The background of the book cover is a close-up photograph of a clownfish, likely a common clownfish (Amphiprion ocellaris), swimming within the tentacles of a sea anemone. The anemone's tentacles are a deep purple or magenta color, creating a dense, textured background. The clownfish has a bright orange body with a prominent white vertical stripe running down its side. The overall scene is brightly lit, highlighting the colors of the fish and the anemone.

**THE
CREATION
BOOK
FOR
CHILDREN**

by
William F. Dankenbring

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**Other books written by
William F. Dankenbring**

**THE FIRST GENESIS: A NEW CASE FOR CREATION
THE KEYS TO RADIANT HEALTH**

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P.O. Box 292, Altadena, CA. 91001**

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*Dedicated to all children
everywhere,
That they may remember the
Creator,
In the days of their youth.*

Foreword

For a person living in the Middle Ages the world, for all its mysteries and beauties, was simple: The Earth was the center of the Universe. Up in Heaven, above the clouds, resided God, while man, made to His image, was the epitome of His creation. As long as man lived a pious life and obeyed the rules laid down by the Church, he had nothing to fear and would ultimately join the Lord and his angels in their heavenly abode.

Modern science has devastated this beautiful but simplistic view of the world in which we live. Soon after Nicolaus Copernicus had demoted the Earth from its central position in the Universe to that of a minor planet of our sun, Giordano Bruno declared that the entire firmament of stars was not formed by tiny holes in a huge celestial crystal dome, but that each of these billions of stars was a sun just like our own. God clearly reigned over a much larger kingdom than medieval man had thought.

Three hundred years of scientific onslaught have badly battered the ramparts of the churches, those fortresses of man's faith in God. But with all the new scientific knowledge we have acquired, we now have really even more reason to admire God and His handiwork than medieval man in his little self-centered world. Science and religion may use different methods to seek revelations about the ultimate truth: The purpose of science is to understand the creation and its laws, while the purpose of religion is to understand the Creator and His divine intentions. As there can be no creation without a creator, a will and purpose that brought it all about, they both really seek the same.

Wernher von Braun
Germantown, Maryland

Chapter One

“In The Beginning...” *The Awe Inspiring* *Universe*

How big is the universe? Scientists not only don't know the age of the universe, but they don't know whether it has an outer edge. The universe may go on forever and ever, or there may be other “universes” out beyond the edge of our own.

One thing astronomers do know—the universe is far bigger than they used to think. With tremendous telescopes, they have peered into the night sky, and analyzed the light from faraway faint stars. And to their amazement, they discovered that many of those “stars” were not really single stars at all, but “island universes”—huge clusters of millions and billions of stars. They called these huge star formations galaxies.

Our sun belongs to the Milky Way galaxy. Another galaxy very similar to our own is called the Andromeda Galaxy. It is a sister galaxy, because it is about the same size and shape as our own.

Nobody knows how many stars there are in the universe, or how big the universe is. But the more we study it, the more we must pause in admiration and wonder.

Some scientists tell us the universe may be 20 billion “light years” across. They have measured the apparent speed of light and find it to be 186,000 miles per second—or 6 trillion miles per year. Thus if the universe were indeed 20 billion light years in diameter, it would be 120,000,000,000,000,000,000,000 miles across. That number is so great that no human being can comprehend it. But it is really only a guess anyway. The farthest objects in space—called quasars—seem to be travelling away from the earth at almost the speed of light and are believed to be almost 10 billion light years away from us.

How many stars are there in space?

No man of course has ever counted them. But the Creator who made them knows the answer to that question. The prophet Isaiah says, God “hath created these things,” and “bringeth out their host by number: he calleth them all by names by



The awesome Trifid nebula illustrates the majesty and splendor of the Universe.—Hale Observatories ©by the California Institute of Technology and the Carnegie Institute of Washington.

the greatness of his might" (Isaiah 40:26).

There are probably as many stars in the heavens as there are grains of sand on the seashore, and God knows each one of them individually.

What makes stars give off light and heat energy? There is no simple answer to that question, because there are many different kinds of stars. Some are much larger than others, and some are very small and compact—smaller than the earth itself!

Scientists have discovered that the general run-of-the-mill star gives off energy by nuclear explosions—an ongoing nuclear chain reaction, such as occurs when an hydrogen bomb explodes.

The energy thus created deep within the sun works its way to the surface and then radiates into space. The sun shines with a constant power of about 380 million billion billion watts.

The most brilliant stars are hot and blue, such as the blue supergiant star known as Rigel in the constellation Orion. It consumes energy at the rate of 40,000 of our suns. The red giant stars are the coolest stars. One of them, Antares, is so large that 36 million suns could fit snugly inside it. Its rim would engulf the Solar System out to the planet Mars. The red supergiant Betelgeuse (sometimes called Beetle juice), oddly enough, is 800 times as large as our sun in diameter, and 12,000 times brighter, but only half as hot on the surface!

The tiniest stars are also the most dense and solid. They are called white dwarf stars and are sometimes as small as the planet Mercury. If one cubic inch of such a star were weighed on a scales, it would break the scales at 20 tons per cubic inch!

Even heavier and smaller, however, are the "pulsars"—pulsating stars which are thought to be the remnants of formerly large stars, but which have collapsed down to a size of roughly one to ten miles across. Such a pulsar would weigh about 10 billion tons per cubic inch—or a single teaspoonful would weigh as much as 200 million elephants, if you can picture that in your mind.

Astronomers classify stars according to their brightness and color. They are classified into the groups O, B, A, F, G, K, and M. College students memorize these groups by the sentence: "Oh, Be A Fine Girl, Kiss Me." The blue O stars are the hottest, most brilliant, and the M stars, on the other end of the scale, are the cool red stars.

Our sun, according to astronomers, is an average "yellow" star, midway between the hottest and coolest stars, rather small in size, and middle aged in years. It is largely composed of a gas called hydrogen. If the sun continued burning hydrogen at its present rate (657 million tons per second), it will last another 50 billion years—a long, long time, far longer than any of us have been around.

"In the beginning," the Bible tells us, "God created the heavens and the earth."

When was the beginning? When was the universe, with all the twinkling stars, and the Solar System of planets, including the earth which we live on, created?

Exactly when the beginning was nobody knows. The Bible doesn't say when the creation was fashioned by God. It only tells us that it occurred "in the beginning." Scientists tell us that their studies indicate the beginning may have been 10-20 billion years ago. Their studies show that the stars in the universe are flying outward, like when a boy blows up a balloon. If that balloon has little stars attached to it, those stars would get further and further apart as the size of the balloon increases.

At one time, astronomers tell us, before the stars began to fly apart, they were close together in a large mass. By measuring the speed of the retreating stars, scientists think the universe must be about ten billion years old. But nobody knows for sure.

Are the stars really flying apart as astronomers think? The evidence seems to say yes. It is interesting that the Bible itself supports this conclusion. The prophet Isaiah wrote 2,500 years ago that God "stretcheth out the heavens as a curtain, and spreadeth them out as a tent to dwell in" (Isaiah 40:22).

The time when the stars in the heavens, and the earth we live on, were created is really known only to God. No man knows the final answer at this time. But someday we will know.

Chapter Two

Spaceship Earth

The earth, of course, is the planet that we live on. It is about 8,000 miles in diameter. Although it seems big to us humans, when we fly above it in an airplane, or take a journey across the ocean, it is a small tiny speck in the infinite vastness of space.

This planet earth, which we call home, is a miraculous creation all by itself. It is surrounded by a marvelous atmosphere of air which supports life. If it were not for the oxygen in the air, almost all living creatures would perish, including Man. But also, far above the earth, there is a belt of gas called ozone which filters out harmful rays from the sun. Without that ozone layer life as we know it would be impossible.

The earth is specially designed by God to support life. About three million different species of plants and animals call the earth their home, from tiny amoeba living in swamps, tidal pools, and water droplets, to huge whales cruising the seas. The earth has plenty of water, also very important for all living creatures.

The earth is about 93,000,000 miles from the sun, just the right distance so that it is not too hot or too cold to support life. The tiny planet Mercury is much closer to the sun and is so hot that life there would be impossible. Also, the giant planets of Jupiter and Saturn are too far from the sun to support life—they are intensely cold all the time, with temperatures hundreds of degrees below zero.

The earth spins like a top as it travels around the sun. One complete revolution takes 24 hours and equals one day. One trip around the sun equals one year. If the earth turned much faster on its axis, and the day were only 8 hours, terrific hurricanes would blow constantly, and tornadoes and terrible winds would make life virtually impossible. If the earth only turned on its axis once a year, as it circled the sun, then the same side would always face the sun—and one half the planet would be in eternal darkness, and the other half bathed in eternal light. Life under such conditions would be a nightmare, if possible at all.

But God designed the earth just right to support life.

The Bible tells us a great deal about the earth. It is an amazing book.

While pagans worshipped sticks and stones, the sun, moon, and stars; while entire

nations were bowing under a cloud of magic and superstition, ignorant of the truth—at that very same time, a Book of books was being written which contained many astronomical facts generally unknown to most of the nations in the world!

Notice how amazingly scientific the Bible really is!

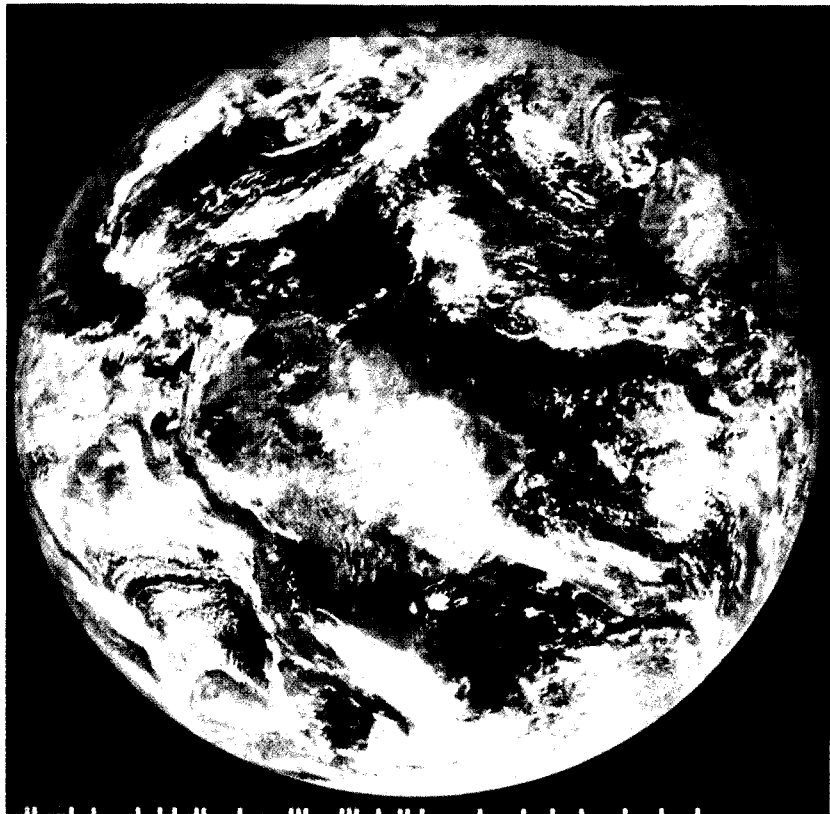
Many people have erroneously believed that the Bible teaches the earth is flat. The Medieval Catholic Church held to the notion the earth is flat and is the center of the universe. When Galileo presented scientific evidence to the contrary, his facts and theories were branded as “absurd in philosophy, and formally heretical, because expressly contrary to Holy Scripture.”

But nowhere does the Bible teach the flat earth theory, or that the earth is a stationary object at the center of the universe.

Galileo’s theories were declared heretical in the 17th century. But, amazingly enough, six hundred years before Christ, the prophet Isaiah was inspired by Almighty God to write and speak of the spherical shape of the earth!

In Isaiah 40:22 we read of God, “It is He that sitteth upon the CIRCLE of the earth.” Moffatt translates this verse clearer, “He sits over the ROUND EARTH.” The *Critical and Experimental Commentary* states this expression is “applicable to the globular form of the earth.” The original Hebrew is *chung* and means a “compass, circle, or sphere.”

But how did Isaiah, an ancient Hebrew prophet, know that the earth is round? Other peoples didn’t learn this fact for hundreds of years.



The beautiful earth. In the book of Job we read that God “hangeth the earth upon nothing”—an apt description of how the earth journeys through space around the sun.—*Courtesy of NASA*

How much did the ancient writers of the Bible really know about astronomy? Did they believe the notions of pagan Egyptian contemporaries who believed the earth was carried about on the back of a great tortoise?

The fact that the earth revolves around the sun once every year was not generally understood until the days of Copernicus in the 16th century—just a little more than 400 years ago. He taught that the sun is the center of the solar system.

However, thousands of years before Copernicus lived, in the days of the patriarch Moses, the Bible indicates, the revolution of the earth around the sun once a year was probably *known* to ancient Biblical astronomers! In Exodus 34:22 we read, in the King James Version, the innocent phrase, “And thou shalt observe the feast of weeks, of the firstfruits of wheat harvest, and the feast of ingathering at the *year’s end*.” According to the original Hebrew, however, this should be translated “at the *revolution of the year*.” The original Hebrew word is *tequwphah* and means “to move in a circle,” “circuit,” “to go around,” “orbit of the sun,” “revolution of time.”

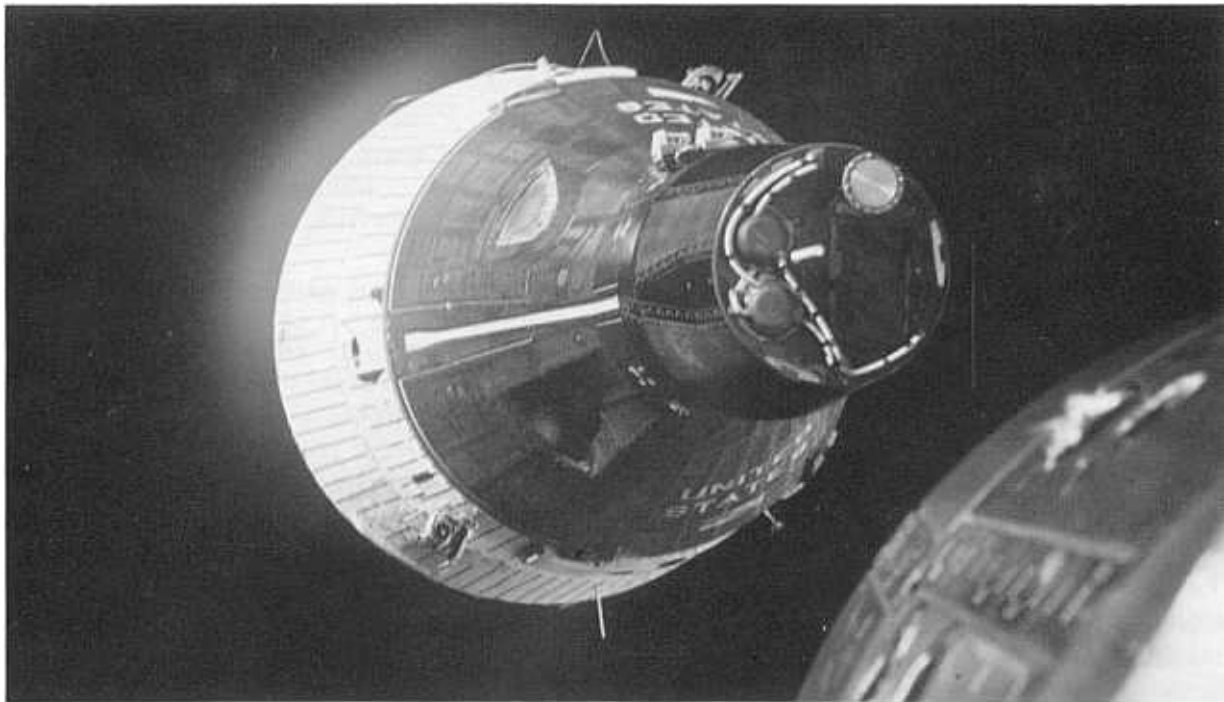
Also in II Chronicles 24:23 the words “end of the year” in the original Hebrew really mean “in the *revolution of the year*”.

These verses suggest the fact that the ancient Hebrews knew the earth revolves around the sun, and completes one *revolution*—one turning—each year.

But this is not all. Notice Job 38:12-14—“Hast thou commanded the morning since thy days; and caused the dayspring to know his place; that it might take hold of the ends of the earth . . . IT IS TURNED *as clay to the seal*”

What does this mean? God is talking to Job about the morning—the rising of the sun. How is it that the sun appears to rise in the morning? The earth itself *turns*, or “rotates”—from west to east, causing the sun to rise in the morning, in the eastern sky.

The original Hebrew in this verse says, of the earth, “it turns itself.” What could



Man’s ingenuity has led to the invention of space capsules which can orbit the earth when launched by powerful rocket engines. But who launched our own “space capsule”—planet earth—upon its orbit around the sun?—*NASA Photo*

be a more apt expression? The allusion of the clay and the seal refers to the rolling cylinder seal, one to three inches long, such as was used in ancient Babylon, which left its plastic impression on the clay *as it turned about* or rolled around. What more apt figure of speech could be used to represent the rotation of the earth itself, causing day and night?

