5 p.m. and Saturdays till noon—Elizabeth 10
Evenings, Sundays and Holidays: Linemen—Robert J. Wand, Elizabeth 83-R-27; Ralph J. Smuck, Elizabeth 120-R-7; Harry W. Ehler, Elizabeth 168.

At the January board meeting the directors adopted a policy to be followed on tenant farms. From now on it will be necessary either for the owner to sign a statement guaranteeing payment of the tenants bill or the tenant must pay a \$20 meter deposit.



Donald Hancock has been hired by your cooperative as a wiring inspector and has been very active since starting on his new assignment. Don was employed by the Charles Youtzy Miller Appliance Store for the past eight years and is well known in the cooperative territory.

It is our aim to have Don check all places that haven't been inspected and make recommendations on any changes in your wiring that does not meet the code. When these recommendations are made we urge that you take immediate action as you realize wiring improvements not only safeguard against fires and electrical hazards but mean a money savings to you.

If you have a wiring problem or want a reinspection, call the cooperative office. When Don is not out inspecting wiring he helps the construction crew as a lineman. Most places that have been inspected have added to their original wiring and we have had several requests for reinspections in such cases.

If you have added to your wiring and have already had an inspection and wish a reinspection, send your request to the office accompanied by the \$5 reinspection fee.

BROODER TIME

Drop us a line when you get those chicks so we can notify you in case we have to take your line out of service for any reason. This will enable you to take care of your chicks and keep them from getting chilled.

If you plan on using heat bulbs for your little pigs be sure they are installed correctly. If they are too close to the bedding it is possible to start a fire and the little pigs will not stay in the brooder. Check to see that the bulbs are fastened securely where they cannot be knocked down.

If you plan on installing a water heater be sure you are getting the correct size so that the water heater rate can be allowed. Each element must be at least 1,000 watts and not over 2,500 watts with a minimum capacity of 40 gallons.

VACATION TIME

Perhaps next month we'll have a few comments to add to the constant conflict comparing Florida weather to Arizona - California weather. Charles Youtzy, manager, H. G. Dittmar, president, Morris Birkbeck, treasurer, and Jesse McIntyre, director, attended the NRECA convention in Miami, Fla., in January.

Miss Alice P. Biesmann, bookkeeper and Mrs. Hazel Morrison, billing clerk headed west, to visit relatives and friends. Miss Biesmann has two brothers in Los Angeles and Mrs. Morrison will visit her husband and brother-in-law in Tucson and visit other relatives in Long Beach.

NEWS FROM Eastern Illinois Power Co-op

Paxton, Illinois
T. M. Brady, Manager

TELEPHONE NUMBERS FOR OUTAGE CALLS
Office—8 p.m. to 5 p.m. except Saturday. Report all outage calls during office hours to 185 Paxton. After office hours, call the following nearest number:
Tony Barbier, Paxton 595.
Kenneth Slater, Paxton 576.
Arthur J. King, Paxton 271-J-X.
Donald Sharp, Paxton 740.
Jesse Piets, Gilman 159.
Don Allison, Hoopston 462.
John Dorsey, Cropsey 56.
George Popejoy, Cropsey 59-R-3.
Virgil Farris, Watseka 1227.
Howard Gustafson, Watseka 614.
In case of an outage, check to see if your neighbors have service. If not call collect 185 Paxton. If your call is not accepted you will know that the report of the outage has already been received and that it is being taken care of.

Dear member: March 16, is the date of the annual membership meeting of your cooperative, to be held at Paxton Community High School.

The meeting will start promptly at 10 a.m., and we expect to complete the business portion by 12 o'clock noon. The usual reports will be given, and the election of 11 directors will be held at this meeting.



We will adjourn for lunch at noon, and T. M. Brady will hold open house at our new headquarters building, starting at 1:15 p.m. The building is located at 330 West Ottawa Road, on Route 9, in Paxton.

SHOULD ATTEND

We urge all members to come to the meeting, as well as to visit the new building. Favors will be given to both ladies and men. There will be music to entertain you.

We are mighty proud of this building. It will do much to assist us in better serving the needs of the members. Draw a circle around March 16. We will see you there.

RECEIVED NICE LETTER

We received the following letter from Mrs. Harry Hoskins, Route 2, Potomac: "Dear sir: Here is our first payment—light bill, rather. Thought you would like to know how well we appreciate lights again after almost seven years.

"One of our youngsters told a lineman out here the day we got the lights, Mom's going to turn the radio on and run it for a month without stopping. Well, 24 hours was enough for a start.

"And do we use those lights (plus everything else, of course)! The head of the house whistled at \$13.65. But he whistled again when we compared the last two months of ice, kerosene, gas, stove to iron with, etc.—\$21.00 (compared) to two months of electricity at \$13.65.

"Your Illinois Rural Electric News is tops. Already we have learned quite a few new tricks and ideas. Thank you as a customer for that. I liked that article last month by another manager, about a man who was going to have lights disconnected and go back to kerosene and wood.

"Ha! Sounds like Harry and his Hoosier brother, Fred, last night. But they won't turn 'em off—not with electric equipment in their shops."

This is a very fine letter. It certainly expresses a sense of appreciation for the everyday blessings in life which most of us are prone to take for granted.

We are happy for you too, Mrs. Hoskins, and we know that you will find more and more that electricity does not cost—it pays.

NOT 'THE REA'

A man pointing to a nice farm said, "That's the Second National Bank."

Of course it isn't. And everybody knows it isn't. Even though this farmer borrowed money from the bank to finance some improvements, no one associates him or his homestead with the bank.

We're pretty much like that farmer—except when it comes to people's attitudes about us. We borrowed money, too.

Not from a bank, of course, but from the Rural Electrification Administration—the REA. And now, everybody calls us "the REA." And many of these people actually think we're part of the government.

This rural electric system is no

more part of the government than that farmer is part of the Second National Bank. This system, with its office building, the distribution lines, substations, all belongs to the members it serves with electricity.

They borrowed the money from the government to provide themselves with electric power. Now they're getting the power and paying back the government's money with interest.

No, we're not the REA. We're certainly proud of that fine government agency, of the vision that created it and the tremendous job it has done in helping the farmers of America to bring electricity to the rural areas.

But we're also proud of the fact that we, like all the rural electric systems, are in the very real sense, free enterprise.

NEWS FROM Wayne-White

Fairfield, Illinois
Owen J. Chaney, Mgr.

In case of trouble before 8:00 a.m. and after 5 p.m. call the following—
For White County Call Norman Davis, Carmel, Phone 2175.
For Norris City area call Chalton Carter, Phone 123 or Everett Phillips, Phone 38-J, Norris City.
For Edward County call Weldon Galher, Phone 151-M or Bill Bennett, Phone 217-WX, Albion.
For McLeansboro area call Alfred Venters, Phone 474, McLeansboro.
For west part of Wayne County call Wm. Fleming, Phone 3131, Wayne City, or Dee Vaughan, Phone 3141.
For eastern Wayne County call Cloyd Musgrave, 4294; Charles Mann, 7157; George Harper, 3184; all of Fairfield; Carl Merritt, Phone 6397.

Most of you, I hope, read accounts of the National Rural Electric Cooperative Convention that was held in January at Miami, Fla. in last month's issue of this paper. I had the privilege of attending this meeting as one of the representatives of your cooperative. This was a meeting of farm people representing our nation's largest industry and rural electrification the largest business within that industry. The fruit grower, the meat producer, the grain farmer and the cotton raiser; from Washington to Florida and from Maine to Southern California representing a true cross section of rural America, were there.



Many problems have been met and solved in bringing our rural electric systems to where they are today. Local, statewide and nationwide cooperation has made it possible to overcome these problems.

This great gathering of farm people in Miami was truly a wonderful exhibit of democracy in action and should be a warning, to those who would like to see the rural electrification program fail, that farm people know their rights and intend to protect these rights.

NEED CHANGES

Many of you are aware of the fact that the constant increase in the use of electricity has made it necessary to make many radical changes in our system. You have been plagued with power interruptions where changes have been made.

We think you are aware of the fact that these changes are being made to insure you an adequate supply of power, with a minimum amount of interruption, because you have been very patient when these outages become necessary. We thank you for this consideration.

While we are talking about continual increase in the use of electricity, it is a good time to remind many of you that the wiring in your buildings is probably inadequate for the job you are asking it to do. The addition of more circuits, more outlets and heavier wire to many farm wiring systems will add to the economy of operation of appliances and will greatly increase the safety of electricity.

METER READING

Since we reminded you that it is important for you to read your meter promptly, we have seen considerable change for the better by prompt return of meter reading cards. We thank you for your cooperation and urge you to keep up the good work.

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.

Proper wiring pays for itself. If you think your electric bills are too high, you might find the reason for the additional cost in your wiring.

Most wiring jobs were designed to take care of the average connected electrical load of 10 years ago. Those jobs are now inadequate and will cost you money in added electrical bills each month.



W. L. Walker

Electric wiring is paid for in two ways. First, you pay for it when it is installed. If the wires are large enough and the whole wiring job adequate, that first cost is the whole cost.

But if you are one of those unfortunate persons whose wiring job was just good enough to get by and pass code requirements, chances are, you are paying for that wiring job over and over again in extra electricity.

If the wires are too small, electricity is wasted in heating them. You have to pay for that heat. That electricity, wasted in generating heat in your wires, could just as well be put to work at lighting or for running your motors.

There is some loss in all wires. The larger the wire and the shorter the run, and the smaller the loss.

TYPICAL EXAMPLE

Here is a typical example of the cost of inadequate wiring: A farmer wires his hog house, located 200 feet from the meter pole, to pass the minimum code requirements. The code called for a minimum of number 8 service conductor and 115-volt service. The wiring job was adequate so long as only lights were used in the hog house.

One spring the farmer decided to use heat lamps for pig brooding. Twelve heat lamps were used in addition to the lights, with the resulting continuous load of 30 amperes.

Checking the chart, we find that his present load is costing him about \$2—the cost of electricity used to heat the under-sized conductors for only 500 hours (21 days) at 1½ cents per kilowatt.

REDUCED COST

If the service to the hog house would have been installed according to recommendations, with number 6 conductor and 230-volt service, that cost could have been reduced to only 36 cents for the 500 hours of operation.

By changing from 115-volt to 230-volt service he would have cut the current carrying requirements for each conductor to only 15 amperes instead of 30.

The wireman who tells you that a 115-volt service to any of your buildings or to your water pump is of sufficient size, is doing you an injustice.

Likewise, if he sells you on anything smaller than a 100-ampere service for your home, he is building up additional business at your expense, for in a few short years he will be back to make the change and "heavy-up" your wiring. Think it over! Adequate wiring pays for itself many times over in cold, hard cash!

SELECT PROPER MOTOR

It pays to select the proper motor. In selecting a motor for general farm use, one must determine the many usages to which it will be applied. In order to meet these varying conditions, manufacturers build different types and sizes.

They are designed to meet one of the following three conditions: Easy starting loads up to one-quarter hp, fairly difficult starting loads up to three hp, and difficult starting loads up to 10 hp.

Split-phase motors: The only place this motor can be used is on the easy starting loads. This type of load might be fanning mills, grindstones, washing machines, and emery wheels. It draws a very heavy amperage while starting.

