Awake!

Is Humility Really Desirable?

Facing the Problems of Widowhood

Drilling for Oil Under the Sea

"Switches" That Turn Genes On and Off

FEBRUARY 8, 1969

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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.

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CONTENTS

Thought Control—Voluntary or Coercive? 3

Is Humility Really Desirable? 5

Facing the Problems of Widowhood 9

Drilling for Oil Under the Sea 13

Hawaiian Memories of the Past 17

Degeneration, Not Evolution 19

Finding and Walking with God 20

"Switches" That Turn Genes On and Off 21

The Rewards of Good Training 26

"Your Word Is Truth"
Must You Confess Your Sins to a Priest? 27

Watching the World 29

Awake!
"It is already the hour for you to awake."
—Romans 13:11

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THOUGHT CONTROL Voluntary OR COERCIVE?

HOW would you like the government to control your thoughts by means of food additives? 'Fantastic! Impossible!' do you exclaim? Not at all, for psychologists even now speak of being able to manipulate the human race through drugs.

Thus Dr. K. E. Moyer of Pittsburgh University recently said: "It is not inconceivable that specific anti-hostility agents can be placed in the water supply to make a peaceful population. That is, of course, frightening, but the potential is there whether we are frightened by it or not. And it will not disappear just because we ignore it."

Dr. Moyer added that "the control of man's aggressive behavior by physiological manipulation is here now. It is here whether we like it or not, and whether we consider this step progress or not." —Houston, Texas, *Chronicle,* March 24, 1968.

Control drugs have been used experimentally on animals and also on violent criminals. However, what the psychologists have yet to determine is whether man's hostility can be reduced by chemical means without weakening his intellect and ambition, and without damaging initiative and creativity or undermining man's capacity to resist injustice and oppression.

This is not the first time that scientists have toyed with the idea of thought control. About ten years ago there appeared what was called subliminal advertising. This, it was claimed, could influence people watching motion pictures or television programs without their being aware of it. In one experiment, by means of pictures that did not last long enough on the screen to be recognized by the conscious mind, people were told to eat popcorn and drink Coca Cola. Though very brief, they apparently registered on the unconscious mind. As a result the audience greatly increased its demand for these two items, although, mind you, they had no knowledge of having been encouraged to do so. Many expressed strong indignation against the advertising agency's going to such lengths to influence the public to buy. In time the project was abandoned, apparently largely for ethical reasons.

Thought control in the name of science may be comparatively new, but coercive thought control in the name of religion

or as an instrument of government is by no means new. Communist China practices it, as can be seen from reports of those subjected to brainwashing in Red China's prisons. Also Hitler and his Nazis practiced coercive thought control wherever they extended their power, even as did the Fascists under Mussolini.

In times past coercive thought control was practiced chiefly in the name of religion. No sooner had the Council of Nicaea promulgated the doctrine of the Trinity than people were persecuted if they did not subscribe to it. Also Charlemagne, the first Roman emperor to be crowned by a pope, was not content merely to subdue the warlike marauding Saxons. He gave them the option, 'Be baptized as Christians or die!'

How different all this is from the course of true Christianity as taught by its Founder, Jesus Christ! At no time did he teach others to use force to make people adopt his teachings. Rather, his disciples came as peace messengers, having been taught to greet each house with, "May this house have peace." If not favorably received, they were to leave, looking for "a friend of peace" elsewhere.—Luke 10: 5, 6.

Even when dealing with his ancient nation of Israel Jehovah God repeatedly let the people choose. Would they accept Moses as sent from God? Would they enter into a covenant with Jehovah God to keep his laws? In each instance an appeal was made to their reason, and the people responded with a voluntary assent. (Ex. 4: 31; 19:8) Moses' successor, Joshua, put it squarely up to the people, after they had declared their willingness 'to serve Jehovah. Reminding them that Jehovah "is a holy God; he is a God exacting exclusive devotion," Joshua questioned whether his people, the Israelites, so often guilty of grumbling, of showing a lack of faith and of rebelling, would be able to serve such a God. But the people insisted, "Jehovah we shall serve!" No question about it, Joshua did not use any of the coercive tactics that Charlemagne used with the Saxons to get them to profess to be Christians.—Josh. 24:14-24.

However, let it be noted that, once the Israelites had gone on record as accepting Jehovah as their God and benefiting from his Godship, they were accountable to him, were obligated to give him exclusive devotion.

For their own good Christians are counseled in the Word of God to exercise voluntary thought control: "Whatever things are true, whatever things are of serious concern, whatever things are righteous, whatever things are chaste, whatever things are lovable, whatever things are well spoken of, whatever virtue there is and whatever praiseworthy thing there is, *continue considering these things.*" (Phil. 4:8) What worthwhile thoughts this will bring!

Voluntary thought control requires alertness and self-discipline. In particular does it require control of one's emotions. Have you been slighted or otherwise offended by what another has said or done? Do not dwell upon it, but exercise voluntary thought control by changing the subject of your thoughts. Or have you been brought face to face with an appealing temptation? Again, exercise voluntary thought control and dismiss it from your mind before it becomes an overwhelming desire causing you to sin.—Matt. 26:41; Jas. 1:14, 15.

Yes, it is wise to exercise voluntary thought control. Not only does it make for more peace of mind and contentment for yourself, but it is bound to benefit those with whom you have to do. And, above all, it brings with it the approval of the Creator.—Prov. 27:11; Mal. 3:16.

IS HUMILITY REALLY *Desirable?*

Does practicing it bring happiness and success? Or do the proud fare better?

WHOM do you prefer? A person who is mild, modest and lowly of mind, or one who is proud, arrogant and high-minded? Which one, in your opinion, makes the most desirable marriage mate or working companion? Which one would you prefer to have exercise authority over you, perhaps as your employer or ruler?

The answer is obvious, is it not? We usually are repelled by the boastful, haughty person. Domination by him can be oppressive and undesirable. On the other hand, the meek, humble person is a fine companion, and it is indeed pleasant to submit to his oversight or rule.

The trouble is, however, that the arrogant often rise to the top and wield authority. The apparent success of such ones caused an ancient Bible psalmist to say: "I became envious of the boasters, when I would see the very peace of wicked people. For they have no deathly pangs; and their paunch is fat. They are not even in the trouble of mortal man, and they are not plagued the same as other men. Therefore haughtiness has served as a necklace to them; violence envelops them as a garment. Their eye has bulged from fatness; they have exceeded the imaginations of the heart. They scoff and speak about what is bad; about defrauding they speak in an elevated style."—Ps. 73:3-8.

Have you, too, observed that boastful, haughty persons often seem to have the best of things? It is generally felt, therefore, that humility is impractical, that it is not a desirable quality to cultivate if one wants to succeed. Is this true? What do you think?

How the Proud Fare

The fact is that proud, haughty persons do not fare as well as is sometimes thought. Even though they may acquire worldly position and wealth, and, as a result, attract numerous associates, they rarely are truly loved by others. Rather, their exalted opinion of themselves and their quest for prominence generally make them repulsive both to fellow humans and to God. "God opposes the haughty ones," the Bible says. (Jas. 4:6) Is it any wonder then that such ones seldom realize genuine happiness?

Furthermore, their high-mindedness often serves as a trap that suddenly brings them low. As the Bible proverb says: "Pride is before a crash, and a haughty spirit before stumbling." (Prov. 16:18) Even the Bible psalmist who wrote about the apparent success of the haughty went on to observe: "O how they have become an object of astonishment as in a moment! How they have reached their end, have been brought to their finish through sudden terrors!"—Ps. 73:19.

The pages of history are filled with ex-

amples of proud ones suddenly being brought low. Adolf Hitler and Rafael Trujillo are but more prominent recent examples. And although there may be those who seem to be secure in their proud way of life, God sees and promises to take action, saying: "I shall actually cause the pride of the presumptuous ones to cease, and the haughtiness of the tyrants I shall abase." (Isa. 13:11) The proud and arrogant will not fare well indefinitely.

The Desirability of Humility

Appropriately, therefore, Jesus repeatedly emphasized to his disciples the desirability of humility. The disciples needed this counsel, for they were influenced by the worldly attitude of seeking prominence and prestige. This became apparent during the last year of Jesus' earthly ministry, shortly after Jesus had taken Peter, James and John with him up to a high mountain where miraculously "he was transfigured before them."—Mark 9:2-13.

As they were traveling home to Capernaum, an argument broke out among the disciples over which one of them was the greatest. Jesus' favor toward Peter, James and John by taking them up into the mountain may have been a factor in this argument. In any event, Jesus recognized the undesirable attitude existing. So Jesus questioned them. Thus he got the disciples to ask him about the matter on their minds, thereby affording Jesus opportunity to correct their wrong thinking. —Mark 9:33, 34.

The apostle Matthew describes what happened: "The disciples came near to Jesus and said: 'Who really is greatest in the kingdom of the heavens?' So, calling a young child to him, he set it in their midst and said: 'Truly I say to you, Unless you turn around and become as young children, you will by no means enter into the kingdom of the heavens. Therefore, whoever will humble himself like this young child is the one that is the greatest in the kingdom of the heavens.' "—Matt. 18:1-4.

What a fine way to impress upon his disciples the desirability of humility! Little children naturally look up to their elders and consider them as superior. The disciples needed to turn around and become like that. As one of the apostles later explained, they should have developed "lowliness of mind considering that the others are superior." (Phil. 2:3) What pleasantness there is when persons have this humble frame of mind! There are no rivalries, grudges or strained relationships. But a warmth and a friendliness exist that bring true happiness. How desirable!

Later Jesus described the stark contrast between God's people and worldly rulers who lack humility. He said to his disciples: "You know that the rulers of the nations lord it over them and the great men wield authority over them." How undesirable is that arrangement! Therefore Jesus continued: "This is not the way among you; but whoever wants to become great among you must be your minister, and whoever wants to be first among you must be your slave."—Matt. 20:20-27.

Not only did Jesus teach this superior way of humility, but he demonstrated it. The Bible describes how he "emptied himself and took a slave's form." (Phil. 2:7) Yes, Jesus even performed the menial task of washing the feet of his disciples, thus emphasizing to them to what extent they should humbly minister to others. —John 13:4, 5.

Humility—The Way to God's Favor

Humility is really desirable because it opens the way for a person to come into God's favor. Humility moves him to accept God's provisions, even though these

are dispensed through a lowly source. That is why Jesus so often emphasized its importance.