The laws of gravity were not understood until Sir Isaac Newton discovered them in the 18th century. The laws of motion were discovered by the same genius.

However, amazing as it may sound, thousands of years ago the Bible alluded to the laws of centrifugal force, centripetal force, gravity and motion.

How else do you explain the enigmatic statement in the book of Job, speaking of the earth—“*He . . . hangeth the earth UPON NOTHING*”? (Job 26:7.)

The pagans believe a tortoise carried the earth about; but God revealed to His people the truth—that the earth hangs suspended in space by powerful laws of force and motion!

Also in the book of Job we read a remarkable statement. One who claims to be God says to Job, “Can you bind the chains of [the cluster of stars called] Pleiades, or loose the cords of [the constellation] Orion?” (Job 38:31, *Amplified Version*).

And in the next verse, we read: “. . . Or can you guide [the stars of] the Bear with her young?”

The One speaking to Job apparently knew that the Pleiades, the stars of Orion, and the Bear (Ursa Major or the Big Dipper) travel together. In particular, since the “*chains* of Pleiades” and the “*cords* of Orion” are mentioned, the One speaking was stressing the fact that these particular groups of stars are more than just constellations in the sky—they are actually *local groups* of stars in space!

The King James Version hides the real meaning of verse 31, calling the “*chains*” of the Pleiades “*sweet influences*.” However, the original Hebrew word is *ma'adannah* and literally means “*to lace fast*,” bind or tie.

The “*cords*” or “*bands*” of Orion, in the original Hebrew are called *mowshekah*, meaning something “*drawing*,” from *mashak*, “*to draw*.”

The *Larousse Encyclopedia of Astronomy* says:

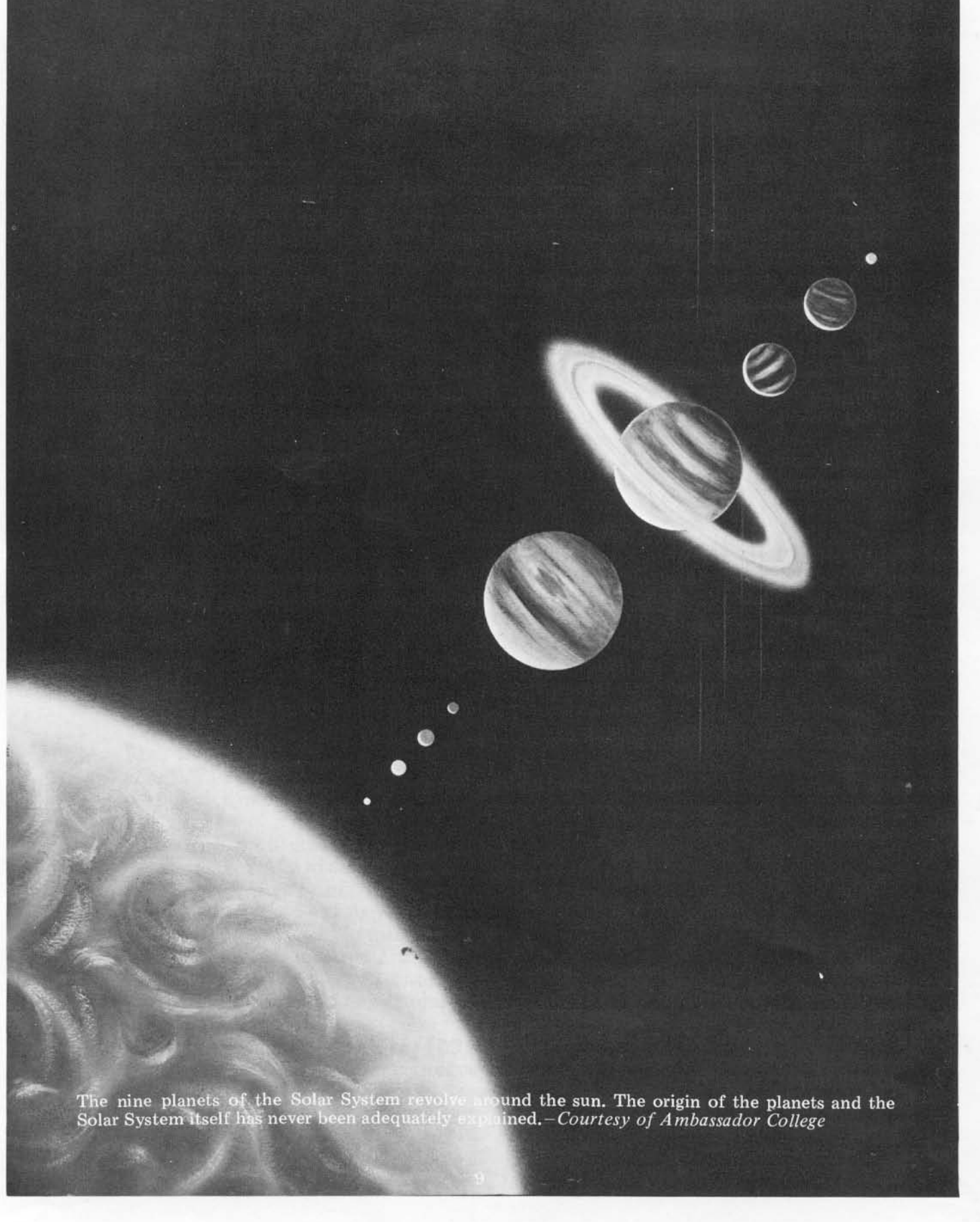
Usually it is found that the motions of the different stars of a constellation figure are oriented quite at random—confirming our conclusion that their apparent mutual proximity is simply an effect of perspective. But there are *certain exceptions* to this rule:

Occasionally, velocities of the same order of magnitude, and oriented in more or less parallel directions, are observed. Such stars, without being ‘near’ to one another in the ordinary sense, nevertheless form a **PHYSICALLY CONNECTED UNIT AND ARE VOYAGING THROUGH SPACE TOGETHER**. They are said to belong to the same star stream, or to form a **MOVING CLUSTER**.

Five of the principal stars of the *Great Bear* form such a moving cluster. The same thing is encountered among the *stars of Orion*, and with the two clusters of stars in Taurus known as the *Hyades* and the *Pleiades* (p. 308).

The One who spoke to Job talks as if He knew these particular star groups, or constellations, are bound or “yoked” together—that the stars within each group are joined and move as a unit through space!

These words were written about 2,000 B.C. Modern astronomers only discovered these fact about Orion, the Bear, and the Pleiades, through the use of modern, sophisticated equipment—huge telescopes. *How did the One speaking to Job know 4,000 years ago what modern astronomy has only discovered in this century?* The answer is simplicity itself: He created them!



The nine planets of the Solar System revolve around the sun. The origin of the planets and the Solar System itself has never been adequately explained.—*Courtesy of Ambassador College*

The ancient patriarchs had a great deal of knowledge of astronomy. The Creator GOD taught them amazing facts about the earth and universe which modern science has only just begun to verify.

God asked Job, "Where wast thou when I laid the foundations of the earth? . . . Whereupon are the foundations [sockets] thereof fastened [made to sink]?" (Job 38:4, 6.) It is interesting that science has discovered that the earth's axis is pointed in the direction of the North Pole Star, allowing for the wobble and precession, and the north and south poles are the points where the earth's axis of rotation meets the surface of the earth. *God* is the One who planned it all out; set the earth to spinning on its axis; and pointed the north pole toward the star Polaris!

The science of weather and understanding the earth's atmosphere is of relatively recent origin. It, too, has developed greatly during the last two hundred years. Chemistry and physics play a vital role in this science. Before the nature of matter and air were understood, weather science was in total chaos.

The key to understanding weather is the hydrological cycle. Today it is well known that water evaporates from the surface of the oceans, rivers, lakes and all bodies of water; that it rises into the atmosphere; and that later it returns to the earth as rain, snow, sleet, or hail. The evaporation-condensation-precipitation cycle was not generally known, however, before the nature of water, water vapor, and the chemistry of matter was understood.

The Bible reveals this basic cycle *was* understood, however, thousands of years ago!

Notice Jeremiah 10:13—"When he uttereth his voice, there is a multitude of *waters* in the heavens, and he causeth the vapours to ascend from the ends of the earth."

Jeremiah knew about the evaporation of water into water vapor, condensation of water vapor as rain droplets, and the precipitation cycle.

Jeremiah was not the only Biblical meteorologist, however. Solomon knew the weather cycle. Wrote Solomon about one thousand years before Christ, "The wind goes to the south, and circles about continually, and on its circlings the wind returns again. All the rivers run into the sea, yet the sea is not full; unto the place from which the rivers come, to there and from there they return again" (Eccl. 1:6-7, *Amplified Version*).

Solomon understood the circuits of the wind—and of water.

Consider, for a moment, how amazing Solomon's knowledge was. It was not until the 1800's that William Ferrell, an American meteorologist, formulated "Ferrell's law" which explains the prevailing directions of the winds over the earth, based on the earth's rotation.

Said Matthew Fontaine Maury, an American hydrographer who lived in the late 1800's, "The direction in which a wind blows is so constantly changing that we often speak of the winds as fickle, inconstant, and uncertain. There is, however, order in the movements of the atmosphere. The fickle winds are obedient to laws."

Amazing facts about the seas are also revealed in Scripture.

In Job 38:16, God asked, "Have you explored the *springs of the sea*? Or have you walked in the *recesses of the deep*?" (*Amplified Version*).

How could the writer of the book of Job have known that beneath the oceans of the world are *springs* or fountains of fresh water?

An article in the *Saturday Review* (July 1, 1967) said, "Although they usually remain undetected, submarine springs of fresh water are often more common along certain types of shoreline than are rivers and other surface streams."

Along some shorelines, as much as 20 million gallons of fresh water a day flows



The Horsehead Nebula in Orion, named for obvious reasons, is really a cloud of interstellar dust. *Life* Observatories ©by the California Institute of Technology and the Carnegie Institute of Washington.



The Pleiades—suspended like jewels in space—are actually a group of stars travelling together through the void of the cosmos. — *Hale Observatories*



into the sea for every mile of shoreline.

In fact, one major submarine spring in the Persian Gulf flows with enough volume to create a large area of fresh water in the midst of the sea, because of favorable limestone geology in Iran and Saudi Arabia. In Greece, an estimated 100 million cubic feet of fresh water goes into the sea through submarine springs.

But about *four thousand years ago*, God asked Job if he knew about the springs in the sea!

INCREDIBLE!

What about the “recesses of the deep”? There are deep trenches of the oceans—such as the Marianas Trench in the Pacific, 36,198 feet deep, discovered in September, 1959 by the Soviet ship *Vityaz*. The same ship discovered a depth of 35,702 feet in the Tonga Trench; there are four other deep trenches in the North Pacific. The greatest depth in the Atlantic Ocean is north of Puerto Rico—the Puerto Rico Trench, 27,498 feet deep.

The dark world of the bottom of the ocean is now being explored by scientists in bathyscapes, and special cameras, mounted with strobe lamps, have been lowered miles into the depths.

New instruments have revealed that the ocean bottom is surprisingly rugged. Depths of valleys and canyons running underwater when averaged out are five times greater than heights reached on continents. The undersea world is cut, and sliced, by huge canyons bigger than the Grand Canyon. One such canyon is the Hudson Canyon off New York. Sixty miles off shore, this mammoth canyon knives downward to 8000 feet, and then slopes on down to 16,500 feet.

The sea floor is called the abyssal plains. At their edge are sometimes found tremendous chasms or trenches, averaging 20 miles wide at the top and hundreds of miles long. The deepest such trench discovered is the Challenger Deep in the Marianas Trench, almost seven miles down.

Thousands of years ago, God asked Job what he knew about these “recesses” deep under the ocean! In the original Hebrew, the word for “explore” is *cheger* and means to “search out, examine; secret, inmost part.” The word for “deep” is *tebown* and means “confusion”—or “the abyss, *the great deep*.”

What an amazing book!

Matthew Fontaine Maury, when reading the Bible, was struck by the words of Psalm 8:8—“The fowl of the air, and the fish of the sea, and whatsoever passeth through *the paths of the seas*.” His curiosity aroused, he set out to map the currents of the oceans of the world and became the foremost hydrographer of his day (1806-1873). He discovered the ocean routes which would make best use of prevailing ocean currents and winds. His research enabled ship owners to cut many days from the time required to make their voyages and helped them save many thousands of dollars. He was called the “Pathfinder of the Seas.” The *Bible* was his source of inspiration!

But how did King David, the author of the Psalm, who lived about one thousand years before Christ, know about these paths of the seas and the great currents in the oceans?

In 1855 Matthew Fontaine Maury, pioneer oceanographer, wrote, “There is a river in the ocean. In the severest droughts it never fails, and in the mightiest floods it never overflows. Its banks and its bottom are of cold water, while its current is of warm. The Gulf of Mexico is its fountain, and its mouth is in the Arctic Seas. It is the Gulf Stream” (*The Physical Geography of the Sea*, 1855).

Truly a river in the middle of the sea, the Gulf Stream flows for the most part through the Caribbean into the Gulf of Mexico and leaves through the Straits of

Florida, from where it flows out into the broad Atlantic across to Northwestern Europe.

Seaward of New England, the Gulf Stream can be 100 miles wide and 16,400 feet deep, and have a surface velocity of six miles an hour. There it carries past a given point about 150,000,000 tons of water every second; the equal of 700 Amazons or 8,800 Mississippis!

If the Gulf Stream were emptied upon the United States, it would flood the entire nation to a depth of over four feet in just one day!

This mighty river is truly a PATHWAY in the sea. The larvae of a snail (*Cymatium Parthenopeum*) found from Brazil to the west coast of Africa ride the Gulf Stream, perhaps taking 300 days to cover 2,640 miles from the Bahamas to the Azores. Although the "odds" against a successful passage for the snails may be 2 million to 1, it is commonly done!

The Gulf Stream is just one of many mighty ocean currents, such as the cold Humboldt Current, pushed by antarctic winds up the west coast of South America. Then there is the Japan Current, or Kuroshio, in the Pacific.

The earth's great wind systems push before them the great sea currents, and have enormous impact on world weather. The westerlies drive the Gulf Stream and Japan Current; the polar easterlies drive before them the Humboldt Current and Brazil Current, and others. The Labrador Current, in the North Atlantic, flows down from the north polar region, pushed along by polar easterlies.

All these mighty currents are virtual rivers or paths in the seas. But—how did David, one thousand years before Christ, know such mighty paths in the seas existed? How indeed, unless navigation was far more advanced in his day than skeptics like to admit?

Clearly, the Bible is far more scientific than most people would suppose!

Even in the days of David, facts about bird migration and fish migration were understood!

You are probably familiar with the fact that air has weight. At sea level air pressure is 14.7 pounds per square inch. As you go up in altitude, air pressure is less and less. A mountain climber ascending Mount Everest finds the air so thin that he has to take oxygen along to breathe.

When did science discover that air has weight? Any textbook on Physics reveals that the laws of pressure, temperature and volume of gases were not discovered until the last few hundred years. It was not known, previously that the invisible air actually had weight.

But notice what God wrote in His Word over three thousand years ago:

"God . . . looks to the ends of the earth; beneath the whole heavens he sees. When he made a *weight* for the wind, and meted out the waters by measure [rainfall on the United States averages 29 inches every year!]; when he made a LAW for the rain, and a way for the thunderbolt" (Job 28:23-26).

The *Amplified Bible* makes it even more specific: "When He gave to the wind *weight or pressure . . .*"

Here is another remarkable instance of science in the Bible—thousands of years before modern science discovered these same laws of nature and principles of physics!

These verses indicate that Job knew the relationship between barometric pressure of the atmosphere and the weather *three thousand years* before Torricelli, an Italian physicist (1608-1647) proved the same relationship with his barometer!

In Job 28:26 we read, "When he [God] made a decree for the rain, and a WAY for the lightning of the thunder."

Lightning kills more people yearly than any other natural disaster—about 400. It destroys \$37 million worth of property annually, plus the losses due to 8,000 annual forest fires started by lightning.


How are lightning bolts formed? The story is fascinating. Inside enormous thunderclouds are so-called chimney currents—a column of air rising upward with gale force. Within this turbulence near the top small hailstones become positively charged, while raindrops in the lower portion are charged negatively. Below on the earth there is another positive charge buildup, following the drifting cloud.

Tremendous differences of electric potential are created between the top and bottom of the thundercloud, and the earth's surface.

At this point, a gaseous arc reaches down from the cloud for perhaps fifty feet, hanging there, building up, growing. Meanwhile, positive particles on the earth below streak upward as high as fifty feet, called "St. Elmo's fire." When one of these earth "streamers" meets one of the cloud's dangling gaseous arcs, called "leaders," suddenly A PATH IS FORMED BETWEEN THE THUNDERCLOUD AND THE EARTH!



"THE WAY OF THE LIGHTNING"—No power in Nature seems more awesome close up than a thunder storm accompanied by fiery, flashing lightning bolts. Did you know that lightning actually erupts from the ground up and only appears to the deceived human eye to strike from the sky downward?—Galloway Photo



This is where the darting, flickering BOLT OF LIGHTNING hurtles through the air, starting at the point of contact between negative and positive charges of electricity, ripping up to the cloud along the gaseous arc path already formed. The lightning actually travels *upward*, and the fact that it *appears* to travel downward is an optical illusion.

