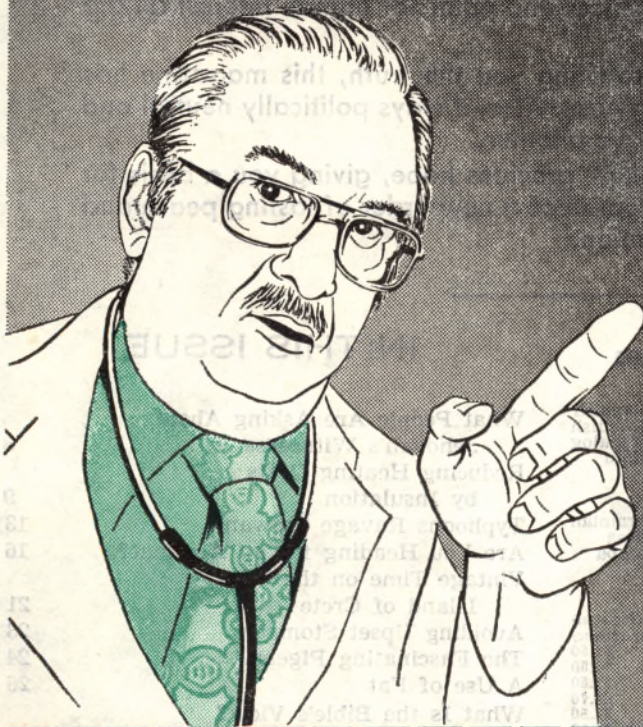


Awake!

**Are You
Heading
For An
Accident?**

- Page 16



NOVEMBER 22, 1977

*Also In
This Issue:*

**WHAT PEOPLE ARE ASKING
ABOUT JEHOVAH'S WITNESSES**



November 22, 1977
Vol. 58, Num. 22

Average Printing Each Issue:
10,125,000

WHY THIS MAGAZINE IS PUBLISHED

Today as never before, what goes on in the rest of the world affects each one of us. "Awake!" reports on the world scene. But it does more for you personally.

It probes beneath the surface and points to the real meaning behind current events. And it gives practical suggestions to help you to cope effectively with the mounting problems of our time.

The scope of subjects covered by "Awake!" makes it a magazine for the entire family. Customs and people in many lands, the marvels of creation, religion, practical sciences and points of human interest all are included in its pages.

In keeping its freedom to bring you the truth, this magazine has no commercial advertisers to please. Also, it stays politically neutral and it does not exalt one race above another.

Most importantly, "Awake!" provides hope, giving you a basis for confidence in the Creator's promise of a new order of lasting peace and true security within our generation.

Now Published in 33 Languages

Semimonthly Editions:

Afrikaans	Finnish	Italian	Spanish
Cebuano	French	Japanese	Swedish
Danish	German	Korean	Tagalog
Dutch	Greek	Norwegian	Zulu
English	Iloko	Portuguese	

Monthly Editions:

Chinese	Melanesian-	Swahili	Ukrainian
Cinyanja	Pidgin	Tahitian	Xhosa
Hiligaynon	Polish	Tamil	Yoruba
Malayalam	Sesotho	Twi	

Five cents a copy

Watch Tower Society offices	Yearly subscription rates for semi-monthly editions in local currency
America, U.S., 117 Adams St., Brooklyn, N.Y. 11201	\$1.50
Australia, 11 Beresford Rd., Strathfield, N.S.W. 2135	\$2.50
Canada, 150 Bridgeland Ave., Toronto, Ontario M6A 1Z5	\$1.50
England, Watch Tower House, The Ridgeway, London NW7 1RN	\$1.70
Hawaii, 1228 Pensacola St., Honolulu 96814	\$1.50
New Zealand, 6-A Western Springs Rd., Auckland 3	\$1.50
Nigeria, West Africa, P.O. Box 194, Yaba, Lagos State	₦1.10
Philippines, P.O. Box 2044, Manila 2800	P8
South Africa, Private Bag 2, P.O. Elandsfontein, 1406	R1.30
(Monthly editions cost half the above rates.)	

Remittances for subscriptions should be sent to the office in your country. Otherwise send your remittance to 117 Adams Street, Brooklyn, N.Y. 11201. Notice of expiration is sent at least two issues before subscription expires. Second-class postage paid at Brooklyn, N.Y. and at additional mailing offices.

CHANGES OF ADDRESS should reach us thirty days before your moving date. Give us your old and new address (if possible, your old address label). Write Watchtower, R.D. 1, Box 300, Wallkill, New York 12589, U.S.A. POSTMASTER: Send Form 3579 to Watchtower, Wallkill, N.Y. 12589.

The Bible translation used in "Awake!" is the modern-language "New World Translation of the Holy Scriptures," unless otherwise indicated. Printed in U.S.A.

IN THIS ISSUE

What People Are Asking About Jehovah's Witnesses	3
Reducing Heating Costs by Insulation	9
Typhoons Ravage Taiwan	13
Are You Heading for an Accident?	16
Vintage Time on the Island of Crete	21
Avoiding Upset Stomach	23
The Fascinating Pigeon	24
A Use of Fat	26
What Is the Bible's View? "The End of the World"—Should You Fear It?	27
Watching the World	29

PUBLISHED BY
WATCHTOWER BIBLE AND TRACT SOCIETY
OF NEW YORK, INC.
117 Adams Street, Brooklyn, N.Y. 11201, U.S.A.
FREDERICK W. FRANZ, Pres. GRANT SUITER, Secy.

How do Jehovah's Witnesses view obedience to governments?

Do they oppose medical treatment?

WHAT PEOPLE ARE ASKING ABOUT JEHOVAH'S WITNESSES

By "Awake!" correspondent in Nigeria

WHAT do you know about Jehovah's Witnesses? Principally, many know them as the people who call from door to door with the Bible. Also, they are commonly known for their large conventions. But the first response of many persons is: "Aren't those the people who don't take blood transfusions and don't salute the flag?"

Refusing to take blood transfusions, or to pledge allegiance to the flag, has, in many places, caused Jehovah's Witnesses to be surrounded by controversy. 'Why do they take such a position?' many wonder. 'Is it just to be contrary, to draw attention to themselves? Are they against governments?'

That is what some have been led to believe. Nigeria's *Sunday Punch* of July 17, 1977, presented the views of persons of different walks of life. Said a student: "Jehovah's Witnesses are fanatics, Nigeria should beware of them." An accountant asserted: "It is very wrong for any section of the population to refuse to recite the National Pledge. . . . Jehovah[s] Witnesses should be forced to recite the pledge." A secretary agreed: "It is not

right for any set of people under whatever guise to disregard the national pledge. It is a contempt of national security."

Religious leaders often are responsible for molding such public opinion regarding the Witnesses. The same issue of the *Sunday Punch* observed: "In an attack on the sect, the Anglican Bishop of Ibadan, Rt. Rev. Timothy Olufosoye said 'their books and papers are full of hate . . . and denials of the plain teaching and the love of God.' " Another religious leader was quoted as saying: "Their refusal to recite the national pledge is a sin on their part because it is a disregard for worldly norms."

What about such charges? Just why do Jehovah's Witnesses refuse to salute the flag or take blood transfusions? Do they really 'deny the plain teaching of God'?

The *Sunday Punch* had its reporter, Dupe Olugunna, call at the branch office of the Witnesses here in Lagos, Nigeria. She left a number of handwritten questions with Albert N. Olih, a member of the branch staff. He answered these, and in the July 17, 1977, *Sunday Punch*, the questions and answers appeared, in part, along with the views of others about Je-

hovah's Witnesses. Since the controversy surrounding Jehovah's Witnesses is world wide, and not simply confined to Nigeria, a consideration of this interview will be enlightening to people everywhere.

You will find the questions of the *Punch* reporter and Albert Olih's answers below.

PUNCH: Why are you so persecution-complexed?

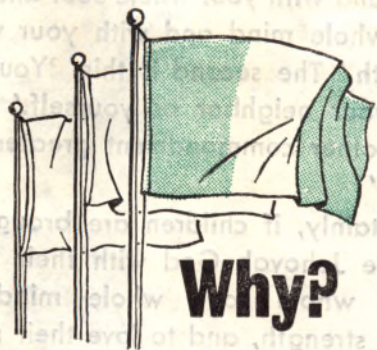
MR. OLIH: If by this you want to know if Jehovah's Witnesses like to be persecuted, I want to assure you that Jehovah's Witnesses do not like to be persecuted. However, if some people want to persecute us because we hold a different view on some Scriptural matters, we cannot stop them from doing so. We just have to bear the persecution and endure. We try to see that what we do is in accord with the Bible because our organization is a Bible-based one, and then if people want to persecute us because of our living up to what we understand to be Bible principles, then we just have to leave the matter in the hands of Jehovah God.—Ps. 83: 18.

The Bible says: "Hold a good conscience, so that in the particular in which you are spoken against they may get ashamed who are speaking slightly of your good conduct in connection with Christ. For it is better to suffer because you are doing good, if the will of God wishes it, than because you are doing evil." (1 Pet. 3:16, 17) And also: "Bear in mind the word I said to you, A slave is not greater than his master. If they have persecuted me, they will persecute you also."—John 15:20.

PUNCH: Why is it that you resent authority so much? At least Jesus told us that we should 'give to Caesar the things that are Caesar's and to God the things that are God's.'

MR. OLIH: The truth is that as one of Jehovah's Witnesses I do not resent the authority of the government, and I can say this for all of Jehovah's Witnesses. We act in harmony with what is stated at Titus 3:1: "Be obedient to governments and authorities as rulers." It is true that some, before they became Jehovah's Witnesses, might have engaged in lawless conduct. They may have stolen what belonged to others. Perhaps they viewed obedience to certain laws as important only when the police were in sight. However, the Bible made clear to them that, if they were going to take up true worship of Jehovah, they would need a very different outlook on life.