For example, shortly before entering Jerusalem for the final week of his ministry Jesus again seized an opportunity to impress on his disciples' minds the necessity of humility. Notice how he illustrated the humble frame of mind needed to accept the Kingdom and thus gain God's favor:

"Now people began to bring [Jesus] also their infants for him to touch these; but on seeing it the disciples began to reprimand them. However, Jesus called the infants to him, saying: 'Let the young children come to me, and do not try to stop them. For the kingdom of God belongs to suchlike ones. Truly I say to you, Whoever does not receive the kingdom of God like a young child will by no means get into it.' "—Luke 18:15-17.

Very young children are usually meek and teachable. They are open-minded and eager to learn new things. They are not hindered by prejudice, nor are they puffed up with knowledge. It is to persons that demonstrate such humble childlike qualities that the Kingdom belongs, Jesus said. Will you receive the message of God's kingdom as young children receive new information—eagerly, open-mindedly, humbly? To do so is the only way that you can gain God's favor.

Humility Tested

It is clear, therefore, that Jehovah God takes delight in humble ones. He says: "In the height and in the holy place is where I reside, also with the one crushed and lowly in spirit." (Isa. 57:15) So, to enjoy God's favor you must prove yourself humble, lowly in spirit. This may not be easy. That it can, in fact, be a real test is illustrated by the example of an ancient army chief.

This man was the Syrian Naaman, who was afflicted with leprosy. Through the Israelite slave girl of his wife, Naaman learned about the prophet Elisha and the miraculous works he performed by means of the power from God. So Naaman went to Israel to seek a cure.

After arriving there Naaman was directed to the home of Elisha in Samaria. But instead of his being welcomed personally, the Bible record says: "Elisha sent a messenger to him, saying: 'Going there, you must bathe seven times in the Jordan [River] that your flesh may come back to you; and be clean.' " (2 Ki. 5:1-10) But, as a prominent chieftain, Naaman did not expect such an ordinary reception, nor did he anticipate receiving such a simple remedy for his disease. What would he do?

Well, Naaman grew angry and began to go away. Indignantly he exclaimed: "Here I had said to myself, 'To me he will come out all the way and will certainly stand and call upon the name of Jehovah his God and move his hand to and fro over the place and actually give the leper recovery.' " Naaman expected special attention, certainly not to be told to bathe in a common river. Disdainfully he asked: "Are not the Abanah and the Pharpar, the rivers of Damascus, better than all the waters of Israel? Can I not bathe in them and certainly be clean?" So pride was about to interfere with obedience to instructions from God's prophet.

However, Naaman's servants now approached him and said: "My father, had it been a great thing that the prophet himself had spoken to you, would you not do it? How much more, then, since he said to you, 'Bathe and be clean'?" At this Naaman humbled himself. Obediently he went to the Jordan River and plunged into it "seven times according to the word of the man of the true God; after which his

flesh came back like the flesh of a little boy and he became clean."—2 Ki. 5:11-14.

What a grand blessing Naaman enjoyed for humbly obeying God's representative! But it was not easy to lower himself to submit to such simple instructions. Similarly, it requires humility for persons to accept the Kingdom message and to act upon it.

A Present-Day Test of Humility

Do you have the necessary humility? Remember, God uses lowly means by which to make known his provisions for blessing mankind. Jesus Christ, whom God sent forth as the chief proclaimer of his kingdom, was not a prominent worldly educator. Rather, he was known as a local carpenter who had no special schooling. (Matt. 13:54-57; John 7:15) Would you have willingly accepted instruction from him? Most persons were too proud to do so. Jesus' apostles also were just ordinary men as far as worldly education and prominence were concerned. (Acts 4:13) Would you have taken the time to consider seriously the message they carried about God's kingdom? To do so would have required humility.

The situation is similar today. God is not using the prominent political, military or religious leaders to proclaim the establishment of his kingdom and the grand blessings it soon will bring. No, but as in the first century, he is using ordinary persons—laborers, housewives, young people and elderly—to do this Kingdom preaching. This activity is now being carried on in two hundred lands by such Christian witnesses of Jehovah. They are pointing out that the present unparalleled "anguish of nations" is Scriptural evidence of the imminent end of this wicked system of things and the ushering in of God's new system. (Luke 21:25-32) Will you humbly give this message serious consideration?

True, it is common for worldly men to scoff at the reliability of the Bible and scorn those proclaiming its message about God's kingdom. Yet, remarkably, the very deterioration in human affairs now occurring world wide was foretold in the Bible! (2 Tim. 3:1-5; Matt. 24:3-14) This is no time, therefore, to allow pride to prevent you from considering the real meaning of world conditions. Heed Jesus' admonition to become as little children. Open-mindedly and eagerly listen to the Kingdom message. Accept a Bible study with Jehovah's witnesses in your own home. Learn about God's grand provisions for soon blessing mankind.

ARTICLES IN THE NEXT ISSUE

What Is Happening to Youth, and Why?

Miracle Rice—for Asia's Hungry Millions.

This humble course of action will lead you to happiness and blessings that you would not have imagined possible. You will be brought into association with a society of people who truly live by the Bible and who demonstrate the childlike humility of which Christ spoke. You will come to feel the warmth and joy of their fine association. What is more, your faith and hope in God's promises for eternal life in a paradisaic new system will grow until they are the dominating feature of your life. And eventually you will realize the fulfillment of your Bible-based hope and faith. Yes, you will see in your own life the fulfillment of the inspired Bible proverb: "The result of humility and the fear of Jehovah is riches and glory and life."—Prov. 22:4.

Facing *the* Problems *of* WIDOWHOOD

"I NEVER expected to be a widow," said a young woman, "yet here I am without my husband. What am I to do?"

No young wife expects to be a widow, but as long as this system continues, that possibility exists. And it is an eventuality for which wives should prepare.

Every year more than half a million women in the world go through the soul-searching experience of becoming widows. There are over ten million widows in the United States alone, and the net rate of increase is about 100,000 a year. Statistics show that 25 percent of the women between fifty-five and sixty-four are widowed.

While schools do not give courses on how to become a successful widow, still prudent women can profit greatly from the experiences of others. "Wisdom is for a protection," says the Bible. (Eccl. 7:12) And wisdom dictates that women inform themselves beforehand as to what they need to know and do to meet the crushing possibility of widowhood.

"When my husband John died," said a young widow, "I was completely lost. He left me almost totally unprovided for. I am ashamed to admit my first reaction was one of resentment." Another widow said: "My husband left me entirely unprepared for the problems now facing me." Many a heartache and disillusionment of this kind, and countless mistakes and errors of judgment could be avoided if women would face the possibility of widowhood frankly *now*—before it happens.

A husband should realize how important it is for his wife to know at all times the status of family finances; where his will is and the terms of his will; if there is a bank account, any debts, the way his insurance is set up and the provisions of the trust fund set aside for her, if one exists. It would be a wise and loving act if a husband would indicate in writing the names of several trustworthy persons to whom his wife could go for various types of advice. The husband might also make suggestions as to what might be done with the property, provisions to be made for the children and alterations that might be necessary in the family standard of living. All of this would act as a protection. This would be immeasurably helpful for the wife to know *now*.

No matter how prepared the wife may be, death still comes as a shock. Each widow is called upon to deal with a multitude of new problems, and this at a time when she may be confused, grief-stricken, bitter and uncertain. She often is asked to make accurate decisions, manage her

money and make a new life for herself and for her children when she feels most miserable and least qualified. Therefore, thorough preparation beforehand, to the extent possible, should be viewed as a thoughtful, understanding and loving act on the part of the husband.

Try to Avoid Hasty Decisions

Widows are often tempted quickly to sell or give away everything, to move and to start life anew somewhere else. But remember, wisdom is for your protection. And the timely advice for widows is: Don't be hasty! Don't make any drastic changes on the spur of the moment. Don't rush to sell your house or move in with somebody or invest your money in a "sure thing" that will put you on "easy street." Wait. Wait until you have pulled yourself together and thought it over carefully.

If you feel you are being rushed or coerced into something, consult your lawyer, or, if you are one of Jehovah's witnesses, speak to a mature Christian brother in your congregation. The wisdom of the Bible is: "In the multitude of counselors there is salvation." (Prov. 24:6) Never rush into anything that might cause you regret later.

One widow sold her car, because she thought she could get along without it. Then she got a job that required a car. She was forced to buy a used car that was not as good as her old car, and she had to pay more for it than she received for her old car.

Another widow sold all her belongings and moved to another city. "I burned all my bridges behind me," she said. But the new location did not work out. So back to the previous community she moved. This not only proved expensive, but she had to settle for a smaller apartment, for which she paid more rent, and she was also forced to redecorate it at her own expense.

If you feel that you must make changes, then it might be well that they be on a temporary basis. You can always make temporary arrangements permanent after six months or so when you are positively satisfied with the change. Provide yourself with a big 'loophole.' Otherwise, you may live to regret it, for "everyone that is hasty surely heads for want."—Prov. 21:5.

Get Competent Help

Another temptation is to think that others know more and can do more for the widow than she can for herself. The fact is that the widow knows more than she thinks, and she can do more than she thinks. The survival of tens of millions of widows in the world is proof of this. One widow was left with three children, more than $500,000 in debts and back taxes, a court fight, a custody battle and a number of lawsuits; still she prevailed. "I had to be the rock of the family—and there was nothing inside of me but whipped cream," she said. But she seized hold of the situation, went to work on the problems and overcame what might have appeared to be impossible obstacles.

If you can afford it, you may find it beneficial to get professional help. One widow said: "Professional help means your lawyer, your banker, your doctor, not your blood relatives." That does not apply to all relatives; some are very competent, trustworthy and willing to help. But, unfortunately, there are many who are very selfish. The same is true of some professional men; be sure you know the one with whom you do business. Life in this world is hard and it must be faced realistically and honestly. A widow received $60,000 insurance when her husband died. She was encouraged to invest

in various enterprises. Now she is a clerk in a store, every insurance penny swept away. Those who helped her spend it have also vanished from sight.

Often, where wealth and property are involved, one's enemies may be very close to home. A son wanted his widowed mother's money to start a business and build a fortune. The business failed and the money disappeared. If need be, stand up to relatives who might want to put your money into risky ventures. Also, it is usually wise to say "No!" to big brothers and sisters who say, "Just give me all the money and I'll take care of you." Have they truly showed unselfish concern in the past, so that you have reason to be confident that they will show it in the future? Poorhouses are crowded with widows who have listened to attractive promises from self-seeking persons. If the offer is tempting, remember, there is safety in a multitude of counselors. Listen to counselors first before deciding.