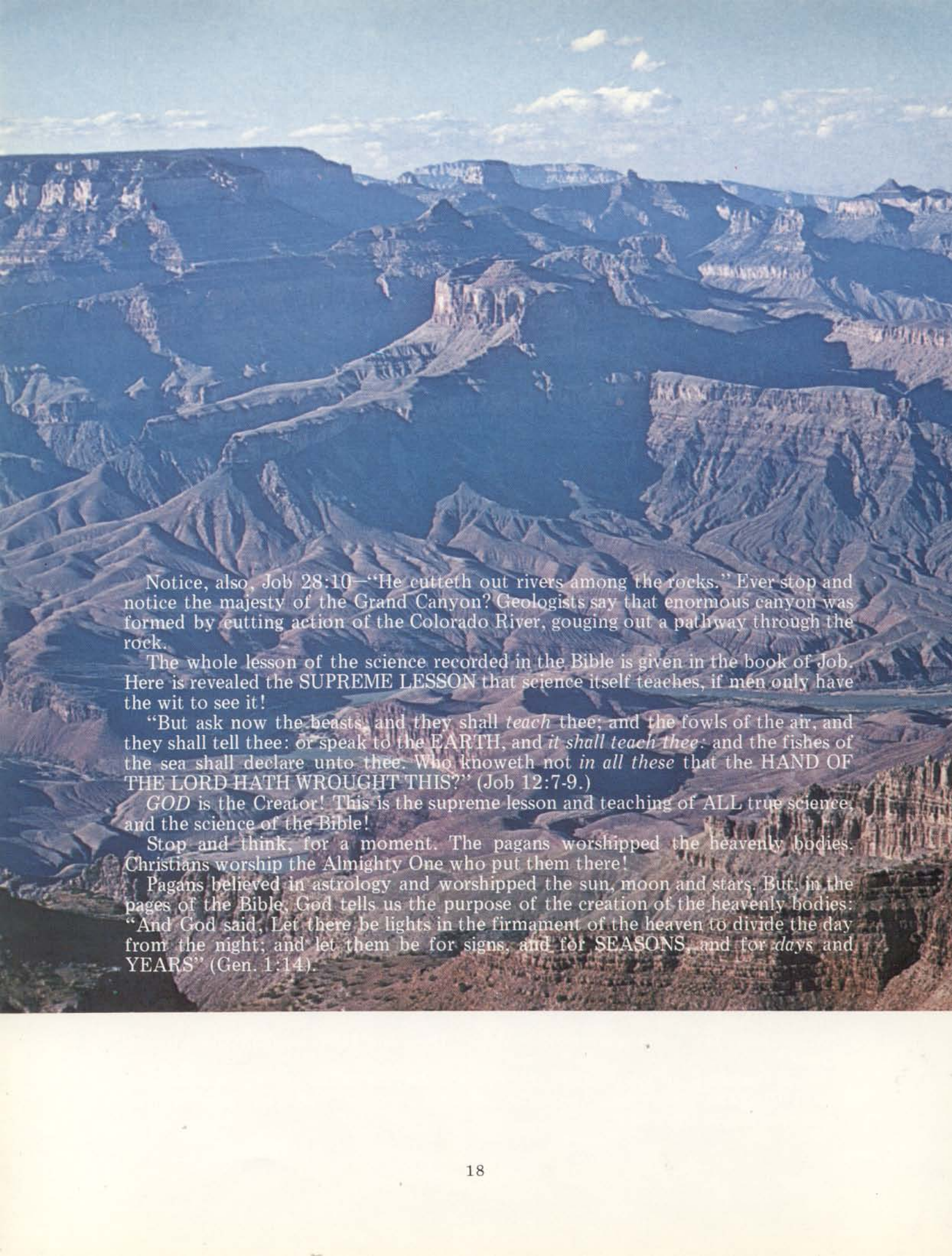
The point of this fascinating story is—HOW DID JOB KNOW? *Yes, how could he* have ever known that there is “A WAY for the lightning of the thunder”?

Science did not discover the secret of this phenomenon until very recent times. But God Almighty, the Creator of heaven and earth, revealed it to Job and inspired him to write of it over 3,700 years ago!

Imagine that!

What about the earth science of geology? Does the Bible have anything to say about it?

Again, the book of Job contains the answers. We read of the process of erosion in Job 14:19—“The waters *wear* the stones: thou washest away the things which grow out of the dust of the earth. . . .”



Notice, also, Job 28:10—“He cutteth out rivers among the rocks.” Ever stop and notice the majesty of the Grand Canyon? Geologists say that enormous canyon was formed by cutting action of the Colorado River, gouging out a pathway through the rock.

The whole lesson of the science recorded in the Bible is given in the book of Job. Here is revealed the SUPREME LESSON that science itself teaches, if men only have the wit to see it!

“But ask now the beasts, and they shall *teach* thee; and the fowls of the air, and they shall tell thee: or speak to the EARTH, and *it shall teach thee*: and the fishes of the sea shall declare unto thee. Who knoweth not *in all these* that the HAND OF THE LORD HATH WROUGHT THIS?” (Job 12:7-9.)

GOD is the Creator! This is the supreme lesson and teaching of ALL true science, and the science of the Bible!

Stop and think, for a moment. The pagans worshipped the heavenly bodies. Christians worship the Almighty One who put them there!

Pagans believed in astrology and worshipped the sun, moon and stars. But, in the pages of the Bible, God tells us the purpose of the creation of the heavenly bodies: “And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for SEASONS, and for *days* and YEARS” (Gen. 1:14).



The Grand Canyon—carved by water out of stone over eons of time—reveals a long sequence of fossil strata. Was the Canyon itself largely formed by the massive torrential run-offs of water after the Flood of Noah's time?—Monte Wolverton Photo

Did you know that *time* is based on the motion of the heavenly bodies? The earth rotates at a constant speed, giving us day and night; it revolves around the sun at a constant speed, taking one year per revolution. The moon revolves around the earth, giving us the lunar month. Every watch and clock is kept accurate by timing them with the most precise Clock ever invented—the solar system and the stars!

Time is kept accurate by basing time calculations and computations on the precise movements of the stars and the positions of the fixed stars. The master clock in the United States is at the Naval Observatory, Washington, D.C. By measuring time by the stars, the Naval Observatory keeps track of time to the tiniest fraction of a second.

By knowing the exact movements of the heavenly bodies, solar and lunar eclipses can be PREDICTED *thousands of years* in advance!

God inspired David to write, “He made the moon for *fixed times*; the sun knows its time of setting” (Psalm 104:19, *Goodspeed*). Or, as the *Amplified* has it, “the sun knows the EXACT TIME of its setting.”

Take a look at a watch—a manmade instrument for telling time. You know that a watchmaker made a watch. It didn’t just somehow decide to put itself together! Great painstaking workmanship went into it, most likely, and its delicate parts were made with great precision.

The universe is a Great Master Clock. It has been running smoothly, accurately, for millions—if not billions—of years. It is still accurate—in fine working order. Its parts still move with age-old, timeless precision!

You know your own watch didn’t accidentally “evolve.” What about the Great Master Clock in the skies—so much more perfect than your watch, so grander in its execution and operation?

You keep your watch running by winding it up. Who keeps the Great Clock of the universe operating?

TRUE SCIENCE admits the existence of the original “Clock Maker”—Almighty God. True science admits GOD made the heavens and the earth.

Chapter Three

The Miracle of Life

Where did life come from?

There are two major beliefs about the origin of life on the earth. Some scientists believe that life happened by pure accident. Billions of years ago, they believe, little bits of matter were formed by the accidental bumping and colliding of tiny bits of matter called molecules, forming blobs of matter called amino acids, which are the building blocks of living things. Then these amino acids continued bumping and colliding, in shallow pools, forming billions of such blobs of matter, as lightning and rays from the sun struck the pool's surface.

Gradually they became more and more complex, learned to be sensitive to their surroundings, learned to ingest food for survival, to expel waste matter, to travel about, and to reproduce themselves with fantastic accuracy from generation to generation.

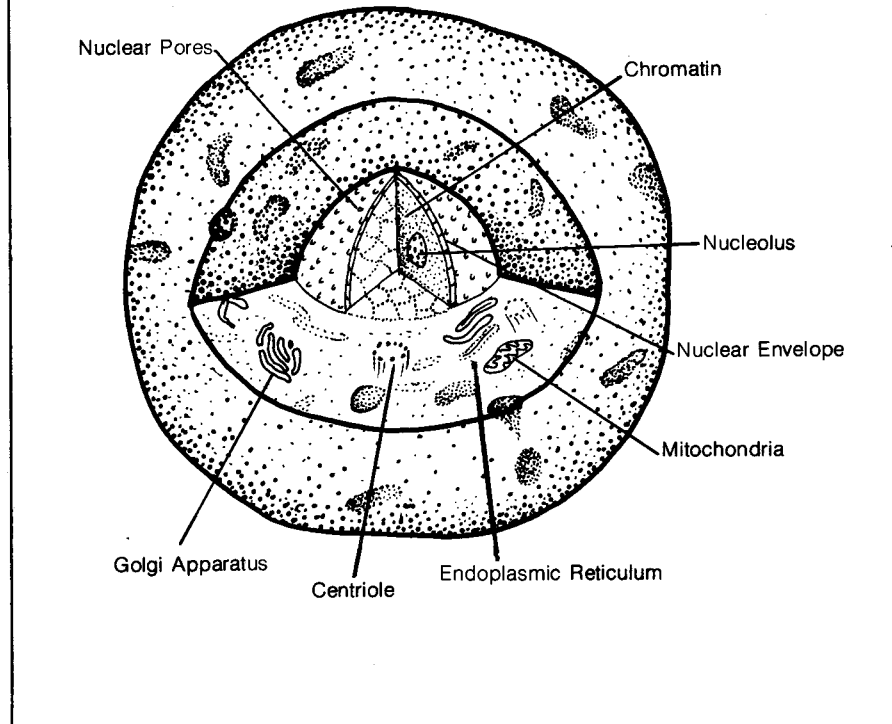
That is the evolutionary view of the origin of life.

Many people believe, however, that the evolutionary view of the origin of life is wrong. The Bible tells us that life did not evolve from lifeless matter on this earth. Rather, life on earth was created by God. God is the Original Life Giver. He created the amino acids, the proteins, and all the building blocks of life itself. He put them together into incredibly complex forms, and shapes, and sizes, creating a vast teeming multitude of living creatures on earth—from tiny single-celled plants and animals, such as the amoeba and paramecium, to the birds that fly in the air, the fish that swim through the seas, rivers, and lakes, and the creatures that live on dry land.

In the book of Psalms, David wrote of God: "O Lord, how manifold are thy works! In wisdom hast thou made them all: the earth is full of thy riches . . . Thou sendest forth thy spirit, they are created: and thou renewest the face of the earth" (Psalms 104:24, 30).

The living creatures God has made attest to His glory and supreme Intelligence. Consider the so-called simple one-celled animals.

Generalized Animal Cell



The living cell—as complex as New York City and much more efficient in operation—is a miracle of Creation. The human body itself is composed of trillions of specialized cells.—*Andy Voth*

How could a living cell have evolved mindlessly, by random accident? Cells are not just little blobs of “protoplasm,” or “living stuff.” They are incredibly complex little miniature mechanisms of the highest order. They are as complicated in their design and function as a huge city like New York or London, but exceedingly more delicate, balanced, and harmonious in their working.

Inside a typical cell there are networks of tiny microtunnels which extend through the cell like blood vessels. Also little factories called ribosomes exist in the cell, and manufacture protein, a substance essential for life. Thousands of such factories may exist in a single cell.

Hollow, saucer-like discs or plates, called Golgi complexes, act as packaging warehouses for the cell. The chief power plants providing energy for the cell are the mitochondria—chemical energy plants which resemble nothing you have ever seen before. On the opposite page is an illustration of a typical, rather average cell.

But how do cells reproduce?

Near the center of the cell is its nucleus, or organizational headquarters—the “capital” of the cell where all cellular functions are controlled. The control center governs all cell behavior and contains also the blueprints for the cell’s reproduction.

The nucleus of the cell is composed of threadlike chromosomes, which in turn are made up of smaller elements called genes. A single human chromosome may have 1,250 genes.

Genes are composed of a substance called nucleic acid—often simply referred to as DNA. DNA contains the basic alphabet of life. Scientists believe it is like a twisting ladder of genes, intricately coiled within the nucleus. The DNA in a simple creature called a virus may be a “ladder” 1/2,000 of an inch long, containing 170,000 “rungs.”

The DNA in a single human cell, if it were stretched out in a straight line, would be three feet long and contain six billion “rungs.” If the DNA in every cell in your

body were put end to end, it would stretch out 10 billion miles!

Could the complex little cells have designed and constructed themselves over long periods of time—by sheer accident?

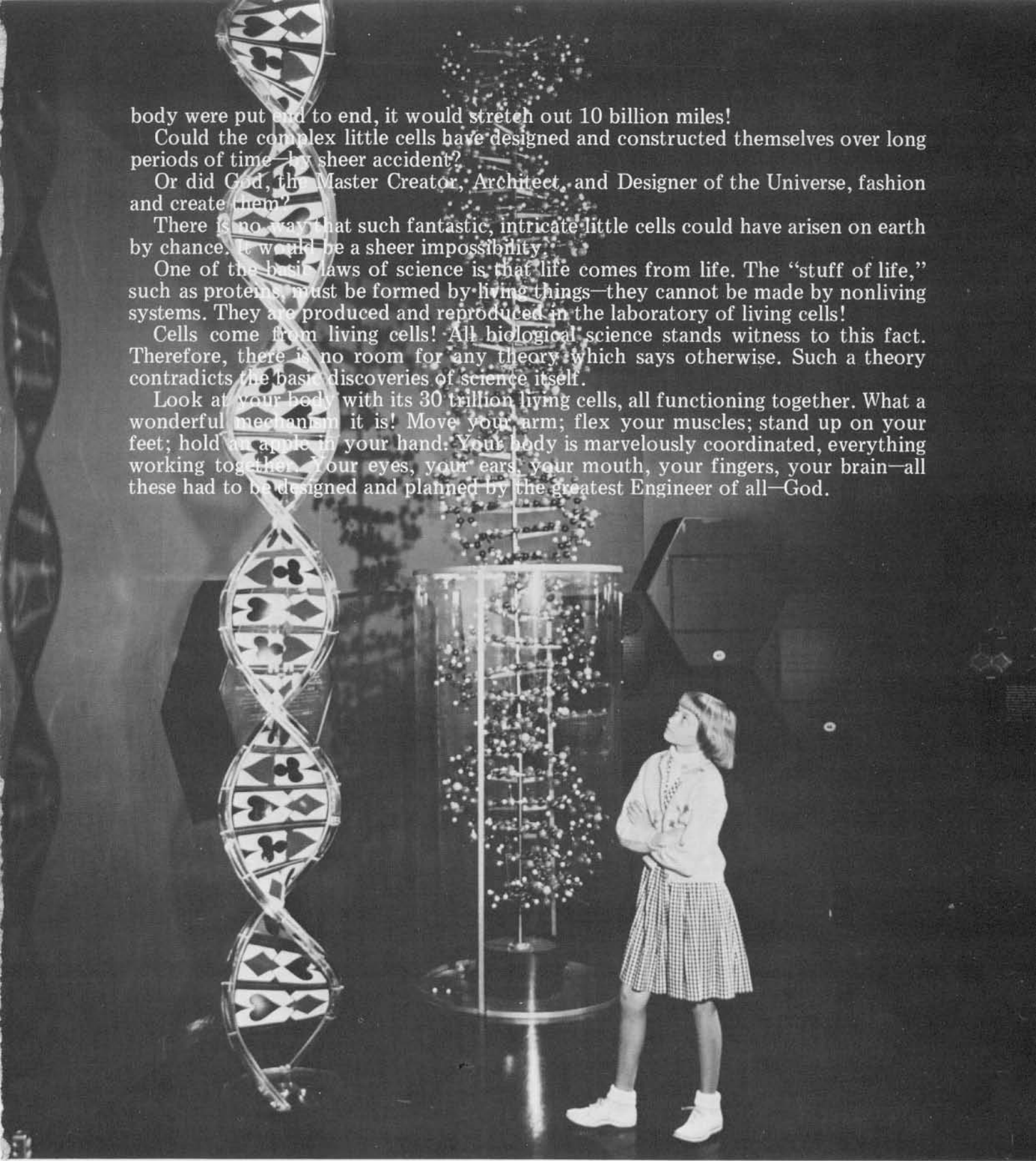
Or did God, the Master Creator, Architect, and Designer of the Universe, fashion and create them?

There is no way that such fantastic, intricate little cells could have arisen on earth by chance. It would be a sheer impossibility.

One of the basic laws of science is that life comes from life. The “stuff of life,” such as proteins, must be formed by living things—they cannot be made by nonliving systems. They are produced and reproduced in the laboratory of living cells!

Cells come from living cells! All biological science stands witness to this fact. Therefore, there is no room for any theory which says otherwise. Such a theory contradicts the basic discoveries of science itself.

