

DECEMBER 8, 1978

Awake!

SECURITY
Why so elusive?
Can you obtain it?

July 1978

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FEATURE ARTICLES

- 3 SECURITY—THE ELUSIVE GOAL!
- 5 WHY IS THIS AN 'INSECURE GENERATION'?
- 8 WHO CAN BE SECURE TODAY?

The above articles, prepared in the British Isles, examine questions of life that affect every one of us. The conclusion? You can enjoy, right now, a level of security not dreamed possible by most people. Learn how

16 GENETIC ENGINEERING—WILL IT IMPROVE THE HUMAN RACE?

There has been much talk about improving coming generations by genetic engineering. Can it be done? What prospect is there for improving the lot of those already alive?

OTHER ITEMS

- 11 Would There Be As Many Wars If . . . ?
- 12 Merchants on Wheels
- 15 Now Opening to Blacks
- 20 The Amazing Brine Shrimp
- 21 I Cleaned Up My Life—Why?
- 24 What Do You Mean by "Shakes," "Shingles" and "Froes"?
- 26 Even Misrepresentations Can Advertise Truth
- 27 The Bible's View Should a Christian Serve on a Jury?
- 29 Watching the World

WHY THIS MAGAZINE IS PUBLISHED

"Awake!" is for the enlightenment of the entire family. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it stays politically neutral and does not exalt one race above another. It also shows how to cope with today's problems. Most importantly, "Awake!" builds confidence in the Creator's promise of a peaceful and secure new order within our generation.

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

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to start now and you can still have time to prepare for the future.

"ONE of the most serious breaches of embassy security for many years." That was the description of the electronic spying equipment discovered in America's Moscow embassy last May. Diplomats can only speculate at the amount of secret information monitored by the dish-shaped receiving device, hidden for an unknown length of time in an old chimney stack.

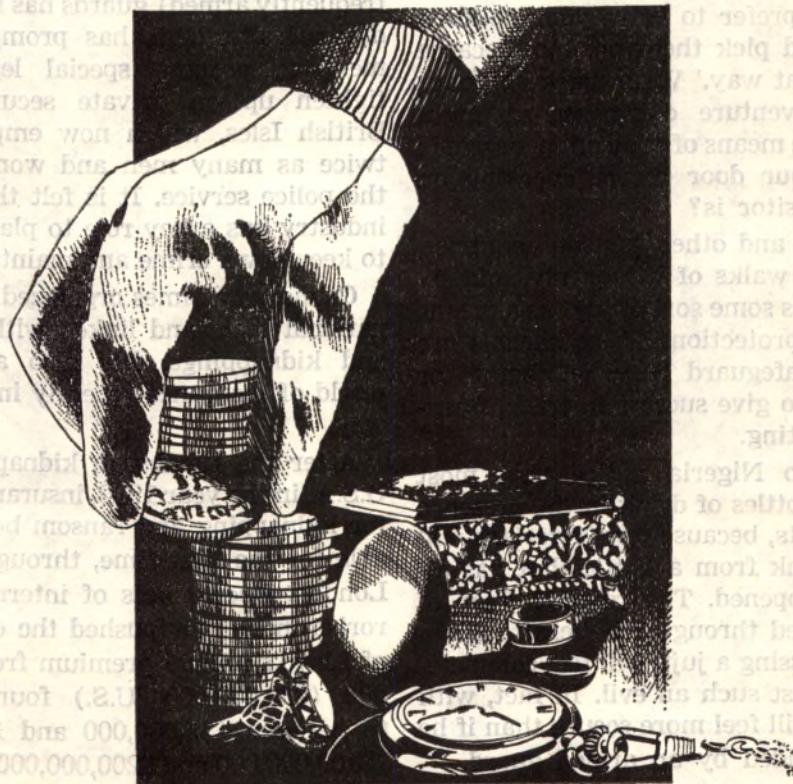
For the great majority of people, of course, such matters of high state security are not a daily concern. But more immediate matters of personal security most

certainly are. How does the search for security affect your life?

Personal Security

Perhaps you have taken out a life-insurance policy to bring a measure of security to your family in the event of your death. You know, too, of those who invest in real estate or other valuable commodities—precious metals, gem stones, old coins, works of art or even postage stamps—as security in the face of inflation. Wherever you look, people work hard to

SECURITY The Elusive Goal!



gain financial security for themselves and their families in every way possible, but not always with success.

In addition, each day, in practical ways, we relate automatically to security consciousness. Check for a moment your own pattern of life.

How many locks and bolts do you have to attend to before leaving your home? They form just part of an elementary security precaution. Even so, an estimated quarter of a million cases of breaking and entering occur each year in the British Isles alone.

You unlock your car, which itself may be locked in a garage, before you can drive it away. When walking in public you secure your wallet or purse as best you are able, to ward off thieves. Before getting down to a day's work, do you need to show a 'security pass' to enter a factory, or office premises, as many do?

You may prefer to drive your children to school and pick them up, too, because 'it's safer that way.' When back at home, would you venture out alone at night without some means of protection, or would you open your door before checking on who your visitor is?

In Nigeria and other African countries, people in all walks of life openly, and secretly, possess some sort of juju as a means of personal protection. These charms are used as a safeguard from witchcraft or danger and to give success in trade, farming and hunting.

Visitors to Nigeria notice that most hosts open bottles of drink in the presence of their guests, because few Nigerians will willingly drink from a bottle that has already been opened. The reason? Fear of being poisoned through witchcraft! But a person possessing a juju will feel completely safe against such an evil. In fact, with his juju he will feel more secure than if he were surrounded by an armed guard.

These examples (and you can think of many more) are everyday happenings now taken for granted. Yet it is a fact of life that personal security is never so easily secured.

A New 'Growth Industry'

In recent years security has come to be recognized as a new 'growth industry.' From a proliferation of shops stocking security locks, bolts and catches, to the more sophisticated alarms and monitoring systems as employed to check shoplifting, the sale boom is on. And, if you do not wish to purchase one of many specially trained breeds of dog to guard your property, it is now possible to buy a cassette recording of one barking ferociously. The tape recorder, connected to the doorbell, plays immediately when your bell is pressed.

In addition, world wide the number of security firms employing trained (and frequently armed) guards has mushroomed dramatically. This has prompted Parliament to propose special legislation to tighten up on private security in the British Isles, which now employs nearly twice as many men and women as does the police service. It is felt that this new industry has a key role to play in helping to keep down crime and maintain security.

Crime, sometimes organized on an international scale and linked with hijackings and kidnappings, has also alarmed the world of insurance recently in an unusual way.

After the Lindbergh kidnapping in the U.S.A. in the year 1932, insurance coverage for kidnapping and ransom became available for the first time, through Lloyds of London. Recent acts of international terrorism have now pushed the current level of Lloyd's annual premium from £16,000,-000 (\$30,000,000, U.S.) four years ago to between £55,000,000 and £110,000,000 (\$100,000,000 and \$200,000,000, U.S.). This

means that the London insurance market today cannot be carrying less than £5,500,000,000 (\$10,000,000,000, U.S.) in direct kidnap and ransom risks alone. A heavy price indeed for those seeking "security."

"Untroubled by danger or apprehension," is The Concise Oxford Dictionary definition.

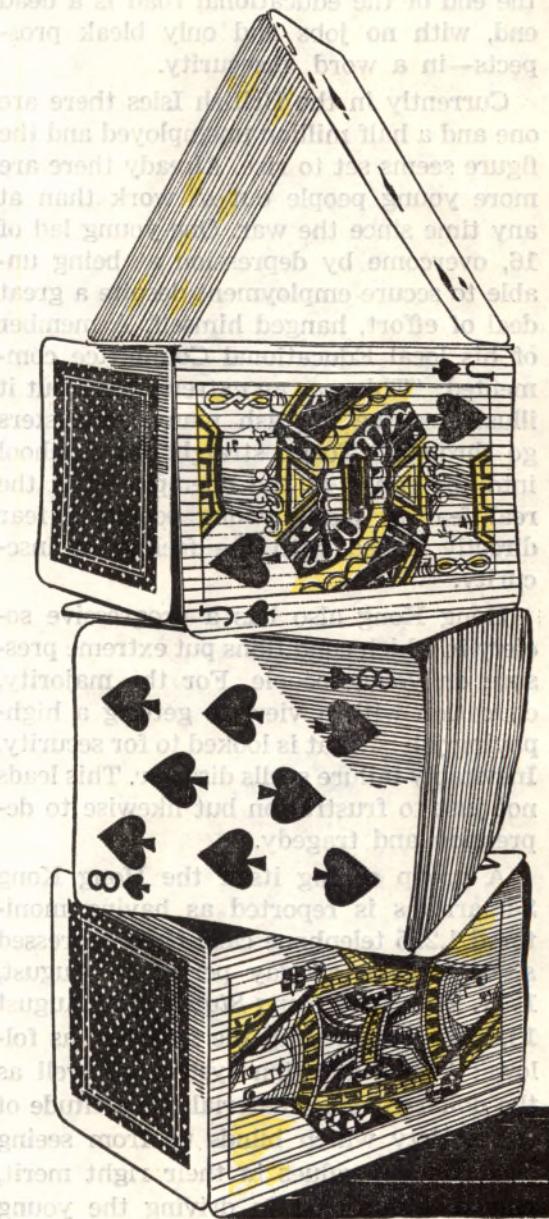
tion of "secure." So in today's world of increasing crime, do you honestly consider your outlook to be so favourably described as "secure"? Or do you experience a growing feeling of insecurity despite all that you can do? Read on as you consider the question:

Why is this an 'INSECURE GENERATION'?

"THERE'S an undercurrent of fear, so people want to believe in some kind of controlling force which they hope will look after them."

Reporting these words of an Oxford university student, London's *The Sunday Telegraph* last April revealed an unexpected increase in religious participation among undergraduates. This trend, so out of keeping with extreme political involvement of previous years, reflects what the newspaper calls "the uncertainties of an insecure generation."

In an age of unparalleled prosperity such a situation is something of a paradox. It is something like a house built of cards, bright and showy, yet delicately stacked and doomed to fall. People sense this instability. What makes this present generation feel so "insecure"? Is it possible to determine the source of this 'undercurrent of fear'—and to overcome it?



