



GOD OR POLITICS?

Is religion condemned by its political activity?

Atomic Radiation and Man's Destiny

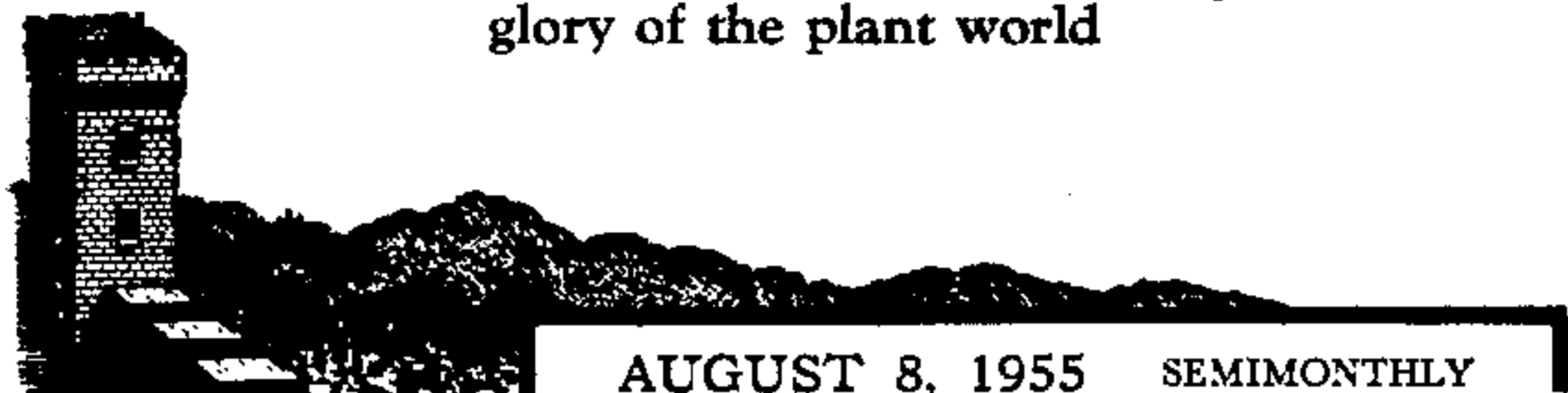
Why men lived longer before the Flood

Probing the Unknown Continent

A vast 6 million square miles that is
still practically unknown to man

Marvel of the Living Tree

Unusual facts about this crowning
glory of the plant world



AUGUST 8, 1955

SEMIMONTHLY

THE MISSION OF THIS JOURNAL

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 ambitions or obligations; it is unhampered by advertisers whose toes must not be trodden on; it is unprejudiced by traditional creeds. This journal keeps itself free that it may speak freely to you. But it does not abuse its freedom. It maintains integrity to truth.

"Awake!" uses the regular news channels, but is not dependent on them. Its own correspondents are on all continents, in scores of nations. From the four corners of the earth their uncensored, on-the-scenes reports come to you through these columns. This journal's viewpoint is not narrow, but is international. It is read in many nations, in many languages, by persons of all ages. Through its pages many fields of knowledge pass in review—government, commerce, religion, history, geography, science, social conditions, natural wonders—why, its coverage is as broad as the earth and as high as the heavens.

"Awake!" pledges itself to righteous principles, to exposing hidden foes and subtle dangers, to championing freedom for all, to comforting mourners and strengthening those disheartened by the failures of a delinquent world, reflecting sure hope for the establishment of a righteous New World.

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



PUBLISHED SEMIMONTHLY BY
WATCHTOWER BIBLE AND TRACT SOCIETY, INC.
117 Adams Street
N. H. KNORR, President
Brooklyn 1, N. Y., U. S. A.
GRANT SUITER, Secretary

Printing this issue: 1,450,000

Five cents a copy

Languages in which this magazine is published:
Semi-monthly—African, English, French,
German, Hollandian, Norwegian, Spanish, Swedish.
Monthly—Danish, Greek, Portuguese, Ukrainian.
Other
America, U.S., 117 Adams St., Brooklyn 1, N.Y. 8;
Australia, 11 Somerset St., Westfield, N.S.W. 8/-
Canada, 40 Irwin Ave., Toronto 5, Ontario 3/-
England, 84 Crown Terrace, London, W. 8 1/-
New Zealand, G.P.O. Box 80, Wellington, C. 1 1/-
South Africa, Private Bag, Eldorado Park, Tvl. 7/-

Remittances should be sent to office in your country in compliance with regulations to guarantee safe delivery of money. Remittances are accepted at Brooklyn from countries where no office is located, by international money order only. Subscription rates in different countries are here stated in local currency. Notice of expiration (with renewal blank) is sent at least two months before subscription expires. Change of address when sent to our office may be expected effective within one month. Send your old as well as new address.

Entered as second-class matter at Brooklyn, N.Y. Act of March 3, 1879. Printed in U. S. A.



CONTENTS

José Martí—Cuba's Apostle of Freedom	3	Marvel of the Living Tree	17
God or Politics?	4	Surprised Thieves	19
Religion's First Responsibility	5	Atomic Radiation and Man's Destiny	20
Follow God, Not Man	7	Shortened Life Span Since the Flood	22
"A Nation of Spectators"	8	Military Whitewash, Scientific Fears	24
Religion's Political Activity	9	"Your Word Is Truth"	
Babies Smarter than You Think	12	Christian Grounds for Divorce	26
Probing the Unknown Continent	13	Does Radiation Shorten Life Span?	28
Oddities and Future Proposals	15	Do You Know?	28
An Interesting Book	16	Watching the World	29

Awake!

"Now it is high time to awake."

—Romans 13:11

Volume XXXVI

Brooklyn, N. Y., August 8, 1955

Number 15

José Martí—Cuba's Apostle of Freedom

By "Awake!" correspondent in Cuba

IT SEEMS that each country has its own George Washington, its Napoleon, its Caesar or its Alexander the Great. Cuba's hero is José Martí, a nationally honored and deeply respected apostle of freedom. José Martí was instrumental in the nineteenth-century struggle to free Cuba from the tyrannical rule of Spain. Yet, more than advocating political rule, he wanted the people to think. Moved by the ignorance the Cuban peasants manifested toward the Bible, José Martí composed a thought-provoking message to the common man.

He said the priest did not want the people to know how false and useless were all his ceremonies, "because after that he can't collect more money for all this."

He said further: "The priest also says he baptizes [your son] for you for him to enter the kingdom of heaven. But he baptizes the newly born if you pay him money, or grains, or eggs, or livestock; if you don't pay him, if you don't give him something, he doesn't baptize him for you. So then that kingdom of heaven that he talks to you about costs a few coins, or grains, or eggs or pigeons. What need or what interest can you have as to whether your son enters a kingdom like that? What kind of judgment must you form of a man who says that he will do you a great favor, that it is within his power, that without him

you are condemned, that your salvation depends on him, and for a few silver coins he denies you that great benefit? Isn't that a selfish, avaricious and wicked man? What idea of God would you have if he actually should send a messenger like that to you?

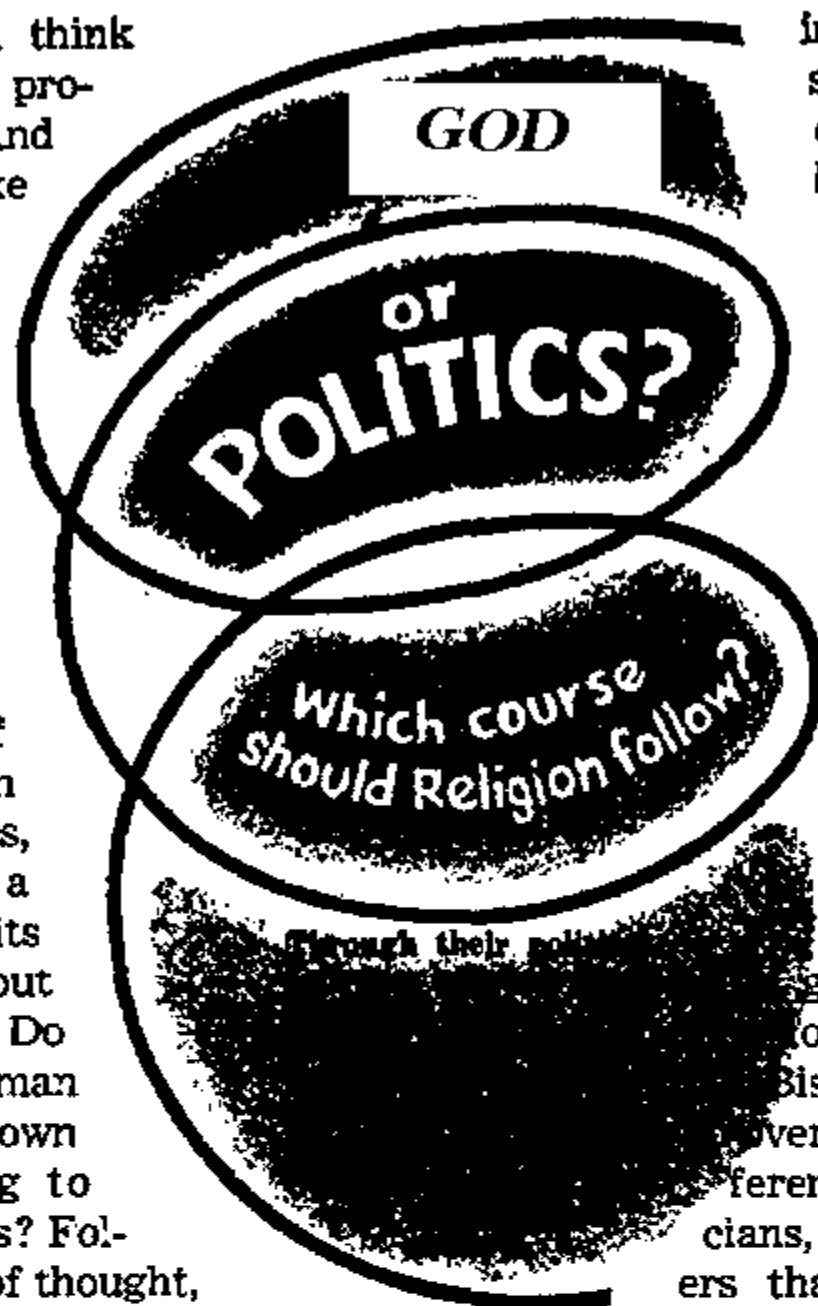
"That god that bargains, that sells salvation, that does all for money, that sends people to hell if they don't pay him, and if they do pay him he sends to heaven, that god is a kind of money lender, a usurer, a trafficker. No, my friend, there is another God."

Some people might not like what Cuba's apostle of freedom thus said and wrote to the poor of his land. But it is true that what he said is worthy of careful thought. It is also true that freedom-loving Cubans in large numbers are now learning that there is a God who does not demand money, who is not a usurer, a trafficker or a money lender, whose servants serve for love, as did Jesus and the apostles. False and misplaced faith is being replaced by what is sound and true, by a faith based upon a loving God whose Son freely gave his life for all who would accept its protection, and who today liberally provides the truth of his righteous new world that will shortly bring conditions of lasting peace and freedom to all the earth. Many thousands of freedom-loving Cubans are now hearing about this hope from Jehovah's witnesses.

WHAT would you think of teachers and professors in schools and colleges who would take money for teaching you one subject, but spend most of their classroom time discussing a different one? If you paid a man to teach you French, would you want him to spend most of his time talking about Arabic? If your interest was in learning mathematics, would you appreciate a teacher who ignored its principles to talk about the art of cooking? Do you agree that a man should deal with his own field before trying to branch out into others? Following the same line of thought, if you paid a man to teach you about religion, would you not expect him to show more interest in your spiritual welfare than in politics, commerce or social matters?

