

From Noah's Ark to Australia

The Dancing Lights of Northern Nights

Relaxing the Mind to Go to Sleep

No Blood, Please!

THE REASON FOR THIS MAGAZINE

News sources that are able to keep you awake to the vital issues of our times must be unfettered by censorship and selfish interests, "Awake!" has no fetters, it recognizes facts, faces facts, is free to publish facts. It is not bound by political ties; it is unhampered by traditional creeds. This magazine keeps itself free, that it may speak freely to you. But it does not abuse its freedom. It maintains integrity to truth.

The viewpoint of "Awake!" is not narrow, but is international, "Awake!" has its own correspondents in scores of nations. Its articles are read in many lands, in many languages, by millions of persons.

In every issue "Awake!" presents vital topics on which you should be informed. It features penetrating articles on social conditions and offers sound counsel for meeting the problems of everyday life. Current news from every continent passes in quick review. Attention is focused on activities in the fields of government and commerce about which you should know. Straightforward discussions of religious issues alert you to matters of vital concern. Customs and people in many lands, the marvels of creation, practical sciences and points of human interest are all embraced in its coverage, "Awake!" provides wholesame, instructive reading for every member of the family.

"Awake!" pledges itself to righteous principles, to exposing hidden foes and subtle dangers, to championing freedom for all, to comforting mourners and strengthening those disheartened by the failures of a delinquent world, reflecting sure hope for the establishment of God's righteous new order in this generation.

Get acquainted with "Awake!" Keep awake by reading "Awake!"

PUBLISHED SIMULTANEOUSLY IN THE UNITED STATES BY THE WATCHTOWER BIBLE AND TRACT SOCIETY OF NEW YORK, INC. 117 Adams Street Brooklyn, N.Y. 11201, U.S.A.

WATCH TOWER BIBLE AND TRACT SOCIETY
Watch Tower House, The Ridgeway London Name of the Control o London N.W. 7, England GRANT SUITER, Secretary England

Average printing each issue: 5,400,000

5d a copy (Australia, 5c; South Africa, 31/24) Yearly subscription rates for semimonthly editions America. U.S., 117 Adams Street, Brooklyn, N.Y. 11201 \$1
Australia, 11 Beresford Rd., Strathfield, N.S.W. 2135 \$1
Canada, 150 Bridgeland Ave., Toronto 19, Ont. \$1
England, Watch Tower House \$1 The Bidgeway, London N.W. 7
New Zealand, 621 New North Rd., Auckland 3
South Africa, Private Bag 2, P.O. Elaudsfontein, Trl. 8/6 90c 70e (Montbly editions cost half the above rates.)

Remittanees for subscriptions should be sent to the office in your country. Otherwise send your remittance to Brooklyn. Rollee of expiration is sent at least two issues before subscription expires.

Now published in 26 languages

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

Monthly—Chinese, Cinyanja, Hilligaynon, Malayalam, Polish, Tamil, Ukrainian.

CHANGES OF ADDRESS should reach as thirty days before your moving date. Give us your old man new address (if possible, your eld address label). Write Watch Tower, Watch Tower, House, The Ridgeway, London N.W. 7, England.

Entered as second-class matter at Brooklyn, N.Y. Printed in England

The Bible translation regularly used in "Awake!" is the New World Translation of the Holy Scriptures, 1961 edition, When other translations are used, this is clearly marked.

CONTENTS

Meeting Daily Challenges Successfully	3	A Trip into India's Past	21
From Noah's Ark to Australia	5	Interesting Legend	24
What a Day!	8	Something to Drink When	
The Dancing Lights of Northern Nights	9	Friends Get Together	25
Relaxing the Mind to Go to Sleep	12	"Your Word Is Truth"	
Lightning Facts	16	What the Bible Says	
No Blood, Please!	17	About Use of Images	27
Electric Batteries	20	Watching the World	29



Volume L London, England, January 8, 1969

Number



IT WAS a beautiful summer day as a family of vacationers were speeding along on a highway in the midwestern United States. Suddenly the occupants of the car received a severe jolt as the car lurched onto the shoulder of the highway and just as quickly came back again onto the pavement. Surprised, one of the family asked the one driving: "What happened? Why did you do that?"

He replied: "Ahead in the next lane a-car was trying to pass another and so was coming straight for us. Had I not swung the car out onto the shoulder of the road in just the nick of time, we would have had a head-on collision."

That driver met a challenging situation successfully. Had he been daydreaming instead of keeping alert, 'paying heed to his steps,' as the Bible puts it, there would without a doubt have been a serious highway accident.—Prov. 14:15, AT.

We all may be said to be traveling on the highway of life, on which we are continually brought face to face with challenges. These may be challenges to our alertness, as in the case of the foregoing true-life story. They may be challenges to our keeping integrity toward God or toward our loved ones. Or they may be challenges that test our emotional maturity or our resourcefulness. These challenges may come as temptations, as pressures, as threats of violence or as emergencies. Helping us to meet such challenges is the counsel found in the Word of God.

There is the challenge of prosperity, of success, of advancement. How will you meet that challenge? If you get an unexpected raise in wages, will you take that as a signal to "splurge," that is, spend money foolishly. just because you are now earning more? Or, if advanced above your fellows at your place of work or in your congregation, will you let it go to your head, as it were? Will you beam with self-confidence so that everyone will see how pleased you are with yourself? Or, like the proverbial corporal, will you become bossy just because you have been given a little authority? Yes, success brings with it challenges to keep modest, humble, to exercise control of your emotions and to continue to manifest empathy to those about you. God's Word counsels modesty.—Prov. 11:2.

Or the challenge may be of the very opposite kind. You have made a slight mistake and your employer becomes unreasonable. He may make 'a mountain out of a molehill,' may get sarcastic, may 'rub it in,' or you may be blamed for something for which you were not wholly responsible. Then what will you do? Will you become angry, shout, forget you are talking to one who is your superior as far as your job is concerned and so forget to be respectful? Or will you feel sorry for yourself and so cherish resentment? All such is most unwise and will only make bad matters worse. Manifesting pride in such situations is a costly luxury, certainly not worth the price in worsened relations. Yes, on such occasions exercise restraint, even as God's Word counsels, so that you do not add fuel to the flames. -Eccl. 10:4.

Within the family circle there are bound to be tests of love, of loyalty, of longsuffering, all of which are challenges that one should want to meet successfully. When one's mate does something foolish, such as making an ill-advised remark in public or making an ill-advised purchase, this represents a challenge as to whether one will show understanding, love and empathy or will respond with harshness. A widower who had lived for many years with a tactless wife had the right idea. When asked how he had been able to put up with her all those years, he gently smiled and said, "She made a man out of me." By this he meant that learning to make the best of trying situations by exercising self-control had helped give him emotional maturity. In this regard marriage may be said to be like a training school where each one learns to put up with the other's shortcomings and, while working at his own, understandingly seeks to help the other to do the same. So let your mate's shortcomings help to improve your personality, even as the oyster makes a pearl from the irritation of a grain of sand.-Eph. 4:31, 32; Col. 3:13.

Then again, a challenge to a mate's loyalty may be presented by his being thrown into close proximity with a charming member of the opposite sex. Will he welcome or initiate flirtatious doings or will he meet this challenge successfully? Never before has there been so much temptation in this regard and never before have so many succumbed to it as in modern times. In Joseph, the most beloved son of the patriarch Jacob, the Bible contains a marvelous example for all to imitate. He certainly found himself face to face with a strong temptation to take advantage of his master's trust and his mistress's fondness, but he kept integrity. meeting the challenge successfully.—Gen. 39:1-23.

Challenges are also faced by those who engage in the Christian ministry. When people use abusive speech or threaten violence, what will the Christian minister do? Reply in kind? That would not be meeting the challenge successfully. Rather, he will do well to remember that "an answer, when mild, turns away rage."—Prov. 15:1.

Many more examples might be cited. such as in the parent-child relationship, the teacher-student and the physicianpatient relationship. But the foregoing examples suffice to show that Bible principles can help us to meet daily challenges successfully. So, are you driving on a literal highway? Then 'pay heed to your steps.' Have you unexpectedly blessed with prosperity or advancement? Practice self-control and remain humble. Has one close to you been injudicious? Then show forgiving love. Does a stranger tempt you to be indiscreet? Then remember to remain loyal to your true love. Do you come face to face with abuse? Then keep calm and mild. Such is meeting daily challenges successfully.

FROM NOAH'S ARK



W HEN James Cook, an English explorer of the eighteenth century,

set foot upon the east coast of Australia, he did more than discover a continent new to the British. He not only bridged an ocean, but he also bridged a gulf in animal life. He discovered a continent of animals unlike anything in the "old world."

The oceans that divide Australia from the continents of Europe and Asia remind one of the huge gulf that separates the types of animals found in these places. This division is fundamental. It involves the entire life cycles of major divisions of animals.

Among Australia's animal life are found most of the world's mammals that are classified as marsupials, those that carry their young in a pouch. About half of the native animals 'down under' are marsupials. At birth the young are very small and relatively undeveloped, so they crawl into the mother's pouch where they are nourished until fully developed. The kangaroo, wombat, Tasmanian wolf, koala and others are marsupials native to Australia.

Mammals found on the other continents are principally the placentals, whose young are developed in the mother's womb and are nourished there by the mother's placenta.

No Support for Evolution

At the time of Cook's discovery in 1770, Charles Darwin had not yet propounded his theory of evolution. But when he later did so the wide difference between the marsupials of Australia and the placentals of the rest of the world was seized upon to support his theory.

So widespread has been the acceptance of this supposed proof that it is hard to find a book dealing with Australian animals that does not take it for granted. An example of this is in the foreword of the book *A Continent in Danger*, which says: "For 60,000,000 years the marsupials [in Australia] evolved in a thousand different directions to fill every parallel food niche the continent offered. They became, literally, like nothing on earth."

The theory of evolutionists in this regard runs something like this: the placentals, they say, have evolved higher than the marsupials. Because of this superiority they have succeeded in effacing these marsupials from the other continents, for the most part. Australia, separated from the "old world" by impassable oceans, has kept the placentals at bay and the marsupials safe. But for these oceans, they argue, animals such as the kangaroo and other marsupials in Australia would have

been made extinct by the depredations of the placentals. Hence, it is claimed that these marsupials were not involved in the type of evolution that occurred on the other continents that brought the placentals to a position of dominance.