This draw may be as much as six to eight times its normal running current. Once up to full speed, the split-phase motor develops just as much power as any other type of motor, but it is not able to start heavy loads. Because of its heavy draw at starting, it may flicker the lights.

CAPACITATORS

Capacitor-start motors: This type of motor is normally used for fairly heavy starting loads. Fairly difficult starting loads may be such as pump jacks, air

compressors, milking machines, and coal stokers.

The capacitor-start motor has a built-in condenser located either on top, side, or inside the frame. This gives it three times more starting force than the split-phase. It is commonly available in sizes ranging from one-sixth to five h.p. and it is available for use on 115 or 230 volts.

When starting it draws three to six times its full-load running current. This may cause some light blinking. It costs 15-25 per cent more than the same size split-phase motor.

REPULSION MOTORS

Repulsion-Induction motor: Some difficult starting loads are hammer mills, grain elevators, hay hoists, deep well cylinder pumps, and ensilage blowers. The repulsion-induction motor is a commonly known motor for use on this type of equipment.

Its external appearance is similar to the split-phase. The starting motors in the single-phase field with its low current draw in starting.

It is available from one-sixth to 10 h.p. and the cost of this motor is comparable to the capacitor start in the higher horsepower. Many farmers will use the same motor on several machines.

Therefore, it is advisable to buy a motor which can be of general use and is capable of delivering maximum power in starting with the least amperage draw possible. Consequently, the repulsion-induction motor is the motor which is recommended for general farm use.

MOTOR ENCLOSURES

Types of motor enclosures: The three most common types of enclosures for farm motors are the open drip-proof, splash-proof, and totally enclosed.

Open-type enclosures are usually the drip-proof type. Liquids or falling objects will not enter the motor as long as they fall almost straight down.

Most motors used on farms are of this design. They should not be used on any equipment where the motor is exposed to rain, snow or very much dust.

OFFERS PROTECTION

The splash-proof type of enclosure protects the motor from falling objects and liquids and also from objects or liquids that strike it from the side unless they enter at a very low angle.

This type would be most useful on pump jacks or on feed grinders standing outside. They cost about 15 to 20 per cent more than open type motors.

Totally enclosed motors are so designed that dust or grit cannot enter into the working parts. These motors are required to be used in elevators with elevator legs.

Also they are to be used in grinding rooms and any place where dust accumulates. They cost 20 to 40 per cent more than an open type motor.

As a reminder to all wiremen, check section 1301 of the Wiring Specification. I quote, "All stationary motors of one-half hp. and recommended that one-third hp. or larger shall be connected to a 230-volt circuit and this ruling shall apply to any portable equipment not readily moved about or which is continuously in use although portable. On intermittent duty portable equipment, such as electric drills up to one-half hp. motors may be used on 115 volts".

NEWS FROM Corn Belt

Bloomington, Illinois
T. H. Hafer, Mgr.

When this is being written our annual meeting was one week away but when you read it the annual meeting will be history. We hope you all enjoyed the meeting.



T. H. Hafer

We just received word today that REA has approved another loan for your cooperative for \$260,000. We have been building lines, substations, and are now building a new building. For quite a number of years we have done work without borrowing money from REA, in fact your co-op has upwards of \$600,000 of co-op funds invested in the lines of which REA would loan the money. Now we are needing the new building and will soon have it and this loan will replenish our cash reserve fund.

RATE SCHEDULES

Your co-op office is having quite a few requests for copies of rate schedules. We are glad to see this because we want our members to understand the charges for electric service. We will be glad to mail you a copy on your request.

The following bouquet has been received from Miriam Reid a member near Cisco: "Enclosed find check for electricity used. Also to say we are now

enjoying television. Thanks for the good service."

We send a bouquet to member Glenn Meredith of Foolsland for calling and telling us his meter had stopped.

NEWS FROM Tri-County Electric Co-op

Mt. Vernon, Illinois
H. G. Downey, Manager

By the time you receive this copy of the Illinois Rural Electric News, an employee of your cooperative will be home from the hospital. His name is Charles Sigwerth and he works in our engineering department.



H. G. Downey

Charles has really been a sick boy. He first became ill on November 24, spending two weeks in the hospital and then returned to work only to be again admitted to the hospital on December 30, 1953, and at this writing is still in the hospital.

At the present time, he is in the De Paul Hospital in St. Louis and if all goes well we expect to have him back in Mt. Vernon by February 12. Charlie has become a symbol of courage and determination to all who know him, since his condition was very serious three different times, to the point that he was not expected to live. The latest word is that he is recovering very nicely.

WHOSE MONEY IS IT???

Hardly a month passes without the co-op office receiving money in one form or other with no identification as to whom the sender is. Often cash is received in an envelope, bearing no return address, no light bill, or stub or any identifying writing.

Cash, of course, should never be sent through the mail. We have constantly advised against this practice. Still worse, is to send the cash in the mail with no identification as to the sender or whose bill it should be applied against.

Naturally, the folks in the billing department have a very difficult time in determining which account should get the credit for such unmarked money.

HOW TO HELP US

Still another cause of confusion is when checks are received which are signed by persons not on the rural lines, and with no instruction as to which account is to receive the credit.

Members can insure and expedite proper handling of bills and accounts and also aid the folks in the office by making sure that their name is put on every letter mailed in. And by including the entire electric bill when sending in checks to pay the electric bill, they can help.

Also please do not go to your neighbor or relation to borrow a meter reading slip. Remember your co-op places your name and address on these slips and if you use others, they will be given credit for the money you send in and it may be possible that your account will become delinquent.

If you run out of meter reading slips, let us know, and we can furnish you another meter book.

WORK PLANS

Present plans were to energize our new 69,000-volt Lively Grove substation located on Route 153 during February. This station is of latest design and represents an investment of approximately \$35,000 which is one of the many improvements your cooperative is making to assure adequate and continuous service.

Our new Lively Grove substation will serve members in the western half of Washington county. It is located centrally within the area it serves. The transmission line serving the Lively Grove substation is owned by Illinois Power Company and we are fortunate in the fact that power can be supplied to this line from Ashley, Sparta or Belleville.

During the past four years the members of this area were served by a substation in Nashville. We connected onto this line at Addieville which was a 7,200-volt, three phase line that goes along the L and N Railroad, serving Addieville, Okawville and Venedy.

Originally this line was built for 2,300 volts about 35 years ago on steel structures and later converted to 7,200 volts. Several outages were encountered on this line recently because of its age and state of repair and we are looking forward to a service record far superior to any of the past.

Our new Lively Grove substation is equipped with Allis-Chalmers' voltage regulators which maintain a constant line voltage at all times. This means that members served from this station can be assured a constant voltage. For instance, if the setting should be for 120

volts the voltage will never be more than 121 volts or less than 119 volts.

This substation has a 1,000 K.V.A. rating at present which is double our former supply. We estimate the present transformers to adequately supply our needs for 10 years.

Some time during the month of March a steel truss for mounting regulator switches will be installed in our Ashley substation along with regulators. This will give benefits as stated above to the balance of the members in Washington county.

Upon completion of the regulator installation at Ashley substation all members served by your cooperative will have benefits of regulated voltage.

ELECTRIC BROODING

Every year many articles have been written about electric brooding and after a person reads them the most wonderful and essential thing of the article is that it can be done. Practically all modern farmers use electricity to brood chickens, pigs or lambs.

It has been stated that 15 to 30 per cent of the lambs and pigs dropped are lost because of crushing, cold weather, dampness, disowning, malnutrition and other causes. At least half these losses can be prevented by the use of electric light and heat at the time of the animals birth and for the first two weeks of the young animals' lives.

LAMP ADVANTAGES

Advantages of Infrared Heat-Lamp Brooding:

1. Quick and easy to install.
2. Low initial cost and long life.
3. The extension cord, porcelain socket and reflector, if any, can be used for other purposes when the farrowing season is completed.
4. Equipment can be moved easily and quickly from pen to pen. The lamp socket, reflector and cord can be easily sterilized to prevent the spread of disease.
5. Heat lamps tend to keep the bedding drier, which improves the condition under which confined animals must live.
6. The same equipment can be used for brooding pigs, lambs, calves or chickens.
7. It will save an average of three pigs in two litters.

Electrical uses are unlimited and will make a profit for anyone that has the foresight to see the advantages of this low cost servant.

We think its worth the price, try it sometime—use electricity.

OPERATING STATISTICS

	Dec. 1952	Dec. 1953
Miles energized	2,094	2,125
Revenue per mile	\$26.92	\$27.96
Connected members	6,995	7,054
Density per mile	3.34	3.32
Average bill	\$7.77	\$8.28
Average kwh.	256	279
Kwh. sold	1,855,190	2,002,506

NEWS FROM Adams

Camp Point, Illinois
Dean Searls, Mgr.

Protect your livestock from electrocution by properly grounding all electrically heated stock tank warmers. Whether the electrically operated equipment is completely automatic or manu-



Dean Searls

ally controlled, you still have to take the necessary precautions when you work with electric equipment around water, because water is such a good conductor of the current.

Ground the heater unit by connecting a wire from the frame or shell of the heater to the neutral or grounded side of the circuit. Better still, drive a ground rod beside the tank in a location where the livestock cannot get at it and attach a ground wire directly from the water heated device to the ground rod.

Heaters that have exposed elements and are submerged directly in the water are very dangerous and should not be used. Three rules to follow in cold weather watering are: Heat as little water as possible to do the job; insulate the stock tank as much as you can in order to retain the heat; and make sure that the heater is properly fused and grounded.

POPULAR PROGRAM

Our free installation of electric ranges and electric water heaters program which began on January 15, is proving very popular again this year. Several of our electrical dealers have given additional impetus to the program by offering special sales at this time.

Many dealers have good used ranges and water heaters which can be purchased and still take advantage of our free installation offer.

All dealers have been notified of our requirements and they should know whether or not the used appliance you are interested in can be installed under our free installation program.

NEWS FROM Egyptian Co-op

Steeleville, Illinois

R. S. Holt, Mgr.

TELEPHONE NUMBERS FOR OUTAGE CALLS

Call Office at Steeleville, No. 68 between 8:00 a.m. and 4:30 p.m. except Sundays and holidays or if closed.

Call office at Murphysboro No. 830 between 8:00 a.m. and 4:30 p.m. except Sundays and holidays.

After Office Hours call the following nearest telephone—

Elmer Nagel, Steeleville 101-F-21.
John Shriver, Chester, No. 544-R.
Robert Huddleston, Steeleville, No. 43-F-41.
William Muench, Steeleville, No. 82-R-12.

CARBONDALE AREA

Carl Reeves, Carbondale 50-F-14.
Herber Dalley, Murphysboro 1337.
In Case of an Outage, check to see if your neighbors have service. If not, call the nearest telephone listed collect. If your collect call is not accepted you will know that the outage has already been reported and is being taken care of.

One of the big issues before congress at this time is REA. Every day you can read in your newspaper or hear over the radio something about someone being for or against the program. In many cases politicians have confused the people until we are not sure what they are talking about.



R. S. Holt

REA is not a Democrat or a Republican program. It is a farm program to give farm people electricity at the lowest possible cost. It is a program to give the farmer low cost electricity to cook his meals safely, pump and heat his water, light his farmstead, and do a 100 other jobs on the farm.