Funeral Costs, Promises and Payments

Perhaps the first difficult decision the widow faces is in connection with the funeral arrangements. Many widows have been persuaded to buy expensive caskets and to erect tombstones on plots far more elaborate than they could afford. Widows have spent entire estates on deluxe funerals and then found they had nothing with which to face the future. Others have contracted debts that have taken them years to repay. Incur no debts, if you can help it. Do not be stampeded into paying ten times what a plot is worth simply because it has a willow tree or a fine view of the valley. That valley may turn into a shopping center in a year or two. Anyway, the deceased cannot enjoy the view.

Order the kind of funeral service that you want. A simple, dignified funeral with an inexpensive closed coffin is no affront to anyone. When funeral directors know that funds are limited, most of them will help to keep costs down. Bear also in mind the apostle Paul's words: "We have brought nothing into the world, and neither can we carry anything out." (1 Tim. 6:7) So no good purpose is served by burying a diamond stickpin or a gold watch with the deceased. The dead have no use for silver handles or hand carving on coffins, or for satin linings.

When in a state of shock, money and other things may seem of little value to the widow, but later on they may prove to be very useful. So a widow cautions: "Promise nothing to anybody for at least six months after your husband's death. Or make it a longer period than that . . . Then you will have no rash promises to regret when your judgment is cooler." Also, lend no money and sell nothing until you are sure it is legally yours and you have thought it over carefully.

Also, do not pay any bills until you see proof that the merchandise was actually ordered by your husband or that the services were in fact performed. Do not pay cash on delivery charges unless you know what you are receiving. Racketeers often use these methods to swindle unsuspecting widows.

When Loneliness Strikes

"Look out for the end of the second week," warned a widow, "that's usually when the bottom falls out." When loneliness closes in there may be panic in the thought of spending the rest of one's life alone, eating alone, visiting alone, doing things alone. "Nobody needs me. Nobody cares for me. They don't care if I live or die. I am useless," are the depressing thoughts of a lonely person that can drive one into desperation, if permitted.

What can a widow do to counteract these thoughts? She can stop feeling sorry

for herself by forcing herself to look at the brighter side of life. How fortunate she was to have had a husband, a wonderful love and a happy marital experience. This is something not all women experience in a lifetime. Life teaches us that to have had the love of another person, as one receives in marriage, is an incomparable privilege. If we must lose a loved one in death, were we not immeasurably the gainers and enriched by having had that one in the first place? The widow can always carry with her the knowledge of a love that was hers, and nothing in life can take that away from her.

When loneliness strikes, the widow should quickly busy herself. She can write letters or prepare a dinner and invite friends over. When the hands are busy, working for the good of others, the mind relaxes, depression soon disappears and the fountains of joy open up to flow once again. A real blessing comes when 'all that our hands find to do, we do with our very power,' with zeal.—Eccl. 9:10.

And what are friends for? Call them up when trouble looms. Say, "Let's go out. Let's have a lunch. Let's take a trip." Refuse to allow yourself to become emotionally upset. Like every storm, loneliness passes in time when steps are taken to counteract it. The widow needs to persevere. And physical activity will help weather the storm.

Finding Work

A young widow, if she has not been working already, will most likely have to find a job or turn some talent or skill into making money. Older widows may not find jobs easily, but jobs are there. The widow with children also has a problem. The insurance money, large or small, is often all the average widow will have to depend upon for some time. Therefore the insurance money is not a windfall to be spent on luxuries. Some insurance companies have set up plans that help the widow safeguard her capital. Money comes to the widow in small monthly installments, rather than in one big lump sum.

In some cases poor widows with children, and even without children, have had to appeal to welfare agencies to help them along until they could get themselves financially situated.

Some widows say, "I'm middle-aged. What chance do I have to get a job?" There are many lines of work, some of them are interesting and rewarding, where gray or snow-white hair is no bar.

Investigate the employment offices in your locality. In some countries there are employment offices that charge no fee. These generally are helpful to the untrained and inexperienced in getting jobs. You can also consult private agencies. Watch the classified ads. Pass the word around throughout your entire acquaintanceship that you want a job. Do not hesitate to go after the work you want. Remember, there are millions of widows working.

Faith Is a Strong Tower

Fortunate, indeed, is the widow who has a strong and enduring faith in Jehovah God. She who feels the nearness of God is never alone. The widow who has looked upon religion as something useless or outdated has cheated herself out of this most rewarding experience in life. Her loss is great! A seventy-nine-year-old widow who had lived almost fifty years with her husband, when asked how she managed, replied: "Trust in Jehovah." She continued: "My life is full with spiritual work."

So often widows who have not been introduced to a living faith have no way of standing up to disaster. They flee from

reality into sickness, drink, some philosophy of hate or a futile pursuit of pleasure. On the other hand, those who have made God their strong tower have found in his Word proof that God is a Friend of the widow. His Word counsels Christians to "look after orphans and widows in their tribulation," 'not to defraud widows,' but to "honor widows that are actually widows." (Jas. 1:27; Zech. 7:10; 1 Tim. 5:3) So the widow finds comfort and honor within God's arrangement.

God has proved himself to be a widow's Provider. You may recall those widows mentioned in the Bible—faithful Anna, the generous widow of Zarephath, and the lovely Ruth, to whom it was said: "May Jehovah reward the way you act . . . under whose wings you have come to seek refuge." (Ruth 2:12) What was so admirable about these widows? It was their devotion to true worship and also their loving interest in others. By busying themselves in the service of God they found healing from sorrow and renewed purpose for their lives.

So the most natural direction for the widow to look to fill the void in her life, then, is toward God. Applying her thoughts and activities to his grand purposes, she will find comfort and eternal life in his new system of things.—1 John 2:17.

By "Awake!" correspondent in Papua

SINCE the drilling of the first oil well for petroleum in the United States in 1859, oil-drilling rigs have become a familiar feature of the landscape in many lands. Until recently most of these rigs were on dry land. Now, however, with most of the land areas of earth well prospected and mapped for their oil resources, man has turned to the ocean in his search for oil.

At an average cost of $20,000 per day oil companies around the world are busy searching for earth's undersea treasure. In many areas oil has been found. In fact, after a recent find in the Tasman Sea it was predicted that within a decade offshore oil fields will supply all of Australia's petroleum needs.

Such drilling down through the ocean floor, often at great depths, has necessitated new types of drilling rigs and new techniques. Just what kind of equipment is being used, and how is the operation conducted? Perhaps the best thing to do is visit one of the latest rigs—one that has been drilling in the Gulf of Papua since October 1967.

The Drilling Rig

This is one of the largest rigs of its kind afloat. Dwarfing the 286-foot rig that has been so successful in the Tasman Sea, this one has an overall length of 400 feet

and a displacement of 11,000 tons, nearly twice that of the rig operating in the Tasman Sea. Technically it is classified as a drilling ship, for besides fulfilling the requirements of a standard rig it can also move along under its own power. It has twin propellers and a total of 4,500 horsepower at its command. On its maiden trip the ship was able to average a speed of twelve knots—quite a feat for an oil-drilling rig!

The ship's crew and drilling personnel are rotated so that each has opportunity for a break ashore. Relief teams are transported regularly from the capital to the most convenient airstrip, and thence by helicopter to the rig, where others await the return flight to families and friends for a brief respite.

It is in one of these helicopters that we shall make our trip out to the rig. It carries us over the maze of waterways and canals that wind in and out among the nipa palm islands and swamps that are common on the shoreline of this region. Soon we are flying over open sea, and our destination, the drilling ship, comes into view. The 142-foot derrick especially captures our attention as we settle down on the helicopter deck astern.

No small ship this. Why, as we take a look over the edge we note that there is a drop of at least forty feet to the water below. Down in the engine room we note eight generators, some to supply the ship with a 415-volt A.C. supply of electricity, and others to furnish the power to drive the ship's D.C. motors as well as the motors that operate the drill, the pumps and the draw works on the rig.

Next day, by arrangement of the captain, we tour the various parts of the vessel. One thing that puzzled us was soon cleared up by our guide: How could the ship be kept steady enough at sea for drilling purposes? The answer: The ship is held firmly by ten anchors weighing fifteen tons apiece. Eight of them are fastened to 1,500- to 3,000-foot lengths of 2 3/4-inch alloy steel chain and two are fastened to 1,500- to 2,200-foot lengths of 2¼-inch wire rope. By slackening the wire ropes on the bow or stern and playing out the chains either fore or aft on one side of the ship, while taking up the slack on the opposite side, it is possible to maneuver the ship into position directly over any proposed drilling site.

Almost amidships on the main deck we come to what is called the drill well, more often spoken of by the personnel as the "moon pool." It is a hole 22 feet by 20 feet that runs vertically through the ship to its keel. Through this the drill, casing and other apparatus are lowered to the ocean floor. Up a flight of steps the guide leads us to the drilling platform, mentioning as we go something about "coming up out of the hole." This, we found out, means that they have drilled at this site to the maximum depth planned for the time being—in this instance 8,000 feet—and are now bringing the lengths of drill pipe back on deck.

As we watch the derrick lift long lengths of pipe out of the hole, one after another, the guide explains that the derrick's control systems are run by compressed air, whereas other machinery is driven by sparkproof electric motors. These latter are a vital necessity, for, should any gas be blowing out of the hole, a spark could touch off an explosion.