But why should the evolutionary process continue in one part of the earth while it stops in another? Why should placentals go on evolving in North America and Europe but stop doing so in Australia?

There is evidence that placental animals were on the Australian continent very early in history. Then why did these not exercise their supposed superiority and obliterate the marsupials? The number of marsupials and placentals were said to have been about equal. Why, then, did not the law of "survival of the fittest" go into operation and hand the trophy to the placentals as victors in the struggle? Such reasoning shows the weakness of the theories of evolution.

Not Necessarily Superior

That the placentals are not necessarily superior in the struggle can be seen from the following information involving a type of mouse and also a type of cat that are both marsupials, that is, whose females have pouches. Notice what happens when these marsupials are compared with a mouse and a cat that are both placental. Life Nature Library: The Land and Wild Life of Australia reports this:

"If this marsupial in mouse's clothing is boarded in the same cage with a real [placental] mouse overnight, nothing is left of the [placental] rodent in the morning but its pelt, peeled off and turned neatly inside out as if by a skilled taxidermist. The tiger cat [a marsupial the size of a domestic cat] has been known to kill a large placental tom-cat in a fair fight and to hold dogs at bay."

Other marsupials that would prove a match for placentals of comparable size are the Tasmanian devil, wolf, mulgara, tuan, and, when cornered, even the mild kangaroo.

Settling in Suitable Areas

Nor is it true that the isolation of the same species in widely separated areas induces independent and diverse evolution. We find, for instance, that the alligator is isolated in two widely separated pockets: Florida in the United States, and the Yangtze River in China. But they have not evolved differently. Both are still simply alligators. Not even the most rash evolutionist would argue that they had evolved along identical lines by accident.

The alligator settled in these places because the environment suited its requirements. That is true for other species as well. It is this that makes the camel prefer the desert regions, the mountain goat the rocky hills. Similarly the walrus, manatee, yak and numerous other animals instinctively settle where conditions best favor survival. So too the Australian marsupials—the environment in Australia ideally suits them.

What is it about Australia that is so suited to the kangaroo and other members of his family? This: Australia is, for the most part, arid. That suits the kangaroo because he prospers on little or no water. By day he hides in the shade. By dusk and by night he grazes. Body liquids are obtained from the grasses and leaves he eats. Just as certain plants and animals thrive in the desert, each one by its own method of securing and conserving moisture, so too the kangaroo in the arid parts of Australia.

How Did They Reach Australia?

If the marsupials in Australia are not the product of a particular kind of evolution, then how did they get to Australia? If Noah's ark deposited its valuable cargo of human and animal life in what is now eastern Turkey, then how is it that we find the marsupials of Australia so far removed from that area, even granting that Australia nicely supplies their needs? How did they travel so far? How did they cross the Indian or Pacific Ocean, since there is no land bridge over these waters to Australia today?

Disembarking from Noah's ark, man, the most versatile and adaptable of earth's creatures, eventually spread out and settled widely different areas. There was hardly an environment or climate to which man did not adapt himself, even though that environment or climate may not have been especially suited to him.

However, different types of animals wandered on until they located a habitat that most suited them. Some, like the oxen, settled widely because its needs were met in many places. Others, like the alligator, settled in areas far apart. Still others, whose needs were more exacting, settled in a single area where alone they could subsist. Individual animals, or groups, of any kind failing to discover their proper environment perished and provided the fossils found far removed from living members of their kind.

This urge to migrate in search of an acceptable domicile is very common. The book Marvels and Mysteries of Our Animal World tells of many migrations, such as egrets from Asia into the United States, moose into Canada and Alaska, North American muskrats into Europe, possums into Canada, coyotes into New York, and cod into Iceland's waters—all far from their usual habitat. This source concludes: "Thus, while man ponders his chances of colonizing space, many forms of wildlife are reaching out to find new habitats on this old planet of ours." Thus, is it not

reasonable to conclude that the animals released from Noah's ark would have instinctively set out in search of the kind of environment that suited their needs?

But how, you may protest, could animals such as the marsupials cross the oceans separating Australia from the other continents? There are sound reasons for believing they had no need to cross oceans. Recently the American research ship, the *Oceanographer*, was off Australia's west coast checking the continental shelf. Its objective was to find evidence for or against the theory of shifting continents. This is the belief that at one time all the continents were united, but have since drifted apart.

Scientific American of April 1968 reports: "After years of debate many lines of evidence now favor the idea that the present continents were once assembled into two great land masses." It also states: "There is also strong evidence for a juncture between Australia and India." Even after these land masses separated, for a time there were probably land bridges that connected different areas, such as a bridge between Siberia and Alaska, and no doubt one between Asia and Australia. The string of islands and shallow seas stretching from Malaya and embracing Indonesia and New Guinea could have comprised a wide land bridge where the crossing to Australia was made.

Forced into Extinction

After migrating thousands of miles over long periods of time, perhaps centuries, those early Australian animals settled and prospered. But sadly, for the past two centuries their isolation has been invaded by the most blood-lusting creature of them all—man!

Conditions that once caused this continent to be the ideal home of marsu-

pials are fast changing, particularly with the advent of the gun in the hands of the increasing human population. Indeed, several species of animals in Australia have already passed into extinction and others are now in the process of doing so.

One news item in the West Australian of May 23, 1967, reported the following: "TASMANIAN HUNTERS KILL 1,000 WALLABIES." The article stated: "Two hundred men shot about 1,000 wallabies [a small type of kangaroo] yesterday in the annual charity shoot at Avaco, a mining town in north-east Tasmania. As the wallabies were shot, the hunters cut off the two front paws as an evidence of their kill. Many animals were left wounded in the scrub. . . . The profit from yesterday's shoot—about \$400—will provide sports equipment for the local State School."

Another item in the November 13, 1967. issue of this same publication noted the danger that the kangaroo faces. It stated: "A recent scientific field party went 800 miles from Canberra to Tibooburra, in the north-west of New South Wales, most of it through kangaroo country. The object was to catch 300 female kangaroos. The party saw 11 kangaroos and returned with nothing. To Canberra scientists, this emphasized the wilful destruction of the kangaroo at the stage where it is in danger of becoming extinct. The red kangaroo, the most beautiful of the six species, is rare, and could soon join the ranks of the toolmarche wallaby, gaiamards rat kangaroo, and the parma wallaby, all of which are extinct."

Truly, Australia, the home of the marsupial, is now invaded by creatures who are rapidly forcing the marsupials into extinction. But the damage is not being done by the placental cattle, goats, horses, pigs, buffaloes, rabbits, cats, deer, foxes and other animals introduced into this country by man, and most of which have gone into the wild state. Nor is it due to the fierce dingo dog that was introduced into Australia some centuries ago, and which has also gone wild. But it is due to the human species. It is he who threatens the survival of the marsupials.

Will these charming, harmless and often beautiful Australian animals pass into extinction? It could easily prove to be so at the rate they are being decimated. It has happened many times before in different parts of the earth. Many delightful creatures that God formed in the beginning for man's pleasure and use have already become extinct. And many others all over the world, including Australia, are seriously threatened now.

However, there is consolation in this thought: the same wise Designer and Creator, Jehovah, who formed such animals and who arranged suitable places for their dwelling, can also, in his great wisdom, restock our earth with all the varieties of animal life that he purposed for this earth, if that is his will. Then, in God's new system, the harmony that existed between man and animal in the garden of Eden will be reestablished and neither will ever again be in danger of extinction.

What a Day!

Using the twenty-four-hour day of earth's time by which to measure, one can say that the planet Venus makes a revolution around the sun in 224.7 days. So a "year" for Venus is equal to 224.7 of our days. However, recent radar reflection observations indicate that the planet rotates on its axis, not every twenty-four hours as does the earth, but every 243.2 of our days. So its "day" is longer than its "year."

66 OOK! They're dancing; they're streaming upward; now they are converging right above us! I can hardly believe my eyes!"

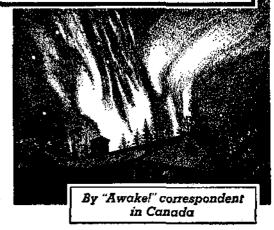
The delighted host managed an appearance of nonchalance. He remarked calmly that such a pageant

is common entertainment for anyone privileged to have front-row seats for the splendorous display of colorful lights in the northern sky. But as he and his southern guest watched, he admitted that this particular show was indeed rare. The leaping yellowgreen rays soared to their zenith from all directions and hung like a shimmering dome, only to disperse and reassemble, now with a trace of red. They were thrilled by the spectacular aurora borealis, commonly called "northern lights."

The excitement of the visitor from the south was understandable, for while persons on a large area of the earth's surface may view the northern lights, most do so infrequently. Those living in an oval-shaped region skirting the north coast of Africa and traversing southern Asia and central Mexico, may see this luminous dance performed only once in ten years. Farther north, those in a zone across northern France and Germany, southern England, and North America between New York city and Portland, Oregon, see the phenomenon about ten nights each year.

The auroral zone of maximum frequency touches the north coast of Russia, passes over northern Norway, just brushes southern Greenland, and crosses over northern Canada and Alaska. It is here that the "northern lights" dance with ever-changing diversity about nine clear nights out of ten. Traveling still farther north, as one approaches the center of the auroral oval at about the earth's geomagnetic pole near Thule in Greenland, visible occurrences decrease to some fifty times a year.

The Duncing Lights OF NORTHERN NIGHTS



In the southern hemisphere there are similar oval-shaped zones of auroral frequency, but since this area is sparsely populated, few people see the displays. However, if you live in southern Australia, New Zealand or Argentina, you have probably beheld with wonder aurora australis, the dancing lights of southern nights.

Anyone privileged to watch the beauty of the aurora knows that words cannot describe the wondrous dance. The majority of people, however, do not actually see the lights dance. They may see instead merely a luminous band glowing just above the northern horizon, hence the name aurora borealis or, literally, "northern dawn." But come along and join us in the brisk tang of a northern evening as we settle down on a knoll to watch a full performance of this marvelous pageant.

