

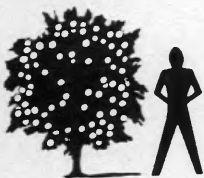


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August 1980

**Illinois Rural Electric News**

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# Illinois Rural Electric News

## The capacity to meet the demand

This has not been an easy summer for electric cooperatives in Illinois. Late June and early July brought some of the most severe wind storms most people can remember. Damages to electric distribution systems in Southern Illinois climbed well into the millions. Storms in other parts of the state added to those losses. (Pages 6 and 7 detail more about the storms.)

Crews working to restore service compared working in the 100-degree temperatures to working in the cold after an ice storm. Many preferred the cold.

For most Illinoisans, the storms ushered in a silent weather menace — the extended heat wave that slapped Illinois with thermometer readings of 100 degrees and above, taxing generating capacity of electric producers.

Across the state utilities announced that new consumer demand records were being set. It is not that unusual for a utility to set a peak demand record, but to set several records over a limited time is unusual.

As the heat wave continued, the use of electricity followed the same pattern. Air conditioners worked around the clock to help ward off the effects of the oppressive heat and humidity. To a lesser degree, use of fans contributed to the increased consumer demand. Generating plants were called on to provide all the electricity possible to meet the needs of consumers' air conditioners and fans.

Illinois electric cooperatives saw electric usage climb sharply, even as they conducted extensive campaigns to persuade consumer-members to shift much appliance usage to off-peak hours. Consumers responded and there have been no brownouts or blackouts. That's not the

case in some other parts of the country, where some consumers had been warned to the potential for interrupted service.

We can consider ourselves fortunate that there is sufficient generating capacity in this area to meet the surge in demand. The number of deaths caused by the heat in Illinois and across the nation would be much greater if it were not for the capacity available to generate electricity. Relief centers had been set up through the heat-stricken area for the elderly to go to escape the heat. Window air conditioners sold out. Fans were made available for elderly who could not get to the air-conditioned centers.

It is an unpleasant thought to consider what might have happened if the generating capacity had not been sufficient, or if consumers had not cooperated in shifting their loads to off-peak hours. Those who say the nation has enough capacity to meet our needs should look ahead the eight-to-12 years needed to build a generating plant and consider the potential problems if the nation experiences even only minimal electric use growth without a corresponding increase in generating capacity.

The surge in consumer demand for electricity to run all those air conditioners will mean higher kilowatt-hour consumption, too. Temperatures this summer are well above those of the past couple of years, making for some sharply increased bills.

Given the choice, though, between having the electricity to run the air conditioners and the alternative of brownouts and blackouts in a prolonged, deadly heat wave, few will choose the latter.

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Larry F. Elledge  
Editor

Gordon M. Olsen  
Managing Editor

Jack D. Halstead  
Associate Editor

Sandra S. Johnson  
Advertising Coordinator

Cover: Crewmen for Southeastern Illinois Electric Cooperative work on electric lines downed in the wind storms which hit Illinois in late June and early July. The damage in the background is evidence of the storms' fury.

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# The 'Trotting King'



Over the past 30 years W. T. Frederking of Altamont has had many successful business pursuits: oil producer, subdivider and homebuilder, real estate developer, retailer, campground operator, farmer, new car dealer and, admittedly his favorite endeavor, harness racing.

Frederking, or Freddie as most call him, hasn't come by this love for harness racing and standardbred horses in any overnight manner. He has been working with standardbreds since 1956, reaching the point in 1979 when he had built the largest herd of trotting brood mares in Illinois and picked up the nickname "Trotting King" around Chicago harness tracks.

His reputation for turning out top standardbreds is not limited to this country either. Frederking's horses have been sold to breeders in Europe. One of the latest and most notable exports is Kahlua Empire, a winner during the 1979 Illinois State Fair in Springfield. Kahlua Empire was shipped to Italy last December. The mare had set an age trotting record at Maywood Park in Chicago. In Italy Kahlua Empire joined half-sister

Dapper Empire. Later in December, Frederking sold seven horses to a West German stable.

In addition to West Germany and Italy, Sweden is another European country with well-developed standardbred programs.

Frederking, a member of Southwestern Electric Cooperative and a native of the Okawville area of Washington County, became a new automobile dealer in Altamont in the early 1950s. He sold the auto business in 1955, and ventured into the oil business. It was a successful venture. Nineteen of his first 21 wells were producers, "way better than the national average," Frederking admits. "I've been very, very lucky."

Frederking's varied business activities emphasize his business philosophy: if you are diversified, your business is apt to be more stable.

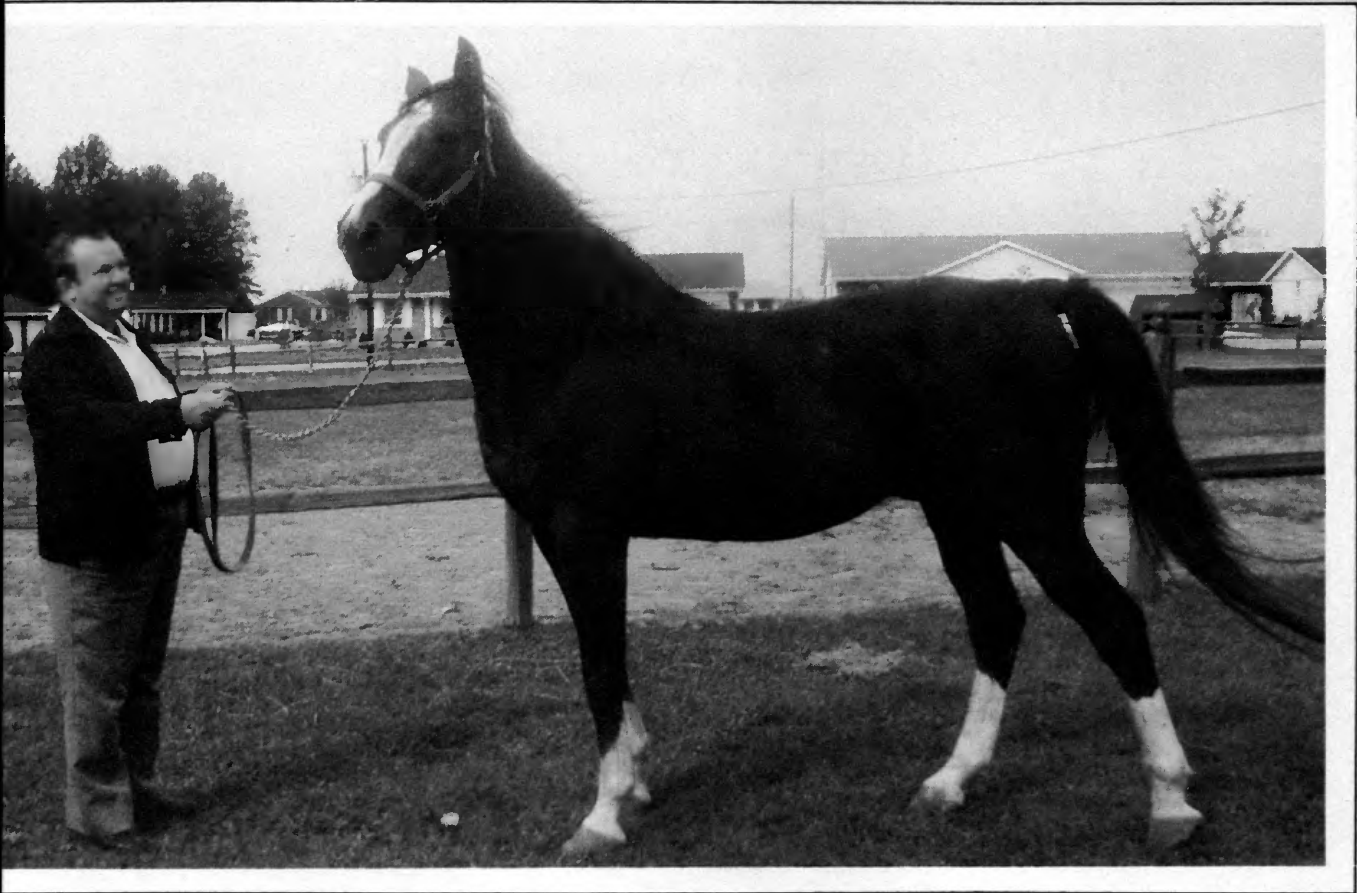
Shortly after the oil drilling and production success, he branched into real estate, bought his first standardbred, opened a roadside campground complete with grocery store, then moved into home construction and real estate development. Oldest son

David has joined him in the building business and the subdivision they developed now includes over 60 homes and apartments, plus the Frederking stables. Three other children are relatively close to home, including Sandy (Mrs. Douglas Heiden of Paris), Debbie (Mrs. Gary Pryor of Altamont) and Kathy (Mrs. Marc Lock of Altamont). Marc works with Frederking in his farming operation. Frederking and wife Lorene live in the subdivision, too.

