

Tennessee

DECEMBER, 1970

M A G A Z I N E

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New "Miss Tennessee Rural Electrification" Crowned
(See Pages 16-17)

Tennessee MAGAZINE

Official Publication of the

**TENNESSEE ELECTRIC
COOPERATIVE ASSOCIATION**

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J. C. Hundley, Executive Manager

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ON THE COVER

First alternate Pamella Lee Culbeson (Miss Middle Tennessee), Queen Jackie Hollie (Miss Gibson County) and second alternate Quen Golden (Miss Holston) were the winners in the 12th Annual "Miss Tennessee Rural Electrification" beauty contest. Story begins on page 16.


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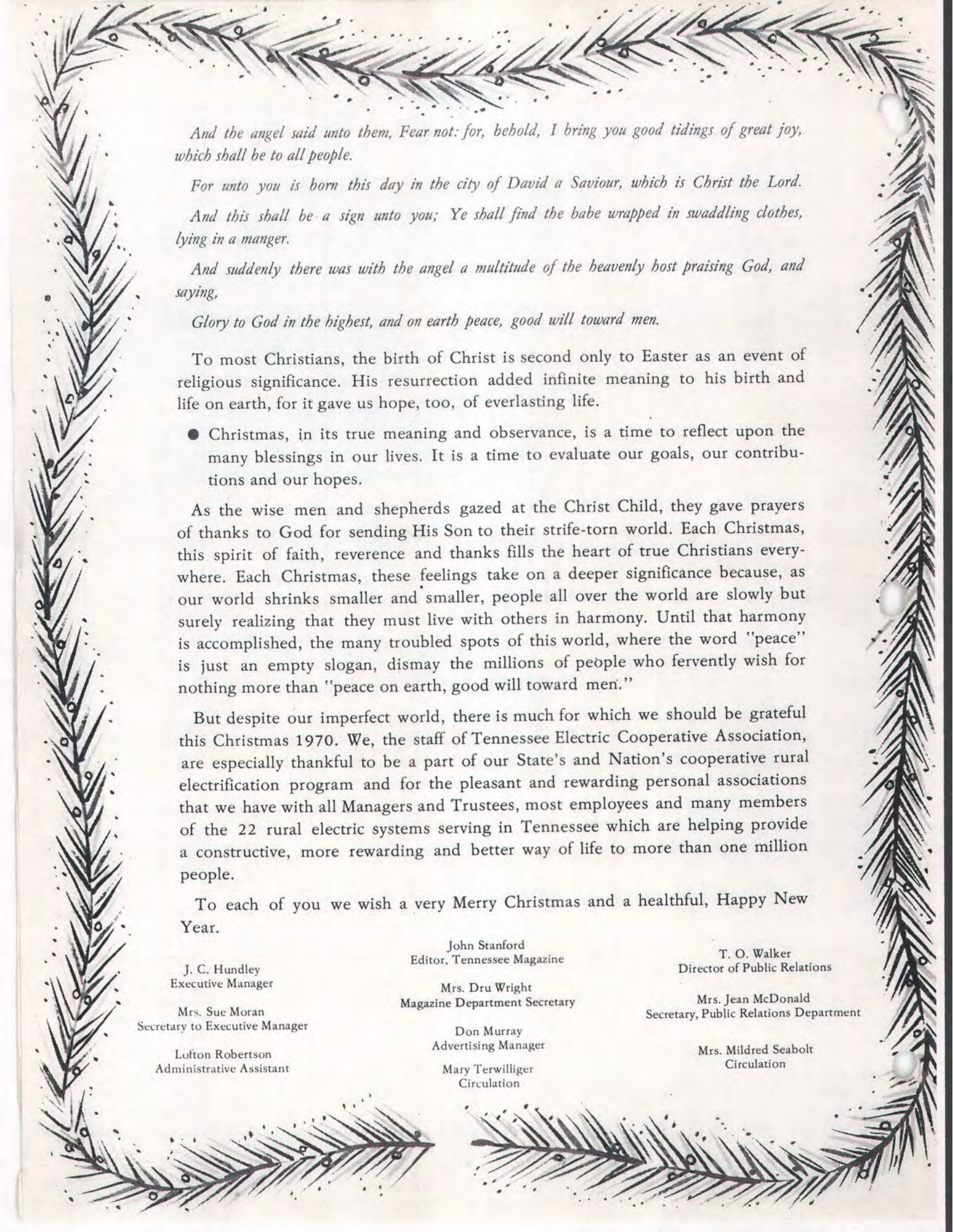
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And the angel said unto them, Fear not: for, behold, I bring you good tidings of great joy, which shall be to all people.

For unto you is born this day in the city of David a Saviour, which is Christ the Lord.

And this shall be a sign unto you; Ye shall find the babe wrapped in swaddling clothes, lying in a manger.

And suddenly there was with the angel a multitude of the heavenly host praising God, and saying,

Glory to God in the highest, and on earth peace, good will toward men.

To most Christians, the birth of Christ is second only to Easter as an event of religious significance. His resurrection added infinite meaning to his birth and life on earth, for it gave us hope, too, of everlasting life.

- Christmas, in its true meaning and observance, is a time to reflect upon the many blessings in our lives. It is a time to evaluate our goals, our contributions and our hopes.

As the wise men and shepherds gazed at the Christ Child, they gave prayers of thanks to God for sending His Son to their strife-torn world. Each Christmas, this spirit of faith, reverence and thanks fills the heart of true Christians everywhere. Each Christmas, these feelings take on a deeper significance because, as our world shrinks smaller and smaller, people all over the world are slowly but surely realizing that they must live with others in harmony. Until that harmony is accomplished, the many troubled spots of this world, where the word "peace" is just an empty slogan, dismay the millions of people who fervently wish for nothing more than "peace on earth, good will toward men."

But despite our imperfect world, there is much for which we should be grateful this Christmas 1970. We, the staff of Tennessee Electric Cooperative Association, are especially thankful to be a part of our State's and Nation's cooperative rural electrification program and for the pleasant and rewarding personal associations that we have with all Managers and Trustees, most employees and many members of the 22 rural electric systems serving in Tennessee which are helping provide a constructive, more rewarding and better way of life to more than one million people.

To each of you we wish a very Merry Christmas and a healthful, Happy New Year.

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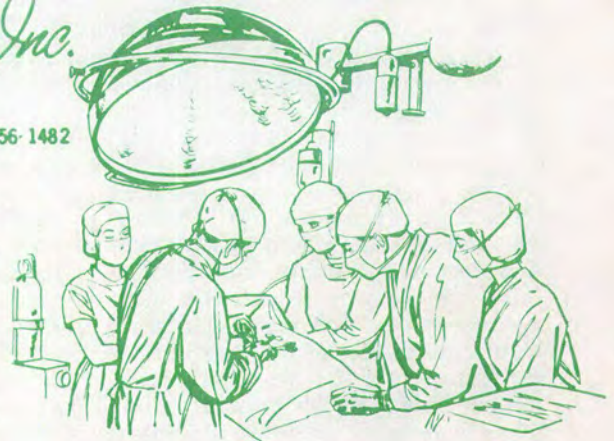
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CUT OUT ALONG DOTTED LINE AND MAIL

The Ole Copper Inn

By Robert Sosebee
Electrification Advisor
Tri-State Electric Cooperative

A motorist driving up winding highway 64 on what is locally known as the River Road will suddenly be confronted with a beautiful structure called the Ole Copper Inn which is located at the Junction of highways 68-64, just between Copperhill, Tennessee and Ducktown, Tennessee. To a weary traveler Ole Copper may look like a desert oasis. Many local people have asked the question: what does a man have on his mind who would build a forty-two unit, ultra-modern motel in an area which cannot boast of a population of 10,000 people, and is 40 miles distant to the next major town? Some think this man has a crazy idea on his mind.

Let's take a look at the man with the crazy idea. First of all let us say this man is crazy all right; he is crazy like a fox. His name is Kimsey Campbell, better known as Kim. Kim grew up here and is the son of pioneer families. As a young man he was one of the adventurous kind. He and a group of young men built an airplane in the 1930's. The tale is that this plane was built from six straight pins, two yards of oil cloth and one empty sardine can, which Kim actually flew. The tale also goes that a teacher in one of the elementary schools was telling her youngsters about Old Santa and how in the quiet of the night all this jingling, clattering and clanging in the air would be heard and

when you look up in the air do you know what you would see? One bright little youngster says, "Yeah, Kim Campbell."

When the Second World War began Kim went to Canada and joined the Royal Canadian Air Force. This was before the U.S. was involved in the war. When the U.S. became involved Kim joined the U.S.A.F.