Value of Education

Ever since the end of the second world war, educational facilities have been greatly extended in most advanced countries. Yet it cannot be said that in itself education holds out security. As a means to an end, to what will it lead? That is the important question. Alas! For so many today the end of the educational road is a dead end, with no jobs and only bleak prospects—in a word, insecurity.

Currently in the British Isles there are one and a half million unemployed and the figure seems set to rise. Already there are more young people out of work than at any time since the war. One young lad of 16, overcome by depression at being unable to secure employment despite a great deal of effort, hanged himself. A member of his local Educational Committee commented: "This was an extreme case, but it illustrates the anguish many youngsters go through." To go straight from school into the ranks of the unemployed is the real fear of many young people, a fear directly linked with the feeling of insecurity.

Hong Kong also has a progressive society in which conditions put extreme pressure on young people. For the majority, education with a view to getting a high-paying job is what is looked to for security. Inevitably failure spells disaster. This leads not just to frustration but likewise to depression and tragedy.

A group calling itself the Hong Kong Samaritans is reported as having monitored 1,225 telephone calls from depressed students in a six-day period in August, 1977. The *Hong Kong Standard* of August 13, 1977, summed up the situation as follows: "Our education system, as well as the dollar-chasing materialistic attitude of our society which blinds us from seeing basic human values in their right merit, play a major part in driving the young

people to suicide." Yet, with an increasing number of students and a decreasing number of job opportunities, the pressure to get to the top of the tree can hardly diminish.

Modern Technology

What, though, of modern technology? Will this not open up new fields of endeavour and employment? Many have fondly thought so in past decades, but no longer. In fact, authorities are now sounding the warning of a dramatic increase in unemployment in the immediate years ahead. One group of Cambridge, England, economists recently went so far as to predict a figure of some five million unemployed in the British Isles, likely within the space of 10 years. Why this gloomy forecast?

Rapid developments in microelectronics have accelerated automation to a previously unsuspected degree. Heralded originally as the means of breaking the routine of repetitious work, it is now realized that computer technology can also effectively replace intellectual work. A skilled draughtsman, by way of example, may take 25 times as long on a project as a computer, programmed to design. With efficiency and profits in mind, it is not

In Future Issues

■ **True Monarch of the Air**

■ **What Do You Do for Entertainment?**

■ **They Won't Forget Their Oriental Tour**

hard to guess what happens to the human element.

Various solutions have been put forward—early retirement, shorter working weeks, more and longer holidays each year, as well as the inevitable raising of the school-leaving age. Yet all, or any one, of these cannot solve the problem, and the basic insecurity of employment remains.

In normal circumstances it is fair to say, as the Bible does, that "if anyone does not want to work, neither let him eat," but what of a man who is eager to work and who is denied the opportunity? (2 Thess. 3:10) Sadly, today many fall into that category, and in countries where no social-aid system exists they are simply forced to eke out an existence in a state of perpetual insecurity.

Delinquency

"Work banishes those three great evils, boredom, vice and poverty." So philosophized the 18th-century French writer Voltaire. If capable, trained men and women are unable to turn their hands to an honest day's work, it is hardly to be wondered at when today many turn instead to a life of crime. Frustration has its outlet, as is seen in the British Isles where about 38 percent of all crimes are committed by unemployed people.

Even more alarming has been the related upsurge of violent terrorism throughout the world. Trouble in Italy has been fanned by an insecure and alienated younger generation (20 percent of Italy's college graduates qualify for positions that simply do not exist) and mirrors the unhappy state of affairs in many European countries. Yet, seeking to change the "system" by force and intimidation can only breed its own insecurity.

Many authorities turn to larger and stronger police forces and stricter legislation to stem the tide of crime. Certainly

such restraining steps may go a good way in containing criminal activity, but inevitably the people of decent society pay heavily for their security. Not only is the burden of the law to be borne in taxation, but also restrictions curtail the freedom of all society to some degree. There can be no substitute for honesty and integrity to restore the desired security.

International Tension

Will international problems get out of control? This fear affects those of the younger generation too as they seek to plan their lives. They know that their own fathers and grandfathers have lived through the insecurity created by war. Yet they see world leaders still unwilling to agree among themselves, and international deception and intrigue continue to put peace in peril.

The arms race goes on unabated and students are well aware that a quarter of all scientists spend their time on offensive weapons development. Perhaps less known is the fact that each year the average worker forfeits the equivalent of two weeks of his wages to pay for the arms race. The present generation may say that they wish to 'Make Love—Not War,' but they realize that they are not the masters of their own destiny in the important matter of world international security.

Problems of Retirement

For those at the other end of man's short life-span there is no letup on the feeling of insecurity. How many senior citizens worry as they see their life savings eroded away by continuous inflation? Thrift and saving seem no longer to be virtues meriting praise. As one advertiser succinctly put it in encouraging readers to go into debt and negotiate a loan: "The way prices are rising these days, it doesn't pay to save for things you want."

This philosophy of life may well suit the younger generation, but what of those whose retirement income is limited and who tend to rely on their savings? Even in countries where State aid is more readily available, despair among the elderly can still take its toll. In the United States one

suicide in four involves a person over 65 years of age.

Living in this generation with all its problems and uncertainties, is there any stability? What can be secure? We invite you to consider the evidence as you ask yourself the question:

Who can be **SECURE** today?

FOOD, clothing and shelter are basic necessities of life. Without them our very grip on life cannot be secure.

If someone offered to give you all these essentials in ample measure, you would surely ask: "On what conditions?" Such a promise at too high a price would hardly be a gift at all. Yet on acceptable terms, what a blessing it would be!

A Valid Assessment

In his famed Sermon on the Mount, Jesus Christ was realistic in assessing the material requirements of life. His emphasis, however, was to the end that we should 'never be anxious' about securing them. Why? There are good reasons. Maybe you would like to check them for yourself in your Bible at Matthew 6:31-33, or in the parallel account at Luke 12:29-31.

We may note that Jesus there acknowledged that the great majority would never heed his advice. Instead, they would be in 'anxious suspense,' pursuing the gaining of material belongings. To such ones these assets then become an end in themselves. Yet, as we have seen, what security do they really afford?

In the same context, Jesus spoke of accumulated treasures "where moth and

rust consume, and where thieves break in and steal." (Matt. 6:19, 20) With all the excelling wealth available today, those who have it are enjoying no greater sense of security than people have possessed in the past. More importantly, to follow their example would be to ignore riches of a superior kind. Jesus warned of such a short-term view of life, saying: "A man's life is not made secure by what he owns, even when he has more than he needs."

—Luke 12:15, *The Jerusalem Bible*.

Where, then, is real security to be found? Not just in acknowledging that our heavenly Father is fully aware of our needs, but in acknowledging that he has *obligated* himself to us to supply them all. On what terms? Simply that we 'seek first his kingdom and his righteousness.' (Matt. 6:33) Consider the following true-life experiences and assess how this can work out in practice.

A Choice of Priorities

World wide there are over two and a quarter million Christian witnesses of Jehovah who are seeking first God's kingdom. Among these there are around 75,000 who volunteer to spend, on the average, 1,000 hours each year in preaching and teaching

the "good news of the kingdom." (Matt. 24:14) These men and women are called "pioneers," as their assignments of territory can often find them in unusual and even remote areas.

If we were to equate their total number of hours (approximately 75 million) with money values, taking an hourly rate of £1.10 (\$2.00, U.S.), then annually their time is worth £82,500,000 (\$150,000,000, U.S.). Yet all this time is *given* freely and often by people who have vacated well-paid jobs, even professions, for the privilege.

One reporter on religion, having assessed the work of these pioneers, came to the

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One reporter on religion, having assessed the work of these pioneers, came to the



conclusion: "Generally their lives are happily frugal . . . their (Jehovah's Witnesses') behaviour is governed by absolute faith and a deep sense of duty to which no financial strings, no material rewards are attached."

Take the case of a well-respected doctor of gynaecology. By the standards of this world he 'had it made,' holding a good position in a large hospital in Japan. On studying the Bible with Jehovah's Witnesses, the doctor and his wife both dedicated their lives to serve their Creator, symbolizing this by water baptism.

After a short while, they decided that they would like to move to another town where only a few of Jehovah's Witnesses lived, to share their faith with that community. To do so the doctor had to quit his secure hospital post and seek part-time employment, as both he and his wife wished to become pioneers. They now live in a modest rented house. The husband works two days a week in a local health clinic to support them both and also his mother who lives with them.

Colleagues with whom the doctor has worked say they cannot understand his thinking, and much less do they desire to make it their own. Yet this couple have the security of a peace of mind and contentment in aiding the local congregation with which they associate, as well as in conducting numerous Bible discussions in their new neighbourhood.

Securing Spiritual Privileges

London, England, is the world centre for many specialized fields of commerce. Twenty-five years ago, a young man working with a well-known international company started, along with his wife, to look into the Holy Scriptures. After a thorough check with all religious leaders in their hometown to determine the truthfulness of Bible doctrine, dedication and baptism

of them as Jehovah's Witnesses soon followed. The person who had helped this couple was herself a pioneer and the fine example she set left a lasting impression on them both. In the local congregation they worked hard. During the ensuing years, this husband-and-wife team were privileged to help up to 100 men and women to a knowledge of the Bible. Fourteen of these were in the company where the husband was employed at that time as manager, caring for thousands of employees world wide.

Ten years ago, an offer of a directorship at four times his salary was made to the husband, with a promise of an early opportunity to become chairman of the board of directors. At that very time, however, the way had opened up for the couple to enter the pioneer work. For this privilege they were quite prepared to forgo the security of his employment and its prospects. As things turned out the company eventually made an offer of part-time work at half salary—and a directorship was given as a reward for faithful service!

Three years later, following company reorganization, the Witness was faced with the ultimatum of resuming full-time work or leaving. He left. Later he was appointed to serve as a traveling overseer of Jehovah's Witnesses, visiting congregations along with his wife, a privilege that they still retain and greatly enjoy.

Asked how he now felt at having given up such a promising commercial career, he replied quoting Paul's words: "I do indeed also consider all things to be loss on account of the excelling value of the knowledge of Christ Jesus my Lord." (Phil. 3:8) He added: "To exchange material riches for spiritual ones has been completely rewarding and has given us both a sense of security for the future we have never had before."