Without really having to say, "I've always liked horses," Frederking is obviously most happy when he is with his horses. In fact, the interest in racing standardbreds is overshadowed by his interest in raising and selling yearlings. "It gives you a good feeling to train a good trotter," Frederking says.

The standardbred horse is a heftier, sturdier breed than the thoroughbred, Frederking explains. And, trotters are differentiated from pacers because trotters' legs on each side move in opposition and pacers run with legs moving together.

Frederking says he's raced horses



*Clockwise from far left: It's feeding time for some of Frederking's brood mares, considered to be the largest band in the state. The pride of Frederking's stable is stallion Cardinal Jamie. Frederking's busy desktop indicates his varied activities.*



"all over," but points out that "If you can win in Chicago, you can win anywhere." Illinois sports eight harness tracks: five in Chicago, two in the East St. Louis area and one at East Moline. Horses can race up until they are 14 years old, he adds, but says, "There are just so many good, fast races in a horse."

Frederking takes considerable pride in knowing that he has made a top-producing stallion out of a horse

which other breeders found unsuitable. When he needed a replacement for Empire Hanover (a stallion he owned in partnership with Carl Becker, prominent race announcer) Frederking found Cardinal Jamie, a horse with a successful racing career which included a win in the Castleton Stakes at DuQuoin. Frederking saw great promise in the large (about 1,600 pounds) animal. The promise was fulfilled, and Cardinal Jamie,

although he may not be as good a sire as Illinois' top trotting sire Empire Hanover, is earning a reputation for himself.

Frederking has logged hundreds of thousands of miles following his stable of standardbred racers, and perhaps just as many miles keeping up with his other businesses. Now his interest in raising yearling horses may signal a sharp slowdown in all that travel, as Frederking "undiversifies" a little.



Losses estimated in the millions

## Storms hit Illinois; southern areas devastated

**H**heavy summer storms spawning tornado-like winds of over 75 miles per hour slammed Illinois in late June and early July, causing millions of dollars in damage to electric service of many Illinois electric cooperatives, hitting those in the southern area of the state the hardest.

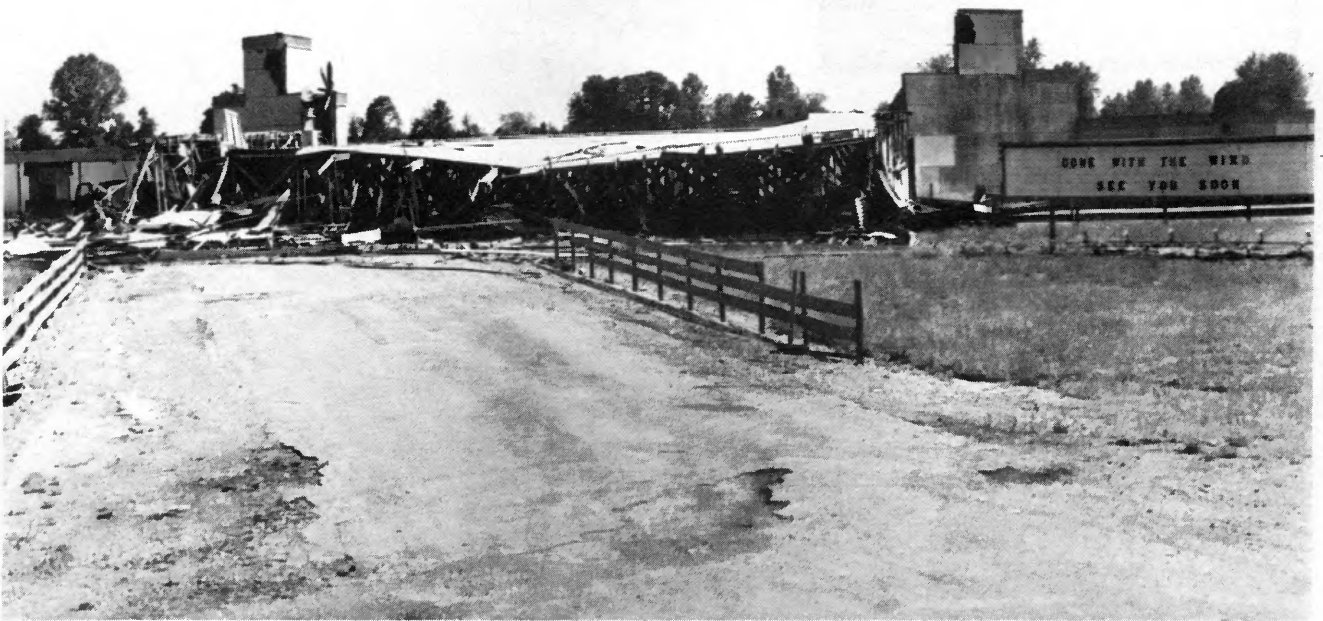
The first blast carved a path across Southern Illinois during the late evening hours of June 28, cutting electric service to over 20,000 farms, homes and businesses served by Southeastern Illinois Electric Cooperative and Egyptian Electric Cooperative Association for periods of a few hours up to several days.

Crews worked around the clock, and just when service had been restored to most of the member-owners of the two cooperatives, the afternoon of July 2 brought a more severe storm along almost the same path, uprooting trees and power line poles, destroying buildings, toppling antennas and overturning mobile homes. Included in the damage were many temporary repairs the two cooperatives had made in order to restore service from the June 28 storm.

The June 28 and July 2 weather problems were almost duplicated in parts of central Illinois during the

holiday weekend of July 4. Hardest hit of the state's cooperatives by these storms was Corn Belt Electric, headquartered in Bloomington.

In all, well over half of the state's electric cooperative's suffered significant wind-related damages. In addition to the hardest hit — SEIEC and Egyptian — and Corn Belt, others were: Monroe County Electric Co-Operative, Waterloo; M.J.M. Electric Cooperative, Carlinville; Adams Electrical Co-Operative, Camp Point; Western Illinois Electrical Coop., Carthage; McDonough Power Cooperative, Macomb; Spoon River Electric Co-operative, Canton; Menard Electric Coop-



*Tree limbs pulled down power lines over wide areas of Illinois during the June 28-July 6 storms and inflicted tens of millions of dollars in damages to property. Typical of the power line damage is that shown on the opposite page, while the owner of the drive-in theatre in the photo above displays a sense of humor with the "Gone with the Wind" marquee message.*

erative, Petersburg; Wayne-White Electric Cooperative, Fairfield; Tri-County Electric Cooperative, Mt. Vernon; Clay Electric Cooperative, Flora; Norris Electric Cooperative, Newton; Southern Illinois Electric Cooperative, Dongola, and Illinois Valley Electric Cooperative, Princeton.

Areas served by other of the state's electric cooperatives also had weather-related outages during the period, but most of those outages were of short duration.

State officials estimated damage in counties hit by the June 28 and July 2 storms at \$81-million. In addition to electric services of the cooperatives, Illinois Power Company and Central Illinois Public Service Company electric service was interrupted, affecting tens of thousands of persons for up to several days.