After the war Kim returned to the Basin area where he operated the Copper Station, which was near where the Ole Copper Inn is now located. He operated the Copper Station until 1948 and then went to Benton, Tennessee, and operated an automobile business until 1955, at which time he returned to the Basin area and shortly afterward rebuilt the Copper Station and named it the Three Bears Tradin Post. This gives a short summary of Kim's career life, except for the fact that he still enjoys flying, but the plane which he

flies now is not home-made. Anyone needing his flying service can hire Kim, and many people have found in cases of emergency that he doesn't have to be hired.

With all of Kim's business ventures he has to have someone to keep him straight, and his lovely wife, the former Edith Chancey, does a good job in this department. They have three wonderful children—two girls and one boy.

This brings us to Kim's latest venture—the Old Copper Inn, or the crazy idea which was mentioned earlier. In the earlier stages of planning for the Inn, Kim probably never thought of the motel being on a major route to the Smokies, or that it was only an hour's drive away from the Tellico River area, or that it would be located only



The Ole Copper Inn, as it appears going west on U.S. Highway I-64. The construction in foreground is the swimming pool.

minutes away from Lake Blue Ridge and Lake Hiwassee, or that a major industry was located nearby, or that it was on one of the most beautiful scenic drives in the Southeast. Certainly Kim never thought of any of these things when he was in the planning stages of building.

The motel is a three story structure with some 42 units. Each unit is carpeted with shag carpet and the interior walls are done in colorful patterns. The bathroom and dressing area are separated, and there is plenty of room for luggage. The interior furnishings will measure up to and surpass any of the better motels. Everything about the Inn is electric from the laundry equipment and water heating in the basement to the electrified sign on top of the third floor.

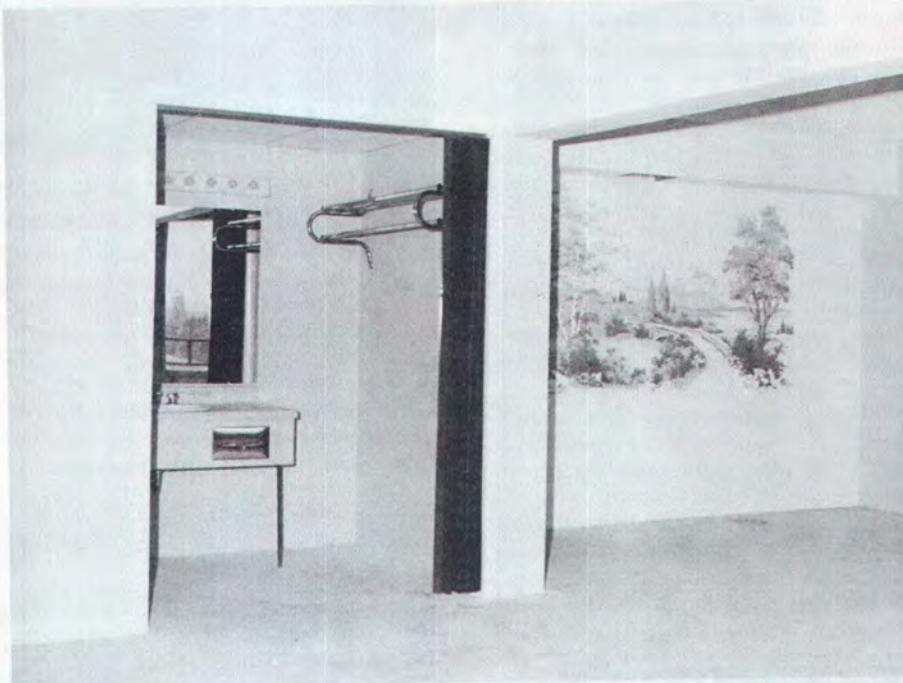
The scene from the Inn is terrific. The mountains of Georgia, Tennessee, and North Carolina make a beautiful back-drop for the red hills of the Basin mining area. From the terrace of the top floor much of the mining operations can be observed as well as a good view of the modern Copper Basin Hospital and Copper Basin High School.

Kim is not stopping with the motel. He already has a swimming pool under construction, and has plans for a restaurant which will be located just back of the Inn. The restaurant will join the Three Bears Tradin Post on which he plans to do major renovations.

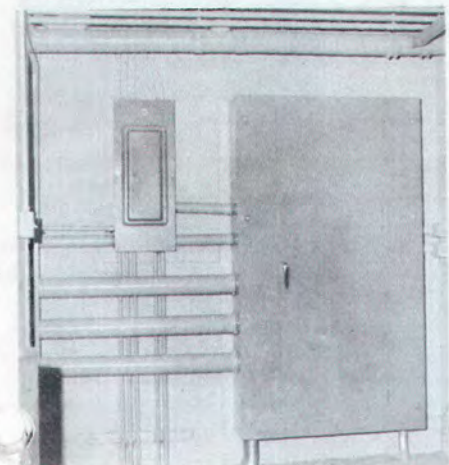
The motel will open around December 1, 1970. If you are in the Copper Basin area Kim would be happy to see you. If you can't spend the night with him you will still enjoy his friendly smile and warm handshake.



This picture is taken from the balcony of the third floor. Looking east one can see the mountains of North Carolina. In the immediate foreground can be seen a part of the Cities Service mining operation.



This is the interior of one of the rooms. Note the spaciousness and design of the rooms. The carpet and furniture have not been put in the rooms yet.



This is the electrical center of the motel, which is all electric.



This picture was taken looking south from the third floor, in the background the mountains of North Georgia can be seen, in the foreground is the Copper Basin Hospital and School.

"Silent Minority" The Electric Garbage Disposer

By: Mrs. Patsy Myers, Home Economist, Middle Tennessee Electric Membership Corporation, Murfreesboro

Someone has said "The garbage disposer is displayed like lingerie. It is taken home and then never seen." I call it the Silent Minority among electric appliances in the kitchen because it is usually out of sight and it stays very silent unless it is called on to work. Nevertheless the garbage disposer is the least expensive and probably the most universally liked of all kitchen appliances, because it swishes the homemaker's daily accumulation of garbage out of sight and out of mind.

Down the drain go such items as fruit pits, bones, large rinds, peelings, vegetable scraps and egg shells. The garbage disposer pulverizes them, then swirls them away at the flip of the switch.

In meal preparation, the sink and the work counter are left free for work since food waste and scraps can be disposed of immediately. This gives the disposer a high ranking in convenience in homes that have it.

The disposer is a very simple device. It is nothing more than a small tank with a metal shredder run by a small electric motor. A safety control eliminates danger in operation, and the unit is self-cleaning when water is allowed to run for a few minutes following the grinding of the garbage.

The operation of the garbage disposer is very simple. (1) Turn on the cold water, (2) Flip the switch to start the motor, (3) Feed in the garbage, (4) After the waste has been pulverized and washed down the drain, turn off the motor, and turn off the water.

Cold water must always be used with the disposer to flush the ground food waste through the household pipes and sewer lines.



Mrs. Hollie Tuggle is showing us the Garbage Disposer, and their display material relating to it, at Smith Furniture Company in Lebanon. Notice they handle two different brands of garbage disposers.

The cold water solidifies fats and grease, making them easier to grind and dispose of, and keeps the plumbing lines clean.

The garbage disposer can be installed in any home, including those with septic tank systems. It is inexpensive to operate, using only small amounts of water and electricity.



This picture shows how the garbage disposer looks under the sink. A disposer can be added under any sink. This picture was made in Middle Tennessee Electric's Lebanon meeting room.

I would like to suggest the garbage disposer as a nice Christmas gift to yourself, Mrs. Homemaker, or a nice hint for a gift from you husband or family. It will save you and save for you. It is a kitchen saver, a garbage can saver, a time and work saver, a sight saver and a money saver. And don't forget that it will cut down on odors and insects.

Two items for maintenance of the garbage disposer that are simple and easy are:

(1) Occasionally put a tray of ice cubes through the disposer.

(2) Regularly, flush out the pipes by this method, especially if you don't have a dishwasher: Fill the sink bowl 1/2 to 2/3 full of water, then remove the stopper so that the water will rush through the pipe to flush it out.

The garbage disposer teams up with the dishwasher to make cleaning up the kitchen after meals a pleasant chore.

The dishwasher, also an excellent gift suggestion, is available in two models: portable and convertible or undercounter. One of these models can be added to any kitchen.

The dishwasher in many homes is a necessity. It leaves time for activities more important and



Miss Lois Crowley, Extension Agent of Williamson County, Franklin, shows us the usefulness of the other half of the clean-up team, the electric dishwasher. Note it is right beside the garbage disposer, allowing the homemaker to scrape large particles of food off the dishes into the garbage disposer as she loads the dishwasher.

more satisfying than washing dishes. It also helps keep the kitchen orderly between meals. In addition, the high temperatures and strong detergents make the dishes more sanitary by reducing

the bacterial count on the dishes. With the eating habits of most families, it will be necessary to wash the dishes only once a day—wouldn't a dishwasher make a nice gift for Mother?