A Celestial Ballet

A yellow-green arc glows across the sky, suspended some sixty to eighty miles high and stretching a thousand miles from east to west. The lower border is sharp and well defined against the dark background, while the upper reaches gradually fade into the night. The stage is set, the dance is about to begin.

The arc begins to rise toward the zenith, gaining brightness and form until it is a radiant bluish-white ribbon. Then, suddenly, it jumps to life. Rays of light, resembling a hundred searchlight beams, align themselves in bundles across the heavens. As the tempo increases the rays begin to leap on stage, changing length at a rapid pace. Some soar to a hundred miles or more in vertical dimensions. Now delicate folds appear in the drapery of light and gently sway back and forth across the rippling curtain, only to be replaced by larger loops and folds that grow to a truly grand scale.

The color of the lights changes from yellow-green to yellow-orange and a trace of mauve. A pink glow highlights the clearly outlined undulating lower edge of this symphony of light. For a grand finale, colorful rays appear to shower forth from a common point, forming a dome. At last the dance concludes as it began, with the formation of a quiet arc near the northern horizon. Such a marvelous pageant bespeaks a grand, beauty-loving Production Manager.

Although such an active performance is typical, no two shows are identical. Green is the most common color. And the brightness of a display can change from just below what is visible to something comparable to full moonlight! A major display can last for hours. On rare occasions a high arc may be entirely rosy red. At times the lower edge of a drapery may become such an intense red that it resembles the reflection of a blazing fire. Sometimes an arc of light will pulsate,

gaining brightness and fading in rhythm.

On more than one occasion the sight has been mistaken for a city in flames. In the more populated areas south of the main auroral zone rare, but usually spectacular, displays have terrified observers. Some have considered them omens of doom.

Farther north, where the dancing lights occur more often, they once were viewed under the influence of superstitious false religion. Eskimos in northern Greenland believed they were spirits of the dead playing ball with a walrus skull. Others thought them to be torches in the hands of spirits guiding those who had just died to a land of happiness and plenty. In southern latitudes the aboriginal people of Australia once believed that the gods were dancing across the sky when the aurora australis was seen. It is also thought that the "Buddha lights" seen occasionally in Ceylon as a sign of Buddha's displeasure were actually the aurora.

Production of the Pageant

Since the nineteenth century there has been a concerted effort to discover how the dancing lights perform their matchless show. Special cameras and spectrographs, radio, radar, balloons, rockets, rockoons (rockets launched from high-flying balloons), and satellites have all taken their turn at looking for the answer. From all this complicated probing there has emerged a picture of a complicated grand design. Let us take a look backstage and see what goes into an auroral pageant.

The first step in preparation for the dance appears to originate with the sun. Space vehicles have established that a gust of electrically charged particles blows out from the sun and past the earth at about 900,000 miles per hour. This solar wind is composed mainly of positively charged protons and negatively charged electrons. When there are storms on the

sun, as indicated by solar flares and sunspots, great belches of these charged particles are blown out, causing gusts in the solar wind. These initiate the pageants of dancing light.

However, the solar wind does not bombard the earth directly. Instead, our planet is contained in a huge cavity carved out of the solar wind by the earth's magnetic field. Within this cavity, called the magnetosphere, charged particles are trapped and held along magnetic lines of force to form radiation belts. It is these charged particles that somehow precipitate from space into the atmosphere and are directed toward the poles by the earth's magnetic field, causing the display of lights.

However, the energies required of these particles to cause the lights are greater than the energies of the particles arriving in the solar wind. The outer reaches of the radiation belts seem to have particles with high enough energy, but too few of them to sustain the display of lights. In some obscure way gusts in the solar wind apparently set off a mechanism in the magnetosphere by which enough particles are energized or accelerated and precipitated into the atmosphere. Just how this is done is part of the puzzle not fully understood by man.

Now for the start of the dance of lights. As the atoms and molecules of the upper atmosphere are bombarded by the charged particles, electrons in particular, they become excited, or raised to a higher energy level. When they return to their original state they give off light. Thus the dance begins. The colors depend upon the elements involved and the degree of excitation. Oxygen provides both green and red; nitrogen, the glow of violet, blue and the lower fringes of red.

The fascinating motion of the dance is considered to be due to changing patterns of excited atoms and molecules as beams of incoming electrons shift. The particular shape of the lights depends upon the shape of the electron beams, but what causes them to shift and what determines their shape is still unknown.

Since the incoming particles follow lines of magnetic force to the poles, studies are being carried on at opposite ends of such lines, called conjugate points. It has been found that at such points in the north and south the lights can occur within minutes some 9,500 miles apart!

Unseen Effects

As electrons bombard the atmosphere to produce the colorful pageant, unusual unseen effects also are produced. Satellites slow down more rapidly or "drag" due to heating of the atmosphere during the dance. The smashing of these particles into the atmosphere is thought to be a cause of this. The atmospheric bombardment by electrons also generates X rays. This increases ionization that blacks out radio communications, but reflects television waves for sometimes surprising reception from distant places.

The gusty solar wind also causes magnetic storms, or variations in the earth's magnetic field, producing strange results. Electric current builds up in the atmosphere, and this induces current that blows fuses on telegraph lines during the display of heavenly lights.

For centuries sound like the rustling of a fire in the distance has been reported with the dancing lights. There is still controversy over this, since the great height of the lights makes associated sound unlikely. Some have suggested that unknown phenomena near the ground might be the cause, if the sound is real,

Truly the northern nights excite wonder and admiration. How wise and wonderful the Creator who stages these marvelous pageants of dancing lights!



THROUGHOUT the world, an increasing number of people are having difficulty with their sleep. They cannot get to sleep easily once they have gone to bed, nor can many of them get back to sleep quickly when they awaken during the night.

One investigator, Dr. A. Kales of the University of California at Los Angeles, observed: "On an over-all basis, more people are complaining of difficulty sleeping." He noted the unusually large number of persons taking drugs to go to sleep and said: "Drug dependency is increasing and is a widespread problem."

When a poll was taken in various countries to determine which nation had the highest proportion of people having trouble with their sleep, it revealed that Americans led the field. Fifty-two percent of them said that they had trouble some of the time or all the time in getting to sleep. Countries such as Norway, Sweden and Denmark reported that about one person in four had difficulty in this regard.

Who Have Trouble?

What kind of people have trouble in sleeping? They can be found among all nationalities, occupations and agegroups. But within any one group, who is it that is more likely to be established that people who have sleep difficulties are usually those who are worried, tense, insecure or nervous. This includes those who have excessive feelings of guilt, and also those

who are overly ambitious.

When reviewing the book *Why So Tired?*, the New York *Post* of April 6, 1962, stated: "Married couples experienced less insomnia than single [persons]; the divorced and widowed most of all. . . . Among the college-trained, the chief reason for non-sleeping was worry over jobs and the high cost of living; among the grammar school graduates, nervous tension caused by overwork or illness. People over 50 suffered almost twice as much from insomnia as young people in their twenties."

And who sleeps the best? The report added: "The ones who said they were 'very happy' slept the soundest of all."

Thus it is fairly well established what, aside from a physical ailment, prevents people from going to sleep quickly, or interferes with the soundness of their sleep. Those with emotional or mental problems rooted in worry or anxiety suffer the most.

It is no surprise to find the problem more severe in the highly industrialized nations of the world. In these lands more and more people live in large cities where life proceeds at an ever faster pace. Fewer and fewer live in rural areas where the pace of life is much slower and more relaxed. As Dr. Kales stated: "With people less active [physically] than they used to be and with more tensions, more interruptions, more deadlines pressing in on them, flying back and forth across the country in a few hours—with all these changes, insomnia is reaching alarming proportions."

In addition, there is a lack of security prevailing over much of the world. One reason for this is the skyrocketing crime rate everywhere. Also violence and rioting are spreading in many lands. In places such as Vietnam or the Middle East, war and the fear of war plague the minds of many. Other factors that place great stress on individuals are financial problems, such as having large bills to pay with money that has been reduced in value by inflation. And no little source of aggravation is the increasing crush of traffic in most large cities in the world.

Persons who are deeply affected by such anxieties take much longer to fall asleep. In one test a group of depressed people took an average of forty-one minutes to go to sleep, some taking much longer. Their sleep was also much lighter. On the other hand, it was found that persons who did not allow these anxieties to bother them excessively took much less time, one test group taking from only one to thirteen minutes to fall asleep.

In the Mind

Worry, tension, insecurity and other anxieties all originate in the mind, that is, in the brain, the seat of the central nervous system.

While occasional sleeplessness is not necessarily a sign of mental problems, chronic sleeplessness may be a sign of an imbalance in the mind that could lead to

serious mental disorders. This link between sleep disorders and mental illness is not confined to just one type of society. Dr. J. Davis of the National Institute of Health in the United States reported that he had seen the same history of sleep disturbance among natives in the Fiji Islands and Tahiti. These natives usually sleep from sundown to sunrise. But when they succumbed to mental illness, they complained of having difficulty in falling asleep, or of waking up well before dawn.

The problem of sleep, then, usually begins in the mind. It is the mind that is called upon to process the problems of daily living. It supplies answers and gives directions. The healthy mind has a great capacity for absorbing and handling information and regulating the body's functions.

However, after a day's work, especially if the mind has been taxed heavily, it often has a tendency to keep right on going in the same direction. It is almost as if the law of inertia was at work here.

The Mind's "Inertia"

Inertia is the tendency of all objects to stay still if still, or when they are moving to go on moving in the same direction unless acted upon by an outside force. So in a manner of speaking we might say that the mind has an "inertia" that must be taken into consideration.

When the day's work is over, the mind can easily keep going in the same direction. The brain cells, particularly the key brain cells called neurons, have been set pulsating by man's will. They have become activated, energized, and will continue that way even when not directly called upon for use by their owner.

The more highly the mind has been activated in one direction, the more likely it is to keep right on going that way. This may be the result of the entire day's ac-

tivity, but it could also be the result of a single event, such as an argument. If the brain cells have been highly excited and kept that way right up to bedtime, then it will usually be more difficult to fall asleep. And probably you have experienced this yourself. If you had difficulty in your work, or if a serious problem arose in the home, you likely carried that burden to bed with you.