A columnist in the Detroit, Michigan, *Free Press* once said: "I do not go to church very often because I have grown tired of having preachers in their pulpits tell me what I ought to think about taxation, government ownership of industries, the tariff, labor legislation, and God alone knows what else. . . . I always supposed that the clergy was to spend its time looking after our morals, not our politics or economics."

Eleanor Roosevelt expressed a similar view: "Sometimes I think church organizations are foolish because they do things that lead people to believe they are not



interested mainly in the spiritual side of the church but that they have a decided interest also in temporal affairs." Yes, with the current state of religious illiteracy, with the apathy that today is shown toward true Christianity and right doctrine, religious leaders would have their hands full teaching their own subject, without trying to expand out into others.

But they do expand out into others. Religion's part in politics is not accidental. Lutheran Bishop Hans Lilje of Hannover, Germany, told a conference of clergymen, politicians, journalists and publishers that "the Church should readily take part in political responsibility," though not delivering itself into the hand of a single political system. Also, reports of the World Council of the churches' second assembly in Evanston, Illinois, last summer had a great deal to say about the political position that high church dignitaries thought the religions should take. This is not new. Centuries of religious history show that religion and the state often have been closely allied. However, the fact that this custom has a long history does not automatically make it right.

For a moment, visualize in your mind's eye the Messiah going about his preaching in Palestine nearly two thousand years ago. Can you see this founder of Christianity getting information about the political injustices committed in Palestine so he

could travel to Rome and present political information to the rulers there? Is he waging a fight for social rights or lower taxes? Does he tell the Roman governor what economic practices or what international policy should be followed? No! His mission was far higher than temporary political reform.

What have taxation and social security and other politics to do with Jesus' instruction: "This good news of the kingdom will be preached in all the inhabited earth for the purpose of a witness to all the nations"? (Matthew 24:14, *New World Trans.*) Certainly not even all the so-called "Christian" world is yet aware of that good news, or knows how that kingdom is the sole hope of mankind, the only hope for peace. Jesus' work of pointing to the truth remains the primary work of true Christians today, though many religious leaders seem to have ignored this fact and show a far greater concern with other fields.

Religion's First Responsibility

As long as the divorce rate in "Christian" lands can reach one out of every three marriages, as long as juvenile delinquency so shamefully increases, as long as adultery is as widely accepted as novels, movies and the questionable Kinsey report would imply, what business do the religions have in spending time in other fields that Jesus pointedly ignored? As Jesus said: "How can you say to your brother:

Allow me to extract the straw from your eye'; when, look! a rafter is in your own eye? Hypocrite! first extract the rafter from your own eye, and then you will see clearly how to extract the straw from your brother's eye."—Matthew 7:4, 5, *New World Trans.*

Is the bringing of peaceful conditions religion's responsibility? If its leaders think so, then let them first teach their members

how, under Christ, to live in peace. Are social security and race relations and foreign and international alliances unjust? If so, then religion has failed to instill right principles and the importance of daily applying them into the minds of its members who are in high governmental positions. Until religion succeeds in teaching at least its own people such principles, it should devote its efforts to solving its own problems (the problems that Christ dealt with) and teaching its own subjects (the subjects that Christ taught) before trying to solve other problems that Christ pointedly rejected.

Teaching a right knowledge of God's Word is religion's first responsibility. But while that knowledge does not exist in any really great quantity among church members today, religions have concerned themselves with labor standards, social welfare, civil rights, the tax policy and other matters that they say are basic to family welfare, and therefore of prime concern to the church. But is establishing labor standards the church's commission? The command to Christians was not: "Go and solve the world's political and social problems," but: "Go therefore and make disciples of people of all the nations, baptizing them: in the name of the Father and of the Son and of the holy spirit."—Matthew 28:19, *New World Trans.*

It is true that those who thus take up the work of true Christianity will become better people, more law-abiding citizens, will be considerate of people of other nationalities, races and colors, will give a good day's work to their employer and a just wage to their employees. Yes, legal reforms to enforce these social advances would be unnecessary if the religions really had taught their members the sound principles of godly living. Perhaps it is the religious leaders' failure to succeed in doing this that prompts them to go to the state

and ask for laws to force the people into the course they think the people should take.

The mission of true Christians is to preach the gospel, to aid those who are hungering and thirsting after righteousness, to teach the truth. Spiritual welfare should come ahead of political or social accomplishments. Thus Paul reminded, in Romans 8:6: "For the minding of the flesh means death, but the minding of the spirit means life and peace."—*New World Trans.*

The world's religious leaders have become associated with the world, identified with the world and an integral part of the world's governments. In wartime clergymen give moral support to their members on all sides. If, prior to and during World War II, the clergymen of Germany and Italy had instilled a real Christian conscience into the minds of their members, then there would have been no war. Their members may have been ordered to fight, but they would have known that they receive a higher set of orders from above. It was because they had not really been taught these higher orders that the people accepted the false human ones. Had the churches stood solidly behind their professed determination to be Christian, rather than lending at least tacit support to the totalitarian governments, and had they done a proper job of teaching their members to follow the same right course, then the internal support for the totalitarian governments would have collapsed, the soldiers would not have fought and there would have been no war.

But the churches had allied themselves too closely with the political state. They refused to take the neutral position that Jehovah's witnesses did in those lands, and the world was plunged into war.

Separate from the World

Not everyone likes the idea of the

churches' being in politics. In his book *Church Lobbying* Dr. Luke Ebersole says (page 106): "The development of church lobbying requires the emancipation of the church mind from traditional notions about nonparticipation in government by religious groups." But why should such "traditional" notions be cast aside, especially since they also are scriptural? The Bible, our true guide on religion, pointedly says:

"Do you not know that the friendship with the world is enmity with God? Whoever, therefore, wants to be a friend of the world is constituting himself an enemy of God." "Do not be loving either the world or the things in the world. If anyone loves the world, the love of the Father is not in him." Jesus told his followers: "If you were part of the world, the world would be fond of what is its own. Now because you are no part of the world, but I have chosen you out of the world, on this account the world hates you." The world in general has not changed, but many of those who claim to follow Christ have. The world continues its corrupt course, while many religious leaders have not only become its friends, but even want to help govern it.—James 4:4; 1 John 2:15; John 15:19, *New World Trans.*

Think of the political influence religious leaders could have if they were given the chance Jesus had to be made a king. Many would be enthusiastic over such an opportunity. But what did Jesus do? "Therefore Jesus, realizing they were about to come and seize him to make him king, withdrew again into the mountain all alone." Why would he not be king? Because he knew that Satan was the world's real ruler. Satan had already had the audacity to offer Jesus the world's kingdoms: "Again the Devil took him along to an unusually high mountain, and showed him all the kingdoms of the world and their glory, and he

said to him: 'All these things I will give you if you fall down and do an act of worship to me.' " (John 6:15; Matthew 4:8, 9, *New World Trans.*) How different was Jesus' wise refusal of such an offer from the course taken by the religious leaders of today who in their eagerness to have political advantage admit a willingness to "deal with the Devil himself" to advance the interests of their particular religious group.—*New York Times*, February 22, 1945.

A shocking statement? Well, according to the Scriptures, when a religion meddles with the world it is dealing with the Devil himself! Thus 1 John 5:19 (*New World Trans.*) says: "The whole world is lying in the power of the wicked one." Again, in 2 Corinthians 4:4 (*New World Trans.*) we read that it is the "god of this system of things," obviously Satan, who "has blinded the minds of the unbelievers, that the illumination of the glorious good news about the Christ, who is the image of God, might not shine through." Further, in a prayer to his heavenly Father Jesus said of his followers: "I have given your word to them, but the world has hated them, because they are no part of the world just as I am: no part of the world." Exactly to the contrary are today's clergy-politicians who can say: 'The world has loved us, because we are a part of it, and our basic aim is to help it solve its problems.'—John 17:14, *New World Trans.*

Follow God, Not Man

True Christian confidence, however, is not in man's solutions but in God's kingdom. Religious leaders who support the world's politics say that by this action they are bringing in God's kingdom. But Jesus said: "My kingdom is no part of this world." (John 18:36, *New World Trans.*) God's kingdom is not something that is just within the hearts and minds of men, as some

people believe, but it is going to bring a complete overthrow by Jehovah through his Son Christ Jesus of the present Satan-ruled corrupt system of things. "In the days of those kings shall the God of heaven set up a kingdom which shall never be destroyed, nor shall the sovereignty thereof be left to another people; but it shall break in pieces and consume all these kingdoms, and it shall stand for ever," says Daniel 2:44, *American Standard Version*. Does that sound as if God's kingdom were a mere social reform?

Further, in Isaiah 9:6, 7, it was prophesied regarding the Prince of Peace, Christ Jesus: "Of the increase of his government and of peace there shall be no end, upon the throne of David, and upon his kingdom, to establish it, and to uphold it with justice and with righteousness from henceforth even for ever. The zeal of Jehovah of hosts will perform this." (*Am. Stan. Ver.*) Does that sound like something that is just in the hearts or minds of men? or something to come just by passing new laws or making political leaders aware of the importance of social reform? Far from it! That kingdom will provide a righteous, invisible rulership for earth. That righteous rulership now is replacing Satan's wicked rule. Soon Satan's rule will come to the sudden and violent end that is described in Revelation 19:19 through 20:3. This is the vital message that the religious leaders should now preach, if they were not ignoring that now-established kingdom while mingling with Satan's world.

Is the true Christian going to follow the course of today's world, supporting it and lending tacit approval to its course of ignoring Christ's established kingdom? No! God himself is the one who promises to intervene, and the Christian has complete confidence in that promise. "For, behold, I create new heavens and a new earth; and the former things shall not be remembered,

nor come into mind." And again: "Furthermore, the world is passing away and so is its desire, but he that does the will of God remains forever."—Isaiah 65:17, *Am. Stan. Ver.*; 1 John 2:17, *New World Trans.*

Jesus was quite explicit about the limitations put on the activity of true Christians: "Go in through the narrow gate; because broad and spacious is the road leading off into destruction, and many are the ones going in through it; whereas narrow is the gate and cramped the road leading off into life, and few are the ones finding it." (Matthew 7:13, 14, *New World Trans.*) However, today's religions have let the barriers down, broadening out their path to where almost anyone can come in, rather than keeping their principles high and on the way of right worship. Thus they are filled with many "social" members who are members because it is the popular thing, the accepted custom, and they are also filled with apathetic individuals whose belief is far below lukewarm, who do not practice the principles that Christ taught, and who, in many instances, do not even know what those principles were.

Having watered down their high standards, these religious leaders have also watered down Christ's instructions to stay separate from the world. They see little reason to stay separate, because they have lowered their standard to where their membership already takes in much of the

world. They may even put aside their true job of teaching and preaching true worship and apply their major interest to family problems, labor standards and the like.

But the point is that if their concern is political and social reform, they should be honest enough to say so and let people join them for the reasons they would join a political party. But if their aim is to live up to the name Christian, then they should follow Christ—and he was interested in one thing: spreading the right knowledge of God's purposes and pointing to the narrow way of true worship that does lead his servants to everlasting life.

It is not anticipated that today's religions would so drastically alter their present course as to get back to that way that Christ set out. Then what can you do about it? You can separate from them, realizing that you should not follow leaders who ignore Christ's specific instruction that tells them to keep separate from the world. "Therefore get out from among them, and separate yourselves," says Jehovah, "and quit touching the unclean thing," "and I will take you in." (2 Corinthians 6:17, *New World Trans.*) You must separate yourself from the wrong, and accept what is right. This requires positive action upon your part. Jehovah's witnesses, who have taken that action, will consider it a privilege to show you how you too may do so.

A NATION OF SPECTATORS

Some scientists do not think much of what television has done for mankind, especially for children. In fact, one scientist, Dr. Robert E. Wilson, a chemist and chemical engineer, believes that youthful preoccupation with television has contributed to creating a shortage of scientists and engineers in America. In an address before the 127th national meeting of the American Chemical Society, Dr.

