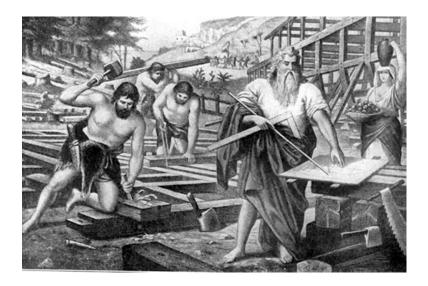
# The story of the deluge



Albert O. Hudson

### Preface

Albert Owen Hudson, of Milborne Port England, was a faithful Christian, Bible Student and Scholar of the twentieth century and the author of many books. He was born in 1899 and died in 2000 at 101 years of age. In his early years he worked as an Electrical Engineer for Standard Telephones. His aptitude for detail served him well in research Biblical details. He had access to the British Museum to reference ancient records in support of this and other studies.

The Bible Fellowship Union began publishing a journal in 1924 "The Bible Students Monthly". In 1935 the name was changed to "The Bible Study Monthly". The journal was headed by Albert O. Hudson since its inception, and included many of his articles. He had a scholarly approach to Bible study particularly Old Testament history and prophecy concerning God's Kingdom and the practical outworking of God's purpose. In 1942 Albert Hudson wrote a series of articles entitled "Jacob's Trouble" that appeared as a booklet later that year. There have been two editions and a reprint resulting in many thousands of copies being dispatched across the world. In 1989 he also published "Bible Students in Britain — The Story of a Hundred Years".

He had an exceptional memory but also a very methodical filing system to store the fruit of his extensive reading, research and studies. His knowledge of history and the ancient world was outstanding. He loved the study of the Scriptures and sought to clarify doctrinal aspects of the faith. He had a wonderful gift with words, particularly the written word. His treatises contained much valuable information and wisdom.

The following exposition comprised a series of articles in his journal from 1974-1976. The British spelling and formatting is retained. We have appended a chart at the end of this manuscript with this dating and events during the year on the ark.

The following is a transcript beginning with the introductory page for January 1974. Then follows 13 articles until January 1976.

#### **Concerning Ourselves**

With this year the "Monthly" enters upon its second half-century. Fifty years ago, in the year 1924, the magazine was launched in a quite modest manner with a circulation reaching only a limited circle. Quite some years passed before it began to attain either its present size or extent of readership. The few comprising the little band which steered it through the first pioneering years have mostly long since gone to be with the Lord, and probably there are not many present readers who remember them or even know their names—but the journal continues to find its place, still very modest compared with some Christian magazines but holding nevertheless to one principle not found so often in this modern cost-conscious world, the old traditionary one of "without money and without price". There is nothing to pay and it is sent freely to all who appreciate its contents and message; it depends for continued production upon the spontaneous free-will gifts received from those who feel led and able to contribute. At this the beginning of a New Year very sincere appreciation and acknowledgment is extended to all such. It is in the confidence engendered by such friendly cooperation that we go forward into 1974.

The world is fast running down to its end. The reins of government and of control are slipping from the hands of men. Human society has become so complex that it is becoming unmanageable. Men's hearts are failing them for fear and for looking to the things that are coming upon the earth, even as Jesus foretold two thousand years ago. But the outlook is not really dark. Behind the cloud is the silver lining. The signs of the pre-millennial Advent of our Lord Christ are increasingly manifest; there is abundant evidence to the thinking Christian that we are living in the "Days of the Son of Man", that period which immediately precedes his revelation to all mankind in the power of his Messianic reign. The renaissance of Israel, "kingdom of this world" though it be at present, is an outward sign too patent to ignore. No man can be saved and attain his destiny without faith in Christ, but no man will be condemned without a full opportunity of knowledge so to believe and be converted. In the meantime the Bible is the book of daily life, adequate for instruction in the things of God and a sure guide to the working of God in history, past and future. These things form part of the message of the "Monthly"; in the inspiration of this belief, if the Lord will, it shall continue.

### THE STORY OF THE DELUGE

#### 1. The End of a World

"In the sixteenth or seventeenth century from the Creation, there happen'd a most extraordinary and prodigious Deluge of waters upon the Earth".

So wrote the learned William Whiston, contemporary of Sir Isaac Newton and a famed scholar of his day, in his book *"New Theory of the Earth"* published in 1696. The celebrated professor had assembled a great deal of argument, scientific and theological, to describe exactly what took place when that great catastrophe came upon the world. The passage of three centuries during which scientific knowledge has increased a thousandfold has falsified some of those arguments, and a few of the alleged supporting facts are amusing rather than convincing, but the basis of the good Doctor's thesis remains stable and the historicity of such a great Flood in the lands of the Bible—in fact of several such floods—has been established beyond dispute by the work of archeologists in our own day. William Whiston's alleged facts may not have been always beyond question, but his faith was solidly founded.

Of all the stories, histories and traditions that have captivated the minds of men, that of the great Flood which once destroyed the world seems to hold first place. It has found its way in one form or another into practically every nation and tribe on the face of the earth and references to the great catastrophe appear in the annals of nearly every generation from the present back to the beginning of history. Christian, Jew and Moslem, pagan peoples and savage peoples, all have their particular versions of the event, agreeing in the main and differing only in detail. Ancient civilisations of the Mediterranean immortalised the story in poem and song; colonies of aboriginals in South America and India kept alive the legend by oral repetition from father to son. The Jews enshrined the story in the Bible; the Moslems in the Koran. One of the oldest literary compositions the world possesses, the "Epic of Gilgamish" written before the days of Abraham, preserves the Sumerian version whilst at the other end of history the daily newspapers of the past few years have recorded the efforts-and failures-of various expeditions which have set out from Britain, America and France to explore Mount Ararat in hope of finding the remains of the Ark. And the fact that this latest—and somewhat belated—enthusiasm for the verification of Scriptural truth, coinciding as it does with a certain tendency in the political world to surround Russia with observation posts, has drawn from the Soviet Government the not unreasonable comment that the alleged search is but a cover for other and vastly different activities (Ararat is on the Russian frontier) makes no difference to the editorial view that such expeditions constitute "news" in the newspaper sense of the term.

Any attempt to tell the story of the Flood, therefore, must involve references to a great many historians and writers, from the unnamed scribe who first penned the story which appears in the Book of Genesis, and in a different form in the *"Epic of Gilgamish"*, to the equally anonymous journalists and others of our own generation busily writing up vivid accounts of men of the nineteenth or twentieth centuries who claim to have climbed—or flown over—the celebrated mountain and seen with their own eyes the ruins of the famous vessel. It must take into account the incidental evidences afforded by the discoveries of archeologists and the investigations of geologists, for the rocks of the earth and relics of past ages have some testimony to offer. Likewise the studies of astronomers and geographers have much to contribute when it comes to considering the natural causes of the catastrophe; the fact that it was a visitation of Divine judgment upon a sinful world makes it no less true that the Flood was a stupendous cataclysm of Nature.

First and foremost to the Christian, however, comes the moral and dispensational teaching of the story. This is the first example in the history of humanity of what may be

termed collective judgment—the execution of a judicial sentence upon a whole community which had transgressed the law. As such it was an assurance of the active intervention of God in human affairs when the state of society demands such intervention. The Flood was the end of a world, the wiping of the slate clean and the making of a fresh start. We in this day live in just such another period, another climax of human wickedness and rebellion which is to bring down fresh Divine judgment, another end of a world, and another fresh start. The story is of surpassing interest to us today on that account, for it exemplifies the principles upon which Divine judgment operates, and it shows above all things that with the onset of judgment there comes also a means of deliverance through repentance. The men of the antediluvian world were not left without warning of what was to come; any who wished could have been saved in the same way as was Noah and his family. It need not be assumed that the patriarch was the only man of his generation who knew how to build a boat. The exercise of belief in the message which was being proclaimed and the necessary activity in harmony therewith would have enabled many more—in fact "whosoever would"—to be saved. But no one believed, save the one family, and so they all perished.

Our Lord drew an analogy between these aspects of the event and the happenings that would characterise the time of his Second Advent and Messianic kingdom. "As the days of Noah were" He said "so shall also the presence of the Son of man be. For as in the days that were before the flood they were eating and drinking, marrying and giving in marriage, until the day that Noah entered into the ark, and knew not until the flood came, and took them all away; so shall also the presence of the San of man be" (Matt. 24:37-39). The force of the simile resides in the indifference and heedlessness of men in face of the coming catastrophic ending to a world order. The antediluvians did not believe that anything would occur to disrupt or bring to an end their institutions and their way of life; to them it was a truism that "all things continue as from the beginning of creation". When the crisis came upon them they were unprepared for it. So it is, said Jesus, when this present world order, built upon and supported by human greed and selfishness, comes to its inevitable end at the time He returns to take his power and rule the nations for their blessing and uplift and for the elimination of sin. Men do not believe and will not believe that this present international system-social, commercial, political, everything—is destined for a destruction every bit as sweeping and final as that which in the story came upon the world of Noah's day. When one reflects how closely the condition of the world today, both as respects the moral state of its peoples and the polluted state of the planet itself, points to an imminent such crisis it is difficult to deny the logic of the argument that here is one very convincing evidence that we are now living in the "Days of the Son of man", the early stages of his Advent, unperceived by and unknown to the heedless majority but realised by those who, like Noah of old, have walked and are walking with God. So the judgment must inevitably come upon the world, even although in the Divine purpose there is blessing to follow.