But, are these sacrifices made solely for future security? How real is this "security"

in down-to-earth values today? Let us consider some of the advantages readily available now.

Secure in Christian Association

"A WORD OF CAUTION:—Beware of pickpockets." This advice was given to the many thousands of delegates attending the "Victorious Faith" International Conventions of Jehovah's Witnesses this year. You may wonder why such practical counsel was necessary. Well, the fact is that the moral integrity enjoyed by true Christians puts them at a distinct disadvantage. Thieves are known to capitalize on the disarming trust so clearly in evidence among Jehovah's Witnesses; so the warning was timely. But what a joy it is for honest folk to feel secure among people they can trust!

"On earth the nations will not know where to turn, . . . while men will be fainting from fear, and for the thought of what is going to happen to the world." Jesus contrasted this negative outlook of the majority of people, at the time of the passing of our old world order, with that of his true followers: "Lift up your heads, for your deliverance is near."—Luke 21:25-28, *The New Testament, A New Translation*, by William Barclay.

Nobody would attempt to belittle the apprehension, mistrust and fear so evident today, fulfilling Jesus' words. Only faith,

Would There Be As Many Wars If . . . ?

In a special session of the United Nations on world disarmament, Ambassador Jamil M. Baroody of Saudi Arabia made a disarming statement, according to a UPI report. He suggested limiting the armies to men between the ages of 40 and 60, suggesting also that the defense ministries be staffed by mothers. This would be a giant step toward world disarmament, he said, since middle-aged men "generally make the decisions to fight wars" and would perhaps think twice if they also had to take part in them.

based on a true understanding of the Scriptural prophecies, can give the security of peace of mind.

Despite today's pressing problems, Christians can look to the future with complete confidence. The future is secure, just as God's purpose concerning it is immutable. Under His Kingdom government, for which Jesus told his followers to pray, life will forever be a delight of endless Christian association.

With a world government ruling in the best and lasting interests of all earth's inhabitants, a man's labours will not be directed to the detriment of his fellowman. Human inventiveness will be positive and constructive as the blessings of work bring delight and the earth yields its bounty. Animals and other forms of earthly life will be in full accord. Pollution of earth, sea and atmosphere on account of human selfishness will be unheard of. Safeguarding health will no longer present problems. Human death, sickness and crippling disease will be things of the forgotten past. —Compare Isaiah 65:17-25.

To learn of our Creator's love and purpose is to 'reside in security, undisturbed from dread of calamity' for all time. (Prov. 1:33) Lasting security is not elusive. It is a reality. It can be yours for the asking. Why not share its benefits now in association with Jehovah's Witnesses world wide?

Merchants ON Wheels



By "Awake!"
correspondent
in Japan

THERE is a bias in his gait that inclines him somewhat to the left of a straight line but the pair of legs that carries him is strong. His smile is infectious, his manner kindly and his cries of "Yakiimo!" are familiar to all. He has left the country farm and joined the throngs of merchants on wheels in a big city some two hundred miles (320 kilometers) from his home.

Yakiimo is hot sweet potato. The sweet potato is plentiful in winter months; so the Hot Potato Man turns to this work for his livelihood until spring, when he returns to the rice farm. His mobile shop resembles a huge boxlike contraption that is made from metal and wood. A wood fire in its interior heats small, smooth pebbles held in a metal container. It is on these stones that the potatoes are cooked. The smell of the wood from the cart's chimney and the aroma of the potatoes as he occasionally lifts the lid to see how they are cook-

ing stimulate the gastric juices. Rain or shine, you can be sure to hear the megaphone or pre-recorded tape calling for you to buy "Yakiimo!"

There are other merchants selling fruit, seafood, Japanese hotchpotch and numerous other things. And then there is the delivery boy, peddling a cycle, or, perhaps, revving up a motorbike. He is to be seen in all towns and cities, wending his way through even the heaviest traffic, with a mountainlike pile of delicacies in bowls and boxes balanced deftly on one shoulder. How does he do it? Well, sometimes he doesn't, as a sorrowful face peering up from a pile of noodles and broken bowls may testify.

Merchant with a "Commercial"

Attracting children and adults alike by his amusing entertainment is the seller of sweet corn. His live commercial is a winner. He arrives in an extremely small open-backed truck. His corn on the cob is roasting and ready for sale. This particular man is wearing colorful shorts, *tabi** socks and thong sandals, a *happi*-coat and a headband to keep his brow free from perspiration. His jovial face and manner have you smiling before his performance begins. Having made a final check that the corn is roasted to readiness, he jumps down from the back of the truck and starts to sing and dance in the street. He sings that his corn is from Hokkaido in northern

* Mittenlike Japanese socks. The big toe is separated from the other toes to facilitate the wearing of thongs.

Japan. He chants how delicious and sweet it is and from there he seemingly makes up the words of his song depending on his audience. For the benefit of the housewives who have put down their work to watch him, he trolls, in polite Japanese, that they are as sweet as his corn. His antics as he dances excite the children and some of them venture to join him. Needless to say, he soon sells all that was roasted and prepares to move on, leaving his audience happy and munching.

Beauty and Practicality

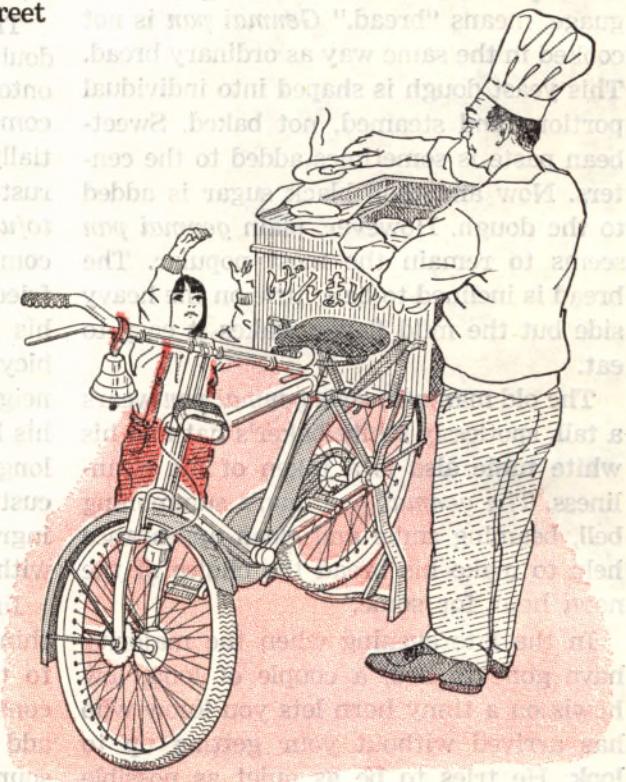
In contrast, a merchant who does not have to do anything to attract a crowd of customers is the vendor of flowers. Why is a gimmick not necessary in his case? In Japan men and women alike have a great love for flowers and, where possible, they like to have them in their homes, particularly in the entranceway. The street vendor is approved by the populace because he sells his flowers cheaper than does a regular flower store. He will arrive in an autobike that is pulling a barrow. The potted flowers will be arranged on wooden shelves that rise like stairs. The whole is covered with thick transparent vinyl that is removed when he begins his "pitch" to the assembled throng. Someone will notice his arrival and spread word of his presence. Presently (depending on the season), cyclamen, chrysanthemum, pinks, flowering cactus and a host of other plants are being admired and purchased.

What does this next peddling merchant have to offer? Bamboo poles! What do you do with them? It is the custom here to hang laundry on them. Shirts, blouses and *yukata* (cotton *kimono*) give the appearance of standing with their

arms outstretched as they are threaded onto them with the daily laundry. Bamboo poles are also used to hang the *futon* (mattresses) on to freshen in the air. This peddling merchant usually makes his rounds on the weekend when things are quieter and so manages with his natural voice box to sing out his cry of "Bamboo Poles!"

Pets for the Children

Habitually, when the children have finished school, a favorite traveling merchant will appear on the scene. What is it that appeals to the little ones? He is hawking goldfish. It is amazing that he has the strength to pump his bicycle along with all that water on board. He is very careful and needs to be. Consider what would happen if he were to take a tumble! As soon as he sings the word "goldfish" children begin



to gather. Adults will congregate, too. Small flat nets on a handle are provided, and presently there are shrieks of laughter when the fun begins in trying to catch a tiddler or two. Just when you think you have netted him, the fish jumps and speeds to the other end of the tank.

Japanese homes in general do not allow much room for pets, so it is rare that at least a small goldfish tank is refused to a child. All year around this trade is profitable because watching fish adds to the sense of tranquillity that appeals to Japanese people.

Traveling Soup and Bread Shops

Another man just rings a bell and lovers of *genmai pan* know his sound. "It's not the bell, but the way he rings it!" is an exclamation made by many. *Genmai* means "whole rice," and the Japanese word *pan*, actually taken from the Portuguese language, means "bread." *Genmai pan* is not cooked in the same way as ordinary bread. This yeast dough is shaped into individual portions and steamed, not baked. Sweet-bean paste is sometimes added to the centers. Now and then black sugar is added to the dough. However, plain *genmai pan* seems to remain the most popular. The bread is inclined to be a little on the heavy side but the mild flavor makes it easy to eat.

The old man who sells *genmai pan* wears a tall, spotlessly white baker's hat and his white tunic also is a token of his cleanliness. The *genmai pan* man's summoning bell, beaming smile and clean appearance help to make his bread the choice of the noon hour for some.

In the late evening when the majority have gone to bed, a couple of long, low howls on a tinny horn lets you know who has arrived without your getting up to look. He tries to be as quiet as possible

so as not to disturb people unnecessarily. Since his tiny truck moves at a snail's pace, his red lantern and advertising flag can be seen swinging from the back of his van from a long way off. This movable noodle shop travels the streets. We call his noodles "*ramen*." They are thin noodles, served in steaming hot soup containing long green onions, thinly sliced. Students often study late and hot noodles in a disposable bowl satisfy them before they turn in for the night. These noodles are said also to settle the stomach after an all-evening drinking spree.

The *tofu* maker is also a merchant on wheels. *Tofu* is soybean curd that is said to have been made first in China. The making of these bean-curd cakes begins while everyone else is still sleeping. The result of the craftsman's hard work is a 12-ounce (340-gram) square cake of white *tofu*.