Here we see Mrs. William H. Walker, Hillview Lane, Franklin, turning on the garbage disposer switch after she turns on a full flow of cold water. There should always be a continuous flow of water while grinding garbage.

A Blessed Christmas

by Nadine Brothers Lybarger

May the star that shone in triumph
O'er the manger where Christ lay,
Be your guiding light to happiness
This blessed Christmas Day.

May each gift exchanged with fondness,
As a token of your love,
Bring remembrance of the blessed gift
God sent from heaven above.

So the gentle Christmas spirit may
As Yuletide days depart,
Leave a glow of everlasting joy
To linger in your heart.

Recipe of the Month

Cocoanut Fruitcake

1/2 lb. candied cherries
1/2 lb. candied pineapple
4 cans or 5 cups Angel Flake
cocoanut
14 oz. pitted dates
1/2-1 lb. chopped nuts
2 cans Eagle Brand Milk

Chop fruits and nuts. Combine all ingredients and mix well. **PACK FIRMLY** in a 10" tube pan which has been greased and lined with waxed paper.

Bake in a 325° oven for 1 hour. Remove from oven and cool in pan on cake-cooling rack for 15 minutes. Turn out on rack and cool thoroughly for several hours before cutting (makes a 5 pound cake).

Happy
Holidays



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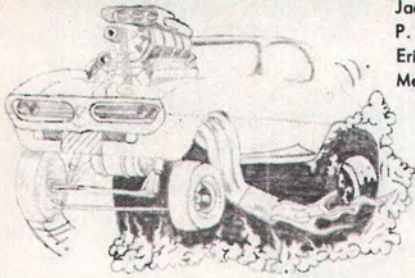
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Uncle John's Page

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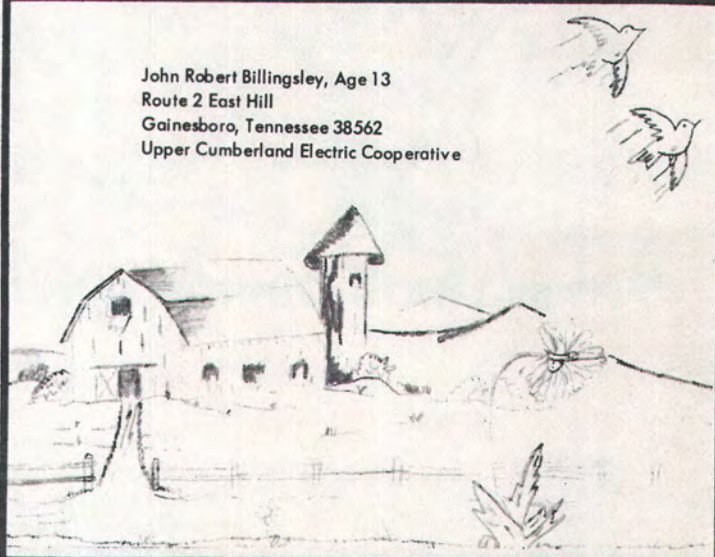
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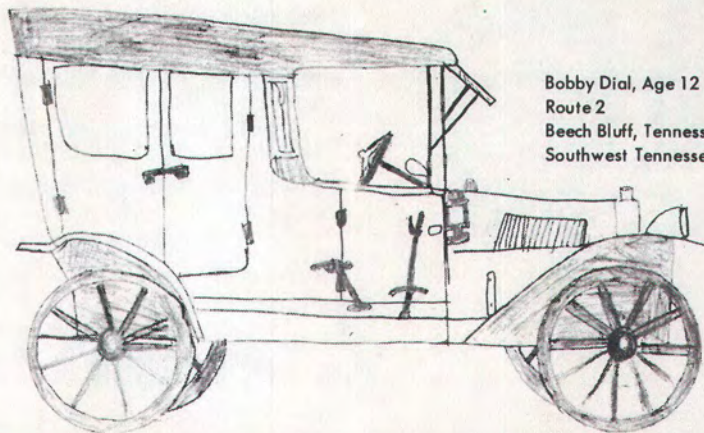
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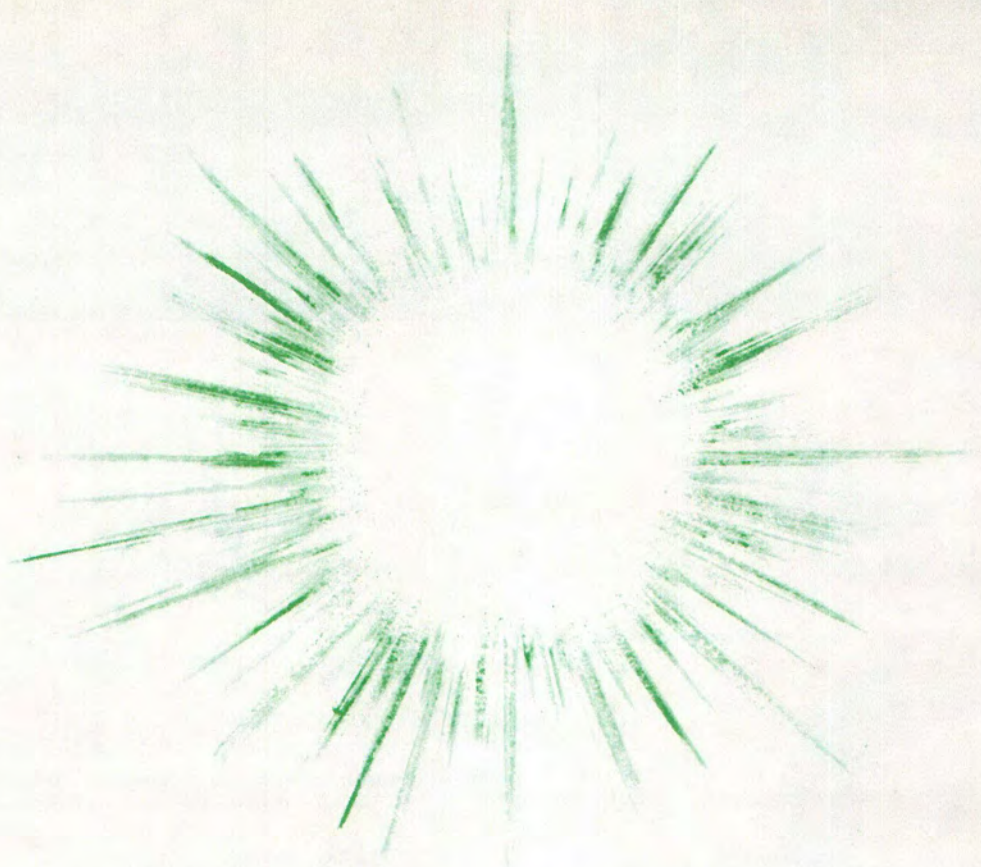
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Sandra Chambers, Age 15
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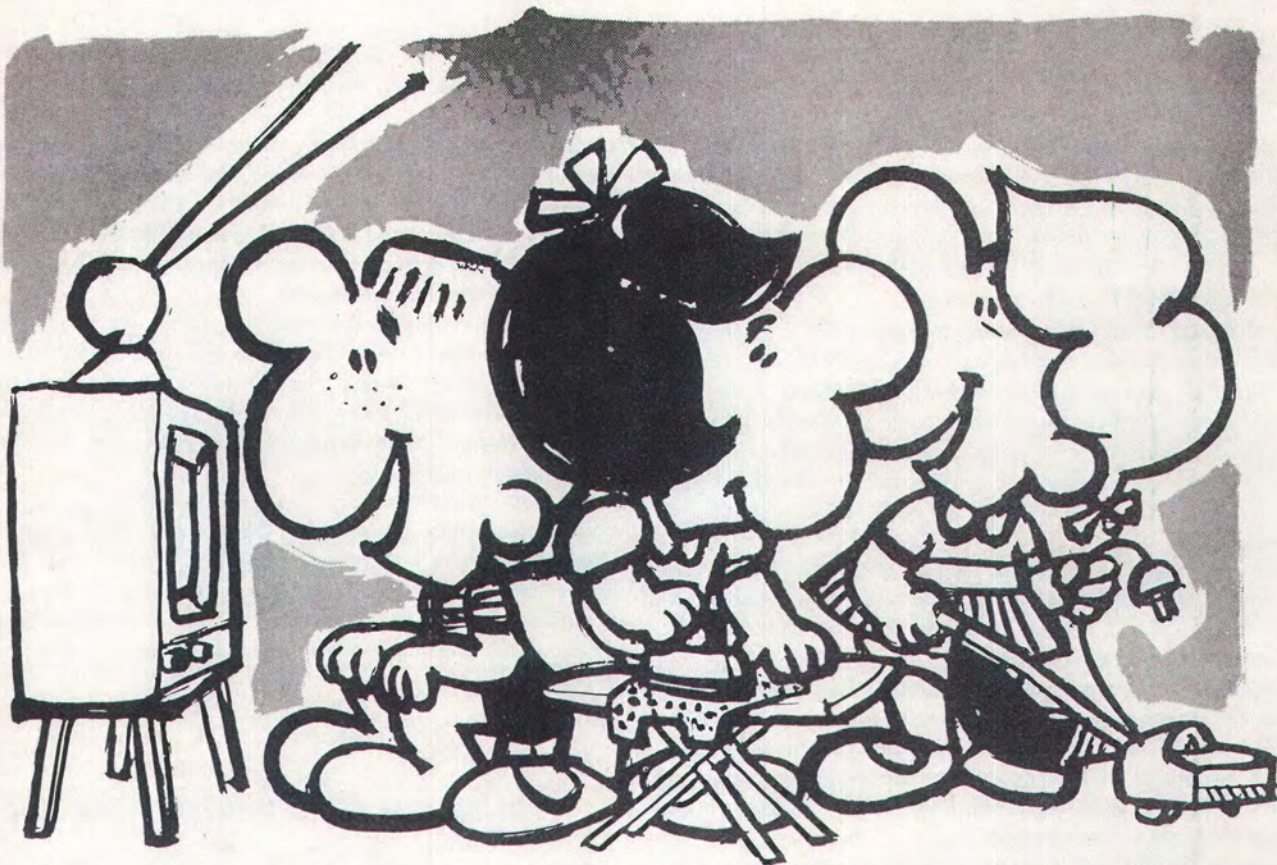
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Timely Topics

