EARTHQUAKES— and the Bible!

Science is discovering amazing new facts concerning earthquakes. Meanwhile, self-styled "earthquake prophets" are claiming to "predict" quakes. In all this concern about earthquakes, few have looked into the Bible for the astounding facts it gives about earthquakes. This article reveals those vital facts.

by Ambassador College Graduate School of Theology

ANCIENT peoples once believed that the earth was supported upon the back of a huge legendary beast. Whenever the earth convulsed they believed it to be the movements of this great beast.

As man's knowledge increased, he learned more about the earth beneath his feet. Scientists now know that deep within the earth tremendous forces are at work. These forces are part of the primary system of physical law which keeps this earth in balance.

Seismologists, experts who study earthquakes, realize there is much they do not yet know or understand about these great forces constantly in motion beneath the surface of the earth. Yet, their awesome potential is evident when one examines the breathtaking flaws and distortions on the earth's surface.

Earthquake Faults

In recent years seismologists have come to astounding new knowledge concerning the *origin* of earthquakes and earthquake potential on this earth. In their studies they have encountered new potentials that *stagger the imagination*.

Over sixty years ago, at the time of the San Francisco earthquake of 1906, scientists were aware that certain "earthquake cracks" were associated with the movements of the earth's crust. At that time scientists believed that these cracks in the earth were the *by-product* of earth tremors — but had nothing to do with their cause.

San Franciscans, back in 1906, knew of the "earthquake crack" and referred to it as the "great fissure." Other earthquake cracks had been observed in different places along the Pacific Coast, but had never been associated in any way with each other.

Soon after 1906 and the San Francisco disaster, serious investigations began into these isolated earthquake cracks. It was at this time that a startling truth was learned. These "isolated" faults were all part of one tremendous gargantuan fault system! It was to this particular vast fault — running visibly on the surface of the land for over 600 miles and stretching from the Gulf of California to a point well above San Francisco — that scientists gave the name "San Andreas Fault Line."

Intensive studies of similar fault systems have revealed to scientists and seismologists that the *entire surface* of our earth is cracked and creased by these tremendous cracks and deformities.

Startling new facts came to light as a result of exhaustive and intensive scientific research made during the International Geophysical Year of 1957. Charting and scrutinizing the hidden depths of previously unknown ocean floors, scientists discovered additional breathtaking flaws in the earth's crust.

Beneath the waters of the Mid-

Atlantic lies the *Mid-Atlantic Ridge*, a spectacular mountain range tracing its serpentine course from Antarctica in the south, through the Atlantic, all the way to the North Pole. This breathtaking ridge continues, in fact, beyond the North Pole on into the Pacific and AROUND THE WORLD.

Probing the mysteries of this phenomenon, scientists have discovered a huge *crack* or fault running along the crest of this ridge — in places MILES wide.

In similar studies in the Pacific, giant fractures trace their way — unseen — beneath the sea, mute evidence of the tremendous forces lying below.

Terrible Potential

In studying these fault systems, scientists have had to come to an entirely new concept in earthquake potential. With the startling new knowledge of the immensity and magnitude of the tremendous fault systems that trace themselves through this earth, seismologists and geologists came face to face with the destructive potential in the earth's

Just as scientists 60 years ago did not associate the isolated fissures near San Francisco, California, with one tremendous fault system over 600 miles long, scientists of just a decade ago did not realize how intricately this earth is cracked into a maze or network of *related* fault systems. With the

investigations of the I.G.Y. the staggering truth became known.

Seismologists and earthquake researchers have had to revise their concepts of earthquake potential in light of the recent discoveries. No longer can a single earthquake be considered as an isolated incident, but, rather a symptom in a complex interrelated system of earthquake faults which is worldwide in scope!

Today, a theory called the New Global Tectonics visualizes earthquakes, volcanoes, mountain building and other physical phenomena as part of the same series of interrelated activities of our earth.

The Little-Understood Fault

The most famous of all these earth faults is the ominous San Andreas in California. Consider some of the staggering geological knowledge available on the San Andreas fault alone.

One of the most revealing bits of information concerns the horizontal displacement on this fault. The information is important because it shows what *can happen* in the earth's crust.

Some geologists think the displacement has been "only" several thousand feet. Others claim it has been on the order of several HUNDRED MILES!

Can you imagine the forces in the earth that would move billions upon billions of cubic yards of material thousands of feet — or hundreds of miles? And, of course, geologists cannot really be sure that this movement has been gradual. That is, in fact, one of the key questions: Has the present displacement of two inches a year been the same throughout time?