Certain congressmen and politicians who are friends to the enemies of your cooperative would have you believe REA and TVA are socialistic. We here at Egyptian don't depend upon TVA for electricity, but farmers in Iowa, Kentucky and many other states do depend on federal power agencies for cheap power.

We need to support those farmers now, because we never know when we will need their support on some issue that comes up in the future.

HEAT-LAMP BROODERS

We have answered many inquiries on heat lamp brooders during the last few weeks. We mailed each member a folder with coupon whereby they could get 25 free chicks if they bought a new four or six lamp brooder between the dates February 1, and April 1. Anyone who has lost his coupon can write or call the office and we will mail him another.

Heat lamp chick brooding is by far the most popular type of brooding. Remember that a four lamp brooder will ordinarily take care of 350 chicks and the six lamp 500 chicks.

APPLIANCES ADDED

Home freezers: John Doeth, Ava, George Meister, Marissa, George A. Knop, Campbell Hill, Adolph Schrieber, Red Bud, Wm. Fox Jr., Murphysboro, Charles Poe, Elkville, Lawrence McMahan, Vergennes, M. L. Paul, Murphysboro, Charles Struss, Carbondale, Russell Clendenin, Cora, Willie Lambkin, Carbondale, John Wesseln, Pinckneyville, Willard Hughey, Carbondale, Ward Harris, Chester.

Television: Clyde Rush, Carbondale, Robert VanCloostere, Murphysboro, Delbert Dietz, DeSoto, William Rowan, Makanda, Paul Sparks, Elkville, Park Jarrett, Cora, Joseph Martin, Pinckneyville, Wm. L. Simmons, Chester, Floyd Cox Jr., Oraville, John Fulford, Chester, Jasper Stearns, Murphysboro, H. C. Duncan, Elkville, Burch Marks, Ava, Ben Baseler, Carbondale, Alvin, Duty, Cobden, Arthur Ohlau, Percy, Edwin Fauth, Marissa, Ben Schneider, Vergennes, Charles Leek, Elkville, Harley Higerson, Willard Hughey, Carbondale.

Sewing machine: John S. Lee, Ava, W. O. Meininger, Vergennes, J. M. Jones, Rockwood, Wm. Lehmborg, Campbell Hill, Lyman Hamman, Sparta, Rose Missethorn, Percy, Robert Appleman, Carbondale.

Ranges: John Manis, Makanda, Wesley Hartnagel, St. Louis, Ray Snyder, DeSoto, Raymond Hartman, Campbell Hill.

Water heater: Fletcher Chadwick, Cora, E. A. McMeen, Chester, Louis Saul, Ava, Charles Bush, Jacob, Ray Snyder, DeSoto, Paul Campbell, Coulterville, L. L. Montroy, Ellis Grove, Wm. O. Schulein, Evansville, Herbert Moeckel, Jacob, Wm. J. Mayer, Pinckneyville.

Water systems: Wm. J. Mayer, Pinckneyville, E. A. McMeen, Chester, Louis Saul, Ava, John Winter, Pinckneyville.

Milk cooler: Arnold Mochrs, Red Bud.
Percolator: Joe Robinson, Carbondale, Roscoe Robinson, Hurst, Bennie Bibbs, Carbondale, Earl Tygett, Carbondale, Arnold Mochrs, Red Bud.

Corn popper: Shelby A. Wright, Carbondale, George E. Flure, Pinckneyville.

Toaster: Fritz Siemers, Chester, Gene Heiple, Gorham, Kenneth Shannon, Jacob, Foster Short, Marissa, Toaster, Kenneth Carter, Elkville, Otis C. Wagener, Evansville, Wm. D. Sullivan, Vergennes, Gerard Kettman, Prairie du Rocher, Waldo, Grimes, Carbondale, Sylvester Nitzsche, Ellis Grove.

Furnace blower: Jesse Johnson, Oraville, Norman Heins, Gorham, Herman Knop, Percy, Louis Walkenhorst, Pinckneyville, Alfred Batteau, Elkville, E. A. McMeen, Chester, Robert Weber, Prairie du Rocher.

Stoker: Charles Schneider, Vergennes, E. A. McMeen, Chester, Robert Weber, Prairie du Rocher.

Clock: A. L. Whisler, Ava, W. H. Gerlach.
Mixer: Arnold Mochrs, Red Bud.

Mixer: Elmer A. Hiller, Cutler, Louis M. Schuetz, Sparta, Charles Montgomery, Modoc, Ernest Newbold, Alto Pass, Guy Dial, Marion, Wm. Schaffner, Evansville, Frank Epplin, Pinckneyville, Ross Evans, Oraville, Wm. Elling, Percy, Effie Stephens, Carbondale, Clarence Mohr, Pinckneyville.

Pasturizer: Charles Parrish, Vergennes.
Vaporizer: E. A. McMeen, Chester.

Iron: Raymond Prage, Steeleville, Iron, Thomas Torrens, Pinckneyville.
Waffle iron: Melvin Patridge, Elkville, Joe

Favier, Chester, Eugene Priebe, Campbell Hill.
Electric blanket: Ben Schneider, Vergennes, Glenn Brown, Cutler, Claude Childers, Marion, W. H. Moore, Walsh, Harold Woodside, Coulterville.

Heating pad: Frank Brown, Pinckneyville, Howard Wesley, Vergennes.

Sweeper: Park Jarrett, Cora, Post Oak Parsonage, Campbell Hill, George E. Flure, Pinckneyville.

Electric heater: Post Oak Parsonage, Campbell Hill, Elmer E. Hindman, Rockwood, Roy Higginson, Oraville, Joe Carman, Walsh.

Deep fryer: Allen Abernathy, Steeleville.
Fig brooder: Joe Deason, DeSoto.

T. V. lamp: Oscar Mennerich, Chester.
Deep fryer: Adolph Schrieber, Red Bud, Walter Cottom, Ava, Gilbert Stearns, Carbondale, Aubrey Albright, Marissa.

Heat lamps: G. W. Dietz, DeSoto.
Electric welder: Paul Twenhofel, Gorham, Fletcher Charwick, Cora.

Electric drill: Otto Kloth, Walsh.
Bench grinder: Clarence Mohr, Pinckneyville.

Clock-radio combination: W. H. Gerlach, Sparta.

Clothes dryer: Elvin Bockhorn, Campbell Hill, August Koester, Red Bud.

NEWS FROM Menard

Petersburg, Illinois

Howard O. Bell, Mgr.

Hot water under pressure is a convenience that every home should possess. Its advantages are many and it is only after you have enjoyed them for a period of time that you would be able to list them all.



Howard O. Bell

Modern electric water heaters operate on the principle of a large thermos jug. They consist of an inner tank where the water is stored, heating elements either in or around this tank, filled with an insulating material. They are automatic in operation and require little maintenance or attention.

Thermostats maintain the temperature desired and for ordinary household use 150 to 170 degrees is normally as hot as you will need. However, this is a matter of choice and the thermostats can be set to suit your needs.

Carrying the temperature too high may result in excessive scale or lime deposits accumulating just as it did when the kettle was left on the coal and wood stoves prior to the days of rural electric cooperatives.

INSTALLATION TIPS

Heaters should be located as near the hot water outlets as possible because hot water in the pipes from the tank to the various hot water outlets will cool immediately after each use. This results in a direct loss because no benefit is obtained from the amount of water allowed to cool in the pipes.

Standard electric water heaters need an individual electrical circuit from the main load center. A fused disconnect switch should be installed in this circuit as near the water heater as possible.

This switch should be visible from the heater so that anyone who has occasion to work on the heater can readily see that it is disconnected. This is most important because any plumbing should be well grounded and work should not be done on the heater while it is connected to the electrical circuit.

We will be glad to explain how this circuit should be set up and will send our wiring inspector to inspect the installation after it has been made. No charge is made for this inspection and we urge you to make use of it. It may save you a very high electric service bill at a later date.

VARIED COST

Modern electric water heaters will use one kwh. of electric energy to heat four or five gallons of water and the cost of operation will vary according to the amount of hot water used. Cost will also vary according to the number of kwh. you ordinarily use for other purposes.

For example, if you are now using 400 kwh. bi-monthly, any additional kwh. used will cost you 16 cents each. We will be glad to discuss this with you and can give you a reasonable estimate of cost based on your present kwh. usage.

Capacity needed is an important item to consider when purchasing a water heater. Never buy less than a 30-gallon, two-element heater and for a family of four, get at least a 50-gallon heater.

Larger sizes are recommended if you plan to use automatic laundry equipment. Remember that the size of the heater does not increase the cost of operation. It simply provides a storage place for hot water so that it will be available when needed.

Please keep in mind that a water heater is not an additional expense. You are now using hot water and regardless of how you heat it, it is costing you money. Why not heat it the automatic electric way and have it on hand for immediate use at all times.

No report on the annual meeting of

members of Menard Electric Cooperative can be given at this time, but we hope you attended and that you enjoyed it.

NEWS FROM Norris Electric Cooperative

Newton, Illinois

Damon Williams, Manager

OUTAGE CALLS

Office hours: 8 a.m. to 5 p.m., Monday through Friday. Closed on Saturday. Telephone 404—Newton.

To report an outage after Office Hours call Mrs. Harry Beavers, Newton; Joe Ware, John Tabb, or Gene French, at Newton; Francis Smith at Claremont, or Freeland Swarens at Lawrenceville.

The 16th annual meeting of our cooperative was held on February 20, at the Newton Community High School. We want to thank H. E. Wright, who is principal, the custodians, and board of education of the high school for their splendid cooperation in helping to make the meeting so successful.

We also greatly appreciate the work done by the home bureau ladies and others who helped prepare and serve Damon Williams lunch. This was a big job well done and we want to sincerely thank them for their help.

Others who helped were the dealers who donated the appliances that were given away as awards at the end of the meeting. A list of these dealers was prepared for distribution to all who registered at the meeting.

Please remember these dealers are your friends and are interested in the welfare of your cooperative. We hope that you as members will show your appreciation by calling on them when in need of electrical appliances or services which they are prepared to render.

OUR CO-OP HAS GROWN

Your cooperative has really come a long way since the beginning in 1939. At that time many people believed that they could not afford to pay for electric service. Now there are very few who feel that they could afford to do without it.

Electricity is the ideal way to produce heat, cold, power and light. It is clean, safe, dependable, and low in cost. The more of it that is used, the less is the average cost per kwh. Electricity makes possible the completely automatic operation of equipment.

Many chores, such as pumping water, milking cows, elevating baled hay and grain can be done in less time and at less cost with electricity than by any other means. That is why most farmers feel that they cannot afford to not use the electric service now available to them.

It is interesting to note that in December of 1939 we had less than 500 members using an average of little more than 23 kwh. for the month. In December of 1953 we had more than 10,000 members whose average for the month was more than 254 kwh.

INCREASED CAPACITY

In December of 1939 we had one 750 K.V.A. substation, located just south of Newton, serving the entire cooperative. Now we have eight substations in operation. The total capacity is 9250 K.V.A. and another substation north of Greenup will soon be ready to energize. This will add another 1,500 K.V.A. for a total of 10,750 K.V.A. substation capacity.

In addition to all this, many new feeder lines have been constructed and old ones have been made heavier in order to carry the load. Who says that the country folks in our area can't afford to use the electricity that they need and want?