This merchant now prepares a large double-layered wooden box, which he straps onto the back of his bicycle. As the lower compartment of the wooden box is partially filled with water, it is lined with a rust-proof metal. The regular and toasted *tofu* is put into the water. The box's top compartment contains thin slices of deep-fried *tofu*. With a small horn tied around his neck, the *tofu* merchant mounts his bicycle and begins to peddle through the neighborhood of his choice. The blowing of his horn announces his arrival and before long he is busy serving his early-morning customers. For many, *tofu* is an essential ingredient in *miso shiru*, the soup served with breakfast every morning.

In the main all these vendors have something that is peculiar to them and fitting to their personal traits. Their similarity consists in their being pleasant folk who add color, fragrant odors and strange sounds to the streets of Japan.



Church Doors

AFRICA. On March 18, 1978, the "Daily Mail" of Johannesburg, South Africa, published an article entitled "Green Light for Mixed Worship." It began: "Churches in the urban areas can now open their doors to black people without permits for 'bona fide' church activities, the Minister of Plural Relations, Dr Connie Mulder, announced yesterday." However, permits are still required for large gatherings or meetings lasting longer than a day.

In an effort to prevent misunderstanding, Dr. Mulder explained: "This decision does not mean churches or church councils are now compelled to open their doors to all people at all times. What it really means is that individual churches or church councils will, in the light of their particular circumstances and in the spirit of the country's laws, in each instance decide for itself what its standpoint will be."

The announcement met with mixed feelings. While some welcomed it, one clergyman complained that "the time was not yet right" for such a move. A church official declared: "It is not our custom to have mixed congregations and we will continue to hold separate services." However, according to the "Daily Mail" report, spokesmen for some churches said that they had always had multiracial services and had never applied for permits. But regardless of how individuals may feel, permitting blacks to attend churches of South Africa that were formerly exclusively white is significant. What effect it will have on black-white relations only time will tell.

Church Government

AMERICA. Ever since the Mormon Church was established in the United States in the early 19th century, it has excluded blacks from the priesthood. In this regard, "Time" magazine noted that Mormon publications had considered dark skin "a sign of God's disfavor" and had specified that blacks were "cursed as to the priesthood."

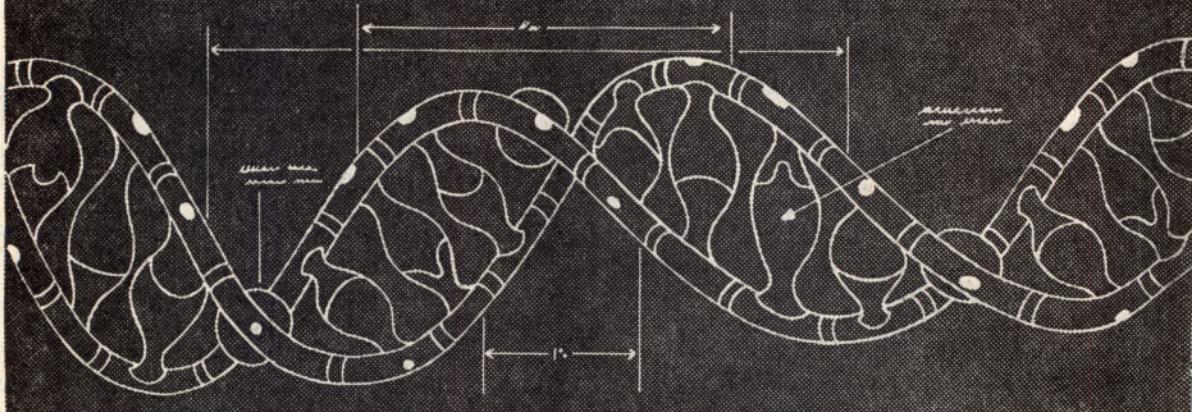
However, this doctrine has long been a source of embarrassment to many Mormons. The problem has grown in recent times with the advancement of such movements as civil rights for blacks and human rights for all persons. Stated University of Utah historian Brigham Madsen: "Church young people were mortified. They would not put up with it any longer."

So this past June, S. W. Kimball, 83, church president, announced that a new revelation had come from God that would allow blacks to become Mormon priests. Kimball stated that God "has heard our prayers, and by revelation has confirmed that the long-promised day has come when every faithful, worthy man in the Church may receive the holy priesthood . . . without regard for race or color." He noted that "the Lord has now made known his will" in this regard.

Yet, nearly two thousand years ago the Lord had already revealed his will in this matter by having the following recorded in his own inspired Word: "God is not partial, but in every nation the man that fears him and works righteousness is acceptable to him."—Acts 10:34, 35.

GENETIC ENGINEERING

Will it improve the human race?

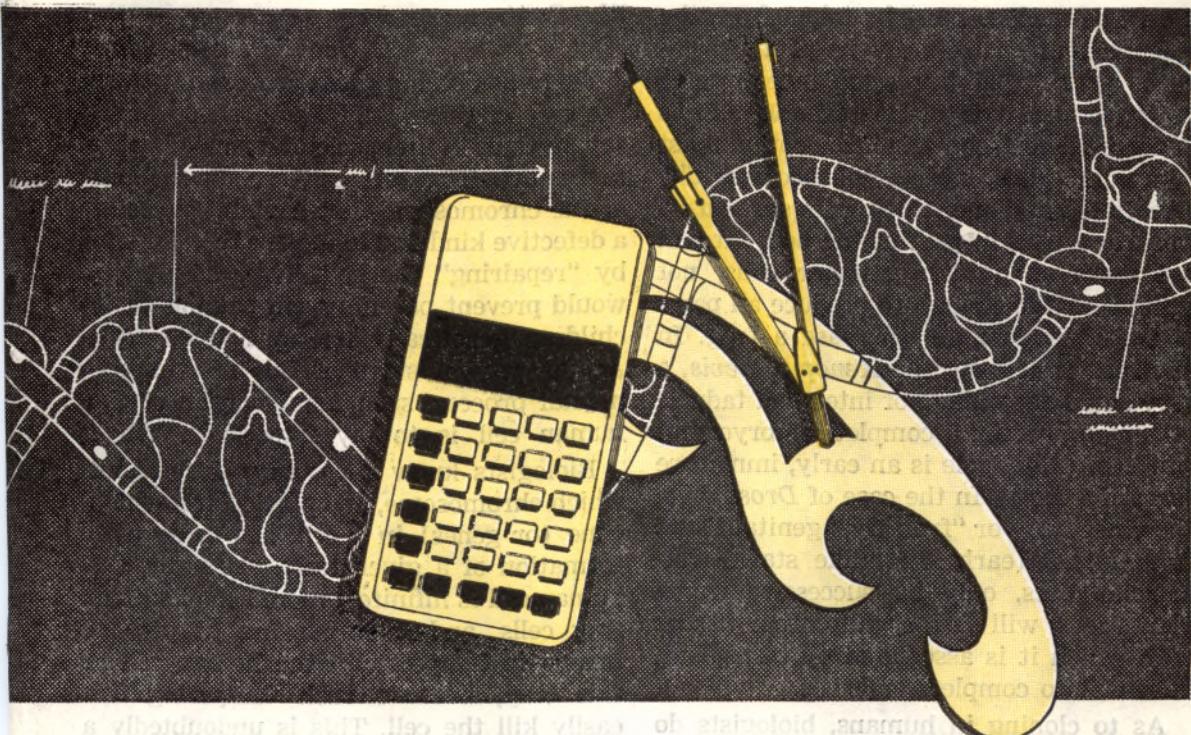


HERE is much talk about new discoveries in the field of genetics. Since the development of powerful microscopes that enable men to probe deeper into the world of the unit of life, the cell, and to see features that they never before knew existed, some researchers and journalists have theorized that men may be able to discover the complete genetic code, even the "secret of life." They extend their speculations, even forecasting that, by genetic manipulation, they will be able to cure hereditary diseases and defects and, possibly, make a race having superior bodies and intellects.

Some things have been done with the very simple life forms by way of genetic interference. But scientists almost unanimously admit that they are far, far from manipulating the genes of the human cell so that they can correct deficiencies. Let us examine a few of the things that have been done.

Cloning

The word "clone" means a group of organisms produced without sexual union from a single ancestor. In nature clones are found in organisms capable of asexual reproduction, that is, in certain plants and bacteria. The offspring inherit their genes from one parent. Therefore all individuals in a clone are genetically alike. *Artificial cloning* has been done with animals that reproduce sexually, such as sea urchins, salamanders and frogs. An egg cell is enucleated, that is, the nucleus is removed and replaced with the nucleus from the body cell of an animal of the same kind. But in every case, the nucleus taken from the body cell of an animal, and inserted into the egg of another, has to be taken at a very early stage in all but extremely simple life forms. This is because, slightly later, yet still at an early stage in the development of an embryo, the cells become differentiated or specialized and



will not serve for cloning of a total new individual. Why? For the reason that, although every body cell has the full complement of chromosomes, the differentiated cell cannot function in other parts of the body. This is because the genetic code on its chromosomes will work for only that part of the body that the cell is specialized to serve. When placed in the enucleated egg, the cloning attempt will fail. Monroe W. Strickberger of Saint Louis University, in his book *Genetics*, says about cloning:

"The cells of early sea urchin embryos, for example, can be isolated from each other at the two- and four-cell stages and nevertheless develop into complete embryos. In salamanders, Spemann showed that a single cell at the embryonic 16-cell stage could produce an entire embryo. More recent experiments by Briggs and King have shown that some nuclei from blastula and gastrula [very early] stages of frog embryos (*Rana pipiens*) are still sufficiently potent to produce a complete

embryo when transplanted into an enucleated egg. In *Xenopus laevis*, the African clawed frog, Gurdon has shown that at least 20 percent of the intestinal cells of feeding tadpoles can be transplanted and produce functional muscle and nerve cells. Furthermore, some of these intestinal cells may even produce a completely viable embryo. In plants Steward has found that individual carrot root cells can, with proper nourishment, be made to differentiate into complete carrot plants. In *Drosophila* [a vinegar fly] Hadorn has shown that larval embryonic discs which would ordinarily develop into genital tissue, for example, will, after many successive transplants, develop into other tissues as well, including parts of the head, thorax, legs and wings."