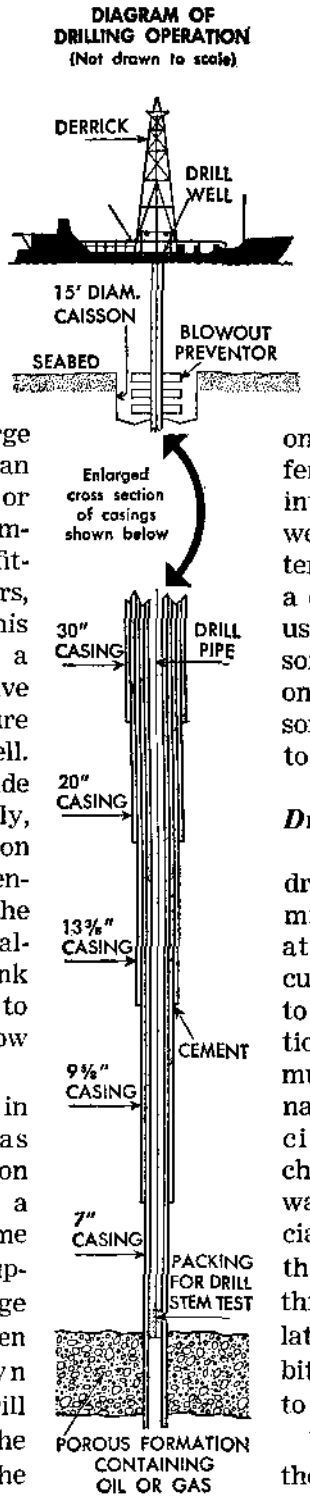
It is interesting to watch them "come out of the hole." As soon as one length of pipe is pulled to the top of the derrick, the drill crew quickly swing a compressed-air vise into position. It clamps the end of the next section of pipe, now protruding from the rotary platform. The top

length of pipe is then unscrewed and lowered into an automatic pipe rack. In the actual drilling operation the reverse takes place. As section after section of the drill pipe descends into the depths, the next section is screwed on, and so on until the desired depth of the hole is reached.

Sinking a Well

Apparently, before they started drilling at this site a large hole had to be made on the ocean floor, into which a caisson or large metal box, having a diameter of fifteen feet, had to be fitted. It consisted of three layers, each about eleven feet high. This caisson houses what is called a "blowout preventor," a protective device used in case high-pressure gas is encountered in the well. This preventor is actually made up of a series of valves. Normally, the caisson would simply rest on the ocean floor, still leaving plenty of space between it and the ship's keel. However, here in shallower waters it had to be sunk below the ocean's bed so as to leave plenty of clearance at low tide.

Once the large caisson was in position, a 36-inch hole was drilled through its center and on down through solid ground to a depth of 100 feet. Into this some 30-inch casing was sunk, its upper end being fastened to a flange at the center of the caisson. Then cement was pumped down through the center of the drill pipe and forced up around the outside of the casing from the bottom to the top where it set. Then a 26-inch bit was lowered through the casing to drill on for 400 feet at this smaller diameter. Into this some 20-inch casing was inserted and cemented from bottom to top in the same manner.



At this point the blowout preventor was installed, as a safety measure, in case of a blowout. From there on down, various lengths of different size casings were lowered into the drilled hole. These too were cemented into position. After the 20-inch casing, some with a diameter of 13 3/8 inches were used to a depth of 3,300 feet; then some 9 5/8-inch casing continued on to a depth of 6,000 feet; finally some 7-inch casing will be sunk to the full depth of the well.

Drilling Mud

To lubricate the bit during drilling operations, special mud mixtures have to be made, and at intervals samples of the drilled cuttings are taken and examined to determine the kind of formations being drilled. The drilling muds are not "mud" in the ordinary sense. Rather they are special mixtures of freshwater, chemicals, clay, fibertex, mica, walnut husks, and so on. The special mud is pumped down through the drill pipe and bit and on up through the casing. As it circulates it cools and lubricates the bit as well as flushing the cuttings to the top of the casing.

When brought to the surface, the mud goes through a shaking

system where the cutting samples are thoroughly examined. From this stage the waste is channeled overboard and the drilling mud is recycled. Evidently it is quite an art to determine the right consistency of mud to use, viscosity and weight being qualities that receive careful consideration.

Geological Tests

From cutting samples geologists can determine the different strata of rocks being drilled, whether it be limestone reef, mudstone or something else. The presence of hydrocarbons is watched for, and the amounts in which they occur. It was quite surprising to learn, too, that what these men expect to find when searching for oil is not some huge underground reservoir, but rather porous rock with a large amount of hydrocarbons present.

When a certain depth is reached, some wire-line logging instruments are lowered into the hole. These measure the amount of natural radiation as well as the effect that gamma radiation has on the formation. The electrical properties of the formation are also determined, to ascertain whether there are hydrocarbons present. If present to any degree, they have a high resistance to electricity. Measurement of the velocity of sound waves through the rock is also taken in order to determine the degree of porosity of the formation.

Should there be any hint of the presence of oil or gas, a "drill stem test" is made. The annular space between the outside of the drill pipe and the casing is sealed off with a packer at the base of the drill pipe just above where the test is to be made. Then explosive charges are used to make a series of perforations through the casing and into the formation below the base of the drill pipe. Any oil or gas present should then flow up through the center of the drill stem to the surface, where experts can examine it.

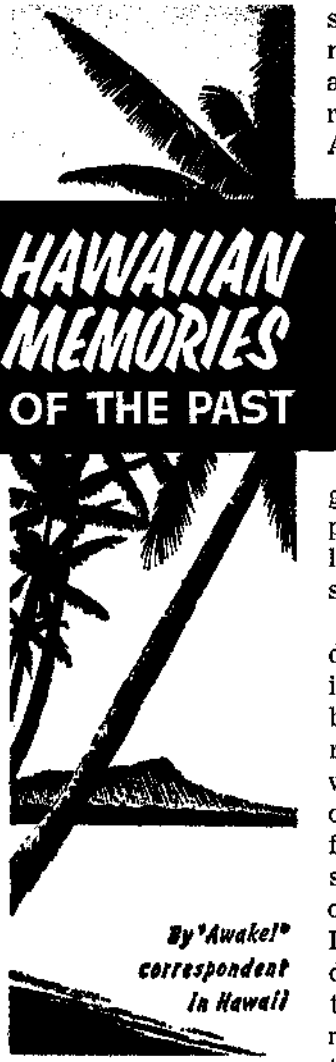
Why the Expensive Search?

Only gas has been located at this site, and in order for such a well to be profitable it would have to produce millions of cubic feet a day. Oil companies, however, hope to find crude oil, and so they continue month after month to spend fantastic sums of money in the search. How costly the search is may be gathered from the fact that perhaps only one well in ten will produce oil and one well may cost as much as $2 million to drill. If the odds against finding oil under the sea are so great, why, you may ask, is so much invested in the quest?

Companies, it seems, are prepared to take the risk, for they realize that, once successful, the costs involved would be nothing in comparison with the returns. Offshore drilling has opened up opportunities for non-oil-producing countries to produce their own oil. Australia, for example, may one day produce sufficient oil from under the sea to satisfy all of its needs in this respect. The hopes of many in Papua and New Guinea have been spurred by success in other lands.

In a commercial age, for a country like Papua to strike offshore oil reserves would have far-reaching consequences. It could mean the country's becoming self-supporting. True, not all of the gains would be entirely beneficial. Materialism would get a grip on many. The peace and beauty of the land and its adjacent waters would be marred. The tempo and pressures of industry would take their toll. Yet people tend, for the most part, to consider immediate benefits as far outweighing future possibilities of loss and danger.

HAWAIIAN MEMORIES OF THE PAST



By "Awake!" correspondent in Hawaii

DID you know that, of all the fifty states of the United States of America, Hawaii has the only palace with a throne? And to most Hawaiians that palace constitutes a link with their varied history of the past. Little wonder, then, there were cries of *Auwe! Auwe!* (Too bad! Too bad!) when the news was first released that the old Iolani Palace and its throne room were to make way for the new capitol building.

Native islanders could take some measure of consolation from the fact that the old throne, which is today but a symbol, is to be kept intact and provided with a suitable display location. It certainly brings back many memories —some happy and some less so. Certainly it stands for a much more tranquil way of life—one that has now all but vanished. Would you like to know something about it?

As every Hawaiian child in school can tell you, these lovely islands were discovered in 1778 by the famous adventurer Captain James Cook. To honor the patron of his voyage, the fourth Earl of Sandwich, Cook named them "Sandwich Islands." The discoverers landed first on the northern island of Kauai, and then in time visited the other islands. This first visit was attended by a strange combination of circumstances.

In the first place, Cook actually stumbled upon the islands most unexpectedly —he was not looking for them. Then, on two occasions he made landings at the season of the year when the natives, in accord with their ancient legends, expected the return of one of their gods. And to heighten the interest of the islanders, Cook's ships fitted the description given in the legends. Still more important, from the modern point of view, the chronometer had just been invented, so that ship navigators could determine the exact longitude of the islands, thus giving them a permanent place on the charts. These islands were now a reality to seafarers.

Cook himself was killed during a skirmish with the islanders over the theft of a boat. But ships began to call regularly, for here were fine wintering places for traders of every kind, rest and refreshment for ships' crews suffering from scurvy and other deficiency ailments. Lush greenery blanketed the deep valleys and extended to the tops of the deep-ridged mountains. Azure-blue waters and golden sands invited relaxation. As Mark Twain described them: "They are the loveliest chain of islands anchored in any ocean."

Island History

Before the advent of Europeans, civil wars had plagued the natives, as various chiefs vied with one another for supremacy. From the southernmost island of the group arose a young chief who was to become the outstanding figure in the history of the South Seas. Kamehameha the Great came to be known as the Napoleon

of the Pacific. His struggle for control of the islands began shortly after Cook's arrival, and in some twenty years (by 1810) he had united all the islands under his rule. That was the start of a dynasty that was to endure for almost a hundred years, bringing Hawaiians an era of peace and progress.

There were others, however, besides the English who were interested in establishing a foothold in this part of the Pacific. In 1814 a Russian cargo ship was wrecked on the shores of Waimea, Kauai. Its cargo was bound for the Russian settlement at Fort Ross, California. The governor of this settlement commissioned an agent to try to recover the cargo and at the same time set up a permanent trading post in the islands. The agent exceeded his authority, involved the governor of Kauai in a treasonable agreement to make the island a protectorate of the Russian Czar, and even went so far as to build a blockhouse at Honolulu, mount guns and hoist the Russian flag.

Kamehameha on the Big Island sent word to his Oahu chiefs to oppose the Russians. Faced with superior forces, the Russians retired to Kauai, where they built another fort at the mouth of the Waimea River. Later they were expelled from this fort by the governor of Kauai, who had by this time turned against them. Since the agent had not acted strictly within his orders, he received no backing from the Russian government. Eventually, he and his ships departed for Canton.

On one occasion Kamehameha offered to place his kingdom under the protection of Great Britain, since he could see that there was scant chance of survival in the scramble by European powers of that day for territory in the Pacific. The British, however, turned down the offer. At his decease, his son Kamehameha II succeeded him. During his reign the dreaded kapu or tabu system was abolished. The natives had lived in mortal fear of the power of their priests, always subject to some dreadful punishment for the infraction of their superstitious code. Kamehameha II and his young queen died in the same week, while on a visit to England—of measles.