ELECTRIC MOTORS

One of the most common pieces of electrical equipment used on the farm is the electric motor. Many are used on appliances such as the refrigerator, washer, and electric clock without much thought of their many advantages.

But there are still many chores to be done on most farms where an electric motor could save much hard work, or add to the family income and comfort.

Electric motors have many advantages when we compare them with any other kind of farm power. They are low in cost, cheap to operate, long in life, highly efficient, simple to operate, quiet in operation, capable of starting a reasonable load, capable of withstanding temporary overloading, may be automatically or

remotely controlled, and are compact and safe.

Now that you have the electric service why not put motors to work for you. Pumping water, milking cows, separating the cream, shelling corn, elevating grain, curing hay, mixing concrete, cooling your home and many other chores can very conveniently be done with an electric motor. You might be surprised to find out how much work can be done with one kwh. of electricity.

NEWS FROM Western Illinois

Carthage, Illinois

Lee Leonard, Manager

Office Hours—8 a.m. to 5 p.m. through Friday; 8 a.m. to 12 p.m. on Saturday. Telephone 84—Carthage.

In case of interrupted service, outside of regular office hours, call one of the following numbers:

Lee Leonard, Carthage, White 248.
Clarence Hutchins, Carthage, Black 495.
Luther Bennett, Carthage, Black 416.
Roger Goetz, Carthage, Red 360.

D. W. Baker and Ralph Brausey, CPA auditors from Wise, Baker and Company, Waterloo, Iowa, audited the books of the cooperative, the week of February 8, for the year of 1953.

Lee Leonard, manager, Robert Wagner, president; Lee Junk, vice-president; Lloyd Dickson, Lee Murphy, and Wendell Thompson, directors, of this cooperative attended the monthly district meeting of the managers and directors held in Macomb, the evening of February 8.

Lee Leonard and Fred Harasha attended a meeting of the managers and bookkeepers February 5, in Macomb.

ELECTRIC BEATS GAS

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 the agriculture research center 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 over bottled-gas refrigerators 11.6 to 1 and electric water heaters proved more efficient than bottled gas water heaters by ratios ranging from one and six-tenth to one, to two to one.

Electric lights in the laying house have been used for many years to stimulate egg production when prices are highest. Formerly it was believed that in reared production from the use of artificial lights was due to the lengthening of the day for the birds to consume more feed.

More recent studies show that the stimulating effect of the light rays is more important than the extra feeding time provided. . . The electricity needed to light a pen for 100 birds ranges from two to six kwh. a month during the lightning season.

REFRIGERATORS

Most all of you know the many advantages of an electrically-operated refrigerator. But here are a couple of tips that may mean an additional saving to you. First of all, to save wear and tear on your refrigerator, don't overcrowd it or let too much frost form before defrosting.

And while you're cleaning the inside, you might try dissolving a level tablespoon of baking soda in each quart of warm water. When you come to the rubber gasket around the door, it's best to use plain soap and water instead of soda.

Speaking of the gasket, here's an easy way to see if it's doing a good job for you. Close your refrigerator door on a piece of ordinary wrapping paper about the thickness of a dollar bill.

If it pulls out easily, the gasket is not tight enough. Correct this by tightening the latch on the door, making it fit more snugly. Test it again, and if it is still loose, we're afraid you'll just have to replace the gasket.

We have begun planning for our annual meeting which is to be held July 19 and 20. Watch this column and your W.I.E.C. News for additional information concerning the annual meeting.

We have planned our meeting this year so as not to conflict with other meetings and celebrations. Make plans now to attend this meeting.

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NEWS FROM Southeastern

Eldorado, Illinois
Thomas Clevenger, Mgr.

The following is a list of telephone numbers which may be called when necessary to report an outage, or any trouble on the lines:

Between 8 a.m.—5 p.m., Monday through Friday, call Eldorado 610. Emergency calls at hours other than those mentioned, call: Benton 3092
Golconda 13-R-2
Cave In Rock 26-R
Harrisburg 264-5, 1430, 173.
As. your operator for correct exchange.

Oil Field Electric Co. has been awarded the contract for the new feeder line from Dixon Springs to Golconda. The construction on this line is now in progress.

When completed, this line will enable us to feed the town of Golconda and a considerable part of the surrounding area from either Elizabethtown or Dixon Springs.



The survey for the new transmission line from Joppa to Dixon Springs is now being made and we plan to build this line this summer.

The work on the lines south of Marion has been completed. During the time the contractor was working on this line, it was necessary to interrupt service while changes were made.

We appreciate the patience of those whose service was interrupted and believe that now that the heavier lines have been installed better service will be available in this area.

HIGH USAGE

The contract for the Walpole transmission line has been awarded to the Schulman Electric Company of Chicago. Work will begin on this line in the very near future.

The uses being made of electric service are far in excess of that which was anticipated when most of our lines were built. In order to keep abreast of ever increasing demands for electric energy, we are engaged in a system improvement program which will add two additional substations and about 28 additional miles of transmission lines.

Now is the time to save money on appliances. The new merchandise has arrived and has been placed on the floor for display. There are a few models of the 1953 line left—both ranges and refrigerators—which are offered to our members at a real saving.

These appliances are new and carry the full factory warranty, as well as your cooperative's lifetime maintenance service policy. If you need a range or refrigerator, come in to your co-op service department and look them over or drop us a card and we'll be glad to call on you.

NEWS FROM Clinton County

Breese, Illinois
Joseph Heimann, Supt.

IMPORTANT PHONE NUMBERS TO REMEMBER

Keep This List Near Your Telephone At All Times
From 8 a.m. to 5 p.m. Mondays through Saturdays, call the Office—Breese 76.
In case of an outage or for any other emergency after 5:00 p.m. call—
Ernest Becker, Breese 69.
Robert W. Vander, Plum, Breese 278.
Robert Hintz, Shattuc.
Joseph Huelsmann, New Baden 69-R.
Paul Huels, New Baden 108-R.
Cut this list out of the paper and put it near your telephone or paste it in your directory where it will be available at all times. In case of an outage check with your neighbors first to see if they have lights before reporting line or individual outages.

There is the story of the young farmer fresh out of an agricultural college who decided that this ought to be the age of specialization on the farm as well as in the city.



He was going to run his father's farm, which was mainly a dairy farm. So he found a hired man to milk the cows, the best milker in the country, even though he was a little fellow who could not lift a good forkful of hay. That meant the young farmer had to find a heavy-work specialist, too.

That took care of everything but the chores, which called for a quick moving man who could do a little thinking. The milker allowed as how he hated to do the chores, and the strong man was too slow. A chore specialist was hired a few days later.

DIDN'T GET RICH

The young farmer did not get rich. None of the other farmers expected him

to. All of which leads us where everybody knew all along we were going.

Most farmers would be quick to size up the mistakes of the young farmer, but some are making the same mistake when it comes to energy to do their chores, cook their meals, clean the house and entertain the family.

Electricity can do all of these things . . . do them better and cheaper than anything else. Any other "fuel" is limited to a narrow, special field, like heating and refrigeration.

Anyone who uses electricity to do a part of the job and another fuel to do something else is making the same mistake the young farmer made. The more things you put electricity to work doing, the less each kwh. will cost you.

* * *

Each time you decide to use bottled gas for a part of the job, you are laying off the low cost kwh. on the end of your electric rate scale, because when you're already using over 200 kwh. per month, you only pay 1½ cents per kwh. or 1.3 cents per kwh if you have an electric water heater of 30-gallon or more capacity.

NEW APPLIANCES

Water heater, Fred Ahlf, J. E. Machen, Mrs. Fred Hempen, Ray Spihlmann.
Home freezer, Clem Jansen.
Milking machine, Ted Holzhauser.
Television, Irwin Wessel.
Deep fryer, Abe Edwards.
Toaster, Theo. Elling.
Vacuum cleaner, Robert Beckmeyer.

OPERATING REPORT

January 1954

Miles energized	732.25
Revenue per mile	27.55
Connected members	2047
Density per mile	2.80
Average kwh. per farm	312.1
Average bill per farm	8.82

NEWS FROM Rural Electric

Divernon, Illinois
Ralph V. White, Mgr.

Office Hours—7:30 a.m. to 4:00 p.m. Monday through Friday. The office is closed all day Saturday. Telephone number—Divernon 19.
Make trouble calls to the outage reporter on your telephone exchange. The outage reporter will notify the cooperative office.



Recent tests by the United States Department of Agriculture have spotlighted the economical advantage of electricity over bottled gas. These tests proved that electricity is more economical than bottled gas for cooking, water heating and refrigeration.

The over 200 kwh. per month rate of your cooperative is 1½ cents. The majority of the members use more than 200 kwh. per month. For cooking, bottled gas would have to be sold for less than \$5.35 per 100 pounds to be competitive.

Bottled gas in this area is much higher than that. This says nothing for the cleanliness, efficiency, safety and added convenience of the electric range.

WATER HEATING

The USDA tests showed a very large savings of electricity over gas in water heaters. When you are receiving electricity for 1½ cents, bottled gas for heating water would need to sell for less than \$5.85 per 100 pounds.

Again with electric water heaters you have the advantage of cleanliness safety, convenience, automatic control, accessibility plus other advantages of electricity over old-fashioned type water heaters.

READ METERS

Your cooperative has long had a policy of members reading their own meters, determining the amount due and remitting this amount to the cooperative office. For the benefit of new members we would like to review this policy briefly.

Members whose last names begin with the letters A through K, in alphabetical order, read their meters on the 12th day of each month. The members with last names beginning with L through Z inclusive read their meters on the 20th day of each month.

If the reading is not received within five days of the reading date, an estimated bill is prepared. The charge is then for the estimated bill, and if the meter reading is received after this date, it is not used. This sometimes causes misunderstanding on the billing.

Each member is allowed 10 days to make the payment. If the payment is not received within 10 days of the reading date, then a 10 per cent penalty is assessed and collected.

* * *

It is to your advantage to make sure your reading is received within five

days of the reading date, and the payment within 10 days. Most members make it a practice to send the card with the reading and remittance together, immediately after the card is received.

Why not read the meter on the way to the house from the mailbox when the card is received, subtract the previous reading from the present reading, and check the rate chart immediately?

Then make out the check or money order while it is still fresh in your mind. Remember, also, do not send cash through the mail. Always send check or money order. A money order can be purchased for a few cents. If lost they can be replaced, not so with cash.

NEWS FROM Illinois Valley

Princeton, Illinois
F. I. Ruble, Mgr.

Address: 430 S. Main St., Tel. Princeton 3-1331
Office Hours—8:00 a.m. to 5:00 p.m. Monday through Friday.

TO REPORT OUTAGES AFTER HOURS—
Princeton Area: Milford Jontz, Line Supt., Telephone Princeton 2-2072, or Floyd Christiansen, Maintenance Foreman, Telephone Princeton 2-4792; Stanley Ballard, Maintenance Lineman, Telephone Princeton 3-5813; Leonard Sifford, Phone 3-3562, Princeton.

TO REPORT OUTAGES AT ALL TIMES IN—
Galva Area—Lester Register, Maintenance, Telephone Galva 504-J.

Ottawa Area: Jack Lewis, Maintenance, Telephone Ottawa 2987-R-3; Farrel Brooks, Phone 2423-L, Ottawa.