Geologists don't know!

Let's take a brief look at some of the geologic evidence. It is shocking in what it reveals about the awesome potential of the San Andreas fault system.

Hundreds of Miles of Shifts

According to some geologists, what is called Pleistocene gravel in the Carrizo Plain area of California has been offset some TWELVE MILES! Strata called Pliocene may be offset anywhere from 20 to 50 miles!

Some rocks called Miocene are appar-

ently offset even further along the San Andreas fault system. In central California is an area of granitic rock, schist and marble detritus. However, on the other side of the fault this type of rock simply is NOT there!

The nearest possible source of the above-mentioned rock is in the Gabilan Range — some EIGHTY MILES to the northwest. Some geologists think this shows a right lateral displacement of this distance.

In rocks called lower Miocene and Oligocene there is a strand of marine and non-marine beds which may have once been continuous across the fault. If it was, the rocks have been displaced by ONE HUNDRED AND SEVENTY-FIVE MILES!

Similarities in rock and fossils of the Eocene, Paleocene and Late Cretaceous rocks of the Santa Cruz Mountains and the San Emiglio-Temblor Range — some 225 miles to the south — suggest that the fault has been displaced by this distance

What are termed Jurassic and Triassic rocks may be offset perhaps to about THREE HUNDRED AND FIFTY MILES!

Fearful Energy Potential

The 1906 earthquake — one of California's worst — had a MAXIMUM displacement of "only" 21 feet.

A geologist computed the energy that caused the 1906 surface rupture of the San Andreas. His answer was 130,000,000,000,000,000 foot-pounds of energy. That is enough energy to raise that many pounds one foot. That equals a total amount lifted of 65 trillion short tons!

Here's another way to look at it.

Think of the mass of rock shifted by the fault. A block of earth some 275 miles long was moved. Its average thrust was 13 feet — the greatest thrust was about twenty-one feet.

The fault probably moved to a depth of twelve miles. If you assume a shearing force of about 1,850 pounds per square inch is needed to break granite, then the work accomplished in terms of electricity was fifty billion kilowatt hours. That would be enough to supply one-fourth of all residences in the United States with power for a FULL YEAR.

Of course, all these calculations are "guestimates." At best, they give us only a weak glimpse of the magnitude of earthquake energy.

All about us in this earth is such mute testimony. We see great mountains with twisted, uplifted strata. We can visit giant valleys and chasms which have been created by super-upheavals of the earth.

In many places on the surface of the earth the very fault lines themselves with tortured rock and distorted strata are visible. One such area is in California, not over 50 miles from Pasadena, in the Coastal Range mountains near Gorman, California. Here the San Gabriel fault, a tributary of the great San Andreas fault line — often called the "Mother of Earthquakes" — is exposed plainly to view.

There is no more dramatic display of wildly distorted strata anywhere. As many times as one goes through this area he is still spellbound by the fantastic potential of earthquake force shown so graphically there. Can you imagine what would happen to a mighty city like Los Angeles should such displacement occur beneath the city?

Havoc in the Himalayas

Such catastrophic evidence of past violence is seen the world over. One example involves the destruction of mammal life, as is clearly seen in the Siwalik Hills. These are the foothills of the mighty Himalayas.

In the nineteenth century, workers found the remains of living and extinct animals here in great abundance.

The mammal life of the area today cannot compare with the plethora of creatures' remains found in the Siwalik Hills. Musing on this catastrophic extinction, geologist D. N. Wadia said, "The sudden and widespread reduction, by extinction, of the Siwalik mammals is a most startling event for the geologist as well as the biologist.

"The great carnivores, the varied races of elephants belonging to no less than 25 to 30 species... the numerous tribes of large and highly specialized ungulates [hoofed animals]... are to be seen no more in an immediately succeeding age" (D. N. Wadia, Geology

of India, 2nd edition, London: Macmillan and Co., Ltd., 1939, p. 279).

When Burma Broke Up

This was No local disaster. Thirteen hundred miles away the same spectacle of sudden and wholesale slaughter and distortion of land surface is seen. The place is central Burma. Here two fossiliferous horizons occur, interrupted by approximately 4000 feet of sand.

The signs of two destructions are quite obvious in deposits sometimes 10,000 feet thick.

In the upper horizon, we find typical Pleistocene mammals, similar to those in the Siwalik Hills.