In many studies it was observed that when a worker felt he had problems with his employer or fellow workers, or that his work was unsatisfactory, his feeling of insecurity grew. Activated in this direction, his brain cells continued to work on the matter when the time came for sleep. The mind that was so charged up did not turn off easily.

This problem of increased mental activation was noted by Theodore Roosevelt when he became president of the United States. The pressure of the many details and responsibilities of the presidency continued to bother him, not only through the day, but also at night, right up to the time he went to bed. He observed that this made his sleep difficult.

One businessman who was a success in his field found his sleep greatly disturbed. But why should he worry? Was he not a success in business? True, but worry he did. What robbed him of his sleep was the thought that he should be even more successful in the future. So he would lie awake at night planning his next business move! His ambition kept his mind going in the same direction. He did not turn down his mental alertness, or what some scientists call mental "vigilance," before the time came for sleep.

Persons who have long-standing anxieties usually have long-standing sleep problems. In this regard the book *Sound Ways to Sound Sleep* states: "Chronically anxious people have chronically poor sleep

because they keep their guards up, whereas they should lower their guards to sleep.
Temporary anxieties also boost vigilance.
The difficulty people have in going to sleep
if they go to bed in anger is an example.
There can also be vigilance when scant
emotion is involved. Merely having in
mind that we want to awaken earlier than
usual can affect sleep. . . . when people
wanted to get up earlier than usual, their
sleep was much lighter during the last
three hours."

Drugs the Answer?

As statistics show, an increasing number of persons are resorting to drugs in order to sleep. Is this a simple solution, one that is really satisfactory?

Professor V. Frankl, head of the Vienna Polyclinic's neurological department, explained it this way, as reported by the Ottawa *Journal:* "Even the best sleeping pills tend to drug the patient. He has only light sleep instead of the deep, restful sleep he needs."

In the book *Sleep* we are also told: "Somewhere on the forehead of each person there should be an invisible legend that appears each time he sees his face in the mirror: CENTRAL NERVOUS SYSTEM WITHIN—HANDLE WITH CARE. Once drugs have begun to substitute for the usual functions of the brain, the individual may no longer possess the ability to care."

At times drugs may be useful in breaking a bad sleep pattern. However, drugs as a regular habit are not a proper substitute for the normal sleep. But how can a person "turn off" his mind when he goes to bed so he can get the kind of sleep he needs?

Change the Mind's Direction

The root of sleeplessness for a great majority of people lies in the mind's staying

too active when the time has come for sleep. The key to overcoming the problem has to do with slowing down the mind before a person goes to bed. But how can one slow down his mind when it continues to charge forward in the same direction right up to bedtime and beyond?

Here we may use the illustration of a large jet airliner. As the airliner soars through the skies its jet engines supply a powerful thrust to keep the craft airborne and moving forward. However, when it is time to land, the jets are slowed down. Yet, when the airliner touches the ground it is still traveling well over one hundred miles an hour.

The pilot cannot let the aircraft coast to a stop, as its forward movement might continue until it had rolled off the runway, perhaps resulting in damage or death. So the pilot applies the wheel brakes. Often, however, the brakes are not enough to stop the airliner as quickly as desired. So the pilot reverses the thrust of the huge jet engines. The same thrust that took the plane forward so swiftly now works in the opposite direction. This counteracts the forward movement and the aircraft is quickly subdued and brought to a halt.

In a similar way it may not be enough just to cease our day's activity. The mind may still continue to move swiftly forward. The key, as with the airliner whose jet thrust is reversed, is to provide the mind with a *change in direction*. When the mind has worked on certain matters all day, it may continue right on working in that direction at bedtime. Its "inertia" needs to be counteracted by another force, a change in direction.

When Theodore Roosevelt was bothered by problems that made sleep difficult, he adopted the practice of reading something totally unrelated to his political work before going to bed. And in *Insomnia and* Its Relation to Dreams, Dr. L. Gilman observed: "In this modern world of specialization, and with the numerous and complicated demands we face every day, too often we neglect entire areas of activity in our daily curriculum. One or more of such things as religion, art, hobbies, recreation, exercise, intellectual pursuits, are often found to be entirely lacking in the life program of many individuals. We cannot stress too much the importance of a varied and balanced approach to life for each individual."

Hence, well before you go to bed change your mental direction if you have trouble getting to sleep. Begin the slowdown that will enable the mind to be quickly overcome by unconsciousness. For instance, if you have been working with numbers all day, start on another subject so you will not be thinking about numbers. The direction of your mind, its "inertia," will be counteracted.

Doing What Benefits

To benefit from a change in direction for your mind, however, you should remember to do what is good for you, not just what you like. Otherwise you can start working on a different subject that may also tax your mind too much before bedtime.

For instance, one way of relaxing may be to listen to soft music. It soothes the nerves and puts the mind in an increasingly relaxed state, preparing it for sleep. But harsh, provocative music may have just the opposite effect, exciting the brain cells instead of quieting them.

So, too, with exercising. Studies have shown that moderate exercising produces a marked increase in total sleep time, and also in the amount of deeper sleep obtained. However, if that exercising is done just before going to bed, then for many persons the effect produced can be just the

opposite—the body and mind may be stimulated instead of being relaxed. Therefore, many individuals find that exercising is most effective when done earlier in the day, or at least an hour before sleep, allowing time for the initial stimulation to disappear.

Another way of relaxing is by reading. This can change the direction of your mind very quickly. Some read the daily newspaper, books or magazines.

In this regard, you will find Bible reading doubly rewarding. Not only will it get your mind off your job or the problems of caring for a household, but you will also benefit in that the Bible alone tells us the truth about the cause of all anxieties. It tells us why the mind and the body are troubled to begin with. It tells us why the world is in such chaos today and where it is going. It tells us of God's marvelous remedy for all human anxieties and bodily ills. In a truly satisfying way, the Bible sets one mentally straight on all the big questions of life.—2 Tim. 3:16, 17.

Today hundreds of thousands of persons who read the Bible and take in accurate knowledge of its satisfying message find their anxieties lessened remarkably. They obtain a peace of mind they never before experienced. As a result, their sleep is much less disturbed. They can now appreciate the words of the inspired psalmist David, who said: "In peace I will both lie down and sleep, for you yourself alone, O Jehovah, make me dwell in security." They also say of the Creator, as David did: "My soul he refreshes."—Ps. 4:8; 23:3.

So if you are having trouble going to sleep, try changing the direction of your mind well before retiring. And when you are actually preparing for bed, take it slowly. In this way you will cooperate with the body's call for relaxing. Hurrying to bed and being anxious about getting to sleep can awaken relaxed muscles and heighten mental alertness. Also, if your bed is cool, this may tend to produce muscle tenseness, so it might be better to let your bedroom cool off after you are in bed, not before.

Of course, there are other things that different individuals do to help them go to sleep. Some take warm baths before bed. Others drink warm milk. Yet, there are those who find that taking anything into the stomach before bed interferes with their sleep. That is why you should analyze your own situation to see what it is that keeps you awake and what steps you need to take to counteract it.

Also, if you are one who awakens during the night, even several times, do not let this disturb you. For many persons, especially adults, this awakening is a normal part of their sleep cycle. Usually, in a very few minutes, or even seconds, you will be asleep again. But if you worry over this, then you will increase your mental vigilance, and this will work against sleep.

Proper sleep is an absolute necessity for humans. Without it they do poorly. Their efficiency decreases, as does their enjoyment in living. So take steps to get your proper sleep. Pay particular attention to relaxing your mind so you can get the benefits from sleep that the Creator of man purposed.

Lightning Facts

About 400 persons in the United States are struck by lightning every year. Did you know that? Emphasizing the need for caution during thunderstorms is the sobering fact that the temperature of lightning ranges from 45,000 to 55,000 degrees.



NOTHER emergency! The ambulance pulls up at the casualty entrance to the hospital, and a young man, victim of a car crash, is carried in on a stretcher. After conferring briefly with the ambulance men, the nurse reports: "Considerable blood loss, some shock. He should have a blood transfusion, but look at this card that was found on him." It reads: "NO BLOOD, PLEASE!"

"Must be one of Jehovah's witnesses," the doctor responds, as he takes a closer look.

The young man stirs, opens his eyes and tries to focus them on the doctor's face. His lips move. "No blood," he whispers.

"No, we'll not give you blood. Just don't worry. We know just what to do. Relax—that's all you have to do." The young man's face loses some of its anxiety, and then he drifts off into unconsciousness. Brisk instructions are given to the nurse, and the stretcher is wheeled into the casualty room.

Some hours later in a screened-off bed in the hospital the young man regains consciousness. His eyes questioningly take in his strange surroundings. Then he notices the plaster on his left arm and the

tube protruding from under it. His eyes follow the tube upward until it ends at an upturned bottle of—yes, of clear liquid. It looks just like water. Not blood, anyway, and that knowledge brings great relief. "They have respected my conscientious belief in God's law about the sanctity of blood," he thinks gratefully, as he drifts off into restful sleep.

Not a Blood Substitute

What that young man in the hospital received intravenously was not a substitute for blood, although that is what such substances are often erroneously called. Man has not been able to produce a substance that can even approximate all the marvelous properties of whole blood. Both of blood's main constituents, the plasma or liquid part, and the blood cells transported by the fluid, are capable of performing tasks that no other substance can duplicate. The plasma carries nutrients to distant organs and tissues and, on the return trip, carries off waste matter for elimination—all this in addition to circulating the blood cells. The red cells (corpuscles) perform the task of transporting needed oxygen from the lungs, while the white cells protect the body by devouring invading bacteria or microorganisms. The platelets, a third kind of

JANUARY 8, 1969 17

blood cell, look after the matter of blood coagulation so as to prevent loss of this precious fluid through wounds or injuries. No, with all his ingenuity, man has not been able to make a substitute for this unique. God-created fluid!