Look at your body with its 30 trillion living cells, all functioning together. What a wonderful mechanism it is! Move your arm; flex your muscles; stand up on your feet; hold an apple in your hand. Your body is marvelously coordinated, everything working together. Your eyes, your ears, your mouth, your fingers, your brain—all these had to be designed and planned by the greatest Engineer of all—God.



The DNA molecule controls heredity and life functions within a single cell—this intricate helix structure fits inside the central nucleus of the cell.—*Courtesy of Pacific Science Central Foundation*

If you look at a superbly built house, with its roof, shingles, fireplace, plumbing, electrical system, walls, bedrooms, living room, kitchen, family room, closets—you conclude that such a house was built by a man—a builder. It was designed by an architect. It did not over years of time put itself together, without the aid of man! Such a house reveals intelligent design and the workmanship and skill of its “creator.”

Even so the Universe itself—from the living cell to the greatest star—shows the skill, intelligence, design and craftsmanship of its Creator—the one we call God.

Chapter Four

The Amazing Interdependence of Life

The next time you visit a pond, and sit down on the bank overlooking the water lilies, be silent and let your eyes roam about observing the living creatures.

In the forest behind you, you may see a woodpecker clinging to a tree, pecking away to his heart's content, searching for food. You may well notice hummingbirds, or bees and other insects, flitting from flower to flower, sucking out the nectar. You will notice the dragon flies, darting about, and you may see water spiders walking on the surface of the pond.

If you peer intently, you may see fish swimming under the water, and occasionally one may leap above the surface, snatching flies for dinner.

Such a scene as a simple pond, with its many forms of life, each important to other forms of life, illustrates the vital principle of interdependency of life on earth.

All life on earth lives in what we call the "biosphere"—a thin zone covering the surface of the earth, including the ocean, land, and atmosphere where life can survive.

This biosphere is teeming with life! One cubic foot of seawater may contain 12 million tiny plants called diatoms. On one acre of land, as many as 141 different species may be found among 1,261 trees, as in North Queensland, Australia. In a 6 square mile district in Panama, as many as 20,000 species of insects have been catalogued and observed.

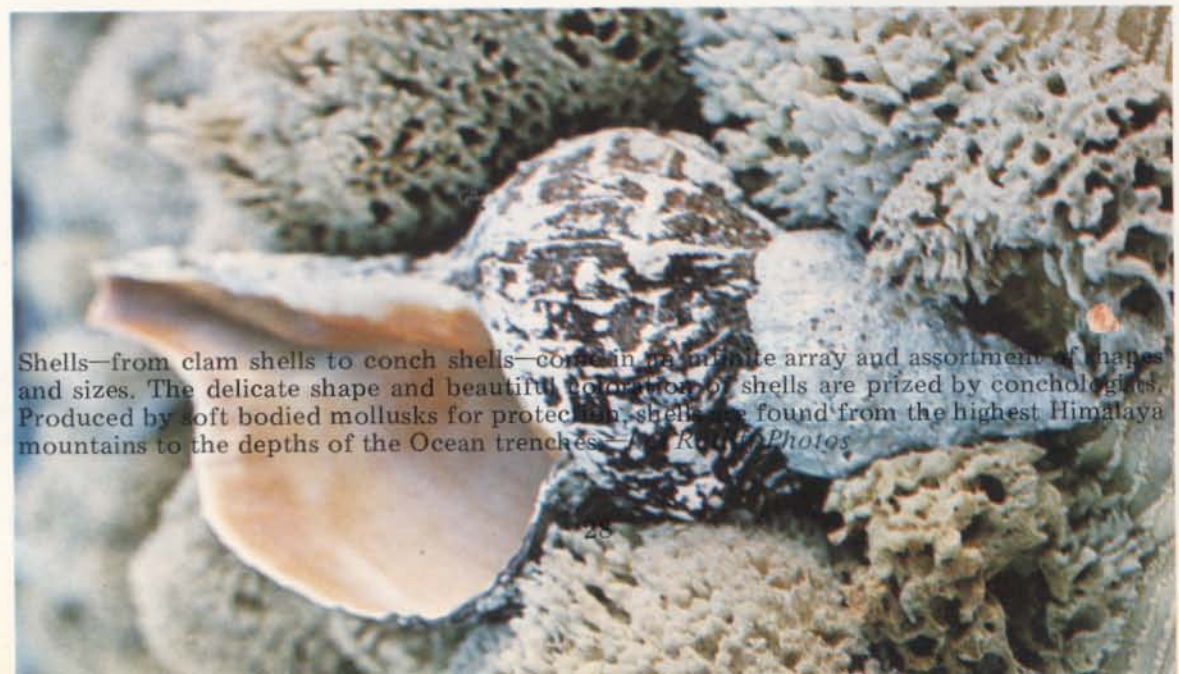
All the three million species of plants and animals on earth form a giant web of life. Each individual affects the whole web. The death and extinction of just one species may affect several others which depend on it for food, shelter, or transportation.

The web of life is shaped like a giant pyramid. At the bottom are algae, bacteria and simple animals. Shrimp, insects and minnows feed upon these, and birds, larger fish, reptiles and amphibians and mammals, feed upon the shrimp, insects and minnows. Larger animals, sharks, lions, cougars, etc., feed upon these animals. At





The honey bee sucks nectar from a gorgeous flower. While the bee uses the nectar to make honey, the flower also profits from the relationship, as the bee carries its pollen to other flowers, aiding in fertilization.—*Mike Hendrickson Photo*



Shells—from clam shells to conch shells—come in an infinite array and assortment of shapes and sizes. The delicate shape and beautiful coloration of shells are prized by conchologists. Produced by soft bodied mollusks for protection, shells are found from the highest Himalaya mountains to the depths of the Ocean trenches.—*Art Roloff Photos*

PYRAMID OF LIFE



A KILLER WHALE
GAINS 1 LB. BY EATING ...



10 LBS. OF SEAL—EACH
10 LBS. WAS GAINED BY EATING ...



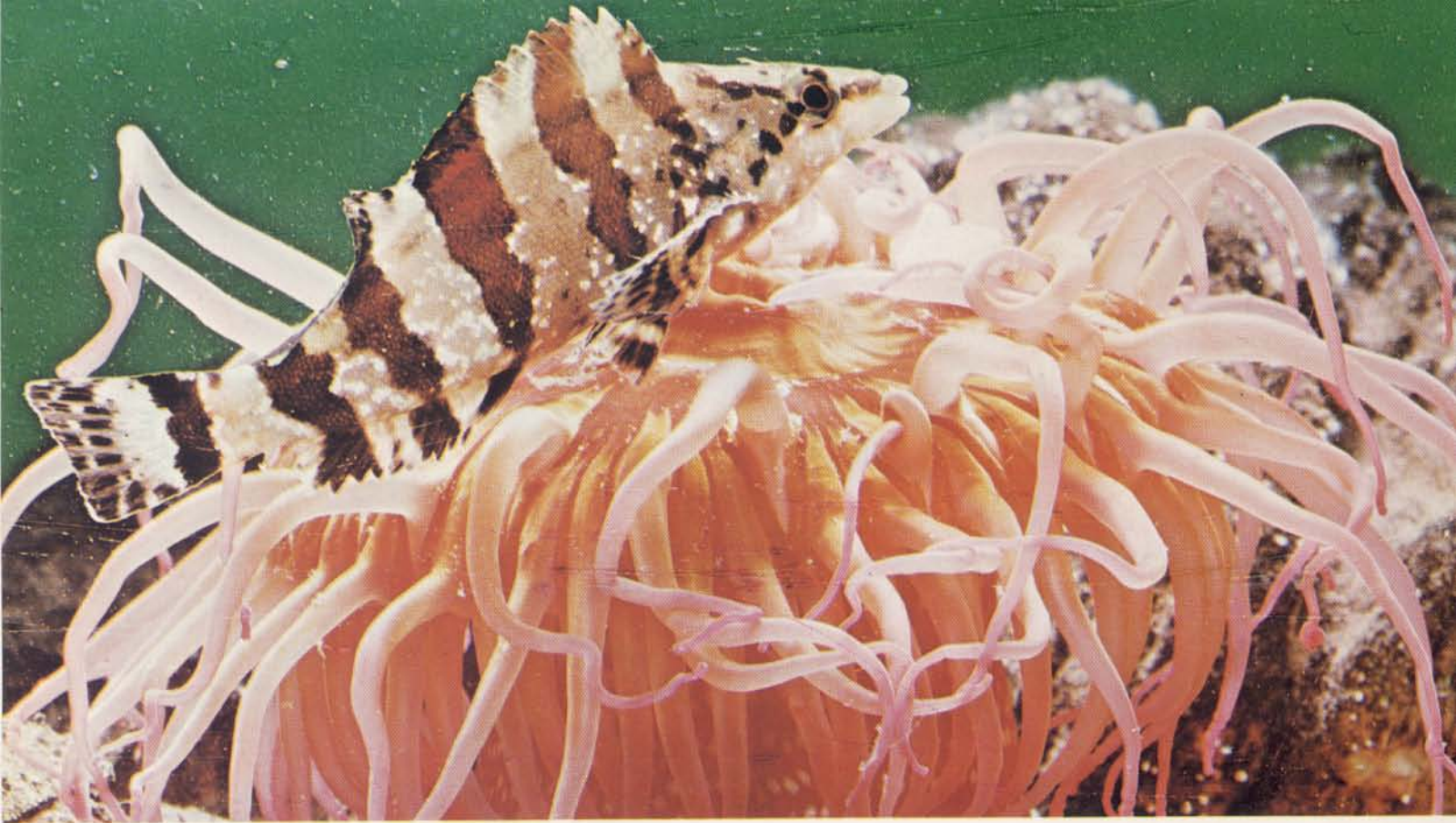
100 LBS. OF FISH WHICH ARE PRODUCED BY ...



1,000 LBS. OF KRILL WHICH ARE PRODUCED BY ...

All life is interdependent. The food chain illustrates this mutual dependency in a very straightforward fashion. If one link in the chain is broken, the entire chain is seriously threatened.—*Courtesy of Ambassador College*

10,000 LBS. OF PLANKTON



The clown fish and the sea anemone "live together" in a relationship called symbiosis. The clown fish is immune to the poison of the sea anemone and darts in and out among its tentacles freely, luring other fish to their doom. In return he receives protection and food scraps for his services.—*Courtesy of Ambassador College*

the top of this vast pyramid stands man.

If it were not for the vast interdependency of the web of life, the world would be very different. No creature lives or dies to itself. Nature is full of co-operative ventures between different animals that could not exist without each other.

The South American parakeet breeds in the nests of one species of termite. While building its nest, the parakeet destroys about half the termite nest. The termites attack the intruder, but then stop, and don't harm the parakeet's young offspring.

Why do the termites adjust to the situation? Godless evolutionary theory cannot explain it.

The interdependency of life is clearly shown in the relationship between plants and insects. Fruits and vegetables are often dependent on insects for fertilization and breeding. The flying insects carry pollen to fertilize the blossoms, making possible the continued existence of many plants. It is a mutually beneficial relationship. The flowers provide nectar for the honey bee, which uses it to manufacture honey in the bee hive; and the bee carries the pollen from flower to flower, seeing to it that the species is preserved through fertilization.

Birds of prey, in undisturbed wild areas, help keep nature in balance by eating rodents and other types of game. Careful analysis of the interplay between one species and another in the wildlife community reveals that the abundance of game and birds of prey are linked together very closely.

One study by the U.S. Department of Agriculture analyzed the contents of the stomachs of 2,690 birds of prey. It concluded that the great majority of owls and hawks are very important because of their rodent control activities, and are entitled to protection at the hands of farmers and ranchers.



If it were not for the birds of prey, a single pair of meadow mice could breed one million descendants within one year's time. Twelve thousand tons of vegetable matter would be needed to feed such a booming population.

One of the most colorful examples of "living together"—or symbiosis as scientists call it—is the relationship between the deadly Portuguese man-of-war jelly fish and *Nomeus*, a small bright blue and silver striped fish that darts in and out of its poisonous tentacles.

Nomeus is immune to the poison of the deadly dangling tentacles of the Portuguese man-of-war, which hang 60 feet below the surface of the ocean, slowly twisting and turning, searching for prey.

Nomeus finds the haven of the tentacles a safe refuge from larger fish which attempt to eat him. When attacked he simply darts in among the billowing tentacles. If the larger fish follows him, thinking the tentacles are seaweed, with nothing to fear, it is stung by the tentacles and becomes dinner for the man-of-war. *Nomeus* and the deadly jelly fish therefore serve and help each other. This fascinating



The pronuba moth and the yucca plant co-exist beautifully together in the desert, each dependent on the other for survival.—*Courtesy of Ambassador College*



The humming bird can hover apparently motionless in the air like a helicopter, fly backwards or forwards, or dart suddenly at high speed. A marvel of Creative design.—*Courtesy of Ambassador College*

relationship evolutionary theory is unable to explain.

Sea anemones live in all seas around the world, and are especially abundant in tropical areas. They are related to the jellyfish, but instead of swimming freely on the surface, they usually attach themselves to rocks and spread their tentacles over as large a space as possible. If danger lurks, they contract violently into a rubbery ball.

These creatures are flesh eating and their tentacles are loaded with small poison cells which shoot barbs into any animal or fish which come into contact with them.

Hermit crabs often make use of this fact. They are small specialized crabs which live in cast off snail shells (another example of interdependence of life). Some hermit crabs are immune to the poison of the sea anemones, seek out a special species of anemone, and rub it until it detaches from its rock. They then hold the anemone against the snail shell until the anemone attaches itself.

The hermit crab now has its own build in battery of stinging cells, mounted on its shell—a lethal portable artillery!

How can evolutionary theory explain the marvelous living arrangements of the creatures of the earth and sea? But these wonderful shows of nature are easily seen to be the work of the Great Designer—God.



Above the mouth of the Angler Fish is his own personal fishing pole, including the "bait" at the end of the "fishing line." The angler fish lures his prey closer and closer by means of the "bait," and then gulps him down.—*Courtesy of Ambassador College*

Chapter Five

Color, Camouflage and Nature's Amazing Inventions

Nature's creatures are the most amazing inventors of all time! Some animals—such as the octopus—discovered “jet propulsion” long before man invented the jet airplane.

Termites, tiny little creatures that are a pest to home builders because they eat wood, build intricate, huge “metropolises” complete with air conditioning, satellite suburbs, and storage areas. They even bring water to their homes by digging wells 120 feet deep!

Animals used camouflage to escape detection by enemies long before human soldiers learned to camouflage their weapons during war.

Color is not just something beautiful to look at. It is very important in Nature's scheme. The tide pool blenny drives other fish from its territory by displaying its brightly colored chin. Decorator crabs use parts of algae and sponges, putting them on their own upper shell to mask their own coloration.

Flatfish have an uncanny ability to perfectly match their background, the pattern of the sea bottom on which they rest.

Ingenious tricks and camouflage provide protection for smaller creatures; but predators themselves often resort to similar tricks in the never ending struggle of eat or be eaten.

Man's own efforts to disguise and camouflage his military weapons seem feeble in comparison with nature. The main method of concealment used by nature's creatures is simply matching the background. Meadowlarks disappear in a hay field, a woodfrog vanishes among dead leaves, a green tree frog hides in green air plants growing on trees.

Some creatures change their costumes to match the seasons. Wet and dry season broods among some butterflies show marked differences. The wet season dead leaf butterfly has a more dazzling pattern than the dry season brood. The arctic fox discards his brown summer coat for a bright white winter coat to match the winter's snow.

You may have noticed that a deer fawn has spots that help to conceal it among tiny shafts of sunlight in the summer. But in the winter a more uniform coat is needed, so the deer sheds its white hairs for brown ones as winter approaches. Since there are no leaves in the winter to cast tiny shafts of sunlight patterns, the brown coat is more protective.

Some of the artful camouflage tricks of nature make its creatures resemble magicians or quick-change artists. Within two or three minutes an American Anolis lizard can change from pea green to dark brown. The surgeon fish and the Nassau grouper can also change coloration very quickly. The surgeon fish is mostly black as it swims among coral reefs, but when it swims into clear water it quickly changes to a pure pale blue-grey which makes it very difficult to see.

The Nassau grouper can change to six or eight different appearances within a few short fleeting minutes. Usually very dark, it may turn several shades as a swimmer approaches, or adopt a strongly banded appearance, or turn almost white as it darts out into the open waters to escape.

Some harmless animals "mimic" dangerous distasteful animals in order to escape being eaten by predators. Many times one creature deliberately poses and acts like another. Some spiders hold up their two front legs giving the appearance of ants which have only six legs. Many moths look like wasps and hornets and act like them too. The hummingbird moth can even deceive humans as it hovers in front of flowers like a hummingbird!



Why are male birds usually more brightly decorated, and have more brilliant feathers, than the female birds of the species? The bright plumage may help attract a mate, or deter a rival, of course. But another reason is that the male birds usually keep far away from the nest where the female tends the young. This directs the attention of enemies to the male bird, away from the actual nest where the young are, and where the female blends into the background with her "ordinary" looking camouflage.