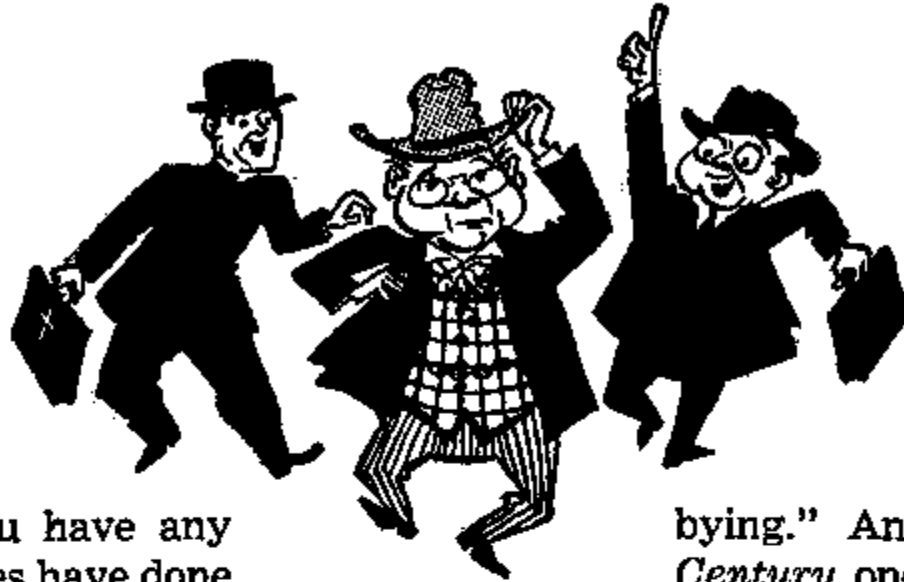
Wilson said: "The bright young boy who used to play with a home-made crystal radio or a chemical kit is now twirling the knobs on a TV set, watching terrible programs that distract him from constructive activities." Television, declared Dr. Wilson, "has made us a nation of spectators instead of participants."—*New York Times*, April 3, 1955.

Religion's Political Activity

THE preceding article discussed the scriptural viewpoint of religion's meddling in politics, and showed what is wrong with this widely accepted practice. But do you have any idea how the churches have done this? the denominations that are involved? the subjects on which they try to influence the government? or the extent of their activity in this field? This article will answer these questions. It will deal with both Protestantism and Catholicism alike. And while it deals basically with United States lobbying, the principles that are involved concern the people of every land where the government is elected by the people.

Britain's Labor government complained in 1949 about that land's state church taking a political side on economics and national policy. The Vatican's August, 1953, concordat with Spain legalized Catholic power in that land. Former President Quirino of the Philippines warned against the participation of the church in politics, but acknowledged that he had yielded to Catholics on the issue of religious instruction in public schools. And in the United States Kermit Eby of the Protestant Federal Council of Churches has called for "an integrated, long-range political strategy in the ranks of Protestantism."

There are many ways that churches have mingled in politics. They have tried to sway legislators, have influenced their church members who were in positions of



authority, and have swayed the voters to accomplish their political aims. In the United States the first method (that of trying to influence legislators) is called "lob-

bying." And, as the *Christian Century* once pointed out: "De-

spite the fact that most churches try to avoid using the word," the representatives that they keep in Washington "are lobbyists as defined by law," because "they are in Washington 'to influence, directly or indirectly, the passage or defeat' of legislation by Congress."

It is commonly known that church officials and lobbyists in Washington furnish information to legislators through the mail, through personal interviews and through having their opinions published in the press. By mail congressmen receive religious publications, statements concerning churchmen's official views and letters dealing with specific issues on which religious organizations have taken a political interest. Information furnished to congressmen is directed to key members of committees, who may be urged by the religious organizations either to speed or to delay action on proposed legislation. Oftentimes an influential individual will be brought to Washington to appear before a particular congressional committee to argue for the view of his religious organization.

Both Catholic and Protestant organizations have wide interests. An idea of the scope of their activity is shown by the ar-

rangement that Protestant groups made several years ago for a co-operative system of exchanging legislative information. Their labor was divided in this manner, according to the detailed study *Church Lobbying in the Nation's Capital* by Dr. Luke Ebersole: "Northern Baptists: civil rights, atomic energy, food; Congregationalists: immigration, social welfare, relation of church and state; Friends: United States-Soviet relations, strengthening United Nations, displaced persons, revision of immigration regulations, civil rights; Methodist women: civil rights, labor, tax policy; Presbyterians: European recovery, social welfare, labor, alcohol."

The extent of such church interest in politics can further be seen in some examples of religious influence in Washington during recent years. Religious representatives have taken sides and tried to influence the government on such matters as the fair-employment practices bill in 1947, social security, extension of the displaced persons act, the anti-poll-tax proposal, U.S. aid to Greece and Turkey, the Reciprocal Trade Agreements Act, federal aid to state health programs and the North Atlantic Treaty. The idea that some religions might not know everything about politics has apparently prompted no general trend toward their staying in their own field.

Regarding Slavery and Prohibition

Are you amazed that church lobbying has reached such a scope, and that some men apparently want to put God on one political side, other men want to put him on the other? This is nothing new. Even during the short history of the United States, both of these things have been evident many times. The churches took a strong interest in and certainly did not speak with one voice on the nineteenth-century issue

of slavery.* Said President Lincoln: "I am approached with the most opposite opinions and advice, and that by religious men, who are equally certain that they represent the Divine will."† Very frequently a religion's members' approval of its political ventures was based not on the question of whether politics is the proper place for a religion, but on whether the denomination's political views corresponded with those of its members. As *Church Lobbying* puts it (page 6): "It appears that, to some extent, the attitude toward the participation in politics by preachers depended upon which side of the controversy the Almighty was placed."

Perhaps the most outstanding instance of church lobbying in the United States, however, was that carried on by the national Anti-Saloon League, organized in Washington, D.C., in December, 1895, to represent about forty-nine temperance and religious groups. Eventually it had the support of as many as 60,000 agencies, and had such political power that Governor Brumbaugh of Pennsylvania is reported to have said that no politician or political party could afford to turn a deaf ear to "such an organized body of men."

"At first," says Ebersole, "the church's tradition of non-intervention in politics produced doubts and resistance, but the hope of immediate reform was too great and the churches rallied to the cause." The league did not put up its own political candidates, but it supported those who agreed with its policies, no matter what their voting record was on other issues. Its strategists drafted and introduced bills, lobbied among congressmen, created public opinion and succeeded in establishing prohibition, putting through the constitutional amendment that banned the sale of intoxi-

* For a more detailed account see *The Watchtower*, June 15, 1953, page 357.

† *The Political History of the United States of America During the Great Rebellion*, Edward McPherson, page 231.

cating liquor from January 16, 1920, until it was repealed in 1933.

Protestant Representation

In contrast with single-purpose organizations like the Anti-Saloon League, the present trend is toward denominational and interdenominational organizations having regular representatives before the United States government. This trend was begun by the Catholic Church during World War I, and the major Protestant groups later followed suit, generally during and after World War II.

The Friends and Congregationalists have had full-time legislative secretaries in Washington registered with the government as lobbyists. The Presbyterian representative registered to lobby "in the interest of social legislation on which the Presbyterian General Assembly has taken action." The Northern Baptist representative's duties consist of "talking with Congressmen and officials to present the Baptist conscience, arranging for visitors to meet their representatives and express their views, keeping watch upon the acts and trends of government, and reporting back to denominational agencies and groups."

The Washington office of the National Lutheran Council says its purpose is that of public relations. Robert Van Deusen, the council's secretary, says: "A two-way flow of information is considered desirable, but no pressure is to be brought on individual congressmen in favor of specific pieces of legislation." Additionally, the African Methodist Episcopal Zion, Brethren, Mennonite and Christian denominations are reported to have part-time representatives but with less activity in connection with legislation.

What do people think of religious organizations' trying to persuade the government to take a particular course regarding such political subjects as trade agreements,

income tax, the United Nations and the Bretton Woods monetary conference? It is safe to say that many people know nothing about it. A *Catholic Digest* survey revealed that 72 per cent of the Catholics and 69 per cent of the Protestants think it is never right for clergymen to discuss political candidates or issues from their pulpits. If they are not to discuss them in their pulpits, then should they take sides on them in Washington?

Catholic Lobbying

The Catholic Church "Never Interferes in Matters of Political Nature," declared *Our Sunday Visitor* to its Catholic readers, September 16, 1945. "Those editors who are ever charging the Catholic Hierarchy with meddling or interference with politics," it said, "are careful never to publish statements of the Hierarchy which prove the very contrary." However, one's actions speak at least as loud as his words, and the Catholic Church is no more free from political meddling than are the Protestant religions. Its political position is well understood in Spain where the Catholic concordat is a legal agreement with the state. It has come to public attention in England, where a London *Catholic Herald* headline said: "Priest Has Right to Advise on Use of Vote—Says the Pope."

Church activity in politics is also a prominent matter in the United States, as informed Catholics know. Numerous agencies are at work in Washington, from time to time making formal recommendations to the government, and representing Catholic interests before administrative agencies. Dr. Ebersole discusses some of these on pages 50-54 and 106-113 of his book *Church Lobbying*. This lobbying, of course, is in addition to the numerous devout Catholics in government who would respect and support their church's views on

major issues, which views are widely publicized through Catholic agencies, through local churches and through the statements of Catholic leaders that are published.

It is also in addition to what the *Christian Century* called the "strong influence on American foreign policy of the professors of Georgetown and Catholic universities," and "the close liason the Catholics maintain with congressmen through certain priests in Washington." Ebersole says Catholic power "derives from long, continuous and intimate acquaintance with legislation and lawmakers; from the loyalty of some Catholic government officials; and from an active interest in the administration of the law."

Thus, there is no question that both actions and admissions show that high Catholic organizations, as well as the Protestant groups, can be charged with "meddling or interference with politics" despite *Our Sunday Visitor's* declaration to the contrary.

Catholic lobbying for such things as tax support for religious activities, for reli-

gious hospitals and religious schools, and to gain political representation for their religion through an ambassador to the Vatican, prompted the establishment of another political organization, Protestants and Other Americans United for Separation of Church and State, organized specifically to oppose these efforts.

Thus, on both sides of the religious fence there is abundant lobbying, and the religious organizations exercise a far greater influence than many people realize. Should the religions do this? No! As the preceding article shows, religion's duty is to preach the truth, to teach right morals and pure worship, and to show the people how to separate from Satan's dying old world and to side with God's righteous new world. While the religions in general are not really doing that work today, you can have a part in it. You will thus find the greatest joy for yourself and will provide the greatest of services for others—the service that God himself set out. Will you participate in this important work?

BABIES SMARTER THAN YOU THINK

☛ Cameron Meredith, assistant professor of education at Northwestern University, told the *Chicago Sun-Times* of a baby who learned to cry silently, because his parents were deaf and dumb. According to Meredith: "This baby's parents could neither speak nor hear. It only took a few experiments for the baby to learn that if he yowled, no one paid attention to him. What did he do? He learned to cry silently, wasting no energy but getting the same results of attention any other baby would attain by crying his lungs out." The baby would roll his big blue eyes at his parents, screw up his face, pucker his mouth, and once in a while drop a visible tear; in short, he went through "all the gyrations of crying without making a sound." This stratagem brought swift results. "His parents were quick to look for the pin that might be sticking him, change his diapers, grab for the bottle, take his temperature: Do what all parents think is necessary when a baby cries, even though this youngster made no sound! And amazing, too, was the story about this particular youngster, that when people talked or made sounds in his hearing, then he would cry audibly to attract attention." Meredith told of a hard-of-hearing boy about six years old who had "temper tantrums." No matter what the parents would do in the emergency, the lad would show no reaction except to continue the tantrum. When asked privately why he paid no attention to his parents at the time, the lad replied simply: "I turn off my hearing aid!" Meredith concludes by saying to parents: "Don't underestimate the intelligence of your youngsters."