Note, in Strickberger's comments, that, in order to achieve successful cloning, the nuclei must be taken from a sea urchin when it is only in the two- to four-cell stage, and from a salamander embryo when it consists of only 16 cells—yet very

tiny. The nucleus must be taken from the blastula and gastrula stages of frog embryos (at this point no semblance or form of the creature is distinguishable). Cells of these stages soon after conception must be used because, after a cell becomes differentiated and starts doing its specialized work in a certain part of the body, it will not serve as do the younger cells, not being versatile enough to produce all parts of the individual, in this case a frog. In one species of frog, the *Xenopus laevis*, a very small percentage of intestinal tadpole cells *may* produce a complete embryo that will live. (A tadpole is an early, immature form of a frog.) In the case of *Drosophila*, the vinegar fly or "fruit fly," genital tissue from *larval* (early wormlike stage) embryonic discs, only by successive transplantations, will develop into other tissues with which it is associated by transplant, but not into complete embryos.

As to cloning in humans, biologists do not claim that this can be done, or that they are anywhere near doing so. Some uninformed persons, apparently for sensationalism, have envisioned cloned populations of humans, directed by genetic engineers, in which only the most desirable personality traits exist. Some have theorized that persons like Einstein—mental prodigies—or great athletes—could be duplicated by cloning. But note that, even in the lowly sea urchin or the salamander, the cells have to be taken at the blastula or the gastrula stage—*very early embryonic stages*, for successful cloning. Who would know at the blastula or gastrula stage of a child's formation whether he would turn out to have "Einstein-type" intelligence? At that early period of growth, there is not even a semblance of human form, and it is impossible to know then whether the individual will be healthy and intelligent, or deformed, imbecilic and of the poorest quality.

The Controversy over Genetic Engineering

There has been a great controversy over "genetic engineering." Some advocate it, saying that, in time, scientists may be able to remove from the cell certain sections of the chromosome that contains genes of a defective kind and to replace them, thereby "repairing" the cell. This, they hope, would prevent parents from passing on to children genetically transmitted diseases. At the present stage of this new experimental process, such manipulation of the human cell is totally impossible. Why?

Biologists know very, very little about which chromosome, and particularly which gene (or genes) in a cell, has to do with formation of a given trait. Moreover, the human cell is infinitely more complex than frog cells, and scientists are at present unable to tamper with the human cell in this way, because such tampering can easily kill the cell. This is undoubtedly a "safety" feature incorporated by the Creator, so that, when a cell, or even a chromosome, is damaged seriously, the cell dies. Such "safety" feature prevents further development of the embryo and birth. Otherwise many more babies would be born in a seriously deformed or mentally defective condition.

Right now genetic engineering is concentrating to a great extent on producing certain needed substances, such as insulin, and in detecting genetic diseases in human fetuses. Much of their work is focused on the manipulation of bacteria. But even here there are great fears. Also, because of the great lack of knowledge of the organisms involved, scientists, health officials and other concerned persons have been embroiled in complex arguments as to the restrictions that should be placed on genetic engineering attempts, especially when it comes to altering bacteria.

Another aspect of genetic control con-

sists of radioactive treatment of insects. The New York Times of May 17, 1978, on page A16, reports on the efforts of scientists of the University of California at Berkeley in bombarding mosquitoes with nonlethal radiation from Cobalt 60, in order to break up and transfer to another location their genetic material. The purpose is to bring about a strain of mosquitoes that have an immunity to a certain virus causing inflammation of the brain (encephalitis). They plan to release colonies of these immune mosquitoes with the hope that "in breeding with the normal mosquito population of the area the encephalitis-free genetic trait will be passed on to enough progeny to eliminate the whole mosquito population as a disease carrier." Another technique for fighting disease is the releasing of sterile mosquitoes. If enough females mate with the sterile males, the overall population should be reduced, thereby reducing the danger of human infection.

Dr. William C. Reeves, one of the experimenters in this project, spoke doubtfully of the effectiveness of such efforts, saying: "Sometimes even with well developed and effective methods, luck runs against you. You may release hundreds of thousands of mosquitoes that took three years to breed, only to have them quickly killed by a high wind or too much heat, before they can mate."

Dr. Reeves went on to say: "We've had good results in the laboratory and in test tents, but you can't always be sure something like this will also work in the natural environment."

A Better Hope

So genetic engineering holds out, perhaps, a little hope of helping those now living, and a very questionable hope, if any, for the future. Certainly such meager prospects cannot compare with the hope of

the better, lasting life that the Creator holds out to men who love him. One of the apostles of Jesus Christ, Simon Peter, wrote: "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 apostle John also held forth this hope. In the last book of the Bible—the Revelation or the Apocalypse—he recorded a vision given to him by Jesus Christ. John writes: "I saw a new heaven and a new earth . . . 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.'"—Rev. 21:1-4.

So the Creator, who knows exactly the working of the genes and all other components of the cell and of the human body, and who has humanity's interests at heart, reveals to us the real hope that exists, not merely for those who will be born, but also for the living. And he promises to help those to whom no scientist, even in his most fanciful dreams, gives any promise, namely, those who have died. For Jesus Christ himself said: "Do not marvel at this, because the hour is coming in which all those in the memorial tombs will hear his voice and come out."—John 5:28, 29.

The Question of Aging

The abolition of death means also the end of aging. Scientists do not know exactly what causes aging. They are perplexed when they see the manner in which cells divide. Leonard Hayflick, microbiologist of the Bruce Lyon Memorial Research Laboratory, Oakland, California, reports that certain experiments seem to indicate that

there is a "built-in" aging and dying process in the cells of all animal life. Normal human embryonic cells cultured in a test tube in the laboratory were found to stop dividing after about 50 population doublings (brought about by individual cell divisions). Cancer cells, which are abnormal, kept on dividing. During the population doublings the normal cells also deteriorated somewhat, so that in actual life the individual could likely age and die before the 50 doublings are completed. This harmonizes with the Bible's explanation as to the inheritance of imperfection from humankind's forefather, Adam.—Rom. 5:12.

Also, other surveys have indicated that all mammals tend to follow a certain pattern in their life-spans. The length of life seems to be largely in direct proportion to body size, and inversely proportional to heartbeat and breathing rates. A tiny shrew, for example, lives a "fast" but short life, its fast-burning metabolic rate demanding lots of food and its heart and breathing rates being rapid. In the elephant's more "leisurely" life, the processes are slower and life is much longer. But, paradoxically, the human body does not adhere to this pattern. Humans live longer than they are "supposed to," as judged by this pattern. Stephen Jay Gould of Harvard University, U.S.A., remarks: "*Homo sapiens* is a markedly deviant mammal in more ways than braininess

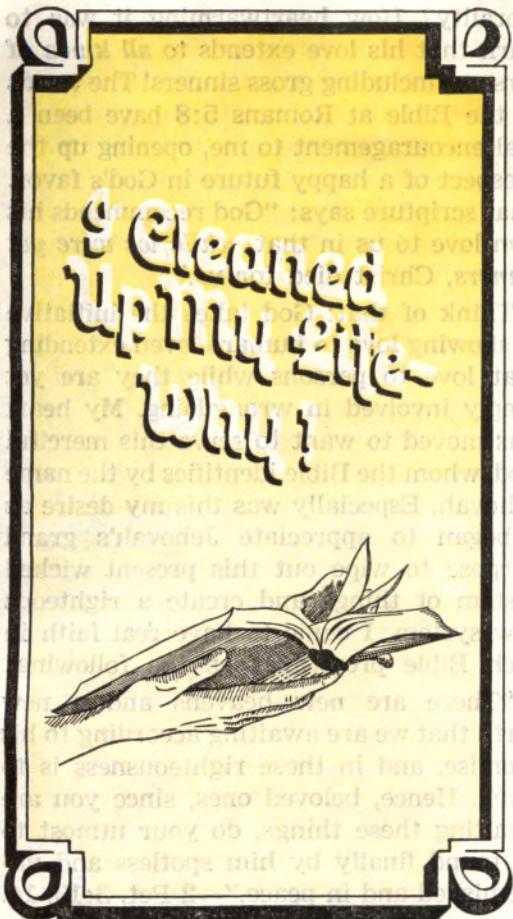
alone. We live about three times as long as mammals of our body size 'should,' but we breathe at the 'right' rate and thus live to breathe about three times as much as an average mammal of our body size."

Again, this seeming irregularity is explained by the Bible, for it shows that animals were created with a limited life-span. Not so with humans, however. The Bible record reveals that, in the early history of the human race, when it was not far from its created perfection, men lived 700 to 900 years.—Gen. 5:3-31.

If a person believes the evidences of his senses proving that there is a Creator who brought into being the galaxies, which run in amazing orderliness, and the earth, with its multitudinous living things, all interdependent, then it is not hard for him to see how such a Creator can sustain the lives of humans forever. He promises to restore mankind to perfect life through Christ's Kingdom rule. As the Creator, he is of necessity able to know and control every molecule and every step of the cell's activities. When we consider the astronomical quantity of energy manifest in the universe, we realize that it is no problem for the One in whom limitless energy resides to heal any genetic irregularities, and to supply energy for the continuation of the human life cycle indefinitely, ending aging and death, for, as the psalmist said in prayer to him: "With you is the source of life."—Ps. 36:9.

The Amazing Brine Shrimp

THE brine shrimp gets its name from being able to live in extremely salty water—water so salty that no potential predator could survive in it. But what is even more amazing about this little creature, measuring less than a half inch (1.3 centimeters) in length, is the survival capacity of its eggs. If dried of nearly every bit of moisture and thereafter subjected to a temperature of minus 310 degrees Fahrenheit (-190 Celsius), the eggs will still hatch if placed in salt water of a reasonable temperature. At the other extreme, fully dried, brine shrimp eggs retain hatching potential even after being submitted for two hours to a temperature somewhat beyond the boiling point. What remarkable evidence this is of the hardiness with which the Creator, Jehovah God, has endowed these creatures!



GREW up near the city of Liège in eastern Belgium. My early life as a young girl was far from happy because my parents had separated in the early 1960's. I was less than 10 years old at the time.

My father, with whom I lived, had never shown much inclination to work, and this caused all sorts of problems. He never took much interest in me either, and so I would come and go pretty much as I pleased. This left him unperturbed, since he very often slept elsewhere, and would not return home for days.