The huge "eyespot" on the head of some swallowtail butterflies are nothing but deception. The huge "eyes" give

The woodpecker pecks wood with his chisel-like beak, in its quest for food.—Goodpaster—National Audubon Society



The beak of the scarlet macaw is perfectly designed for flexibility, with the top part of the beak separately hinged to the upper jaw. The colorful macaw, the largest member of the parrot family, makes a fine pet. The ability of parrots to "talk" like humans is well known. — *Angermayer-Photo Researchers.*



A belted kingfisher nest illustrates merely one of the wide variety of nest-homes built by various birds. Where did birds “learn” this amazing architectural skill? How do they pass along the information to every succeeding generation?—*Austing—Photo Researchers*

enemies the impression that the butterflies are much bigger and more dangerous than they really are.

The amazing camouflage artists in nature are another evidence of the Supreme Artist—the Creator God who endowed them with these incredible, fascinating abilities.

Similarly, the inventiveness of nature’s creatures bespeaks the Supreme Genius of the Original Inventor of all things.

Did you know, for example, that the whirligig beetle, which is found all over the world in pools and lakes and rivers, has

A bird’s feather is an engineering masterpiece—extremely light weight, structurally strong and versatile, and readily repaired or replaced when damaged.—*Courtesy of Ambassador College*






The arctic tern—the greatest migrant traveller of them all—seems ready to take off on another 22,000 mile round trip—without either compass or sextant to guide him.—*Robert Hermes—National Audubon Society*

an amazing trait? This little creature, insignificant of itself, is equally at home in the air, on the water, or underwater. It can fly from pond to pond, and when it finds a new home, it uses its wings as a parachute, dropping gently to the surface of the water. When diving underwater, it takes with it, under its wings, an air bubble. On the surface of the water, it uses its two rear legs as oars to scull over the water.

The whirligig beetle is an aviator, parachutist, surface craft operator, and skin diver, all in one!

Long before Adam and Eve learned to sew, tiny ants, a species of *Oecophylla*, stitched leaves together in a spectacular fashion. Several ants, working as a team, pull the edges of two leaves together. If the leaves are too far apart, they form a living chain, each ant gripping the one behind with its hind legs. Then other ants join the sewing party, each carrying a grub between its jaws. The grubs emit silk, and are passed back and forth like shuttles until the two edges of the two leaves are securely fastened together by the silk strands.



A spider's web—silken threads spun and artistically arranged—is a fantastically clever construction. The little spider is one of nature's most patient, elaborate artists.—*Les Ralliff Photo*

Another amazing architectural feat of the animal world is tunnelling. It may seem simple, digging a tunnel, but not so at all! Moles for example are equipped with their own built in shovel, hoe, pick-ax, and garden fork. Their front paws combine a fork and shovel, and they are able to burrow into ground hard enough to require a pick to break!

Tunnelling requires more than just digging apparatus, however. It requires mathematical precision and engineering skill to be able to calculate position at every moment while working underground, blind, with no light, and nothing but dirt all around! A blind mole can bore a new tunnel and make it connect precisely with a pre-existing tunnel several feet away! Nobody knows how he does it.

Nor were Adam and Eve the first gardeners on earth. Did you know that some species of ants and termites raise their own gardens for food? The leaf cutter ants cultivate a fungus in special chambers in the ant nest, and feed on the fungus gardens.

Some species of termites also cultivate mushroom beds within their colonies. The fungus serves the termites by pre-digesting vegetable matter such as wood which the termites themselves are unable to digest.



A Hawaiian rainbow wrasse, better known as a "doctor fish," earns his keep by scrubbing, sanitizing and cleaning larger fish, and in return receives immunity from his natural enemies.—*Douglas Faulkner*

The giant clam of the Indian Ocean, which grows to be several feet across, is also a capable, ingenious gardener. Many single-celled green plants live within its tissues and form part of its food. When the clam opens its shell to expose itself to the sunlight filtering down from the surface of the shallow sea, the sun's rays enable the green plants to manufacture sugars and starch, causing the plants to grow and multiply. The plants are aided by the clam in another way. The clam has transparent lens structures which even focus the sunlight on the plants!

The wonders of nature defy human description. Bats navigate by means of echo-location. Electric eels, with electric cells capable of generating 220 volts, are capable of causing great pain to men. Dolphins and porpoises have a sonar system and use it as a depth-ranger as well as for detecting obstacles in the water.

To combat the radar or echo-location systems of bats, there are certain moths which give out sounds which disrupt the echo-location of pursuing bats—nature's own radar-jamming devices!



The Koala bear of Australia, a tree-dwelling marsupial, eats the leaves of the eucalyptus tree. This "Teddy Bear" can climb the highest trees. Although the leaves they eat are poisonous to other animals, the Koala must eat the leaves of one special species of the twelve types of eucalyptus tree, or it will die. -*Courtesy of Ambassador College*

We look at the tanks, armored cars, shields, and helmets of human armies, and then note that armor appears often in the animal kingdom—the armadillo even looks like a tank! Turtles and tortoises are renown for their heavily armored shells.

Human ingenuity and engineering were anticipated by nature many times over—the snorkel, the flying aircraft, the submarine with its periscope, artillery and chemical warfare, are all found among Nature's denizens.

The snorkel, which enables a submarine to replenish its air without surfacing, was anticipated in the hippopotamus and crocodile which have eyes and nostrils set high upon the head so the animals may remain submerged and still breathe and see above the surface.

Numerous aquatic animals have long breathing tubes which they push above the surface of the water to take in air. One of them is the rat-tailed maggot (the larva of a hoverfly). It can live in turgid water with its telescopic tail. While resting on the bottom of a pool, it can extend its breathing tube up beyond the surface to breathe.

Birds of course are the first heavier than air flying machines. They are able to soar, glide through the air, hover in place, and even able to migrate for thousands of miles without running out of fuel or energy or losing their sense of direction.

One of the champion migrants is the tiny blackpoll warbler. Every autumn it flies unerringly from its Canadian nest all the way to Brazil, a distance of over 4,000 miles.

The golden plover wings its way a distance of almost 8,000 miles from the edge of the Arctic Ocean in the north to far-off Argentina in the south. The blue-winged teal flies from Quebec, Canada to Guyana every year, a distance of 3,300 miles. The bristle-thighed curlew makes an annual round trip from Tahiti to central Alaska, flying 5,500 miles each way.

Even the unheralded barn swallow migrates yearly from northern Canada to north central Argentina, a distance of no less than 9,000 miles.

The top migrator among land birds is the little bobolink which averages 7,000 miles in its journey from Canada to Argentina.

The greatest migrator of them all, in terms of mileage, is the Arctic Tern. It leaves its nest at the age of six weeks in the Arctic, and flies nonstop to the region of Antarctica, 11,000 miles away, and finds its way back home the following summer. How it is able to navigate successfully for 22,000 miles scientists do not know. But migrate they do, and very successfully, too!

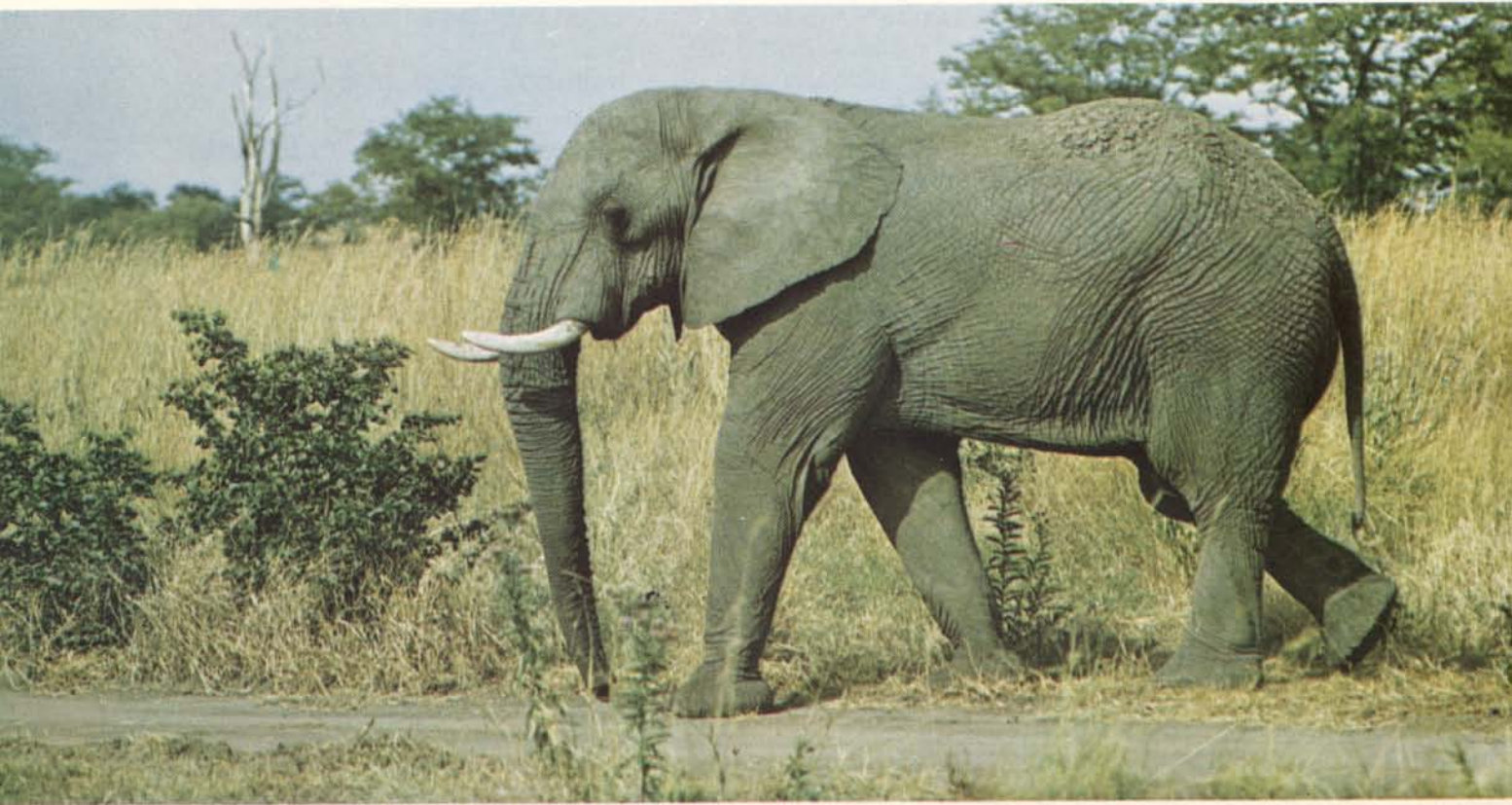
It has been estimated that perhaps one third of all bird species migrate. But evolutionary theory has not been able to explain the why or how of bird migration—or even less why the *first* bird that migrated attempted to do so—or how that first bird navigator was able to find his way accurately—or how many birds attempted to learn the secret of migration, and failed, and died in the dismal attempt, thus becoming extinct!

What about speed? How fast can animals travel? We humans are fascinated with speed. Millions watch in fascination as men strive to break a speed record and win a race, such as the Indianapolis 500 or the Grand Prix.

Animals also are "speed kings." Theoretically dolphins shouldn't be able to swim faster than ten knots, but they have been clocked at twenty knots or more for up to a half hour! Research and studies have showed that the skin of dolphins has a soft outer layer filled with vertical ducts containing spongy water-logged tissue. Tests showed that this design reduces friction of water and reduces drag by as much as 60 per cent!



The African lion. Prowling the veldt of East Africa, this tawny master of his domain is a powerful hunter, yet spends most of his time lounging in the sun or shade, sleeping.—*Ambassador College Photo*



The elephant, the largest of land mammals, with his ponderous bulk, long specially designed trunk, and big floppy ears, is another marvel of Nature's Design.—*Courtesy of Ambassador College*

Swordfish, marlin and sailfish have been clocked up to about 70 miles per hour. Flying fish have been timed at 35 miles per hour and can fly up to a quarter of a mile before descending to the sea.

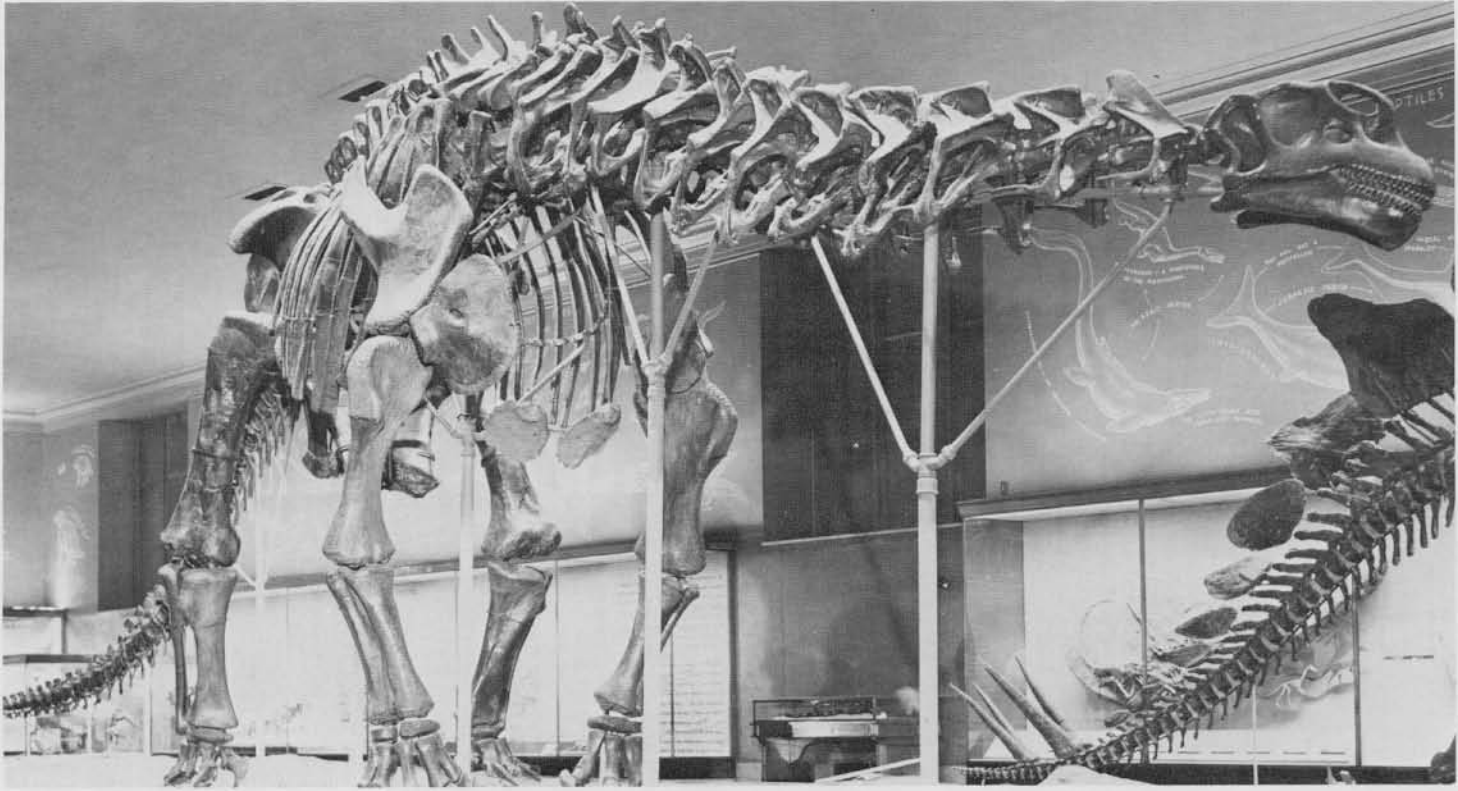
How fast can birds fly? The cloud swift has been measured up to 200 miles per hour. A peregrine falcon can reach 180 miles per hour when diving upon its prey. The racing pigeon in level flight has been clocked up to 94.3 miles per hour!

When we observe the many marvels, mysteries, and fascinating creatures in the Natural Realm, we see a glimpse of the wonderful and ingenious Mind of God, the Creator. The marvels of Nature reflect the majesty of the Creator who designed them, and placed them on the earth!

In the light of these mind stirring, inspiring features of the world around us, how can anybody say there is no God?



Dolphins—those merry mirthmakers of the sea—appear to be having a private joke at evolutionary theory. Do they know something that has escaped the attention of evolutionists?—*Courtesy of Ambassador College*



The huge brontosaurus, which reached a length of 80 feet, was equally at home on land and in the water. The stegosaur, with rows of heavy bony plates down its back and spikes on its tail, was heavily armored for protection. Triceratops, with long horns and a huge armor plate, was about 25 feet long—the original gladiator, built like an armored tank.—*American Museum of Natural History*

Chapter Six

“The World That Was...”

How long has life been on earth? When was man created? These seemingly simple questions have puzzled scientists for countless centuries. Some people believe all life was created just 6,000 years ago, and that dinosaurs—huge reptiles that once lived on the earth—were contemporary with man.

Scientific research and the studies of the rocks and strata of the earth, however, present strong evidence that there was a world before Adam—a totally different kind of world.

According to the dating methods of geologists, many millions of years ago the world was dominated by huge reptiles—the great dinosaurs, with such awesome names as Brontosaurus, Allosaurus, Triceratops, and Tyrannosaurus Rex. The latter was a flesh eating monster that preyed upon other dinosaurs.