Probing the UNKNOWN CONTINENT

WHAT—a continent nearly as big as Europe and Australia combined, and yet unknown? That is right. Most of it has never been seen by human eyes. This is Antarctica, called the "bottom of the world." Here is a vast region of snow, ice and penguins. Here are some 6,000,000 square miles so unknown that most maps still show it in hazy, general outline. Here is a continent with 14,000 miles of coast line, most of which has never been sailed. Here is a continent where summer, as most of us know it, never comes. Yet a summer of a sort does come to Antarctica during the Northern Hemisphere's winter, bringing 24-hour-a-day sunshine and brief, spongy softening of coastal pack ice. It is during this cold, flowerless summer that valiant men arrive by ship to probe the mysteries and oddities of the unknown continent.

Thus it was that the United States naval icebreaker, the 6,500-ton Atka, steamed into Antarctic waters last January to probe the continent's inhospitable coast line. This was not a military voyage. The Atka's objective was to search out locations where bases could be established for a large-scale research project. In fact, the Atka's probe into the unknown was only a part of the world-wide activity being carried on in preparation

for the International Geophysical Year 1957-58. Some forty nations plan to conduct co-ordinated studies in this gigantic undertaking. To prepare for the United States' part of that program was the Atka's task. Surprise, enchantment, disaster and innumerable oddities lay in the pathway of the Atka's journey.

An Inhospitable Pacific Coast

Toward the Ross Sea steamed the Atka. First port of call was Little America. Here Rear Admiral Richard E. Byrd, during his expeditions, had set up camp near the outer edge of the Ross Shelf Ice on the Bay of Whales. A dismaying surprise greeted the Atka: the Bay of Whales had vanished. The harbor had disappeared. It had disintegrated. Hundreds of square miles of Ross Shelf Ice had broken off, and much of the unoccupied Byrd camp had been carried out to sea. Only a fuel drum, buried

in a sheer 100-foot cliff of ice, was found to mark Byrd's 1947 camp. Seventy-foot radio towers, erected by Byrd on a still earlier expedition, were now almost buried by snow and ice; only some seven to ten feet protruded. Little America had indeed changed.

Sailing east from Little America, the Atka tried to enter Sulzburger Bay. But the way was barred by a mighty river of ice



called pack ice. This consists of frozen ocean broken into floes that range from a few square yards to hundreds of square miles. In its calmer moods pack ice is fantastically beautiful; when it is angry the pack can destroy a ship in a few minutes by direct crushing or by swamping it under mountains of storm-tossed ice. Before the Atka could extricate herself from the heavy floes, a submerged spear of ice lopped off one of the three blades of the ship's thirteen-ton starboard propeller. Undaunted despite the mishap the Atka forged ahead. "When the ice was not thick enough to bring the ship to a halt," wrote Walter Sullivan, the only correspondent aboard the ship, "the Atka forged ahead, plowing a swath sixty-five feet wide. Huge ice cubes three feet on a side twisted, ground and turned somersaults in the churning water alongside. The sound within the ship's hull was like that of empty oil drums bouncing down a mountain."

At a small indentation the Atka made a landing. This was Kainan Bay, which was found to be a possible, though not an ideal, site for a base. It was here that disaster struck. One of the ship's helicopters, while ferrying observers onto the ice plateau, crashed, killing the pilot during a "white-out." This condition, one of the chief hazards of Antarctic travel, occurs when sunlight diffuses through a solid overcast. The effect is that of being in a cloud. No boundaries can be seen. Men on the ground may walk into crevasses and airplane pilots may crash because they cannot tell where the surface is.

For the next two weeks the Atka battered its way futilely at enormous fields of drift ice. It made three further attempts to enter Sulzburger Bay, after circling north of the pack. When these probings were blocked, the Atka continued eastward. It tried to break a pathway through to Mt. Siple and the Thurston Peninsula, all with-

out success. So formidable was the ice pack that never again, after leaving Kainan Bay, was the Atka able to reach the Antarctic coast on the Pacific side.

Atlantic Coast of Antarctica

Churning its way toward the Atlantic side, the Atka rounded Palmer Peninsula, a piece of land that juts out 800 miles from the continent toward South America. The peninsula is so narrow that, even 500 miles from its top, one can see across it from its 5,000-foot plateau. It is a land of snowy mountains, glaciers and fiords.

Off Palmer Peninsula is fantastic Deception Island. Here the Atka took the ocean's temperature, thus giving the crew a glimpse of this unusual isle. What makes Deception Island so intriguing is what it really is—a relic of a huge volcano. The crater of the volcano has cracked open, allowing the sea to pour in. A snug harbor four miles wide is the result. The crack is large enough so that ships can sail into the harbor. Heightening the isle's weird enchantment is the sulphurous steam that spurts around the shore line and the "black snow"—layers of volcanic ash that give the snowy slope a sooty appearance.

The Atka now steamed into the Weddell Sea, where the pack ice was especially heavy. Officials aboard the Atka believe that theirs is the first ship to battle the treacherous Weddell Sea ice pack since an earlier ship was trapped there in 1922. During the skirting of the Weddell Sea shore the Atka made a landing in a small bay. Here the crew captured some penguins for the Washington zoo. It was not very difficult capturing the birds; they can readily be approached since they do not have any natural enemies on the ice. Commenting on Antarctica's wildlife, the *New York Times* correspondent, Walter Sullivan, said: "Despite its cruel climate the pack abounds with life. Seals lounging on the floes have

met no enemy on the ice. They know fear only in the water. Like most creatures of the Antarctic they are so wild they are tame."

But capturing wildlife was not the Atka's main objective; so on the vessel steamed in search of a good landing place. On the coast of Queen Maud Land the Atka found a fair landing place, which was surveyed and named "Atka Bay." Farther east the Atka crew exulted on finding an excellent site, Admiral Byrd Bay. This discovery is regarded as an outstanding achievement of the expedition, since Admiral Byrd Bay is well suited to the larger expeditions planned for the near future.

Oddities and Future Proposals

A probe into the unknown was bound to bring some oddities. The Atka itself furnished one oddity: the mailing of 2,500 envelopes near Antarctica. The post office? The ocean! For the Atka crew, using a modern version of the bottled message, tossed some 2,500 post cards sealed in transparent plastic envelopes into the ocean. The finder is asked to write down on the card where it was found and drop it into the mail. Scientists want to find out where the waters flow from the bottom of the world.

Another oddity was seen on the voyage home. This was an iceberg so enormous that it took four hours for the Atka to steam past it. It was the largest iceberg seen by the expedition, and its size was so vast that only an estimate could be made of its length: a 50-mile-long iceberg! So huge was it that the crew could hardly believe the ice was not on land. But an iceberg it was.

The very outcome of the Atka's journey is somewhat odd. The icebreaker steamed some 5,500 miles or about halfway round the frozen continent, and yet the ship could

discover only four accessible harbors along the coast. Though the Atka's major objective was to find suitable bases for future explorations, so much datum was collected in the physical sciences—study of cosmic rays, sea temperatures, depth of ice, high-altitude weather, etc., that the correspondent aboard the ship came to this conclusion: "The most valuable work done by the Atka on her cruise may prove in the long run not to have been in her discovery of good harbors and airfield sites for future operations. It may have been in the data collected from the ship's 'exploration' in the physical sciences."

The Atka's cruise enlightened scientists on one special objective of the research of the International Geophysical Year. That objective is to find an answer to the question: At what rate is the earth becoming warmer? The Atka found that the pack ice was strikingly farther south than had been expected from records of previous visits. Was this just an unusual year or is the phenomenon further evidence of the warming cycle in the earth's climate? By 1958 scientists expect to have the answer.

So there is no doubt that the Atka's probings helped pave the way for the mammoth international program scheduled to culminate in 1957-58. A United States observation outpost at the South Pole itself is just one of the many remarkable proposals for the near future. One of the most exciting proposals for 1957 is for a joint British-New Zealand expedition to perform an even more daring, more difficult feat than conquering Mt. Everest was, namely, to attempt to cross the whole Antarctic continent. Man has never been able to do this except by airplane. If the projects for 1957 succeed, the veil of obscurity enshrouding Antarctica may soon be lifted—and a vast continent will, at last, signify more than ice and penguins.

An Interesting Book

AT HAND is a review copy of the new book *Jehovah's Witnesses—the New World Society*, published by Vantage Press of New York city. Several books and many pamphlets have been written about Jehovah's witnesses, but this one is unusual in the fairness and objectivity of its material. It is put together in the crisp news style of a reporter by its author, Marley Cole. He has assembled authentic material by research into literature both by the Witnesses and about them, by attendance at local congregational meetings and at national and international assemblies, and especially by personal interviews with many Witnesses themselves, some of whom are officials of the Watchtower Society.

¶ The first of its ten chapters colorfully reports on the 1953 international assembly at New York's Yankee Stadium, attended by Witnesses from ninety-six nations, and climaxed by a gathering of 165,829 persons to hear the public talk on the last day.

¶ A chapter showing the unorthodoxy of Jehovah's witnesses states: "You could not produce a more revolutionary religion, even if you took the sum total of all the tenets of Christendom and turned them precisely upside down. It is as if the Witnesses had hit upon the formula that religion as we know it has everything in reverse. To get true worship straightened out (you could almost accuse them of reasoning), you adopt the opposite of what you hear in church."

¶ In the chapter on the Society's first president, Charles T. Russell, we read: "His writings," declared an enemy, "are said to have greater newspaper circulation every week than those of any other living man; a greater, doubtless, than the combined circulation of the writings of all the priests and preachers in North America." His enemies were many and their bitter attacks bristled with slander and libel, but they never stemmed the flood of Bible truth from his pen that swept away falsehood and restored to their place in the minds of many the basic truths of the Bible. He was referred to by one as 'turning the hose on hell and putting out the fire.'

¶ After his death Joseph F. Rutherford became president of the Society, and author Cole shows how attention was turned from creatures

to focus squarely on the organization, building it up and strengthening it on a theocratic basis. Neither internal strife nor external attacks could muffle the ringing cry of those years, "The Kingdom Is Here!" Even the imprisonment falsely of the Society's officers, including Rutherford, was no victory for the enemy, for while in prison a new magazine was conceived, the one you are now reading, only then it was called "The Golden Age." The work of witnessing to the Kingdom's establishment boomed, and during this period this society of Christians became known world-wide as JEHOVAH'S WITNESSES.

¶ Under Rutherford's successor, Nathan H. Knorr, the witness work took on new impetus as trained missionaries were sent into scores of countries and branches sprang up in many lands. And yet this was in the face of continuing opposition, from individuals to mobs to nations, fighting imprisonment and bans, doing the work underground for years in some nations, and waging incessant court battles in many countries for the legal right to preach. An enlightening interview with the Society's legal counsel, Hayden C. Covington, disclosed the magnitude of the court battles and the many victories won in the Supreme Court of the United States—so impressive that judges and lawyers have hailed Jehovah's witnesses as making firm the civil liberties of all citizens.

¶ Another interview, this one with a Society director and the superintendent of evangelists, Thomas J. Sullivan, brings out the basic doctrines, placing first in importance the vindication of Jehovah's name, and continuing to show beliefs about salvation, the soul, Christ's second presence since 1914, earth-wide Kingdom preaching and the paradise conditions to come in the new world.

Many pages of fine photographs on heavy coated paper and an appendix complete this 229-page book. Perhaps the outstanding part of this appendix for the average reader will be the documentary evidence that President Eisenhower's parents were Jehovah's witnesses for more than forty years. This book is interestingly written about interesting material. You will enjoy reading it. The first printing of 20,000 copies has been taken up by bookstores. A second printing, 40,000 this time, has been run.