Aiding in the effort to restore (and re-restore in many instances) electric service in the widespread service areas of the electric cooperatives was the Illinois Electric Cooperatives' Emergency Work Plan. Personnel of the Association of Illinois Electric Cooperatives maintain telephone communications with cooperatives affected by

emergencies, such as ice or wind storms, gathering information on estimated damage, number of additional personnel and equipment to assist in restoration of power, work and road conditions and where and to whom the crews should report. Contact is made with cooperatives unaffected by the storm which in turn dispatch personnel and equipment to assist in restoration of power. If service assistance requests exceed the capabilities of the cooperatives which can loan men and equipment, the emergency work plan coordinator secures the aid of crews from contract construction companies in the mid-west.

The emergency work plan has been implemented many times and has been invaluable in helping restore electric service as quickly as possible after severe outages caused usually by weather. Most of the emergency work plan efforts of the past have been to provide aid following ice storms, such as those which struck in 1978 and 1979, causing widespread system destruction and leaving many persons without power for long periods.

The emergency work plan roundup

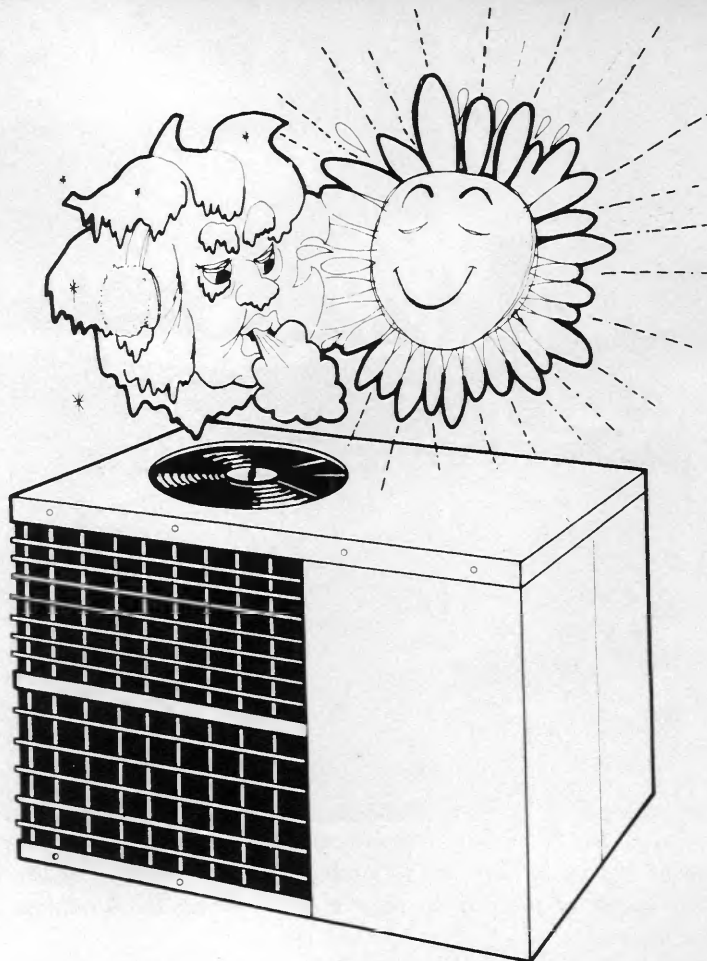
of crews to assist following the July 2 storm brought men and trucks to the stricken area from as far away as Champaign.

Crews working on the damage found getting to downed lines difficult at times. They had to hack through fallen limbs, and in at least one instance they had to use a boat to get to a downed line. Trucks became mired in rain-softened ground and temperatures climbed to over 100, with accompanying humidity.

The fury and destruction of the storm is amplified by the total damage figures for Southern Illinois alone. Of the \$81-million in losses, as estimated by the state's Emergency Services Disaster Agency, Franklin County suffered the most — \$32.4-million, with \$12-million in West Frankfort alone.

State officials have given much of the area a disaster designation and two federal agencies — Small Business Administration and Farmers Home Administration — have declared many counties of Southern Illinois as disaster areas. The declarations make possible low-interest loans for many who suffered losses during the storm.

energy  
efficiency



## Heat pump: dual purpose unit that heats and cools

**F**or many consumers, decisions about heating and cooling equipment include consideration of the electric heat pump, a device that heats in the winter and cools in the summer with the same equipment. Because it is a dual-purpose system, it offers an attractive option over separate air conditioning and heating systems, especially for new homes, but the heat pump's application is not limited to new construction.

A heat transferal system, the heat pump conveys heat to the most appropriate place. In summer it extracts heat from the interior air of the home or business and expels it to the outdoors. In winter the process reverses. Heat is absorbed from the outside air and is pumped into the structure.

The principle of the heat pump allows for the capturing of heat from outside air temperatures, even during cold winter since heat exists in all air. In winter the heat pump's refrigerant is directed through the unit's outside coil, picking up heat from the outside air as it evaporates into a vapor or (gas). The refrigerant vapor is carried into the structure and

heat is released as the vapor turns to liquid as it passes through the indoor coil where an indoor blower pushes this heat into the home or business. In summer the cycle is reversed, with the refrigerant passing through the inside coil and as the liquid evaporates it absorbs heat, cooling the air around the coil. The indoor blower moves the cold air through the ductwork into the structure.

The heat pump's main components are the compressor, coil and blower. It is noted for its efficiency and operating economy. The heat pump can be either a single-package type with all components outside the house, or a split system, in which the interior system contains a heat-exchanger coil, a blower and electrical controls. Exterior sections of the split system contain the outdoor coil, compressor, a fan and controls. Refrigerant lines and electric controls connect the two sections.

Although heat exists in temperatures to minus 459 degrees fahrenheit or "absolute zero," the heat pump's efficiency is diminished as temperatures outdoors reach freezing or below. To offset this loss of

efficiency, the heat pump is designed to be equipped with supplementary, resistance-type heating for these cold periods.

Persons who are considering installation of a heat pump should look for a number of features, and should ask their cooperative energy specialist for assistance and advice.

There are items many heat pump specialists recommend as features:

All-temperature compressor — should operate at outdoor temperatures from zero to 105 degrees F.

Suction-line accumulator, or other reliable device designed to keep liquid refrigerant from entering the compressor — the compressor is designed to pump gas, not liquid and a dry compressor is a must for efficiency and long compressor life.

Crankcase heater — helps assure that compressor bearings are properly lubricated by removing liquid refrigerant which can dilute lubricating oil.

Liquid-line filter-dryer — helps keep system clean and free of acid and moisture.

In addition to the heat-pump



features, other things to give important consideration are:

Duct system — it must be properly designed and adequately sized, as heat pump performance is hampered, and some experts say mechanical problems are hastened, by inadequate duct systems particularly undersized air ducts.

Indoor thermostat — it should have two stages of heating, one of cooling.

Supplemental heat — automatic resistance-type heaters either in unit or in duct.

Heat switch — for manual activation of the resistance-type heaters, in case the compressor becomes inoperative; sometimes referred to as the emergency heat switch.

Outdoor thermostat — used to prevent the supplemental heat from switching on before needed, helping

to insure comfortable, efficient, economical operation.

Your cooperative's specialist can help you determine the size of unit needed. Don't make the mistake of thinking that big is best. Get the exact size needed.

Compare brands, price and value. Look for certification seals such as Underwriters' Laboratories and Air-Conditioning and Refrigeration Institute.

The EER, energy efficiency ratio, is a indication of the heat pump's

cooling efficiency. The COP, coefficient of performance, is an indication of its heating efficiency. The higher the EER and COP the greater the cooling and heating efficiency of the unit.

Shop for a reliable dealer. Ask about the total costs, remembering that the lowest bid may not be the best quality installation price. Check for parts and service availability. Be sure to compare service, warranty and service contracts as you do size and cost of the heat pump.

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## My Feet Were Killing Me...Until I Discovered the Miracle in Germany!

It was the European trip I had always dreamed about. I had the time and money to go where I wanted—see what I wanted. But I soon learned that money and time don't mean much when your feet hurt too much to walk. After a few days of sightseeing my feet were killing me.