The promise of the future is associated with all this. After the storm comes the rainbow. For the first time in the Bible there appears the Divine guarantee of perpetuity for the earth and its inhabitants. God makes a covenant, not only with man, but with the lower creation as well, affirming his intention that no more would the earth be physically depopulated as it had been then. The earth is to be one scene of Divine promises, and for the fulfilment of those promises it is essential that the earth should remain. The second progenitor of the human race will succeed where the first one failed. In that we have a clear anticipation of the inspired words of St. Paul three thousand years later, when he declared that although by the First Adam came death, by the Second Adam there will come the resurrection from the dead and restoration to the full glory of God. In the Sumerian legend, which is a considerably distorted version of the original story from which the Genesis account is also drawn, Noah and his wife were endowed with immortality and taken to dwell with the gods in the Sumerian Paradise "at the mouth of the rivers" in the Persian Gulf land afterwards knows as Dilmun. To this day worship is offered at the shrine of Al Khidr on the sacred island of Failaka in the Persian Gulf; the identity of Al Khidr can be traced back through centuries of Moslem and then pagan legend to Atra-Khasis the Sumerian equivalent of Noah—one of the most striking examples of the persistence of legend the world can show. That translation of the central figure in the story to the land of the gods may, after all, have been but an early poet's realisation of the fact that only by means of the cleansing effected by the Flood could men hope to obtain the exalted status of sons of God and enter at last into the everlasting inheritance which God has prepared.

To this day the lands of ancient Sumeria, Babylon and Assyria, the modern Iraq, abound with legends of the great Flood, handed down from father to son through the generations. Even were there no written records surviving and no Bible account, the story could be reconstructed in detail. The ruins of Shuruppak, the city where Noah is supposed to have lived before the Flood, are still there. The place where he built the Ark and the nearby village where his wife was born are pointed out to the credulous. The alleged course of the Ark during the hundred and fifty days that it was afloat can be plotted from the various stories, including the near escape from shipwreck on Mount Sinjar in western Iraq and its final landing among the mountains of Kurdistan. To the extent that such traditions help to fill up gaps in the Bible narrative they can be viewed with a certain amount of interest, for some of them at least may well possess a basis of truth, surviving their telling and re-telling through the ages. We need not think that men have remembered nothing whatever of the Flood save the details that are recorded in the Book of Genesis.

Modern research has established that there were at least three devastating floods in the Euphrates plain during the Third millennium before Christ and each of these caused a local break in the culture of the region. Forty years ago Sir Leonard Woolley's discovery of the greatest of these during his excavations at Ur of the Chaldees led to its identification with the Flood story of the Bible but this is now generally discounted. The stratum of clay which Woolley assumed to have been deposited by the Flood of Noah's day was laid down at about the time Sumerian recorded history, as distinct from myth, begins, when Kish, the first city-state of the Sumerians, came into being, and there is known to have been a considerable time span of some centuries prior to that date during which the Sumerian civilisation was evolving. True to this, Woolley and others found evidence of such earlier peoples beneath the clay layers which betokened these various local floods. Below these evidences lies a thick deposit of black mud and stones bearing on its upper surface pottery objects lying as if swept together by a rush of waters and this deposit is found at various places all over the plain. Here are the signs of the earliest and greatest flood of all and this, in all probability, is the one to which the Bible story refers.

The story as it appears in the Book of Genesis has to be viewed against the background of its authorship and date. The theory so fashionable half a century ago that this and other historical narratives in Genesis were first written up by priests and scribes in the days of the Hebrew monarchy and based upon the folklore and traditions of their own days is no longer accepted by serious students. There is no doubt that the five books accredited to Moses were actually from his hand. It is also clear that so far as history before his own time is concerned he had access to earlier documents and records. The first eleven chapters of Genesis, which include the story of the Great Flood, contain so many words and terms of Sumerian origin that it is obvious that Moses transcribed, probably without alteration, Sumerian records of a much earlier date. The geographical indications in these chapters, although relatively few, depict Sumerian geography and place names of the First Dynasty of Kish, prior to the introduction of Sumerian cuneiform, which indicates that these records must have been originally composed in the archaic pictographic script which preceded cuneiform and of

which very few examples have as yet been discovered. Expressed in Biblical terms this would have been in the days of Eber and Peleg the descendants of Shem (Gen. 10:25) and it may not be too far-fetched to speculate that these two patriarchs, ancestors of Abraham, may have been responsible for the completion of this record or at least the editing of previous records and updating to their own time. What is of interest is the fact that the internal evidence of these early Genesis chapters does indicate that they existed at least three centuries before the Sumerian account of the Flood first saw the light. That disposes of the too frequent assertion that the Bible story of the Flood was taken from the Sumerian account. In point of fact, both accounts probably came from a common source, but the Sumerian account has been considerably distorted by the introduction of the many gods and goddesses of Sumerian mythology. Nevertheless, since so much of Sumerian records on the tablets has in these latter days proven to be remarkably accurate it is not wise to dismiss the Sumerian version as valueless; to some extent its testimony can be admitted and the fact that the Sumerians did preserve, quite independently of the Bible, their own version of an event which they claimed happened in their own country in historic time is an additional confirmation of the veracity of the Bible account.

The story of the Flood and its relation to the overruling purposes of God, the Divine Plan, can only be understood when something of the condition of the antediluvian world is appreciated. The record says "and God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually." (Gen. 6:5.) It is difficult fully to comprehend the significance of that statement. This was not just a hasty or prejudiced generalisation such as, from time to time, is issued by some social or ecclesiastical authority. This was a considered and dispassionate statement of the situation. Humanity had degenerated to a level far below that which exists in the world had never at any other time known a wickedness so great as that which existed just before the Flood. The Bible, rightly understood, reveals the prime cause of that wickedness. It is left to the apocryphal books, notably the "Book of Enoch" to dwell in detail upon the conditions of that dying age and the manner in which judgment came, but the Bible does, in two verses, indicate quite positively that the incidence of sin upon the earth was tremendously accelerated and intensified by a rebellion among the angels.

The plain implication of Gen. 6:1 is so strange to the thought of modern times that theologians and scholars have resorted to all kinds of expedients to find alternative explanations. This is not the place to go into this particular matter in detail, but it may be said in order to present a picture of the world as it was before the Flood that the "sons of God" of Gen. 6:1 denote the angels, beings of the celestial world. This was the fixed understanding of the Israelites throughout their history and the belief of the early Christian Church. A number of those angels rebelled against God and left their own high estate, their own order of being, to take upon themselves human flesh and form, so quitting the celestial world for the terrestrial, and in that condition took the daughters of men as wives. Their purpose in so doing is not clearly stated; it has been inferred that their object was the infusion of new, vital angelic life into the dying human race in an attempt to defeat the execution of the Divine sentence upon sin passed on the race at the beginning. If so, the purpose was frustrated; perhaps it was fundamentally impossible. The offspring of these unnatural unions, only half-human, were pictured in later legend as brutish monsters that roamed the earth ravening, killing and devouring until men went in terror of them. What kind of creatures they were we do not certainly know; the implication in Genesis and in the apocryphal Book of Enoch is that they were wiped out by the Flood, and the New Testament rounds off the story by declaring that their angelic-become-demonic fathers were thereafter restrained, as St. Jude puts it "in everlasting chains of darkness unto the judgment of the great day". (Jude 6; 2 Pet. 2:4; 1 Pet. 1:19-20).

So ended the first great Age of human history. It opened in the serene loveliness of Eden, without a whisper or shadow of sin to mar the happiness of the first human beings to walk this earth. It closed, something like two thousand years later, a dark, noisome cesspit of all iniquity, an order of society fit only for destruction. Men had been given every power to make of the primitive earth a beautiful and luxuriant habitation in which they could live endless lives given over to continued progress in the knowledge and understanding of God and his ways. Instead, they chose, and willingly chose, the way of sin, even to the extent of allying themselves with those who in the heavens had also rebelled against God. Too late, they discovered the unnameable horrors to which that alliance had subjected them, and, in the picturesque language of the author of the First Book of Enoch, *"the earth laid accusation against the lawless ones… and as mien perished, they cried, and their cry went up to heaven."* 

But the consequences of evil are not so lightly to be mitigated. God in his mercy heard that cry and sent deliverance—but the deliverance was what we in our day would call "long-term". The wisdom of God declared that the mere removal of that fearful oppression would not of itself effect complete reformation. Men groaned under the tyranny but they themselves were still wedded to sin. Only the supreme experience of death, coupled later on with the coming of that day when all men are to stand before the Great White Throne to hear the conditions of eternal life or eternal death rehearsed in their ears, can effect that. The rot had gone too far; there had to be a clean sweep and a fresh start.

So God sent the Flood.

#### 2. Man of Shuruppak

"Man of Shuruppak, O son of Ubara-tutu, build thou a ship and finish it quickly, for by a deluge I will destroy all substance and life... And I, understanding, spoke thuswise to Ea, my Lord, What thou sayest, Lord, I will do... Then on the fifth day I laid out the shape of my ship... all I possessed of the seed of all living I laded aboard her. Into the ship I embarked with all my kindred and family with me, cattle and beasts of the field..."

This is how Atra-Khasis, priest-king of the ancient city of Shuruppak on the river Euphrates, begins his account of the great Flood which destroyed all life save that of those who were with him in the ship. Ea was the principal god of the Sumerians and Atra-Khasis the only one in all Shuruppak who had remained faithful to him. Because of the wickedness of mankind the great gods had held a council and decided to wipe out the human race by a flood of waters; Atra-Khasis because of his piety was told of the decision and instructed to build a ship for the salvation of himself and his family. The whole story was written down as an epic poem about two thousand years before Christ in what is called the *"Epic of Gil-garnish"* and copied and re-copied for centuries afterward until the 7th century B.C. Its details leave no doubt that it comes from the same basis as the Flood story of Genesis although grossly distorted and mingled with lingering memories of other and later floods in the same land.

"And God said unto Noah, ... make thee an ark of gopher wood... I do bring a flood of waters upon the earth, to destroy all flesh wherein is the breath of life, from under heaven: and every thing that is in the earth shall die... And Noah did according unto all that the Lord commanded him... And Noah went in, and his sons, and his wife, and his sons wives... of clean beasts, and beasts that are not clean, and of everything that creepeth upon the earth" (Gen. 6 & 7).