However, when an appreciable volume of blood is lost from the body, immediate action must be taken to correct the condition, or else death may occur. But what can be done? To most people the obvious answer is a blood transfusion. But then most people are unaware of the inherent risks involved in transferring the blood of one person into the body of another. Nor are they aware of the fact that such a course runs counter to specific commands of the Almighty God recorded in the Bible.—Gen. 9:4; Deut. 12:23; Acts 15:28, 29.

Conscientious Christians, however, are informed on these matters, and therefore seek some other method of dealing with an emergency loss of blood. Now available are balanced salt solutions such as Ringer's Lactate, or the plasma volume expanders ("PV expanders," for short) such as dextran. Though none of them can perform as blood or accomplish what blood can, these expanders do supply the fluid necessary for the red cells to be kept in circulation, bearing oxygen throughout the body. Much is required of them, for there are problems to be overcome.

Problems to Be Overcome

To meet the attack of the numerous surrounding threats to health and life posed by microorganisms, bacteria and viruses, the body has been marvelously designed with barriers and defense mechanisms. Foremost among them are the skin and the mucous membranes that line all canals and orifices connecting the outside with internal body parts. Even in the lungs the blood remains separated from

the external air by the microscopic lining of the lungs, which lining provides only for the vital oxygen/carbon-dioxide exchange.

It follows that when anything is transfused directly into the bloodstream these defense barriers are bypassed. Every such procedure is therefore fraught with danger. The material infused directly into the bloodstream can reach vital centers such as the heart and the brain within a matter of seconds. It can be seen, then, why direct transfusion is rightly placed in a different category from the simple muscular injection.

Care in the preparation of plasma volume expanders is therefore essential. Absolute sterility of the product must be maintained—a total absence of bacteria. harmful substances, yes, of even those hard-to-detect, heat-resistant waste products of bacterial action, the pyrogens. Further, the PV expander has to be nontoxic. causing no allergy or other harmful reaction in the recipient. It must be such as will be tolerated by the body for sufficient time so as to achieve its desired effect. Its osmotic pressure, its ability to retain fluids in circulation, has to be similar to that of blood plasma. It must not adversely affect the physical qualities of the blood. And it must be capable of being stored for long periods without undergoing change.

Manufacturing Process

Little wonder, then, that the manufacture of PV expanders calls for complex machinery, modern electronic equipment, well-trained personnel, including technicians, bacteriologists, chemists, chemical engineers, doctors, research workers and many others.

Before considering the manufacturing process, consider for a moment the container. No ordinary glass bottle is this. Sometimes called a "vacoliter" (the one liter of contents being under vacuum), it is made of special pyrogen-free glass, resistant to chemical attack. Before use each bottle is thoroughly cleaned, the final rinse in pyrogen-free water. This same pure water is also used for all preparations and solutions, and its quality is tested every two hours throughout the manufacturing process.

In a typical plant in Johannesburg, South Africa, where intravenous fluids are manufactured, all equipment is of glass or high-grade stainless steel. At each day's close, the equipment is drained and, where necessary, dismantled, to prevent the stagnation of water in any part. The filling of the bottles is done mechanically in a compartment where the internal room pressure is at all times slightly above that of adjoining areas. This keeps out dust or other foreign particles that might cause contamination.

When the bottles are filled to the exact volume required, a vacuum is drawn and rubber seals are affixed, and the seals are then covered with protective aluminum discs. Each disc is embossed with the same details appearing on the outside label, so that even if the label gets defaced the contents are clearly identified. The bottles are then placed in an autoclave, a large chamber operating on the pressurecooker principle, for sterilization of the contents. Temperature and steam pressure are automatically registered on removable charts that become part of the complete physical, chemical and biological record of a specific batch. A serial number for the batch is shown on each bottle, a number that is never repeated, so that at any time one can trace the entire history of any particular bottle.

Following sterilization, each bottle is thoroughly inspected. A check on the details listed on the aluminum discs is made. as well as on the amount of solution in each bottle. The bottles of fluid are examined against a black background in order to detect foreign white particles, and against a white background for detection of dark particles. The presence of foreign matter disqualifies any bottle in which it appears.

Nor is this all. Before the new batch is shipped out, a few bottles are selected at random and subjected to a series of laboratory tests. The correct vacuum within is tested by high-frequency electric current. A final quantitative chemical analysis is made to ensure that the contents conform to the formula appearing on the label. Acidity is checked electrometrically. Polarimeters are used to measure the concentration of dextrose in solution and photometers to determine the sodium and potassium content by measuring the flame intensity. The contents of other bottles of the same batch are subjected to bacteriological tests.

Despite all this testing, there is something yet to be done. The fluid may contain some of those heat-resistant pyrogens. the waste matter of microscopic bacteria. which can cause side effects in the living body. Testing for the pyrogens involves the use of rabbits. These little creatures are housed in special temperaturecontrolled quarters. Some of the fluid is injected through a superficial vein in the ears of three different rabbits. Their temperatures are then recorded at measured intervals to see if there is any change. The permissible temperature change may not exceed .07° Fahrenheit above or below normal. Any greater change would indicate pyrogen contamination.

The director of the plant studies closely all charts and test reports, the entire record of a batch from start to finish, and only when fully satisfied will he authorize release for distribution.

JANUARY 8, 1969 19

Administering the PV Expander

All the equipment used to administer the expander to a patient must likewise be sterile and pyrogen-free. Expendable administration sets are now highly favored since they are standardized, simple in construction and avoid the danger of cross infection with other patients. The sterilization of such equipment is just as vital as that of the PV expander itself.

One of the great advantages of the PV expander in an emergency such as that described at the opening of this article is its availability for immediate use. In emergencies, time is a critical factor. In the use of blood, valuable time has to be consumed in testing for compatibility. Not so with expanders. The nurse quickly checks the contents on the label of the vacoliter, and as the stopper is removed the characteristic sound of inrushing air assures her that the required vacuum has been maintained. The expendable administration set is attached and checked to see that all air is displaced by the fluid flowing down the transparent tubing. The doctor sterilizes the skin over the vein on the inside of the patient's forearm and inserts into the vein the needle attached to the extremity of the tube. Sticking plaster secures the needle to the arm. A special drip chamber in the apparatus arrests and retains any air bubbles.

The PV expanders now occupy a vital place in the treatment of patients suffering from loss of blood. Research continues, however, and from time to time we

20

hear of developments such as that reported on in the Johannesburg *Star* of April 18, 1968, telling how a Harvard biochemist, Dr. Robert P. Geyer, has developed what is called "a milky synthetic substitute for blood," which, according to his experiments, had proved "highly effective in carrying dissolved oxygen from the lungs to body tissues and in eliminating carbon dioxide waste."

Contrastingly, the same issue of the Johannesburg Star had an article "High Disease Rate in Blood Transfusions," in which it was reported that "twelve out of 120 patients receiving whole human blood plasma during treatment in California developed hepatitis within six months." At the same time reference was made to an issue of the medical journal Transfusion. which contained a "strong recommendation by an expert committee of the National Research Council of the United States National Academy of Sciences saving that 'the use of whole blood plasma should be discouraged and even discontinued.' "

Conscientious students of the Bible prefer PV expanders or any other reasonable treatment rather than willingly becoming party to a violation of God's law on blood and its sacredness. Many doctors and hospital personnel are already aware of the stand of Jehovah's Christian witnesses on this subject. Some, it is true, indulge in ridicule, but others treat with respect the earnest request of Christian patients, "No blood, please!"

ELECTRIC BATTERIES

It is believed that the jewelers in ancient times had and used a type of electric battery to electroplate gold, silver and antimony. Vases of copper plated with gold and silver were found as evidence. Even remains of the batteries have been discovered. Willard F. M. Gray made replicas of these to see if they could do the job, and they worked. These replicas, housed in the Berkshire Museum in Pittsfield, Massachusetts, testify to the high intelligence of ancient man.



TRIP INTO INDIA'S PAST

THE STUPA MOUND

BY "AWAKE!" CORRESPONDENT IN INDIA

Dear John and Eunice:

Christian love and greetings to you from India.

Would you like to hear about the interesting visit we made the other day? Well, we were viewing souvenirs of the people of the Indus Valley civilization, some of them probably about four thousand years old. Just as you learn about the history of the Indians of North America at school, so in India here our scholars go back to Indus Valley history. Rivaling in antiquity the archaeological finds in the Nile Valley, the early records of men found at Mohenjo-Daro and Harappa in the Indus Valley are truly quite intriguing.

Remember, Eunice, when John gave you that lovely multi-strand necklace a few years ago? You thought it was the last word in modern fashion at the time. Little did we know that we were about 4,000 years behind the fashion! Some of these ancient remains we were examining included long and short necklaces very much like yours. And especially amazing it was to note that the strands were fastened into a single handsome clasp at each end. Women of that ancient civilization also wore gold armlets, nose studs and earrings. And we realized, too, that the fashion of wearing bangles, followed right down to our own time, has lasted since that very early time in human history.

The children's toys from that far-off time also fascinated us. Little animals with movable heads and tails—we could just imagine little tots sitting on the floor, little fingers pulling the strings to make heads and tails move and perhaps even produce the mechanical mooing of a cow. You see, thousands of years ago parents were just as keen to keep the little ones happy as they are today. In fact, I feel sure that many youngsters today would enjoy playing with some of the tiny oxcarts of baked clay that we were examining.

In one display case, what do you suppose we saw? Why, a whole group of tiny figurines one and a half inches high, representing squirrels sitting on their haunches, and holding something to their mouths! It almost looked as though they might have been used for some game such as chess or checkers.

Our imaginations had a real field day—which reminds me that it is now time to get out into the field ministry, preaching to the many interesting people to be found in this land. Must write you more later when there is time. This is the hot season, and are we ever looking forward to the monsoons for a change to cooler weather! Warm love to all, and do write soon.

Bye for now, Aasha Dear John and Eunice:

You did write soon, and we are surely happy to hear from you, especially since you are so interested in the lore of ancient India.

Of course, the Indus Valley is really in Pakistan, and most of the area where archaeologists have been busy is called the Sind Desert. So, what was once a flourishing and fertile region is now a wilderness. The maximum temperature in the summer is 115° F., while in winter the minimum is 45° F.