The attitude Christians should have toward the "Caesar" government is stated at Romans 13:1: "Let every soul be in subjection to the superior authorities, for there is no authority except by God." This does not mean that God established these governments or that he approves of their course. Some of them plainly say that they are atheistic. Nonetheless, God permits them to exist. They would not be able to exercise authority at all if God did not allow it. "Jesus answered [Pontius Pilate]: 'You would have no authority at all against me unless it had been granted to you from above. This is why the man that handed me over to you has greater sin.'" (John



19:11) So we follow the doctrine that says: "Pay back, therefore, Caesar's things to Caesar, but God's things to God."—Matt. 22:21.

PUNCH: In the case of the school-boys who refused to say the "national pledge," aren't you taunting the state authority too hard? Why don't you follow the doctrine, 'to give to Caesar the things that are Caesar's'?

MR. OLIH: It is good to remember that the command says 'to give to Caesar the things that are Caesar's and to give to God the things that are God's.' It is necessary to determine the things that are God's so that a person may not be giving to Caesar the things that are God's.

It is good to remember, too, that Jesus was answering questions about the payment of taxes. We are glad that the "Caesar" government under which we live provides roads for travel, schools for education, fire protection, food inspection and many other things, including courts of law and protection against

crime. How do we pay back these things provided by Caesar?

It is by paying taxes. The Bible says: "There is therefore compelling reason for you people to be in subjection, not only on account of that wrath [in punishment of laws violated] but also on account of your conscience. For that is why you are also paying taxes; for they are God's public servants constantly serving this very purpose. Render to all their dues, to him who calls for the tax, the tax; to him who calls for the tribute, the tribute." (Rom. 13:5-7) Jehovah's Witnesses pay their taxes.

But, on the other hand, Jesus says to give unto God the things that are God's. What are the things that belong to God? The Bible at Psalm 36:9 says: "For with you is the source of life; by light from you we can see light." In another place we read: "The God that made the world and all the things in it . . . gives to all persons life."—Acts 17:24, 25.

So we owe our life to Jehovah God and he alone has the right to determine how we use our lives. We owe him our worship, and this means we need to regard his laws as supreme. So if "Caesar" asks that we disobey the laws of God, then a Christian must follow the example set by the apostle Peter and his fellow apostles when they said: "We must obey God as ruler rather than men."—Acts 5:29.

Jehovah's Witnesses do not "taunt" the state authority. They imitate Jesus Christ and the apostles by showing respect to those in authority, while at the

same time using their lives to do the things that are in harmony with the will of God. So doing, we truly pay back to God what belongs to God and to Caesar the things that belong to Caesar.—1 Cor. 7:23.

Now about the reciting of the pledge: As you will have observed from the many newspaper reports of recent incidents involving children of Jehovah's Witnesses, the boys concerned did not say that someone had told them that they should not repeat the words of the pledge. In each instance they maintained that their Bible-trained conscience would not allow them to repeat the words of the pledge.

These children must have read about the three young Hebrews, Shadrach, Meshach and Abednego, and how they refused to participate in the ceremony ordered by the king. Why did they refuse? Because it involved worship, and their worship belonged to Jehovah God. God approved of what they did. But how did the king of Babylon react? At first he was violently angry. Yet, in time, he saw the hand of Jehovah God in the matter. Realizing that they were no danger to the state, he issued a decree protecting their freedom. (Dan. 3:1-30) Do you not admire their loyalty to God? Do you not want to be just as firm as they were in giving worship exclusively to God?

These children must also have read the account at Mark 12:29-31: "'Jehovah our God is one Jehovah, and you must love Jehovah your God with your whole

heart and with your whole soul and with your whole mind and with your whole strength.' The second is this, 'You must love your neighbor as yourself.' There is no other commandment greater than these."

Certainly, if children are brought up to love Jehovah God with their whole heart, whole soul, whole mind and whole strength, and to love their neighbor as they love themselves, they would not constitute any danger to the nation. They would not steal, defraud, join in any plans to overthrow the government, fail to give equal work for equal pay or do anything that would bring a bad name to their country and its government. Would anyone say that persons who are willing to obey God's law and abide by it constitute a danger to the public?

If this refusal to salute was something only in Nigeria, then one would begin to reason that these children are slighting the government of the country. But this is a stand that has been taken by children of Jehovah's Witnesses whenever they are confronted with similar issues.

PUNCH: Would you say that the ritual-like expression of pledge is a crucial index for measuring the depth of commitment and loyalty to the state?

MR. OLIH: It appears that this is a matter for those who are in authority to consider. However, there is an illustration in the Bible that may assist a person to give an answer to this question.

It is found at Matthew 21:28, 29: "What do you think? A man had two children. Going up to the first, he said, 'Child, go work today in the vineyard.' In answer this one said, 'I will, sir,' but did not go out. Approaching the second, he said the same. In reply this one said, 'I will not.' Afterwards he felt regret and went out. Which of the two did the will of his father?' They said: 'The latter.' Jesus said to them: 'Truly I say to you that the tax collectors and the harlots are going ahead of you into the kingdom of God.'"

So what do the people want? Do they want the doers or the talkers? Which would you prefer? The one that by his actions shows loyalty to the nation by obeying the laws of the nation, such as not stealing, not committing murder or in any way planning the overthrow of the government or engaging in smuggling or hoarding and other things that could bring difficulty and unnecessary danger to the people, or the one that engages in these things but very eloquently proclaims that he is very loyal to the nation?

PUNCH: Don't you think that as citizens of Nigeria members of your sect owe a set of general civic obligations to the country?

MR. OLIH: Certainly Jehovah's Witnesses who are citizens of Nigeria know their civic obligation to obey the laws of this country. As already stated, they pay 'Caesar's things to Caesar and God's things to God.' (Matt. 22:21) In our conversation you mentioned the mat-

ter of voting. An editorial in the "New Nigerian" of October 18, 1976, made some pertinent comments on this when discussing local government elections. It noted that a society's degree of democracy is often measured by the extent to which the right to vote is guaranteed. But what if "citizens are coerced into exercising this right"?

Says the "New Nigerian": "[That] society's claim to democracy is laid bare. This is why all the hairsplitting in some quarters about the refusal of members of the Jehovah[s] Witness[es] to vote . . . seems uncalled for." The editorial continues: "We believe that the Jehovah[s] Witnesses have not committed any crime. So long as an individual or a group of individuals . . . pay their taxes, do not engage in any unlawful activity and do not disturb peace and order, democracy demands that they are left in peace and given state protection—even if such an individual or group chooses not to vote."

PUNCH: What about the pregnant woman in Emekuku who died with her unborn child because she refused blood transfusion on the grounds of "disbelief in natural medicine"? Where in the Bible does it say that we should refuse blood transfusion?

MR. OLIH: It is difficult to believe that this woman did not believe in natural medicine. Otherwise why did she go to the hospital? Did she expect to be given a bottle of beer or some whiskey and brandy? Certainly she went to the

hospital in order to receive medical attention. Jehovah's Witnesses do not disbelieve in natural medicine.

Why?



Now as to the direct question you have asked as to why Jehovah's Witnesses refuse blood transfusion. God's law forbids a person to steal, to murder, to commit adultery, to worship idols; so Jehovah's Witnesses do not do these things. God's law also forbids the eating of blood. At Genesis 9:3, 4 Jehovah commanded Noah: "Every moving animal that is alive may serve as food for you. As in the case of green vegetation, I do give it all to you. Only flesh with its soul—its **blood**—you must not eat." Further, Jehovah said to his people, the Israelites: "'No soul of you must eat blood and no alien resident who is residing as an alien in your midst should eat blood.' . . . Consequently I said to the sons of Israel: 'You must not eat the blood of any sort of flesh, because the soul of every sort of flesh is its blood. Anyone eating it will be cut off.'" (Lev. 17:12-14) So, according to these scriptures, God does not permit man to eat blood.

After the death of Jesus Christ, the apostles were faced with this issue of blood when non-Jews began to accept Christianity. The matter was referred to the governing body of the Christian congregation in Jerusalem and they reached a decision based on God's Word and with the help of the holy spirit. What was their decision?

At Acts 15:28, 29 the account reads: "For the holy spirit and we ourselves have favored adding no further burden to you, except these necessary things, to **keep abstaining** from things sacrificed to idols and **from blood** and from things strangled and from fornication. If you carefully keep yourselves from these things, you will prosper. Good health to you!"

So in obedience to God's command, Jehovah's Witnesses abstain from taking blood. In emergencies they will use plasma volume expanders such as saline solution, dextran, and so forth, which are much safer than transfusions of blood. Jehovah's Witnesses do not condemn medical practices; there are many physicians and dentists among them. If you check in the hospitals here in Lagos and in other parts of the country, you will find that there are Jehovah's Witnesses who are working as nurses and chemists, and there are some of them who own shops where they sell patent medicines. But they will not violate the law of God simply to go along with the popular practice of giving blood transfusions.

Being frank, what person in the medical field can honestly say that blood transfusions themselves have *no risks*? In mentioning this, I do not mean to say that Jehovah's Witnesses object to transfusions primarily for medical reasons. No, let no one ever get that impression. The fundamental reason why we cannot, yes, will not, accept blood transfusions is that God's Word forbids it. Ours is

basically a religious objection. Nevertheless, the fact that there are so many risks in taking blood underscores the reasonableness, even from a medical standpoint, of our position.

It is fine when an opportunity is afforded, as it was by the *Sunday Punch* here in Nigeria, to explain the position of Jehovah's Witnesses. As you can see, theirs is not a fanatical, unreasonable position, but, rather, it is one based squarely on the teachings of God's Word the Bible.

Due to the misrepresentation spread by religious leaders, it would be a mistake to expect to obtain an accurate picture of what Jehovah's Witnesses believe, and why they believe as they do, merely from hearsay. We would not expect to obtain from the scribes and Pharisees a correct picture of what Jesus believed, would we?