NOTE—Members in Galva and Ottawa areas please try to report trouble to your maintenance man before calling Princeton.

We urge you to read each copy of your Illinois Rural Electric News from cover to cover. The many interesting special articles on the use of electrical appliances and equipment may supply you with information you've been needing to help you get the most from your equipment or appliances.



Articles in the news are written to give you first hand information on what other cooperative members are doing to use electricity advantageously. If you have erected a building, built some labor-saving equipment or are using electricity in an unusual way, will you write your co-op office and tell them you have a story to pass on?

This note will be just between ourselves, but will present an opportunity for us to visit you and talk it over. We are all in the business to help each other and what you are using or doing that benefits and helps get your job done, or made easier, may help someone else.

Let's try to make our newscolumn and the special articles more interesting during the year. We have had some very good news articles during the past year and who knows but what the lead you send in will develop into the best story of the year. Thanks for your interest and cooperation. Sincerely yours, your column editor.

MORE EGGS

One of the sure methods to increase egg production is to have plenty of warm water for your flock to drink.

Here is how you can do it. Keep up egg production with a water warmer for your chickens. Most water is consumed by hens if it is about 50 degrees. The more water taken in, the higher egg production. Eggs are about 65 per cent water.

Use an immersion water warmer of the cartridge type or fountain warmer. The immersion type comes with thermostatic control and will keep the water at about 45-50 degrees. Of course, you will have no ice forming, besides saving yourself the trouble of emptying water pans each cold night, or thawing them out when frozen.

Increases up to 20 per cent in egg production are common when temperatures are correct. Warmers cost little, can be even made at home and pay for themselves in increased egg sales. Consumption for warmers is from 10 to 20 kwh. in colder winter weather.

LAYING HOUSE LIGHTS

Electric lights in the laying house have been used for many years to stimulate egg production when prices were highest. Formerly it was believed that increased egg production from the use of artificial lights was due to the lengthening of the day for the birds to consume more feed.

More recent studies show that the stimulating effect of the light rays is more important than the extra feeding time provided. The electricity needed to light a pen of 100 birds ranges from three to six kwh. a month during the lighting season.

SAFETY THOUGHTS

This is not written to frighten you, but last year accidents in the home were

greater than on the highways. Most accidents in the home occur through carelessness or just not thinking.

Of course, our primary interest in home safety is the proper handling of your electrical equipment. Be careful and follow a few simple rules of safety in handling your electrical equipment. It does not take a fallen high voltage line to be dangerous—a 120-volt electrical shock can be fatal.

Read these few rules over, learn them and practice them.

1. Never work on an electric circuit or appliance until the main switch has been turned off.
2. If you are in doubt about how to install or repair electrical equipment or wiring, call a competent electrician.
3. If a fuse blows, check for damaged or bare wires, defective sockets and too many appliances on the circuit.
4. Never replace a blown fuse with one of greater amperage. Your fuse is your fire insurance.
5. Avoid long extension cords. They cut down on the efficiency of your appliances, use more electricity to do the job, and are otherwise a source of trouble.
6. Disconnect electric cords by pulling on the plug, not the cord.
7. Always place electric wires so they will be safe from mechanical injury.
8. When pipes of your water system shock, disconnect your pump and water heater, then check each for shortages.
9. Place switches and outlets out of reach of the bathtub.
10. If you add to your present wiring, be sure all additions are installed in accordance with the National Electric Safety Code.
11. Report low or broken wires to the cooperative when they are wires installed by the cooperative.

NEW TRENDS

New trends in merchandising will be the keynote in introducing electrical household appliances to homemakers this spring. Most manufacturers are bringing to the buyers attention, eye appeal, new styling and designing of appliances, and even color to attract sales.

One nationally known manufacturer recently held a regional sales conference in Chicago attended by more than 700 dealers, distributors and guests to see their new line of refrigerators and water heaters.

Beautiful styling, color and designing made the range, refrigerators and freezers stand out. Backed by a service guarantee to assure the purchaser that their purchase would receive the proper attention when needed.

Manager F. I. Ruble, and Fred E. Darr attended this showing which indicated by its presentation that a new manner in merchandising aimed at the purchaser's own convenience was being recognized.

The next few months is the opportune time if you plan to purchase or trade in any household appliance. See your appliance dealer soon if you do consider it.

ATTEND MEETINGS

On January 26, the annual meeting for members of the Seatonville Elevator Company was held at the Parish Hall, Seatonville, and was attended by 225 members and guests. Fred E. Darr was the speaker.

Members of your board of directors held their regular monthly meeting, Wednesday, February 17, with all members present. President Upton Craig, presided.

Manager F. I. Ruble and Fred Darr attended a district manager-power use meeting held at the McDonough Power Cooperative, Macomb, February 5.

Your cooperative assisted with the program presented in connection with the Schmidt-Krager Implement company show held at Manlius on February 13. H. C. Schmidt and L. M. Krager are members of Illinois Valley.

The two adult evening classes sponsored by the Bureau township home ec. and vocational ag. instructors held a joint session on February 18. A program was presented by your cooperative on safe wiring, what's new in appliances and lighting. Sound movies were also shown.

Note: Our program service can help you in planning your community club or school program. To date your cooperative has presented or provided material for 80 programs since September 1.

ADDRESSES FARMERS

The Bureau County Farm Bureau has just completed a series of meetings known as the Young Farmers' Short Course. Nearly 200 of this group attended each of the farm meetings that were held. Topics included explaining the affiliates of the Farm Bureau and Illinois Agricultural Association by representatives of those organizations.

While not an affiliate of this group the farm bureau organization in Bureau and the seven other counties in which the cooperative extends its lines, works with the rural electric program. It was only natural that in planning the program that Halsey Miles, farm adviser, invited Manager F. I. Ruble to attend the session held February 11, to discuss the rural electrification program developed for the cooperative's 3,482 members.

NEWS FROM M.J.M. Co-op

Carlinville, Illinois
A. C. Barnes, Mgr.

TELEPHONE NUMBERS FOR OUTAGE CALLS

Office Hours—8:00 a.m. to 5:00 p.m. except Saturday and Sunday, holidays, Carlinville 136.
John Scroggins, Carlinville 577-Y.
Aerio Balestri, Hillsboro Co., 8506.
Claude McAfee, Brighton 40.
Charles W. Witt, 803 Sumner St., Jerseyville 296-W.
B. W. Bandy, 830 School St., Hillsboro 830-K.
Delmar Miller, Nicholas St., Carlinville 669-Y.
Howard Bloomfield, Carlinville 153-L.
William Hensen, Jerseyville 437-R.
James Hopper, Carlinville 321-X.
Ralph Sides, Carlinville 687-X.
If lineman does not answer and for any other business aside from trouble, call A. C. Barnes, Carlinville 565-L.
KEEP THIS LIST NEAR YOUR TELEPHONE CHECK with your neighbors to see if their lights are out before calling. Then report the line outage.
COOPERATION INSURES
BETTER SERVICE

Lack of sufficient rainfall in this area continues to cause a major problem in providing sufficient water for the modern farm. Our deep wells in this area are continuing to fail to supply the amount of water expected of them. And shallow wells, in most cases, have ceased completely as a source of water.



A. C. Barnes

Only those fed by springs and other sources of underground water, continue to provide the necessary water for livestock and home use. Your cooperative has extended electric service to locations where water was available on several farms and will continue to do so wherever the distance is not too great to enable the line to pay out.

Any member having a water problem should feel free to contact the cooperative office. There might possibly be a solution to his water problem by the extension of electric service in order to make remote wells or springs available.

DO CUSTOM WORK

In this area, several plumbing concerns have purchased ditching machines whereby they offer complete service in installing pipe for water purposes, either plastic or galvanized iron.

These concerns dig the ditch, lay the pipe and fill the ditch, thereby relieving the member of any of the hardship work encountered in laying water pipe. Don't fail to investigate this service if you have a problem along this line.

This time of year is also a good time to plan your improvements and extensions to your present water systems. This office would also like to cooperate with you on any problems that you may have concerning your extensions or additions to your present systems.

FARM PONDS

Along with your spring planning of pasture improvements, it might be well to consider the building of a farm pond to collect water whenever the rainfall again returns to normal. Most of our area is well adapted to the use of farm ponds as a reservoir for water, whereby a sufficient amount can be stored for fire protection, household use, irrigation and livestock watering.

The first step in planning a farm pond is to consult your soil conservation department in your area for their ideas as to how the installation of such a pond will fit into your soil conservation practices. If you do not care to make this step, anyone of the many reliable bulldozer operators and owners in this area will be glad to make you an estimate.

It usually runs well within the budget of the average farm. Many farm ponds can be constructed at this time in areas where moisture would prevent proper bulldozing during periods of normal rainfall.

* * *

We notice an increasing number of new bathroom installations being made, both in old homes and homes under the process of remodeling. We wish to call your attention to the advantages of the electric heating panel for providing heat to these new bathrooms. The electric panel with a thermostat gives automatic, safe and convenient heat at a nominal expense.

SPRING WIRING

Along with the spring chores the installation of new outlets and revamping of farmstead wiring should be given consideration. This work could well be done on many farms before the rush of the crop season.

Occasionally, new outlets and wiring will require the addition of new fuse boxes, which can be connected to the old box in such a way as to hold down the cost and gain as

much efficiency as possible. Your cooperative has received information on the latest manufacturers tests comparing the use of electricity with L.P. gas for refrigeration, cooking and water heating.

These tests proved very favorable as far as electricity is concerned and showed the tremendous strides made by the electrical manufacturers in increasing the efficiency of their products since the last tests were made in 1938. Doing the same job for one month, electricity proves more economical as follows:

ELECTRICITY

Refrigeration\$.82
Cooking 3.26
Water heating 6.86

L. P. GAS

Refrigeration\$3.52
Cooking 4.88
Water heating 7.02

These tests also showed the electric range to be more efficient than bottled gas by a ratio of two to one; electric refrigerators over gas refrigerators by a ratio of 11.6 to one, and electric water heaters over gas by a ratio of one and six-tenths to one.

This cooperative does not intend to discredit the use of bottled gas for any of the above operations, but rather to point out the efficiency of electricity in doing these jobs, as well as a saving made by the member who has all his appliances on one source.

NEW APPLIANCES

Dear sir: We have 300 baby chicks that are a week old today. So far we have lost only one. We have four brooder lamps and like them fine. Clemence Albert, Shipman.

NEWS FROM Southwestern Electric Co-op

Greenville, Illinois
V. C. Kallal, Manager

TELEPHONE NUMBERS

Bond County—Office, Greenville, Tel. 1025.
Office Hours: 8:00 a.m. to 5:00 p.m. except Saturday, Sunday or Holidays. Before or after office hours call: Paul G. Morgan, Greenville 796; Jack Compton, 984 or V. C. Kallal, Greenville 379.
Fayette County—W. E. Jones, St. Elmo 326.
Madison County—Ed Barnes, Edwardsville 1087.

Practically all of the area served by your cooperative is within range of one or more TV stations. In some areas, it is necessary to support the antenna high above ground or house on a mast, or metallic tower.



This creates a hazard. Masts may fall down in high winds or storms. In falling, they may come in contact with the member's 120 or 240 volt lines to the house or to other buildings.