Marvel of the

THE crowning glory of the plant world is the tree. Yet how few people appreciate this marvel among plants!

Many a person who walks through a forest or park hardly gives any thought to the giant plants around him. If he does think of them, he may not think of them as things that are truly alive. Yet a tree is a living creation. It breathes. It digests and assimilates food. It gives off waste products. It has real circulation. It rears a family as truly and beautifully as any other form of life. It has the power of adapting itself to its surroundings in a wonderful way. Though it, of course, lacks intelligence and power of locomotion, a tree performs vital acts as truly as the body of a man. Yes, the living tree is a marvel!

What a variety there is in the tree world! Botanists have now numbered between 60,000 to 70,000 species of trees. These are of all shapes, sizes and colors. You name the color; and if you cannot find it in the bark of these thousands of trees, you will find it, at some time of the year, in the leaves. As for sizes, there is a tree to measure up to everyone's ideal. At maturity some trees are only ten feet high, with trunks as slender as six inches in circumference. If you like big trees there are species that reach as high as 350 feet and those with a trunk circumference of more than a hundred feet. In Australia the eucalyptus trees reach dizzy altitudes. One eucalyptus, located near Colac, in the province of Victoria, reaches a height of 347



feet. For sheer tallness, though, the redwood puts in its bid for first prize. At Dyerville Flat, California, the tallest living tree in America rears its topmost boughs to a height of 364 feet. Still growing, its girth is 47 feet.

Adaptability and Circulation

Truly wonderful is the growth of a tree. For the tree adapts itself to its surroundings in as marvelous a way as man adapts himself to varying conditions. If water is scarce, roots go down deeper and deeper. If nourishment is poor, the roots stretch out farther and farther, traveling backward and forward, above and below and around obstacles in their search for what will be good for the tree. As a tree grows, its roots exert a steady pressure, whose cumulative effect is truly astonishing. Thus the birch, though far from the sturdiest of trees, can lift a boulder weighing twenty tons.

If trees are crowded together, they reach higher and higher; and their branches, instead of growing outward, rise almost perpendicularly to reach the sunshine. If the situation is windy, the tree takes firmer hold of the ground with its roots. Though the tree may bend before the wind, it rarely breaks; snow and frost it can keep out;

animals and birds it can often resist; and in the tougher fight against its own relatives—such as the ivy that tries to strangle it—it puts up a good fight and sometimes wins.

The living tree has a circulation as truly as does man himself. While it does not move as fast as ours and does not go round and round as the result of pumping by a heart, the circulation system of a tree is still a marvel, for it operates from the tiniest root hair to the most distant leaf and back again. In the giant trees that is some distance! On the upward flow the circulation goes on through the sapwood, traveling from cell to cell, from the small roots to the larger ones, then into the trunk and branches and leaves. From the leaf the circulation travels down once more through the cells of the inner bark on the way to the smallest roots, building up layers of cells all the time. And so most trees keep on growing in girth as long as they live.

Like man each tree is a marvelously unique individual. For no two trees, not even those of the same species, are ever alike. And for that matter, no two boards taken from the same tree are ever alike. Each piece of wood, with its grain and rings, is as different as human fingerprints.

"The Lungs of a Tree"

A tree breathes as surely as man does. It takes in air through its leaves, entering through tiny openings on the undersides. Once inside the leaf, the elements that make up the air are separated from one another. The carbon dioxide is used in sunlight in the manufacture of solid substance, while the unused oxygen is given off again to the air. This process is called photosynthesis, because it is a union or synthesis of material in light. Of course the leaves need some oxygen for breathing. But although green leaves undergo normal respiration, absorbing oxygen and excreting carbon dioxide, they absorb on the average

about five times as much carbon dioxide in photosynthesis as they excrete in respiration, and release about five times as much oxygen as they consume. Indeed, enough oxygen is produced by 180 square inches of green-leaf surface during an average summer to supply the average oxygen requirements of a man for an entire year!

Leaves are aptly called, then, "the lungs of a tree." What a marvel a single leaf is! And how many there can be on a single tree! A good-sized poplar may have 70,000 leaves, a birch 200,000 and an old oak, 700,000. Shapes of leaves are adapted to the conditions under which the tree lives. Though most leaves have flat blades that expose as much surface to sunlight as possible, cone-bearing trees have needlelike leaves that offer a minimum of resistance to the high winds of cold climates. How do the needlelike leaves make up for their little surface? By their numbers! Thus an examination of a Monterey pine revealed some 8,000,000 needles. When trees have only a few leaves, they make up for it by their size. So the leaf of a royal palm may weigh ten pounds or more, and the leaf of a mature date palm may be twenty feet in length. One tropical species has been observed with leaves a fantastic forty feet in length!

Seeds are another marvelous feature of trees. Again there is a wide range of variety. Some seeds are so incredibly light it takes tens of thousands to make a pound. In fact, 500,000 seeds of the Torrey pine weigh just one pound. On the heavy side, specimens of the giant double coconut from the Seychelles Islands may tip the scale at forty pounds.

How are seeds distributed? Those that are light float through the air; those of the sycamore have wings to carry them far enough from the parent tree to find sustenance in the soil. Acorns, chestnuts, cones and other heavier seeds are often planted by

forest creatures such as squirrels and jays. Even the heaviest of seeds, the coconut, lacks not a way to travel. For the coconut palm often grows near the ocean beaches; some palms even lean over the water. When coconuts fall they either roll into or drop into the water. Soon they are riding waves. In time a floating coconut hits land, rolls into a spot and germinates; and barren land becomes a lovely grove of palms that offer to man their fronds for shelter, cool coconut milk as a drink and coconut meat as food.

Life Span of Trees

Almost everyone has heard about tree rings. In those trees whose annual activity is interrupted by a regular winter or dry season, rings of growth occur. These are a clue as to a tree's age. But how do the rings develop? Because wood cells produced in the spring of the year are large, and those produced later in the year are smaller, and because an interruption of growth occurs during the winter, each year's growth of wood appears as a distinct ring.

How long do trees live? Long! Sugar maples frequently live as long as 500 years. Some oaks live as long as 1,500 years and some junipers as long as 2,000 years. Some of the giant trees in Sequoia National Park, California, are so old that they were nodding their lofty boughs when Jesus

walked the earth. Many of the sequoias are over 2,000 years old. The General Sherman tree is estimated to be between 3,000 and 4,000 years old. John Muir, who examined a huge sequoia much damaged by fire, reported over 4,000 growth rings.

How long, then, can a giant tree live? Man does not know, since the giant trees appear not to know such a thing as "natural death." Thus *Hammond's Nature Atlas of America* says: "For how many centuries or millennia our present sequoias will go on living nobody knows; their chances seem excellent as they are almost indestructible." "A recent study of giant sequoias," says Dr. Ferdinand C. Lane in *The Story of Trees*, "found no record that any had ever succumbed to mere old age and guessed that if the hazards of lightning, fire and storm could be eliminated, some of these great trees might defy the ravages of time for 10,000 years."

And so, extraordinary longevity, a life span so long that man cannot measure it, is the crowning marvel of the tree. How richly meaningful the Bible's numerous references to trees now become, especially Jehovah's promise of never-ending life to those worthy of living in his new world: 'Behold, I create new heavens and a new earth. As the days of a tree shall be the days of my people.'—Isaiah 65:17, 22.



Surprised Thieves

Usually the thief surprises the victim, but not always. At Hagerstown, Maryland, someone made off with a classy-looking suitcase; it contained a ten-foot python snake. But it remained for a thief in Knoxville, Tennessee, to hit bottom. He grabbed a purse from Mrs. Lilly Mae Hipshire. The bag was full of diapers. Perhaps the most surprised thief for a long time was one in Modesto, California. This one made off with a station wagon but he abandoned it in hot haste. On the back seat was a local resident—recently deceased. The station wagon belonged to an undertaker.

ATOMIC RADIATION



and MAN'S DESTINY

MANKIND is constantly under bombardment by many kinds of atomic radiation as described in the previous articles in this series. From the day of his birth to the day he dies, everyone is exposed to cosmic rays from the skies. The air we breathe contains traces of radon, a radioactive gas. There are minute quantities of uranium and radium in the soil, and hence in all ground waters. From ordinary drinking water the average person accumulates, during his lifetime, around one ten-thousandth of a microgram of radium in his bones. Radioactive potassium and radio-carbon in body tissues add to the radiation exposure. Do these weak radiations have any effect on us? Does the fact that man apparently has been exposed to these penetrating radiations throughout his history, or the fact that some of them originate

even in essential elements within his own body—do these facts mean that they are necessarily harmless? What is their relation to man's destiny? Have they affected his past history? What bearing do they have on God's promise of everlasting life to obedient men?

Of all the known radiations to which man is exposed in his common environment, cosmic rays are by far the most important. (See *Awake!* July 8, 1955, Table on page 23.) Hence, our answers to the foregoing questions must be concerned primarily with the effects of cosmic rays. The others may be disregarded.

Cosmic Rays and Natural Mutation Rate

It has long been believed that the level of cosmic-ray exposure, accumulated over a lifetime, was far below the lowest exposure that could possibly cause any injury to man. So far as the chronic effects of repeated small overexposures to radiation are concerned—such effects as anemia, leukemia, cancer—it does not seem possible that any of these could ever result from seventy years' exposure to cosmic rays. But hereditary effects, caused by mutations in the reproductive germ cells, occur at much lower levels than those necessary to visibly injure the person exposed. Mutations lead to the begetting of offspring whose bodily form or function is more or less seriously impaired. Mutations have been estimated to occur spontaneously, from unknown causes, at an average rate of about one out of 100,000 genes in each generation. In experiments on fruit flies, this mutation rate could be equaled by exposure to 200 roentgens during a generation. Since cosmic rays give an exposure of only .1 roentgen a year, they appeared to be of no consequence as a cause of mutations.

However, recent experiments with mice exposed to radiation have disclosed the

startling fact that mutations occur in them at a rate ten times as great as in the fruit fly. These experiments, reported in the seventeenth semiannual report of the Atomic Energy Commission, suggest that the estimated mutation rate in man under exposure to radiation should be increased tenfold. Even this may be conservative since man is a more complex creature than the mouse and therefore, presumably, more easily injured by radiation.

Instead of taking the 100 roentgens that are necessary to double the mutation rate in fruit flies, we should consider the amount necessary to double the mutation rate in man as not more than ten roentgens. At the normal cosmic-ray level a person absorbs about three roentgens between birth and the age of procreation. In view of the rough approximations involved, it appears quite possible that the natural mutation rate in man is due chiefly, if not entirely, to cosmic rays.

Mutations Cause Degeneration,

Not Evolution

How do these mutations affect the race of mankind, as they continue generation after generation? A currently popular theory of evolution is based on the assumption that some mutations are beneficial and some detrimental. Through natural selection the detrimental ones are eliminated while the beneficial mutations are multiplied and spread throughout the population. Over vast periods of time, perhaps thousands of generations, these good mutations gradually improve the species. Some hold that mutations can even produce new species.

Now, if race improvement is the result of mutations, since mutations are increased by raising the level of atomic radiation one would conclude that anything that raises the radiation level (short of inducing cancer during the lifetime of an individual)

would be a good thing for the race. Widespread use of X rays, general dispersal of radioactive isotopes from atomic reactors, and especially the world-wide contamination of the atmosphere and soil with radioactive ashes falling out of atomic and hydrogen bomb clouds should all be a marvelous benefit to mankind, because they would increase the speed of evolution. They would give our children or grandchildren new abilities or desirable traits that might not have come along for many more generations, had not man stepped in to help evolution along. Are the evolutionists willing to back up their theoretical claims with this magnificent opportunity to demonstrate evolution in a large-scale, practical way?