So if you have any questions about Jehovah's Witnesses and what they believe, why not ask them personally? They will be happy to answer any questions that you may have.

Reducing Heating Costs By Insulation

IF YOU are like most people, you look for ways to save money on household expenses. Did you know that insulation can help you to do just that by reducing home heating costs? Even if you live in a warm climate, insulation will help to cut expenses, since it is generally agreed that more energy is re-

quired to cool a home in summer than to heat it in winter.

But how will insulation save you money? Inflation, record-breaking extremes in temperature and fuel shortages all have contributed toward increasing the price of maintaining the comfort level of your home. Insulation will aid you to

keep that comfortable level at a lower cost.

What Insulation Accomplishes

But what does insulation really do? Since no heat is generated by the insulation itself, how does it work? Simply stated, it slows down the movement of heat. Heat is like a river in that it always flows in one direction—from warm surfaces to cooler ones. Hence, heat will flow out of a house in cold weather and into it when temperatures soar. This flow takes place in three ways: by conduction, by convection and by radiation. *Conducted heat* travels through solids such as bricks and concrete, while *convected heat* is transmitted in fluids. Thus a wooden-frame house with air space in the walls, or one that is not insulated, will lose heat by convection, since air acts like a fluid. *Radiant heat* travels through space (as in the instance of the sun) and heats the object it strikes (as in the case of the earth).

Experimentation indicates that air is a poor conductor of heat. Therefore, what insulation accomplishes is this: It makes tiny traps or pockets of still air, and these slow down heat transfer. Also, insulation material itself is a poor conductor.

Insulation material comes in several forms. It may be a granular material or loose pieces of mineral wool about the size of small hen's eggs. Packed in bags, it is usually placed in level places, such as attics or crawl spaces, where it will lie undisturbed. The fluffy quality, produced by the pieces being on top of one another, creates the spaces of dead or noncirculating air. Fiber glass is often used in side walls and is usually glued to a paper or foil backing, which is secured to the walls to hold it in place. These are called blankets or battens and they come in varying widths and thicknesses. More rigid pieces

of foamed plastic may also be used, but in each case the trapped air pockets result in the insulation properties. The notable exception is the use of metal foil to reflect radiant heat.

By contrast, solid building materials are poor insulators, transferring heat more quickly. Reinforced concrete, steel, concrete blocks, bricks, plaster and even wood, although required for the structural support of a building due to their strength, should always be used with a suitable insulation for maximum heat retention. Some authorities illustrate this need with the claim that it would take a wall of bricks 99 inches (251 centimeters) thick to equal the insulation capability of only two and three fourths inches (7 centimeters) of polyurethane!

Making Insulation Work for You

The need for insulation is virtually unquestioned, and so, in modern construction, such material is always included as part of a new building. But the amount and the type to be used varies from one area to another and may even vary among insulation contractors and engineers. A widely accepted amount is six inches (15 centimeters) of fiber glass in ceilings and attics and three and one half inches (9 centimeters) in side walls. However, in view of fuel costs and shortages, some experts now are recommending almost twice these amounts. Additionally, areas formerly left uninsulated, such as basement walls and floors over unheated parts of the house, are now receiving attention. Also to be remembered is the fact that some insulation materials are more efficient than others. For example, the same insulation is achieved from three and one half inches (9 centimeters) of extruded polystyrene as from six inches (15 centimeters) of fiber glass.

When cost is an important factor in new construction, it is not wise to eliminate or drastically reduce the insulation budget. Most of the cost of insulation is in the product itself, not in the labor to install it. Furthermore, it will pay for itself in fuel savings in just a few years. In the United States, some lending agencies give favorable consideration on loans made for the purpose of constructing "super insulated" homes. The theory behind the loan is that operating expenses will be reduced and the savings from fuel not used can be applied toward the repayment of the loan.

More savings can result in heating and cooling a new home if it is built with insulated windows, keeping their size and number to a minimum on shaded sides of the house and making them larger and more numerous in sunny areas of the building. In warmer climates, shade trees or other devices may be necessary to reduce the amount of sunlight striking the building, as this will decrease the heating of the house by solar radiation during the summer months.

Even in older homes, insulation can make a difference in heating and cooling bills. Can attics or crawl spaces be insulated? Insulation contractors can foam liquid plastic into wall cavities where it will solidify and provide a barrier against heat loss. Tight-fitting storm windows and doors help, too. Weather stripping also aids. According to a U.S. Department of Health, Education and Welfare publication, "under average conditions complete weather stripping will reduce 15 to 20 per cent the amount of fuel needed for a house not especially insulated." Not to be forgotten is the space at the bottom of the door. Closers on doors will keep them shut and will cut down on drafts.

Wrapping heat-carrying ducts and pipes with a suitable insulation material will

reduce heat loss. Keeping furnaces, boilers, chimneys, and fuel and air filters clean is necessary in heat conservation. In older homes, all such improvements will increase, to some degree, the resale value of the house. Of course, they may also increase the assessed value and, hence, the property or real-estate taxes.

If you are a homeowner who can spend only a minimal amount, have you thought of lowering high ceilings? This will require less heat to warm the room, since its volume is reduced. However, in homes with a single thermostat, care should be taken in the room where it is located. If only that room has the ceiling lowered, it will heat more quickly than the others and cause the furnace to shut down before the rest of the house is warm. If you do not own your own home and cannot lower the ceiling, you will find that floor rugs not only beautify but add somewhat to the insulation of a room.

During the winter, tenants who pay their own heating bills will find that curtains and window blinds can be opened to allow sunshine into a room, thus heating it by means of radiant energy. When the sun no longer shines through the window, the blinds can be closed and the curtains drawn to prevent heat loss through the glass. In warm climates, this closing of the blinds is done to reduce costs in cooling the home in summertime.

Another method used in winter is to lower the thermostat at night and put on extra blankets while sleeping. Some use electric blankets. But, in either case, you may need an old-fashioned nightcap to keep your head warm. Of course, you can also close off extra or unused rooms.

Disadvantages

There are disadvantages that must be considered in well-insulated homes, espe-

cially in winter. Unless doors are opened periodically, as in normal use, the amount of usable oxygen can be greatly reduced. Such a lack of sufficient oxygen is an obvious health hazard to anyone, but especially to the very young and to those who may be ill or elderly, all of whom may not easily detect such oxygen depletion.

Another disadvantage is the temptation to raise the thermostat, feeling that the insulation will retain the heat. It should be remembered that no insulation is 100 percent effective. Insulation does not stop heat loss; it only slows it down. Further, such an attitude is wasteful and is not conducive to reducing home heating costs.

Rigid foam lends itself to insulating existing homes, as when glued to interior stone or brickwork. But it has one serious disadvantage, which applies to both styrene and urethane foam. It is combustible and must be covered with at least one half inch (1.3 centimeters) of plaster-board. The same can be said of loose cellulose insulation, since it is ground newsprint and, unless properly treated with flame retardants such as formaldehyde, it could be a fire hazard. Even then, these retardants can dissipate in time; so extreme caution is advised.



Plan Ahead Now

If you decide to insulate your home, pick the time most advantageous to your area. Some companies may either sell or install insulation at a reduced rate during certain times of the year when their business is slow.

If you plan to do much of the work yourself, a further point can be made about a vapor barrier. This is a membrane that is placed between the insulation and the heated surface. The reason for it, states *Popular Mechanics Illustrated Home Handyman Encyclopedia and Guide*, is that "moisture-laden air inside the house slowly penetrates the plaster and insulation and condenses to water or ice when it comes in contact with the cold inner surface of an exterior wall or roof." Such condensation can result in "rotted wood, peeling paint, damage to inside walls and ceilings, and damage to insulation."

Since considerable time and money can be invested when insulating a house, if you decide to do your own work, take time to read current books or periodicals on the subject. Local building codes should be researched to be sure that you will not violate the law. Carefully plan out your work schedule in advance. In return for all your hard work and investment, proper insulation will reduce home heating costs.

TYPHOONS RAVAGE TAIWAN

By "Awake!" correspondent in Taiwan

TAIWAN is hit by the second typhoon in six days! This was the report flashed to the world on July 31, 1977, as Typhoon Vera struck the northern cities of Taipei and Keelung. Thelma, the typhoon that hit the southern cities of Kaohsiung and Fengshan and surrounding areas on July 25, reportedly was the strongest since 1952, but the damage to industry and the like was said to be the greatest ever. More than one third of the island's factories were either severely damaged or put out of commission due to lack of electric power. The newspapers reported that some 155 high-tension transmission-line pylons were downed by the storm. Four thousand concrete power poles were broken! That was the devastation that Typhoon Thelma brought.

Then, six days later, Typhoon Vera hit the northern area of Taiwan, and at least 38 persons were killed. Many others were injured and hundreds of dwellings were destroyed. The news media carried numerous pictures of damage, including that done by a steel pylon that was being used in constructing a flyover (an overpass) in Taipei. It crushed three buses and a number of cars as it fell on them.

Living Through a Typhoon

What is it like to live through a typhoon? These storms can be most capricious. One house may be destroyed while the one next to it escapes almost unharmed. Typhoon paths can change suddenly, as was true with Thelma. This ty-

phoon apparently had passed by Kaohsiung without hitting land. Suddenly, however, the storm made a U-turn and wreaked devastation that affected well over one million people in the Kaohsiung area.

At the branch office of the Watch Tower Society in Taipei, Typhoon Vera did little damage. This led some of the newer resident missionaries to conclude that being in a typhoon was not so bad after all. However, the following report from the fourth-story apartment-missionary home in the city of Fengshan gives another view:

"We're very thankful that no one was injured. Had anyone been in the dining room when a piece of asbestos roofing smashed through our glass double doors, he would surely have been injured seriously or even killed. The roofing smashed through the doors with such velocity that it knocked a chunk of concrete off the balcony, bent the aluminum cross beam above the doors, ricocheted off the floor into a cupboard and the refrigerator, smashing both with sledge-hammer force. Shattered glass was driven into the concrete walls, the floor and the woodwork, and was scattered throughout every room in the house. When that happened, the four of us were on the rear balcony, which was protected from the wind. But after the front doors broke open, the wind coming through the house put such pressure on the rear balcony door that the wood cracked around the lock and two of us

had to brace it with our feet against the opposite wall."