"The sediments are remarkable for the large quantities of fossil-wood associated with them.... Hundreds and thousands of entire trunks of silicified trees and huge logs lying in the sandstones suggest the denudation of thickly forested" area (*Ibid.*, p. 275).

The proof is unmistakable. Cataclysmic occurrences wiped out mammal life and denuded the landscape. The effects of violent water action and tectonic activity are everywhere obvious.

Obvious, too, is the fact that great mountain uplifts occurred simultaneously with these incursions of the sea. That such uplifts occurred in the history of man — as did the violent flooding — is also unmistakable.

"In Kashmir, de Terra and Sahne have found sedimentary deposits of an ancient sea bottom which in places has been elevated to an altitude of FIVE THOUSAND FEET and up-ended to an angle of as much as 40 degrees.

"These deposits contain Paleolithic fossils and other organismal fragments belonging to the Quaternary period.

"Who in the face of such facts can venture to repudiate the bold hypothesis that since the appearance of man on earth the passes leading into Tibet have become more difficult owing to the rise of THREE THOUSAND FEET or more in the height of the mountains — however fantastic changes so extensive may seem to a modern geologist?" (Arnold Heim and August Gansser, The Throne of the Gods, An Account of the First Swiss Expedition to the Himalayas, 1939, p. 218.)

Our Battered Earth

Such evidence shows the unimaginable destruction visited upon the earth in past ages. That such occurrences were catastrophic and sudden cannot be denied.

Many of these evidences of catastrophes were the result of a worldwide flooding — with accompanying volcanoes, *earthquakes* and other phenomena.

The account of this is recorded in the legends of most all peoples on earth. It is proved by geology and paleontology. So all-pervading is the evidence that it led scientist Rhodes W. Fairbridge to make the admission:

"A deluge such as that described in the Book of Genesis occurs in the legends and folklore of almost every ancient people.

"Such agreement among the legends of so many peoples living in distant parts of the world has caused scholars in modern times to wonder WHETHER mankind did in truth experience the worldwide catastrophe of a deluge" (Rhodes W. Fairbridge, "The Changing Level of the Sca," Scientific American, Vol. 202, May, 1960, page 70).

For further information PROVING that a worldwide series of catastrophes did occur — as recorded in Genesis — write for our FREE reprint, "Worldwide Mammal Massacre."

Today, most people reject the hand of God in the affairs of men. Yet, the EVIDENCE of the hand of God intervening is too clear not to accept.

In the above-mentioned catastrophes, a worldwide flood with accompanying volcanoes, earthquakes, mountain building and land depression wiped out mammal life except for the creatures spared by Noah. God says He PURPOSELY intervened and destroyed the earth because of what man was doing to himself.

Not Natural Disasters

The point is that these disasters were not natural — but directly induced by God! The earthquakes of today are merely natural outgrowths of a "faulty" earth which groans and strains. However, the destructive potential evidenced in a worldwide fault system is plain to see.

There is a time coming when God is once more going to take a direct hand in the affairs of men. He says He is going to use this already existent worldwide rift system to bring on earthquakes of an UNPARALLELED magnitude.

These will not be the ordinary, isolated earthquakes we experience today — however destructive they may be. These will be God-induced quakes that will bring civilization to its knees.

Notice, what the Bible says of these earthquakes.

Earthquakes a Sign

When Jesus Christ was asked, "Tell us, when shall these things be? and what shall be the *sign* of thy coming and the end of the age?" — Jesus Christ said that among many terrible and destructive circumstances EARTH-QUAKES would occur in many places (Matt. 24:3, 7).

Jesus Christ promised that together with famines and pestilences, *earth-quakes* will be one of the *signs* immediately preceding His imminent return. Christ told His disciples, "Now learn a parable of the fig tree; When his branch is yet tender, and putteth forth leaves, *ye know* that summer is nigh: So likewise ye, when ye shall see all these things, know that it is *near*, even at the doors" (Matt. 24:32, 33).

Those same days are described in Luke 21:25-26: "And there shall be signs in the sun, and in the moon, and in the stars; and upon the earth *distress* of nations, with perplexity; the sea and the waves roaring; Men's hearts FAILING THEM FOR FEAR, and for looking after those things which are *coming* on the earth: for the powers of heaven shall be shaken."

The Return of Jesus Christ

All these events will culminate in the return of Jesus Christ to this earth! Let's understand what is to occur.