Oh, I tried to keep going. In Paris I limped through Notre Dame and along the Champs-Élysées. And I went up in the Eiffel Tower although I can't honestly say I remember the view. My feet were so tired and sore my whole body ached. While everybody else was having a great time, I was in my hotel room. I didn't even feel like sitting in a sidewalk cafe.

The whole trip was like that until I got to Hamburg, Germany. There, by accident, I happened to hear about an exciting breakthrough for anyone who suffers from sore, aching feet and legs.

This wonderful invention was a custom-made foot support called Flexible Featherspring. When I got a pair and slipped them into my shoes my pain disappeared almost instantly. The flexible shock absorbing support they gave my feet was like cradling them on a cushion of air. I could walk, stand even run. The relief was truly a miracle.

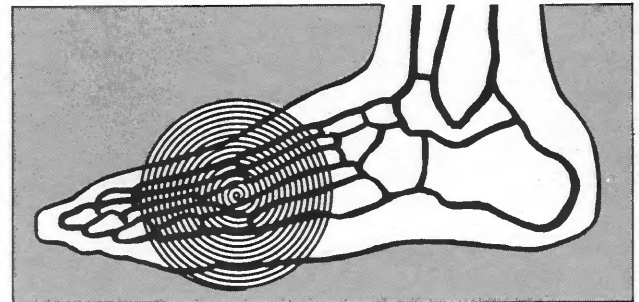
And just one pair was all I needed. I learned that women also can wear them—even with sandals and open backed shoes. They're completely invisible.

Imagine how dumbfounded I was to discover that these miraculous devices were sold only in Europe. Right then I determined that I would share the miracle I discovered in Germany with my own countrymen.

Over a quarter million Americans including those who have retired—many with foot problems far more severe than mine—have experienced this blessed relief for themselves.

Here's why Feathersprings work for them and why they can work for you. These supports are like nothing you've ever seen before. They are custom fitted and made for your feet alone! Unlike conventional devices, they actually imitate the youthful elastic support that Nature originally intended your feet to have.

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ends, painful ankles, old injuries, backaches or just generally sore, aching feet, Flexible Feathersprings will bring you relief with every step you take or your money back..

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*"My husband felt a great relief and no more pain. They are truly an answer to our prayers. Only wish that he had heard of them twenty years ago." Mrs. F. S./Metairie, Louisiana*

*"I have checked your corporation with (A Consumer Protection Agency), and received an excellent report." H.S.H./Louisville, Kentucky*

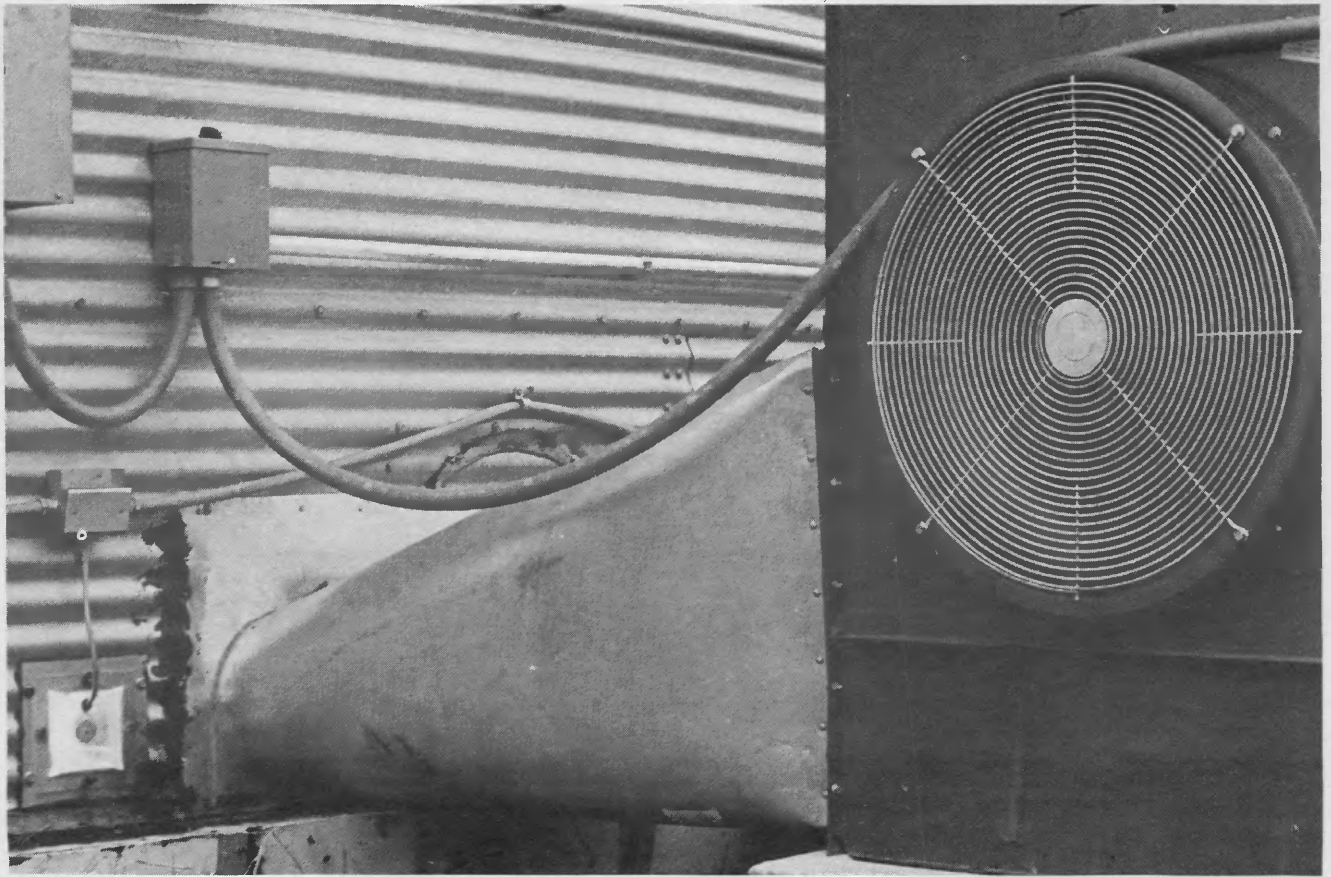
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## Keeping electric motors in good condition lessens chances of costly breakdowns

**M**odern grain handling around the farm depends on hard-working, efficient electric motors. They are taken for granted when they work, which is most of the time.

But, occasionally electric motors fail. And when they do, an entire handling system can come to a halt. Thus, it's important to understand the causes of motor failure and know how to prevent them.

Overheating is the most common cause of electric motor failure, say engineers. Other primary causes are unfavorable environmental conditions, mechanical failures and adverse transient or temporary voltage conditions.

A study of 4,000 motor failures conducted over several years by a large service shop indicates that 25 percent of the failures were caused by overheating from overloads. Ten percent resulted from single phasing, another source of overheating, and five percent were from normal "old-age" deterioration of insulation.

Forty-three percent of the failures were attributed to adverse environmental conditions, contamination of the motors leading to grounding or shorting of the electrical system. Included in this category were oil and grease, 20 percent of the total failures; moisture, 17 percent; chips and dust, five percent, and chemicals, one percent.

Bearing failures, a mechanical cause, accounted for 12 percent of the total, and five percent were classified as miscellaneous.

### EXCESSIVE HEAT BLAMED

Engineers for Gould Inc. Electric Motor Division point out that excessive internal heat has a severe deteriorating effect on the motor insulation system. Despite improvements in winding techniques, the insulation remains the weakest link in any electric motor.