Nowadays if you want to visit Mohenjo-Daro you can come by plane most of the way, then by train the last few miles, but finally you have to take a *tonga* or horse-drawn vehicle. Quite likely you will still follow the route to the ruins that was traversed by its original inhabitants. If you expect to spend more than a day exploring the excavations, you had better come supplied with your own blankets. Space may be rented in the Dak (travelers') Bungalow for about 50 cents a day, and you can order meals from the caretaker.

How far back did this Indus Valley civilization reach? Everything points to from 2200 to 1500 B.C.E.—certainly not any earlier. Archaeologists have described it as a "prehistoric civilization almost as old as that of Sumeria," and its city as being "as old as the Pyramids, or Ur of the Chaldees." But, if that is the case, then "prehistoric" is hardly the word for it, since we know that Bible chronology takes us back to the start of human history in the year 4026 B.C.E.

The Bible's account showing how, after man's language was confused by God at the tower of Babel, earth's peoples were scattered from the Mesopotamian region in all directions is certainly reflected in some of the indications here in the Indus Valley. An Indian archaeologist has declared: "It is noteworthy that the facial

features of the early Sumerians exhibit many similarities with the people of the Indus Valley. The long beard, shaved upper lip, and knot of hair at the head were fashions alongside the shaved head and face."

An abundance of clay seals of various sizes and shapes was turned up by the spade here. To the amateur, some of them look more like attractive little buttons. You see, on the back of each there is a tiny appendage through which a pin or a cord could be passed, so that its owner could carry it on his person. According to another authority, these seals "show beyond doubt that the Indus people were polytheistic in their religious beliefs. Like the Sumerians and the Babylonians they have a multitude of gods and goddesses of high and low rank presiding over various natural phenomena, such as the sky, the storms, the lightning, earth, water, fire, air, and the plant and animal life, etc."

Here, too, are found numerous clay statuettes of a female figure, indicating that a Mother Goddess cult existed, just as in Babylon of old.

They seem to have had their temple mounds also, reminiscent of the ziggurats of Mesopotamia. Today, a Buddhist stupa stands atop one of the ancient mounds, thought to be the ruins of an ancient Indian temple. With the Buddhists the stupa began with being merely a memorial, but later was turned into a temple for worship. So, in effect, you have here the old story of the latest religion taking over the "holy place" of the earlier cult, just as the Mohammedans built their mosque over the ruins of the Jewish temple at Jerusalem, and as Catholic Rome now uses the ancient pagan Pantheon.

The excavated temple area here at Mohenjo-Daro has some interesting features, such as the 'Great Bath,' possibly used for bathing by priests and other people alike, the 'College Building,' apparently a school for priests, and the 'Assembly Hall,' which was doubtless used for large public gatherings.

Well, I had better close for now and check my schedule of preaching activity. I am also due to visit one of the sick ones in our congregation. Feel free to ask whatever further questions you may have.

Warmest love to both of you, Aasha

Dear John and Eunice:

So you would like to come to India? We just wish you could. But until you can do so, we are glad to furnish you with answers to your questions. So just let us be your eyes and ears in this part of the world

By the way, John, before I go on to other matters, remember how we used to talk about how pagan religions borrowed and misused ideas expressed in the Bible? Well, the tree-worship of the Indus Valley people is a case in point. One writer speaks of it this way: "Like the Sumerians, the Indus people, too, had a tree legend. The pipal and acacia, probably the sami, were held sacred, one being the Tree of Knowledge and the other the Tree of Life." According to their traditions. "there is a constant attempt on the part of certain demons, either in human or animal form, to steal away the magic plant or its twigs. The tree, however, is heavily guarded by a spirit in human form who is ensconced in its foliage to ambush the tiger-demon." One of the excavated seals shows "a bull protected by a cobra is engaged in fighting a human adversary and is thus preventing him from approaching the sacred tree."

There is evidence too of a "trinity" doctrine among all these peoples. And they have goddesses, temples on lofty places, a priestly class set apart from the

common people, and many other features in common with Christendom's sects. So much so that it is an easy step for the "converted" Indian simply to add "the goddess Mary" to his collection of statues or holy pictures before which he burns incense and offers food.

But to return to the city of Mohenjo-Daro itself, it has been called "one of the most dramatic and revealing of all excavated cities." As one writer puts it: "The primary marvel of the great Indus city is not that it did (or did not) develop in such-and-such a fashion, . . . but that it existed at all in the remarkable form" indicated by the ruins. Its house walls rose up tier upon tier, and its lanes, its elaborate drainage system, and its fortress bespeak a highly developed community.

Still another author writes: "The most astonishing feature, which makes the Harappan cities almost unique in the preclassical world of the ancient East, is the elaborate system of drainage and sanitation. Bathrooms are very much in evidence; there are latrines with wastechannels leading to cesspits, which were evidently regularly cleared by the municipal workmen." Even a Western-type seat-latrine was found—something heretofore known largely only in the cities of modern times.

One of the distinguishing features of our century is the provision of companyowned and -built housing projects. Here in India there are many of them, built by the government or by large companies, as in the steel cities of Jamshedpur, Rourkela and Bhillai. The most common design of two small rooms and an outside court surrounded by a wall and provided with efficient sewage disposal is almost an exact duplication of the style excavated in Harappa. So, we have not come very far in this respect during the past 4,000 years. And here's another thing about these Mohenjo-Daro ruins. Everywhere you look there are bricks—thousands of them! And before the archaeologists arrived on the scene others had been at work, extracting huge quantities to use as ballast for the Lahore-Multan railway. What do you think of that for quality?—they are still in use after 4,000 years! It seems that the whole defensive system of the city was brick-built. Think of that! The wall was forty-five feet wide and just about one mile around, built of course upon course of baked bricks.

About the only artwork that survives among these remains is found in the tiny seals and in the jewelry. The presence of seals in such quantity indicates both commercial dealings and personal property. But, strange as it may seem, not much writing is in evidence, and whatever has been discovered has not yet been deciphered. The style of writing, noted mainly on seals, looks like the bones of men and

animals laid every which way. Some of the figures look like fish.

The end of the line for this flourishing community is also something of a mystery. Invaders from the northwest are believed to have inspired panic, for the population fled, mainly to south India. The cities disappeared from view almost overnight and were unearthed only some forty years ago. The sacred Hindu writings such as the Big Veda tell the story of the conquerors. It makes one think of the cataclysmic end that is swiftly bearing down upon our present-day civilization, according to Bible prophecy. The only thing is that this will be no mystery, and no godless conquerors will be left to crow about their victories.

It is time for me to close again. Please let us know how you are getting along in your Kingdom-preaching work, and convey loving greetings to our fellow Witnesses.

Best wishes, Aasha

Interesting Legend

Bible students have long been interested in folk legends from various parts of the earth that reflect the truthfulness of the Biblical comments about the early history of man. Two events in particular appear frequently in such legends: the preservation of Noah and his family through a global flood, and the spreading of mankind from Babel in the area of the Euphrates River above Ur of the Chaldeans after God confused the language of the people in Babel.—Genesis, chapters 7 and 11.

In discussing the background of the Maori, native inhabitants of New Zealand belonging to the Polynesian race, the illustrated booklet *The Family of the Maori* observed: "Who was the Maori? Where did he come from?... Anthropologists are still seeking out the answers. If Maori tradition is taken into ac-

count, the origin of the Maori would seem to be beyond the Indian continent. Maori oral tradition places the original home as Uru. From Uru followed a migration to Irihia. Irihia in ancient Sanscrit was Vrihia—India.

"As to where Uru was, there can only be more conjecture. Could it have been the ancient kingdom of Ur on the Lower Euphrates? This theory may not be as far-fetched as it may seem. Ancient Egyptian carving has an affinity with Maori work and words from India and the Malayan Peninsula are often similar to Maori words.

"Considering the Maori's theory of the origin of the Polynesian race, it is not surprising that they should have had the legend of a great flood in their religious mythology. It is so much like the story of Noah that it needs no elaboration here."—1966.



TN EVER so many of L the more prosperous countries throughout the world, the use of liquor is taken for granted when friends get together. But due to problems in connection with alcoholic beverages, many persons give thought to other kinds of drinks for social occasions. They feel that the use of alcohol, under some circumstances, poses problems.

For example, it is reported that at least 50 percent of the auto accidents in the United States are caused by alcohol.

Why is this so? For one reason, because alcohol enters the bloodstream almost immediately, especially if the stomach is empty. Then in only a matter of minutes it affects the brain, slowing down insight. memory, discrimination and concentration, as well as the responses of the body to the brain. Yes, alcohol in the bloodstream interferes with the quick thinking and quick acting that may be required in the case of an emergency.

And not only does alcohol interfere with the thinking processes, but it also causes a feeling of euphoria, that is, an elated feeling of well-being. There is nothing wrong with this when such beverages are used in moderate amounts, for as the Bible says, 'God gave man wine that makes his heart rejoice.' (Ps. 104:15) But this causes one to have increased confidence in himself at the very time when his skills and thinking ability are reduced; all of which can be very bad in the case of an emergency when driving an auto.

Nor is this all. In certain respects alcohol is a depressant, in that it depresses one's inhibitions, and therefore tends to decrease one's self-control. and to make some persons, especially youths, a little reckless, happy-go-lucky, as it were. It therefore makes it easier for a young woman "to respond flirtatiously to a handsome stranger," according to one widely read American psychologist. And not to be overlooked is the legal restriction in certain states or lands against serving alcoholic drinks to minors, those under twenty-one years of age.

In view of all this, many persons give thought to what might be served in the way of nonalcoholic beverages when friends get together.

A Great Variety Available

What can be offered by a host or hostess who would like to serve something interesting, refreshing and yet nonalcoholic? What can be offered especially when there are a number of young persons present?

Many kinds of delightful fruit punches can be made. While punch, which some say originated in Jamaica about two hundred years ago, was originally made with rum, sugar and citrus juice, and is often made with other alcoholic beverages, this does not necessarily need to be. There is an almost endless variety of fruit punches that can be served, limited only by one's imagination, one's pocketbook and by what is available at the

25 **JANUARY 8, 1969**

corner grocery store. Thus one popular book states that "the combinations possible are nearly unlimited as most fruit juices combine harmoniously with one another." And let it be noted that such kinds of punch have another advantage; they cost far less.