The world of that time was very different from our world, today. Scientists estimate that the Age of Reptiles, when dinosaurs ruled the land, occurred about 80-120 million years ago. We know dinosaurs once were very numerous around the world. Their bones have been dug out of the earth in the United States, Canada, Europe, and around the world.

Dinosaurs ruled the land. Pterosaurs and other flying reptiles sailed across the skies. Ichthyosaurs and mosasaurs reigned supreme in the seas.

Then, abruptly, suddenly, they all perished. It is one of the greatest riddles of all science. What caused the massive extinction of all the dinosaurs around the world? Was there some kind of incredible upheaval—destruction—that wiped out these huge living creatures?

In the strata of the ground of that time, there is vast evidence of flooding, continents breaking apart, mountains being uplifted, and volcanic eruptions and vast lava flows.

Wholesale destruction occurred. But today nobody knows why. No scientist has yet come up with a theory that explains all the facts. The “time of great dying” of the dinosaurs remains one of the most fundamental unsolved mysteries of all science.

Most modern theories suggest that some awesome catastrophism was involved. Perhaps some cosmic disturbance changed the climate violently and altered the face of the earth. Recent theories have speculated that a comet from outer space collided with the earth, or came close enough to have a severe effect on life on this planet.

While men speculate, however, perhaps the answer—or a clue to the ultimate solution to the mystery—is contained in the pages of the Bible.

The Bible reveals that there was a “world before man.”

When we carefully read the first chapter of Genesis, the first two verses, we find that God created the heavens and the earth “in the beginning”—a remote time that may have been millions or billions of years ago. Then, in verse two, we find that something happened. As some translations explain it, “The earth *became* in darkness and confusion,” or empty and waste. Something incredible happened. Destruction caused the earth, which had been beautiful and filled with life, to become a waste, desolate no-man’s land.

When the earth was created, we read that the angels shouted and sang for joy (Job 38:5-7). It must have been a beautiful world. But then tragedy occurred.

“The earth was (or became) without form and void, and darkness was upon the face of the deep” (Genesis 1:2).

What happened?

The Hebrew words *tohu* and *bohu* strongly indicate that the earth became a desolate wilderness, empty, uninhabited due to some ancient cataclysm.



The ancient world was strikingly different from the world of today. The dinosaurs, huge reptiles, dominated the land, seas, and sky. —*American Museum of Natural History*

The cause of that cataclysm, and the violent end of the world of the dinosaurs, may well have been connected with another episode of violence mentioned in the Bible which occurred long before the time of man.

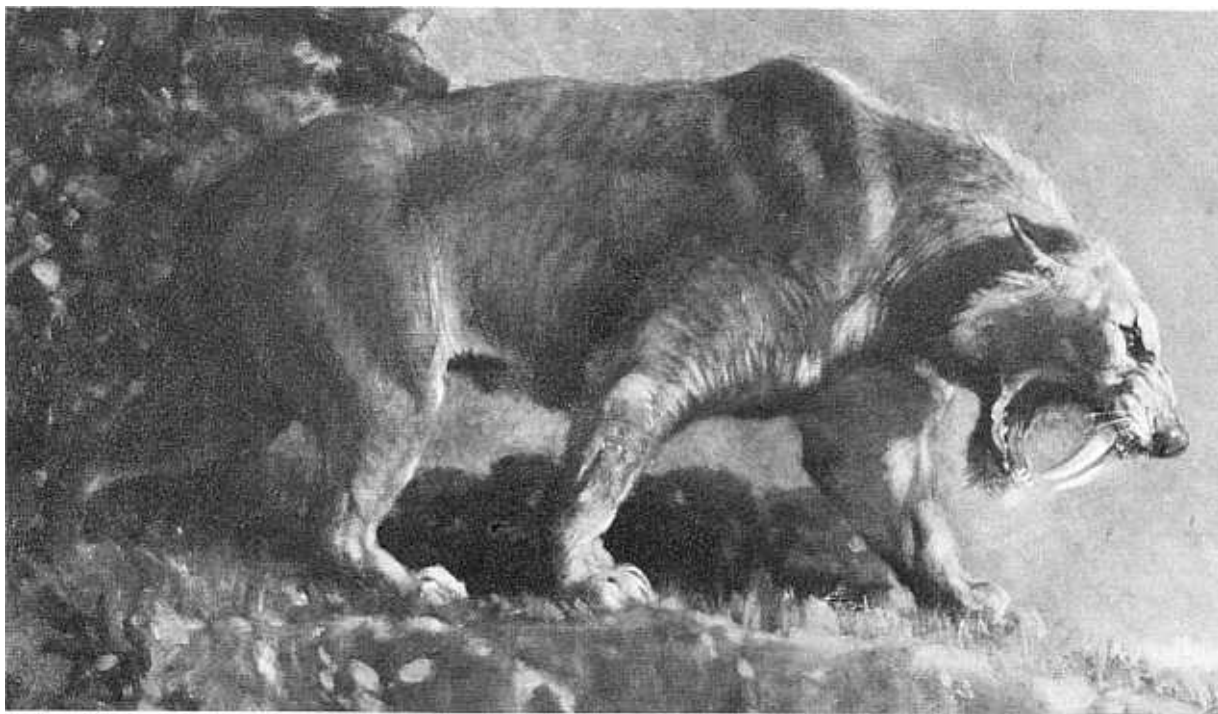
“How art thou fallen from heaven, O Lucifer, son of the morning!” God says in the book of Isaiah. “For thou hast said in thine heart, I will ascend into heaven, I will exalt my throne above the stars of God: I will sit also upon the mount of the congregation, in the sides of the north: I will ascend above the heights of the clouds; I will be like the most High. Yet thou shalt be brought down to hell, to the sides of the pit” (Isaiah 14:12, 13-14).

Long ago, in the primordial mists of time, the archangel Lucifer rebelled against God, and attempted to seize His divine throne and take over the rulership of the Universe. He had been given control over the earth and was “in Eden, the garden of God” (Ezekiel 28:12-13). But evil crept into his heart—he became ambitious and filled with pride (Ezekiel 28:15-17). He launched a massive rebellion against God and ascended to heaven to do battle against his own Creator!

Apparently one third of the angels on earth followed him in his folly. In the cosmic, titanic conflict that followed, the archangel Lucifer—his name changed to Satan, the Devil, or Adversary—was cast forcefully back down to earth. He was ejected from the heavens, and “his tail drew the third part of the stars of heaven (the angels), and did cast them to the earth” (Revelation 12:4).

In this mighty fall from power, it is very likely that many of the “stars of heaven”—the asteroids and planetoids in the solar system—were cast down to the earth with him, causing a terrible meteoric bombardment and tremendous upheaval upon the earth itself!

Whether other planets were affected in this tremendous battle, and the surface of Mars, and the Moon, were also bombarded and scarred as a result, we don't know. It is also possible that one of the planets of the solar system—which may have orbited



The huge sabre-toothed cat, Smilodon, flourished during the Pleistocene age. About the size of a lion, this flesh-eating predator was a fearful sight to behold.—*American Museum of Natural History*



The fearsome Tyrannosaurus Rex surveys the ancient world.—*Courtesy of Ambassador College*

between the orbits of Mars and Jupiter—was destroyed in this ancient celestial warfare, leaving the present swarm of asteroids in a belt between Mars and Jupiter.

One thing we do know: “God spared not the angels that sinned, but cast them down to hell, and delivered them into chains of darkness, to be reserved unto judgment” (II Peter 2:4).

Jude the apostle relates: “And the angels which kept not their first estate, but left their own habitation, he hath reserved in everlasting chains under darkness unto the judgment of the great day” (Jude 6).

The awesome destructions that occurred long before the time of Adam were no doubt connected with the rebellion and activity of Lucifer and his army of angels. Lucifer had rejected the rulership of God. He had been placed over the earth, but despised his dominion and attempted to grasp control over the entire Universe. His plot failed. And as a mute, enduring, eternal testimony of his abortive rebellion, the evidence of cataclysm and destruction lies written in the rocks and fossil beds and twisted and torn strata of the earth.



A beautiful Hawaiian sunset reminds us of the words in Genesis: "AND THE EVENING AND THE MORNING WERE THE FIRST DAY. . ."—*Mike Hendrickson Photo*

Chapter Seven

“Let Us Make Man...”

After the rebellion of Lucifer and his angels, God recreated the surface of the earth, and created new living creatures to replace many that had perished. The account of this new creation is given in the first chapter of Genesis, verses 3-31.

But this time God went far beyond any previous time of creation. This time He created man.

We read: “And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

“So God created man in his own image, in the image of God created he him; male and female created he them” (Genesis 1:26-27).

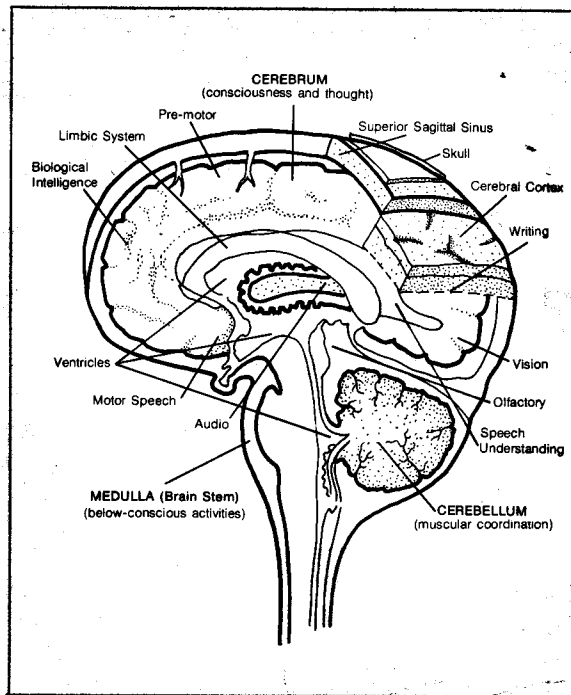
God made man of the dust of the earth (Genesis 2:6). This time, if his created beings went astray, and rebelled against His government, and His laws of love, He would simply let them return to dust—die. He did not want more spirit beings—like Lucifer and his angels—to rebel and have to be punished for aeons of time in chains of darkness.

This time God intended man—His supreme creation—to have the opportunity to learn lessons in a fleshly, mortal existence—to learn that disobedience and rebellion would be a very unpleasant way of life and would result in death.

Man was created in the very image and likeness of God. Man was given a brain with creative capacity, inventive skill, and endowed with some of the same attributes and abilities as His Divine Parent, only on a limited basis.

Think for a moment about the human brain. That is the round, wrinkly grapefruit size object that fits inside your head.

Your brain is a miracle of creation. Scientists don’t even know what makes it work or how it does its job. But they have discovered many interesting facts about the brain.



Man's brain—the most complex organization of molecules in the entire universe—is composed of 10 billion neurons and 100 billion glial cells. This mental “box” is far more sophisticated than any computer. Was it the product of mere chance? Or of the mind of a Supreme Designer?—*Andy Voht*

They know, for example, that it is composed of perhaps 10,000,000,000 little nerve cells called neurons, each one acting as a conductor, integrator and transmitter of impulse energy. Neurons receive and carry information through a chemical and electrical process that is not very well understood.

Also in the brain are 100 billion smaller non-nerve cells called glial cells which may compose a support framework for the neurons. They account for about half the mass of the brain. They may also be vitally involved with memory.

Memory itself is a marvelous mystery. How we are able to remember things which happened years ago is a baffling feature of the mind of man.

Could the human brain have evolved by sheer accident?

The brain is like an amazing network of 100 billion computer memory banks and 10,000,000,000 computer sensory devices all working together! It is far more fascinating and complex than the greatest computer built by man!

We know the huge IBM computers were designed and built by computer technologists and engineers. Obviously the brain of man was designed and built by the greatest Technologist and Computer Designer and Engineer of them all—the Creator God.

The human brain, no bigger than a grapefruit, is hooked together like a marvelously complicated switchboard and can store during a human lifetime an estimated 200,000,000,000,000,000,000 bits of information!

How can we “see”? The human eye, connected to the brain via the optic nerve, is very complex itself. The brightest object your eye can see in bright light is 20 billion times brighter than the dimmest object it can see at night! The human eye, like a tiny camera, can snap its pictures in a continuous stream, and immediately have them developed in the “darkroom” laboratory of your brain.

The “seeing” part of the eye is the retina, located at the back of the eye and composed of tiny rods and cones. There are about 137,000,000 rods and cones with perhaps 1,000,000 nerve lines leading from them to the brain.

Your brain receives messages from the “sensory receptors” of your body—which include the eye, the ear, the nose, the taste buds on your tongue, and your skin (the sense of touch).

Scientists are fascinated by the human brain and the sensory devices by which it has contact with the outside world. They are beginning to believe that perhaps the ultimate creative capacity of the brain may be *infinite*.

The human brain is truly a masterpiece of creation. God created us with creative capacity similar in many respects to His own. How foolish it would be to believe that such an incredible object could have “evolved” by mindless, sheer chance!

Think. Think about thought. The powers of reason. Awareness. Even self-awareness. Awareness that *you* are a unique individual in time and space. *Think* about it.

But the biggest mystery of all is—*why* did God create man? Do you know?

Why did God say, “Let us make man in *our* image”?

The word for God in Genesis, chapter 1, is the Hebrew word *Elohim*. It is a uniplural word, similar to the English words church, family, nation. It means “more than one.” Literally, *Elohim* means “The Mighty Ones.” It refers, of course, to God the Father, and also to the One who was known as “The Word,” in ancient times, the One who shed His divinity and became born of a virgin—Jesus Christ (John 1:1).

The Father and Christ created mankind in their own image, shape and likeness. Why?

The apostle Paul explained it perfectly: “The Spirit itself beareth witness with our spirit, that we are the children of God; And if children, then heirs; *heirs of God*, and joint-heirs with Christ” (Romans 8:16-17).

Although we are temporarily made of dust, lower than the angels, God will someday put all things in subjection under our feet. “For in that he put all in subjection under him (man), he left *nothing* that is not put under him. But now we see *not yet* all things put under him” (Hebrews 2:8).

Imagine that! With Christ, we are someday to be the “heir of all things” (Hebrews 1:2). The Moffatt translation says Jesus is “HEIR OF THE UNIVERSE”! We will inherit it with Him!

There is a divine plan to human life. We are not mere flotsam and jetsam on the ocean of life.

We are not mere accidents in the cosmic universe. We didn’t just “happen” to be born. God our Father, created our original parents, Adam and Eve, and He ordained and designed that we should someday be born! Even so, He has also ordained that if we learn our lessons of love and obedience to His wonderful commandments, we shall someday become members of the very Kingdom of God as His immortal and eternal sons, and reign with Him forever. We shall rule over the vast limitless reaches of the unfathomable Universe!



How wonderful and wise a Creator our heavenly Father is! How magnificent and breath-taking is His Plan! How awe-inspiring is His love and goodness!

God says, "Only the fool hath said in his heart, There is no God." The Universe itself stands witness to the Great God who created it. Your own life reveals the marvelous Hand of the Creator.

The Great Nebula in the constellation Orion.—*Hale Observatories*



ABOUT THE AUTHOR: William F. Dankenbring, widely read author of articles and books, received a Master of Arts degree in theological journalism in 1970 and has done wide-ranging graduate studies. Over the past twelve years he has written many acclaimed articles for major Christian magazines and has recently authored two impressive, thoroughly researched books, *The Keys To Radiant Health* and *The First Genesis: A New Case for Creation*. In *The Creation Book for Children* Mr. Dankenbring provides fresh, unique and inspiring insights into the Master Plan of Creation. All who desire to know how theology and science interface in human experience will find his books satisfying, informative reading.

Chapter Five

Color, Camouflage and Nature's Amazing Inventions

Nature's creatures are the most amazing inventors of all time! Some animals—such as the octopus—discovered “jet propulsion” long before man invented the jet airplane.

Termites, tiny little creatures that are a pest to home builders because they eat wood, build intricate, huge “metropolises” complete with air conditioning, satellite suburbs, and storage areas. They even bring water to their homes by digging wells 120 feet deep!

Animals used camouflage to escape detection by enemies long before human soldiers learned to camouflage their weapons during war.

Color is not just something beautiful to look at. It is very important in Nature's scheme. The tide pool blenny drives other fish from its territory by displaying its brightly colored chin. Decorator crabs use parts of algae and sponges, putting them on their own upper shell to mask their own coloration.

Flatfish have an uncanny ability to perfectly match their background, the pattern of the sea bottom on which they rest.

Ingenious tricks and camouflage provide protection for smaller creatures; but predators themselves often resort to similar tricks in the never ending struggle of eat or be eaten.

Man's own efforts to disguise and camouflage his military weapons seem feeble in comparison with nature. The main method of concealment used by nature's creatures is simply matching the background. Meadowlarks disappear in a hay field, a woodfrog vanishes among dead leaves, a green tree frog hides in green air plants growing on trees.

Some creatures change their costumes to match the seasons. Wet and dry season broods among some butterflies show marked differences. The wet season dead leaf butterfly has a more dazzling pattern than the dry season brood. The arctic fox discards his brown summer coat for a bright white winter coat to match the winter's snow.