In some cases, poor judgment has been exercised in the location of the masts and they could fall into the cooperative's 7,200 or 13,000 volt lines.

In other words, the fallen mast could be energized with 120, 240, 7,200 or even 13,000 volt current. In all cases and under some conditions this could prove fatal to a person or animal coming in contact with them or any guy wire or lead-in attached to the mast.

We believe that more care should be taken (1) in the location of these or other masts, and (2) that more adequate guying should be done to lessen the danger of their falling during wind storms.

PROPERTY DESTRUCTION

We cannot say just what would be the legal penalty for cutting guy wires or loosening them, but we do believe that any person or member doing such things is unaware of the seriousness of such actions.

Perhaps it might be some time before the damage would be located and repaired. Perhaps, however nothing serious would happen to the line serving you and your fellow members.

Then again, while a guy may not be needed except in case of a high wind or ice, or both, it is placed on certain poles for definite established reasons.

* * *

One member who questioned admitted that he removed a guy. The cooperative representative explained to him that this particular guy was placed to strengthen the line and that his act could result in injury or death to his children.

He was speechless for a moment, and then expressed his sorrow. After regaining his composure, he admitted that he had never thought of the problem in that light.

You, as a member, and your cooperative are interested primarily in good service and continuity of electric

service to all of you 7,000 members. Therefore, your management will always endeavor to build the best and safest electric line possible in accordance with currently accepted engineering practice.

To tamper with guys, to bump poles with a tractor, or to use poles for "dead men" in stretching fence or any other such acts are serious and could result in a fatality in addition to the destruction of property. Your cooperation in discouraging such things will be appreciated.

4-H WORK

Your cooperative and the other power suppliers in your county want to help in any way possible in the 4-H club electrical projects for boys and in the 4-H club activity (Better Light—Better Sight) for girls.

Therefore, if your leaders or youth assistants need help that we, as power suppliers, can give, please feel free to call on us.

CLEAN FENCE ROWS

Many members have built ponds on their farms the past several months. The shortage of water for one thing and the unusually good weather for such work have been responsible for the increased number of ponds built this past winter.

The thing that is encouraging to your cooperative management is that many of you who had ponds built also had some brush along the line bulldozed out while the heavy equipment was on your farm.

Such cooperation and interest among the membership does much to assure continuity of electric service and to reduce operations expense and thereby assure that the present low-rates can be enjoyed by the members for some time to come.

POOR GROUNDING

Do not be surprised if the average number of electrical storms do more than the usual amount of damage this spring not only to the cooperative lines but also to your own wiring, both inside and outside.

During such dry weather as we have experienced for over a year now, the accepted methods of grounding may prove insufficient. An eight-foot ground rod driven within two feet of a house with a deep basement is perhaps practically worthless.

Many ground rods are within inches of perfectly dry basement walls. You might want to relocate these to lessen lighting damage.

In other cases, your whole electrical system may work better, or the damage from lightning lessened, if you would dig down beside these rods about two or three feet and pour some water around them occasionally. A good ground is important in the proper operation of protective equipment whether it be of the breaker or of the fuse type.

* * *

A little consideration of the problem may go a long way in assuring you that fuses will blow and that breakers trip in case of a short before a fire is started, or before a person or animal is killed.

It is always a good idea to check the connections of the ground wire to the ground rod. The connection must be clean and also tight.

SERVICE INTERRUPTIONS

This year will be similar to last year in that there are several extensive road widening projects scheduled for the year. One of these involves over four miles of an important three-phase feeder out of one of the substations.

Another involves something like nine miles of line along a federal highway. Both of these jobs are costly and most difficult to perform. The cooperative, as in the past, will try to keep both the number and length of the interruptions down to a reasonable figure.

On the other hand, we are bound to keep the cost of the work down. This is sometimes difficult to do and at the same time not inconvenience the members in some way or another. Your forbearance has been admirable in the past and we are sure that we can expect the same again this year.

After all, improved highways are important, as well as electric service. In fact, good roads are necessary if the cooperative service trucks are to restore service interruptions especially during bad or wet weather.

OPERATING STATISTICS

DECEMBER, 1953	
Miles energized	2,156.93
Revenue per mile	\$ 29.41
Total connected members	6,706
Total members billed	6,597
Density per mile	3.13
Average bill	\$ 9.57
Average kwh. used	318.70
Per cent minimum bills	1
Kwh. sold	2,102,437
DECEMBER 1952	
Miles energized	2,112.77
Revenue per mile	\$ 27.87

Total connected members	6,520
Total members billed	6,385
Density per mile	3.10
Average bill	\$ 9.17
Average kwh. used	297.62
Per cent minimum bills	9
Kwh. sold	1,900,304

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 Metropolis area call Metropolis 3100 or Tom Willis Round Knob Exchange.

Spring is just around the corner and summer isn't too far behind. Time really slips by and the older we get the faster it seems to go. It won't be long and annual meeting day will be here again.



George Endicott

A lot of us probably don't give a second thought to this meeting, yet when you become a member of your cooperative, you assumed the obligations of attending meetings, expressing your opinions, and voting on issues, policies and directors.

Our annual meeting will be held at Dongola, August 16 and 17. It will be the caravan type meeting such as we have had the past two years. Along with a fine merchandise display we will have top notch entertainment furnished by local talent competing for some very fine prizes.

Also, we'll have a beauty contest. The fair young miss who wins our local contest will have the honor of representing our co-op at our state annual meeting and compete there for the right of representing Illinois at the national meeting to be held at Atlantic City, N. J., next February.

The Fruit Belt Service Company will sponsor a tractor driving contest. All you farmers and farmerettes will have a good chance of exhibiting your tractor driving skill.

ORGANIZED QUARTET

Ted Frayser, our line superintendent, has organized a co-op employee quartet. We hope his efforts are successful with the co-op quartet and that the co-op members will have a chance to hear them sing.

A meeting of home advisers and their assistants was held in Marion at the C.I.P.S. office on February 15. This meeting was sponsored by all power suppliers in Southern Illinois.

The ladies were given a demonstration of good lighting in the home, also useful instructional material which they can use for teaching good home lighting methods to their county units and to 4-H girls.

BOARD MEETING

At the last regular board meeting the problem of costs concerning servicing of appliances was brought up and given quite a bit of discussion. There is no benefit to you to have equipment installed which is not kept in workable condition.

Believing it to be to the best interest of co-op members that they are assured a dependable and reasonable source of replacements and repairs, the following appliance service policy was drawn up and approved by your board of directors.

APPLIANCE POLICY

1. Make a charge of \$3.50 for transportation to any location.
2. Charge factory suggested list price on all parts used.
3. Charge \$2.50 per man hours for actual time used in service on all applicants except those purchased from co-op. Instead of giving dividends on purchase made from co-op store, give lifetime service free.
4. Fulfill factory guarantee policy on all merchandise sold by co-op. No charge for transportation, service time, or parts in guarantee period.
5. Example:
 - a. On merchandise not purchased from co-op: \$3.50 transportation, \$2.50 per man hour actual service. Parts at factory suggested list price.
 - b. On merchandise purchased from co-op after warranty has expired: \$3.50 transportation. Time, no charge. Parts at factory suggested list price.
6. All member appliance service should be under direction of and supported by the co-op sales department.

JUNIOR RURAL ELECTRIC NEWS

PEN PALS

HI PEN PALS!

Time to get your pen in hand. Here's another issue of Junior Rural Electric News and another group of Pen Pals who are waiting to hear from you. Get your letters off soon. And—letters for publication should be addressed to Kay Conlan, Junior Rural Electric News, Box 1180, Springfield, Ill.

SINGS AT CHURCH

I am eight and have a birthday on October 30. I have two brothers. I'm in the fourth grade and I go to church and Sunday school all the time. My brother and I sing together at church and our Mother is a gospel singer and she is teaching us to sing. I play the piano and like to ride my bike. I belong to a girl's club. We meet once each week in the summer when not in school and we are learning to embroider. I'm a "Brownie".—Marie Elena Farthing, c/o Stanton Farthing, Route 5, Marion 3, Ill.



HAS A DOG

I am 15 years old and my birthday is November 1. I have blond hair, blue eyes, am four feet nine inches tall and weigh 100 pounds. My hobbies are letter writing, collecting scrap books and bike riding. I have two dogs and one cat.—Diana Stone, R.R. 1, Moro, Ill.

MANY HOBBIES

I'm a girl 12 years old, have brown eyes and hair, am five feet three inches tall and weigh 99 pounds. Do I have a twin? I have many hobbies. I would like to hear from boys and girls from 11 on up.—Linda Sue Banks, Blandensville, Ill.

PLAYS WITH PETS

I am eight and my birthday is November 20. My hobby is playing with pets. I have a puppy named "Ike". I have two kittens, too. My hair is brown and my eyes are blue. I have two brothers and two sisters.—Dorothy Lea Halley, Route 2, Dahlgren, Ill.



LIKES TO HUNT

I am 13 years old and my birthday is November 17. I like to fish, hunt and swim. I have blond hair and blue eyes. I would like to hear from boys and girls between the ages of 11 and 15.—Jerry Lee Dudley, R.R. 1, Butler, Ill.

AUGUST BIRTHDAY

I am a girl 13 years old and my birthday is August 1. I am five feet one inch tall, weigh 100 pounds and have blue eyes and blond hair. I am in the eighth grade. My hobbies are cooking, sewing, reading, horseback riding and riding my bicycle. I would like to hear from boys and girls between the ages of 12 and 15.—Clyda McBride, R.R. 2, Ullin, Ill.

COLLECTS BOTTLE CAPS

I am 11 years old and my birthday is March 4. My hobbies are playing the accordion and collecting bottle caps. I would love to hear from lots of boys and girls and I promise to answer all letters.—Barbara Bohler, Route 1, Waggoner, Ill.



APRIL BIRTHDAY

I am six years old and my birthday is April 14. I have brown hair and blue eyes. I live on a farm. I would like to hear from boys and girls between five and eight.—Linda Dudley, R.R. 1, Butler, Ill.

EIGHTH GRADER

I am 13 years old and my birthday is June 2. I have blond hair, blue eyes, weigh 115 pounds and am five feet three

inches tall. I am in the eighth grade and my hobbies are hillbilly music and reading. I would like to hear from boys and girls between the ages of 13 and 16.—Sally Decker, Dow, Ill.

ENJOYS SEWING

I am nine years old and I am four feet, four inches tall and weigh 61 pounds. I have two sisters and one brother. My hobbies are sewing, walking and looking at TV. I would like to hear from boys and girls of all ages.—Brenda Kay Fry, R. R. 1, Johnston City, Ill.



DRIVES TRACTOR

I am 11 years old and my birthday is March 10. I have blond hair and blue eyes. I like fishing, skating and driving the tractor. I would like to hear from boys and girls between 11 and 13.—Robert Earl Dudley, R.R. 1, Butler, Ill.

PLAYS ACCORDION

I'm a girl 11 years old and my birthday is January 20. I have brown hair and blue eyes. My favorite pastime is playing the accordion. I enjoy writing letters and I will answer all I receive.—Karen Jones, Richview, Ill.

DECEMBER BIRTHDAY

I am 13 years old and my birthday is December 17. I am five feet, five and weigh 98 pounds. I have black hair and blue eyes. My hobbies are writing letters and reading books. I would like to hear from boys and girls of all ages. Do I have a twin?—Julia Cote, R. R. 1, Beaverville, Ill.