DON'T CUT PERFORMANCE WHEN CUTTING WINTER FEED COST FOR BEEF HERD

Your goal in feeding your beef cow herd this winter should be to give the cows enough nutrition to get the performance you want.

"A cow's nutrient requirements change at different times in the life cycle because the requirements for performance change," explains W. P. Tyrrell, University of Tennessee Extension animal husbandman. "For instance, dry pregnant cows which have just weaned off a fall calf are for all practical purposes on 'vacation.'"

The cheapest feed for wintering brood cows is a good permanent pasture growth of Fescue and Ladino Clover, Tyrrell says. But after grasses are frosted back, and unless there is a heavy protected growth underneath, such grasses become less nutritious. Once pasture is gone, the average brood cow in order to properly develop her unborn calf, needs about two pounds of fairly good quality hay for each 100 pounds of her body weight.

If you are feeding corn silage, feed at least 40 to 45 pounds plus one to one and one-half pounds of protein supplement daily. No protein is needed if urea has been added to the silage at ensiling time, he adds.

"Pregnant cows gleaning stalk and stubble fields or receiving low quality roughages should receive a protein supplement," Tyrrell states. "This may be fed by providing commercial liquid or block protein or by feeding salt-protein meal mixtures. Ordinarily between 20 to 30 percent salt will be needed to be sure the cows get enough protein."

Since the nutrient requirements for cows nursing calves is at least twice that of pregnant cows, serious consideration should be given to time of calving.

"Fall-calving cows have larger calves and more weight to sell the following fall, but winter feed costs will be higher," he points out. "Similarly the breeding season for fall-calving cows is mid-winter; therefore, it is often not the best time to get the most cows bred in the shortest period of time. Tender green grass in the spring is unexcelled as a means of increasing breeding performance. Therefore, a nutrient level for the cow herd based on mid-winter calving and early spring breeding will fit most management programs in the Mid-South."

LAMBING TIME IS CRITICAL PERIOD

Timely management at and just before lambing time can reduce the losses you might suffer on your sheep flock, believes Fred C. Powell, University of Tennessee Extension assistant animal husbandman.

"Each lamb lost by Tennessee sheepmen reduces flock income by about \$25," he says. "So each lamb saved and marketed pushes your net profits higher."

Get ready for the lambing season at least one to two weeks before the first lamb is expected, he suggests. The ewe flock should be gaining weight at this time, but not be overly fat. If pastures are stemmy and woody, supplemental feeding of grain and legume hay may be needed. One-half pound of grain and three to four pounds of high quality hay per ewe per day will keep the ewes in thrifty condition.

Lambing facilities should be checked to see that they are clean, dry and free of drafts, says Powell. Lambing pens should be set up and repaired if needed. Bedding should be located near the pens. Heat lamps should be examined and tested. Supplies of iodine and other needed disinfectants should be checked. Feeding and watering equipment should also be inspected and cleaned before use.

Observe the ewe flock frequently just before lambing time, Powell continues. Sort out the ewes heavy with lamb and put them close to the lambing area. Heavy ewes need exercise and should not be crowded into small enclosures. Overcrowding and unnecessary excitement can cause premature lamb births and add to normal losses.

Newborn lambs that are strong and healthy usually stand and nurse within 30 minutes after birth. Weak lambs may require assistance in standing and nursing the first time. Chilled lambs may need to be warmed by artificial means and returned to the ewe. If the ewe is milking normally and the lambs stand and nurse shortly after birth, most losses can be avoided.

TENN. 4-H GETS PUBLIC SUPPORT

The two-way benefits of public support for Tennessee 4-H club work are highlighted in recent reports, according to George S. Foster, 4-H specialist with the University of Tennessee Agricultural Extension Service.

"According to officials of the National 4-H Club Foundation, ninety-three Tennessee banks contributed support for state and national programs," he says. "This was the largest number of bank supporters of any southern state. In addition, twelve business organizations in the Chattanooga area donated funds directly to the National 4-H Center Expansion. Altogether, Tennessee's financial support for the Center amounted to nearly \$50,000, thereby being the second state in the nation to meet its fair share pledge."

Immediate benefits to Tennessee 4-H club members are illustrated by the fact that 173 4-H members, more than from any other southern state, took part in 4-H Citizenship Short Courses at the National 4-H Center, Foster reports.

Recent reports from county Extension agents indicate that over \$109,000 in nontax money was provided for 4-H support to local programs last year. Much of this support came through organized County 4-H Citizens Committees.

To learn how you may participate in your county's 4-H program, either through giving or receiving, contact your county Extension office.

Financing still critical issue for RECs

“Do you think we’ll ever reach the point where we can turn the REA program off completely?” is a question I encounter frequently.

For the record, we believe the answer is negative. It would appear at this point that both the electric and telephone systems financed by the Rural Electrification Administration have only begun to meet their obligations as established institutions to bring the best of electric and telephone service to our countryside.

All of our people, rural and urban, should be thankful we have these systems. The areas they have developed offer a practicable alternative to jamming still more people into overcrowded urban centers, and a refuge from the growing frustrations of our urban society. We have said on many occasions, and we say again, we cannot see the day when we can turn off the program.

The guiding policy of REA is to help borrowers develop the internal strength to assure their success as independent enterprises while safeguarding the security of REA loans. “As borrowers develop adequate internal strength and financial soundness,” the policy continues, “direct REA assistance will diminish accordingly.” We can, and do, see the day when this assistance will dwindle to negligible proportions.

As we enter the 1970’s we find that the rural systems have reached a maturity that none of us ever dreamed of three decades ago. By any measurement, the systems are stronger, better managed, and better qualified to handle the needs of their consumers than at any time in their history. The combination of long-term, low-interest loans, coupled with the provision of technical and management assistance, has paid off handsomely for them. To me, there has never been anything quite like the REA program in the history of this country. Rural people, working with their federal government, surely developed something new under the sun.

While the early years offered many

obstacles, the rural electric systems today face an even greater problem. It is, of course, the matter of financing for the future.

Last year, an independent financing institution, owned and controlled by the borrowers, was organized to provide supplemental funds for the rural electrification program. The National Rural Utilities Cooperative Finance Corporation (CFC) represents a giant stride toward the attainment of financial independence by the rural systems. It is possible that CFC may be able to make its first loan toward the end of this calendar year. But whatever CFC produces in the way of capital, it is not expected to be sufficient to meet the present demands of all the systems, particularly the generation and transmission borrowers. Thus, for the immediate future at least, REA will have to be the major source of financing for rural electrification.

Until there is a source or sources of supplemental financing, REA is doing its best with the loan funds available through the federal government, and borrowers are being encouraged to use their own general funds to the greatest extent possible. The general guideline is to be practical in terms of loan funds available for both distribution and power supply loans.

As rural electric cooperatives move toward the adoption of a supplemental financing plan which will involve the use of private capital, the need for territorial protection becomes more evident.

This means that in better than half the states there are no legal guaranties

About the article

The above is a digest of an article which recently appeared in the Public Utilities Fortnightly. The author is David A. Hamil, administrator, Rural Electrification Administration. Mr. Hamil, a cum laude graduate of Hastings College, was engaged in the cattle feeding business in Colorado before assuming his post with the REA.

that co-operatives will be able to serve all of the consumers in the territories they pioneered. Nor are they assured of the right to serve new loads as they develop in their service areas.