I left school when I was 14 and began to work! This made me feel that I had become an adult, and so I started to smoke, drink and go out with boys. The company I kept

was not good, and little by little I became involved in the way of life of these associates. At the outset, of course, I didn't do anything really bad, but I was inevitably slipping downhill toward immorality. Yet, I didn't see why I should act otherwise, since I really had no purpose in life.

Deeper and Deeper into Immorality

At the age of 15 I got a job as a waitress in a hotel near the city of Spa, and it was there that I had sex relations with a boy for the first time.

When I was 16 I lied about my age and obtained work as a barmaid. Here I struck up a friendship with one of the bar owner's sons, and soon was regularly spending the night with him. Later, I switched and started going with his younger brother.

Things quickly went from bad to worse when one of my "lovers" introduced me to homosexual-type acts. Soon I became more involved in degrading sexual practices.

About this time I was forced to find other employment. The man I was then living with wanted to marry me and take me with him to Morocco. But I became suspicious when overhearing some of his conversations with a Moroccan friend. I concluded that they intended to use me as a prostitute to support themselves.

The police now took my case in hand, and when my father finally realized what was happening, he put me under the charge of my older sister. But to show everybody that I was going to do what I wanted to do, I went out with a young man and committed fornication and unnatural sex acts. I would do things like this without the slightest twinge of conscience. And yet, rather than such an immoral way of life bringing me peace of mind and happiness, I kept growing more discontented and depressed.

A Way of Hope Opens

Late in 1971, when I was living with my sister and her husband in Liège, a handbill advertising a public talk sponsored by Jehovah's Witnesses was slipped into our letter box. Seeing the handbill called to mind my first contact with the Witnesses three years before, when I was 14. I had accepted a lady's offer of a home Bible study, but it was discontinued after a few studies when my father raised strong objections. Later, I learned that this Witness often had tried to contact me, but she was never able to since I was away so much of the time.

I thought of those earlier Bible discussions as I examined the handbill, and I wanted to attend this lecture. But I didn't go since I was looking after my sister's two small children and was afraid that they might disturb the audience if I took them along. A few days later, however, two Witnesses called at the home and their comments about God's being interested in us and our welfare really impressed me.

These Witnesses took note of the interest I showed, and my address was passed along to another Witness. When this Witness eventually called and offered to study the Bible with me on a regular basis, I readily accepted. My sister and her husband also joined in the studies.

As the seeds of Bible truth began to penetrate my heart, my way of viewing things radically changed. With horror I realized that the life I had led for the previous three years had been totally contrary to the way that our Creator desired people to live. I could see the wisdom of God's laws that condemn fornication, homosexuality and unclean conduct. These practices, it was obvious to me, don't bring true satisfaction or happiness.

But what did God think of me, in view of my being so deeply involved in im-

morality? How heartwarming it was to learn that his love extends to all kinds of persons, including gross sinners! The words in the Bible at Romans 5:8 have been a real encouragement to me, opening up the prospect of a happy future in God's favor. That scripture says: "God recommends his own love to us in that, *while we were yet sinners, Christ died for us.*"

Think of that! God takes the initiative in showing love to humans, even extending that love to persons while they are yet deeply involved in wrongdoing. My heart was moved to want to serve this merciful God, whom the Bible identifies by the name Jehovah. Especially was this my desire as I began to appreciate Jehovah's grand purpose to wipe out this present wicked system of things and create a righteous new system. I came to have real faith in such Bible prophecies as the following:

"There are new heavens and a new earth that we are awaiting according to his promise, and in these righteousness is to dwell. Hence, beloved ones, since you are awaiting these things, do your utmost to be found finally by him spotless and unblemished and in peace."—2 Pet. 3:13, 14.

Since I was now waiting in real anticipation of God's incoming new system, I was determined to make the necessary changes in my life to be pleasing to God, to be "spotless and unblemished." I wanted to survive the end of this world into God's new earth, a prospect that the Bible holds out in these words: "The world is passing away and so is its desire, but he that does the will of God remains forever."—1 John 2:17.

However, making the changes in my life wasn't easy. It is difficult to transform one's life pattern when one has been doing so many things that are out of harmony with God's will. How I wished that I had never become involved in immoral living! But by regularly studying God's Word and praying earnestly to Jehovah God, I re-

ceived the needed help to change, and it didn't take me long to do it. I cut off my former bad associations, which helped me to break free of all forms of immorality and to avoid getting drunk. One of the hardest things for me, however, was to give up the unclean tobacco habit. But I did that too. Yet this doesn't mean that everything now went smoothly for me.

Difficult Decisions

Unfortunately, my enthusiasm for the things we were learning was not shared by my sister and her husband. They did not need to make the radical moral changes that I did to conform to God's laws. Yet they continued to use tobacco. Also, my brother-in-law became annoyed because of all the time that I devoted to Bible study. So, what would I do? I decided to leave and get a job and an apartment of my own.

I now began sharing the Bible truths that I had learned with others, even speaking the good news of God's kingdom from house to house. Then, in October 1972, I was baptized in water by Jehovah's Witnesses to symbolize the fact that I had dedicated my life to our loving Creator. Now I had another decision to make, since my job prevented me from getting to all the meetings of the Christian congregation. I determined to make a job change, and so I prayed to Jehovah about the matter. I feel that he opened the way for me to get other employment.

I now began to consider how I might help my father and younger brother to become acquainted with God's purposes. So, late in 1972, I invited them to come and live with me, hoping that my Christian example and the things I would show them from the Bible would move them to serve Jehovah God. They accepted my invitation, but soon I was disillusioned. For, instead of accepting Bible truths, my father returned to his former way of life. He wanted

me to support him, and he manifested no desire to apply righteous principles in his life. My brother had the same attitude. So I obtained another apartment and moved out.

Once again I prayed earnestly to Jehovah—this time for help to find a job by means of which I could support myself in full-time activity of sharing the "good news" with others. Jehovah blessed my efforts, and I quickly obtained a suitable part-time job. Thus I began the full-time witnessing work as a pioneer in March 1973, and in December 1973 I was appointed as a special pioneer.

After three years in this service, I got married in November 1976. Although my witnessing activities were now limited, I always nourished the desire to undertake once again the full-time witnessing work. Today, I am happy to be able to share again in that rewarding activity.

A Happy, Rewarding Life

As I reflect back on my life just a few short years ago, I'm so grateful that I was moved to respond to God's love and was determined to serve him with all my heart! What a contrast between my life now and what it was then! I now have peace, contentment and a clean conscience. I would never have imagined that one day I would be able to experience so much happiness. Jehovah is truly very kind and merciful because he has made it possible for me to come to know and serve him. Even decisions that resulted in certain anguish have turned out to be a cause for joy.

For example, when I left my sister's home so that I could more freely serve Jehovah, she criticized me. She complained that I was abandoning her with all her work and that she would have to care for her children by herself. But since my decision was made after prayerful consideration, I was convinced that I had done the right thing. How glad I was, therefore,

when one day my sister got in touch with me and asked that we again study the Bible together! This time she quit smoking, and on May 11, 1974, she was baptized in symbol of her dedication to Jehovah. What joy this brought me!

This moved me to try reviving the interest of other members of my family. Finally, my younger brother accepted Bible truth and dedicated his life to Jehovah. I have also been blessed abundantly in seeing two young girls with whom I have studied the Bible progress to the point of

dedicating their lives to Jehovah. Also, my marriage has given a more solid foundation to my everyday life and I am happy to be able to serve Jehovah together with my husband.

How faith-strengthening and rewarding it is to be used to help other persons to serve God! I am convinced that all honest-hearted persons, regardless of how far they may have sunk in a course of wrongdoing, can transform their lives by turning for help to our merciful, loving God, Jehovah.

—Contributed.

medical man might well understand the word "shakes" to refer to an uncontrollable trembling. Other individuals might think of handclasps, as when congratulating someone or showing agreement. Similarly, when hearing the word "shingles," some persons think of stretches of fine pebbles at the seashore. Our medical friends could just as easily think of areas of the human body erupting in sores because of nerve-end irritation. Still, all could be correct. As for the word "froes," many might say that they had never heard of it. In fact, a search in most dictionaries might not even provide a definition.

However, in this case we are using the language of the construction man when talking about roofing. In some countries, roofing material can be thin sheets of slate, or baked clay tiles, or their more modern asphalt substitute. When settling the United States and Canada, men used whatever materials were at hand to run the rain off roofs. They even employed sod cut from the prairie earth. Farther westward and near the Pacific coast, giant cedar trees were found. These possessed a type of grain and splitting qualities somewhat unique in treedom. So straight, indeed, were the splitting qualities of this

What do you mean by "shakes," "shingles" and "froes"?

By "Awake!"
correspondent
in Canada



IN THE English language, many words can be understood in different ways. A

wood that even framing could be split and used successfully. Some houses were built without any sawn lumber at all, even the paneling being split thin and wide from logs cut from the main trunk of the tree. Since the diameter of many of the trees was over 10 feet (3 meters), and that of some was even 20 feet (6 meters), there was an abundant supply of wood available.

An average "shake" is a thin, split panel of cedarwood, some 26 inches (66 centimeters) long and usually tapering from a half-inch (13-centimeter) thickness to a fine edge. Special ones can be 18 inches (46 centimeters) long. Shakes vary in width and can be as small as three or four inches (7.6 or 10 centimeters), or as wide as 12 inches (30 centimeters) or more. In earlier days, a durable roof of shakes could be built rapidly. Later, shingles, which are thinner than shakes, came into use. These are sawed and, therefore, a roof of shingles has a flatter, more finished appearance. However, due to the rougher surface left by the saw cut and their being less resistant to the penetration of moisture, shingles do not last as long as shakes. Since many people like the rustic effect of the shake roof, shake splitting continues to meet this demand.

But what is a "froe"? It is the tool developed for splitting shakes. A froe must have an edge that enters the cedar block when the froe is tapped. This tool must also be 16 inches (41 centimeters) long and must have an upright handle of strong wood to enable the user to turn the blade so as to pry off the shake.