LIKES DRAWING

I am a girl 16 years old and my birthday is July 2. I have blond hair, gray eyes, am five feet three inches tall and weigh 135 pounds. My hobbies are drawing, dancing and skating. Most of all I like to write letters. I would like to hear from pen pals from 15 on up.—Doris Jean Dudley, R.R. 1, Butler, Ill.

COLLECTS STAMPS

I am a girl 15 years old and my birthday is March 14. I have black hair, blue eyes, am five feet six inches tall and weigh 125 pounds. I like all kinds of sports. My hobbies are collecting foreign stamps and horseback riding. I would like to hear from boys and girls of all ages.—Suda Stoltz, Delafield, Ill.

PIANO LESSONS

I am 10 and I am four feet, seven inches tall and weigh 66 pounds. I live on a 100 acre farm in Hillsboro. I play the piano and I have been taking lessons for over two years. I have two cats and a dog. I would like to hear from boys and girls between the ages of nine and 12.—Sharon Kaye Green, R.R. 1, Hillsboro, Ill.



IN KOREA

Being a regular reader of your paper, I would like to hear from boys and girls between 18 and 20. I am in Korea at the present time, but I come from a small farm in southern Illinois.—Private Paul R. Espy, U.S. 55351414, Company H, 23rd Infantry Regiment, A.P.O. 248, c/o Post-Master, San Francisco, California.

LIKES TO SING

I am a girl 16 years old. I have red hair, blue eyes and am five feet eight inches tall. My hobbies are reading, listening to the radio and singing. I would like to hear from boys and girls between 16 and 19.—Opal Edwards, Creal Springs, Ill.

ICE SKATER

I'm 16 years old and my birthday is March 17. I am five feet two inches tall and have black hair and brown eyes. My hobbies are ice skating, writing letters and reading. I would like to hear from boys and girls between the ages of 15 and 20.—Betty Jean Smith, Box 7, Ray Ill.

HELPS MOTHER

I am 10 years old and my birthday is August 12. I have blond hair, blue eyes and weigh 68 pounds. My hobbies are cooking and sewing and I like to help my mother. I would like to hear from boys and girls between nine and 12.—Carlene Tanner, R.R. 1, Herod, Ill.

SEPTEMBER BIRTHDAY

I am a girl 14 years old and my birthday is September 2. I am five feet seven inches tall and I have light brown hair and brown eyes. My hobbies are skating, sewing and dancing. I would like to hear from boys and girls between the ages of 14 and 20.—Shirley Mae Smith, Box 1, Ray, Ill.

JANUARY BIRTHDAY

I am a little girl five years old and my birthday is January 10. I have blonde hair and grey eyes and I am in the first grade. My hobbies are playing with my dolls. I have a brother Mildred. I would like to hear from all little boys and girls.—Vickie Sue Biggerstaff, Thackeray, Ill.



PLAYS CORNET

I am a girl 13 years old and my birthday is May 4. I have light brown hair, blue eyes, am five feet two inches tall and weigh 105 pounds. My favorite hobbies are singing, swimming and playing the cornet. I would like to hear from boys and girls of all ages.—Karen Emrick, R.R. 1, Richview, Ill.

COLLECTS PICTURES

I'm a girl 13 years old and my birthday is September 12. I would like to hear from boys and girls between the ages of 12 and 17. My hobby is collecting pictures of movie stars.—Helen Ruth Spain, R.R. 1, Potomac, Ill.

ENJOYS MOVIES

I am six years old and my birthday was February 28. I have black hair and black eyes and I go to Thackeray School. I am in the second grade. I have a little brother 2 years old—Garry Lee. My hobby is going to the movies. Would like to hear from all little boys and girls.—Larry Wayne McMahon, Thackeray, Ill.



RIDES HORSEBACK

I am a girl 14 years old and my birthday is September 9. I have blond hair, hazel eyes and am five feet three inches tall. My hobby is riding horses. I like all kinds of sports. I would like to hear from boys and girls of all ages.—Barbara Allen, Delafield, Ill.

BROWN EYES

I am 15 years old. I have brown eyes and brown hair. I would like to hear from boys and girls between the ages of 16 and 19. Nancy Wells, Box 263, Lomax, Ill.

BABY SITTER

I am 15 years old, have red hair, blue eyes and am five feet five inches tall. I like swimming and horseback riding. I would like to be a bookkeeper when I get out of school.—Katherine Cross, c/o The New Cronks Cafe, Guthrie Center, Iowa.

COLLECTS TOYS

I am seven years old and I have light brown hair and grey eyes. I am in the third grade and I go to Thackeray School. My hobbies are collecting toys from Cracker Jacks. I have two sisters—Vickie and Mildred. Would like to hear from all little boys and girls.—Terry Dewain Biggerstaff, Thackeray, Ill.



ICE SKATER

I am a girl 15 years old and my birthday is January 3. I am five feet one inch tall, weigh 112 pounds and have blond hair and blue eyes. My hobbies are collecting pictures of movie stars and ice skating.—Lois Hargis, Buckner, Ill.

SHAWNEE HIGH SCHOOL

I am 12 years old and my birthday is May 24. I am about five feet tall and weigh 88 pounds. I go to Shawnee High School and I live in a 160 acre farm. My hobbies are writing letters and reading. I have brown eyes and blonde hair and I would like to hear from boys and girls of all ages.—Evelyn Carol Saul, Grand Tower, Ill.



LIKES SPELLING

I am nine years old and my birthday is February 15. I have brown hair, blue eyes and am four feet two inches tall. I would like to hear from boys and girls between eight and 11 years old.—Judith Eggiman, R.R. 1, Litchfield, Ill.

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-F31.

It seems like a long time—from now until August and you might wonder why we are talking about our annual meeting now. We must plan ahead if we are to have a good meeting.

We now have some of the plans made and it looks like we will need more participation than usual to make it successful.

One part of our program this year is a beauty contest. We do not have the rules yet but expect to have them soon and we will put them in the Illinois Rural Electric News.

We do know it will be for girls from 16 to 22 years of age and they must be members or from members' families of Clay Electric Cooperative.

If we get more entries than can be judged at the annual meeting, we will plan some elimination contests. We hope this will be what happens, as so many more could participate this way.

PLAN AMATEUR CONTEST
Another feature that can be made outstanding will be an amateur contest. This will be a contest in which individuals or groups of two or more can participate. At least 50 per cent of each group must be co-op members or from members' families.

So, whatever your specialty is, you will be able to enter and have a good time, and maybe win a trip to Springfield to compete at the State Association meeting next fall.

Another added attraction this year will be a tractor driving contest for the boys and young men of our community.

In addition to all this, we will again have John LaMothe and his electric organ, and can have, if you so desire, his impersonations. You might drop us a card letting us know if you want to see John's "Faces" or not.

This year, the caravan will also have a stage production presented by General Electric. You will see hear more about all of this later on.

BRUSH SPRAYING
We are again planning to continue with our brush control under the high voltage lines. It is too early yet to tell what success we had last year, but we do know we will need a lot more rain before spraying will be much of a success this year.

There are two reasons for this—one, we need the water to mix the spray material with and the other, the brush needs to be growing at a fast rate to get the best results.

CELEBRATION
If you should happen to report an outage and some old man with long whiskers comes out to make repairs, think nothing of it.

Just remember that the thriving little community of Flora was incorporated 100 years ago and although it has progressed some since then, this year it is regressing, and most everyone from now until July will be dressing for it and the men will be wearing whiskers in celebration.

APPLIANCE USERS
Thomas Barr, television.
C. W. Gordon, home freezer.
T. V. Howard, water heater.
Harry Johnson, clothes dryer.
E. A. Paul, home freezer and deep-well water pump.
Lubert Schnautz, television.
Jesse Stanford, range.

Farming News Notes

SOIL CONDITIONERS

Farm and home gardeners may find some of the new soil conditioners both practical and economical for vegetable production, particularly in potting soil or hill or band placement.

Practical use of the conditioners will depend on the conditioner itself, the method of its use, its cost, the soil, the crops and various other factors.

The conditioners maintain a granular porous structure in the soil after they have been properly mixed with it. Researchers suggest that soil conditioners be applied in strips or in hills. This reduces by approximately two-thirds the quantity of conditioner needed as compared with broadcast treatment.

COMPARISON

Since 1939, the average prices received by farmers have risen 165 per cent. Cash farm income is up 220 per cent. During the same time the buying power of the farmer's dollar has shrunk 56 per cent.

CHEMICAL

More 2, 4-D is used on corn than on any other crop. Farmers who use it before the corn comes up say the weeds would be taller than the corn at the time of the first cultivation had they not used it.

NITROGEN

Nitrogen fertilizer must be applied to smooth brome before spring growth starts for maximum increase in seed production.

FROM USDA

Supplies of food for the first part of this year are generally high. Somewhat less meat, fish products, lard, and fresh vegetables will be available but increases are likely for chicken, eggs, manufactured dairy products, and shortening.

Hog slaughter this spring will be down from early 1953 and fewer cattle and sheep are being grain fed. Meat production is expected to be up for the last half of 1954.

Farmers plan to purchase about the same number of baby chicks this spring as they did a year ago. Turkey growers are planning about a seven per cent increase for 1954.

About three per cent less workers are on farms than one year ago. Approximately six million persons, including family, unpaid and hired workers are on American farms.

Casein, the principal protein in milk, carries a previously unrecognized growth factor. Chicks from casein-fed hens outgrow those on other types of protein diets.

Farms where there is the greatest consumption of electricity have the lowest cost per kwh., while those with low electricity consumption have the highest cost.

Approximately 70 forms, reports, files, procedures and work routines are being eliminated, simplified or improved in FHA operations. An estimated 1.5-million dollars are being

saved in the new operations and quicker loans will be made, according to the Secretary of Agriculture.

FROM U OF I

Some soils in the state contain available water at only 40 per cent of storage capacity. While there is no cause for alarm, below-normal moisture levels in Illinois soils must be replaced before planting time or crops will suffer.

Clip or file those tiny sharp needle teeth before your young pigs injure themselves while fighting or before they bite the sow's udder. Germs in barnyard manure attack scratched pigs, causing a disease known as bull-nose. Infected pigs have sore mouths and swollen noses.

Spring oats, properly planted, can furnish early pastures, and with a minimum amount of labor. Broadcast the oats and do away with seedbed preparation. Even if the oats follow corn, you won't need to plow under or disk up the stalks.

You can expect large numbers of chinch bugs and corn borers in 1954. The mild winter so far and the large numbers of these insects last year, are the reasons.

There's no oversupply of quality lumber. Idle lands need to be planted and present farm woodlands properly managed in Illinois. These lands can produce valuable woods, conserve wildlife, soil and water, and control wind.

Many dairymen are using too much protein in their rations and are going to needless feed expense. Dairy cows won't respond to a high protein ration. Shop around and find the cheapest source for your herd.

Beef cattle prices have probably hit the end of their long slide. From now on they should stay about where they are except for seasonal variations.

Last summer's drought may affect this year's calf crop. In some areas the dry weather cut down on the vitamin A content of the hay that is now being fed to cattle. Include plenty of legume hay in diet to supply the vitamin.