Such a condition adversely affects not only the ability of cooperatives to go into the private money market for needed growth capital, but it threatens their security as locally-owned systems. For without territorial protection, private sources of capital can hardly be expected to participate in financing plans involving cooperatives. They demand, and rightly so, an assurance of permanence for the facilities they help finance.

So, it becomes increasingly important for rural systems to work toward securing state commission jurisdiction. If this means compromising certain long-held concepts, these must be re-evaluated in the light of what will bring the most benefit to rural consumers.

It will also be important that rural systems cooperate with the industry and eliminate intra-industry complaints if they are to obtain the most favorable credit ratings. In like manner, sound business practices, the ability to generate margins and supplementary capital, and the wise use of general funds will be essential as a basis for obtaining credit from the private money market.

In many respects, we are entering a new era in REA’s history. The rural systems, formed to bring the blessings of electric light to rural communities, have grown into a dynamic force for the common good. They are in a position to play a major role in helping to solve many of the critical problems we face as a nation today. They can. They must.

TO RETURN to the opening question, the rural electric systems will need the help of a proven hand, the REA program, for an indefinite time to come. More than that, they will require all the additional funds they can obtain from the private money market and their own resources to meet their growing service obligations.

A New ^{THE} 70's Challenge

By John Stanford



Executive Manager J. C. Hundley made his 20th Annual Report to the delegates of the Tennessee Electric Cooperative Association's 29th Annual Meeting.

Giving only a brief backward glance at the triumphs and problems of the past decade, more than 300 Trustees, Managers, key employees and friends of Tennessee's rural electric cooperatives met in Nashville in late October to face, head-on, "The 70's: A New Challenge," which was the theme of the 29th Annual Meeting of the Tennessee Electric Cooperative Association.

Obviously concerned that some major oil companies are seeking control of the nation's coal and other energy supplies, causing shortages of coal, a doubling in its price in less than a year, and necessitating at least in part a 23% increase in TVA's wholesale rates, TECA leaders were not long in lashing out at the factors creating the crisis.

Said TECA President Thomas Hutchinson: "Action, probably

prompt legal action, is the only way to avoid another TVA rate increase. I'm not talking about action against the Tennessee Valley Authority but against the major oil companies who own the coal fields. Some type of really strong action by the cooperatives of Tennessee will let these big fellows know that they can't hold back their coal from TVA and not be punished for it."

TECA Executive Manager J. C. Hundley stated in his annual report to the several hundred delegates from throughout the Volunteer State: "It isn't heresay, it's for real when eight of the 10 largest coal-producing companies in the nation are owned by huge oil companies and mineral conglomerates. And it certainly isn't comforting to know that not only do they want virtual control of all coal production in this country, but

potentially of nuclear energy as it pertains to electric power generation as well. If these oil and mineral giants come anywhere close to securing a corner on the coal and nuclear energy supplies in this country, and if these acquisitions are allowed to stick, we in the electric distribution business are in very deep trouble."

In addition to Hutchinson and Hundley, other official reports were made by Secretary-Treasurer Lester Hamm, President of Pickwick Electric Co-op, Selmer, and by Tennessee's NRECA Director, John Dolinger, Manager of Cumberland EMC, Clarksville.

Highlight of the only afternoon session of the meeting was the joint appearance for speeches of both Gubernatorial candidates—Democrat John J. Hooker and Republican Winfield Dunn—and that was the order of their appearances on the speaker's platform. Dr. Dunn, who exactly two weeks later was to be elected the first Republican Governor of Tennessee since 1920, told the electric co-op delegates:

"As Governor, I feel that it will be my continuing duty to work with the Federal Government in every way possible to find the coal which TVA so desperately needs, and I also believe it will be my duty to encourage the growth and prosperity of the Tennessee Valley Authority since it is such a vital factor in fulfilling the power needs of our state." Dr. Dunn, now Governor Elect, discussed his farm policy proposals at some length, adding that dollars that are now going to "urban projects and into urban areas should be directed, if at all possible, through state leadership to help the problems of our farm families."

In the 12th Annual Miss Tennessee Rural Electrification Beauty Contest, eight of the Volunteer State's loveliest young ladies, all

daughters of members of electric co-ops, competed for the state title and the right to vie for the National crown in Dallas, Texas next February.

Winner was Miss Jackie Hollie, 17, who represented Gibson County EMC. 1st Runner-up was Miss Pamela Lee Culbertson, 18, who competed as "Miss Middle Tennessee EMC." Third place went to "Miss Holston Electric Co-op," 17-year-old Gwen Golden. Chosen as "Miss Congeniality" was the Tri-State Electric Co-op entry, Miss Barbara Mathis. Other contestants were Darleen McCurdy (Miss Cumberland), Judy Deana Bruce (Miss Duck River), Carolyn Wilson, (Miss Mountain Electric), and Carol Ann Perkins (Miss Pickwick Electric). All contestants received silver awards while the top three

winners also received cash awards. Helping with the awards ceremonies was Miss Janet Porter of Rt. 2, Humboldt, the reigning Miss Tennessee and Miss National Rural Electrification.

The second day of meetings brought important addresses from James E. Watson, Manager of Power for TVA; J. K. Smith, Governor of the new Cooperative Finance Corporation; and Russell O'Neal, Manager of Carroll Electric Membership Corporation of Carrollton, Georgia.

One of the last developments of the meeting became one of the first in importance when it officially became known that two Tennessee cooperatives—Cumberland Electric Membership Corporation, Clarksville, and Meriwether Lewis Electric Cooperative, Centerville

—had decided, by Board action, to file anti-trust suits against some major oil monopolies. A resolution was passed urging other Tennessee Cooperatives to support the actions taken by these two electric systems.

Re-elected to top TECA offices were President Thomas Hutchinson, Trustee of Middle Tennessee EMC; Vice President James Milton, Manager of Gibson County EMC; and Secretary-Treasurer Lester Hamm, Trustee of Pickwick Electric Co-op. Other Trustees elected to the TECA Board were C. D. Balch, Manager of Appalachian Electric Co-op; John Dolinger, Manager of Cumberland EMC; Becher Lawson, Trustee of Volunteer Electric Co-op; and Marshall Mulherin, Manager of Southwest Tennessee EMC.



Dr. Winfield Dunn, Republican candidate for Governor of Tennessee at the time, addresses the TECA Annual Meeting. His opponent, Democrat John J. Hooker, Jr., who spoke first, listens attentively.



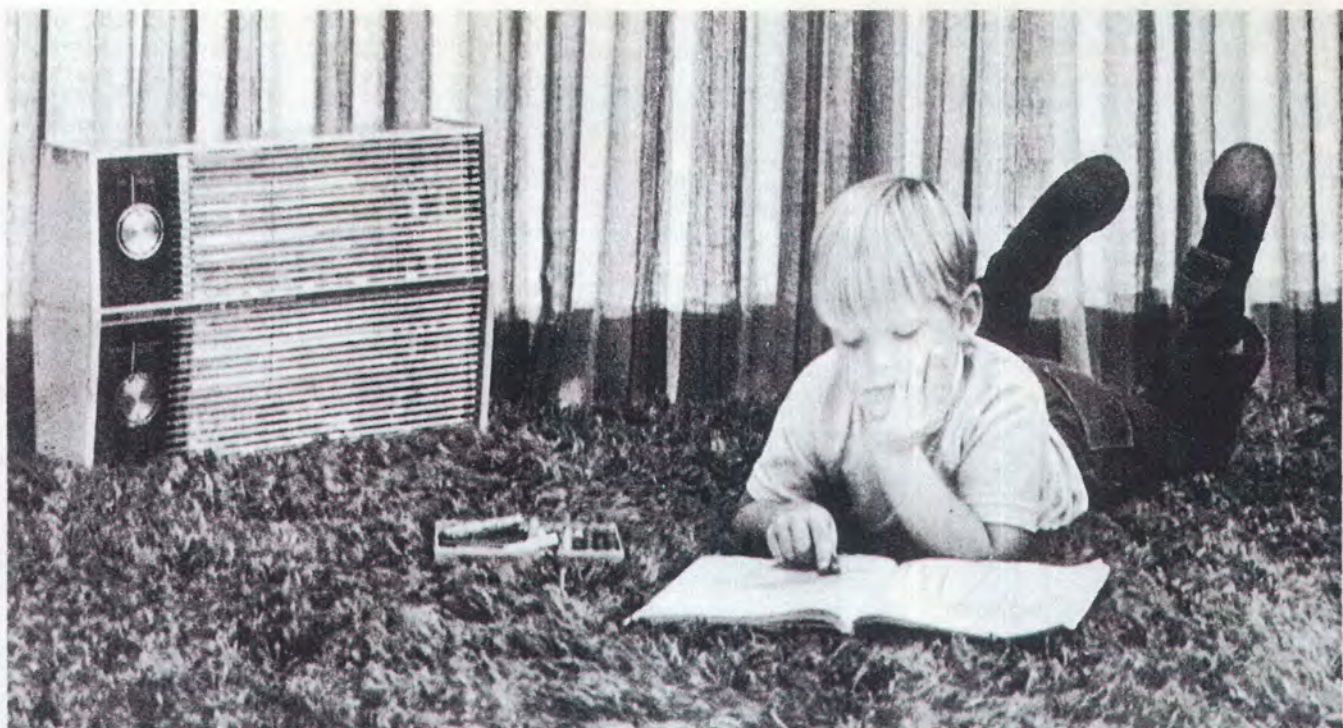
President Thomas Hutchinson presents to Dixie Bettis of Jefferson City, State Winner of the TECA-sponsored Essay Contest, a certification of her \$500 scholarship which will be paid when she enters the college of her choice.