Other damage to this home included the ripping off of iron doors leading to the roof, the dumping of a 70-kilogram (154-pound) slab of concrete from the top of the water tank on the roof onto the washing machine of the missionary home, crumpling it badly, and the smashing of pipes from the roof tanks so that all the water supply immediately ran out. Books and personal belongings also suffered water damage. Electric power still had not been restored after nine days of intensive efforts on the part of the power company.

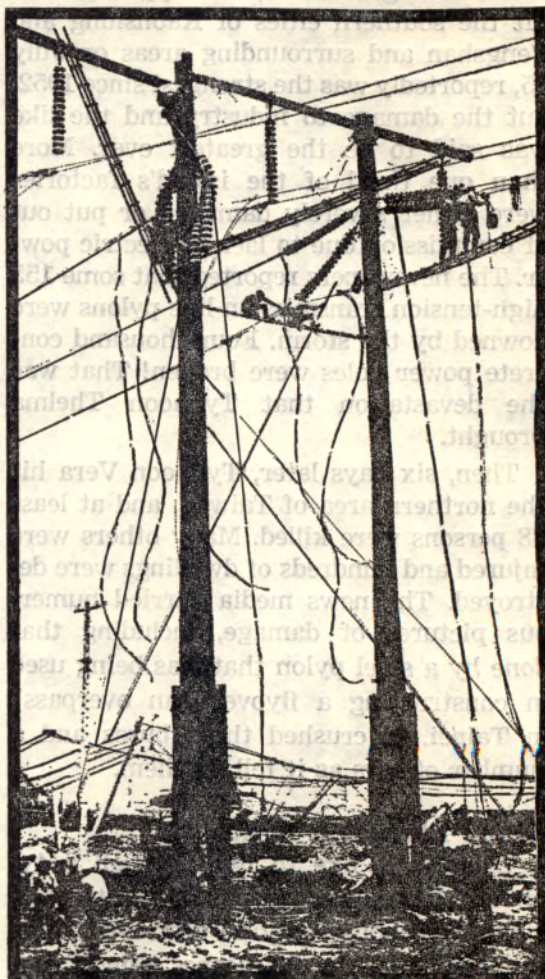
Many persons were caught unawares when Thelma struck. A young man, one of Jehovah's Witnesses, thought things were going to be all right. So he went to work in a factory as usual. Before long he had reason to regret that decision. The wind clutched at the building and it swayed and trembled. Then the roof was ripped off with a terrible wrenching sound. With the roof gone, it was not long before the wind was able to tear away the walls, and the factory literally disappeared before the eyes of the workers!

The only course left for him was to try to get home. Crawling on hands and knees when the wind was at its worst, the young man finally was able to get to a solid pillar of a bridge. Hanging on to it, he prayed to Jehovah God. After some time, the Witness finally made it to his dwelling, only to find that most of the roof was off that building also. No shelter there. Struggling to the nearby Kingdom Hall, he was able to take refuge on the third floor of the building that houses the hall. Although most of the windows had been blown out and the roof was leaking, at least temporary shelter was available there.

Cleanup Activities

After a typhoon, there comes the clean-up work. However, since most homes in

these cities are in apartment houses and residents depend on electricity to pump water to the rooftop tanks, the majority of families soon were without water. The missionary home in Kaohsiung, located on the top floor of a three-story building, escaped serious damage. Only three windows were broken because the wind came from the rear of the building where other structures sheltered them. But the roof was filled with debris from other wrecked buildings. The eight missionaries cleaned the roof and there caught some of the



Workmen make temporary repairs on transmission lines to restore power



Damage wreaked by Typhoon Thelma in the Kaohsiung harbor area

copious rain that was falling in the wake of the typhoon. Thus they solved their water problem. Elsewhere persons were not able to do this. For example, the Witness missionaries in Fengshan had to line up with their neighbors at a hand pump some distance away and haul the water to their fourth-floor apartment. As one said, "Yesterday I counted eighteen bucketfuls that I had hauled upstairs."

Kaohsiung and Keelung are the two largest ports in Taiwan and both are extremely busy. According to the newspapers, Typhoon Thelma sank some 32 boats and damaged 22 ships seriously. It is estimated that at least a year will be required to repair all the damage there. Then Typhoon Vera hit the north of the island, with Keelung port getting the brunt of it. Three of the four gantry cranes for handling containers there were severely damaged. What a blow to this island, which exports and imports huge quantities of goods each day!

The job of cleaning up was complicated by the lack of electricity and water, plus the damage to the communications systems. For many householders these things were the hardest to bear. However, much

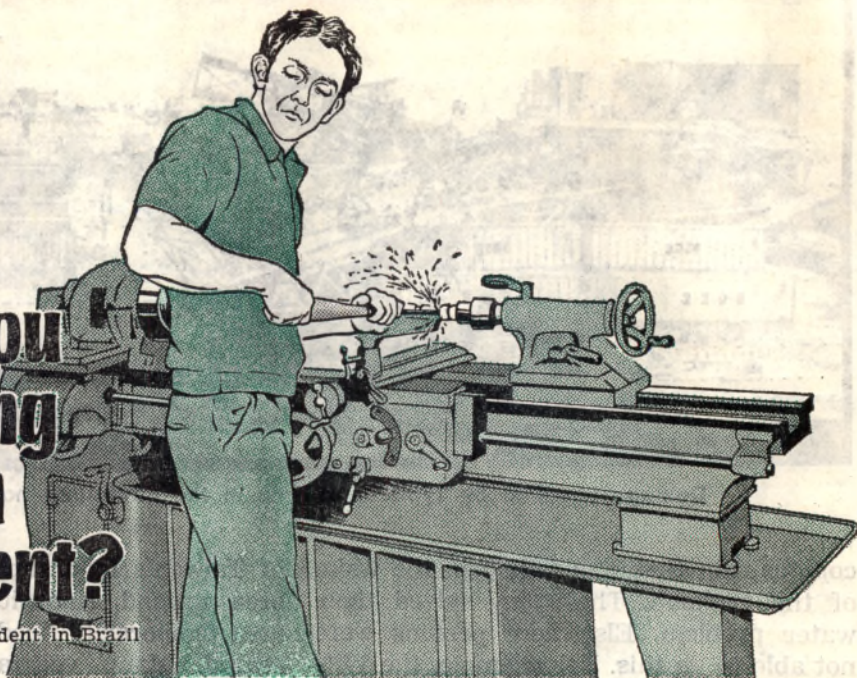
of Taiwan's food supply comes from the area around Kaohsiung and, with the area temporarily flooded, vegetable prices soared. Many vegetables, even though damaged by water, were selling at up to 400 percent above regular prices. Pork and beef were not obtainable in Kaohsiung for a while; so people lived on chicken, if they could get it. Fishing boats were not able to go out for some time and this also affected many persons.

In an effort to get things operating again, the government called out the troops and they did much to speed the cleanup operation. The power, water and telephone companies all had their men working day and night to restore services. Hence, except for the most heavily damaged areas, power, water and telephone services were restored in an amazingly short time.

Jehovah's Witnesses consider it a privilege to comfort the people in Taiwan with the good news that God's promised new order is near at hand. In its tragic losses of life and property due to typhoons such as Thelma and Vera will be things of the past.

Are You Heading For An Accident?

By "Awake!" correspondent in Brazil



THE little boy skipped happily up the back fire escape of the apartment house. Three stories up he paused to look down on the concrete driveway below. Afterward, he couldn't remember slipping under the railing and falling over 30 feet (9 meters). When he awoke, he looked up at several people dressed in white crowding around him. Yes, he was in the hospital, listed as an "accident victim."

Tragedies such as this are all too common today. Even more frequent are job-related accidents. For example, despite safety programs, West Germany reported nearly 2,000,000 occupational accidents among its 26 million wage earners in 1975. In Brazil, 40 work-related accidents are said to happen every *minute*. And according to the May 1976 issue of the Brazilian magazine *Construtor*, the "great number of accidents . . . is increasing instead of decreasing—at a rate of approximately 15% a year."

Some authorities estimate that each year one in four persons has an accident requiring a doctor's care. Knowing this, you are confronted with several unpleasant questions: Am I heading for an accident? Is there anything that I can do to avoid having one? Am I really more "accident prone" than others?

First, it is important to realize that there are steps that you can take that will drastically decrease your chances of an accident. Safety experts contend that over 90 percent of all accidents could have been prevented. They occur because of a *lack of information, carelessness or unsafe conditions*. They rarely arise out of seemingly unavoidable circumstances.

Thus, you are turning away from accidents when (1) you *know* the safe way to do things and (2) you *develop habits* consistent with this knowledge. Really, your personality is involved.

The "Accident-Prone" Person

It is not a myth that some persons are more accident prone than others. Studies show that "Mr. Walking Disaster" consistently displays certain traits. He is usually lacking a degree of emotional control—being either easily angered or frustrated or tense. Obviously, following the Bible admonition to control your spirit can also protect your body.—Prov. 14:17; 25:28.

Also, the accident-prone person is often ignorant of the exact details of the equipment that he is handling. Thirdly, he is careless of long-established safety rules, tending to feel that he can handle any situation or that "what will be, will be." These tendencies, coupled with errors in judging the reflex ability of his body, likely will cause "Mr. Disaster" to live up to his name.