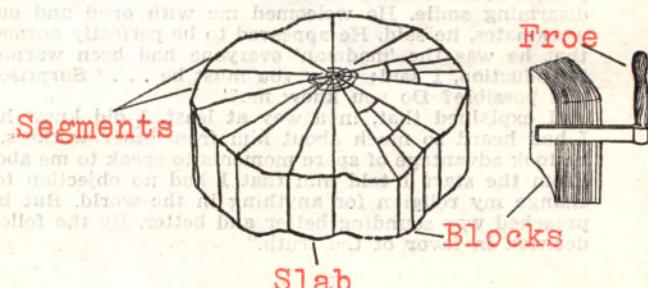
Now let us return to our construction men to whom shakes, shingles and froes are no mystery. This particular group consists of volunteers working in Surrey, British Columbia, on the erection of a fine assembly hall for Jehovah's Witnesses of

that area. Since a good supply of shakes was needed, just where would a suitable tree be found? The supply of such trees diminishes every year. Nevertheless, an available tree was located some 60 miles (97 kilometers) to the northwest.

One fall weekend a group left the Surrey area early to catch the ferry leaving at Horseshoe Bay for the one-hour crossing of How Sound to Langdale on the Sechelt Peninsula. Then the journey by road resumed for the final lap. The mountain, forest and fjord scenery enjoyed during the two-and-a-half-hour trip was simply magnificent.

The time came for leaving the paved road running east along Porpoise Bay and for taking a logging trail. At last the goal was reached—a dead giant of a tree some eight feet (2.4 meters) in diameter and perhaps 180 feet (55 meters) tall. No wonder the tree had been left behind! To fell it could mean hitting the nearby transmission lines and having to pay a fine greater than the value of the tree. Hence, the top 75 feet (23 meters) of the tree had to be cut first. Next the main part was felled. Soon the trunk was being sawed into 18-inch (46-centimeter) slabs.

With one slab ready, shake-making could begin. First, the slab is halved across its center and then segmented as often as necessary to form blocks small enough for easy handling. Examining one of the blocks, we note that the end grain has the curve of the tree's ring growths. The side



grain, however, is straight up and down and is fine and slightly ribbed. This is the face to use on outer surfaces, as it has a natural corrugation that will quickly dispose of any rain. The split wood has a pleasant fragrance—evidence of the natural decay-resistant oils within.

We watch the placing of the froe on the block, ready for the blow of the mallet that will drive it into the cedar. The experienced worker agrees to slow down for the next shake. He also explains that the froe is really on a line that points to the center of the tree, not on the line of the tree's growth rings, as that would produce an inferior product with no fine-grain corrugations for shedding rain. Placed about a half inch (1.3 centimeters) in from the edge of the wood and parallel to it, the froe is ready. The mallet descends and the steel blade enters the wood. A quick forward motion of the handle and the blade

turns enough to pry the thin slab loose. The result? An 18-inch parallel shake, about half an inch thick.

But how can a tapered shake be produced? Experience soon revealed that, in a split of about 26 inches (66 centimeters), the grain of the block, tearing slightly, caused a gradual thinning of the shake to just the right taper. The next split, also causing the same tearing of the grain, would result in a parallel shake. However, if the block is turned over and then split, another taper results. Parallel shakes can be made faster, as there is no need to turn the block.

Eventually splitting, transporting and using the shakes to complete the outside of the assembly hall came to a finish. The end product was a delight to the beholders and brought back happy memories to those who had shared in procuring the building materials directly from the native forest.

Even Misrepresentations Can Advertise Truth

SERVANTS of God should not be surprised when others misrepresent them and their message. The Christian apostle Peter wrote to fellow believers: "Because you do not continue running with them in this course to the same low sink of debauchery, they are puzzled and go on speaking abusively of you." (1 Pet. 4:4) At times such talk serves to stir in others an interest in the Bible's message.

A man from the Republic of Senegal relates what happened the first day on a new job: "I was assailed by intense propaganda from my fellow workers against another man who was not at work that particular day. 'He's mad,' they said. 'He can't talk about anything except God and is always trying to turn people away from their religion. Watch out! He'll try to get you away from your church too.'

"Frankly, I was puzzled. These people didn't even know me. Why were they all showing me such 'consideration' and 'kindness'? It made me rather curious, and I was anxious to meet this 'madman' who was so detested.

"On the morning of my third day of work there I was met by someone I had not seen previously. He was enthusiastic about life. Outstanding were his sunny disposition and disarming smile. He welcomed me with open and outstretched arms. We were to be workmates, he said. He appeared to be perfectly normal in every way. But I was certain that he was the 'madman' everyone had been warning me about. Without any other introduction, I said: 'Why you must be . . .' Surprised, he said, 'Why, yes. But how is this possible? Do you know me?'

"I explained that, in a way at least, I did know him because for two days already I had heard so much about him from other workers. Since we had to work together, he took advantage of spare moments to speak to me about the good news of the Kingdom. From the start I told him that I had no objection to his talking but that I wouldn't change my religion for anything in the world. But by that afternoon the message he preached was sounding better and better. By the following day I had already made my decision in favor of the truth."

The Bible's View



Should a Christian Serve on a Jury?

MANY persons look to the courts or judicial system for justice. In lands where what is called "civil law" prevails, legal cases (both criminal and civil) are usually heard and decided on by a single professional judge, or by a panel of justices. But a distinctive feature of "common law" countries is the use of juries composed of average citizens. A jury of 12 or so persons hears the evidence and determines guilt or innocence. Then, depending on the type of case, the judge may sentence the guilty parties.

Naturally, if you live where the possibility exists of being called for jury duty, you might well ask, Should a Christian serve on a jury? But even if you live where such juries are not used, you can profitably consider the question, for some of the relevant Bible principles can apply to you if you are asked to "judge" in a dispute on your job or to "mediate" some dispute in your neighborhood.

What Christian Obligations?

Serving as a juror is often described as a valid civic duty. It has been reasoned that all citizens benefit from courts and so should be willing to be jurors, even as all benefit from other governmental

services and so should pay taxes for these.

This view is of interest to Christians because of what the apostle Paul wrote about governmental "superior authorities." He counseled: "You must all obey the governing authorities. . . . The state is there to serve God for your benefit. . . . Pay every government official what he has a right to ask—whether it be direct tax or indirect, fear or honour."—Rom. 13:1-7, *The Jerusalem Bible*.

Understandably, Paul did not here mention serving on a jury, for under Roman rule there were no citizens' juries as now exist under Anglo-American law. Still, some persons have reasoned that the local or national government is "taxing" one's time in requiring any qualified citizen to serve briefly as a juror. And it is noteworthy that in most places being a juror does not involve sharing in political matters, which a Christian would not do because of his neutral position. (John 15:19; Isa. 2:1-4; Acts 5:29) Hence, some Christians have concluded that they ought to accept jury duty.

Other Christians, though, have decided otherwise. For example, in 1966 the Supreme Court of Appeals of West Virginia upheld a Christian who refused jury duty. The court opinion reported that he

"stated that it violated his personal freedom of conscience to serve as a juror and that he felt he had authority under his religious beliefs to serve within his congregation with power to judge or decide but not to so serve outside his congregation and cited quotations from the scriptures to support his belief." (*West Virginia vs Everly*)

What scriptures do you think he had in mind? Some have referred to Jesus' words in Matthew 7:1, 2: "Stop judging that you may not be judged; for with what judgment you are judging, you will be judged." However, the context shows that Jesus was speaking about a personal or private type of judging, such as criticizing the personal habits and preferences of others. (Rom. 14:1-4, 10) However, a minister might well refer to Luke

12:13, 14 and 1 Corinthians 5:12-6:8.

The first passage tells of a Jewish man who asked Jesus to judge in a legal dispute over inheritance. Christ refused, saying: "Who appointed me judge or appportioner over you persons?" The congregation of Israel had God's laws on inheritance and designated older men to resolve disputes of that sort. Moreover, Jesus was not sent to earth to arbitrate in such a matter, but was commissioned to use his time preaching the Kingdom good news.

The second passage pertains to a case of wrongdoing in the Corinthian congregation. Paul directed the brothers to expel the wrongdoer. Then the apostle added: "For what do I have to do with judging those outside? Do you not judge those *inside* [the congregation], while God judges those outside?" He went on to state that Christians should strive to avoid even taking their grievances or disputes to worldly courts for handling.

This Biblical counsel certainly should alert Christians to be slow about getting involved in others' personal differences, especially those outside the congregation. And you can appreciate why the Christian in West Virginia might conclude that his efforts to 'judge or decide' matters should be confined to the congregation, rather than be a juror in a secular court of law.

Some Christians have also reflected on the types of cases that jurors might face. For instance, in some places capital punishment is a possible or mandatory sentence for a person found guilty of certain crimes. While the Bible upholds a government's right to execute a murderer, the individual asked to serve as a juror might question whether he could decide solely on the information presented at a trial. (Gen. 9:5, 6) Or a case could involve abortion, divorce, child custody, or another issue on which the Christian follows God's thinking even when the law of the land differs.

So could he agree, such as when being examined for jury selection, to make his decisions strictly according to civil law?

A different problem is illustrated with a nurse in Texas who was a juror at the trial of a young man, son of a prominent family, who was accused of beating to death another youth. During the trial she realized that on her job at the hospital she had seen X rays of the victim, which were rejected as evidence at the trial. Unlike the other jurors, she could not accept the claim that the injuries came from an accidental fall. The others, though, pressured her to side with them to avoid a "hung jury" and subsequent retrial. The nurse, having studied the Bible with Jehovah's Witnesses, resisted for days. But finally she agreed to vote for acquittal. Though years have now passed, her conscience still troubles her; she feels that she was part of a miscarriage of justice. Even in other ways, might this sort of problem arise for a Christian juror? It is something to consider.

What to do? Some Christians have refused jury duty, perhaps mentioning to the authorities how impractical it would be to compel a person to sit through a trial and then have a "hung jury" because he feels he would not want to pass judgment on anyone's guilt. (1 Pet. 3:16) Other Christians, though, have accepted jury duty but have asked to be excused from those cases where they felt their Bible-based thinking would be at variance with secular laws. Still others have accepted any jury assignment, feeling that it is Caesar's right to oblige persons to serve in the civil capacity of hearing evidence and honestly deciding on questions of fact or guilt. (Matt. 22:21) Since the Bible does not pointedly discuss jury duty, each one must personally decide what to do after considering all that is involved in jury service, as well as Bible principles and his own conscience.