The story in the Book of Genesis comes down to us virtually unchanged since the days of Abraham, but it has been translated and retranslated many times. The English of our present Bibles comes from Latin and Greek and Hebrew versions of the early A.D. centuries. That Hebrew differed greatly from the Hebrew script in which Moses transcribed the early records of Genesis which he inherited from his forebears, records which were undoubtedly written in Babylonian cuneiform ("arrow-headed") characters on clay tablets which he had to translate. Even this cuneiform writing was preceded by the pictographic script ("picture-writing") of the earliest Sumerians, long before the days of Abraham. That takes us back to about 2500 B.C., approximately the time of Eber forefather of Abraham. No kind of earlier writing has been discovered so that it is not possible to trace the written stories of Genesis any further back.

The Sumerian account dates from just about the same time, or more correctly just a little later. It is generally believed that the *"Epic of Gilgamish"* which contains the Flood story, was written about 2300 B.C. to commemorate the exploits of Gilgamish king of Erech who lived about a century earlier. The oldest copy so far discovered dates from 2100 B.C. and other copies in the possession of various scholars and museums belong to times up to 650 B.C., the latter written, not in Sumerian, which by then was a dead language, but in Babylonian or Assyrian. The copies vary a good deal in detail; it is evident that the same care was not taken to preserve the original text as with the Bible narrative, but the main outline remains the same and it is clear that the accounts retain the main features of the original story.

There are many legends of the Deluge among almost all the peoples of earth. Something like seventy or eighty have been collected, and whilst many of them are probably derived from the work of early Christian missionaries of mediaeval times or earlier, or the dispersion of Israelites and Jews over the world through the ages, it is thought that some at least have come down as direct recollections of the event, transmitted from generation to generation and becoming greatly modified in so doing. No surviving account save the Sumerian is so similar to the Bible story as to yield any additional useful information but the fact of the existence of so fixed a conviction among almost all primitive peoples is itself a supporting evidence that something like this did indeed happen in the dawn of history.

Who then was this Noah, who figured so prominently in so great a happening, and what kind of man was he? Gen. 6:9 says of him, briefly, that he "was a just man, and perfect in his generations, and Noah walked with God". The Lord told him "thee have I seen righteous before me in this generation" (Gen. 7:1). These expressions have sometimes been taken to mean that Noah was the only one left in all the earth of pure Adamic blood, that he alone was uncontaminated with the alien strain introduced by the apostate "sons of God". That is not likely; to be effective the desired purity of Adamic descent would have to be true also of Noah's wife and the three sons' wives and it would require quite an exercise in genetics to establish how this could be so and still exclude all others living. The word rendered "perfect" means to be morally upright or whole, and "generation", "dor", denotes the then existing generation. When the reference is to a man's antecedents or origin the word "toledoth" is usually employed and this is not the case here. It may be taken then that God looked down upon a depraved and corrupt society and found only one man standing up as a beacon light for righteousness, much as was the case with Lot much later in the story of Sodom and Gomorrah. Like Abraham, Moses, Daniel, the Apostle Paul, Noah was a man of sterling faith and fixity of character, pledged to obey unquestionably the decree and will of God. It might well be said that no other man in history was ever presented with so stupendous a challenge; he was to witness the utter dissolution of the world he knew, build a structure the like of which never man had seen wherewith to escape the fate of his fellows, and with only his own family around him, start a new world. And all that the inspired record says of his supreme faith, translated into action, is "Thus did Noah; according to all that God commanded him, so did he".

Where did the event take place; on what part of the world stage did the patriarch play his part? The Bible tells us little about the world of his day; just where he lived, what the state of the civilisation he knew, the arts and sciences of his day, we do not know. One geographical clue is given in the account, and that is very useful. We are told in Gen. 8:4 that *"the Ark rested in the seventh month… upon the mountains of Ararat"*. This does not necessarily mean, as is

generally assumed, the mountain now bearing that name in eastern Turkey. Ararat is the anglicised form of Urartu, the ancient name of the district lying between Lake Van and Lake Urmia known in modern times as Kurdistan, and at present coming within the north-eastern part of modern Iraq with a small strip in the south-east of Turkey. If it was in this district that the Ark came to rest, it is tolerably certain that it had drifted from the wide plains south of the mountains, watered by the Tigris and Euphrates, which now constitutes Iraq, and in earlier days saw the rise and fall of the empires of Sumeria, Assyria and Babylonia. It is therefore highly probable that the old Sumerian tradition, to the effect that Noah was a dweller in the south country, near the head of the Persian Gulf, rests on a basis of fact. The city of Shuruppak, said to be his native city, was in fact not built until many centuries after the Flood but the Sumerian story has clearly combined with the original record some recollections of a later great flood of the Euphrates which desolated Shuruppak and Erech and a great part of the Euphrates plain about four hundred years before the birth of Abraham so that this must not be taken too seriously. But the fact that the Sumerian traditions all agree that the Ark rested on the mountain they called Nisir in the same mountain range that is indicated in Genesis, that this mountain was ever after venerated by them as the "mountain of the world" and the home of the gods, and the detailed exactitude of the stories of the event emanating from this region compared with those current in other parts of the world, is good ground for postulating the plains of the Euphrates as the scene of Noah's life and labours.

The inference to be drawn from the description of Eden in the second chapter of Genesis, written by a dweller on the Euphrates about twenty-five centuries before Christ and using the geographical names current in his day, is that the first home of man was to the south of the confluence of that river with the Tigris and two others, and therefore at a spot now covered by the waters of the Persian Gulf. It is to be expected that the Flood made changes to the configuration of the land but even so, since the Indian Ocean has existed from before mankind's entrance upon earth and hence presented an impassable barrier southward, and the Arabian highlands and Persian mountains made migration east and west difficult, successive generations before the Flood must have tended to migrate northward, following the courses of the great rivers, Tigris and Euphrates. In such case the principal centre of the antediluvian world, the territory which was most thickly populated and would have attained the highest degree of civilisation, would be this "land of the two rivers", the land which afterwards became Babylonia and Assyria and owned Abraham as its noblest son. Colonists may have gone out into Syria and down into Egypt, thence settling in the Nile valley and along the north coast of Africa. They may have struck eastward, inland towards Tibet and along the seacoast towards India. Westwards they may have penetrated southern Europe. The only concrete basis for assessing the extent to which antediluvian man colonised the earth is by the interpretation of remains of Palaeolithic and Neolithic man and hazarding an opinion at what point the Deluge interrupted their respective cultures, and this at best has to be on a very approximate basis. There seems to be general agreement among contemporary authorities that the Neolithic culture originated in the Tigris-Euphrates valley and thence spread, first west into Syria and Turkey, and that not until a time which must have been the time of the Flood did it extend much farther. Now the principal difference between the Neolithic and their predecessors is that the former grew crops and kept sheep and cattle for food whereas the latter had not attained this stage of development and lived entirely by hunting and gathering wild plants for food. From the Bible point of view this looks very much like an antediluvian world in which a restricted area in the present Middle East boasted an intelligent and perhaps highly cultured and artistic people surrounded by outlying tribes who had so degenerated from the original human stock as to be capable of living only by gathering what Nature provided.

It is perhaps natural to think of the antediluvian world as being populated more or less to the extent that is true of the world today. There is every reason to believe that the contrary

was the case. It is much more likely that the human community was relatively small and that few had migrated very far from the original centre of the first men. A great deal of publicity attends the discovery of an occasional skull or other relic of pre-historic man but not so much is said about the paucity of such finds relative to the corresponding finds of animal remains, compared with the numerical relation between the number of human beings and of large mammals on the earth today. The archaeological evidence is that early man was distinguished by his rarity. Such evidence as the Old Testament gives us seems to indicate that human increase was extremely slow—fantastically slow—in the early days of history compared with later times. In the first two hundred and thirty years (Septuagint) of his life Adam had only three sons. Perhaps he had as many daughters. The families of the post-diluvian patriarchs who are said to have lived three or four hundred years were no larger than average families of two or three generations ago. At a rather later date Abraham and his two brothers were born over a period of sixty years. Taking all that can be inferred from the Old Testament into consideration, it is unlikely that world population in Noah's day amounted to more than a few millions. Some check on the validity of these figures is afforded by the investigations of an acknowledged authority (Putnam in "Energy in the future") who estimates that two thousand years after the beginning of Neolithic culture the population of the world would have been between half-a-million and four millions; from the Bible standpoint this would have been the time of the Flood.

In any discussion as to the historical truth of the story of the Flood there arises sooner or later the question as to the extent of the earth's surface affected and whether all mankind in the earth did in fact perish in the catastrophe. The older commentators used to picture the earth completely enveloped in water standing to a depth of twenty-two feet (the "fifteen cubits" of Gen. 7:20) above the summit of the highest mountain, some five miles high. The fact that if such was the case there would be nowhere for the waters to drain away was overlooked or glossed over. The fifteen cubits, of course, referred to the territory over which the Ark actually passed, being an observation taken at the time and in fact can be shown to be the depth of water required to float the laden vessel. The modern attitude tends to the view that so far as the actual narrative is concerned the description relates only to those facts which were within the observer's own knowledge and, generally speaking, to the territory he was familiar with; in short, the plain of Iraq with its encircling mountains. The word used for "earth" in the narrative means equally either the entire planet or an expanse of territory such as in English is denoted by the word "land". The question of the geographical extent of the catastrophe will be considered later on in connection with an examination into its possible natural causes; for the moment it is sufficient to note that the narrative itself need only be viewed in relation to the area in which it is set.