The reign of Kamehameha III witnessed some far-reaching changes. A modern constitutional monarchy replaced the ancient Polynesian monarchy. Education became widespread, due in part to missionary activity, and in part to the great plantation system that had taken shape. Also, Hawaii entered into its first treaty with a foreign power—the United States.

Under the fourth and fifth (and last) rulers of the Kamehameha dynasty further attention was given to the needs of the people. A hospital was built, a leper colony under proper governmental control was formed, and needed agricultural help was brought to the islands—Japanese workers beginning in 1868, and thereafter Portuguese, Norwegians, Germans and Filipinos.

With the end of the Kamehameha dynasty it became necessary to select a new king. Lunalilo, "The People's Prince," gained the crown, but not for long. On his untimely death Kalakaua, the "Merry Monarch," succeeded to the throne. He did much to promote early Hawaiian culture and develop music appreciation. He took time out to have a round-the-world tour, and enjoyed the distinction of being the first king of a Western nation to visit the court of Japan. Though a pleasure lover, it is said that he took his royal duties seriously and did try to better the conditions among his people.

Vast strides were made in development of the islands during Kalakaua's reign. Steamship and railroad services were made available to the islands. Electricity and the telephone were introduced. Hawaii entered into a reciprocal treaty relationship with the United States and later granted that country exclusive use of Pearl Harbor as a refueling station for its fleets. Appeal was made to the United States to annex the islands, but the appeal was refused by President Cleveland's government.

Kalakaua's sister, Liliuokalani, succeeded him. She was the last to sit on the throne at Iolani Palace. She is remembered for her beautiful musical composition, "Aloha Oe," which has gained world renown and appreciation. In 1894 the monarchy was superseded by a provisional government, and eventually, after many eager demands and numerous delays, in 1959 Hawaii became the fiftieth state of the United States of America.

Enlightenment Brings Peace and Hope

Early missionaries, not yet poisoned by higher criticism, were instructed to learn the language of the people, teach them to read the Bible and lead them away from the superstitious worship of lifeless idols. This they did, and even though false doctrine was also taught, Hawaiians got to learn the name of the true God, Jehovah. That name is well-known among the older generations of Hawaii today, for it appears in their Hawaiian Bibles and is prominent on the cornerstone of the first "Christian" church built in the island territory.

So the field in Hawaii was ripe for the arrival of Jehovah's Christian witnesses with their Bible message of comfort and hope for the people. In 1935, when the president of the Watch Tower Society visited Hawaii and completed arrangements for construction of a branch office and assembly hall in Honolulu, there were but twelve persons actively engaged in preaching Jehovah's name and kingdom. Now that number has risen to 2,728, and over 3,596 Bible studies are being conducted in the homes of persons eager to learn more about the true God, Jehovah, and the kingdom of his Son, Jesus Christ.

So, even though in the past Hawaiians have indulged nostalgic dreams about their history and their royal rulers sitting upon the throne in Iolani Palace, many are now learning about the never-fading glories of Jehovah's kingdom, with his chosen King, Christ Jesus, now installed upon a heavenly throne. To that kingdom they now look for the blessings long foretold by the Bible to come upon obedient humans of every race and land. Hawaii's beautiful island chain will not be overlooked. Many of its inhabitants will prove to be precious in God's sight.

Degeneration, Not Evolution

◆ The modern theory of evolution is built on the idea that mutations, changes in the genes of living things, improved simple organisms until they evolved into higher forms of life, and then finally into man. However, in *The Orion Book of Evolution*, page 73, prominent evolutionist Jean Rostand says: "On the vinegar fly, hundreds of mutations have been discovered, affecting the form or the length of the wings, the body color, the eye color, and so on. . . . They are almost always disadvantageous." Thus, the very foundation of modern evolution is seen to be working against it, not for it. Mutations are disadvantageous. They produce degeneration, not evolution.

Finding and Walking with God

WAS a young lad in 1891 and my family was living in Holland. One night one of my brothers came home and told my father that he read in the newspaper about a "new religion" in America that does not believe in a burning hell but in a resurrection of the dead. My father exclaimed that there was always something new in America, and not much was said further on the matter. I remember that this brief conversation sparked my interest in that "new religion."

When I became eighteen years old, the minister of the Dutch Reformed Church and the elders called on me. They tried to persuade me to become a member of their church. I refused because I felt that there was something radically wrong with the churches. About a year later a minister from another church called on me for the same purpose. Though all my brothers and sisters joined the church, I still declined to do so. I reasoned that it did not have what I was searching for.

However, a few years later, in 1903, I bought a bicycle, mainly for the purpose of attending other churches. None of them satisfied me as being the true one. Now I was determined to find that "new religion" that my brother spoke about to my father. I came to the United States the following year and settled in Iowa. Since I could not read English I could not get much out of the newspapers. Nevertheless, I did notice the printed sermons about the religion I was looking for but I did not realize it then. They were sermons by Charles T. Russell.

When I was twenty-five years old I married, and my wife and I moved to another town in Iowa. There, at last, I met one of the Bible Students, now known as Jehovah's witnesses. He spoke to me about the return of Jesus Christ. I was surprised to learn that the "time of the end" of this wicked system of things was rapidly approaching. After a happy conversation, I asked him where he obtained all this knowledge. He told me that it was within my reach because there were books by Pastor Russell, which I could obtain and study. The next day we met again and he handed me a book entitled "The Divine Plan of the Ages" printed in Dutch. How I enjoyed reading this marvelous book! I knew now that God had let himself be found by me. (1 Chron. 28:9) Soon Jehovah gave me an opportunity to show my appreciation for his loving-kindness.

About two months later, the Bible Students asked me if I would permit a public meeting to be held in my home by one of the traveling representatives of the Watch Tower Society. Not only did I say, Yes, but I went from house to house in my neighborhood and invited all my neighbors to attend. How thrilled I was to see my home filled with eager listeners! The speaker delivered his lecture on the Seed of Abraham in the Dutch language.

Finally, in 1917, we were able to organize a congregation, or class as it was then called, among all the interested persons we found. Now we could work in harmony with the instructions we received from headquarters. Part of our work then was to stand before church doorways on Sunday morning and hand out pamphlets to the people as they came out. Soon the Society sent a traveling representative to stay with us. He gave lectures in the nearby town to audiences that we had arranged beforehand. Yes, our work began to flourish. Many sincere ones who were searching for God's truth joined themselves to us and helped us in our preaching and teaching work. Truly, it was astonishing to see what was accomplished down through the years by Jehovah's holy spirit!

My beloved wife and our eight children all worked with me in the pure way of worship. When all my children reached the age of understanding, they dedicated themselves to Jehovah, symbolizing it by water baptism. When my children married, they too raised their children as I had raised them, yes, in the way of the truth that leads to life eternal. What a joy it is today to see thirty-one grandchildren and twenty-four great-grandchildren all serving as Jehovah's witnesses! Some of them are in positions of responsibility in their congregations and others are full-time preachers.

I am eighty-six years old and I look back over the years with a glad heart. God let himself be found by me and has blessed me with unimagined blessings. My family occupies a place in his theocratic society here on earth and they are all looking forward to eternal life in God's new system, where we can all praise the God who "is not far off from each one of us."—Acts 17:27.—*Contributed.*

"SWITCHES" THAT TURN GENES ON AND OFF

THE development of a human from a single cell in the mother's womb is marvelous indeed. As man learns more about this, his awe increases at the fantastically complicated, yet orderly process.

Despite the many different types of cells in the human body, each one has the same "blueprint." They all contain the identical number and type of genes, the heredity carriers. How, then, do some cells form one part of the body, such as an eye, while other cells, from the same blueprint, form the heart, liver, skin, and so on?

To help us understand something of how this process works, let's listen to the conversation that a scientist father might have with his inquiring teen-age son:

"Dad, in high school today we were told that man may soon be able to create life in the laboratory. In fact, the thought was expressed that, in the future, scientists could create people who would have only the best traits of all the races."

"Well, son, for many years scientists have been trying to create life, but their efforts have not succeeded. They are only beginning to learn about the marvels of cell structure and growth. Why, it was only about a year ago that scientists found out what it is that enables different cells to build different parts of the body even though every cell has the same blueprint. This was the discovery of what scientists call 'repressor substances.' "

"I never heard of them."

"Perhaps the best way to describe these is to liken them to 'switches' that turn genes on and off."

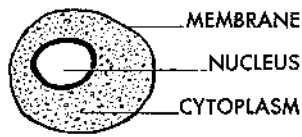
"It sounds quite complicated to me. I'm not sure I even understand what cells are. . . . Also, what are genes made of? . . . And what are these 'switches' you mentioned? How do they work?"

The Living Cell

"Hold on, son! One thing at a time! Let's begin with the cell. All living things are made up of tiny units called *cells.* Each cell is made up of living material called *protoplasm.* Even though scientists have analyzed the chemical substances that make up this protoplasm, they have not even begun to put them together so as to make living protoplasm."

"What kind of a structure does the cell have?"

"If we looked at a single human cell through a powerful microscope we would see that the cell is surrounded by a membrane that encloses a grainy-appearing material called *cytoplasm.* This material flows about within the cell, distributing nourishment and ridding the cell of waste products. Now, within that cytoplasm is a large dot, or sphere, and it is called the *nucleus.* All cells, except red blood cells, which are



SINGLE LIVING CELL

manufactured by the bone marrow, contain a nucleus. The nucleus is like the 'brain' of the cell, directing the cell's activities. If the nucleus is removed or is damaged, then the cell dies."

"What's inside the nucleus?"

"Inside are the chromosomes, the genes and many other chemicals, including the basic materials for the 'switches.' "

"Then, it must be fairly large in size."

"No, son, just the opposite is the case. Most cells are so small that it takes a powerful microscope to see one. Why, not many years ago you were a single fertilized egg cell much, much smaller than a pinpoint!"

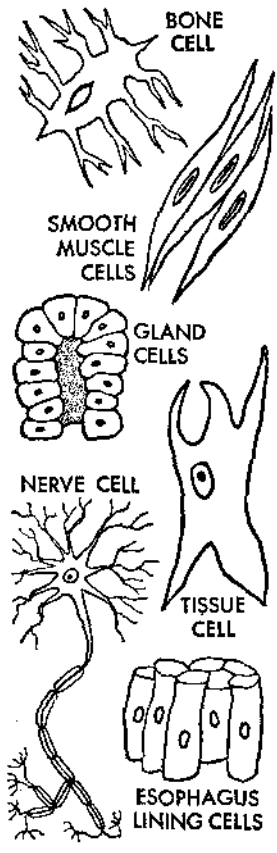
"Do you mean that I was made from a cell that small? But how did all of my different body parts come from one single cell that small?"