Watching the World



'Reward for Neutrality'

◆ The Rhodesia *Herald* recently reported on "some tales of unexpected reward for the [Jehovah's] Witnesses' reputation of political neutrality." Citing one case, the newspaper said: "An armed terrorist boarded the bus [carrying delegates to a Witness convention in Salisbury] and laid claim to all the money on the bus, which included the return bus fares. He then commanded the passengers to sing revolutionary songs, but, because of their faith, which demands political neutrality, they refused. The terrorist threatened to bayonet them, but at that point the bus driver interceded for them, explaining their religious convictions, and the terrorist promptly left the bus." The busload of Witnesses received an additional "reward" for their neutrality. The bus company "granted them a free return passage back to their homes," says the *Herald*.

Ancient African Technology

◆ Anthropologists have discovered that the Haya people of Tanzania were able to produce carbon steel as far back as 2,000 years ago. According to *Time* magazine, "a technology this sophisticated was not developed again until nearly 19 centuries later, when German-born Metallurgist Karl Wilhelm Siemens . . .

recovered from a bus robbery \$37 now worth \$1,000. The bus had been held up by a group of armed men who had been sent to arrest a man named Kipkemboi, who was accused of being a member of the Kenyan People's Liberation Army. The bus driver, who had been driving for 20 years, was able to produce the first high-grade carbon steel." The anthropologists found that the Hayes had abandoned steel-making about 50 years ago, when cheap European steel tools became available. But the very old tribesmen could still build a working furnace of slag and mud for the researchers. The 2,000-year-old remains of 13 nearly identical furnaces were discovered in excavations along the shore of Lake Victoria. This "will help to change scholarly and popular ideas," said the scientists, "that technological sophistication developed in Europe but not in Africa."

Pius XII—Peacemaker?

◆ Formerly secret World War II documents, recently turned over to the U.S. National Archives, reveal much about the role of Pope Pius XII during the war. The information was taken from decoded messages radioed by various Japanese envoys to Tokyo. "A great many people think the pope might do a lot to bring about peace but he will not broach the subject," radioed Japan's ambassador in Berlin. The report by Thomas O'Toole of the Washington Post observes: "The documents make clear that the Vatican exercised little moral leadership during the war. It appears that the pope was more con-

cerned with the bombing of Italy and the collapse of the Germans on the Russian front than he was with bringing about peace."

War "Games"?

◆ When the North Atlantic Treaty Organization (NATO) staged this year's "war games" in the Federal Republic of Germany, they became deadly serious for at least 13 persons. "A U.S. pilot died in a helicopter crash and another American was killed in a crash between an army truck and a car," reports *Newsday*. "Four German soldiers, a Canadian soldier and a British soldier also died in the mock war."

The "Why" of Cervical Cancer

◆ English medical researchers have discovered a reason why women who lead promiscuous sex lives are far more susceptible to cervical cancer than are virgins or monogamous women. Dr. Albert Singer of Sheffield University and his Australian associate have demonstrated that a factor that can lead to cancer is carried by a certain kind of male sperm. The factor is a basic protein called a histone, known to be harmful to cervix cells. "Dr. Singer's work has shown that a woman, by being involved sexually with several men, increases the risk of meeting with one who is carrying this high-histone factor," reports the *London Daily Mail*.

Who Attend Most?

◆ In an article entitled "How 60,000 Women Feel About Religion and Morality," *McCall's* magazine reported on a recent survey in which women were asked whether they attended church meetings during the week as well as on weekends. According to the survey, those "most likely" to do so were "Jehovah's Witnesses (91 percent), Mormons (52 percent) and Baptists (48 percent)." The article also reported: "On

the other end of the scale, 59 percent of Unitarian-Universalists, 36 percent of Jews, 29 percent of Christian Scientists and 26 percent of Episcopalians say they "virtually never" attend church."

Accounts \$50 Billion Off

◆ "International accountants have turned up a \$50 billion shortfall" in the overall balance of payments in trade among nations, according to *Industry Week* magazine. This finding resulted when the Organization for Economic Cooperation & Development (OECD) tried to reconcile the accounts of the world's nations. Why the discrepancy? It is thought that "the missing money went into unrecorded black market currency dealings, secret payments for weapons, and unpublicized bribes," says the journal.

"Common" Politicians

◆ Sessions of the British House of Commons are regularly broadcast to the English public. Apparently, what this reveals about the politicians is unsettling. "It is now clear that Parliamentary broadcasting is doing serious damage to the public reputation of the Commons," observes London's *Daily Telegraph*. "Most listeners are shocked, some even revolted, by what sounds to them like the incoherence, rudeness, and even childishness of what goes on in the Lower House."

Smoke Smites Women

◆ Smoking husbands may have an unwitting share in taking their nonsmoking wives with them to an early grave. A statistician at Pennsylvania's Edinboro State College found that the wives of regular smokers had a life-span 5 percent shorter than that of those married to nonsmokers. He and his assistants interviewed over 8,000 surviving spouses in Erie County, finding that at death the average age for wives of nonsmokers

was 78.8 years and for wives of smokers, 74.7.

U.S. Health, Education and Welfare Secretary Califano reports that while the lung-cancer death rate among men aged 45 to 64 has doubled since 1950, for women it has quadrupled. He also declared that 75 percent of heart attacks among women under 45 would not have occurred if they had not smoked.

China's Ambitious Project

◆ According to news sources, in the People's Republic of China preliminary surveying has been completed for building a series of great canals to divert water from the Yangtze River into North China's dry agricultural areas. "Surface water and underground water have been utilized to the greatest possible extent but are still inadequate," says Peking's *Kwangming Daily*. "Water . . . shortages in North China have become more and more serious in recent years." The planned man-made river, which would redirect about 5 percent of the Yangtze's water over a 700-mile (1,100-kilometer) route, is said to be one of the most ambitious projects in history.

All-Woman Factory

◆ After its first year of operation, Yamaha Motor Company's all-woman motorbike factory "has proved to be an outstanding success," reports Tokyo's *Daily Yomiuri*. Management concern that productivity would drop was dispelled when 25,000 more motorbikes than initially planned were produced. The women proved so skillful at precision work that the rate of unusable damaged goods was also reduced.

Pungent Prescription

◆ Garlic can lower cholesterol levels in the blood, claims a researcher in the Federal Republic of Germany. Professor Hans Reuter of Cologne asserts that he has proof of

garlic's ability to help to clear fatty accumulations in blood vessels, thus helping to combat heart attacks. "Tests showed that volunteers fed butter containing 50 grams of garlic oil in gelatin capsules had a cholesterol level considerably lower than that of a control group fed butter without garlic," says a United Press International dispatch, adding: "In another experiment, patients ate 3 grams of raw garlic daily. After 4 weeks their cholesterol level dropped markedly." Reuter says that to get the full benefits, fresh, not powdered, garlic must be used. As to the problem of odor, he remarks: "If everybody were to eat garlic regularly, as in many southern countries, the smell would bother no one."

Smallpox Still Plagues

◆ An English woman recently came down with smallpox—a disease thought to have been conquered by medical science. However, in this case, medical science appears to have been the culprit. It has been suggested that she contracted the virus from a medical research lab on the floor below the one on which she worked as a medical photographer. Though the victim appeared to be recovering, two other persons did lose their lives in the case—her father, who had a heart attack upon learning of his daughter's disease, and the scientist whose lab contained the virus for study. He apparently committed suicide.

Explosive Surgery

◆ A 26-year-old Danish patient literally exploded on the operating table, according to two doctors writing in the *Journal of the Danish Medical Association*. They were using an electrically heated surgical knife that burned through the patient's digestive tract wall and ignited explosive gases within the tract. The explosion destroyed part of his colon

and he later died from blood poisoning, after further operations to repair the explosion damage. The doctors recommended extra care in the use of heated surgical knives.

Untapped Energy Source?

◆ "If the energy required to maintain the fat on overweight Americans were used to generate electricity," says an Associated Press report, "it could supply the annual residential needs of Boston, Chicago, San Francisco and Washington, D.C." Two University of Illinois scientists also calculated that if all overweight adults dieted to their proper weights, the energy saving would be equal to that in 1.3 billion gallons of gasoline. Maintaining their weight at this level would save as much energy as it takes to run nearly a million automobiles each year.

First Wave-Power Plant

◆ An electrical generating plant using ocean-wave energy as its source of power recently began experimental operation off the coast of Japan. It is claimed to be the world's first big wave-activated power plant. The plant is called "Kaimei" ("Sea Light"). It uses air compressed by wave swells to drive turbine generators. When all turbines are installed, it is hoped that it will generate a maximum of 2,000 kilowatts. The 40- by 260-foot (12- by 80-meter) power plant is said to look like a 3,000-ton tanker.

Assistance for Criminals

◆ By means of the 1975 Freedom of Information Act, the U.S. congress gave citizens the right to search government files for information about themselves. Since that time, it has turned out that among

the most persistent searchers have been criminals. Of 60,000 requests for information from the FBI, about 2,500 reportedly are from such persons. One criminal told a Senate subcommittee that he had filed many requests in an effort to "identify informants" who had reported on his activities. His reason? "To eradicate the informant." Government clerks try to remove names and other clues from the information before it is passed on.

Big Life-Span Gain

◆ Just 30 years ago Japanese people lived, on the average, about 50 years. Now they live longer than people in any other country. Japanese men can expect to live an average of 72.69 years and women, 77.9 years. Life expectancy in the countries closest on the scale to Japan is, reportedly, 72.12 for Swedish men and 77.83 for Norwegian women.

the more people became interested in the "new" form of communication. On Oct. 20, 1970, the first live television broadcast was made by the People's Broadcasting Service (PBS) from the People's Television Center in New York City. This was followed by a series of broadcasts from around the world, including from Mexico, Canada, Australia, and Japan.

The first PBS broadcast was on Oct. 20, 1970, featuring a program titled "The Power of the People." The program was hosted by a man named Tom Hanks, who was later to become a well-known actor. The program was produced by a group of people from the People's Television Center in New York City. The program was a mix of news, politics, and entertainment, and it was a success. It was followed by many other programs, including "The People's Voice," "The People's Choice," and "The People's Choice II."

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