Far from it! All the evidence is that mutations are not beneficial, but invariably injurious. "It is conservatively estimated that over 99% of mutated genes are harmful." "No useful mutations have appeared, and none are expected." "Accelerated H-bomb test programs . . . will ultimately reach a level which can be shown to be a serious threat to the genetic safety of all people of the world." Rather than improving the race, man is committing "creeping suicide" by "fouling the air with radioactivity." Such are the opinions of the scientific authorities.

Read what two prominent evolutionists say about the effect of mutations on the human race. Indiana's Professor H. J. Muller, Nobel Prize winner in genetics, writing in the *American Scientist*, concludes that "each mutation eventually causes one genetic death." This, he says, "is just as true of any recessive invisible or visible detrimental gene, no matter how slight the grade of defect it causes, as of a fully lethal gene." Harvard's articulate anthropologist, Professor E. A. Hooton, says in his book *Apes, Men, and Morons*: "I am afraid that many anthro-

pologists (including myself) have sinned against genetic science and are leaning upon a broken reed when they depend upon mutations. The evidence of modern experimental genetics seems to indicate that most mutations are harmful and that many of them are even lethal, and that they are attributable in the main to deterioration." Not evolution, but race degeneration is the effect of mutations.

Shortened Life Span Since the Flood

Since it now appears that possibly all the natural mutations in the human race can be attributed to cosmic rays, an interesting question is raised in the mind of one familiar with the Biblical history of man. The first man was created perfect. He lost his perfection through sin, and man's subsequent history down through the 6,000 years till now has been one of race degeneration. Hence we ask, What part in this degenerative process might have been played by cosmic rays?

The immediate and greatest change in man's prospects for health and life occurred upon his expulsion from the garden of Eden. Instead of life without end he now faced the gradual process of dying, and his life came to an end after a scant thousand years. For several generations at the beginning, the normal life span of man continued to be close to a millennium. Most of the men in the genealogy from Adam to Noah, recorded in the 6th chapter of Genesis, lived over 900 years. Then came the Flood. The life span of those born after the Flood dropped abruptly to about 450 years, then three generations later to 240 years. It continued to drop more gradually thereafter, reaching 120 years in Moses' case, but his prayer indicated that men had come to regard seventy years as the normal life expectancy. Modern medical science has not reversed the trend of degeneration thus measured. It has made it possible for

more to live out the normal span, but this is still only seventy years.—Psalm 90:10.

Such sudden drops in life span are very characteristic of mutations. If we were to consider that this spate of mutations was caused by cosmic rays, we should then look for some change at the time of the Flood that suddenly brought the cosmic rays into the picture. Is it possible that before the Flood mankind was not subject to the continual bombardment that is accepted today as a normal part of the environment?

Before this question can be answered, it is necessary to know something of the constancy of cosmic rays. The intensity of the radiation varies in a complex way over the earth's surface. It is higher at higher latitudes and at higher altitudes. These effects are explained by physicists by the hypothesis that the primary cosmic rays reaching the earth are protons (nuclei of hydrogen atoms) traversing interplanetary space in all directions, with energies ranging up to billions of volts. Because of the earth's magnetic field, these particles are deflected away from the equator. The more energetic protons are deflected less, and will reach the earth even at the equator, but the weaker ones can penetrate the magnetic field only in the neighborhood of the poles. This accounts for it that the cosmic radiation is stronger near the north and south magnetic poles than at the equator. Reaching the earth, the protons enter the atmosphere, and somewhere in its tenuous upper reaches they collide with atoms of oxygen or nitrogen. A nuclear explosion follows. In the violent disruption of the nucleus, the incoming particle knocks out protons and neutrons, dividing its energy among them. Also, some of the energy from the primary cosmic ray goes into the formation of mesons, or heavy electrons. The protons cannot penetrate more than about 10 per cent of the depth of the atmosphere, but some of the mesons

penetrate all the way to the ground. It is these secondary particles that we commonly speak of as cosmic rays. They are largely absorbed within the atmosphere, so that the radiation intensity at higher altitudes is much greater than on the surface. On a mountain 10,000 feet high the intensity is about double what it is at sea level.

Not only does the cosmic-ray intensity vary from one location to another, but it also changes with time. Small variations from day to day are caused by fluctuations in the depth of the atmosphere, as measured by the barometric pressure. Much larger changes are associated with magnetic storms. This can be understood in terms of the earth's magnetic shielding effect. When the strength of the magnetic field is weakened, weaker cosmic rays that are normally excluded find their way in. Sunspot activity also influences the intensity of the rays. Often an increase is noted a few days after an unusual burst of solar activity.

If, then, cosmic rays can be absorbed so greatly by the relatively thin shell of the earth's atmosphere, it is easy to see that other materials would absorb them also. The source of the water that flooded the earth in Noah's time is not explained by science, but the Bible makes it definite that it came from above. The words of Genesis 1 indicate that a vast body of water was suspended above the earth's atmosphere from the time of the second creative day right down till the Flood. This expanse of water would suffice to completely absorb any cosmic radiation that might have been impinging upon the earth during that period. But with the downpour of this water during the Noachian deluge, the protective blanket was removed and cosmic rays, along with light rays from the sun and stars, could shine directly on the earth's surface. Jehovah might thus have used the rain of cosmic rays to complete

the execution of the sentence inherited by Adam's descendants.

False Assumption Discredits

Radiocarbon Clock

The radiocarbon clock is the latest scientific tool that Bible critics are attempting to turn against the Bible account of creation and the Flood. Although there has been a striking lack of any corroboration by this means of the former inflated ages of 50,000 years and up for man's existence on the earth (the carbon-14 measurement should give zero activity for any specimen older than 20,000 or 30,000 years), a few specimens have been measured that do indicate ages up to 8,000 years for objects used by humans. It is claimed that these discredit the Bible account that tells of a *universal deluge only 4,300 years ago, after which the earth was overspread with the races of mankind.*

However, before one discards the Bible and disowns its Author, it would be well to examine the basis for the radiocarbon age measurement. The radiocarbon that exists in nature has been formed by neutrons, which are produced by cosmic rays in the upper atmosphere, as described above. In order to use this method for age dating, it is necessary to assume that the amount of carbon-14 in the earth is constant, and hence that the rate at which it is being formed and the rate at which it is decaying are equal to each other and have been constant for many thousands of years. But even the day-to-day variability of cosmic-ray intensity belies any assurance of the assumed constancy. Since the foregoing analysis shows that, before the Flood, cosmic rays were probably absorbed in the water canopy above the earth before reaching the atmosphere, it is entirely possible that no radiocarbon was being formed in that period. On this assumption, the world's store of natural carbon-14 started growing

from scratch 4,300 years ago, and an error is thrown into the measurements. For example, a piece of wood from a tree that grew shortly after the Flood would be quite deficient in radiocarbon by today's standards, and hence would appear to be much older than it really is.

In view of this possibility it is foolish to claim that the carbon-14 age measurements discredit the Bible account of creation and the Flood. In fact, the shoe is rather on the other foot, in that the changes that accompanied the Biblical flood discredit the radiocarbon ages that attempt to reach back in the antediluvian era.

Military Whitewash, Scientific Fears

Whatever effects from cosmic rays may have accumulated in the genetic composition of the human race over the past ages of history, the large-scale release of radioactive dust into the atmosphere by nuclear bomb explosions threatens now to multiply manyfold in a mere moment of history. Many responsible scientists voice a growing concern over the effects of unlimited atom bomb tests, fearing for man's continued existence on earth. The more militaristic elements scorn this cautious attitude and urge an all-out bomb development and testing program, an all-out nuclear arms race, and readiness to begin upon any provocation an all-out atomic war.

An extreme example of the all-out attitude is illustrated by a recent article in the *U.S. News & World Report*, entitled "The Facts about A-Bomb Fall-out." Headlined was the statement, "Not a word of truth in scare stories over tests." The article enthusiastically hailed a hardier, more vigorous, more reproductive race of flies, developed by breeding in a strongly radioactive environment, as proof that mankind has nothing to fear from mutations. In fact, the reader might conclude that radioactivity is a new wonder drug, promising

to cure all the ills of mankind by quick evolution into a super-race.

Authorities in the field do not share this enthusiasm. Dr. C. H. Waddington writes that scientists so far "have got the resources to tackle only the technically easiest aspect of the matter—namely, mutations which produce very striking and easily recognizable effects. It is likely that there are vastly more mutations producing much slighter harmful effects, but we have no real knowledge of this, and so far as I know no one is studying the matter. . . . All the available evidence, however, makes it seem overwhelmingly probable that any atomic explosion which produces an increase in radioactivity, however small, in regions inhabited by man will add something to humanity's store of newly mutated and mostly harmful genes."

Professor H. J. Muller concurs in this: "In the most accurately studied genetic material, fruit flies, it has long been known that there are vastly more mutations producing hidden, slightly harmful effects than those producing drastic or easily recognizable ones. What is not so commonly realized is that each invisible, slightly harmful mutation occasions an amount of damage in later generations comparable to that arising from the birth of a 'monster.' This is because the 'small' mutation survives through so many more generations as to do a great amount of scattered harm. By the accumulation of many of these small mutations a population can become genetically debilitated."

Demons Herding Deluded Man

Why do men throw discretion to the winds and, heedless of the warnings of danger to themselves and their posterity, pursue a course that can end only in ruining the earth? Certainly it is not self-interest that prompts man in this suicidal course. The Bible proves that we are living

in a time of human crisis from which the present system will not recover. Wicked, unseen demons are leading the rulers and their subjects into destruction. (Revelation 16:14) Demon-deluded men are bent on ruining the earth. (Revelation 11:18) The context of this verse in Revelation shows that it would be fulfilled after Christ comes in power to his kingdom (vs. 15), and would be part of the woes brought upon the earth by Satan in his last days. (Revelation 12:12) Radioactive ruin is added to the ravages of war, pestilence and earthquakes as part of the great sign given by Jesus to enable his followers to recognize the establishment of his kingdom.—Matthew 24:3, 7.

But Jehovah will not permit his earthly creation to be brought to ruin. To save his handiwork, and to fulfill his promise to righteous men to give them a permanent home upon this planet, he is fully justified in intervening to cut short the wicked ambition of demons and demon-controlled men. Those who would ruin the earth will themselves be brought to ruin. Jehovah will never allow men to atom-blast all life from the earth in a push-button atomic war. Neither will he permit lingering radioactivity to poison the earth and wither all living things. The very fact that man has now come to the verge of the ability to destroy all life on the earth points to the urgency of the world-wide announcement of the approach of Armageddon.

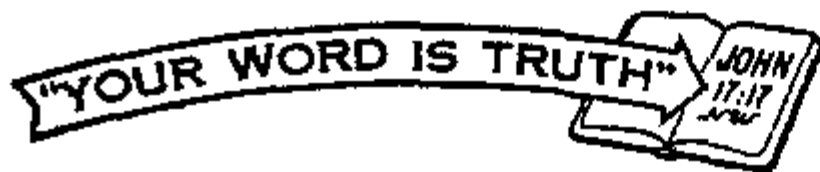
Jehovah Will Deliver and Heal

After Armageddon Jehovah will lead the survivors into the way of life. No longer will the life span be limited to seventy

years. It will not even stop at a thousand years. Obedient men will regain the prospect that Adam had in Eden, that of endless happy life on earth. But will it be possible to maintain health and life forever, if man is still exposed to the debilitating effects of cosmic rays and radioactive contamination? The Bible assures us that "nothing shall hurt nor destroy" in all that holy kingdom, and the "nothing" excludes also radioactivity and cosmic rays. It will not be necessary for Jehovah to restore the watery canopy that enshrouded the earth before the Flood to protect earth's inhabitants. We have seen how easily cosmic rays are diverted even by the earth's weak magnetic field. A stronger magnetic field would block out the rays completely. Or for that matter, Jehovah could shut off the rays at the source. These rays, so mysterious that man cannot even determine their origin, and yet so powerful that they penetrate his most heavily shielded retreat, can be fully controlled by the Creator's omnipotent power.