You may have noticed that a deer fawn has spots that help to conceal it among tiny shafts of sunlight in the summer. But in the winter a more uniform coat is needed, so the deer sheds its white hairs for brown ones as winter approaches. Since there are no leaves in the winter to cast tiny shafts of sunlight patterns, the brown coat is more protective.

Some of the artful camouflage tricks of nature make its creatures resemble magicians or quick-change artists. Within two or three minutes an American Anolis lizard can change from pea green to dark brown. The surgeon fish and the Nassau grouper can also change coloration very quickly. The surgeon fish is mostly black as it swims among coral reefs, but when it swims into clear water it quickly changes to a pure pale blue-grey which makes it very difficult to see.

The Nassau grouper can change to six or eight different appearances within a few short fleeting minutes. Usually very dark, it may turn several shades as a swimmer approaches, or adopt a strongly banded appearance, or turn almost white as it darts out into the open waters to escape.

Some harmless animals "mimic" dangerous distasteful animals in order to escape being eaten by predators. Many times one creature deliberately poses and acts like another. Some spiders hold up their two front legs giving the appearance of ants which have only six legs. Many moths look like wasps and hornets and act like them too. The hummingbird moth can even deceive humans as it hovers in front of flowers like a hummingbird!



Why are male birds usually more brightly decorated, and have more brilliant feathers, than the female birds of the species? The bright plumage may help attract a mate, or deter a rival, of course. But another reason is that the male birds usually keep far away from the nest where the female tends the young. This directs the attention of enemies to the male bird, away from the actual nest where the young are, and where the female blends into the background with her "ordinary" looking camouflage.

The huge "eyespot" on the head of some swallowtail butterflies are nothing but deception. The huge "eyes" give

The woodpecker pecks wood with his chisel-like beak, in its quest for food.—Goodpaster—National Audubon Society



The beak of the scarlet macaw is perfectly designed for flexibility, with the top part of the beak separately hinged to the upper jaw. The colorful macaw, the largest member of the parrot family, makes a fine pet. The ability of parrots to "talk" like humans is well known. — *Angermayer-Photo Researchers.*



A belted kingfisher nest illustrates merely one of the wide variety of nest-homes built by various birds. Where did birds “learn” this amazing architectural skill? How do they pass along the information to every succeeding generation?—*Austing—Photo Researchers*

enemies the impression that the butterflies are much bigger and more dangerous than they really are.

The amazing camouflage artists in nature are another evidence of the Supreme Artist—the Creator God who endowed them with these incredible, fascinating abilities.

Similarly, the inventiveness of nature’s creatures bespeaks the Supreme Genius of the Original Inventor of all things.

Did you know, for example, that the whirligig beetle, which is found all over the world in pools and lakes and rivers, has

A bird’s feather is an engineering masterpiece—extremely light weight, structurally strong and versatile, and readily repaired or replaced when damaged.—*Courtesy of Ambassador College*






The arctic tern—the greatest migrant traveller of them all—seems ready to take off on another 22,000 mile round trip—without either compass or sextant to guide him.—*Robert Hermes—National Audubon Society*

an amazing trait? This little creature, insignificant of itself, is equally at home in the air, on the water, or underwater. It can fly from pond to pond, and when it finds a new home, it uses its wings as a parachute, dropping gently to the surface of the water. When diving underwater, it takes with it, under its wings, an air bubble. On the surface of the water, it uses its two rear legs as oars to scull over the water.

The whirligig beetle is an aviator, parachutist, surface craft operator, and skin diver, all in one!

Long before Adam and Eve learned to sew, tiny ants, a species of *Oecophylla*, stitched leaves together in a spectacular fashion. Several ants, working as a team, pull the edges of two leaves together. If the leaves are too far apart, they form a living chain, each ant gripping the one behind with its hind legs. Then other ants join the sewing party, each carrying a grub between its jaws. The grubs emit silk, and are passed back and forth like shuttles until the two edges of the two leaves are securely fastened together by the silk strands.



A spider's web—silken threads spun and artistically arranged—is a fantastically clever construction. The little spider is one of nature's most patient, elaborate artists.—*Les Ralliff Photo*

Another amazing architectural feat of the animal world is tunnelling. It may seem simple, digging a tunnel, but not so at all! Moles for example are equipped with their own built in shovel, hoe, pick-ax, and garden fork. Their front paws combine a fork and shovel, and they are able to burrow into ground hard enough to require a pick to break!

Tunnelling requires more than just digging apparatus, however. It requires mathematical precision and engineering skill to be able to calculate position at every moment while working underground, blind, with no light, and nothing but dirt all around! A blind mole can bore a new tunnel and make it connect precisely with a pre-existing tunnel several feet away! Nobody knows how he does it.

Nor were Adam and Eve the first gardeners on earth. Did you know that some species of ants and termites raise their own gardens for food? The leaf cutter ants cultivate a fungus in special chambers in the ant nest, and feed on the fungus gardens.

Some species of termites also cultivate mushroom beds within their colonies. The fungus serves the termites by pre-digesting vegetable matter such as wood which the termites themselves are unable to digest.



A Hawaiian rainbow wrasse, better known as a "doctor fish," earns his keep by scrubbing, sanitizing and cleaning larger fish, and in return receives immunity from his natural enemies.—*Douglas Faulkner*

The giant clam of the Indian Ocean, which grows to be several feet across, is also a capable, ingenious gardener. Many single-celled green plants live within its tissues and form part of its food. When the clam opens its shell to expose itself to the sunlight filtering down from the surface of the shallow sea, the sun's rays enable the green plants to manufacture sugars and starch, causing the plants to grow and multiply. The plants are aided by the clam in another way. The clam has transparent lens structures which even focus the sunlight on the plants!

The wonders of nature defy human description. Bats navigate by means of echo-location. Electric eels, with electric cells capable of generating 220 volts, are capable of causing great pain to men. Dolphins and porpoises have a sonar system and use it as a depth-ranger as well as for detecting obstacles in the water.

To combat the radar or echo-location systems of bats, there are certain moths which give out sounds which disrupt the echo-location of pursuing bats—nature's own radar-jamming devices!



The Koala bear of Australia, a tree-dwelling marsupial, eats the leaves of the eucalyptus tree. This "Teddy Bear" can climb the highest trees. Although the leaves they eat are poisonous to other animals, the Koala must eat the leaves of one special species of the twelve types of eucalyptus tree, or it will die. -*Courtesy of Ambassador College*

We look at the tanks, armored cars, shields, and helmets of human armies, and then note that armor appears often in the animal kingdom—the armadillo even looks like a tank! Turtles and tortoises are renown for their heavily armored shells.

Human ingenuity and engineering were anticipated by nature many times over—the snorkel, the flying aircraft, the submarine with its periscope, artillery and chemical warfare, are all found among Nature's denizens.

The snorkel, which enables a submarine to replenish its air without surfacing, was anticipated in the hippopotamus and crocodile which have eyes and nostrils set high upon the head so the animals may remain submerged and still breathe and see above the surface.

Numerous aquatic animals have long breathing tubes which they push above the surface of the water to take in air. One of them is the rat-tailed maggot (the larva of a hoverfly). It can live in turgid water with its telescopic tail. While resting on the bottom of a pool, it can extend its breathing tube up beyond the surface to breathe.

Birds of course are the first heavier than air flying machines. They are able to soar, glide through the air, hover in place, and even able to migrate for thousands of miles without running out of fuel or energy or losing their sense of direction.

One of the champion migrants is the tiny blackpoll warbler. Every autumn it flies unerringly from its Canadian nest all the way to Brazil, a distance of over 4,000 miles.

The golden plover wings its way a distance of almost 8,000 miles from the edge of the Arctic Ocean in the north to far-off Argentina in the south. The blue-winged teal flies from Quebec, Canada to Guyana every year, a distance of 3,300 miles. The bristle-thighed curlew makes an annual round trip from Tahiti to central Alaska, flying 5,500 miles each way.

Even the unheralded barn swallow migrates yearly from northern Canada to north central Argentina, a distance of no less than 9,000 miles.

The top migrator among land birds is the little bobolink which averages 7,000 miles in its journey from Canada to Argentina.

The greatest migrator of them all, in terms of mileage, is the Arctic Tern. It leaves its nest at the age of six weeks in the Arctic, and flies nonstop to the region of Antarctica, 11,000 miles away, and finds its way back home the following summer. How it is able to navigate successfully for 22,000 miles scientists do not know. But migrate they do, and very successfully, too!

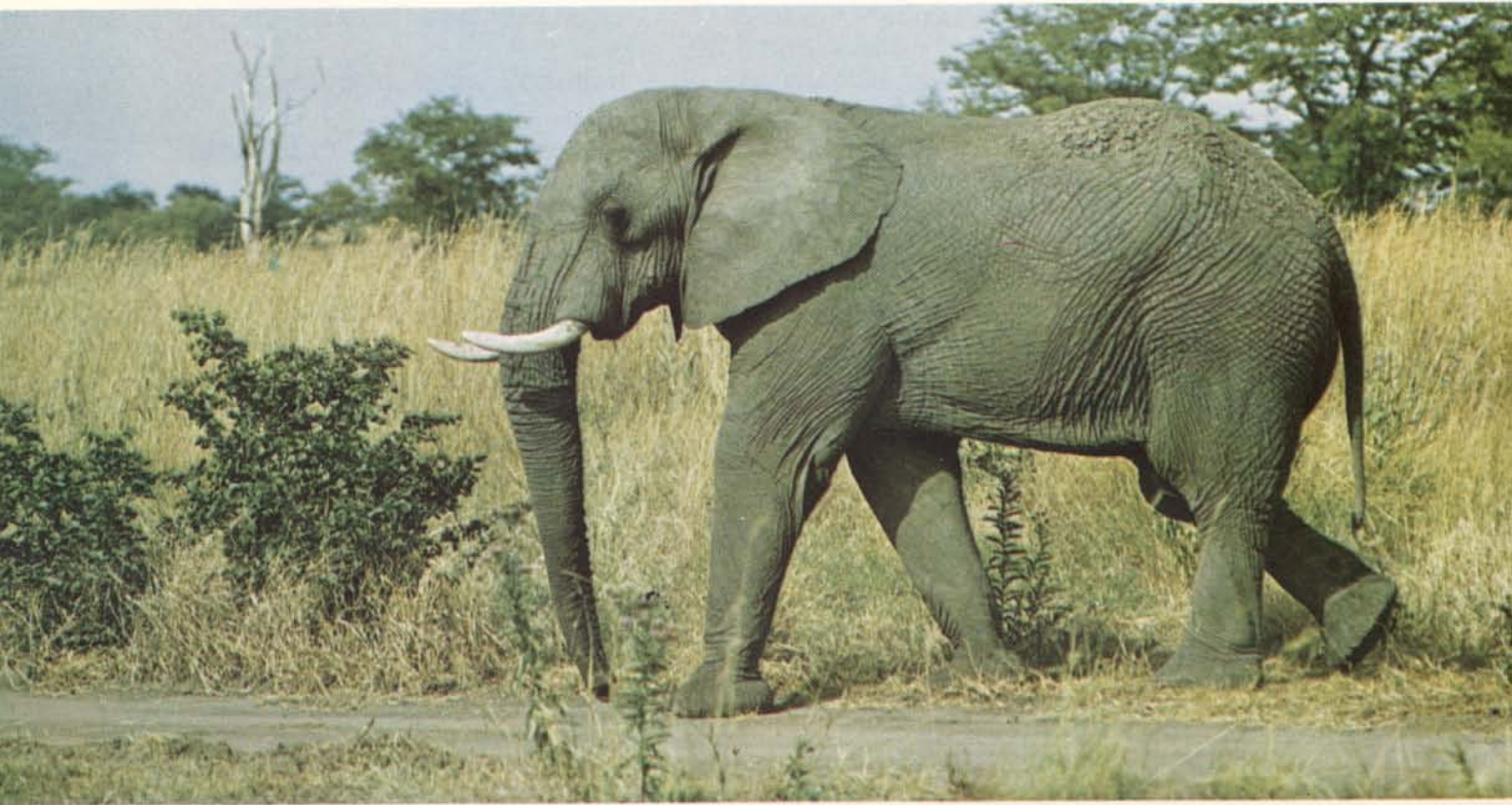
It has been estimated that perhaps one third of all bird species migrate. But evolutionary theory has not been able to explain the why or how of bird migration—or even less why the *first* bird that migrated attempted to do so—or how that first bird navigator was able to find his way accurately—or how many birds attempted to learn the secret of migration, and failed, and died in the dismal attempt, thus becoming extinct!

What about speed? How fast can animals travel? We humans are fascinated with speed. Millions watch in fascination as men strive to break a speed record and win a race, such as the Indianapolis 500 or the Grand Prix.

Animals also are "speed kings." Theoretically dolphins shouldn't be able to swim faster than ten knots, but they have been clocked at twenty knots or more for up to a half hour! Research and studies have showed that the skin of dolphins has a soft outer layer filled with vertical ducts containing spongy water-logged tissue. Tests showed that this design reduces friction of water and reduces drag by as much as 60 per cent!



The African lion. Prowling the veldt of East Africa, this tawny master of his domain is a powerful hunter, yet spends most of his time lounging in the sun or shade, sleeping.—*Ambassador College Photo*



The elephant, the largest of land mammals, with his ponderous bulk, long specially designed trunk, and big floppy ears, is another marvel of Nature's Design.—*Courtesy of Ambassador College*

Swordfish, marlin and sailfish have been clocked up to about 70 miles per hour. Flying fish have been timed at 35 miles per hour and can fly up to a quarter of a mile before descending to the sea.

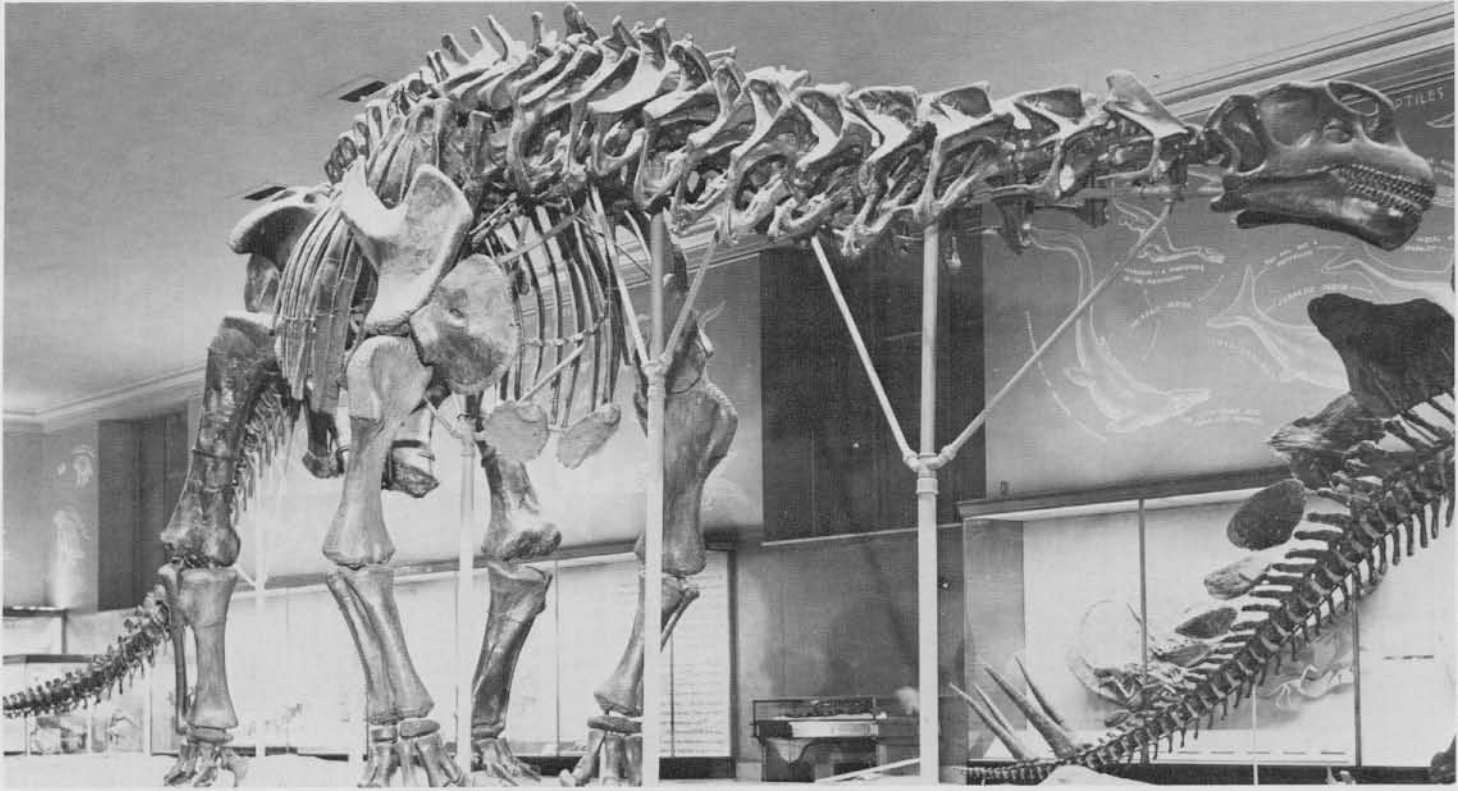
How fast can birds fly? The cloud swift has been measured up to 200 miles per hour. A peregrine falcon can reach 180 miles per hour when diving upon its prey. The racing pigeon in level flight has been clocked up to 94.3 miles per hour!