DID YOU KNOW?

Rotary tillers for seedbed preparation need plenty of power.

Keep watch on your tile drainage system to locate any signs of weak spots showing up, especially near the outlet.

Keep your back straight and use your leg muscles to lift heavy objects to avoid danger of a strained back.

Healthy trees that never produce fruit are not being pollinated.

Permanent types of vaccine will usually protect dogs against distemper for their lifetime.

Cows that calve every 12 months have the highest total lifetime production.

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Auction Schools

LEARN AUCTIONEERING. Term soon. Free catalog. Reich Auction School, Mason City 8, Iowa.

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\$10.00 FOR certain Lincoln pennies. Indianheads \$50. Send 20c for new booklet listing prices paid. Lincoln Coins, D-236. Glendale, Arizona.

WATCHES WANTED. Any condition. Also broken jewelry, spectacles, dental gold, diamonds, silver. Cash sent promptly. Mail articles. Satisfaction guaranteed. Lowe's, Holland Bldg., St. Louis 1, Missouri.

Business Opportunities

RAISE CHINCHILLAS for profit. Young pairs or carrying pairs. Write or call for information. Edwin McCawley, 184 W. 5th Street, Flora, Illinois.

START VENETIAN blind laundry. Profitable lifetime business. New machine. Free booklet. M. F. Co. 442 N. Seneca, Wichita, 12, Kansas.

DISTRIBUTORS, SALESMEN — Introduce Barton's Cannibalism Remedy, hatchery feed stores. Results guaranteed. Exclusive territory. Generous commissions. Lyles Products, Galesburg, Ill.

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NEED MONEY? Write birthday, valentine, Christmas verses. Request free details. Laura Dickson, 401 Montague St., Dept. J, Anderson, S. C.

MONEYMAKING HOMEWORK! Experience unnecessary! Everything furnished! Full or sparetime! Free details! Hirsch, 1301-14 Hoe, Bronx 59, New York.

WE RAISE chinchillas in our spare time in our basement. A very nice and profitable business. Write for our brochure "Franklin Chinchillas". Merrill Hendrickson, Route 4, Franklin, Ind.

\$35 WEEKLY addressing envelopes, instructions \$1. Refundable. Adservice, Spring Valley, 39EA, N. Y.

RAISE CHINCHILLAS on rental plan. Fifty dollars will start you. James T. Collins, 3520 N.W. 33rd Ave., Miami 42, Florida.

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Farm Machinery & Equipment

FOR SALE: 2100 egg Farm Master electric incubator. Good condition. \$100 at farm. Merle Mearns, Louisville, R. No. 1, Louisville, Illinois.

CAMP GRAIN elevators, new repair parts. Write: Berry Machine Shop, Washington, Illinois.

WANTED CHAIN saw dealers for new PM Rocket model KL, one-man saw, 4 HP, weighing 24½ pounds. McFadden Implement Company, Distributors PM Lightweight Chain Saws, Medina, Ohio.

CYLINDER HEAD rebuilding. Tractors, trucks, diesels. Cracks repaired, completely machined, pressure tested, ready to install. Chapin Cylinder Head Company, Phone 3, nine miles west of Jacksonville in Chapin, Illinois.

GARDEN TRACTORS \$100.00—3 h.p. 1954 model including tools. Write Universal Mfg. Co. 324 West Tenth, Indianapolis 2, Indiana.

DISSTON CHAIN Saws—Before you buy, see it saw. Trade your old saw in on a new Disston. Sales and service—new and used. Write for free literature. Hansman's Gun Shop, N. Beech St. Road, Centralia, Ill. Phone 9491.

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FARM DRAINAGE pumps—custom built. Low cost. Large volume. Free catalog describing pumps and installations. Langholz Machine Works, Oak Harbor, Ohio.

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CUT FENCING cost, 50 to 70% with Spring-Tite. See your dealer or order by mail. Free folder & prices. Spring-Tite Fencing Co., LeRoy, Illinois.

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GOVERNMENT APPROVED combination measuring wheel with simple instructions. Figures chains or rods. Dealer's discount. Carmean, Box 904, Dept. PLN, Hutchinson, Kansas.

BAKER 3 YARD scoop, hydraulic pump, controls for D-4 Caterpillar. \$750. Will sell separate. Complete 2-speed axle for K-6 \$110. Leader twin fan truck line bed \$275. William J. Fecht, Carthage, Illinois.

Farms, Real Estate

FOR SALE: 183 acres, 8 room modern house, 3 room brick semi-modern. Large barns, chicken houses, others. Good rolling land. Possibility valuable oil rights. George Daniels, Bluford, Illinois.

25 ACRES Indiana farm land. Good road, one mile state highway. 45 miles from Gary. Phone and electric available. Bargain. Also 18 foot aluminum Trotwood house trailer 1950 model. Good bargain. Write Al Erlanson, Grand Chain, Illinois.

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FORTY-FIVE hundred acres hill land in Tennessee. Twenty years since hard wood timber was cut. Fifteen dollars acre. K. J. George, 5712 So. 5 Terrace, Birmingham, Alabama.

FOR SALE: 28 acre farm, 5 room house, barn sheds, chicken house, 2½ miles from Godfrey, Illinois. Mrs. George Weber, Godfrey Illinois.

FARMS FOR SALE. 162-acre top producing farm in the northern Iroquois County. Well-drained, good buildings, modern house, part down rest on contract. 256 acres, land well taken care of, good producer. Surfaced. On Iroquois river, resort possibilities. Bath, new cabinets in kitchen. 80 acres unimproved at a bargain.

166 acres with good buildings, productive land, running water in the kitchen, bath. 160-acre improved, well-drained stock and grain farm. E. G. Warmbir, Realtor. 159 N. Schuyler, Kankakee. Phone 3-6673. Farm Specialist, Clarence Christensen. Phone Clifton, 1F5.

WHY NOT buy a farm in north east central Illinois 65 miles from Chicago markets. Plenty of well water for all the livestock, and ample rainfall to mature good crops. E. G. Warmbir, Realtor, 159 N. Schuyler, Kankakee. Phone 3-6673. Farm Specialist Clarence Christensen. Phone Clifton, 1F5.

CHEAP SUMMER, winter or permanent homes, farms, lands, motels, stores in beautiful, pleasant, healthful Ozarks. Full information free. Write, Barnsley, Clarksville, Arkansas.

VALUABLE FREE information on cheap homes, lands, motels, stores, in lovely, healthful Ozarks. Write Barnsley, Clarksville, Ark.

FARM IN our mild Willamette Valley. Send 25c for our illustrated catalog. Kingwell Agency, Box REN-267, Corvallis, Oregon.

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FOR SALE reg. Red Poll cows with calves and heifers. One eight month old bull. Walter J. Miller, Farina, Illinois.

FOR SALE: Three registered polled Hereford bulls. Heavy boned. Well marked. Aged 8 months and 18 months. Sire is 100% dehornor. Elmer Hurst, Route 1, DeSoto, Illinois.

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HOLSTEIN AND Guernsey heifers. Fine quality. All ages. Bangs laboratory tested. Sold by pound at lowest prices. No extra charges. Ed Howey Cattle Co. South St. Paul Minn.

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GOOD FEEDER pigs. Vaccinated, castrated and wormed. Stafford Pig Hatchery, Grafton, Ill. Located 13 miles N.W. of Grafton, at Rosedale.

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Ads Continued on Next Page

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EVERYONE LOOKS at your mail box! Improve its appearance with a handsome cast aluminum name plate. Fits any standard rural mail box. Black background with choice of polished or reflective 1 1/2" letters and border. Print name plainly. Maximum eighteen letters. \$3.95 ppd. Eddy's Mail Order store, Dept. REA Box 123, Warrensburg, Illinois.

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OUTDOOR TOILETS, septic tanks, cesspools cleaned, deodorized. Amazing new powder saves digging, pumping, moving. Guaranteed. Circular free. Solvex Products, Monticello, 7, Iowa.

SPliced HALTER ropes, etc. Hooks, eye spliced to rope, end back spliced to prevent fraying. 6 to 8 ft. \$1.00. Cow catchem rope 16 ft. with ring spliced in to rope to hook around neck \$2.00 postpaid. Smokey's Rope Splicing, 1916 Rockingham Rd., Davenport, Iowa.

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BEES DO it—miracle of pollination. Experiments show 175% more alike clover seed pollinizing with bees. Start this year with gentle easy to manage Italian three banded bees. We stock the best bee supplies at factory prices. Write for free pollination literature and A. I. Root quality Bee Supply Catalog. Earl Bronson, Selmaville Road, R. No. 2, Salem, Illinois.

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FOR SALE: 2 Black blanket back foxhounds, 8 months. Started. Granddaughters of Baldwin's Commander and Cap Haggin Raider. Paul Cossey, New Liberty, Illinois.

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HATCH YOUR own hen, ducks, turkey, goose eggs in 2940 egg capacity electric cabinet James incubator units like new, as low as \$50 a piece. Ruth E. Hildreth, El Paso, Illinois.

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GOSLINGS, WHITE or toulouse, sexed if desired. Hatching thousands. Superior quality at lowest prices. Order early. Hi-Lo Farms, Brunswick, Ohio.



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50 MILLION evergreen trees for sale. Grow them for profit. Write Mellen Evergreen Nursery, BX-155, Wilmette, Illinois, for circular.

STRAWBERRY PLANTS: by mail, postpaid, Blakemore, Dunlap, Premier, Robinson, 100 — \$1.50, 250 — \$3.00, Cavness Nursery, Jonesboro, Illinois.

AFRICAN VIOLET leaves: Many newer and better varieties, doubles, singles, very reasonable. Request list. Lucile Mearns, Route 1, Louisville, Illinois.

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AFRICAN VIOLET leaves. One hundred twenty five varieties. Send stamped addressed envelope for list. Mrs. Homer Miller, R. No. 3, Palmyra, Illinois.

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AMAZING NEW sugar corn for garden flavor and terrific production unsurpassed. Summit Seeds, Box 5, Cincinnati 13, Ohio.

25 PEACH tree seedlings 12 to 15 inch \$1.25. 25 Red Cedar seedlings 5 to 8 inch \$1.50. Ponzer Nursery, Rolla, Missouri.

STRAWBERRIES — sooner, better, with certified potted plants. Premier, Dunlap, Robinson, etc. Potted price 25-\$5.00; 100-\$15.00; unpotted 25-\$1.00; 100-\$2.50. Famous Red Rich Everbearer (unpotted) same price as potted plants. Postpaid! Guaranteed! Order now! Plant early! Special organic strawberry food, 3 lbs. 65c postpaid. Shelly's Strawberries, Churubusco, Indiana.

EVERGREEN TREE lining-out stock. Transplants, Seedlings, Pine, Spruce, Fir, Canadian Hemlock, Arborvitae, Multiflora Rose, thorny. For growing Christmas trees. Ornamentals, Hedges, Windbreaks. Write for complete price list and planting guide. Quality stock low as 2c on quantity orders. Suncrest Evergreen Nurseries, Dept. IREN, Box 594, Johnstown, Pa.

CHOICE DELPHINIUM—Primroses, world's finest new colors. Illustrated plant—seed catalog free. Offerman Delphinium Gardens, 4709 W. Stevens, Seattle 6, Wash.

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