However, while just reading will not automatically force you to form new habits, knowledge of practical safety tips, if *applied*, could save you much pain, even your very life. Surely, you do not need to burn your fingers on the stove to establish that the stove is hot. Through the pain and suffering of thousands at the hands of that rough teacher Experience, safety rules have been established. A brief look at their history will encourage your taking them seriously.

A Brief History of Accident Prevention

Interestingly, one of the earliest "safety codes" was incorporated in the Bible as part of what is called the Mosaic law. The Israelites were commanded to build parapets around the edges of their rooftops so that people would not fall off. Wells often were surrounded by low walls and had to be covered to prevent animals or humans from falling into them. There were laws to encourage fire prevention and respect for animal and human life.—Deut. 22:8; Ex. 21:33, 34; 22:6; Num. 35:22-25.

In other nations, a fatalistic view prevailed for millennia. Only in the wake of the so-called Industrial Revolution did legislators enact anything comparable to the accident-prevention laws found in the Mosaic law. Until the beginning of the seventeenth century, practically everything was produced in the home by the family and their servants. There were no big factories and complicated transportation systems. Work-related accidents were minimal when compared with today.

However, with the advent of machines for mass production and transportation, moved at first by powerful steam engines and later by gasoline engines or electric motors, hazards increased and so did serious accidents. The wretched and hazardous conditions to which many industrial workers were subjected in those days, especially in England and Germany, became notorious. Even women and children worked long hours to the point of exhaustion—increasing accidents. Blinded by selfishness and greed, many employers gave little thought to safety precautions.

Official Efforts in Recent Times

In time, many governments and businesses began to recognize how harmful work and traffic accidents were to their communities. Economic setbacks through loss of working hours, medical bills and damage to property and merchandise, besides adverse psychological effects, made action imperative.

Consequently, motivated to some degree by humanitarian reasons but especially by economic considerations, all sorts of accident-prevention measures have been taken. In some industrialized nations this began during the first half of the nineteenth century, when safety laws were introduced. Naturally, many of these laws have undergone changes since then. As

recently as December 1970 the Occupational Safety and Health Act was made law in the United States. Similar revisions were made in other countries too, as in Brazil in 1967 and 1976.

Moreover, nongovernmental and non-profit organizations were established for the sole purpose of accident prevention. To name just two: ABPA (Brazilian Association for Accident Prevention) and the National Safety Council in the United States. Some of the objectives of the latter are "to further, encourage, and promote methods and procedures leading to increased safety, protection, and health among employees and employers and among children." Basically, the same objectives are pursued by similar organizations world wide.

Insurance companies, of course, are also very interested in reducing accidents. Accordingly, they have made available printed material, posters, films and other types of publicity for educational safety campaigns. Recognizing the importance of cooperating with such campaigns, individual firms have done their part by establishing committees or departments in charge of safety and accident prevention. Many of them also provide safety shoes and devices such as hand protectors and equipment to protect the hearing, the sight and the face. Then, too, special accident-

prevention courses have been sponsored in order to make people more safety-conscious.

This extensive concern on the part of the authorities illustrates how big the problem has become and how much pain, sorrow and damage could be avoided if all of us showed genuine interest in our own welfare and that of others. However, all of this may make learning the "safety rules" sound complicated. Really the principles are few and easily learned. Let's consider what you can do to improve drastically your chances of avoiding an accident.

Personal Safety at Work

Since statistics show that work-related accidents are the most common, here are a few safety rules that will be helpful to workers in industry, transportation systems, agriculture and, especially, to those in the construction trades, who are the most frequent victims of serious work accidents.

A Fresh Look at Accident Prevention

1. Take your work seriously. Lack of attention, horseplay, the taking of chances, and the running of risks for thrills could cost you your life.
2. Strictly obey safety rules and make use of all personal protective equipment recommended for your job. Do not think that using it is unnecessary or ridiculous.
3. Train yourself in the six steps of safe weight lifting: (a) Keep feet apart—one alongside, one behind the object. (b) Keep back straight, almost vertical. (c) Tuck chin in. (d) Grip the object with both hands. (e) Tuck elbows and arms in. (f) Keep your body directly over your feet, using your leg muscles to do the lifting.
4. Whenever you have to work in an isolated place, offering potential safety hazards, make sure that you are accompanied by others or are within shouting distance of them.

IN COMING ISSUES

- **What Leads to Alcohol Dependence?**
- **Divorce—Is It the Answer?**
- **Supertankers—Are These 'Sea Monsters' Facing Extinction?**



Which safety rule did her mother fail to obey?

5. Recognize hazards ahead of time by being observant, alert and familiar with safety standards and with the properties of the materials that you have to handle.

6. Any equipment of critical importance to the safe performance of your job should be checked each time that it is to be used. Never presume anything. Machines are governed by natural laws, not by intelligent reasoning.

7. Avoid riding devices designed to lift or transport only cargo.

8. Make a habit of good housekeeping: Clean up any spills immediately. Keep tools in their proper place. Also, all solvent-soaked rags should be disposed of in airtight metal receptacles.

9. Cleaning, repairing, adjusting and most lubricating of machines should be done with all power sources and valves shut off. Only authorized workers should have access to power sources.

10. Guards on the machine are for your protection; therefore, never leave them off while operating. Always keep in mind that loose clothing or long hair can very easily get caught in machines.

Personal Safety at Home

An article headed "25% of All Accidents Happen at Home" was published in the December 1976 issue of the Brazilian *Jornal da Prevenção de Acidentes* (Journal of Accident Prevention). The article pointed out that "most of the victims are generally children and women. Often the cases are fatal." According to Maxwell N. Halsey, an authority on accident prevention, the main cause of death among children of all age-groups is accidents. Therefore, listed below are some practical hints on how to protect yourself and your children at home:

1. Protect small children from falling out of windows or down the stairs by installing protective grates or gates. Other falls can be avoided by keeping the floor in good repair, free of any obstacles and not too highly polished.

2. Have all electrical outlets properly covered or isolated, especially those within the reach of children. Tots like to poke things into receptacles, and so there is danger of their being electrocuted.

3. Make sure that all sinks, bathtubs and washing tanks are properly attached to the wall. Otherwise, they can easily be tipped over by children, causing serious injuries.

4. Do not permit your little ones to play with matches, lighters, pieces of glass, knives, scissors, or other dangerous objects. Do not provide them with toys that may harm them through breakage, inflicting cuts, choking them, and so on. Make sure that they understand why such things must be avoided, and set a good example yourself.

5. Pots and pans on the stove should always be turned with their handles toward the center of the stove, so that small children cannot reach them and adults do not knock them over accidentally.

6. Drugs, detergents, pesticides, alcohol, sprays and other chemical substances hazard-

ous to health should be kept in a safe place out of children's reach. Also, never tell them that medicine is "candy."

7. Never put toxic liquids into bottles or pots normally used for drinking or cooking purposes. Make sure that each of these liquids is clearly identified as to its use and purpose and is kept in its original container.

8. Do not keep firearms around the house, or, if you have to, keep them unloaded and under lock and key. Handle them with extreme care.

9. When cleaning or polishing the floor, avoid using inflammable substances such as naphtha or gasoline. A spark from the floor polisher might set the fumes on fire.

10. Never put flowerpots or other heavy objects on windowsills or in similar places. Falling off, they can cause bad injuries.

Safety Precautions While on Vacation

Recreation periods are supposed to bring enjoyment, but too often they are spoiled by an accident. The share that traffic accidents have in this is alarming. More people are said to be killed and injured yearly on the roads than in wars. Specialists feel, though, that 85 to 90 percent of all traffic and transportation-related accidents could be avoided. Human failure is the chief cause. To illustrate: Recently, restrictions on speed limits, caused by the world's energy crisis, resulted in a lower rate of fatal accidents on highways. That is why some basic traffic rules are included among these safety suggestions.

1. Do not "relax" while driving just because you are on vacation or because the highway is "empty."

2. Always keep your car in safe condition. Periodically check tires, brakes, doors and other vital parts. Neglect could make you an unintentional manslayer.

3. Be familiar with basic first-aid procedures and make it a point to carry a first-aid kit in your car; also a fire extinguisher.

4. Strictly heed all traffic regulations and warnings provided for your safety. There are good reasons for their existence.

5. Even if you know how to swim, ski or ride a bicycle, never take unnecessary chances.

6. Be careful whenever near animals, domestic or wild.

7. Keep away from disturbances or mobs.

Your Personal Share of Responsibility

Of course, many other "do's" and "don't's" could be added to these lists. But these points are sufficient to illustrate basic principles; they are not meant to restrict you to the point of losing the joy of living. If you apply them, they can make you more *safety-conscious*. As a factory supervisor in Brazil, with many years of experience, put it: "Safety rules only become meaningful when people believe in them. As long as you think: 'It won't happen to me,' you are a potential victim."

Remember, statistics time and again have shown that only about 2 percent of all accidents can rightly be attributed to unforeseen occurrence, as well as to human imperfection.—Eccl. 9:11.

More than anything else, deep respect for the sacredness of human life, coupled with genuine love of neighbor, should motivate us to do everything within our power to prevent accidents. We are all accountable to the Giver of life for the way we use it.

Fortunately, the little boy mentioned at the beginning of this article survived his fall. But how much better to save a child or an adult from the agony of sudden pain! Most of the time, "what will be," will be only what we allow it to be.

VINTAGE TIME

on the island of Crete



As told to "Awake!" correspondent in Greece

"OH, GET UP! Hurry up! Quickly! The other people have started and we won't be able to catch up with them," called my mother.

It was early morning, the twilight before sunrise. But the whole village was already on their feet and going—lines of people walking quickly and joyfully down the narrow rural roads of my native island of Crete.

I still remember how I jumped out of bed and ran to the yard of our small rustic home to wash myself. Then I mounted our young ass and hurried to join our fellow villagers. But why all this haste?



It was the vintage season. For my small village on this island in the Mediterranean, it was a time of activity and joy, a time for reaping the fruits of a whole year's labor. It was the month of September, the season of the grape vintage.