When we observe the many marvels, mysteries, and fascinating creatures in the Natural Realm, we see a glimpse of the wonderful and ingenious Mind of God, the Creator. The marvels of Nature reflect the majesty of the Creator who designed them, and placed them on the earth!

In the light of these mind stirring, inspiring features of the world around us, how can anybody say there is no God?



Dolphins—those merry mirthmakers of the sea—appear to be having a private joke at evolutionary theory. Do they know something that has escaped the attention of evolutionists?—*Courtesy of Ambassador College*



The huge brontosaurus, which reached a length of 80 feet, was equally at home on land and in the water. The stegosaur, with rows of heavy bony plates down its back and spikes on its tail, was heavily armored for protection. Triceratops, with long horns and a huge armor plate, was about 25 feet long—the original gladiator, built like an armored tank.—*American Museum of Natural History*

Chapter Six

“The World That Was...”

How long has life been on earth? When was man created? These seemingly simple questions have puzzled scientists for countless centuries. Some people believe all life was created just 6,000 years ago, and that dinosaurs—huge reptiles that once lived on the earth—were contemporary with man.

Scientific research and the studies of the rocks and strata of the earth, however, present strong evidence that there was a world before Adam—a totally different kind of world.

According to the dating methods of geologists, many millions of years ago the world was dominated by huge reptiles—the great dinosaurs, with such awesome names as Brontosaurus, Allosaurus, Triceratops, and Tyrannosaurus Rex. The latter was a flesh eating monster that preyed upon other dinosaurs.

The world of that time was very different from our world, today. Scientists estimate that the Age of Reptiles, when dinosaurs ruled the land, occurred about 80-120 million years ago. We know dinosaurs once were very numerous around the world. Their bones have been dug out of the earth in the United States, Canada, Europe, and around the world.

Dinosaurs ruled the land. Pterosaurs and other flying reptiles sailed across the skies. Ichthyosaurs and mosasaurs reigned supreme in the seas.

Then, abruptly, suddenly, they all perished. It is one of the greatest riddles of all science. What caused the massive extinction of all the dinosaurs around the world? Was there some kind of incredible upheaval—destruction—that wiped out these huge living creatures?

In the strata of the ground of that time, there is vast evidence of flooding, continents breaking apart, mountains being uplifted, and volcanic eruptions and vast lava flows.

Wholesale destruction occurred. But today nobody knows why. No scientist has yet come up with a theory that explains all the facts. The “time of great dying” of the dinosaurs remains one of the most fundamental unsolved mysteries of all science.

Most modern theories suggest that some awesome catastrophism was involved. Perhaps some cosmic disturbance changed the climate violently and altered the face of the earth. Recent theories have speculated that a comet from outer space collided with the earth, or came close enough to have a severe effect on life on this planet.

While men speculate, however, perhaps the answer—or a clue to the ultimate solution to the mystery—is contained in the pages of the Bible.

The Bible reveals that there was a “world before man.”

When we carefully read the first chapter of Genesis, the first two verses, we find that God created the heavens and the earth “in the beginning”—a remote time that may have been millions or billions of years ago. Then, in verse two, we find that something happened. As some translations explain it, “The earth *became* in darkness and confusion,” or empty and waste. Something incredible happened. Destruction caused the earth, which had been beautiful and filled with life, to become a waste, desolate no-man’s land.

When the earth was created, we read that the angels shouted and sang for joy (Job 38:5-7). It must have been a beautiful world. But then tragedy occurred.

“The earth was (or became) without form and void, and darkness was upon the face of the deep” (Genesis 1:2).

What happened?

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The ancient world was strikingly different from the world of today. The dinosaurs, huge reptiles, dominated the land, seas, and sky. —*American Museum of Natural History*



The fearsome Tyrannosaurus Rex surveys the ancient world.—*Courtesy of Ambassador College*

The cause of that cataclysm, and the violent end of the world of the dinosaurs, may well have been connected with another episode of violence mentioned in the Bible which occurred long before the time of man.

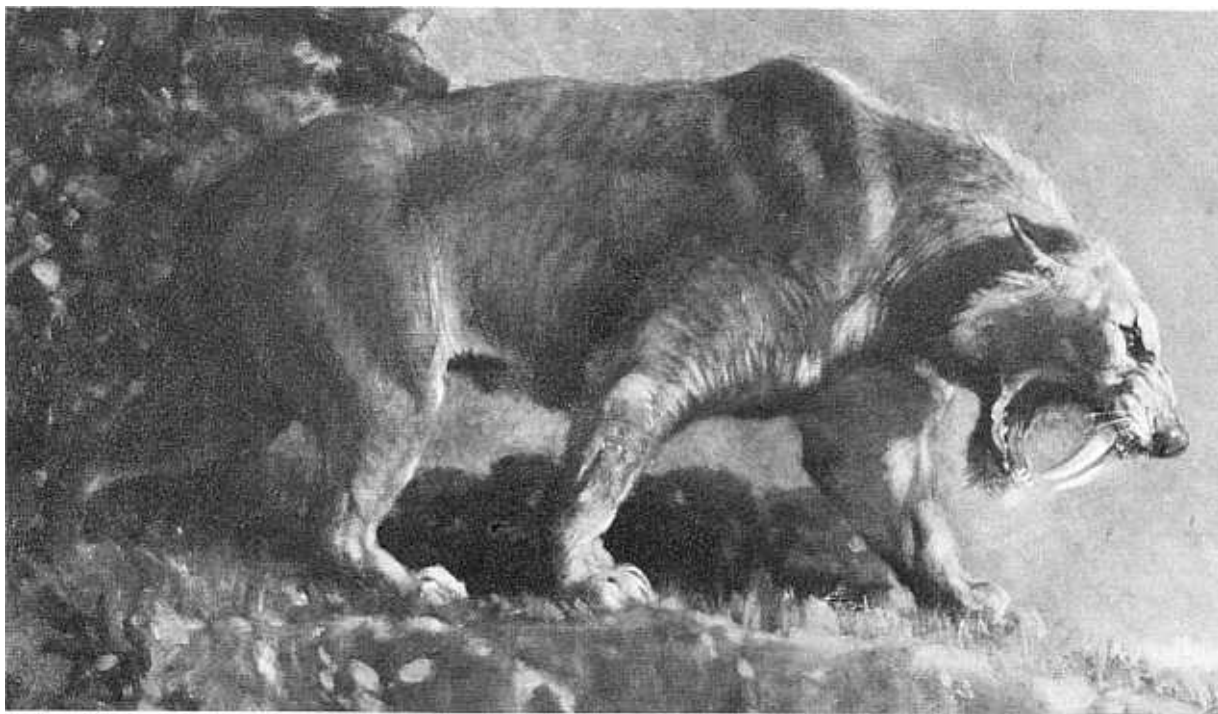
“How art thou fallen from heaven, O Lucifer, son of the morning!” God says in the book of Isaiah. “For thou hast said in thine heart, I will ascend into heaven, I will exalt my throne above the stars of God: I will sit also upon the mount of the congregation, in the sides of the north: I will ascend above the heights of the clouds; I will be like the most High. Yet thou shalt be brought down to hell, to the sides of the pit” (Isaiah 14:12, 13-14).

Long ago, in the primordial mists of time, the archangel Lucifer rebelled against God, and attempted to seize His divine throne and take over the rulership of the Universe. He had been given control over the earth and was “in Eden, the garden of God” (Ezekiel 28:12-13). But evil crept into his heart—he became ambitious and filled with pride (Ezekiel 28:15-17). He launched a massive rebellion against God and ascended to heaven to do battle against his own Creator!

Apparently one third of the angels on earth followed him in his folly. In the cosmic, titanic conflict that followed, the archangel Lucifer—his name changed to Satan, the Devil, or Adversary—was cast forcefully back down to earth. He was ejected from the heavens, and “his tail drew the third part of the stars of heaven (the angels), and did cast them to the earth” (Revelation 12:4).

In this mighty fall from power, it is very likely that many of the “stars of heaven”—the asteroids and planetoids in the solar system—were cast down to the earth with him, causing a terrible meteoric bombardment and tremendous upheaval upon the earth itself!

Whether other planets were affected in this tremendous battle, and the surface of Mars, and the Moon, were also bombarded and scarred as a result, we don't know. It is also possible that one of the planets of the solar system—which may have orbited



The huge sabre-toothed cat, Smilodon, flourished during the Pleistocene age. About the size of a lion, this flesh-eating predator was a fearful sight to behold.—*American Museum of Natural History*

between the orbits of Mars and Jupiter—was destroyed in this ancient celestial warfare, leaving the present swarm of asteroids in a belt between Mars and Jupiter.

One thing we do know: “God spared not the angels that sinned, but cast them down to hell, and delivered them into chains of darkness, to be reserved unto judgment” (II Peter 2:4).

Jude the apostle relates: “And the angels which kept not their first estate, but left their own habitation, he hath reserved in everlasting chains under darkness unto the judgment of the great day” (Jude 6).

The awesome destructions that occurred long before the time of Adam were no doubt connected with the rebellion and activity of Lucifer and his army of angels. Lucifer had rejected the rulership of God. He had been placed over the earth, but despised his dominion and attempted to grasp control over the entire Universe. His plot failed. And as a mute, enduring, eternal testimony of his abortive rebellion, the evidence of cataclysm and destruction lies written in the rocks and fossil beds and twisted and torn strata of the earth.



A beautiful Hawaiian sunset reminds us of the words in Genesis: "AND THE EVENING AND THE MORNING WERE THE FIRST DAY. . ."—*Mike Hendrickson Photo*

Chapter Seven

“Let Us Make Man...”

After the rebellion of Lucifer and his angels, God recreated the surface of the earth, and created new living creatures to replace many that had perished. The account of this new creation is given in the first chapter of Genesis, verses 3-31.

But this time God went far beyond any previous time of creation. This time He created man.

We read: “And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

“So God created man in his own image, in the image of God created he him; male and female created he them” (Genesis 1:26-27).

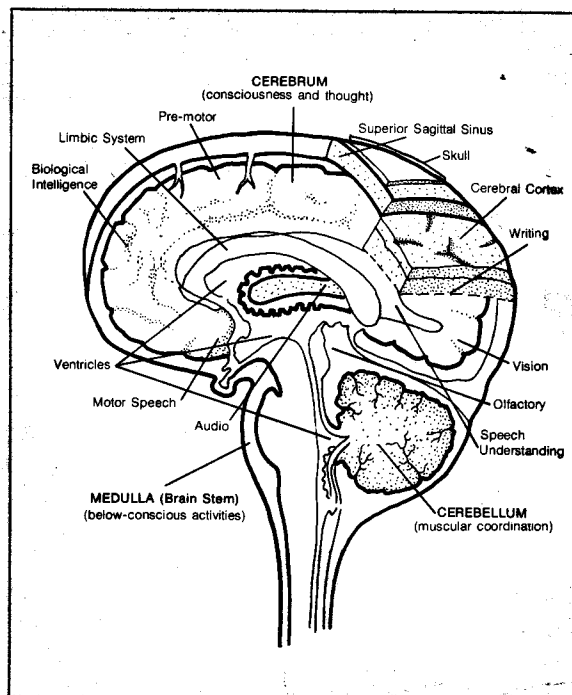
God made man of the dust of the earth (Genesis 2:6). This time, if his created beings went astray, and rebelled against His government, and His laws of love, He would simply let them return to dust—die. He did not want more spirit beings—like Lucifer and his angels—to rebel and have to be punished for aeons of time in chains of darkness.

This time God intended man—His supreme creation—to have the opportunity to learn lessons in a fleshly, mortal existence—to learn that disobedience and rebellion would be a very unpleasant way of life and would result in death.

Man was created in the very image and likeness of God. Man was given a brain with creative capacity, inventive skill, and endowed with some of the same attributes and abilities as His Divine Parent, only on a limited basis.

Think for a moment about the human brain. That is the round, wrinkly grapefruit size object that fits inside your head.

Your brain is a miracle of creation. Scientists don't even know what makes it work or how it does its job. But they have discovered many interesting facts about the brain.



Man's brain—the most complex organization of molecules in the entire universe—is composed of 10 billion neurons and 100 billion glial cells. This mental “box” is far more sophisticated than any computer. Was it the product of mere chance? Or of the mind of a Supreme Designer?—*Andy Voht*

They know, for example, that it is composed of perhaps 10,000,000,000 little nerve cells called neurons, each one acting as a conductor, integrator and transmitter of impulse energy. Neurons receive and carry information through a chemical and electrical process that is not very well understood.

Also in the brain are 100 billion smaller non-nerve cells called glial cells which may compose a support framework for the neurons. They account for about half the mass of the brain. They may also be vitally involved with memory.

Memory itself is a marvelous mystery. How we are able to remember things which happened years ago is a baffling feature of the mind of man.

Could the human brain have evolved by sheer accident?

The brain is like an amazing network of 100 billion computer memory banks and 10,000,000,000 computer sensory devices all working together! It is far more fascinating and complex than the greatest computer built by man!

We know the huge IBM computers were designed and built by computer technologists and engineers. Obviously the brain of man was designed and built by the greatest Technologist and Computer Designer and Engineer of them all—the Creator God.

The human brain, no bigger than a grapefruit, is hooked together like a marvelously complicated switchboard and can store during a human lifetime an estimated 200,000,000,000,000,000,000 bits of information!

How can we “see”? The human eye, connected to the brain via the optic nerve, is very complex itself. The brightest object your eye can see in bright light is 20 billion times brighter than the dimmest object it can see at night! The human eye, like a tiny camera, can snap its pictures in a continuous stream, and immediately have them developed in the “darkroom” laboratory of your brain.

The “seeing” part of the eye is the retina, located at the back of the eye and composed of tiny rods and cones. There are about 137,000,000 rods and cones with perhaps 1,000,000 nerve lines leading from them to the brain.

Your brain receives messages from the “sensory receptors” of your body—which include the eye, the ear, the nose, the taste buds on your tongue, and your skin (the sense of touch).

Scientists are fascinated by the human brain and the sensory devices by which it has contact with the outside world. They are beginning to believe that perhaps the ultimate creative capacity of the brain may be *infinite*.

The human brain is truly a masterpiece of creation. God created us with creative capacity similar in many respects to His own. How foolish it would be to believe that such an incredible object could have “evolved” by mindless, sheer chance!

Think. Think about thought. The powers of reason. Awareness. Even self-awareness. Awareness that *you* are a unique individual in time and space. *Think* about it.

But the biggest mystery of all is—*why* did God create man? Do you know?

Why did God say, “Let us make man in *our* image”?

The word for God in Genesis, chapter 1, is the Hebrew word *Elohim*. It is a uniplural word, similar to the English words church, family, nation. It means “more than one.” Literally, *Elohim* means “The Mighty Ones.” It refers, of course, to God the Father, and also to the One who was known as “The Word,” in ancient times, the One who shed His divinity and became born of a virgin—Jesus Christ (John 1:1).

The Father and Christ created mankind in their own image, shape and likeness. Why?

The apostle Paul explained it perfectly: “The Spirit itself beareth witness with our spirit, that we are the children of God; And if children, then heirs; *heirs of God*, and joint-heirs with Christ” (Romans 8:16-17).

Although we are temporarily made of dust, lower than the angels, God will someday put all things in subjection under our feet. “For in that he put all in subjection under him (man), he left *nothing* that is not put under him. But now we see *not yet* all things put under him” (Hebrews 2:8).

Imagine that! With Christ, we are someday to be the “heir of all things” (Hebrews 1:2). The Moffatt translation says Jesus is “HEIR OF THE UNIVERSE”! We will inherit it with Him!

There is a divine plan to human life. We are not mere flotsam and jetsam on the ocean of life.

We are not mere accidents in the cosmic universe. We didn’t just “happen” to be born. God our Father, created our original parents, Adam and Eve, and He ordained and designed that we should someday be born! Even so, He has also ordained that if we learn our lessons of love and obedience to His wonderful commandments, we shall someday become members of the very Kingdom of God as His immortal and eternal sons, and reign with Him forever. We shall rule over the vast limitless reaches of the unfathomable Universe!



How wonderful and wise a Creator our heavenly Father is! How magnificent and breath-taking is His Plan! How awe-inspiring is His love and goodness!

God says, "Only the fool hath said in his heart, There is no God." The Universe itself stands witness to the Great God who created it. Your own life reveals the marvelous Hand of the Creator.

The Great Nebula in the constellation Orion.—*Hale Observatories*



ABOUT THE AUTHOR: William F. Dankenbring, widely read author of articles and books, received a Master of Arts degree in theological journalism in 1970 and has done wide-ranging graduate studies. Over the past twelve years he has written many acclaimed articles for major Christian magazines and has recently authored two impressive, thoroughly researched books, *The Keys To Radiant Health* and *The First Genesis: A New Case for Creation*. In *The Creation Book for Children* Mr. Dankenbring provides fresh, unique and inspiring insights into the Master Plan of Creation. All who desire to know how theology and science interface in human experience will find his books satisfying, informative reading.