"That's a good question. The matter is very complicated, because not only are the various body parts different, but there are also hundreds of different kinds of cells—bone cells, blood cells, muscle cells, nerve cells, and many others. These different cells have many different shapes. Some are round, others are long and hairlike, some look like blocks, others are shaped like ribbons, cylinders or are even spiral, like a spring. And your body is made up of millions of millions of such cells!"

"Wow! That is really amazing. But it makes me wonder even more how that single cell that you mentioned is able to grow into so many different things."

"The question of how the cell is able to do this puzzled scientists for years. However, a few years ago several French geneticists suggested that somehow there must exist a thing called a 'repressor substance.' In other words, there must exist a 'switch' that 'turned off' certain genes in one cell while other genes in that cell were 'turned on' so they could grow into a certain type of organ. But in another cell a 'switch' would 'turn on' the very genes that were 'turned off' in that first cell, so it could build a different organ."

"Did their theory prove to be correct?"



Inside the Nucleus

"Well, let's imagine we're looking inside the nucleus of a microscopic cell that is starting to form a human baby and see if those French scientists were right. Let us say that about one-half hour ago the sperm from the father with its 23 chromosomes reached the egg of the mother also containing 23 chromosomes. These combined to form 23 pairs, or 46 chromosomes altogether inside the nucleus of this cell. Right there, within a matter of minutes, the complete set of blueprints for an entirely new human creature is decided upon."

"*What is a chromosome*, Dad?"

"If we could see one, it would appear to be a fine, hairlike line. But it is so small that the details of it cannot be seen even with powerful microscopes. However, the general function and composition of chromosomes are generally understood by use of a variety of other methods of analysis. These

studies show that chromosomes are the bearers of the genes."

"Just what are genes?"

"A gene is a complex molecule made up of many smaller molecules linked together to form a chain. It weighs only about two ten-trillionths of an ounce, and is made up of a chemical substance known as deoxyribonucleic acid."

"Whew! Isn't there a simpler expression for that?"

"Yes, it has been given the code name DNA. This stands for the chemicals that make up the complex molecule we call a gene. And that molecule carries the inheritance code. The father's sperm provides half of the DNA and the mother's egg the other half. The DNA contains the blueprint for the new baby. Awe-inspiring is the fact that it would take a large public library to contain as much information as the DNA contains! Even more awe-inspiring is it that all this information is passed on to each new cell that is formed, so that every cell of the body has the same information as the original fertilized egg cell. That applies to cells of the heart, the eyes, the ears, and all the other body parts."

Where the "Switches" Come In

"But, Dad, I don't understand. If all the cells contain the same blueprint, how does each cell use only that part of the code it needs to build its own organ? Everyone seems to have his eyes where they belong, and ears always grow in the same places. What makes the right organs grow in the right places?"

"This is where those 'repressor substances,' or 'switches,' come in. In 1967 scientists discovered that certain protein molecules, those infinitely versatile building blocks of life, were the long-looked-for repressor substances, the 'switches' that turn genes on and off. This discovery proved correct the theory of those French scientists. So it is a protein molecule that makes possible the selection of one particular part of the blueprint while filing the rest away."

"Let me see if I understand this correctly. The cell nucleus contains the chromosomes that carry the genes, which are complex molecules made of chemicals called DNA. The DNA contains the human blueprint. This DNA directs the manufacture of various types of protein molecules, which in turn pick and choose different parts of the blueprint for each different body part."

"Yes, that's a pretty good summary of it, although all the various steps are tremendously complicated."

"Can you tell me more about how the cell makes these protein 'switches,' and how these 'switches' go about selecting the different parts of the blueprint?"

"I can tell you what has been learned so far. But you have to remember that the ideas of science change rapidly, so that before long there may be further changes and enlargements on what is known at present."

"Yes; you have mentioned that before."

"Switches" Perform a Huge Job

"To set the stage, let's see how large this inheritance code is and how much of a job these 'switches' have in turning parts of it on and off."

"Fine."

"As we noted before, the gene is a complex molecule whose chemical composition is called DNA. It is made up of many smaller molecules, each of which is called a *nucleotide*. A nucleotide is made up of one molecule of sugar, one molecule of phosphate and an organic base. There are four different kinds of nucleotides, and various numbers of them are linked together in so many different arrangements

that they can't be counted. These different arrangements make up what we might call a code, or blueprint. This contains the genetic information for each person."

"I think I follow that."

"The nucleotides are like different letters of the alphabet. You can use the same alphabet, but the different combinations of letters produce a different meaning so you can convey untold amounts of information. Even though there are only four types of nucleotides, they can combine in many different ways. As an example take the four-letter word SAME. If we rearrange the letters one way we get SEAM, with a different meaning. Arranged in still another way, they spell MESA, with still another meaning."

"How many of these nucleotides are combined in one gene?"

"There may be 1,000 or more of them in one gene. And remember, too, son, that there may be tens of thousands of genes strung together to make one chromosome. And a human cell contains 23 pairs of chromosomes, or 46 in all! So there is a tremendous amount of information that these 'switches' have to turn on and off. With so many combinations available, the possibility of variety in this code is practically unlimited! That is why hardly any two persons look exactly alike."

How the "Switches" Are Made

"But, Dad, that doesn't explain how these DNA molecules can be the same in every cell and yet different cells use only that part of the blueprint they want."

"Well, take a look at this picture of a chain of DNA. Notice that it is shaped like a spiral ladder. The double twisted parallel chains of DNA separate themselves one from the other. When that happens these strands of DNA are building strands of what is called RNA."

"What is RNA?"

"RNA is the code name for ribonucleic acid. It too is a long chain of molecules, similar to DNA, but its chemical composition is a bit different. Also, its function is different. We might say that the DNA is the architect that has the master plans. The RNA is the messenger, or the engineer that the architect sends to carry material and information to the right location in the cell to build our protein 'switches.' So the DNA gives the orders from its master plan and the RNA takes them and oversees the building of our protein 'switches.' These proteins, in turn, build others just like themselves, eventually forming the body part blueprinted in the original DNA."

"What exactly are proteins, Dad?"

"Proteins are highly complex substances found in all living organisms. They make up about 80 percent of the dry weight of muscles, about 70 percent of the dry weight of skin, and about 90 percent of the dry weight of blood. These proteins direct the chemical process of life, or what we would call metabolism."

"Are there different kinds of proteins?"

"There appear to be many types. In fact, there may be at least one protein for every chemical process that occurs in a cell. All proteins are built from the same material, called *amino acids*. There are about twenty amino acids in each protein molecule. These proteins also form long chains that contain different sequences of their amino acids. The function of each protein depends upon the pattern of its amino acids."

DNA MACRO-MOLECULE

"Let's see if I get this straight now, Dad. First of all, the DNA gives orders to the RNA. In other words, it arranges the RNA in a certain sequence. Then the RNA takes this message and begins collecting the different chemicals that it wants and forms various proteins, or 'switches.' And it collects only the pattern that the DNA has indicated. These proteins build others like them until a certain body part is eventually built."

"That's the general outline."

"But what happens if the protein 'switch' changes its pattern and builds something different?"

"This protein 'switch' is not free to change its long chain of amino acids. It must stay fixed in the pattern in which it was placed. That is an unchangeable law put into this mechanism by the Creator. And countless 'switches' are built by the RNA messenger under orders from the DNA. Some of those 'switches' begin building bones, others build the eyes, still others the heart, and so on. Combinations of these protein 'switches' act upon the genetic material in the cell, repressing that part of the code not needed."

"So then, Dad, these protein 'switches' build only one particular part of the body by 'turning on' that part of the inheritance code in the gene, while at the same time 'turning off' another part of the code."

"Right. And it is really amazing when we realize that all of this individual building is coordinated with the building in every other part of the body. The entire system is unified, so that the digestive system, for example, operates in harmony with the nervous system, the blood system and all the others."

"And to think that all we have talked about begins inside the nucleus of a cell so small that a pinpoint looks huge by comparison! In class today the human body was compared to the huge electronic computers man has made. We were told that these machines were proof that man is capable of producing life."

Comparing the Two

"Well, son, let's compare the two, man's computers and man's own body. The human body is far, far more complex, better made, and equipped to do more kinds of work under all kinds of conditions than any machine man has ever made. And while electronic 'brains' can solve mathematical problems, can they build other machines like themselves, by themselves? Can they decide for themselves which problems to work on, and when, or how many? The versatile human brain is easily capable of such decisions."

"Also, the computer takes up a lot of space, but the human brain is very compact."

"That's right. Also, the thousands of parts that a computer has pale into insignificance when compared to the millions of millions of cells in the human. And really, each cell is more complex than any computer. Another thing, too, if the calculating machine breaks down it can do nothing for itself. But a break or a cut in the human body is usually repaired by the body itself."

"So there is a big difference between the body that God created and machines that man makes. I know that I don't understand all the details, Dad, but one thing I do know: God certainly made our bodies in a marvelous way."

"Yes, he did. And learning something about them helps us to appreciate better how David of ancient Israel felt when he said in praise to the Creator: 'I shall laud you because in a fear-inspiring way I am wonderfully made. Your works are wonderful, as my soul is very well aware.'" —Ps. 139:14.

The Rewards of Good Training

PARENTS who diligently train their children *in the righteous way of Jehovah God* find that, when they grow older, they usually "will not turn aside from it." (Prov. 22:6) The parents of one family in Cranford, New Jersey, were greatly rewarded for having a regular family Bible study with their children. The experiences of their son at his place of employment show how deeply God's righteous principles had been impressed upon him. *They began when, at sixteen years of age,* he applied for a job at a dairy store. His mother reports:

"The day of his interview for the job he dressed carefully and neatly and went off to meet his prospective employer. As soon as he walked into the store, the manager said, 'White shirt!' 'Tie!' 'Short hair!' 'You're hired!' My son told him what hours he could work, keeping in mind his spiritual obligations and the meetings at the Kingdom Hall. The manager accepted these and told him to report to work.