This deterioration, a chemical and mechanical process, usually occurs before any other material in the motor is affected. Thermal gain itself does

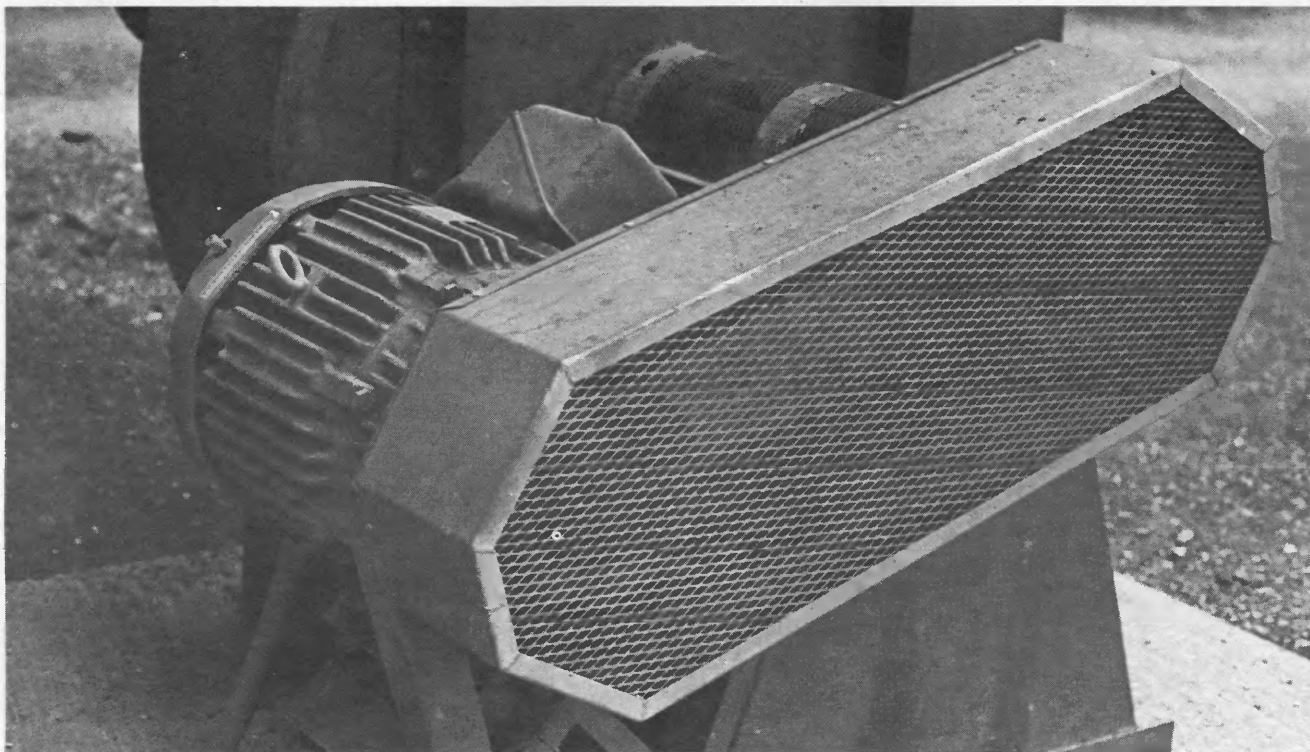
not produce failures. But it makes the insulation system vulnerable to moisture, brittleness and loss of thermal expansion capabilities. The system fails electrically, permitting a short circuit, ground or both.

Motor overheating can be caused by several factors, individually or in combination. They include sustained overload, excessive duty cycle, voltage variation, unbalanced voltage, single phasing, insufficient ventilation and high ambient or external temperature.

Excessive running current from a prolonged overload overheats the motor winding. The motor may stall or refuse to start. In the latter case, starting currents, often six times higher than running current, flow longer than normal and can cause immediate burnout. Overload devices can help minimize this danger if they are properly monitored and corrections are made.

### MATCH DUTY CYCLE TO MOTOR

When the anticipated duty cycle is not determined until after the unit is



*The harvest season brings on extra work for the scores of electric motors on Illinois farms. These efficient, hard-working "farm hands" are the key elements in many grain handling and conditioning systems. Keeping motors in tip-top shape requires a thorough maintenance program.*

installed, it may impose duty loads above the motor's capability. High currents from repetitive plugging, jogging or reversing generates damaging heat unless steady running time is provided to remove the excess heat.

Induction motors are designed to operate at satisfactory temperatures within 10 percent of rated voltage. When these limits are exceeded, the motor may heat up. Engineers advise monitoring current to the motor to determine the effect of heating.

Small voltage unbalances can cause greater current unbalances. This results in heating in the high-current winding and a parasitic torque that decreases motor efficiency and creates noise and vibration. If you suspect this problem, notify your power supplier.

Single phasing is the opening of one line in a three-phase power distribution system feeding a three-phase motor. It is usually caused by mechanical breakage of a conductor, a blown fuse or a malfunctioning switch or controller. Overcurrent protection should be provided to disconnect the motor in such cases.

Clogging, blocking or reducing air flow through the motor can cause overheating. Likewise, high external

temperatures can affect the motor's internal temperature, especially in an enclosed or heat-exposed operating environment.

#### **AVOID OIL, GREASE, MOISTURE**

The oil can and grease gun are major enemies of electric motors. An overzealous maintenance program may result in excess oil and grease seeping into the motor. This excess builds up on the motor winding and, in conjunction with the heating and cooling cycle, eventually breaks down the insulation system, allowing moisture to penetrate. Overgreasing of the bearings can also cause overheating damage.

When moisture penetrates the winding insulation system, shorts and grounds result. A major cause of moisture penetration is improper motor installation; for example, use of an open motor where a totally enclosed or an encapsulated motor should be used in an exposed outdoor location. Or, an open motor may be exposed to splashing or dripping water.

Drain plugs are required on totally enclosed motors to allow the escape of condensed water resulting from heating and cooling.

Totally enclosed or specially insu-

lated motors are recommended where dirt and dust are prevalent, especially under blowing conditions. Abrasive dust can erode electrical insulation. Motors also should be protected from chemicals, especially acids, alkalis and solvents.

#### **MECHANICAL, OTHER PROBLEMS**

Mechanical failures include such problems as unbalanced electrical voltage, unbalanced rotating parts, mechanical misalignment, inadequate mounting or improper V-belt application. The best protection against mechanical failure is to be sure the motor is installed by a qualified serviceman or strictly according to directions.

Transient voltage usually refers to lightning surges. But engineers point out that other major sources of these random transient voltages are load switching, fault recovery, capacitor switching and SCR commutating spikes.

Voltage stresses resulting from these conditions can cause shorts or grounds in the motor. As a consequence, they may be attributed to insulation failure rather than to the less apparent transient voltage failure problem.



Tim Reeves

R.T. Reeves

### Board selects son as successor

## Southern's Reeves retiring

**R**T. "Tom" Reeves, manager of Southern Illinois Electric Cooperative, Dongola, has announced plans to retire after almost 40 years of service to the cooperative. He will step down at the end of this year.

Floyd Dillow, Dongola, president of the cooperative's board of directors, said the board has selected Tim Reeves, 32-year-old son of the retiring manager, to succeed his father as manager of the electric distribution cooperative which serves approximately 9,000 member-owners in parts of six counties.

"Tim Reeves has been involved with the rural electrification program for most of his lifetime," Dillow said. "He has excellent qualifications for the job. Of course, I've known him all his life, and he came to us with good recommendations from Egyptian Electric Cooperative Association, where he's worked for the last six years. He's well qualified and I think he'll do a good job for our members."

Jim Holloway, manager of Steeleville-based Egyptian, echoed Dillow's remarks. "I thought Tim had a lot of talent and good potential," Holloway said, "and I elevated him to staff assistant in 1976 and promoted him to assistant manager two years later. He'll be sorely missed here. He has the

background for the job, and he should make an excellent manager.