No scars borne by the survivors of Armageddon will be beyond God's power to heal. Even the genetic scars, accumulated over thousands of years of sin and degradation, although completely outside the ken of man, can be healed by the great Life-giver who looks upon the unformed substance of a creature in its mother's womb, where nothing but the genetic structure exists to forecast the kind of creature it is destined to be. (Psalm 139:15, 16) After a thousand years of human uplift man will be brought to perfection even in the innermost part of every cell. Nothing will stand between him and the realization of his God-given hope of everlasting life.





Christian Grounds for Divorce

EACH nation has its own divorce laws. Some of these laws differ so radically in important respects that an average citizen may not know what his marital status is in one or another state or nation. But not so with the Christian. He has one divorce law regardless of in what nation he may reside. The Christian law is simple, direct and to the point, so much so that even a child can understand it. It allows no room for ambiguity and misunderstandings so common among divorce laws of this old world. It does not provide divorce for just any excuse or trumped-up charge on which divorces are so common today.

For example: A Paterson, New Jersey, woman sued for divorce because her "husband bawled her out every time she sneezed." A deaf-mute in Detroit, Michigan, was given a divorce after testifying that his wife "nagged him constantly in sign language." A young lady was granted a divorce in Cleveland, Ohio, "because her husband refused her the money for a \$30 coat, and the next day paid \$35 for attachments for his electric train." Over in Leeds, England, Edna Illingworth got a divorce after she complained that her husband tied her up in the cellar and "doused her with a bucketful of water 'to cool her off.'" Actress Linda Christian took the stand in a Santa Monica court in divorce action against her husband Tyrone Power. She testified that he "was 'cool and distant.'" After a 15-minute hearing, the judge granted her an interlocutory divorce."

None of these charges provide sound reasons for divorce according to the Christian standard. Easy divorces merely under-

mine or weaken the dogged determination that both parties need to make a go of marriage. They are prone to think as did Alec Ogburn. When Ogburn was applying for a marriage license, the clerk showed surprise, and no wonder; Ogburn gave his age as 111 and his bride-to-be—22. Ogburn remarked to the clerk: "Don't laugh at me, lady . . . If I don't get along with her, I reckon I can get rid of her." And that is fast becoming the general attitude regarding marriage—easy come, easy go.

Only Grounds for Divorce

Christians, however, have a different outlook on marriage. They consider it a sacred institution. They have the wise counsel of Jesus and Paul on this matter. Jesus declared: "I say to you that whoever divorces his wife except on the grounds of fornication and marries another commits adultery." Paul warns: "Let marriage be honorable among all, and the marriage bed be without defilement, for God will judge fornicators and adulterers."—Matthew 19:9; Hebrews 13:4, *New World Trans.*

Some religious clergymen take Jesus' words at Matthew 19:9 to mean that all divorce is barred from Christians, even on the grounds of adultery. Under date of December 13, 1948, the *New York Times* reported: "Divorce is not justified by any circumstance of marriage, however 'painful or brutal,' the Rev. Anselm Leahy declared yesterday in his second Advent sermon at St. Patrick's Cathedral. He termed modern divorce 'successive polygamy' and denounced as 'adulterers and adulteresses' divorced persons who contracted new marital unions within the lifetime of one another. . . . His unqualified condemnation of divorce [was] followed by a statement issued by Monsignor Robert E. McCormick calling upon the [New York] State Legislature to 'outlaw' divorce and assailing the 'present movement to liberalize divorce in our state' as 'a menace to society.'"

By taking such a position those clergymen condemn Jehovah God for allowing the Jews to practice divorce according to the divine law given through Moses. But Jesus, at Matthew 19:1-9, did not condemn this divorce provision or say it was "not justified by any circumstance of marriage, however 'painful or brutal.'" Neither do his corresponding words in the Sermon on the Mount condemn it but simply say: "It was said, 'Whoever divorces his wife, let him give her a certificate of divorce.' However, I say to you that everyone divorcing his wife except on account of fornication makes her a subject for adultery, seeing that whoever marries a divorced woman commits adultery." He also showed that a woman might start the divorce proceedings, saying: "Whoever divorces his wife and marries another commits adultery against her, and if ever a woman, after divorcing her husband, marries another, she commits adultery."—Matthew 5:31, 32; Mark 10:11, 12, *New World Trans.*; Deuteronomy 24:1-4.

This does not bar Christians altogether from divorce, but it allows them only immorality as the justifiable scriptural grounds for getting a divorce. Whoever married a person that was divorced on grounds other than immorality would be committing adultery, for the legal divorce was not recognized by God as really canceling the marriage bond. But this is not saying that the Christian who gets the divorce because of the sexual unfaithfulness of his mate may only get rid of such mate, not being free to marry another Christian woman. Under God's law to Israel the man getting a divorce from his morally unclean wife was not barred from marrying another Israelite woman. So Jesus was not interpreting divorce by a Christian in such a way as to forbid his remarriage. Jesus' words mean strictly this: If the Christian procures the divorce on grounds other than

the immorality of his marriage mate, such Christian is committing adultery if he remarries. Unless, of course, the separated partner commits adultery or remarries or expires in death, which circumstances would free the Christian to remarry. Otherwise, he is still considered married in the eyes of God.

The establishing of a law forbidding divorce under any circumstances has not served to maintain marriage in honor or to prevent adultery and fornication. In lands where antiodivorce law obtains many married people ignore it and follow the course of their own passions. For one cause or another a man abandons his wife or a woman leaves her husband. They can obtain no legal divorce. So the man or the woman enters into a common-law marriage with another person while the legal marriage partner is alive. By such a procedure the man or the woman is committing adultery and also practicing bigamy or polygamy. The local government, though adhering to the religious canon law of no divorce, is conniving at polygamy or is in effect approving of it when it does not enforce the law and penalize those who violate it. This creates the difficulty of how to adjust their marital affairs properly when such a man or woman comes in contact with the Kingdom truth and desires to become a witness of Jehovah.

Divorce does not break a marriage; it merely legalizes the break that has already been made. The American Bar Association's report stressed that "the cure of marriage ills does not lie in easy divorce, but in hard marriage." A fifth of American divorces occur before the couples have been married three years, because with the first few disagreements legal action is sought. A Christian will not copy this world. He will seek to do everything within his power, asking God's guidance, to make marriage work.

THAT is the question raised by a special dispatch from Hiroshima published in the *New York Times* of May 30, 1955. It says, in part:

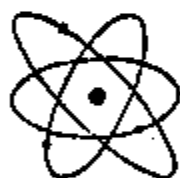
“Scientists studying the effects of the atomic bombs dropped on Hiroshima and Nagasaki in August, 1945, have reached the problem of why people grow old and die. In their investigations the scientists are trying to learn whether persons exposed to atomic radiation here had their lives shortened, even though they recovered. This has led to consideration of a more fundamental question, of interest to all mankind. It is: What is the primary cause of aging and death? Atomic research here, it is thought, may bring new discoveries in the age-old search for ways of prolonging life.

“The apparently simple statistical problems of determining whether persons exposed to ionizing radiation died prematurely ‘is actually a profound observation involving one of the most pressing problems in modern medicine,’ says Dr. Robert H. Holmes, director of the Atomic Bomb Casualty Commission. . . . ‘In

view of the known fact that exposure to ionizing radiation will produce in lower animals a shortening of the life span, it is naturally indicated that this possible concurrence be investigated in the human population,’ Dr. Holmes said today. . . .

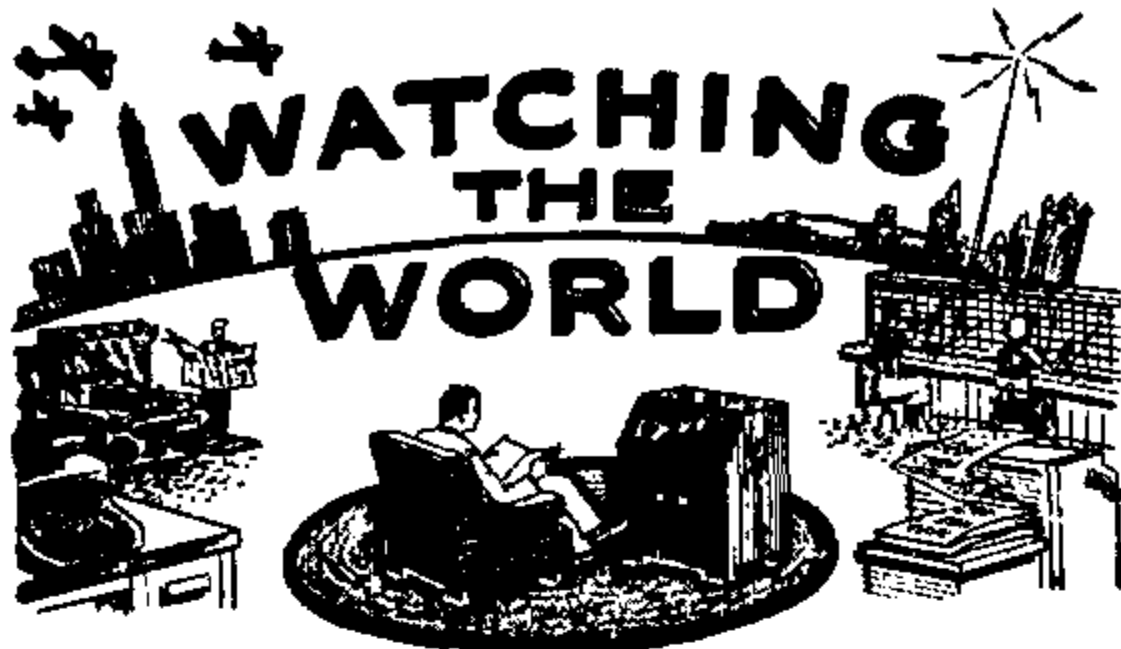
“‘If the findings should indicate that premature aging and shortened life span occur following exposure to radiation, then one is obviously confronted with the blunt question of why,’ he continued. ‘Searching for this answer leads to the primary causes, in lower animals at least, of degenerate diseases such as nephrosclerosis and neuroplasia, or specifically cancer,’ he said. ‘These causes then are among the fundamental problems of geriatrics [the study of why aging occurs]. They are intrinsic to the whole subject of growth and development.’”

“Since it is known that radiation does shorten the life span in lower animals, and since it is known that radiation is more injurious to higher forms by causing more harmful mutations in them, is it not very likely that its ability to shorten the life span is even greater in higher animals and man than it is in lower animals?



? DO YOU KNOW? ?

- How Cuba's hero thoughtfully condemned the church's interest in money? P. 3, ¶3.
- Whether religion's part in politics is accidental? P. 4, ¶4.
- What problems of its own religion bypasses in order to enter politics? P. 5, ¶3.
- What proves God's kingdom is not just within the hearts and minds of men? P. 7, ¶2.
- What methods church officials use to influence a nation's legislators? P. 9, ¶4.
- What the foremost instance of church lobbying in the United States was? P. 10, ¶3.
- Whether both Catholic and Protestant churches interfere in political matters? P. 11, ¶5.
- What odd weather condition is one of the chief hazards of Antarctic travel? P. 14, ¶1.
- Who was said to have 'turned the hose on hell and put out the fire'? P. 16, ¶4.
- How large a leaf surface is needed to provide oxygen for a man for a year? P. 18, ¶3.
- Why mutations could not cause evolution? P. 21, ¶4.
- How it is logically suggested why man does not live as long as before the Flood? P. 23, ¶2.
- Why the radiocarbon clock's criticism of the Bible is based upon a false assumption? P. 23, ¶4.
- Whether divorce is possible for a Christian, and, if so, on what grounds? P. 26, ¶4.