Among the basic things to remember is that it is usually best to sweeten punch with chilled sugar syrup rather than with sugar, as sugar tends to settle to the bottom without fully dissolving. A syrup can be made with equal portions of sugar and water boiled from three to five minutes, long enough in advance so that it can be thoroughly chilled. Also, when possible, it is better to have a large block of ice in the punch bowl rather than many small cubes, as it does not melt as rapidly and keeps the punch colder longer.

Highly recommended by many is the use of soda water, such as ginger ale, in punch, as carbonated water adds much to the enjoyment of it by reason of its fizz. But wait until the last moment to add the carbonated water, as its fizz is of a rather transient nature, and in doing so pour it in close to the edge of the punch bowl so as to lose as little of the carbonation as possible. Those professing to be authorities on the subject recommend adding cucumber slices to the punch, to give it added body.

Among the simplest punches to be made are those consisting of 50 percent ginger ale or some other soda and 50 percent fruit juice, such as grape, pineapple or orange. For the sake of economy one can add sugar syrup and water instead of soda. Then again, apple juice blends readily with other juices to make a fine drink with ginger ale or lemon-lime soda. A delightfully different drink, especially in favor in spring, is rhubarb punch. Cook

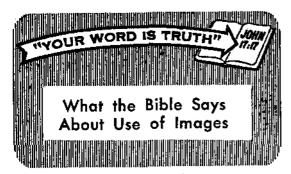
a certain amount of rhubarb and then strain it and sweeten to taste and add equal amounts of ginger ale and water to get the flavor desired. Iced black tea can be used as a base for various kinds of punch.

For the sake of variety one can add bits of fruit to each glass or in the punch bowl, such as pineapple spears or chunks, orange or banana slices or sliced strawberries. The adding of bruised sprigs of mint can improve a drink, even as can the adding of some other spices, such as cinnamon, nutmeg or cloves, depending upon the juices used and whether served hot or cold.

Nor to be overlooked are the many kinds of sherbet and milk drinks that can be made, some of which can be served either hot or cold. For sherbet drinks mix one pint of sherbet with one quart of soda. Especially helpful for such is a mixing machine, such as a blender. Bananas, dates, papaya go very well with milk. For other flavors use preserves such as grape, raspberry, strawberry. Orange juice or other fruit juices can also be readily mixed with milk, even as can peanut butter or chocolate. Ripe fruits can be used as well as the juices from canned fruits, such as peaches. Many of these drinks can also be made with yogurt or buttermilk. If more nourishing drinks are desired, add egg yolks, one per glass or per pint.

The facts show that the indiscriminate use of alcoholic beverages in social drinking often raises problems. Many hosts and hostesses therefore deem it well not to consider such beverages a "must" when friends come together. They consider the circumstances and also the fact that there can be much pleasure at social gatherings with fruit punch and other nonalcoholic drinks.





DID you know that the early followers of Jesus Christ never used images in worship? Did you know that it was after Emperor Constantine of the fourth century C.E. decreed the Catholic Church to be his state church that images began to be used by its adherents? And that was largely because there had been a great influx of pagans into his church. And did you know that one Roman emperor ordered all pictures and sculptured images to be hung high on the church walls to prevent worshipers from kissing them? Strange facts these, and there are more.

² Late in the sixteenth century a Catholic bishop destroyed a number of images because the populace were adoring them. The angered people took the issue to Pope Gregory I. What was his decision? He came out in favor of the images. Why? So that the uneducated people might be able to read on the wall what they were unable to read in books. And even as late as this present century some of Christendom's churches still have their bleeding, weeping and winking images.

³ Since it was claimed back in those earlier centuries that images were needed as 'aids to devotion,' what reason for their use can be offered today, particularly in Christendom? Are not most persons in Western lands able to read? After some sixteen hundred years of teaching by the clergy, are not the majority in Christendom equipped to read and understand

God's view of image worship as set out in the Bible? Since you want to do what is right and you can read intelligently, why not go to the Scriptures and learn for yourself the truth on this subject? Is God pleased with worship offered through images?

Note, first, the emphatic ruling that God gave the Jews at the time he set them apart to be his special people: "You must not make for yourself a carved image or a form like anything that is in the heavens above or that is on the earth underneath or that is in the waters under the earth. You must not bow down to them nor be induced to serve them." (Ex. 20:4, 5) It would not have done for those Jews to claim that they were rendering only a relative worship to the idol. God had said they were not even to make them. And later, when they did make a golden calf image to represent God, his anger blazed against them disastrously.-Ex. 32:4, 5, 35.

⁵ God, through his prophet, shows the futility of putting trust in images. Please turn to Isaiah 46:6, 7 and note these words: "There are those who are lavishing out the gold from the purse, and with the scale beam they weigh out the silver. They hire a metalworker, and he makes it into a god. They prostrate themselves, yes, they bow down. They carry it upon the shoulder [in religious procession], they bear it and deposit it in its place that it may stand still. From its standing place it does not move away. One even cries out to it, but it does not answer." See also Psalm 115:4-8.

*Since, as the apostle John states, "at no time has anyone beheld God," it would be impossible to make an accurate and truthful likeness of him. (1 John 4:12) Remember, Jesus instructed his followers: "God is a Spirit, and those worshiping

him must worship with spirit and truth." -John 4:24.

But what about the claim by some that use of images aids them to concentrate their thoughts on religious ideas? Well,

the Christian teaching of the apostle Paul disagrees with that view, for he wrote: "We keep our eyes, not on the things seen, but on the things unseen,"

Winter Colds-Can They Be Avoided? Wilderness Life in Alaska.

The World in Ferment-A Look at 1988.

will inherit God's kingdom."-1 Cor. 6: 9, 10; see, too, Revelation 22:14, 15.

10 Through his prophet God declares further: "Every metalworker will certainly feel shame because of the carved image;

for his molten image is a falsehood, and there is no spirit in them. They are vanity, a work of mockery." (Jer. 10:14, 15) We might as well put our trust in

the falsehoods of unscrupulous men as put trust in lifeless images! Besides, the God of heaven assures that he is always approachable for those who are righteously disposed, so pray to him in the way that he instructs, in Jesus' name, not by means of an image. (Ps. 34:15) Wisely, then, let lovers of God and of truth obey the urgent counsel of the apostle Paul: "Flee from idolatry."-1 Cor. 10:14.

ises found in the Bible.—2 Cor. 4:18; 5:7. 8 Can a madonna statue or a crucifix hear and answer your prayers or transmit them to the true God? Of course not. Can they intercede or mediate for you before God? Jesus Christ himself gives the authoritative answer: "I am the way and the truth and the life. No one comes to the Father except through me. If you ask anything in my name, I will do it." (John 14:6, 14) Nor is there any other mediator or mediatrix, for the Bible assures us: "There is one God, and one mediator between God and men, a man Christ Jesus."—1 Tim. 2:5.

that is, on the spiritual truths and prom-

⁹ Indeed, Jehovah God considers it a blasphemy, a personal insult to himself, when men reverence and bow down before such supposedly "holy" images and pictures. "I am Jehovah," he declares. "That is my name; and to no one else shall I give my own glory, neither my praise to graven images." (Isa. 42:8) Those who insist on directing reverential worship through lifeless images are putting in jeopardy any expectation of their ever enjoving the blessings of God's promised kingdom. Says the apostle Paul: "Neither fornicators, nor idolaters [image worshipers] . . . nor thieves . . . nor extortioners

Can you answer these questions? For answers, read the article above.

(1) What strange facts about the use of images are here brought to our attention? (2) Why did Pope Gregory I favor the use of images? (3) What pertinent questions arise as to the need for 'aids to devotion'? (4) At Exodus 20:4, 5, how does God express himself about carved images? (5) Speaking through his prophet Isaiah, what does God say about putting trust in images? (6) Why is it impossible to make a likeness of God? (7) As shown at 2 Corinthians 4:18, did the apostfe Paul agree that visible aids to worship are beneficial? (8) What is the only means of access to the Father, and how does the apostle Paul indicate this at 1 Timothy 2:5? (9) What serious warning does God's Word give to those who direct their worship through graven images? (10) How, then, should we pray to God?



Everyone in Debt

America's collective citizenry owes more than \$100,000. 000,000, according to a group of financial experts. Morris Rabinowitch, president of financial counselors in San Francisco, said: "I would guess now that one-third of all American families are over-extended in their debts and are on the brink of serious trouble." William Regan, University of San Francisco business school dean, termed the American society one in which "everybody owes." Rabinowitch scoffs at the official figure that Americans collectively owe more than \$100,000, 000,000. He says the figure should be closer to \$200,000. 000,000. There were over 41,000 bankruptcies filed last year in California alone, "If this country, for just a period of 90 days, eliminated credit, it would make '29 look like an age of optimists," said Rabinowitch.

Meat Ban Off

♦ What was once a sin has now become an acceptable practice for Roman Catholics, that is, the eating of meat on Fridays. Catholics throughout New Zealand were told in November that they, too, may now eat meat on Fridays, except during Lent.

Criticism of the Papacy

♠ The National Catholic Reporter for October 1968 published one of the strongest internal criticisms of the Roman Catholic Church in modern times. The article was headlined: "How to get the papal monkey off the Catholic back." The article calls for the "debunking" of the papacy. Even Protestants were amazed by the outspoken criticism of the Catholic hierarchy contained in the article. One said I "never thought that I would see the day when a Roman Catholic publication would be so honest." A few statements from the Catholic article are these: "The pomp and paraphernalia of the papacy are so much trivia, fit only for circus Ioving children, politicos and visiting tourists." The article spoke of the "need to debunk the papacy." On respect for the pope: "The Pope ought to be addressed with respect, but no more or less than the respect which every Christian ought to accord evcry other Christian." On the claim to papal infallibility: "The doctrine of papal infallibility is dead; but then it was never really alive anyway as anything more than a piece of theological hyperbole, good for morale but for nothing else." It said: "Catholics can achieve a psychological independence of the papacy." All this from *The National Catholic Reporter*, October 9, 1968.