The question as to whether the entire human race was wiped out, needs more detailed consideration. From the non-Biblical point of view it is virtually impossible to hazard an opinion since the answer depends upon both the extent to which the Flood penetrated and the extent to which man, however small in numbers, had spread over the earth. From the Biblical point of view the problem is different. The narrative is very definite that the corruption of mankind was so complete that the Deity moved to wipe them out and make a fresh start with Noah and his sons. The language used denotes totality; *"all flesh had corrupted his way upon earth"*, *"I will destroy man whom I have created from the face of the earth… but Noah found grace in the eyes of the Lord"*, *"I do bring a flood of waters upon the earth to destroy all flesh, and everything that is in the earth shall die, but with these shall I establish my covenant"*, *"these are the three sons of Noah, and of them was the whole earth overspread*". It can reasonably be argued that this language, sweeping as it is, applies to the lower animals in equal measure to man, and it is certainly not true that all such were destroyed; the fauna of Australia and Tasmania, for example, include types found nowhere else in the world and those lands

have been separated from the other continents from a time before man existed. It is also admittedly difficult for anthropologists to classify all existing human racial types within the limits of three principal ancestors—Shem, Ham and Japheth. The difficulties may be more apparent than real. On the assumption of a limited occupation of the earth at the time of the Flood it is possible reasonably to envisage the destruction of all living, both men and animals, in that area, the more remote animal creation remaining unaffected. Some such hypothesis may go far toward reconciling these discordant factors; so far as Noah and his family were concerned, it was certainly the case that the whole of the world they knew was destroyed and they alone were left living.

When did all this happen? According to the chronological chain which can be constructed from various statements and allusions in the Old Testament, the Flood occurred in, approximately, the 34th century before Christ (taking the patriarchal periods as stated in the Septuagint, which is now established as correct in this particular). This is a thousand years before the beginning of recorded history. Accurate dating still does not go back much before 1500 B.C., but the rise of the Sumerian city-states is fairly well established at about 2600 B.C. This is useful, for there is evidence of several disastrous floods in the "land of the two rivers" all of which were later in time than the great Deluge. The earliest of these—the one which deposited the eight-foot strata of clay at Ur which Woolley at first thought was evidence of the Deluge—came towards the end of what is called the Ubaid period which might have been round about 2700 B.C. Prior to this there had to be time, if the Genesis account is to be accepted, for the increase of population to a figure commensurate with what is known of the primitive Sumerians and Egyptians. An interesting sidelight on the problem is the fact that several widely dissimilar peoples date the beginning of history at about that time. Thus Chinese history commences in the 27th B.C. century, that of ancient Egypt in the 29th, and the Hindu world era in the 32nd. The Maya of Central America, who had one of the most sophisticated calendar systems the world has seen, started their year on 14th October 3373 B.C. Whatever the significance of these various calendar systems it does seem that something of tremendous significance to all races of mankind occurred some three millenniums before Christ.

Reasonably enough, then, we can take the Sumerian legends as affording a very suitable background to the Bible story. We do not need to concern ourselves unduly as to whether the Flood overspread the whole earth or not. We have but to picture it as it affected the Middle East. Then, as now, the land was a wide, flat plain, the size of England, bounded on the north and east by a lofty and tortuous range of mountains. Through the plain flowed the four rivers of Gen. 2, ultimately joining at a point below which lay the lost Eden. Dotted over that plain must have been the luxurious cities of the antediluvians and on those broad rivers they must have taken their pleasures. Somewhere here must have lived Enoch, who served God and was translated and not seen again. Here, on this ground, walked the materialised angels who had sinned against God and were now sinning against humanity; this was the land that more than any other must have fulfilled the words of Gen. 6:11 in being filled with violence. Here the "giants" of Gen. 6:4 roamed abroad, preying on helpless mankind; perhaps the skeletons of those monstrous creatures lie buried there now, deep below the silt and gravel of the Deluge, amidst relics of the magnificence of those early days, deeper down than any of our archaeologists have as yet penetrated. Here must have been the land where Noah was born, and lived six hundred years, and preached righteousness, and heard the voice of God, warning him of things not seen as yet, and so "prepared an ark, to the saving of his house, by the which he condemned the world, and became heir of the righteousness which is by faith" (Heb. 11:7). To the north-east of that land still stands the mountain, venerated by Sumerian, Assyrian and Babylonian for three thousand years thereafter as the "mountain of the gods in the sides of the north" where the Ark at length came to rest, from which Noah and his family came forth to make all things new.

#### 3. The Building of the Ark

A moderately detailed specification for the construction of the Ark is given in the Book of Genesis. It must be remembered that the vessel was not intended to proceed by any kind of motive power nor to steer a course. It had but to float on the surface until the flood had abated; its construction had to be of a type that would withstand turbulent water but it required neither sails, oars or rudder. It is true that the Babylonian legends include a steersman to manipulate the steering-oars characteristic of Babylonian ships, and even recorded his name, Puzur-Amurri, but to steer a ship the size of the Ark by the primitive methods known to the Babylonians would have demanded a veritable army of steersmen, and this part of the ancient legends is certainly an embellishment.

The word "ark" is, in the Hebrew Bible, *"tebah"*, a word so archaic that scholars do not know to what language it belongs. Dr. Yahuda has suggested that it comes from the Egyptian *"tebet"*, meaning a box or chest; the only other occasion on which the word is used is to describe the covered basket of bulrushes in which the babe Moses was committed to the river, which supports the suggestion. The Greek *"kibotos"* and Latin *"arca"—from* which the English "ark" is derived—both mean box or chest. The term is well descriptive of the structure which Noah built; it was nothing at all like the orthodox ship's hull surmounted by a gable-roofed dwelling house which is so often pictured, and caricatured in children's toys. Students of the Genesis account decided many years ago that the Ark was a three-floored structure having a flat base and twoy sides which sloped toward each other and met at an angle at the top. It was, so to speak, triangular in cross-section, the ground floor being the widest. The length was very great in relation to the width and height so that it presented the general appearance of a long three-sided box. With the ends rounded to withstand the force of the waves, such a structure would float partially submerged and be, to a great extent, unaffected by the violence of waves and currents.

Seventy years ago an experimental vessel was built in Denmark to the same proportions as the Ark—but very much smaller—and of the same constructional style. This boat was thirty feet long, five feet wide, and three feet high from the flat base to the angle formed by the meeting of the two sloping sides. Tests carried out in the Baltic sea by the designer, a naval architect named Vogt, showed that the proportions of the vessel were ideal for maximum resistance to stresses set up by the force of the sea. The Copenhagen newspaper "Dagbladet" of 31st August, 1904, reporting these experiments, said, in part: "The Royal Shipbuilding yard has recently completed the construction of a remarkable vessel. It is 30 feet long, 5 feet wide, and 3 feet high, and with its slanting sides most resembles the roof of a house. It is a new Noah's Ark, constructed after the design of Mr. Vogt, the engineer, the Carlsburg Fund bearing the expense of its production... The remarkable thing about the Bible measurements is that after thousands of years' experience in the art of shipbuilding they must be confessed to be still the ideal proportions for the construction of a big ship... the Ark was not intended to sail, but to lie still on the water, and to give the best and quietest condition for the comfort of its inhabitants, and this is ensured by means of the triangular shape. In a storm the motion of the Ark would be reduced to a minimum... If the greatest living engineer in the world was given such a commission as this, to construct as large and strong a vessel as to lie still upon the sea, and as simply constructed as the Ark, he could not make a better vessel." According to another Copenhagen newspaper, "Dannebrog," the vessel "drifted sideways with the tide, creating a belt of calm water to leeward, and the test proved conclusively that a vessel of this primitive make might be perfectly seaworthy for a long voyage."

Three hundred years earlier, in 1609, Peter Jansen, of Noorn, Holland, had embarked upon a much more ambitious project. He built a vessel to the proportions of the Ark, one hundred and twenty feet long, twenty wide and twelve high. It was found to behave so steadily in the sea and to have such ample stowage in relation to its weight that a number of similar boats were built. They fell into disuse only because of the difficulty of arranging for motive power and steering.

We come then to the Divine instructions to Noah relative to the building of this celebrated vessel. It is not necessary to suppose that God gave all the details in the form of a kind of celestial set of working drawings and that all Noah had to do was blindly to follow them. Much more likely is it that the knowledge necessary to build this amazing structure came to Noah over a long period of perhaps many years and that a great deal of study and research was necessary on his part before he could pick up his tools and commence.

It is probably true that no one who has not had the benefit of an engineering training can properly appreciate the tremendous mechanical problems with which Noah was confronted. It was not just a question of nailing a few planks together and making them water-tight. If our understanding of the length measures of the ancients is well founded, the Ark was some 540 feet long, 90 feet wide and 54 feet high. Lest it be thought that such an enormous timber structure could never be built, and even if it were built, would never float, it can be pointed out that the Egyptians in the third century before Christ were building ships 400 feet long by sixty wide, propelled by four thousand rowers. The British warship "Victoria", in the early nineteenth century, one of the last wooden warships to be built, was nearly 300 feet in length. Since the advent of iron the sizes of ships have exceeded that of the Ark. The famous steamship "Great Eastern," built in 1854, was 680 feet long by 82 feet wide. In more modern times many of the oil tankers which are so familiar a feature of the high seas exceed 1,000 feet in length, twice that of the Ark. There is nothing unreasonable therefore in the apparent size of the Ark, but Noah must have been an engineer of considerable technical qualifications even to design on paper—or the then equivalent of paper—the structure which became the means of saving those who were to start life afresh on the earth.

"This is the fashion which thou shalt make it of" says the account "the length of the ark shall be three hundred cubits, the breadth of it fifty cubits, and the height of it thirty cubits." (Gen. 6:15.) There were many "cubits" in the ancient world, for each nation had its own system of length measures, and cubit lengths in one historical period were not necessarily the same as in another. As Babylonian, Assyrian, Jew, Egyptian, Greek, met and mingled so their length measures were modified to suit each other. The records from which Moses translated the story as we have it in Genesis were probably in terms of the ancient Sumerian cubits but Moses would almost certainly have converted the figures to the Egyptian cubit of his time, just as we now convert them to English feet to make them intelligible to the modern reader. Various authorities give values for the Egyptian cubit in common use at the time of Moses as between 20.6 and 21.6 inches; taking the larger figure the Ark would be, as just stated, 540 feet long by 54 high by 90 wide. The fact that it was a three-floored structure and that the outer shell as well as the floors must have been enormously thick to withstand the stresses imposed by the initial impact of the flood waters requires something in the region of this height as a minimum in order to give adequate headroom and in this respect the story is consistent with itself.