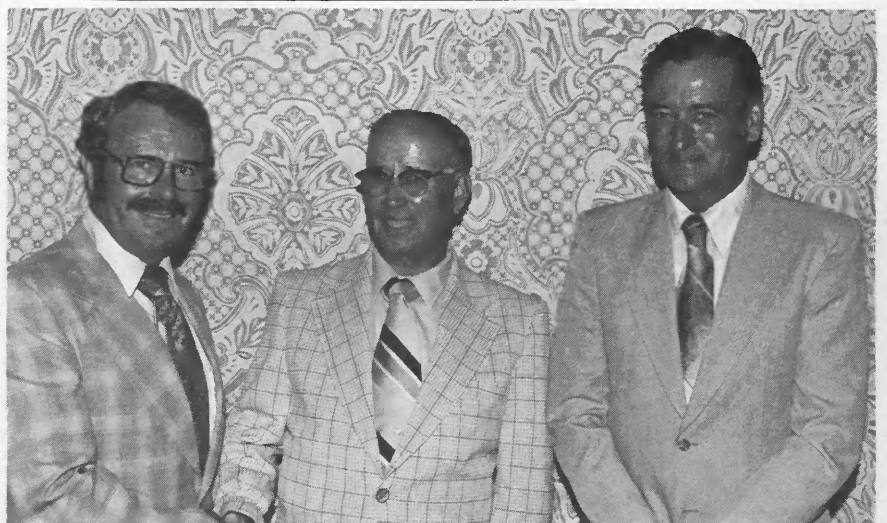
"The real beneficiaries of this succession are the members of Southern Illinois Electric Cooperative — they're getting an excellent manager," Holloway concluded.

Tom Reeves has worked at Southern for 38 years, with three years out for wartime service with the U. S. Navy. He began work as office manager, and became manager of the cooperative in 1954.

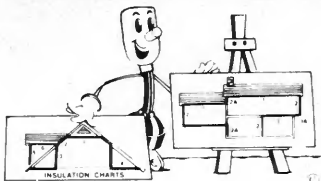
Dillow praised Tom Reeves for his management ability and leadership in helping the cooperative face challenges and solve problems over the years. "One of our big problems was power supply," Dillow said, "and we all had something to do with getting Southern Illinois Power Cooperative going and getting the plant at Marion built. Naturally, Tom was right in the middle of it all. He's had a fine relationship with the entire board and we've been very happy with him. He's done a fine job, I'd say."

Reeves and his wife, Eulita, plan to do some traveling after retirement, and perhaps to spend their winters in warmer climates, and Tom expects to get in some fishing and golfing.

The younger Reeves and his wife, Carol, have a two-year-old daughter, Cherie. He served three years in the U. S. Army, achieving the rank of First Lieutenant, and graduated from SIU-Carbondale in 1973. He worked for a household products firm for a year before joining Egyptian Electric Cooperative.



*Glen Morton of Paloma, left, Adams Telephone Co-Operative director, has been elected president of the Illinois Telephone Cooperative Association. Also elected at the ITCA annual meeting at Springfield in July were Wilson Barclay of Macomb, center, McDonough Telephone Cooperative director, who was reelected secretary-treasurer, and Sheldon Orwig, of Smithfield, a director of Mid-Century Telephone Cooperative, elected vice president. Eldon Snowdon, manager of McDonough Telephone Cooperative, was elected chairman of the advisory council, and Jack Douglas, manager of Adams Telephone Co-Operative, was named vice chairman.*



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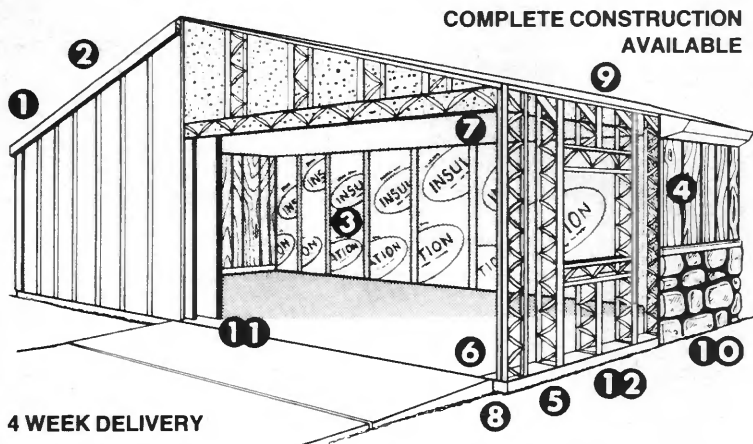
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#### BARBECUE SAUCE:

- |                                   |                                |
|-----------------------------------|--------------------------------|
| 2 bottles barbecue sauce for base | 2 medium bell peppers, chopped |
| 1 cup brown sugar                 | 2 medium onions, chopped fine  |
| 1/2 cup molasses                  | 1 teaspoon black pepper        |
| 2 cloves garlic, chopped fine     |                                |

Combine ingredients and simmer until thick, about 1 hour. Keep unused sauce in refrigerator. Use this sauce on chicken that is cooked on the electric barbecue oven.

#### SLOW COOKER CHICKEN AND VEGETABLE DISH

- |                          |                 |
|--------------------------|-----------------|
| 1 chicken (3 lb.) cut up | 2 celery stalks |
| 4 carrots                | Salt to taste   |
| 4 onions                 | Pepper to taste |
| 6 small potatoes         | 1/2 cup water   |

Put all vegetables on bottom of cooker and place chicken on top. Salt and pepper and cook on low for 7 hours or on high for 3 hours. I cook on high because the potatoes don't get dark.

#### SQUASH RELISH

- |  |  |
|--|--|
| 10 cups diced yellow summer squash or zucchini | 1 cup diced sweet pepper (red or green or mixed) |
| 4 cups diced onions                            | 5 tablespoons salt                               |

Mix above ingredients. Let stand overnight. Drain liquid off well next morning. Then mix

- |                          |                          |
|--------------------------|--------------------------|
| 1/2 cups vinegar         | 3 cups sugar             |
| 1 tablespoon celery seed | 2 tablespoons cornstarch |

Mix this liquid mixture well and add to the squash mixture. Cook slowly 30 minutes. Fill regular jars and seal, or use any jar that will seal for storage.

# Summertime Specials

#### BROCCOLI CASSEROLE

- |                          |                              |
|--------------------------|------------------------------|
| 1/2 stick oleo           | 1 small jar of Cheese Whiz   |
| 1 onion (chopped)        | 1 can cream of mushroom soup |
| 2 boxes chopped broccoli | 1 cup Minute Rice            |

Melt oleo and cook chopped onion until clear. Stir cook broccoli until tender and stir in broccoli and soup. Simmer for 15 to 20 minutes. Mix in Cheese Whiz and rice. Bake in 300 degree oven for 20 to 30 minutes.

#### TACO SALAD

- |                      |                              |
|----------------------|------------------------------|
| 1 head of lettuce    | 1 lb. velveta cheese, melted |
| 2 tomatoes           | 1 can Rotel tomatoes         |
| 1 lb. hamburger meat | 1 large pkg. Doritos         |

Brown hamburger meat and drain. Mix hamburger with cheese and Rotel. Crush Doritos and mix with lettuce and tomato salad. Pour Rotel dip over lettuce and tomato salad just before you eat.

#### MACARONI SALAD

- |                              |                        |
|------------------------------|------------------------|
| 1 pkg. macaroni (7 oz.)      | 1 jar corn relish      |
| 1 small jar pimentoes        | 1/4 cup onion, chopped |
| 1/2 cup mayonnaise           | 1/2 cup sour cream     |
| 1/2 cup bell pepper, chopped |                        |

Cook macaroni until done and drain. Rinse with cold water. Mix all ingredients with macaroni. Chill and serve.

#### BEEF PICKLES

- |               |                            |
|---------------|----------------------------|
| 1 cup sugar   | 1/2 teaspoon pickling salt |
| 1 cup water   | 1/2 stick cinnamon         |
| 1 cup vinegar | 1/2 slice lemon            |

Cook beets until tender, skin and slice or quarter. Heat sugar, water, vinegar and salt. Add beets and heat several minutes. Put into jars, add cinnamon, and lemon slice on top. Heat lids and seal.

#### SWEET DILL PICKLES

- |                                 |                                  |
|---------------------------------|----------------------------------|
| 2 gallons medium size cucumbers | 1 teaspoon pickling salt         |
| 2 cups water                    | 12 saccharin tablets (1/2 grain) |
| 1 cup apple cider vinegar       |                                  |

Mix above and bring to boil. Add cucumbers, heat very slowly until they turn color, about 10 minutes. Place in jar with dill heads and stalks, 1/4 hot pepper, garlic button, 1/4 teaspoon mustard seed and 1/4 teaspoon celery seed. Pour hot liquid over cucumbers and seal. Heat lids in hot water. A double recipe covers 5 quarts. If cucumbers are large, cut into quarters and stand up in jars or slice.