"Sometime later the manager found out that Don was one of Jehovah's witnesses and he showed a prejudicial attitude. However, by then he had been sufficiently impressed by Don's diligence and integrity so that he kept him on the payroll. When the manager was promoted, he recommended *that my son be* given a raise and he told the new manager that he was the best and most trustworthy worker. The new manager too had some prejudice against Jehovah's witnesses, because he would look at my son and say: 'Look at me, working with one of Jehovah's witnesses. I never dreamed it. Never!'

"Later, when it became apparent that *someone was systematically stealing money from* the safe, Don was made assistant manager. He was the only one, other than the manager, to be given the combination of the safe. He was also asked to recommend others of Jehovah's witnesses for employment there when an opening occurred. Recently an opening did occur and my son recommended another young Witness for the position. He was promptly hired.

"The manager now demonstrates his complete trust in these two young Witnesses, for he permits them to close the store and take the money from the safe to the night depository."

Truly, the blessed results of theocratic *training are joyful* both to parents and to children. However, what should parents do when a child does not seem to respond to theocratic training and Bible study? Give up? Never! Listen to what this young woman said at a circuit assembly of Jehovah's witnesses in Ohio:

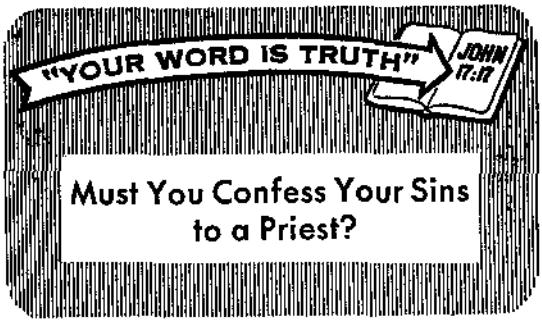
"When my mother became one of Jehovah's witnesses, she insisted that I study the Bible with her regularly. Being a young teen-ager and fairly popular in school, I did not want to 'waste my time' studying the Bible. However, my parents had me under subjection, so I had no alternative in the matter.

"We had our study after school and I tried to postpone it by deliberately making my chores last longer. This scheme did not work. To keep from attending meetings at the Kingdom Hall, I would feign illness, but my mother soon saw *through that trick. I had to* accompany my parents to the Kingdom Hall. Since the hall was located on a busy street, I would rush in so that none of my many friends would see me.

"The Witnesses were always so friendly, for they would come over to me and start talking. I felt that if I could get them to act coldly toward me, then I would have a good *excuse not to attend the meetings. So each* time I went to the Kingdom Hall I resolved not to smile and to act coldly toward them. I was wrong again. They never let that stop them from being friendly. Although I did not realize it then, they were really helping me.

"Mother also helped me to make comments at the meetings. After I began to make comments, things began to make sense. Soon I *was taking my studies more seriously.* Today I am overjoyed to say that I have been serving Jehovah as a dedicated Witness for nearly ten years. How happy and thankful I am that my parents took me to the meetings of the Christian congregation and insisted that I regularly study the Word of Jehovah."

Obviously, the fine and firm leadership of these parents benefited this young person. Surely when parents apply Jehovah's counsel there is a large reward. (Ps. 19:9-11) Are you having a regular family Bible study with your children? If not, then do not hesitate to start one right now and keep it regular. The rewards for doing so are incalculable.



THE Bible explains that Almighty God knows our innermost thoughts and all the sinful things that we have done. (Heb. 4:13) Nevertheless, to maintain good relations with God we must humbly confess our sins. God's own Word says this at First John chapter one, verse nine. If yours is the Catholic *Douay Version* it reads: "If we confess our sins, he is faithful and just, to forgive us our sins, and to cleanse us from all iniquity." But to whom should we confess our sins? Must we confess them to a priest?

[2] The Catholic Church teaches that you must confess sins to a priest. It claims that auricular confession, that is, private confession into the ear of a priest, is vital. In his church-approved booklet on the subject the Catholic priest Martin J. Scott observed: "The main thing to realize regarding confession to a priest is that the priest in the confessional is the representative of Christ. The priest is, as it were, a wire from earth to Heaven." *The Catholic Encyclopedia* (1911 edition, Vol. XI, pp. 619-21) also notes: "The confession is made not in the secrecy of the penitent's heart . . . but to a duly ordained priest with requisite jurisdiction and . . . the power to forgive sins." And it adds: "The power to forgive extends to all sins."

[3] But is this what the Bible teaches? Rather than appointing a priestly class to serve as "a wire from earth to Heaven," Jesus taught that "one is your master; and *all you* are brethren." (Matt. 23:8, *Dy*) The Bible also explains that Jesus Christ is alive forever, and that by virtue of faith in his sacrifice sinners can come directly to God in Jesus' name and confess their sins. (Heb. 7:23-25; John 14:6, 14) Thus, no priest serves as a wire or link between humans on earth and God in heaven. Many years after Jesus' return to heaven it was recorded in the Bible that there is only "one mediator . . . Christ Jesus."—1 Tim. 2:5, *Dy*.

[4] Nor does any earthly priest have "the power to forgive . . . all sins," as is claimed. Jesus explained, for instance, that sin against the holy spirit is unforgivable. (Matt. 12:31, 32) Also, the Bible makes clear that forgiveness or remission of sins comes, not through absolution granted by a priest, but only through faith in Christ's sacrifice. "By his name all receive remission of sins, who believe in him," the apostle Peter said. (Acts 10:43, *Dy*) Other apostles of Jesus taught the same.—1 John 2:1, 2; Eph. 1:7.

[5] But what about John 20:22, 23, which is cited in support of the Catholic teaching of auricular confession? It reads in the Catholic *Douay Version:* Jesus "breathed on [his disciples]; and he said to them: Receive ye the Holy Ghost. Whose sins you shall forgive, they are forgiven them; and whose sins you shall retain, they are retained."

[6] Note that auricular confession is not even mentioned here. *The Question Box,* an official Catholic publication by priest Bertrand L. Conway, admits this: "Auricular Confession is nowhere expressly mentioned in the Bible," but adds, "Christ himself divinely commanded it by giving his Apostles the power to remit and retain sins." But if Christ actually was here commanding auricular confessions, why do we not find one instance in the Bible

where the apostles in their ministry ever heard confessions or forgave sins?

[7] What, then, did Jesus mean by his above statement *on forgiving and retaining* sins? Apparently this: Since the requirements regarding steps necessary to receive God's forgiveness are recorded in the Bible, the apostles, under the direction of holy spirit, could discern whether individuals were meeting such requirements and could on this basis declare that God had either *forgiven them or not forgiven* them.

[8] Significantly, auricular confession did not become an official practice of the Catholic Church until comparatively recent times. *The Question Box* observes: "It has been universally observed in both East and West since the 12th century." But it was not practiced by early Christians who adhered to the Bible, as many authorities have observed.

[9] Examination reveals that auricular confession involves unscriptural practices. For example, on entering the confessional a person is instructed to say to the priest: *"Bless me, father, for I have sinned."* Yet Jesus said: "Call none your father upon earth; for one is your father, who is in heaven." (Matt. 23:9, *Dy*) Those who ignore this counsel of Jesus do not act for him.

[10] Also, according to Catholic teaching, *confession is* vital to avoid eternal torment of one's soul in hellfire. Writes priest James Kavanaugh: "Without forgiveness of confession he [the sinner] could die and go to hell." But the Bible teaches that the soul perishes at death and is not subject to suffering. (Ezek. 18:4; Eccl. 9:5; Ps. 145:4, *Dy*) There is punishment for those who willfully reject God's provisions for life, but that punishment, likened to being cast into a lake of fire, is death: "the second death."—Apoc. 21:8, *Dy*.

[11] Observe, too, that the Catholic Church instructs its priests to question penitents in the confessional on sexual matters, and "in special detail," according to a Council of Trent decree. Discussing sex relations intimately with women has set a moral trap for priests under a vow of celibacy, frequently resulting in immorality on their part that has created public scandal. Could a practice that has contributed to such immoral fruitage be approved by God?

[12] This does not mean that if a Christian is troubled about a shortcoming he cannot discuss the problem with a fellow Christian. In fact, he is encouraged to do so: "Openly confess your sins to one another and pray for one another." (Jas. 5:16) By confessing one's sins one can receive help and encouragement from one's mature Christian brothers to keep God's commandments. (1 Thess. 5:11) But the Bible certainly does not approve the practice of regular confession of sins to a priest.

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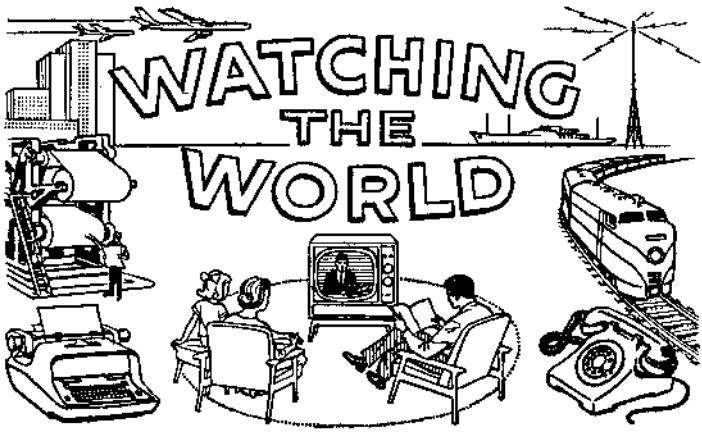
(1) Does the Bible indicate that we must confess our sins? (2) What does the Catholic Church teach regarding confession of sins and the powers of priests? (3) Do priests serve as mediators between God and humans? How *should sins be confessed to God?* (4) *Can* priests forgive sins? (5) What Bible text do Catholics cite to support auricular confession? (6) Is auricular confession mentioned in that text or elsewhere in the Bible? (7) What did Jesus mean when he spoke about his disciples forgiving and retaining sins? (8) Was auricular confession practiced among early Christians? (9) What counsel of Jesus is ignored *in the confessional?* (10) Will persons who do not confess their sins suffer punishment after death? (11) What has been the fruitage of auricular confession? (12) Besides confession of sins to God, to whom else can one talk about such matters?