As we neared our own vineyard, we saw fellow villagers scattered over the countryside in other vineyards. They were like a swarm of bees, gaily moving about to pick the grapes.

As the day was getting on, the sun rose high, but we were protected by our straw hats. The gay shouts, laughter and songs continued to fill the air as the young girls moved among the vines, using sharp knives to cut the bunches of ripe white fruit and putting them into waiting hampers.

The menfolk then carried the filled hampers on their shoulders over to big linen cloths, where they emptied them out. Women squatting around the cloths cleaned the bunches of any rotten grapes, leaves or tendrils. And, after cutting them into small bunches, they put the grapes back into the hampers.

Other men then took these cleaned grapes and plunged them into large vats containing a solution of lye with some olive oil floating on top. From there they carried the grapes to a clearing and spread them out to dry under the burning September sun, thus shriveling them up to become raisins.

The morning passed quickly, hastened by the festive spirit of everyone, and the sun reached midheaven—time for our mid-day intermission and our gathering under an olive tree at the edge of the vineyard. How we enjoyed the food that we had brought along and the fresh water from an earthen jar as we rested in the shade! Then, with renewed strength and spirit, we resumed our work until late in the evening.

The Vintage

As mentioned, the vintage season here on the island of Crete is a time of great gladness; it is also one of great activity and exertion. It begins early in August with the ripening of the early grapes, which we enjoy eating fresh. A little later, though, toward the end of August, the first part of the vintage is to be made. We first gather the black grapes intended for that wonderful red wine traditionally made by all the families of my small village.

The grape clusters in hampers were carried (mostly by young asses) from the vineyard to the winepress in each home. There, laborers trample the grapes barefooted. If you happen to be on the island as a tourist during this season, you too can have a special treat by joining in this work.

But just a moment! Before treading grapes, the peasants always wash their bare feet, and the tourists are required to do the same thing if they want to share in this delightful activity.

From the juice vats, the liquid, or "must," is put into big wooden barrels for fermentation, which transforms it into the delicious ruby-red wine that is an indispensable complement to the meals of most Cretan families. But the produce of the fruitful grape does not end here.

Not all the must is used to make wine. Some is used for preparing various sweetmeats—must jelly, must-jelly sausages and others. Also, from the wine we obtain a wonderful natural vinegar, used in cooking. And fresh vine leaves make a tasty dish when wrapped around a mincemeat and rice stuffing.

The villagers even make use of the residue, or "marcs," left after the grapes have had their juice trampled out. The marcs may become cattle feed or fertilizer. But they are also the basis for another

delightful part of the vintage season. In October or November, the "caldroning" of the marcs is carried out in a festive atmosphere.

The peasants traditionally do their caldroning on the edge of the village. They set up roughly made fireplaces, using big rocks, on which they place caldrons full of marcs for boiling. At nightfall, the villagers begin preparing the fires, and they gather around to enjoy the warmth that tempers the chill of the autumn nights.

Joking and bantering break out, and stories about fictitious feats and adventures are told, exciting young imaginations, as children, sitting nearby, listen enchanted. When hunger starts to prick, we enjoy the tasty potatoes baked whole on the charcoals of the fire grate. But the menfolk's night wait is also rewarded with a taste of the first distillage coming out of the caldrons—a very strong drink that Cretans call *tsikudia*.

Thus a whole year of effort, toil and cooperation between villagers culminates

with these festive occasions. The work had begun away back in January, with the pruning and cutting out of the old shoots, letting the new, more fruitful ones grow instead. Then came digging, harrowing or hoeing on into March, when the vines began to blossom.

Later on, when the fruit became firm, the extremities of the fruit-bearing buds were cut off so as to prevent needless consumption of the vine's sap, and thus to obtain a more abundant fruitage. In the meantime, irrigation, fertilizing, sulfurizing, spraying and trellising of the vines were attended to.

Weather conditions may be a great hazard to the vine, such as frost at the time of blossoming. And attacks from various diseases, locusts and wasps require constant vigilance.

But, for those who have worked hard to care for their vines, it is all worth while when they see their toil crowned by the ripe grapes and the community engaged in the gaiety of the vintage season.

Avoiding Upset Stomach

WE HAVE all experienced an upset stomach from time to time, and often we have a strong suspicion as to the cause—that third helping that we took, that spicy dish of Aunt Sarah's, or that "quick" lunch we gulped down. Doctors agree that these can all be causes of upset stomach, and they add others, such as food with a high fat content, tension, some medications, smoking and even wearing garments that fit too tightly around the waist.

While it is often a matter of what you eat, sometimes it is a matter of *how* you eat. When you gulp down food that is not thoroughly chewed, the stomach secretes more acid to aid in digesting it. This acid, along with excessive air that you "pump" into the stomach when hastily swallowing, can irritate the stomach lining. Obviously to avoid upset from this cause, you need to chew your food thoroughly.

Other ways to avoid stomach upset are to resist the temptation for "extra" helpings that will overload the stomach. Such seasonings as pepper, onion, garlic and chili are best used in moderation. Then, too, it is good to listen to your stomach—learn from the "messages" it sends. If you note that each time you eat a certain dish your stomach is upset, either eliminate it altogether or make some changes in the way that it is prepared. Also, try to relax and put away the cares of the day when eating. Your stomach will appreciate it.



the fascinating pigeon

YOU may have walked down the street of a large metropolitan city or visited a park and observed a flock of pigeons. Doubtless you noticed that they were quite fearless, possibly even eating from someone's hand or at a very nearby feeding station. But something else you may also have noticed—the mess these creatures produce on statuary and sidewalks. So you may wonder, Why would anyone want to have these birds around? And why would anyone ever want to raise pigeons? Beautiful, graceful—perhaps—but, oh, so dirty!

When asked the question, "Why would you want to raise pigeons?" a man who did so replied almost incredulously, "Why not?" To him, it seemed like the most natural thing in the world. He established at the outset that he was of Belgian descent, as if this should be explanation enough. He pointed out that his father and grandfather had raised pigeons. "And you know," he continued, "the pigeon is the

bird of the Lord." He felt that this gave real emphasis to the logic of raising pigeons.

The man's enthusiasm was obvious from the way he described various kinds of pigeons, their traits and natural beauty. With a wave of his hand, he dismissed the cost for feed and care, explaining his love for the birds and the pleasures received from them.

Such fascination with pigeons is not new. There is evidence that for thousands of years the Chinese employed pigeons for liaison purposes. Akbar, a ruler of India in the sixteenth century C.E., reportedly had about 20,000 pigeons. Today, thousands of people breed pigeons for their beauty, humorous antics, for racing or for food. Young pigeons are marketed when they weigh from 12 to 24 ounces (340 to 680 grams).

Pigeons as Homemakers

Part of the interest in pigeons lies in the exemplary cooperation of male and

female. At about four to six months of age the cock and hen mate, usually for life. Together they start to build a nest and take turns sitting on it. After the two eggs are laid, the female incubates them throughout the night, continuing until about 9:30 a.m. Next the cock takes his turn, completing his incubation duty about 2:00 p.m.

After about eighteen and a half days the newly hatched pigeons, known as squabs, emerge to be fed by both parents. Both hen and cock produce in their crops "pigeon milk," a nutritious substance that is regurgitated and passed mouth to mouth from the parents to the babies. "Milk" feeding continues for about two weeks and then the squabs' diet becomes the same as that of the parents.

Trusting Nature

Because of the pigeon's soft, gentle appearance and disposition, it has become known as "the sheep of the bird world." Its trusting nature has made it easy to train and to enjoy. Since this same trusting disposition could lead to easy entrapment, Jesus appropriately balanced his words about being "innocent as doves" with the counsel to be "cautious as serpents."—Matt. 10:16.

Kinds of Pigeons

There are hundreds of pigeon breeds. Of special interest to us here are the following three categories: (1) racing homers, (2) performing pigeons and (3) fancy pigeons.

As the name implies, the racing homer is bred to use its instinct to race home. At speeds upward of a mile a minute, this bird, when released in unfamiliar territory, will circle once or twice and then streak home, flying distances of up to 500 miles (about 800 kilometers). How the pigeon is able to accomplish the feat of

finding its nest at such great distances still remains a mystery.

The racing homer was first developed in the early 1800's in Belgium, and, to this day, pigeon racing is a national sport there. It is so widespread that for every eight homes there is one pigeon loft. Sadly, in connection with pigeon racing, man's greediness comes to the fore, as this activity is associated with gambling. In order to make the birds fly faster, it has been reported that in Germany pigeon breeders have interrupted the mating process shortly before its climax and have then taken the male to the point where he is released for the race.

In the United States over 20,000 persons raise nearly a million birds for racing competition. A recent newspaper article told of a pigeon fancier who paid \$23,000 for one pigeon. Why? The man wanted the championship strain in his loft.

Besides racing, the homing instinct of these pigeons has been employed to relay messages. Before the advent of the telegraph, the racing homer served well in carrying stock exchange quotations back and forth across the English Channel, from London to Antwerp. A pigeon has been known to deliver a message over a thousand miles (1,600 kilometers), although a hundred miles (160 kilometers) is generally accepted as the maximum distance that should be attempted.

Performing pigeons fall, essentially, into four groups. The first group, the "Rollers" and "Flying Tumblers," are indeed fascinating to watch. When released, a flock of twenty or so will rise in formation and then go into a precision act. They will fly a figure "8" up and down wind. At the cross wind of the figure, all the birds will flip over backward in somersaults. Pulling out of the somersault in unison, they continue the figure "8" until signaled to return to their nests.

The "Tipplers" and "Highfliers" have tremendous endurance. These birds have been known to stay in the air for over nineteen hours and to reach altitudes that will make them appear as mere dots when seen through binoculars.

"Parlor Tumblers" give many hours of amusement, as they do their stunts on the floor. These birds will take a step forward and then flip head over heels backward for two steps.