Interestingly enough, one of the accounts of the Flood from the library of the Assyrian king Asshur-bani-pal, written by an Assyrian scribe about 650 B.C., gives the dimensions of the Ark (as translated by the Assyriologist Francois Lenormant in 1880) as 600 cubits long by 60 high by 60 wide. The Assyrians at that time used, for buildings and large constructions, the ancient Sumerian short cubit of 10.8 inches, and this rendered into English feet gives the same length and height as in the Genesis account. Completely to correspond, the 60 cubits width in the Assyrian tablets should be 100, but it is very possible that the original archaic tablet, believed to date from about 1700 B.C., from which the Assyrian scribe made his copy, did have

100 at this point and that a small illegibility or obliteration in the clay tablet misled him. The obliteration of four small marks from the cuneiform numeral 100 converts it into 60, and such obliterations on cuneiform tablets are common and mislead modern scholars in the same way that they must have misled copyists in much older times. The ancient tablets leading to the Assyrian story diverged from those leading to the Genesis account certainly not later than about 2100 B.C. so that this agreement as to the measurements is quite a good witness to the historicity of the narrative.

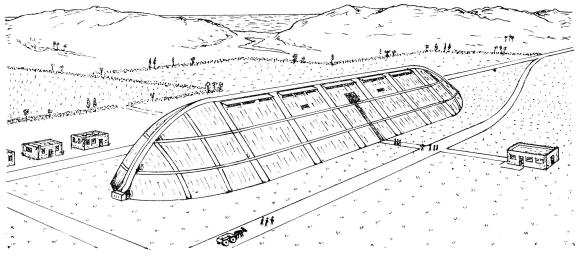
(For the benefit of the studiously inclined it may be interjected here that this 10.8 inch length for the short cubit was established by another Assyriologist, Oppert, nearly a century ago when he investigated the ruins of the royal town of Sargon of Assyria at Khorsabad, finding an inscribed tablet giving the length of the city walls as 24740 short cubits; the walls were still there and he found them to measure 7422 yards, a figure which has since been repeatedly checked, so that it was easy to fix the precise length of the short cubit, or "span" as it is often called nowadays.)

It is perhaps not readily appreciated that in all probability Noah and his family carried much more than a collection of animals and a store of food in the Ark. According to the narrative he had been plainly told that the world he knew was to be completely destroyed with all its works. Only his own family would survive the Deluge to start a new world. It is in the highest degree unlikely that a man possessing the faith to believe such a Divine intimation and the intelligence to build such a vessel would fail to take with him as much in the way of useful materials as he could with which to commence his great task when the Flood was over. The antediluvians must have attained a high degree of proficiency in the arts and sciences and it is very probable—almost a certainty—that the vast lower floor of the Ark was crammed with materials, tools, useful articles, and perhaps objects of art and beauty too, saved from the old world wherewith to facilitate the commencement of life in the new. It is perhaps significant that the Babylonian accounts do catalogue in some detail the treasures of gold and silver and articles of daily life which Noah is supposed to have stored aboard his vessel.

This tremendous construction had three floors; "with lower, second and third stories shalt thou make it" (Gen. 6:16). More than half of the total capacity was on the lower, the ground floor, the flat bottom of the vessel, ninety feet wide and perhaps fifteen high from floor to ceiling. This great space, amounting to nearly 50,000 square feet, was almost certainly used for storage.

The middle floor, sixty feet wide, was perhaps devoted to the storage of food and "articles wanted on voyage". When the Ark was afloat, fully loaded, it would be anything from half to two-thirds submerged, so that both this and the lower floor would be below the water line. Only the top floor could receive air and light directly from outside.

The top floor, thirty or more feet wide and over five hundred long, would afford ample living accommodation for the family and the animals that had been taken on board. Here were the "rooms" or "nests" of vs. 14—compartments, pens and stalls for the various classes of creatures. This would be a strange-looking place, like a long corridor with its two walls sloping steadily above until they met at an angle about sixteen or eighteen feet overhead. This is probably the meaning of the rather obscure phrase in vs. 16 *"in a cubit shalt thou finish it above."* The cuneiform sign for an opening for "cubit" and the primitive pictograph which preceded it in the days of picture-writing (this at the time of Heber and Peleg, Gen. 10:25), suggested an angle and this expression "finished in a cubit (or angle) above" might well denote what we call the "apex", the angle at the top of the Ark formed by the meeting of the two sloping sides, much as we might say it finished in a V at the top. This is shown more clearly in the accompanying engraving, which incidentally also gives an impression of the size of the Ark compared with the persons and houses shown to the same scale.



Probable appearance and size of the Ark

How did the navigators fare for light and air? Flood or no flood, they could not exist without either. There were apparently two kinds of windows in the Ark, both on the upper floor only. "A window shalt thou make to the ark" is the Lord's instruction in vs. 16. The word "window" here is "tsohar" which is a technical term meaning an opening for sky light and air. The same word is used about twenty times in the Old Testament for "noon", "noonday", and "midday". In its structural sense it denotes a long and narrow aperture running along, the tops of buildings near the roof to admit air. All Egyptian temples had such an aperture, usually about six inches high, broken up by supporting columns every few feet. It would seem that such a narrow opening ran along the entire length of the Ark, on both sides, just below the top, and this served for the entry and egress of air and sufficient light, in the brilliant sunshine of Iraq, for the inmates.

The "window" of chap. 8:6 through which Noah put the birds who went out to explore the drying earth, is "challon" which is the regular Old Testament word for windows of the orthodox type. We may reasonably conclude that the "tsohar" was high up along the "eaves" of the Ark and gave fresh air and light at all times. Lower down in the sides of the upper floor, and perhaps only in the living quarters of the family, were other windows, probably made of transparent material, which could only be opened when the water was calm.

Chap. 8:13 tells how Noah, after the abating of the waters, *"removed the covering of the ark, and behold, the face of the ground was dry."* This allusion to a "covering" is interesting. The word is *"mikseh"* which is used elsewhere for the covering of ram's skins and "badger" (dolphin) skins which covered the Tabernacle in the Wilderness as described in the Book of Exodus, and is allied with words meaning to cover as with garments. It will be shown later on that at the first onset of the Flood the Ark must have been completely submerged for a few minutes and must therefore have been made completely watertight from the outside world. Evidently the *"tsohar"* or window which normally gave light and air to the vessel was fitted with some kind of watertight covering which could be locked in position at will to exclude all possibility of ingress of water, and opened again once the Ark was safely afloat in calm water. This may have been the "covering" which Noah removed, apparently for the last time, fifty-seven days before leaving the Ark. In the meantime it probably served as protection against spray, rain and wind in stormy weather.

*"The door of the Ark shalt thou set in the side thereof."* (6:16.) Somewhere along the upper floor existed the only means of entry and exit—a door capable of giving admission to the largest creature or article intended to be taken in, and made completely watertight when closed, as it was for the whole of the time the Ark was afloat. The lower floors would of course be reached from the upper floor by means of stairways or sloping ramps.

Gen. 6:14 says that the Ark was built of "gopher wood" but nobody knows just what particular species of the vegetable kingdom is thus indicated. Commentators of the nineteenth century used to assume an air of oracular wisdom and discourse learnedly of "cypress or other resinous wood, capable of withstanding immersion in water" which was a pretty safe guess having in mind the purpose of the Ark's building. Gesenius connected the word with *"kopher"* which was used for pitch and from that obtained the idea of "resinous wood". It has been left to linguistic experts to find the truth. *"Gopher"* is the Hebrew transliteration of the Babylonian *"gipparu"* which means forest timber of any kind. Noah was told to build the Ark of timber well covered with pitch (bitumen) to make it watertight. Some later copyist or translator, not recognising the meaning of *"gopher"*, took it as a proper name and added "wood" after it.

Those who like figures may be interested in the result of a simple engineering calculation which shows that the Ark may well have absorbed something like 6,000 tons of timber in its building, requiring the felling and dressing of a veritable forest of giant trees. Thus built, it would be capable of carrying some 25,000 tons of cargo without danger of foundering. But an apparently casual remark in Gen. 7:20 may enable us to approximate its lading a little more accurately. *"Fifteen cubits upward did the waters prevail, and the mountains were covered."* That apparently implies that at no point in the Ark's course was the water less than fifteen cubits deep; that fact could only have been observed if the Ark itself "drew" just that depth of water. It seems a logical conclusion that the vessel floated submerged to a depth of fifteen cubits, just half its height, when loaded, and this in turn means that it displaced three-quarters its own volume of water, some 27,000 tons. It follows that if the structure itself did weigh about 6,000 tons, then Father Noah must have stowed away animals and goods to an aggregate weight of 21,000 tons!

How long was this gigantic craft in building? It is not possible to say, for no hint is given. The cryptic reference in Gen. 6:3 to a period of one hundred and twenty years has sometimes been suggested to denote a "period of grace" during which the antediluvians had the opportunity of repentance while the Ark, taking visible shape before their eyes, gave additional point to the preaching and warnings of Noah. We do not know. The work must have taken a good many years and it must have employed hundreds of workers. There cannot be much doubt about that. Noah must have been a man of wealth and power to have had the material means to plan and execute so stupendous a project. The ancient legends depict him as King of his country and there is nothing impossible about that. Suffice it that he was a man of faith and he believed God and acted out that belief in carrying out a command that must have seemed utterly fantastic to all who heard of it. And the greatest test of faith must have been at the moment when, with all his twenty thousand tons of stores and goods and animals safely inside, Noah and his family climbed into the giant vessel which they had built, heard the door close heavily upon them and shut them away completely from the outside world, and sat down in the darkness, to wait...

#### 4. Days of Preparation

"And the Lord said unto Noah, Come thou and all thy house into the ark... and Noah went in, and his sons, and his wife, and his sons' wives with him, into the ark, because of the waters of the flood" (Gen. 7:1 & 7).