Man Orbits Moon

◈ December 21 was the day when Frank Borman, James Lovell, Jr., and William Anders left the earth on man's first voyage to the moon. The 363-foot-tall Saturn 5 moon rocket spewed a burst of orange flame and climbed from its launching pad in Florida. All the rocket's 7,500,000 pounds of thrust were needed to lift the 6,200,000 pounds of booster and spacecraft. But, using up 30,000 pounds of fuel every second, the rocket lightened its own weight and soon was streaking into space. Television pictures of the earth and moon were remarkably clear. Voice communications came in loud and clear. Ten times their space capsule, Apollo 8, circled the moon, coming as close as 69 miles to the moon's surface. They described the moon as "a vast, lonely, forbidding type expanse of nothing," "not a very inviting place to live or work," "a vastness of black and white—absolutely no color." Before returning, they read from the Bible the Genesis account of creation. The Apollo 8 explorers returned to earth on December 27, steering their spaceship to a pinpoint landing in the Pacific Ocean.

Strong Dissent

◈ While the Man-in-Space Program has in recent months been hailed in high places as a feat close to miraculous, there are others who have other thoughts about the program. Among those strongly dissenting was George B. Kistiakowski, professor of physical chemistry at Harvard University. He called the Apollo space project a "spectator sport" and a kind of "Walter Mitty" dream fulfillment. He said the billions spent on manned flight programs could be better put to use in solving environmental problems here on earth—such as poverty and starvation.

The World of 1969

◈ In a comprehensive look at the troubled world of 1969, *U.S. News & World Report* for January 6 said: "No matter where the new U.S. president looks across the face of the earth, he will find troubles. Storm warnings are flying in country after country, in region upon region. All signs are that 1969 is to be a year of danger and turbulence abroad."

New Toys for Tots

◈ The Newspaper Enterprise Association told of new toys designed for children between the ages of three and five. To head the list was "Little Ouija —A nursery-sized model of the real thing, but complete in every detail. Guaranteed hours of fun forecasting the weather, setting prices and fees, or picking cabinet officers just like the grownups do." C. M. Smith, an Oregonian spiritualist and an astrologer, denounced such toys as "dangerous and fraudulent." "They get people emotionally upset," she said angrily. "I have a friend who got mixed up with a Ouija board and now she's in a sanitarium."

Another well-known Portland astrologer, who declined the use of her name, said she strongly disapproved "Ouija" boards as toys. "They are the first step into a demon world —and don't think demons do not exist," she warned. "I experimented with a Ouija at one time and gave it up when I felt I was being taken over."

Religious Views Assayed

◈ According to a Gallup poll conducted in twelve nations the United States leads other nations in fundamental religious beliefs. For example, 98 percent of Americans polled claimed they believe in God, but the percentage is under 80 percent in five other nations surveyed and is 60 percent in Sweden. The poll revealed that three persons in every four in the United States say they believe in life after death, but the percentage falls to 38 in Britain, Austria and Sweden and to 35 in France. Six Americans in every ten believe in the Devil, but in Britain and Sweden only 21 percent do, and in France only 17 percent.

World Money Crisis

◈ Within recent months, confidence in the international monetary system reached the lowest point since it was established about a quarter of a century ago, said Roy Reierson, in the September 1968 issue of *The Banker*. During a period of about six months the system had to contend with: a serious attack on sterling and its sub-

sequent devaluation, a widespread run out of currencies and into gold that culminated in the gold and dollar crisis, *and a major confidence* crisis in the French franc. No major changes have been made in the international monetary system so as to reduce its vulnerability to future confidence crises. In fact, considerable amounts of credit have already been used in support of the pound sterling, the French franc and the United States dollar. In showing the problems that lie ahead, Reierson stated that uncertainty and doubt are still widespread.

"No Rights" in Convents

◈ Roman Catholic nun Margaret Rowe of the Carmelite Convent, Bridall, Cardigan, said nuns have "practically no *rights" and that the Roman* Catholic Church does not regard them as "fully human beings." Despite the Vatican Council's fine-sounding phrases, she stated that there has been no essential change in the attitude of the church towards nuns.

TV Taught Her to *Kill*

◈ Eleven-year-old Mary Flora Bell was found guilty of manslaughter on December 17 and sentenced to detention for life. She was charged with strangling two small boys "for a giggle." She said she learned how to kill by watching television. Parents, let this serve *as a lesson. Be selective as to* the choice of programs your children view on television.

Hungry Millions

◈ The United States Congress was told by anthropologist Dr. Margaret Mead that almost 10,000,000 Americans were getting inadequate nourishment and that many of these were "on the verge of starvation." Dr. Mead said that thirty years ago the United States was able to tackle the problem of hunger and malnutrition, which affected a third of the nation, but that "today we seem unable to deal with a 20th of the nation in spite of our greatly increased productivity and far greater technical resources." She called for a program that should be "concerned with people rather than products."

Hanoi Praises Catholics

◈ The government of North Vietnam praised Roman Catholic clergy and laymen on December 24 for "killing the United States aggressors—the best offerings to the infant Jesus Christ." The report stated that Catholic priests, "for Christ and their fatherland, positively mobilized the Catholic youth of our country to fight against the United States to save our country." Most of North Vietnam's two million nominal Christians are *Roman Catholics. A large num*ber of those serving in the South Vietnamese and United States armed services are also Roman Catholic. Is it Christian that brother kill brother?

"Self-Demolition"

◈ Roman Catholic priest John A. O'Brien at the University *of Notre Dame called on the* pope of Rome to acknowledge that he "made a mistake" in outlawing all artificial methods of birth control. The priest urged "disturbed or worried" Catholics to "follow your own enlightened conscience." Biologist Jeffrey J. W. Baker of the University of Puerto Rico said *on December 29 that he had* compiled a petition signed by more than 2,600 scientists, including four Nobel Prize winners, terming Pope Paul VI "unenlightened" for his birth-control edict. The protest statement charged the pope with promoting war and poverty and with sanctioning "the *deaths of countless numbers* of human beings with his misguided and immoral encyclical." The pope, sensing the upheaval within his church, said on December 7 that the Roman Catholic Church is going through a period of "self-demolition."

Whale Sinks Yacht

◈ An ocean-racing yacht, the 42-foot Makutu, was in the Tasman Sea, midway between New Zealand and Australia, when it found itself surrounded by a school of some thirty whales. All of them seemed to surface together. Suddenly, there was a terrible shaking. One whale came under the boat and lifted the yacht right out of the water. When the boat settled back down, there was a gaping hole about five feet by two between the keel and the rudder. The seven crew members were rescued. The whales disappeared from sight. But a greater respect was won for these creatures *of the deep.*

Youth Power

◈ To the bewilderment of the older generation and possibly of the younger generation as well, youth itself has become a movement, a power. The Detroit *News* stated that "the kids are kicking it over practically *everywhere in the whole* suffering world, and they're doing it regardless of race, creed, color or previous condition of servitude. . . . The kids are imploding on the societies to which they belong, seeking radical change in—even elimination of—the system at hand.... There does not seem to be any time in history, however, in which the brightest kids in every nation on earth looked around them at the same time and said the hell with all of it." Are these not precisely the conditions that the Bible foretold for our times? Read 2 Timothy 3:1-7.

Ban Collection Plate

◈ Complaints were heard that collection-plate-passing in church was degrading. So the Orthodox Church of Greece decreed on December 17 that

throughout Greece the passing of the traditional collection plate in churches would be banned January 1. However, there will be collections for specific purposes.

"Audio-Epilepsy"

◈ Six girls and a boy collapsed at a youth club's psychedelic dance. The seven youngsters, aged 12 and 13, were among forty youths who after an hour of popular music in a dark room set off by a strobe light gave way to a hysterical collapse that the ambulance attendants called "audio-epilepsy."

Operation Losses

◈ According to a London report, the British medical profession set a record for mistakes in the operating room in 1967. There were "44 reported cases of swabs and instruments left inside patients and 33 wrong operations." The Medical Defence Union paid out more than $272,000 in damages, costs and legal charges. About 1,500,000 operations are performed a year in Britain.

Unexpected Birth

◈ Thirteen years ago Mrs. Helen Miller was told that she was unable to have children. On New Year's Eve she suddenly began to have severe and constant stomach cramps. Her husband rushed her to a hospital. The doctor told her that she was in labor. "But I can't be," she exclaimed. "I'm not pregnant." Mrs. Miller was wheeled to the delivery room and seventeen minutes later gave birth to a healthy girl. "I didn't believe I was pregnant until I saw the baby," she said later. Mrs. Miller was delighted, but said it was still a shock. "Shock is a very mild word to describe it," said her husband. It is unusual but not unprecedented for a woman to go unknowingly through an entire pregnancy, according to Dr. S. B. Gusberg at the Mount Sinai School of Medicine.

Sugar Substitute Warning

◈ While no outright harmful effects of artificial sweeteners have been noted in man, the United States Food and Drug Administration released on December 13 a scientific report warning against the totally unrestricted use of artificial sweeteners. The total use of saccharin and cyclamate, each used to contribute to the sweetening effect, has increased substantially in the last five years. It has been discovered that some persons who used cyclamates converted some of it in their bodies to another compound called cyclohexylamine. In some animals studies have suggested that cyclohexylamine can have adverse effects on chromosomes.

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Are you surprised and disappointed at recent religious developments? Jesus foretold the outcome. See Matthew 7:21-23

Are you confused by the changes in religious dogma that are causing violent internal dissensions in the strongest religious systems? First-century Christians maintained their unity. See Ephesians 4:4-6

Are you concerned for the religious future of your family because of the crumbling faith of those charged with your spiritual direction? The apostle Paul showed why it would come. See 1 Timothy 4:1-3

Are you relying on the teachings of your church to protect your children from evils that more and more churchmen are condoning: premarital sex relations, homosexuality, abortion, even the use of certain drugs? Suchlike ones will not inherit God's kingdom. See 1 Corinthians 6:9

Are you continuing to subscribe formally to a religious autocracy that you cannot fully accept? God's Word tells us what to do. See 2 Timothy 3:5 and Revelation (Apocalypse) 18:4

If your answer is Yes to any of the above questions, then you need to take a close look at your religion. *Your life depends upon it*

What can you look for? Jesus set the rule: "Every good tree produces fine fruit, but every rotten tree produces worthless fruit."—*Matthew* 7:17

What kind of people is *your* church producing? Do they stand out among all others because they are honest? because they are better husbands, better fathers, better wives, better mothers? because they do what is right? Is that not what you would expect from a religion that truly draws one close to God?

If your church is producing the kind of fruit that causes you anguish, is it possible that it is also displeasing to Jesus Christ? He said: "If you remain in my word, you are really my disciples, and you will know the truth, and the truth will set you free."—John 8:31, 32

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