#### SNOWBALLS

- |                   |                               |
|-------------------|-------------------------------|
| 1 stick margarine | 1 1/2 pints whipping cream    |
| 2 eggs            | 1 large can crushed pineapple |
| 1 cup sugar       | 1 cup shredded coconut        |
| 1 cup nuts        |                               |

Mix sugar and margarine together. Add egg yolks. Add drained pineapple and fold in beaten eggwhites along with nuts. Spread between vanilla wafers. Whip cream stiff and use 3 vanilla wafers per stack. After stacking, coat with whipped cream, sprinkle or roll in coconut. Refrigerate 24 hours before serving. May be frozen indefinitely.



It's nice to ladle punch from a melon bowl, but it's more fun to see the punch pour from a "spout" in the side of the melon. To do that, simply poke a hole in the melon with a skewer and, between servings, plug the hole with a skewer or small wooden dowel. For our Cherry Jubilee, mix 1 cup each cherry and raspberry sweetened soft drink mix and add 4 quarts of water with ice cubes. For Tutti-Frutti Punch, mix 1 cup sweetened soft drink mix with 2 cups unsweetened pineapple, apple or orange juice and 2 quarts water.

#### PEACH OR APPLE COBBLER

- |                            |                                 |
|----------------------------|---------------------------------|
| 2 cups flour               | 3/4 cup Crisco                  |
| 1 teaspoon sugar           | 1/2 cup milk plus 3 tablespoons |
| 1 teaspoon salt            | 4 cups fresh or frozen fruit    |
| 1/4 teaspoon soda          | 3/4 cup sugar                   |
| 1/8 teaspoon baking powder | 1/2 stick oleo                  |

Sift flour and add sugar, salt, soda and baking powder. Cut Crisco into mixture just until it lumps. Add milk, mix until all is moistened. Take more than 1/2 of the dough, roll out and place in deep pan, (melt 3 tablespoons butter in pan) extending crust up sides of the pan. Add fruit, sprinkle 3/4 cup sugar on top, dot with 1/2 stick oleo. Add top crust, press down, dot with butter, and sprinkle with sugar. Bake at 450 degrees for 10 minutes, reduce heat to 400 degrees and bake 25 to 30 minutes longer or until brown. While pie is cooking bring following syrup to a boil.

#### SYRUP:

- |               |             |
|---------------|-------------|
| 1/2 cup sugar | 1 cup water |
|---------------|-------------|
- Bring to a boil and 10 minutes before pie is done, pour syrup around edges of pie and return to oven to finish cooking.

#### FOUR LAYER DELIGHT

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| <b>FIRST LAYER:</b>                   |                                       |
| 1 stick margarine                     | 1/2 cup chopped nuts                  |
| 1 cup flour                           |                                       |
| <b>SECOND LAYER:</b>                  |                                       |
| 1 cup confectioners' sugar            | 1 pkg. Dream Whip mixed by directions |
| 1 pkg. cream cheese (6-oz.)           |                                       |
| <b>THIRD LAYER:</b>                   |                                       |
| 2 boxes chocolate instant pudding     | Milk                                  |
| <b>FOURTH LAYER:</b>                  |                                       |
| 1 pkg. Dream Whip mixed by directions | 1 cup chopped nuts                    |

Mix ingredients for first layer and press into oblong baking dish. Bake at 350 degrees for 15 minutes. Cool. Combine ingredients for second layer and pour over first layer. Refrigerate. Mix chocolate pudding and milk together for third layer. Pour over second layer and return to the refrigerator. For the fourth layer, combine ingredients and spread over third layer and return to refrigerator to chill well until ready to serve.

#### PINEAPPLE SHEET CAKE

- |                          |                         |
|--------------------------|-------------------------|
| 2 cups sugar             | 2 teaspoons soda        |
| 2 cups flour             | 1/4 teaspoon salt       |
| 2 eggs                   | 1 can crushed pineapple |
| 1 stick butter (1/2 cup) |                         |

Put all ingredients in mixing bowl and cream together. Pour on prepared jelly roll pan 13x17. Cook at 350 degrees 25-30 minutes or until done. (Do not overcook.)

#### ICING

- |                       |                      |
|-----------------------|----------------------|
| 1 1/2 cups sugar      | 1 cup coconut        |
| 1 stick margarine     | 1 cup chopped pecans |
| 1 cup evaporated milk |                      |

Cook sugar, margarine and milk over low heat until thickened, (do not overcook). Add coconut and pecans and spread on cake while still warm.

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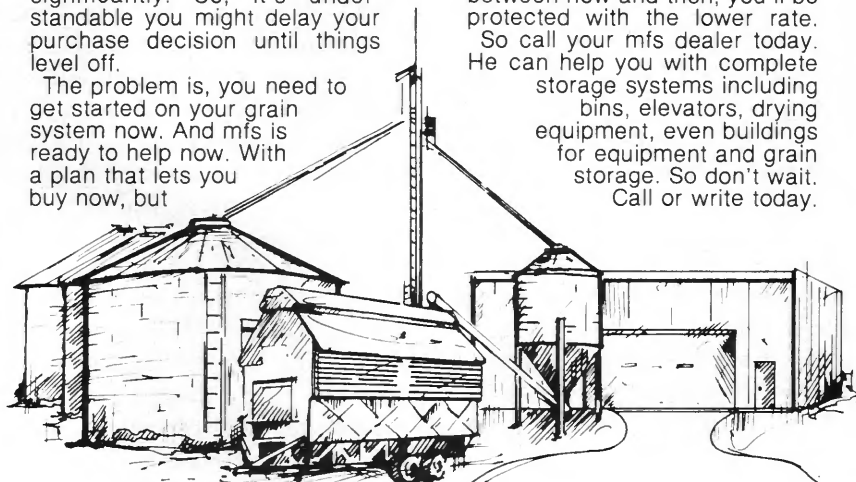
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## 'Retirement' is busy time

# Factory layoff fosters new career

A layoff from a factory job in 1949 has led to a busy, satisfying career for Herman Sandall, a Knox Countian who specializes in upholstery, chair caning and refinishing furniture.

Sandall has his shop in the basement of his rural home, taking on all sorts of projects for customers in the western Illinois area around Galesburg. A typical workload for Sandall this summer was a sofa to be reupholstered, a recliner completed and ready for delivery, an antique washstand ready for pickup by its owner and a request for him to duplicate a carved antique fainting couch foot.

He uses two rooms in his home's basement, one for his sewing work and the other for the woodworking and upholstery.

The six-month factory layoff 31 years ago led Sandall to several jobs before the callback, including work delivering and repairing furniture and carpentry. Those two experiences formed a base for his "retirement" work. In 1950, Sandall and wife Dorothy bought an old house and he set up his first shop in the crowded basement. For about 25 years he acquired necessary tools and experience working evenings and Saturdays and during sporadic layoffs

from the factory job.

When the Sandalls decided a few years ago to build a new home on Spoon River Electric Co-operative lines, it was logical that Herman would have a "built-in" shop, one in sharp contrast to the old one in which narrow stairs and low floor joists made moving furniture in and out difficult.

While the upholstery work accounts for about 80 percent of his work, Sandall obviously enjoys the chair caning and refinishing and restoring.

His caning work is well displayed in his own home. The outstanding work is on a rocking chair which once belonged to his great-great grandmother. "My sister found it. The cane seat was torn out and the wood was grayed. The old seat had been nailed on, too. 'Don't throw it away,' she said. 'Give it to Herman,'" Sandall relates as he describes how he came by the chair.

Now the chair sports handsome natural wood coloring and intricately woven cane seat. A dining room set also features woven cane seats on the chairs, and a small child's chair has been recaned with rush cane.