So far as the record reveals, Noah had three sons, all married at the time of the event, and no daughters. Neither, at this point in time, were there any grandsons. Strange, perhaps, for a man six hundred years old. His predecessors, living lives of comparable length, mostly had their firstborn at less than two hundred years and in every case had *"sons and daughters"*. This latter expression is not used of Noah, only that he begat Shem, Ham and Japheth, that Shem was a hundred years old at the time of the Flood, and the others somewhat younger.

Here we are introduced to the family of Noah. These eight people were the only ones saved and the implication is that they were the only righteous or God-fearing people left in the world; had there been others they surely would have had the same opportunity of salvation. It is difficult to think otherwise. The Flood is said by Peter to have been "a judgment upon the world of the ungodly" and that must demand, from our knowledge of God, that anyone who had faith to escape that judgment would in fact so escape. Noah had brothers and sisters, for Lamech, after Noah's birth, "begat sons and daughters" (Gen. 5:30). They, unless they had already died, all perished. It is at least conceivable that Noah had raised an earlier family in earlier life, perhaps by a first wife now dead, and that these also were unbelievers and—after maybe three centuries of life—had separated from their father and because of their unbelief are not so much as mentioned in the narrative, so that the three sons we do know represent a second and later family. The same thing happened in the case of Abraham with his later wife Keturah after the death of Sarah, when he too was well advanced in age. The point is not of any importance except that it can be cited as a possible explanation in rebuttal of the occasional critics' argument that the narrative is untrustworthy because of the apparent advanced age of Noah at the birth of his first child.

It seems certain that Shem was the eldest. The expression in Gen. 10:21 making Shem the brother of "Japheth the elder" is certainly incorrect and is rendered in most translations (RSV, NEB, RV, Leeser etc.) "Shem the elder brother of Japheth". Ham is described in Gen. 9:24 as the "younger son" of Noah but there are doubts as to the meaning of the term and the fact that the order of the names is consistently the same in each of the five occurrences would seem to indicate that Japheth was the youngest. Since all three were married there could not have been a great deal of difference between their ages.

These eight people had the care of a great number of animals while the Flood persisted. The common impression, hallowed by tradition rather than a critical reading of the text, is that Noah selected one male and female of each species for preservation. This may well be an oversimplification of the position. The Lord's instruction was "of every clean beast thou shalt take to thee by sevens, the male and his female: and of beasts that are not clean by two, the male and his female. Of fowls also of the air by sevens, the male and his female" (ch. 7:2-3). When Noah entered the Ark, "of clean beasts, and of beasts that are not clean, and of fowls, and of everything that creepeth upon the earth, there went in two and two unto Noah into the Ark" (ch. 7:8-9). The distinction is that the clean beasts were those that were good for food and the unclean those that were not (see Lev. 20 and Num. 14). This is one of the indications that, contrary to what has been suggested by some commentators, the antediluvians did eat flesh foods; the knowledge of which beasts were suitable for this purpose did not originate with the Mosaic Law but was known long before. A problem presents itself here. If there were but two of a species of unclean and seven of a species of clean, the requirement of vss. 9 and 15 that they all went in two by two, male and female, cannot be met. One of the seven must have been "odd man out".

The Hebrew word "shenayim", which denotes two in number, also includes the ideas of dual, double, two-fold, couple or pair. The text becomes more consistent if it is read to indicate that Noah was to take two pairs and seven pairs respectively, so that all could enter the Ark "male and female" as stated. In any case it would have been very risky to rest the future of a species upon the preservation of one pair only; all kinds of accidents or shortcomings might easily frustrate the intention. In fact the knowledge that specimens of the clean beasts and birds were offered in sacrifice by Noah upon his emergence from the Ark, and the necessity of speedy provision of food for the eight survivors during the first few years of their new life, might well indicate the desirability of a greater number of each species being taken into the Ark than the first cursory reading of the narrative might suggest. One wonders, too, what happened when the carnivorous animals—lions, tigers, leopards, and so on—were

let loose and started looking for something to eat. This whole question of the animal creation in the story can bristle with difficulties and perhaps the most reasonable solution is to accept that Noah was an experienced and knowledgeable man well able to plan intelligently for the problems that would face him in the new post-diluvian world.

The problems are considerably eased when one reflects that the patriarch did not have to cater for all known terrestrial species and to collect them from the four corners of the earth. Many of such which were and still are peculiar to Australasia, the Americas, Oceanic islands, and so on, were inaccessible to Noah anyway. The most reasonable estimate of the extent of the Flood confines it to the Euphrates valley and the animals in the Ark were probably only those normally inhabiting that area. Commentators of the Nineteenth Century went to a lot of trouble investigating the number of animals Noah had to accommodate and came up with estimates ranging from 1,000 to 1,700 species of mammals, 1,000 to 2,000 reptiles, and 6,000 to 10,000 of birds. Some, carried away by enthusiasm, even added insects, 120,000 of them. A much more sober appraisal made early in this century and based upon what was then known of the fauna of Western Asia in the early days of man gives about 10 species of clean beasts, i.e., reared and maintained for food, 300 not clean (wild animals) and 200 birds. This catalogue represents nothing more extensive than a small zoo and a few pairs of each would be well within the capacity of Noah's family to collect and care for under the stated conditions, besides fitting reasonably comfortably into the available accommodation.

The Babylonian accounts depict Atra-khasis (Noah) as saying quite laconically "All that I possessed of the substance of life of every kind I gathered together... the cattle of the fields, the wild beasts of the plain... and caused them to ascend into the vessel". He, at any rate, was apparently quite unperturbed and took the whole process as all in the day's work. Genesis, in addition to clean and unclean beasts and birds, specifies "creeping things of the earth"; this word *Cremes*) denotes the smaller animals such as mice, lizards, serpents, and so on, but is often used as a term for land animals generally.

All these animals needed food, sufficient for at least twelve months. That of itself required some careful forward planning; once afloat, no mistakes could be rectified. The Lord said to Noah (ch. 6:21) "Take thou unto thee of all food which is eaten, and thou shalt gather it to thee: and it shall be for food for thee, and for them" (the animals). The quantity would be almost impossible to appraise at all accurately without much more detailed knowledge of the creatures involved, but at the very least it could not be below several thousand tons. All of this had to be grown and harvested and carefully packed for long storage. Here again, with an unconscious touch of humour, the Babylonian story says "I instituted rations for each day. In anticipation of the need of drinks, of barrels of wine I collected in quantity like to the waters of a river; of provisions in quantity like to the dust of the earth". There is also the fact that Noah would require a supply of seed of all kinds for sowing immediately the catastrophe was over. They emerged from the Ark in the second month—November—at just the right time for ploughing and sowing in those lands, but no harvest could be gathered until the following April so that they would be dependent upon their stores for the intervening time. It is possible, on the assumption that the Flood affected only the Mesopotamian plain, that the Ark finally came to rest not too far from undevastated land in which case they would perhaps have access to wild-growing cereals and fruits to supplement what they had. It is obvious though that upon setting foot on their new world it was not just a question of picking up life where they had left it; a lot of work had to be done before life became normal. The Ark itself probably remained their home for a long time after they first emerged.

Everything was now ready. The Ark had been well stocked with supplies of food. Its bottom deck was without doubt heavily laden with as many useful articles and materials as Noah could lay his hands on and store away for use when the catastrophe was over. No reference is made to this latter in Genesis, but it is inconceivable that the patriarch would not realise the necessity of preserving what he could of the old world to facilitate his reestablishment in the new. The size of the Ark is a pointer in the same direction. From the dimensions given it must have had a carrying capacity of at least 20,000 tons and the weight of its living inmates and stores of food can account for only a fraction of this. Tools, implements and constructional materials are among the items that come most readily to the mind. Works of art and objects of value are perhaps less likely; Noah may have felt the situation too serious to account such things worthy of attention, and anyway they may have been associated too much with the godless and decadent civilisation now going into destruction to be deemed worthy of preservation. The Babylonian account says that all his treasures of gold and silver were stowed away in the vessel but this is certainly an embellishment. Gold and silver would have no commercial value to the solitary family soon to take root in an otherwise uninhabited world, any more than it will in the soon coming day of Christ's Millennial kingdom on earth when mutual trust and love and the absence of greed and acquisitiveness will likewise render the precious metals useful only for works of art and articles of adornment without monetary significance. Written records of the old world must have been taken in, for there can be no doubt that the art of writing had long since been developed, even though all such records save the extremely abbreviated account of those early days which now survives in the first few chapters of Genesis have long since been lost.

So the word of the Lord came to Noah (ch. 7:1) to herd his living cargo into the Ark, take up residence himself and close the door. He had seven days' notice (ch. 7:4), which was probably necessary to embark the animals and get them safely housed in pens and stalls. According to vs. 16, *"the Lord shut him in"*. A bit difficult to know just what this means; one would not expect the Most High to reach down from heaven to shut the door, an action which Noah could do perfectly well by himself. We do not know either just how the Lord transmitted the many instructions to Noah which are recorded. In the days of Abraham and at other times visitants from the celestial world did appear in human form to convey the word of the Almighty and carry out various commissions. Perhaps during the entire period of the building of the Ark there was one such visitant speaking in the name of the Lord coming to Noah from time to time. In such event it might be that the literal door was finally literally closed by that emissary as a kind of ceremonial indication to Noah that he must now stay inside until all was over.

"And it came to pass on the seventh day that the waters of the flood were upon the earth. In the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, the same day were all the fountains of the great deep broken up, and the windows of heaven were opened. And the rain was upon the earth forty days and forty nights" (ch. 7:10-12). The critics find a contradiction here, saying that verse 13 has Noah entering the Ark on the day the Flood broke, and verse 4 seven days earlier. There is, of course, no contradiction. The critics picture the loading of the Ark as occupying about ten minutes without considering the practical implications. The story reads quite logically that Noah was given seven days' warning and commenced operations straight away, himself and family naturally being last of all to go on board after a week's hard work.