The real show-off is the "Swing Pouter." This brightly colored bird balloons his crop and then, with wings lifted high above his head, swoops down at his admirers. Next the "Swing Pouter" flies upward, loudly clapping his wings. It would seem that the bird is trying to call attention to himself.

Fancy pigeons, like flowers, seem endless in variety, color and hue. The enjoyment comes from finding pleasure in their delicate beauty. It may be a special feather arrangement, a colorful decoration or a unique shape.

A Need for Balance

While there can be a certain delight in raising pigeons, it does involve a substan-

tial sum of money to house and feed the birds. In the United States, fifty pigeons may require a monthly outlay of between \$35 and \$40 for feed alone. There is also work involved. To prevent disease, bird lofts must be kept clean and dry. The devices used for watering and feeding the birds must also be kept clean. To facilitate this, the housing must be properly designed. Cleanliness in the pigeon loft is absolutely a must, as it is known that pigeons can be carriers of diseases fatal to humans.

Sound management would also require isolating sick and newly purchased birds for a time. This can prevent their introducing disease to the rest of the flock.

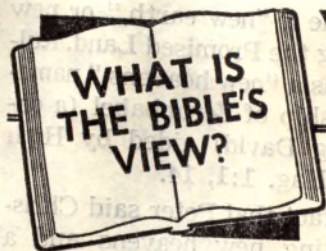
Pigeons have brought delight to many people throughout the centuries. Even you may be surprised because of being able to get very close to these essentially wild birds without their taking wing. And what pleasure can come from watching the antics of performing pigeons! Adding to the fascination are the accomplishments of racing homers and the delicate beauty of fancy pigeons. Truly, the pigeon is an interesting, fascinating bird.



A Use of Fat

The long-distance flights of birds are renowned. But how can birds fly such great distances nonstop? What do they live on, inasmuch as scientists conclude that a flying bird uses six to eight times as many calories as a bird at rest?

Basically the fuel for such flights is fat. Prior to migration, the bird undergoes a change in metabolism; so it begins to store large quantities of fat. On a black-poll netted just before its long overwater flight, half the bird's weight was stored fat. So when these migrating birds take off they are bulging with layers of fat, "fuel" for their flight.



"The End of the World" —Should You Fear It?

SHORTLY before the close of his earthly ministry, certain disciples of Jesus asked him: "What shall be the sign of thy coming, and of the end of the world?"—Matt. 24:3, *Authorized Version*.

Does "the end of the world" refer to fiery destruction of the earth and humankind? Many believe so. They feel that support for this view can be found in the apostle Peter's words: "But the day of the Lord will come as a thief in the night; in the which the heavens shall pass away with a great noise, and the elements shall melt with fervent heat, the earth also and the works that are therein shall be burned up."—2 Pet. 3:10, *AV*.

Do these texts really indicate that the planet Earth will one day come to a fiery end? You will find the Bible's view of this matter enlightening.

Regarding how long the earth will remain in existence, we read at Psalm 104:5: "He [God] has founded the earth upon its established places; it will

not be made to totter to time indefinite, or forever." (Compare Psalm 78:69; 119:90.) According to the Scriptures, the earth, with humans to inhabit it, will remain forever.—Isa. 45:18.

In view of this, what do the Scriptures mean by the end of the world? It will be helpful to consider how Bible translators of modern times have rendered this expression. Some examples are: "the end of the age" (*Today's English Version*), "the close of the age" (*Revised Standard Version*), "the consummation of the age" (Wuest), "the conclusion of the age" (Rotherham), "the conclusion of the system of things" (*New World Translation*). What actually comes to an end is an "age" or "system of things" (Greek, *aion*, from which we get the English word "aeon"), *not the literal earth and its inhabitants*.

Revealing too is the fact that at Matthew 24:3 modern translators have replaced "end" with words such as "close," "consummation" and "conclusion." The conclusion of an era is usually no sudden event. Rather, it can extend for quite some time and merge with the beginning of a new era. Jesus stated that "the conclusion of the system of things" would be identifiable by means of a "sign" made up of many features. (Matt. 24:3) Among them would be notable wars, food shortages, earthquakes, epidemic diseases, and an "increasing of lawlessness." (Matt. 24:7-12) Hence, according to Jesus, the end of the world is the conclusion or final part of the present era of human history. This teaching does not contradict the Scriptural assurance that the inhabited earth will remain forever.

But what about Peter's statement that "the heavens shall pass away with a great noise, . . . the earth also and the works that are therein shall be burned up"? (2 Pet. 3:10, *AV*) One must understand Peter's words in the context of the Bible as a whole. Consider, for example, how "earth" and "heavens" are used in the book of Isaiah:

"Let the earth and that which fills it listen, the productive land and all its produce. For Jehovah has indignation against all the nations, and rage against all

their army. He must devote them to destruction; he must give them to the slaughter. And all those of the army of the heavens must rot away. And the heavens must be rolled up, just like a book scroll."—Isa. 34:1, 2, 4.

Clearly, "earth" in this passage refers, not to the planet, but to *people* who are able to "listen." And did you note that a sword of execution would be drenched with blood "in the heavens"? Since the Bible states that persons of flesh and blood do not live in heaven, this term too must be a symbol of something in the human realm. (1 Cor. 15:50) In his commentary on Isaiah 34:4, Bible scholar Albert Barnes provides clarifying information: "The heavenly bodies often represent kings and princes. The sense is, that there should be great destruction; that the princes and nobles who had opposed God and his people would be destroyed."—Compare Isaiah 14:12-14; Revelation 22:16.

When Peter wrote about the heavens and earth passing away, he meant the present system of human political rulers and their subjects. The Bible foretells that God's kingdom "will crush and put an end to all these kingdoms." (Dan. 2:44) But the earth will survive and continue to be populated.

What will follow the present age of man rule? Peter writes: "But there are new heavens and a new earth that we are awaiting according to his promise, and in these righteousness is to dwell." (2 Pet. 3:13) The "promise" to which the apostle refers is found at Isaiah 65:17, where we read: "For here I am creating new heavens and a new earth." What does that mean?

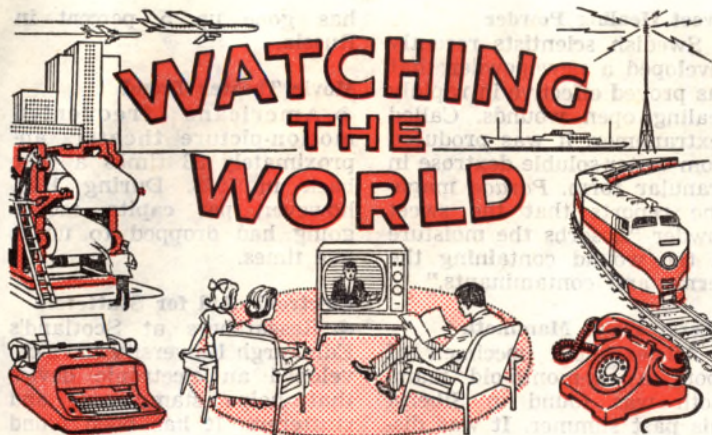
Keep in mind what is said above about the Bible's use of heavens and earth as symbols. Initially this prophecy in Isaiah dealt with the return of Israel from exile in Babylon. Upon arriving in their home-

land, they became a "new earth," or new society inhabiting the Promised Land. Ruling over them was a "new heavens," namely, the governorship of Zerubbabel (a descendant of King David) aided by High Priest Joshua.—Hag. 1:1, 14.

However, the fact that Peter said Christians 'are awaiting new heavens and a new earth' points to a future fulfillment. The "new heavens" are God's heavenly Kingdom government. Its obedient earthly subjects will constitute the "new earth." The apostle John describes the blessings of that arrangement as follows:

"And I saw a new heaven and a new earth; for the former heaven and the former earth [the present earthly governments and their followers] had passed away, and the sea is no more. With that I heard a loud voice from the throne say: 'Look! The tent of God is with mankind, and he will reside with them, and they will be his peoples. And God himself will be with them. And he will wipe out every tear from their eyes, and death will be no more, neither will mourning nor outcry nor pain be anymore. The former things have passed away.' And the One seated on the throne said: 'Look! I am making all things new.'"—Rev. 21:1, 3-5.

The end of the world is a transitional period from the present era of wickedness and suffering into the delightful new order described by the apostle John. People alive today have seen the wars, food shortages, earthquakes, lawlessness and other features of the sign that mark the close of the present age. (Matt. 24:7-14) Rather than causing fear, the Biblical teaching about the end of the world should be a source of joy. Jesus admonished those who would see the foretold sign: "As these things start to occur, raise yourselves erect and lift your heads up, because your deliverance is getting near."—Luke 21:28.



Population Outpacing Literacy

◆ This year the United Nations Educational, Scientific and Cultural Organization (UNESCO) is not going to award its two usual yearly prizes for outstanding contributions toward the combating of illiteracy. Why? Because illiterates are still growing in number. UNESCO estimates that world wide there are at least 758 million persons unable to read or write—26 million more than three years earlier.

Record Cost of Living

◆ In Tokyo, Japan, the cost of living is higher than it is in any other principal city, reported a recent edition of the United Nations' *Monthly Bulletin of Statistics*. It pointed out that, on an average, something costing \$100 in New York city is priced at \$144 in Tokyo. The cost of living index appearing in that issue of the *Bulletin* rated Accra, Ghana, just below Tokyo, and it was followed by The Hague, Geneva, Brussels, Bonn, Paris, Singapore and London. The least expensive place to live? Valletta, Malta. However, Japan's *Daily Yomiuri* explains: "The comparison was based on the assumption that UN employees enjoy the same living standards as in New York, and thus it does not necessari-

ly reflect price levels in major cities precisely."