Working Days Lost

♦ Britain's Department of Employment and Productivity reported that manufacturers of automobiles, motorbikes and bicycles lost 678,000 working days through strikes in the first eight months of 1968, up from 285,000 days in the comparable 1967 period. The figures do not include workers laid off in one plant as a result of a strike in another.

A Hundred Lives Lost

In northern Italy floodwaters brought cities and villages to a standstill. The watermark on storefronts in the town of Vallemosso was six feet high. The mud was knee deep. More than a hundred people were dead in Vallemosso and nearby villages. The Strona River and numerous other rivers spilled over their banks after several days of downpour, destroying lives and property. About 80 of the 120 textile mills in the area around Biella, a maior industrial region, were wrecked.

The Doctor Instead of God

 Gunther Plaut, senior rabbi of Holy Blossom Temple, told the Ontario Hospital Association in Canada that society has substituted the doctor for God. He said doctors have led people to believe that all sick persons need to get well is to find the right doctor who will provide the right treatment. "People about to die are told they are getting well," Plaut said, "because to admit they are dying would be to admit that science is not infallible." And, he said, people are not prepared to admit that. Plaut observed that hospitals have become very impersonal places where the patient is reduced to being a number and required "to provide proof (by insurance or ability to pay)

that he's worthy of being a patient. The gravest illness affecting our society," he said, "is depersonalization." Depersonalization, he continued, "makes us beggars before the chair of medicine."

Quake Shakes 22 States

A third of the United States on November 9 was rocked by a strong earthquake. The shock was felt by millions of persons. Skyscrapers in St. Louis and countless other buildings swayed, but there was no damage reported. The tremor centered in southern Illinois and from there rolled out in all directions. The quake measured 5.5 on the 10-point Richter scale, just under the usual damage point of 6. The 1964 earthquake that devastated much of Alaska registered about 8.5.

The Poor and Television

Professor Bradley Greenberg told the president's commission on violence that to a Negro youth in a slum, the world outside is just like he sees it on television—a violent world. Professor Greenberg says the average American watches television about two hours a day. For the poor, he says, the time is closer to six hours, and on a Sunday, a teen-ager may watch television nine hours. Greenberg says that programs of action, adventure and violence draw larger audiences among the poor—on a percentage basis than they do among the general public. The poor, he said, prefer more violent programs, and they are much more likely to believe what they see.

Homosexual Church Play

♦ Eight of the nine members of the cast of the off-Broadway play called "The Boys in the Band" were among the worshipers in a Presbyterian church in Brooklyn Heights. The worship service was on homosexuality. The play was described by a critic as by far the frankest treatment of homosexuality he had ever seen on the stage. But why air the subject at a religious service? The minister's reply was: "The Bible is more concerned with distortions of the spirit than the flesh. And variations of sex are not sin." However, the Bible is plain on the subject of homosexuality. It says: "Those practicing such things are deserving of death"; "men who lie with men" will not "inherit God's kingdom." (Rom. 1:32: 1 Cor. 6:9, 10) Instead of excusing their wrong, which will certainly bring the death penalty, the Presbyterian minister should conduct the "sheep" into paths of righteousness and life.

Never Enough Money

• It appears that one never earns quite enough. A teamsters' union study made public November 18 revealed that family income in the United States is "grossly inadequate for the overwhelming majority." The study showed that 7,300,000 white families had incomes under \$4,000 in 1967, along with 1,900,000 nonwhite families. To get better incomes, a high proportion of families needed two or more wage earners. In white families with incomes of \$5,000 to \$6,999, 44.3 percent had two or more wage earners; for incomes of \$7,000 to \$9,999, the two wage-earner families represented 56.1 percent; for incomes of \$10,000 to \$11,999, 66.9 percent required two or more wage earners; \$12,000 to \$14,999, the two or more wage earners represented 75.8 percent.

Vandalism on the Rampage

♠ During New York city's long and costly school strike, theft and vandalism, in schools especially, cost the city several million dollars in two months' time. Some schools were stripped of typewriters and adding machines. Unauthorized people were also running up long-distance telephone bills in schools. The cost of vandalism in the schools has been rising. In 1967 the loss from broken glass and unlawful entries and fires amounted to \$1,500,000.

Also, burglars, vagrants and vandals have been forcing their way into many churches and synagogues. Some churches have been forced to cancel evening services, install burglar alarms, hire all-night watchmen, fix floodlights on their property and put double locks on their doors, In some churches valuables are removed from altars after each service and locked up for safety. Msgr. James Searson, director of the Holy Trinity Chapel at New York University, said his church has troubles. Attempted rapes, acts of sexual intercourse and drinking in the chapel are not uncommon. "But it is nothing to get hysterical about," he said. "It is often a housekeeping problem, a part of living in New York City. One minute it upsets you, the next minute you think 'that's life.' "

Ultimatum Handed Priests

Those priests in Britain now rebelling against the pope's encyclical on birth control were ordered by Cardinal Heenan to desist or leave the priesthood. In a letter to all 900 priests in his diocese of Westminster, which letter the cardinal sent to the press for publication, he stated that priests are 'to refrain from opposing the teaching of the Pope in all matters of faith and morals.' 'A priest who is unwilling to accept these conditions will be maintained by the diocese until he has been able to find suitable employment.' Similar letters have gone out from the eighteen other diocesan bishops. Cardinal Heenan spoke of the turmoil within the priesthood. saying: 'The open refusal of

a group of priests to accept the Pope's guidance has caused dismay to their fellow-priests who, while being no less aware of pastoral problems, give loyal obedience to the Holy Father. The opposition of these priests to the Pope's teaching has bewildered and saddened loyal members of the laity.'

Baboon Blood Filter

♦ As early as December 1966, almost two years before South African surgeon Dr. Christian Barnard reported a man-to-baboon-to-man transfer of blood for patients suffering from liver failure, a team headed by Dr. David M. Hume carried out the same procedure. The attempt was made to purify the man's blood when he was in a coma caused by poisons his liver could not remove. Dr. Hume stated that the treatment has been used

with four patients. In each case, he said, the patients improved. But despite the initial improvement in each of the patients, Dr. Hume said, three are now dead. The three-year-old girl whose blood had been filtered through a chimpanzee's liver died on November 18.

U.N. Says No to China

♦ The United Nations General Assembly refused to admit Red China to the world organization for the 18th time since 1950. The vote was 58 against admission of Red China to 44 in favor of the resolution, with 23 abstentions.

Unreported Crimes

♦ Some people have tried to minimize the statistical reports on the crime rise by saying that statistics frequently do not give a true picture of the real situation. On November 29, the New York Times stated that there are "hundreds of thousands of serious incidents that occur each year in New York, but are never reported to the police." This report, in fact, says that the crime problem is even worse than the general statistics show. The report stated that the victims of crimes often are not the only ones who fail to report crime. Sometimes, according to both the national and local surveys, the police do the same. Some people say, 'Why report to the police? They either can or will not do anything about it.' Only 20 percent of the robberies and 13 percent of the burglaries reported to the police in 1967 resulted in an arrest. Since there were far more robberies and burglaries than were reported, the police results are far lower than indicated by official figures.

200 Million Hours to Bring You Good News!

In these troubled times, when labor problems are increasing due to growing resistance to bargaining, when there is a constant struggle to raise wages to keep pace with the spiraling cost of living, how refreshing it is to read of millions of hours donated free to help those like you to find reason for confident optimism in what the future holds! Yes, in one year, Jehovah's witnesses, over 1,150,000 of them, spent over 200 million hours preaching the good news that God's kingdom is certain to bring needed relief to men of honest heart in the very near future. Read the report: 1969 Yearbook of Jehovah's Witnesses. You will be encouraged and enlightened. Only 4/3 (for Australia, 50c; for South Africa, 35c). Send also for the beautiful 1969 calendar, only 2/3 (for Australia, 25c; for South Africa, 18c).

WATCH TOWER

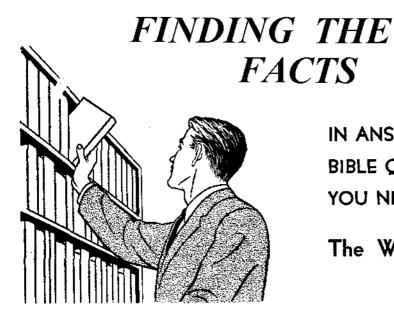
THE RIDGEWAY

LONDON N.W. 7

I am enclosing Please send	me [J 1969	Yearbook	of Jeho	vah's	Witne	esses
(each, 4/3 [for Australia, 50c; for South Australia, 25c; for South Africa, 18c]).	Africa,	35c]); [] 1969	calendar	(each,	2/3	[for
Toma	Street and Number or Route and Boy						

Name or Rotte and Box
Post Postal
Town District No. County

IF YOU HAVE DIFFICULTY



IN ANSWER TO YOUR BIBLE QUESTIONS, YOU NEED

The WATCHTOWER

The Watchtower is a magazine published for people who want the facts about the Almighty God and his purposes for mankind, for people who are discouraged with the growing disagreements and contradictions among the prominent orthodox religions, for people who view the future with genuine concern for the welfare of their families. The Watchtower is filled with comments on physical facts in fulfillment of Bible prophecy, with Bible principles that chart a safe course now with prospects for everlasting life in God's righteous new system just ahead. Read The Watchtower regularly to have your Bible questions answered completely.



One Year, 8/6 (for Australia, \$1; for South Africa, 70c)

WATCH TOWER

THE RIDGEWAY

LONDON N.W. 7

I am enclosing 8/6 (for Australia, \$1; for South Africa, 70c). Please send me The Watchtower for one year (24 issues). For mailing the coupon I am to receive free the three timely booklets When God Is King over All the Earth, World Government on the Shoulder of the Prince of Peace and "Look! I Am Making All Things New."

Name Post	<u> </u>	or Route and Box	\$		
T	p	District No	County		

In: AUSTRALIA: 11 Beresford Rd., Strathfield, N.S.W. CANADA: 150 Bridgeland Ave., Toronto 19, Ont. SOUTH AFRICA: Private Bag 2, P.O. Elandsfontein, Transvaal. UNITED STATES: 117 Adams St., Brooklyn, N.Y. 11201.