The possible and probable causes of the Flood and the physical nature of the catastrophe will be considered later. At the moment only the narrative itself will be examined. The first thing to notice is the length of time the Flood persisted. Noah was in the Ark for a year and ten days. This period is made up from an initial forty days during which the full severity of the Deluge was experienced and the waters steadily accumulated until, as the narrative has it, all the high hills and all the mountains were covered (ch. 7:12, 17-20). There was then a period of five months (one hundred and fifty days) in which matters appeared to be more or less static; *"the fountains also of the great deep and the windows of heaven were stopped, and the rain from heaven was restrained"* (ch. 8:2), at the end of which time the floating Ark became

stranded in mountainous country without however any mountains being visible. Then the water level began to fall but it was nearly three months before any surrounding peaks were seen. The Ark, however, was still marooned and Noah waited another forty days before setting free a raven and a dove to test the likelihood of there being any nearby dry land. The result was negative. Seven days later he tried again and the dove returned with a freshly plucked olive leaf in her mouth which did at least indicate the presence of growing trees not too far away. But evidently egress from the Ark was still not possible, so after another seven days he sent out the dove again *"which returned not again to him any more"* (ch. 8:12). Even so, it was a further three months before the waters were sufficiently abated for Noah to set free the animals and emerge himself to take stock of the situation.

The narrative is remarkably detailed and precise, and bears all the marks of an original record made at the time of the happening and to have been written down by an actual eyewitness. Some of the points could hardly have been otherwise and certainly not imagined by a later writer as is suggested by advocates of the "folk-lore turned into history" school. Ch. 7:20 "fifteen cubits upward did the waters prevail" could only have been discovered by measuring the minimum depth of water needed to float the laden Ark which again could only have been determined when it grounded. This figure, too, is just what would result from a nearly completely loaded Ark of the dimensions given in Genesis. The wind that passed over the earth to reduce the waters, given in ch. 8:1 as the cause of the retreating waters, was a climatic phenomenon the nature of which has been known only in modern times (to be discussed in a later chapter) and could not possibly have been known to any ancient writer except the one who actually experienced it at the time. And no writer of fiction, or of reconstituted folk-lore, would be likely to delay the drying-up of the ground to allow Noah to leave the Ark for so long as three months and ten days after the dove found the growing olive tree. These are points that stamp this narrative with the seal of antiquity and we can be sure that it was written in its present form at the time to which it relates. As one writer has well said "In Genesis 6 to 8 we have Noah's own ship's log-book of the most memorable voyage in human history".

Where did the Flood come from and what was its cause? The Genesis narrative is not a scientific treatise on the subject but it does enshrine the observations of an eve-witness. The principal manifestations were the emergence of waters from the "great deep"—the sea—and from heaven—a torrential downpour of rain. The Septuagint has it "the fountains of the abyss" and "the cataracts of heaven". This idea that the floodwaters derived from two sources-the ocean and the skies-is supported also by tradition. The Babylonian and Sumerian accounts describe a terrific storm approaching from the horizon, and deluging the earth with rain the while a great waterspout or tidal wave emerged from the abyss and rose up to the sky, spreading desolation over the land. The general impression is that of an invasion of the land by the sea accompanied by a torrential downpour of water from above. This is so consistent a picture in all the written legendary accounts ranging from 1700 B.C. to 700 B.C. in addition to Genesis that we must have here an original impression so powerful that it has survived unchanged through the ages in both history and legend. Even the prophet Mahomet, deriving his information probably from Arabic folk-lore, has the same idea in the Koran, chapter 54. "The people of Noah accused that prophet... saying, he is a madman; and he was rejected with reproach... So we opened the gates of heaven, with waters pouring down, and we caused the earth to break forth into springs so that the waters of heaven and earth met". Chapter 11 of the Koran says that the waters of the Flood came out of a "tannar" which is an Arabic word meaning either an oven or a fissure in the earth and although in English translations of the Koran "oven" is used it is evident that the other meaning is intended. This idea that the earth was cloven to allow the waters to escape has a parallel in the Babylonian accounts which speak of earthquakes associated with the Flood.

The entire narrative is consistent with the view that the immediate cause of the Flood was a giant tidal wave or series of tidal waves emanating from the southern seas—the Indian Ocean or the Antarctic—sweeping up the Persian Gulf and deluging the whole of the Mesopotamian plain up to the foothills of the Kurdish mountains at least. Such disasters are not unknown in history although this was without doubt the greatest of them all. The rapid transfer of so great a body of water from the tropics to more temperate regions would induce atmospheric disturbances creating typhoon-like storms in the upper atmosphere which would account for the torrential rain which figures in the story. Such an inundation would build up quickly to its maximum—forty days in the story—but take considerably longer to drain away, all of which is consistent with the Genesis account. Such a visitation would obviously destroy allliving things and all traces of man's handiwork and cover everything with many feet of sand and silt; its initial impact on the stationary Ark would be terrific but once the vessel had taken the first shock it would ride placidly if aimlessly on the waters until they began to recede.

But the full story of that momentous voyage must form the subject of another chapter.

#### 5. Theories of the Cause

A great many theories, some well-founded and others not so well founded, have been advanced to explain the physical cause of the Deluge. They range from comparatively minor terrestrial floods in the flat plain of Iraq to major catastrophes of astronomical dimensions originating from sources outside the earth itself. It would require a long and comprehensive treatise to explore the details of all these theories and the results would not be particularly profitable. The Bible tells us the important fact, that the world of Noah's day was destroyed by a deluge of water extensive enough for the purpose, and it really does not matter to us in our acceptance of the story to know where the water actually came from. Nevertheless it is worth giving bare mention to the leading theories if only to show that the Flood story is by no means so incredible as some critics would have us believe; there are so many ways in which it could have happened.

The traditional and very elementary idea that once Noah was safely inside the Ark it commenced to rain and went on raining until the entire world was flooded to a depth of twenty-two feet above the highest mountains is the first casualty in a serious consideration of the subject. Terrestrial rain comes only from water already existing upon earth, evaporated from the oceans and lifted to the skies, carried along in the form of clouds and condensed to fall again as rain. No source of supply existed for that quantity of water falling as rain. And since the downrush from heaven lasted for only forty days it would have required more than the heaviest of rainfalls to deposit six miles or so in depth; it would in fact take more than sixty years at the rate of the heaviest sudden "cloudbursts" which are sometimes experienced in tropical countries. The rain mentioned in Genesis is but a secondary factor; the primary causes were two, the "breaking up" of the waters from the "great deep"—the sea—and the opening of the "windows of heaven", whatever that may mean. The LXX calls it the "cataracts of heaven" and one modern translator the "floodgates".

A very favourite suggestion is that an unusually heavy spring inundation flooded the Iraqi plain and drowned all its inhabitants. Every springtime the rivers Tigris and Euphrates carry down vast quantities of floodwater from melting snow on the Armenian mountains, and since Iraq is virtually flat for some five hundred miles the water floods over the land and remains so for some weeks before slowly draining away into the Persian Gulf. (At least that was the position before the Babylonians built their extensive system of canals and reservoirs to regulate and control these floods, and since the time of the early centuries of the Christian era when the system fell into disuse and disrepair. Only in our own day is the Iraq Government restoring the old system of flood control.) This theory suggests that a particularly heavy

winter snowfall, followed by an unusually warm springtime, brought unprecedented quantities of water down at once, making a flood deep enough to cover all the cities and destroy all the works of man in the plain. Exponents of this hypothesis have overlooked the fact that according to Genesis the Deluge did not commence in the Spring but in the Autumn, November. There are no river floods at that time of the year; they occur in April-May.

Despite this fact, a great deal of investigation into records and evidences of ancient floods in the Tigris-Euphrates plain has been and is still being conducted. Because devastating floods have been so frequent on the plain the association of Noah's Flood with one of them does seem to be the natural conclusion. Woolley's discovery of an eight foot strata of water-laid clay during his 1928 excavations at Ur of the Chaldees, widely proclaimed at the time to be that laid down by the Deluge, but now demonstrated to be due to a later flood, was the start of a kind of competition among archaeologists and Bible scholars alike to find more and more "flood layers" in Iraq and fit them to the Genesis account—and the effort still goes on. Of the many local floods of which evidences have thus been found there are least four major ones, at Ur, Uruk, Shuruppak and Kish, separated by two or three centuries, which have become prime favourites, but they all suffer from the demerit that they were river floods whereas the Bible and the Babylonian legends insist that the Deluge came up from the sea. "All the depths of the great ocean were heaved up" says Ferrar Fenton in his translation and this represents the literal idea. The ancient Hebrews and the Babylonians both believed that the oceans communicated with the "waters under the earth" and that these waters burst forth in this great cataclysm to deluge the lands, hence the use of "tehom" (deep or abyss) instead of "yam" (sea). In the Babylonian account the waters burst forth from the abyss so that the sea "swelled up to the sky" and frightened even the gods who feared the water would reach them; it then advanced over the mountains and plains overthrowing everything in its path. No river in flood could be described in terms like that.

The "flood layers" of river-borne clay and silt which have been investigated do not go back earlier than round about 2800 B.C. or so and the Deluge of Noah's day was five centuries before that. It is highly probable that the terrible nature of the visitation precluded the survival of any signs of its occurrence; the entire world of the day was destroyed and only virgin land remained upon which an entirely new world was built.

A variant of this theory supposes that the waters of Lake Van in Armenia, near which the rivers Tigris and Euphrates have their sources, had been held up by a vast dam of ice which had formed in consequence of glacier action, and that the eventual breakdown of the dam released the pent-up waters of the lake down both river valleys, causing an even greater flood than could have been the case with the former suggestion. There are raised "beach" lines along the shores of Lake Van which indicate to geologists that its waters once stood a hundred or so feet above the present level. It is calculated that the amount of water that would thus suddenly have swept down from the lake, which has an area of fifteen hundred square miles, could have flooded the entire plain to a depth of thirty or forty feet; it would of course be the impetuous onward rush of the waters that would do the damage rather than their depth. Some people now living will recall the Indian disaster of August 1929, when such an ice dam across the river Shyok, a tributary of the Indus, gave way and flooded the plain of north-west India, drowning thousands of the inhabitants. Many more will remember the disaster of 1963 in the Italian Alps, when six million tons of mountain fell instantaneously into the man-made lake of the Vajont Dam, the highest dam in the world, sending a raging flood three hundred feet high over the village of Lingarone. The village was wiped out in six minutes and three thousand people died. The Deluge must have been something like that but extended over an infinitely wider area. Nevertheless this Lake Van suggestion, like the last, does not really fit the terms of the Genesis narrative.