Cockroaches and

Asthma Attacks

◆ It has been known for a long time that some insects act as allergens. Now experiments with cockroach extract seem to prove that cockroaches too can provoke allergic asthma attacks. Human "guinea pigs" succumbed to fits of asthma either immediately or shortly after being brought in contact with the extract. However, those who inhaled disodium chromoglycate (an asthma drug) before the experiment showed no sign of an attack. The occurrence of such attacks is found to be higher among poorer populations, where excrements and secretions of cockroaches often mix with the dust on the floor, giving rise to allergen pollution. Cockroaches may also contaminate foodstuffs and in this way act as allergens. Added the Brazilian newspaper *O Estado de S. Paulo*: "The odd thing is that this allergen is thermostable, resistant to boiling." Cockroaches are more likely to breed where there is lack of hygiene.

To the Salt Mines

◆ Some bronchial asthma sufferers in Russia have sought

relief in an old salt mine 300 meters (984 feet) below Solotvina, U.S.S.R. Therapy involves merely sleeping nightly in the 300-bed facility for 300 hours, or about one and a half months. It is claimed that breathing the mine air, laden with sodium chloride, has cured child asthmatics, although adults may require a second period of treatment there. While the plausibility of Russian claims has been questioned, over 8,000 persons already have undergone the salt-mine asthma therapy.

Iceberg Peril

◆ In 1912 the passenger ship Titanic struck an iceberg and sank, resulting in about 1,500 deaths. Icebergs still imperil ocean travelers, for each year some 16,000 new ice masses develop in Arctic waters, principally in the vicinity of Greenland. But their formation and movement are monitored by the Coast Guard. Recently, over a 25-day period, scientists photographed a particular iceberg that entered the North Atlantic, noting its changes while melting and due to erosion by waves. By analyzing these photos, they hope to determine how to forecast the movements of other icebergs.

Television Game Risk

◆ In some cases, electronic TV games can damage a set by burning the phosphor coating of the tube, reports *New Scientist*. As evidence, it says that "British service engineers . . . are beginning to encounter sets which have the impression of a football field or tennis court indelibly burnt" into the tube's coating. It is believed that color sets, with less picture brilliance, are not as susceptible to tube burn as are monochrome (black and white) TV sets. As a precaution, the same monochrome game should not be played continuously for hours, and the contrast and brightness

controls on a black-and-white set should be turned down fairly low. "This," says the journal, "will prevent any single area of the tube from receiving a prolonged dose of a static brilliant white on jet black."

Nun Brews Best

◆ A 28-year-old nun of the Poor Franciscan Order recently excelled over 26 men in obtaining her master brewer's diploma in Ulm, Germany. The nun brews some 3,300 pints (1,560 liters) of beer yearly from barley grown on the farm of the Mallersdorf convent near Regensburg. Her brew, sold locally, has a 12.6 percent alcohol content. During Christmastime and Easter she brews a stronger beer, containing 16 to 18 percent alcohol.

Alcohol Harder on Women

◆ A recent study by the University of Toronto, as reported in *Archives of Internal Medicine*, reveals that alcoholic illnesses strike women sooner and more forcefully than men. For men, the average period before the onset of such diseases was 20 years, compared with 14 for women. Also, among the women there was more anemia and twice the incidence of cirrhosis of the liver.

Synthetic Fire-Log Danger

◆ The Consumers' Association of Canada urges care in using man-made fire logs in your fireplace. Do not use more than one at a time, and follow the directions carefully. The Association's periodical *Canadian Consumer* cautioned against moving or poking a burning synthetic log. "It also warned against using broken logs and adding a fire log to a wood fire," reports *Changing Times*, adding: "Any breakage dangerously increases the amount of heat in the fireplace."

Sweet Healing Powder

◆ Swedish scientists recently developed a new powder that has proved effective in rapidly healing open wounds. Called dextranomer, it was produced from water-soluble dextrose in granular form. *Parade* magazine reports that the sweet powder "absorbs the moisture in the wound containing the germs and contaminants."

Siberia Yields Mammoth

◆ An excellent specimen of about a six-month-old mammoth was found in Siberia this past summer. It was discovered by a workman operating a bulldozer in permafrost mud of a Kolyma River tributary in the Soviet Union's Yakutsk Republic. With a height of 144 centimeters (57 inches), the frozen creature has relatively small ears, large feet and fur of a reddish color. "And most interesting," says the British journal *New Scientist*, "there are two 'fingers' at the end of the trunk, . . . unlike an elephant but confirming . . . cave paintings of mammoths."

Record Alcohol Consumption

◆ Although residents of Italy and France drink larger amounts of alcoholic beverages, Russians reportedly consume more pure alcohol annually. The Russian favorites vodka and cognac have a much higher alcohol content than do the beer and wine preferred by people of western Europe. According to the Russian Research Center of Harvard University, from the standpoint of alcohol content itself, the average citizen of Russia drinks 6½ quarts (6 liters) a year, whereas among the French average yearly consumption is about 4½ quarts (4½ liters). The study also reveals that while annual per capita drinking of alcoholic beverages has risen approximately 3 percent in 14 other industrialized lands, it

has gone up 5 percent in Russia.

Movie Theater Trend

◆ Americans frequented motion-picture theaters approximately 33 times a year back in 1948. During 1976, however, per capita movie-going had dropped to under five times.

Electronic Aid for Stutterers

◆ Researchers at Scotland's Edinburgh University have developed an electronic device that helps stammerers and stutterers. It has been found that certain noises often cause these persons to speak without difficulty, losing their impediment. So, using earpieces linked with it and a sensor on the neck, the box-shaped aid produces a sound that masks the wearer's own voice. Termed the "Edinburgh Masker," the device is said to have been 90 percent successful during seven years of testing.

Arthritis Tally

◆ The Health Insurance Institute reports that arthritis is responsible for greater protracted suffering to more U.S. residents than any other ailment. One person in ten has it in a form severe enough to call for medical attention.

Color TV for Afghanistan

◆ In about ten months, Afghanistan will enter the television age. Its first TV station is then expected to begin operating at the capital city of Kabul, with a potential audience of 1.5 million in that area. Facilities for broadcasting in color now are under construction by the Japanese and will cost approximately \$5.2 million. Of this amount, \$3.2 million will be a grant put up by the government of Japan. "Afghan officials say the station's main purpose will be educational, especially literacy training," reports *The Wall Street Journal*, adding:

"Only 10% of Afghans can read or write . . . In the capital itself, the literacy rate is little better at 30%."

Herbal-Tea Danger

◆ Recently, three persons died in the United States after they drank teas mistakenly prepared from poisonous plants. Therefore, the Center for Disease Control urges that an herbal-tea drinker should make sure that he knows what he is drinking "when experimenting with herbs or unfamiliar substances."

The Camels Are Coming

◆ High oil prices and the harsh climate of North Africa favor a return to camels for transport. *Parade* magazine reports: "Many traffic experts believe that especially on the Sahara routes the camel is superior to all motorized caravans. Camels are cheaper,

more reliable, need less maintenance, and rarely break down."

Decorated Drinking Glasses

◆ According to *Chemical and Engineering News*, if gold or some semiprecious metal has not been used in decorating a drinking glass, lead has been employed for any decorations it bears. It has been found that the lead may leach off by licking and due to contact with acids in drinks. Also, there may be lead intake if a person's sticky fingers have handled the glass and then touched his mouth. But *Science News* comments that "scientists are still unsure about whether there is any health hazard" associated with such drinking glasses.

Hypertension in Young People

◆ Hypertension (high blood pressure) affects about 23 mil-

lion Americans and is a major contributor to heart attacks, strokes and kidney failures. Recent studies of young people have revealed that from the age of one day to 18 years about 6 percent suffer from hypertension. In the older ages of this group as many as 11 percent have high blood pressure. A common factor cited is excessive amounts of salt in the diet from hamburgers, pizza, French fried potatoes, canned soups, bacon and other favorite foods. Excessive cholesterol, dietary fat and carbohydrates (sugars and starches), as well as the lack of adequate exercise, may also play a role. Professor E. Petry, a pediatrician from Loma Linda University in California states: "Only 10 percent of adolescents are physically fit." The lack of fitness is related to the many hours children spend watching television each day.

Non-Americans and is a major contributor to heart attacks, strokes and kidney failure. Recent studies of young people have revealed that from the age of one day to 12 years about 6 percent suffer from hypertension. In the older ages of this group as many as 11 percent have high blood pressure. A common factor cited is excessive amounts of salt in the diet from hamburgers, pizza, French fried potatoes, canned soups, bacon and other favorite foods. Excessive cholesterol, dietary fat and carbohydrates (sugars and starches), as well as the lack of adequate exercise, may also play a role. Professor M. Petty, a pediatrician from Louisiana State University in California states: "Only 10 percent of adolescents are physically fit." The lack of fitness is related to the many hours children spend watching television each day.

more reliable need less maintenance, and rarely break down."

Decorated Drinking Glasses

According to Chisholm and English News, if gold or some semiprecious metal has not been used in decorating a drinking glass, lead has been employed for any decorative purpose. It has been found that the lead may leach off by licking and due to contact with acids in drinks. Also, there may be lead inside if a person's sticky fingers have touched the glass and then touched his mouth. But Bob once gave comments that "acidic" drinks are still common about whether there is any health hazard associated with such drinking glasses.

Hypertension in Young People
Hypertension (high blood pressure) affects about 23 mil-

lions of Americans can read or write... in the capital itself, the literacy rate is little better at 30%."

Herbal-Tier Danger

Recently, three persons died in the United States after they drank teas mistakenly prepared from poisonous plants. Therefore, the Center for Disease Control urges that an herb-tier drinker should make sure that he knows what he is drinking. When expert meeting with herbs or other natural substances.

The Camels Are Coming

High oil prices and the harsh climate of North Africa favor a return to camels for transport. Trade magazine reports: "Many firms experts believe that especially on the Sahara routes the camel is superior to all motorized cars. Camels are cheaper,