"Miss Rural Electrification USA," Janet Porter (right) places the "Miss Tennessee Rural Electrification 1970" crown on the head of Jackie Hollie, who competed in the State Contest as "Miss Gibson County EMC." Janet was also the Gibson County and State Winner in 1969.



John Dolinger, Tennessee Director on the NRECA Board, gave a timely report on rural electrification at the national level.



For those chilly rooms - -

Electric Heaters Work Wonders!

Nothing is as useless as a frigid room during the cold winter months. Children shun it and the entire family unconsciously limits activities to rooms that are invitingly warm.

For homeowners who want to make sure that every square foot is usable in the months ahead, it's a pleasure to know that "instant" heat is available. Even the charm of a fireplace is an easily achieved dream with no expensive chimneys to build, no complicated "plans," remodeling projects, or costly decorating bills. Electricity even eliminates the woodpile!

It's important to determine your needs.

Extra heat for "cold corners," chilly bathrooms or bedrooms is provided by the simple and inexpensive purchase of a portable heater. Available to members through many electric cooperatives, they are offered at this time of year at attractive savings.

For as little as \$15, early morning risers can be comfortable. Warmth from portable heaters also can help ward off the discomforts of illness by eliminating those dangerous chills when colds and flu are prevalent.

Easily moved from room to room because they require no special

wiring, the portable heater can become an important auxiliary heat source in any home.

New designs offer attractiveness as well as important safety features. Sturdy wide legs give the heaters greater stability, however a safety tipover switch is included "just in case."

Noise and temperature control are not problems, even with these small units. A quiet fan circulates radiant-heated air evenly throughout the room. By setting the control dial, it will maintain the desired temperature automatically.

The larger, more expensive models give wider choice of heat settings and higher wattage in contrast to a simple on-off setting and smaller heat surface in the less expensive version. However, the safety switch and automatic thermostat control are standard for both.

If a large family room or basement activity room is to be heated, and has no other heat source, the glowing attractive electric fireplace is a perfect solution. If you remember the fake logs of yesteryear, you'll want to see today's version before allowing prejudice to cancel this alternative.

Installation is as simple as plugging into an existing outlet for smaller wattage units. All that the

more powerful units require is a special 220 outlet. No venting is needed, regardless of size.

Electric fireplaces have many attractive features including thermostat, hood, log and fireplace screen and are available in a variety of finishes and colors.

In figuring the size that you need, consult your electric cooperative or use a scale of 10 watts per square foot in a well-insulated area. All elements are totally enclosed and an automatic shut-off is provided to prevent overheating. Larger units can be used to heat up to three full-sized rooms, if insulation is adequate.

The realistic inviting appeal of this contemporary heating unit is a handsome solution for many heating problems. Dens, family rooms, vacation homes, offices, conference and reception rooms, bedrooms and mobile homes are only a few of the many applications possible.

With a weight of 79 pounds and a simple wall-mount installation, it's possible to dream of a fireplace today and sit beside its comfort tomorrow! And because these cheerful warmers are priced reasonably between \$100 and \$175, they make an attractive Christmas gift.

PUZZLE CORNER

The Puzzle Corner proved relatively easy to most of the almost 1,000 participants in the November contest, with more than 90% of the answers proving to be correct.

The puzzle stated that if three chickens and one duck sold for as much as two geese, and if one chicken, two ducks and three geese were sold together for \$25.00, what would be the price of each bird in an exact number of dollars.

The answer: the chicken would sell for \$2.00, each duck would be worth \$4.00, and the geese would sell for \$5.00 each.

With so many correct answers, and as is done each month, the

winner have been chosen by lot from all the correct answers.

Winner of First Place and \$10 from The Tennessee Magazine is L. H. Monroe of P.O. Box 73, Church Hill, Tennessee. Mr. Monroe is a member of Holston Electric Cooperative, Rogersville.

Second and third place winners of \$5.00 each are Margaret K. Foster of Rt. 8, McMinnville, a member of Caney Fork Electric Cooperative, McMinnville, and Mrs. Deane Cummings of Rt. 3, Mercer Road, Brownsville, Tennessee, a member of Southwest Tennessee Electric Membership Corporation, Brownsville.

And here is the December Puzzle Corner.

It was inventory time at the bicycle shop and taking inventory was always a chore. To make things more interesting, the owner decided that instead of counting the number of bicycles and tricycles in his shop,

he would count the number of pedals and the number of wheels. He counted 153 wheels and 136 pedals. How many bicycles and how many tricycles did he have?

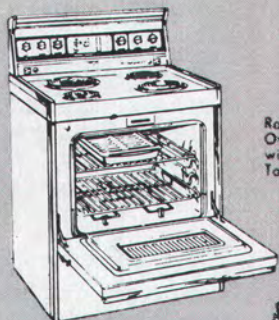
Send your name and address, along with the name of your electric co-op, to:

Puzzle Corner
The Tennessee Magazine
P.O. Box 7232
Nashville, Tenn. 37210

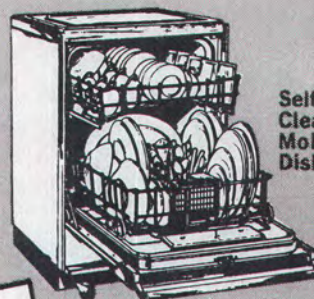


Gift Ideas

Electric Range with Self-Clean Oven



Rotisserie, Oven door window, Top features



Self Cleaning Mobile Dishwasher

Rolls where needed now — Easily built in later!

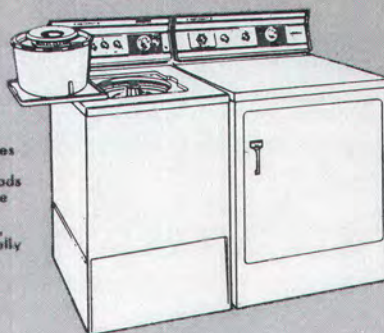
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SEE YOUR HOTPOINT DEALER

Power Companies Learned, Too

DON'T TAKE THINGS FOR GRANTED

By Carl Brown

The bulky mail-order catalogue, traditional fixture in the typical rural home, contains a liberal education on the impact that electricity has had on the farm, both in farming methods and farm living.

A comparison of space devoted to electrical appliances and equipment in the current catalogue of a large mail order house with that of 1933 and 1934 catalogues—before REA came into the picture—shows better than history books how rural electrification has woven

were given twelve times more space, electric saws three times more, and electric chick brooders and egg producing equipment six times.

Since the 1933 and 1934 catalogues, the editors have added electric fencing, arc welders, pumps for all farm uses including irrigation, automatic stock waterers, incubators, milk coolers, pasteurizers and sterilizers, dairy water heaters, cow clippers, egg candler, and even chicken pluckers. While catalogues are available to city folks,



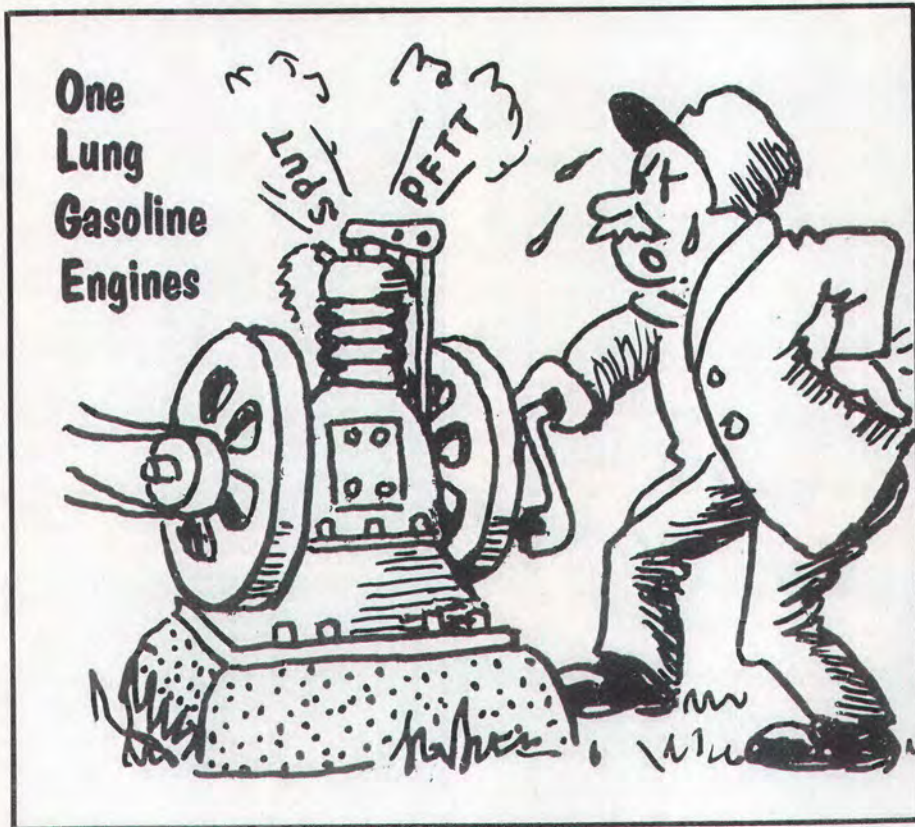
The Kerosene Lantern

space. In addition to household fans, barn ventilating fans and fans for electric hay and grain drying were also prominently displayed.