Notice Zechariah 14. "Behold the day of the Lord cometh, and thy spoil shall be divided in the midst of thee" (verse 1). Now continuing in verse 4. "And his feet shall stand in that day upon the mount of Olives, which is before Jerusalem on the east, and the mount of Olives shall CLEAVE in the midst thereof toward the east and

toward the west, and there shall be a very great valley; and half of the mountain shall remove toward the north, and half of it toward the south. And ye shall flee to the valley of the mountains...yea, ye shall flee like as ye fled before the EARTHQUAKE in the days of Uzziah king of Judah..." (verse 5).

Jesus Christ is returning to this earth to plant His feet upon the Mount of Olives. In that day there will be a TRE-MENDOUS earthquake in which the whole face of the land will be changed. Mountains will be moved out of their places! New valleys and rivers will be created.

That same day is mentioned in Revelation 16. The time setting is the return of Jesus Christ to this earth. "And the seventh angel poured out his vial into the air; and there came a great voice out of the temple of heaven, from the throne, saying, It is done. And there were voices, and thunders, and lightnings; AND THERE WAS A GREAT EARTHQUAKE, such as was not since men were upon the earth, so mighty an earthquake and so great" (verses 17-18).

The whole face of the earth is to be changed by this cataclysmic earthquake. "And every island fled away, and the mountains were not found" (verse 20).

The return of Jesus Christ is going to be highlighted by the most cataclysmic earthquake that has ever struck this earth. It will defy the imagination! Every fault system and earthquake crack on the face of the earth will come into full play when Jesus Christ descends to shake terribly the earth.

Tremendous Tidal Waves

Not only will the earth itself writhe under the cataclysmic convulsions of this tremendous earthquake, but also the very oceans and seas will erupt in tremendous seismic waves to devastate huge portions of this earth.

Notice Jesus Christ's words in Luke 21. "For these be the days of *vengeance*, that all things which are written may be fulfilled. But woe unto them that are with child, and to them that give suck, in *those days!* for there shall be GREAT DISTRESS in the land, and wrath upon this people. . . .

"And there shall be signs in the sun, and in the moon, and in the stars; and upon the earth distress of nations, with perplexity; THE SEA AND THE WAVES ROARING; Men's hearts failing them for fear, and for looking after those things which are coming on the earth: for the powers of heaven shall be shaken" (Luke 21:22, 23, 25, 26).

Yes, these are the terrible and aweinspiring times spoken of by Jesus Christ and soon to come upon this earth.

Notice the prophecy of Isaiah 2:17-21: "And the loftiness of man shall be bowed down, and the haughtiness of men shall be made low: and the Lord alone shall be exalted in that day. And the idols he shall utterly abolish [the possessions men value above God's way]. And they shall go into the holes of the rocks, and into the caves of the earth, for FEAR of the Lord, and for the glory of His majesty, when He ariseth to SHAKE TERRIBLY THE EARTH.

"In that day a man shall cast his idols of silver, and his idols of gold, which they made each one for himself to worship, to the moles and to the bats; To go into the clefts of the rocks, and into the tops of the ragged rocks, for FEAR of the Lord, and for the glory of his majesty, WHEN HE ARISETH TO SHAKE TERRIBLY THE EARTH."

God Our Protector

God promises deliverance and protection to His people. God will not bring these things upon those who obey Him and trust in Him. Notice His promise in Psalm 91.

"He that dwelleth in the secret place of the most High [he that is obeying and keeping the Commandments of Almighty God] shall abide under the shadow of the Almighty.... Surely he shall deliver thee from the snare of the fowler, and from the *noisome* pestilence....

"Thou shalt not be afraid for the terror by night; nor for the arrow that flieth by day; nor for the pestilence that walketh in darkness; nor for the destruction that wasteth at noonday. A thousand shall fall at thy side, and ten thousand at thy right hand; but it shall not come nigh thee....

"Because thou hast made the Eternal, which is my refuge, even the most High, thy habitation; There shall no evil befall thee, neither shall any plague come nigh thy dwelling. For he shall give his angels charge over thee, to keep thee in all thy ways."

There is also a time coming — a wonderful world tomorrow of peace. A time when there will be *no* earthquakes, volcanoes or other natural disasters. You can survive the time of coming calamities and live to see this world tomorrow.

To find out all about this new age, and how you can qualify to be there, write for our FREE, 96-page booklet, The Wonderful World Tomorrow — What It Will Be Like, and a free subscription to TOMORROW'S WORLD — a magazine of Biblical understanding — published by the Graduate School of Theology of Ambassador College.