The beauty and utility of a well-done caning job is underlined by the time needed to do the job properly, Sandall says. "It takes about a day for a rush cane job on a

chair," he explains.

The woven cane and rush cane materials are two of three types used. The third is the sheet cane, a pre-woven flat that is cut to fit and held in place by splines along the edges. Sandall says he varnishes the cane, for longer life and to shrink the rush cane to a tight fit. He orders most of the cane he uses from a Connecticut company. Most cane is imported from the Philippines or Hong Kong, he adds.

Sandall says chair caning offers the greatest variety. "It's really interesting to get a job in for a caning pattern you've never seen before." You can spot antiques quickly by the spacing of the cane holes. Antiques will have irregular spacing."

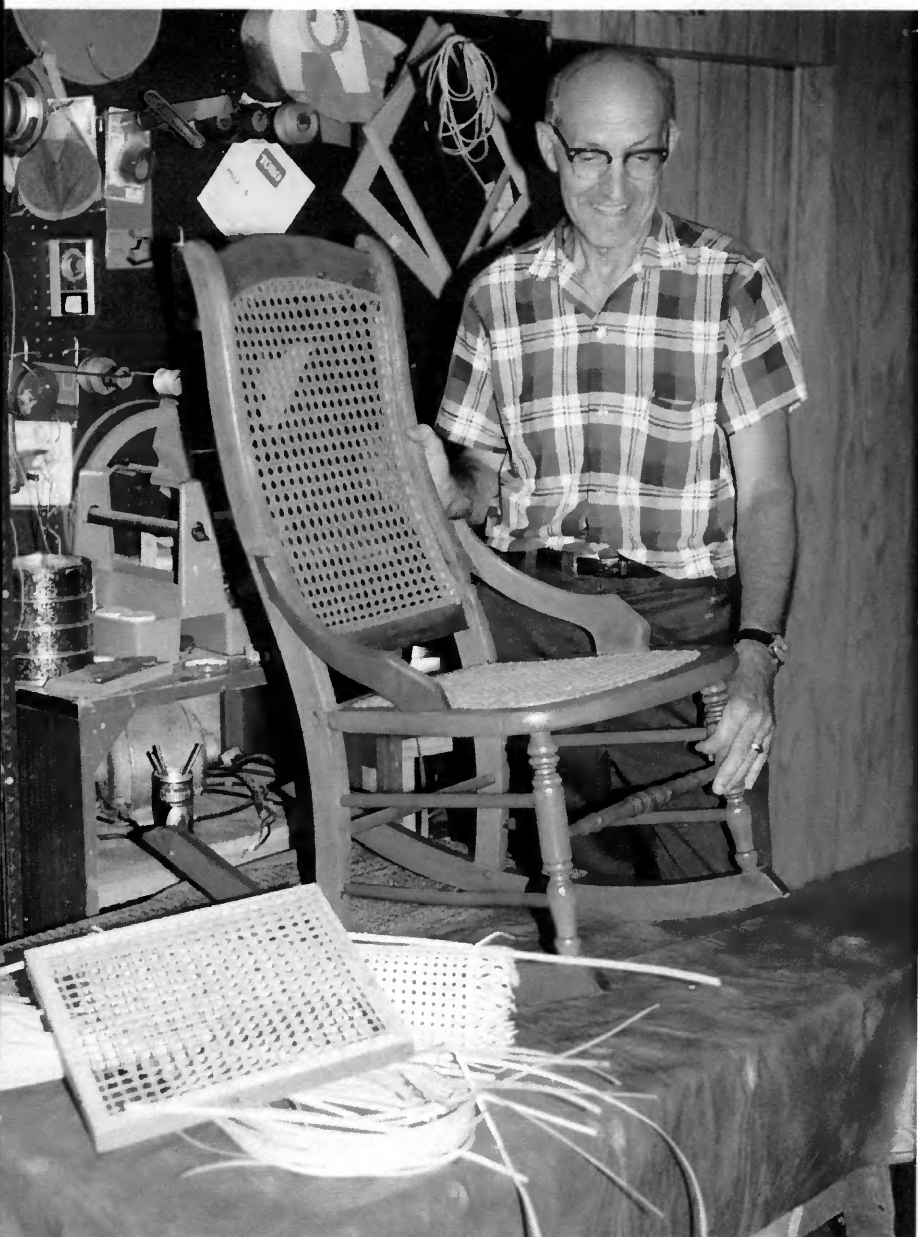
He has attracted some interest from local organizations to display his skills. Last October he spent two weekends caning for people touring on the Knox County Scenic Drive and he built a special frame about the size of a chair seat to take to club meetings for caning demonstrations.

Recently he finished work on an antique washstand for a customer. The stand had been in a basement and fell apart when the owner tried to pick it up. Sandall received it in two cardboard boxes and the largest of the more than 75 pieces was one end. Sandall says he spent more than





*Clockwise from far left: Among the unusual projects people bring to Sandall is this antique sofa foot a customer wants reproduced. Sandall has refinished a few of his own furnishings, including this vintage sewing machine, complete with the accessory box. The popularity of chair caning led Sandall to make the square frame (foreground) for use in demonstrating caning techniques.*



30 hours restoring the washstand.

He advises do-it-yourselfers to chose a stripping solvent carefully. Use a thick solvent, one which will adhere to vertical surfaces. To take better care of furniture, Sandall says, you should never put nails in furniture and you should take care to use glue properly. "Watch glue guns," he stresses. "The glue sets up quickly and if you don't use clamps, you don't get a good job. Then it might pull apart."

Sandall has no storage space for waiting work. "I like to have only one or two projects in the shop at one time," he says. At one time in July he had 13 customers on his waiting list. He and Dorothy use their van to visit customers' homes, size up and estimate the cost of the job and carry the work back to the shop. "I try to make one trip count," he adds. Each item of furniture is measured carefully in the customer's home. Many furniture builders use rough estimates of the amount of material that will be needed to cover a particular sofa or chair. "Sometimes these estimates are off a yard or two and at \$10-50 a yard, I try to save a customer as much as possible by figuring out just how much material is needed."

How long will the waiting list take for Sandall to complete? The average customer has two pieces of furniture and, Sandall explains, "If I work real steady, I can get two chairs completed in a week."

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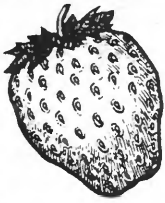
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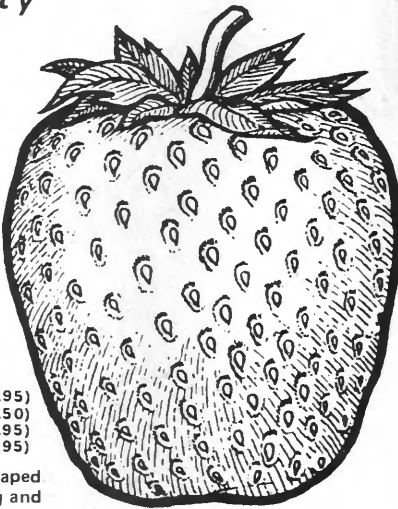
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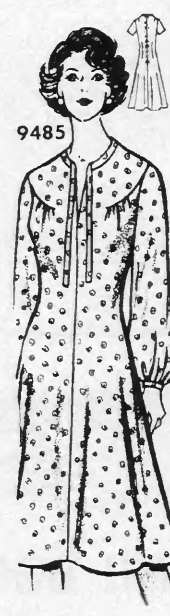
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9258 SIZES 2-8



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SIZES 8-20



9485



9331  
8-20



9495 8-20



9340 SIZES 8-20



9399  
34-48

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- No. 9057 is cut in sizes 12½, 14½, 16½, 18½, 20½; 34, 36, 38, 40, 42, 44, 46, 48. Yardages in pattern.
- No. 9034 is cut in sizes 10½, 12½, 14½, 16½, 18½, 20½. Size 14½ (bust 37) takes 3 3/4 yards 60-inch fabric.
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- No. 9495 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 3 3/8 yards 45-inch fabric.
- No. 9340 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 3 3/8 yards 45-inch fabric.
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