Electric paint and insect sprayers are given a couple of pages in the late edition. Rotary tools, drills, feed grinders, mixers, feeders and barn cleaners get good space in the most recent catalogue.

Items that bring electricity's convenience to the farm wife and provide more leisure time for her and her family jumped in space value. This mail order house has added 7 pages covering freezers, refrigerators and other cooling equipment, 8 pages of washers, dryers, automatic ironers and pressers, and many more laundry facilities. They display 4 pages of vacuum cleaners, scrubbers, polishers and sweepers to maintain floor care. Two pages are devoted to electric dishwashers.

Electric ranges, not even mentioned in the 1934 edition, came in for more than 4 pages in the last catalog—not to exclude the

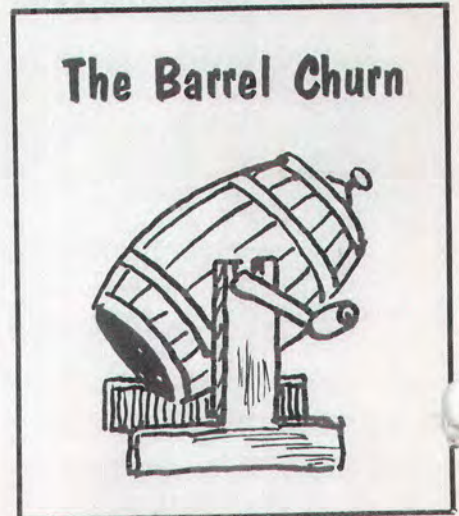


itself permanently into the average rural scene.

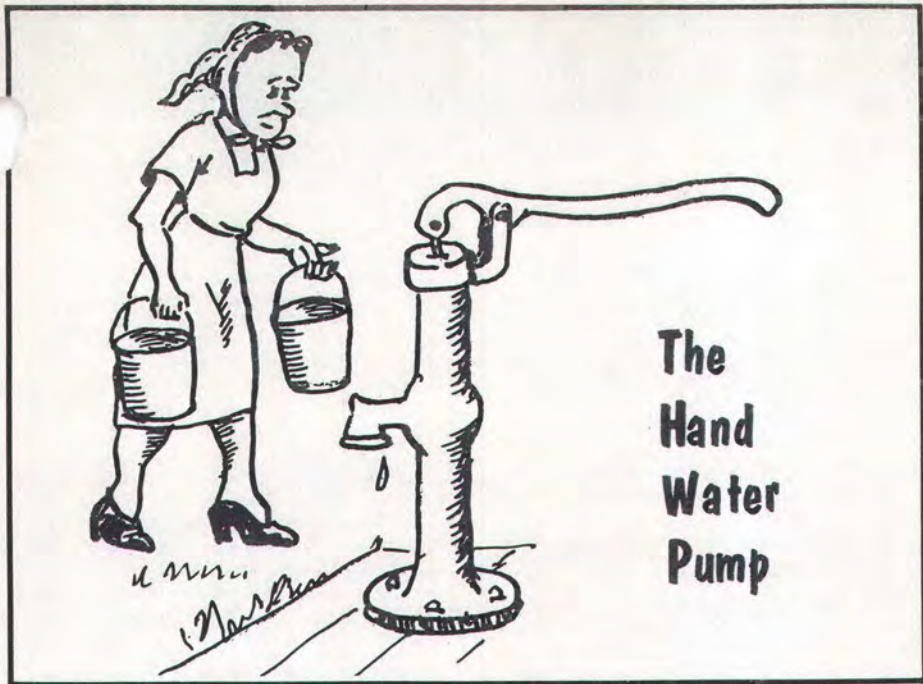
After REA helped boost farm electrification from approximately 10 percent to more than 95 percent, production equipment to make the farmer's workload lighter got much more attention than in the earlier catalogues. Milking equipment, for example, got six times more space. Tool grinders

this kind of merchandise is aimed at the rural people.

A further evidence of the vast advance made since 1935 is found in the display of remote control systems to control equipment in the house, barn, poultry house, milk house, and outside lights. Electric fans used up a mere quarter-page in the early catalogue, but the latest used 10 times more



The Barrel Churn



The
Hand
Water
Pump

one hundred and one different small cooking devices such as the bun warmer and hot dog cooker. Believe it or not the current catalogue displays 16 pages devoted to light fixtures, lamps, etc., and 6 pages to various wiring materials. There is page after page covering small appliances like toasters, mixers, can openers, waffle bakers, juicers, blenders, skillets, etc.

Of course certain types of merchandise have been completely dropped or drastically reduced in catalogue space in the intervening 35 years. These include hand churns, farm power plants, kerosene incubators, kerosene lamps and lanterns, treadle sewing machines, hand operated washing machines, treadle grind stones and sickle grinders and the coal burning cook stove. Perhaps few people are sorry these drudgery items were phased out although they were a necessity at one time.

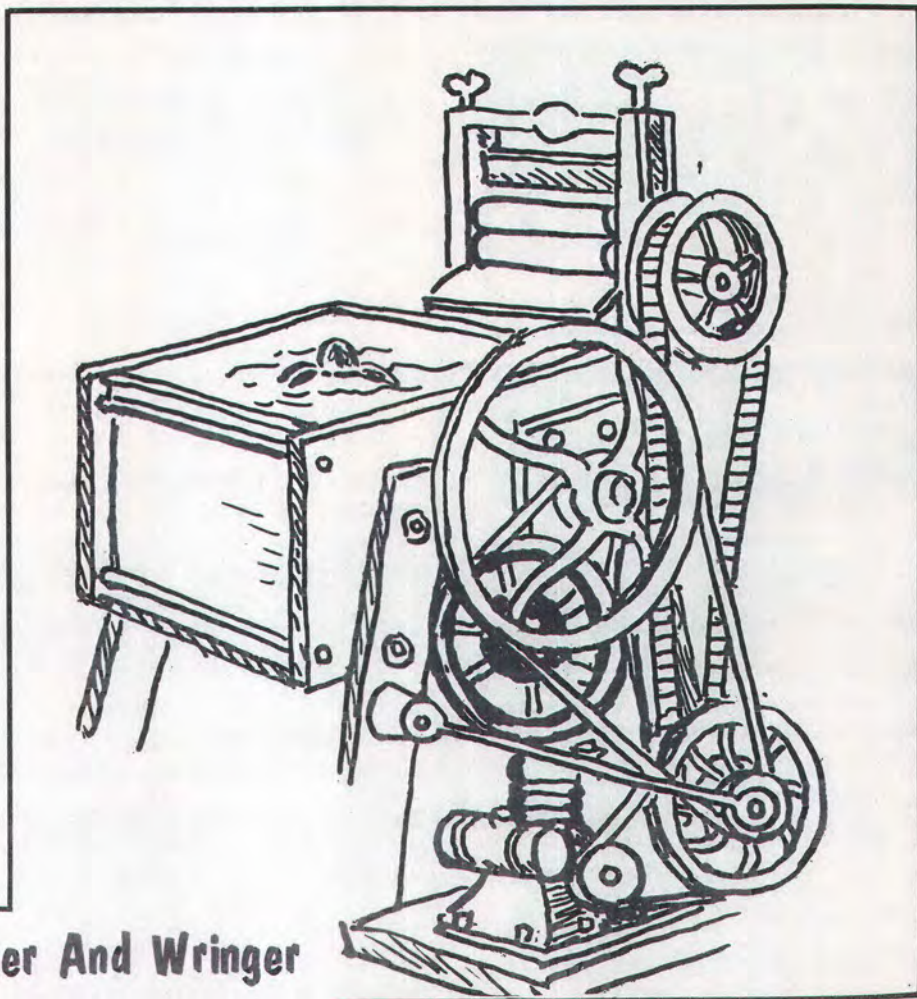
It would seem like a current mail order catalogue would make pretty good reading for those private power mongers who said, "The farmer had little use for electricity, wouldn't consume much of it and couldn't afford it in the first place." To some extent the latter part of their theory was correct because a farmer had to practically buy part of their distribution system to get hooked up—and this few could afford. Lack of faith in the farmer,

however, has since caused them to nibble their fingernails in anguish as they watch farm consumption of electrical power soar to greater and greater quantities. In fact, a

farmer makes more diversified use of electricity than any other individual consumer.