Prelude to the Argentine Revolt

◆ An open break with the Roman Catholic Church was the prelude to a revolt against the regime of President Perón. Tension reached a high pitch when the Argentine government banned a Catholic procession. But the church defied the government, and 100,000 Catholics demonstrated in Buenos Aires' Plaza de Mayo. Afterward a band of Perón's supporters demonstrated in front of the main cathedral. On the steps of the cathedral a group of priests in ranks four or five deep chanted "Long live Christ the King!" but at the foot of the steps a jeering crowd of government supporters shouted "Long live Perón!" Marching in the plaza, the peronistas shouted slogans against the church. An effigy of a priest was raised above the crowds and burned in front of the cathedral. Meanwhile, Perón himself was busy: he told the Argentine people that the clergy-inspired mass demonstration had nothing to do with worship of God but was "a clerical political act." In a nationwide broadcast Perón called the clergy "a wolf in sheep's clothing." "Since 1943," he explained, "open participation of some prelates of the church in politics has been public and notorious. . . . Those who sow the wind shall reap

the whirlwind." Then Perón declared: "I do not know . . . if this admirable and patient Argentine people may not one day become tired and take justice into its own hands." Perón next deported two bishops, accusing them of being ringleaders of the demonstration. The newspaper *Crítica* called one of the bishops "a shepherd of souls [who has] converted himself into a leader of the shock brigade."

The Revolt

◆ After Perón deported two church prelates, the Vatican responded by excommunicating Perón. On the very day Perón was excommunicated the revolt broke out. Navy planes dropped bombs on Government House. A few minutes before the bombs dropped, Perón, warned of the revolt, had been hustled out to safety. The bombing signaled an attack by rebel marines, who stormed into the square. But the army came to the aid of Perón. Tanks and armored trucks loaded with government troops rolled in to repel the rebels. Intermittent waves of rebel planes roared across the plaza, dropping bombs. Jagged pieces of steel ripped into scores of civilians. Finally the white flag was raised on the Navy Ministry building, and the revolt's leader, Rear Admiral Aníbal O. Olivieri, was

captured. Tank-led army units also captured the rebel's air base, the rebel pilots fleeing to Uruguay. There the pilots explained why the revolt failed: fog had hindered the planes and warships and had prevented a landing on the Buenos Aires water front. The abortive revolt left the city blood-spattered. At least 360 persons died and 1,000 were wounded. Perón gave credit for the victory to the loyal army. After his victory speech, mobs of civilians raged through Buenos Aires. The night sky glowed red as the mobs set fire to at least seven Roman Catholic churches and the residence of Argentina's cardinal primate. Perón deplored the acts of violence, but as to the clergy he said: "The priests and religious elements who have participated in this revolution are unworthy of their investiture."

The U-Bomb

◆ Man has built himself an atomic monster. That monster has grown up considerably since it was born in the womb of war. It has now become a colossus whose shadow covers the planet. And still it grows. Reports now tell of the U-bomb, successor to the H-bomb, which in turn was successor to the original A-bomb. The device exploded by the U.S. in March, 1954, is believed to have been the U-bomb. Of that device Atomic Energy Commission Chairman Lewis Strauss said that it was a "totally new weapon." The new "so-called hydrogen bomb," said Britain's physicist Dr. J. Rotblat, "is in reality a fission-fusion-fission bomb." So the U-bomb is a superweapon that uses the "fission" principle of the A-bomb and the "fusion" principle of the H-bomb. To set off the U-bomb, an A-bomb detonates an H-bomb, which then explodes the U-bomb. The superweapon is called "U-bomb" by scientists, who theorize that it consists of an A-bomb, an H-bomb and a jacket of U-238

natural uranium. Existence of the U-bomb was implied in a speech in June by Willard F. Libby, a member of the Atomic Energy Commission. Dr. Libby referred to a nuclear explosion capable of releasing "ten megatons of fission energy." The key word is "fission." So the latest weapon is not the H-bomb, since the H-bomb releases energy by "fusion" of hydrogen atoms. But whatever the new weapon is called, Dr. Libby's speech gave information as to its destructive effects and its threat as a source of radioactive fall-out.

Frankness About Fall-out

◆ Dr. Libby's speech was regarded by atomic scientists as the beginning of frankness about fall-out. Dr. Libby indicated that ordinary, cheap uranium 238 was the major explosive content of the new-type weapon and that it was responsible for the fall-out over a vast area. Some conclusions drawn from Dr. Libby's speech: (1) The superweapon called by scientists a "U-bomb" is cheap; (2) it can be made in any size; (3) the fall-out persists for days, weeks or months and (4) in addition to external radiation effects the weapon creates toxic products such as Strontium-90 and radioactive iodine, which are internally damaging. Adding to the knowledge of fall-out was the report of the U.S. Navy on fall-out effects upon people of the Marshall Islands following the Bikini bomb explosion. The snowlike dust covered the ground, sifted into the people's huts, whitened their hair and clung to their skin. They made no serious efforts to avoid the dust or to wash it off. About three fourths of the population developed nausea; a few vomited. Many lost their hair and developed skin sores on their feet, necks and scalps. Six months after the blast, hair began to grow back and most skin marks disappeared. The report disclosed that "decon-

tamination of the skin must be prompt to be effective because of the initial high beta [radiation] dose rate" and that "clothing and/or any type of shelter gives almost complete protection to the skin."

U.N.'s Tenth Birthday

◆ In 1945 fifty nations signed a United Nations Charter pledging to act together to "save succeeding generations from the scourge of war." In June the U.N. members, now grown to sixty, met in San Francisco to observe the U.N.'s tenth birthday. With the Big Four approaching the summit at Geneva, optimism was high. But before the celebration ended that optimism was shattered. Russian fighters shot down an American plane in the area of the Bering Sea; and Russia's Foreign Minister Molotov gave a tough speech, which was a detailed indictment of Western policy. Optimism got no encouragement either when most of those attending conceded that, during its first decade, the U.N. had not lived up to hopes. Nor did Lester Pearson of Canada bolster up optimism, for he recalled that it was also the fifth anniversary of the North Korean attack on South Korea. That anniversary, he added, was a grim reminder of "how far short we have fallen" of complying with the charter's pledge. Some observers pointed out that the atmosphere at this party was different from that of ten years ago: there was less excitement in the air now and seemingly more doubt of the future. Following a reaffirmation of the members' pledge, there was a minute of prayer and meditation; and the U.N.'s tenth birthday party was ended.

Nehru Goes to Moscow

◆ It is not customary for Moscow to put on public demonstrations for foreign statesmen. Visiting dignitaries are usually whisked through back

streets; the public hears about the visit when it is all over. But in June Moscow changed the procedure. Vast throngs greeted Indian Prime Minister Jawaharlal Nehru as he came to Moscow for a state visit. Bands played and the top Soviet hierarchy turned out for the grandest welcome given any foreigner in the memory of Moscow correspondents. Cordial throughout, the visit wound up with a joint communiqué. It called for a ban on the "production, experimentation and use" of nuclear weapons; settlement by "peaceful means" of Red China's claim to Formosa and a U.N. seat for Peiping. India's formal declaration gave Moscow a propaganda victory. But to attract to itself some of the atmosphere of peace-loving "neutrality" that Nehru reflects, Moscow paid a price: in New Delhi the Indian Communist party announced that it would give up its policy of total opposition and co-operate with Nehru in his land reform and foreign policy.

Italy: Cabinet Crisis No. 5

◆ In the 1953 elections the Christian Democratic party got less than a majority, bringing up the expediency of a coalition. For sixteen months Premier Mario Scelba has led a middle-of-the-road coalition that included three smaller parties. Scelba preached that a coalition with the small center parties was the only possible government in the present parliament. But a large right-wing faction denounced the splinter parties and called for an all-Christian Democratic government backed by the monarchists. Dissension was brought to a head in June by elections in Sicily. The votes yielded heavy losses for the three splinter parties. This gave Scelba's right-wing opponents a powerful weapon. Quickly Scelba tried to revamp his cabinet to win support of the right-wing bloc. He failed.

With a no-confidence motion hanging over his head, the premier resigned. For the fifth time since the 1953 elections, Italy was in the throes of a cabinet crisis.

Tragedy at Le Mans

◆ The 24-hour Grand Prix of Endurance at Le Mans, France, is Europe's classic sports car race. In June some 250,000 people came to watch the cars zoom around the eight-mile circuit. Thousands of spectators spurned the grandstands to cluster close to the dangerous turns. Coming out of a turn at 125 miles an hour, a Mercedes car crashed into another car. The Mercedes rose like a skyrocket and crashed into an embankment, where the car's parts broke loose. The hood sailed through the air into the thick-packed crowd, decapitating spectators like a guillotine. The flying engine cut a swath of death. As bits of bodies and pieces of machinery rained

everywhere, the car's magnesium body burst into flames, burning to a crisp the headless corpse that was once the driver. A 400-square-yard stretch of cheering people was turned into a grisly shambles of horror. The crash killed 78 persons and seriously injured 105. It was regarded as the worst automobile racing accident in history.

U.S.: Safety Records

◆ The year 1954 brought an outstanding safety record for both U.S. railroads and airlines. When the railroad men added up their casualties, they found that 1954 had been the second-safest year in railroad history, with a fatality rate of .07 per 100,000,000 passenger miles; only five persons lost their lives in train accidents. The airlines came up with an equally impressive record: .09 deaths for 100,000,000 passenger miles, the result of only

three fatal accidents that cost 23 lives. For U.S. airlines it was the lowest death rate in their history.

Shooting the Nuisance

◆ Some TV-set owners find it a big nuisance to have to hop out of their chair to change programs. In June Zenith Radio Corporation brought out a new set equipped with electric eyes, permitting the viewer to sit as far away as 20 feet and control it with a special pistol-grip flashlight. By aiming at a special slot, the viewer can switch stations with a minimum of effort and a little fun too. And for those moments when a vapid commercial comes on, the viewer has but to aim his "gun" at a special slot, and he will shoot off the sound. The new device should help Zenith in its campaign for pay-as-you-see TV, since the electronic gun makes a sport out of shooting off commercials.

New World Translation of the Hebrew Scriptures **Volume II**

Containing the books from First Samuel to Esther

Eagerly awaited since 1953, Volume II of this excellent translation of the Hebrew Scriptures is now available. The New World Translation Committee has faithfully maintained the high standard of scholastic effort that has made Volume I such an outstanding success in its brief two years. Obtain your copy at once for only \$1.50 by mailing the coupon below.

WATCHTOWER

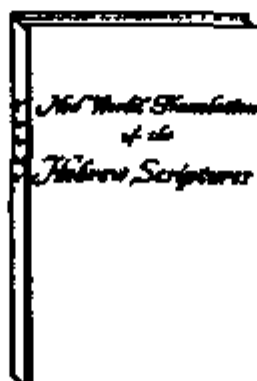
117 ADAMS ST.

BROOKLYN 1, N.Y.

Please send me at once a copy of the

*New World Translation of
the Hebrew Scriptures, Volume II.*

I am enclosing \$1.50.



Name

Street and Number
or Route and Box

City

Zone No. State



May Survive Armageddon into God's New World

As lightning strikes all in its path, so will Armageddon! Where will you be? God's Word points to the only place of shelter! And in that secure hiding place is to be found not only safety from the storm, but also release into a world of endless peace and security. Too good to be true, you say? Then why not prove it for yourself? The new 384-page book just released at the "Triumphant Kingdom" Assembly of Jehovah's Witnesses takes you to the Bible for the answer. Send 50c for a copy today and learn how **YOU MAY SURVIVE ARMAGEDDON INTO GOD'S NEW WORLD.**

WATCHTOWER

117 ADAMS ST.

BROOKLYN 1, N.Y.

I am enclosing 50c. Please send me a copy of *You May Survive Armageddon into God's New World.*

Name

Street and Number
or Route and Box

City

Zone No. State