Consumer owners of REA financed electric cooperatives can well be proud of the part they have played in relegating old-fashioned, back wearing and eye tiring equipment to the antique list. Had not the farmer and rancher taken the bull by the horns in the way of rural electrification the mail-order catalogues would still carry little in the form of electrical gadgets—that is excepting a market to city dwellers.

Few of the younger generation of farm people can remember what their parents have made antiques. Few were required to turn a hand-wrapped grindstone while their father bore down with a scythe blade or grind out a family wash by turning a crank. Few have polished kerosene lamps and lantern globes and, outside of the museum, few have seen some of the hand powered contraptions that used up the elbow grease. To these we can only say "Don't take things for granted."



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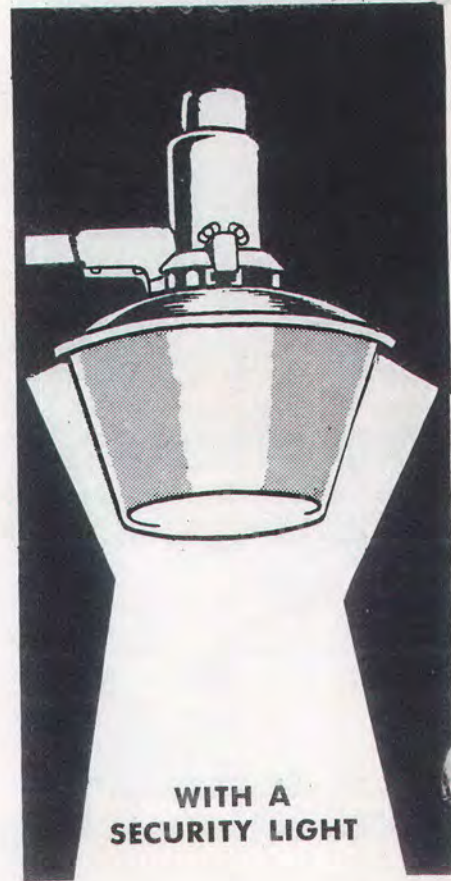
If you are suffering from pain, soreness or stiffness caused by Arthritis, Neuritis or Rheumatism, I think I can help.

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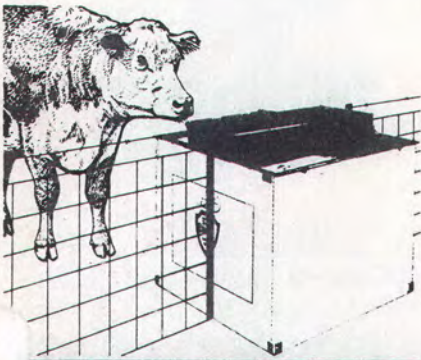
WITH A SECURITY LIGHT

Automatic waterers

Big boon to the livestock producer

Automatic electric livestock waterers are one of the greatest assets the cattle, hog and sheep producer has received in recent years. Many of them have been in use for 10 or more years and are still operating with little or no trouble.

However, some units, improperly installed, have caused some headaches for the owner.



LARGE CATTLE WATERER

Ideal for the large dairy or beef cattle operation. Any of the 4 cattle trough covers may be closed when not in use.

The units in this area, which are designed for cattle, vary in size from a type that will accommodate only one animal at a time to those where eight or more can drink at once. Major distributors and waterer sales personnel recommend the purchase of the smallest size that will provide water for your herd. The reason? A smaller volume of water is exposed to cold temperatures which reduces the heat loss and potential freeze up.



Another good rule to follow when purchasing automatic watering equipment is to select one for the type of livestock for which it is intended. Dual purpose units are fine, but if one part is not going to be used regularly, this heating unit is serving no good purpose and is just an added expense for you.

Pressure systems need not be present for automatic waterers. Float control switches are tied electrically with a pump jack motor which maintains a proper water level in the fountain. This type of unit would work well in many pasture pump locations away from the farm pressure system.

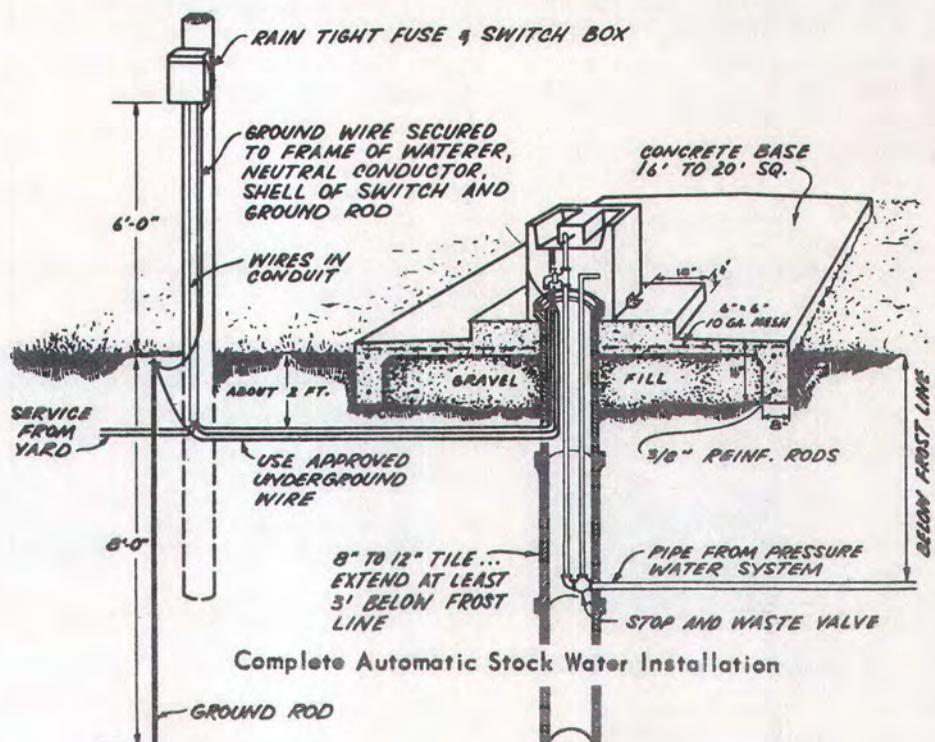
Many farmers are installing electric heating cable in the concrete apron that surrounds a well-installed unit. This cable is switch controlled and is only used when ice buildup gets hazardous around the drinking area. Three or four hours of heating will free the ice from the

slab and allow it to be easily removed.

An occasional inspection of the unit can pay big dividends. This is especially true if the waterer has had several seasons use. Insulation can break down with water and ice buildup over the years. Should this happen, remove all old insulation and replace with either one or two inch styrofoam. This can be cut to exact size and secured with glue or large sheet metal screws on the inside of the unit.

The water temperature should be checked annually to see that the thermostat is maintaining a 40 to 45-degree temperature during cold weather. While the cover is off, look to see that the ground wire is securely attached to the driven ground rod. This helps prevent injury to stock and humans as well.

THE SKETCH featured with this article shows a properly installed stock waterer that should provide years of trouble-free service.



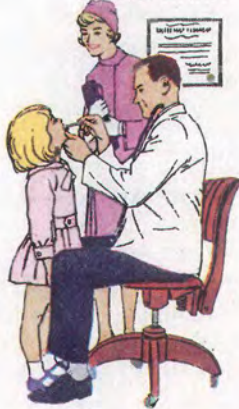
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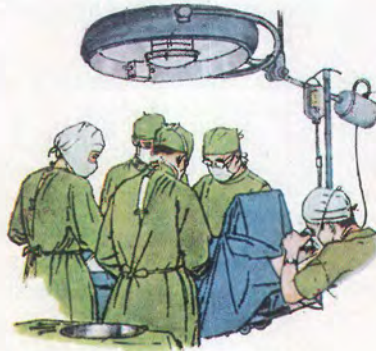
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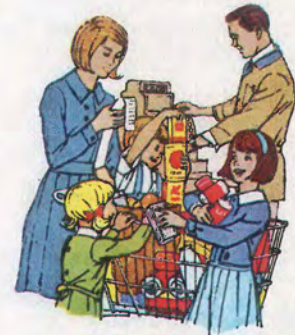
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