The next class of theories attempts to conform to the Bible account by crediting the Deluge to a vast invasion of the sea. Here the physical and geological evidences are much more favourable. The whole of the extensive Iraq plain, from the Armenian foothills to the Persian Gulf, some five hundred miles north-west to south-east, and from the Syrian desert to the Persian mountains, about two hundred miles in width, is to all intents and purposes a level stretch of light, stoneless, silty soil, just as if it had once been the bottom of a quiet inland sea. Towards the north, where the ruins of Nineveh now stand, there rise a succession of low rounded hillocks of soil all bearing evidence of having been deposited and moulded to shape by the action of water. The general belief is that this great flat plain has been formed by the action of the two rivers through countless ages, carrying fine earthy matter from the mountains and depositing it as mud; it is equally likely that the fine silt was laid down by a gigantic inrush of the sea. Within the last twenty years geologists have found marine fossils in strata in which they could only have been deposited within the last seven or eight thousand years and this is strong presumptive evidence that an invasion of the plain from the sea has occurred during the historic period.

The only possible source of such an inundation would be from the Persian Gulf in the south. According to Sumerian legend, it was around the head of the Gulf that the antediluvian cities were built. It is likely that there the men who lived before the Flood had built their world and there that they were *"eating and drinking, planting and building, marrying and giving in marriage,* until the Flood came, *"and took them all away"*. A giant tidal wave, of well-nigh unimaginable proportions, sweeping up the Gulf and submerging all those cities, going on then to devastate the plain right up to the Armenian mountains, would naturally carry the Ark with it and strand the Ark eventually in the very district where the Book of Genesis says it did come to rest—in the mountains of the north-east. Moreover, interestingly enough, the course of the Ark from the place of its building to the place of its resting in Sumerian legend would also be consistent with the hypothesis of a flood from the south sweeping northwards. There is also the very significant statement in the Sumerian King Lists; after listing the ten antediluvian kings the tablet reads *"The flood came up."* Had the historian wanted to indicate that the waters came down from the river sources he would have said "down". As it is, he obviously meant that the floodwaters came upstream from the sea.

All kinds of things can cause tidal waves. The most common is an earthquake or volcanic eruption under the sea. The Japanese earthquake of 1896 started a tidal wave which travelled across the Pacific ocean at a speed of 450 miles an hour and reached San Francisco ten and a half hours later. The Lisbon earthquake of 1755 so disturbed the sea at Rotterdam, eleven hundred miles distant, that large ships moored there broke their cables. When the volcano Krakatoa, in the seabed between Java and Sumatra, blew up in 1883, throwing a cubic mile of rock twenty-five miles into the air, a tidal wave three hundred feet high travelled in every direction at an initial speed of 400 miles an hour, eventually reaching South Africa, five thousand miles away. The effects were felt in the English Channel, eleven thousand miles distant. More recently, an earthquake in the seabed off southern Chile in 1960 sent tidal waves racing over the entire Pacific ocean at 450 miles an hour, causing damage in Japan, New Zealand, Hawaii and California. And only a few years ago scientific investigation revealed the story of the volcanic eruption on the island of Santorin in the Aegean Sea, between Greece and Crete, at the time of Israel's Exodus from Egypt. The resultant tidal wave, 350 feet high, completely destroyed the civilisation of Minoan Crete and left the island a desolate ruin. These examples are sufficient to show that a tidal wave adequate to deluge a flat land like Iraq is by no means an incredible proposition.

A hypothesis advanced by some geologists is that there was a rapid sinking of the land over a wide area which allowed the sea to come in and cover the mountains as stated in Genesis; a year later the land rose again and the sea retreated. Such a happening would meet the requirements of the case but whether it is the true explanation is another matter. Hugh Miller a century ago, in *"The Testimony of the Rocks"* gave reasons for thinking that the whole of the Caucasus and Iraq down to the Persian Gulf did so sink some sixteen thousand feet and was later elevated to its former level; this, he says, was the cause of the Noachic Flood. He explains that such a depression of the land level over so great an area would be quite imperceptible to the inhabitants; the relative heights of mountains and depth of valleys would look much the same and the impression would be that it was the sea-level which was rising and invading the land. Similar statements were made later on by Prof. G. F. Wright, in *"Scientific Confirmations of Old Testament History"* (1906), in which he gave details of his geological researches in Western Asia upon which he based his theory.

Such earth movements are always going on in the world—not always so rapidly as would have had to be the case in this instance, but there are enough on record to show what could have happened at the time of the Flood. In the year 1822, for example, an area between the Andes and the Pacific Ocean as large as Great Britain rose seven feet, and the coast of India dropped at the same time. There is, twelve thousand feet above sea level in the high tablelands of South America, the shore line of an ancient sea which can be traced for over eight hundred miles. That shore-line was at sea level at some time since man came upon earth, for it is studded with ruins of buildings, roadways, canals and wharves, showing that a seafaring people once lived there. At twelve thousand feet the air is rarefied and the climate always cold —but these ruined temples contain carvings of tropical fish and animals, evidence that when those buildings were erected the whole area was at approximately the present sea level now twelve thousand feet below.

There is no possible means of relating such a happening, if it did happen, to the precise date of the Flood. Geologists have to time the changes they discover in terms of thousands of years and this suggestion can never be more than a possible theory.

A somewhat different primary cause of the Flood is pictured in what is known as the "tilting earth" theory. It is well known that the earth turns on its own axis once every day on its journey round the sun. That makes the alternation between day and night. There is also another motion which can be crudely described as a "wobble", something like the behaviour of a boy's spinning top when it is almost at the end of its spin and about to fall over, which brings any given spot on earth alternately more under the direct rays of the sun and away again, so giving us the succession of the seasons, summer and winter. The technical term for this is the "earth's obliquity", but for everyday use the word "wobble" is perhaps more immediately expressive. The "tilting axis" theory supposes that before the Flood this obliquity did not exist. The earth, it is claimed, turned steadily with the sun always shining directly on the Equator and there were no seasons, the climate at any one point being constant. It further supposes that at the time of the Flood the earth's axis was suddenly tilted to its present position. Now the effect of such a happening would be to alter the speed of movement of any part of the earth's surface by something like 300 miles an hour, and that in turn would cause the oceans to move in a spiral direction around the earth at that speed as gigantic tidal waves, inevitably drowning out all the continents.

All this has been worked out in great detail and could constitute a possible explanation of the cause of the Flood. But no astronomer of standing has yet discovered any evidence that such a shifting of the earth's axis has ever occurred. This also, it would seem, must remain a theory.

Finally, there are the astronomical suppositions, which are by far the most spectacular but not necessarily to be ignored on that account. William Whiston, in his "New Theory of the Earth" published in 1696, propounded the view that the Flood was due to a tidal wave caused by the passage of a comet near the earth. Whiston's scientific attainments qualified him to make the necessary calculations which resulted in his announcement that on Monday, 2nd December in the year 2926 B.C., Halley's Comet passed close to the earth in the neighbourhood of China, where it appears Noah was living at the time, and not only caused huge tidal waves to sweep over the entire planet, destroying everything upon its surface, but also discharged a generous supply of vapours at a velocity of twelve hundred miles a minute which descended to the earth, condensed into water, and covered the earth all over to a depth of six miles. That does at least attempt to explain where the water came from. Fissures in the earth opened and most of the water drained away to the inside, where, presumably, it still remains.

Quoth the worthy but somewhat wordy Professor in explanation of all this, "...according to which 'tis plain, that the Comet pas'd by the Earth, broke up the fountains of the Deep, and began the forty days rain about Noon; at which time, tho' the waters fell with the greatest violence in the Earth, yet they affected the opposite Hemisphere only: And this most nicely and wonderfully corresponds to the greatest accuracy of the present case, and of the Mosaick History. So that now we may, agreeably both to the sacred history, and the calculations from the present hypothesis, assert, that the Deluge began at the Meridian of Pekin, in China, about noon. Which exactness of solution wherein not only the Day, but time of the Day assign'd from the Mosaick History, is correspondent to the present hypothesis, how remarkable an attestation it is to the same, and how full a confirmation of the most accurate verity of the Mosaick History, I need not remark; such reflections, when just, being very natural with every careful reader." And if the careful reader was not satisfied with this, there were some three hundred and fifty more pages to the same effect. Proving the historicity of the Deluge was a serious business in the Seventeenth Century!

Whiston was a scientist and mathematician of repute in his own day, a co-worker with Sir Isaac Newton, and a convinced Christian. Much of his scientific work, however, has been superseded by later knowledge, and his "comet" theory need not be taken too seriously.

The basic idea, that the Flood was caused by tidal waves set up by the near approach to the earth of some heavenly body, is however still sometimes elaborated. In our own century Bellamy (in *"Moons, Myths and Man"*) is the chief protagonist of the "moon capture theory". According to this, the moon was originally a planet which got too near to the earth and was drawn into the latter's gravitational system. The consequent disturbance caused mighty ocean tidal waves to rush from both poles to the Equator and drown out the extensive civilisations which Bellamy envisaged as existing, some eleven thousand years before Christ.

D. W. Patten in *"The Biblical Flood and the Ice Epoch"* (1966) propounds the suggestion that the Deluge was due to the gravitational attraction exerted by the near approach to earth of one of the "minor" planets—small bodies normally orbiting the sun in the space between Mars and Jupiter. Some of these regularly pass in the vicinity of the Earth but not near enough to exert any perceptible effect and they are so small—most only a few miles in diameter and none more than about 400—that they would probably have to come within range of the Earth's gravitational attraction to do so and then would themselves fall upon the earth.

All these "astronomical" solutions suffer from the demerit that there are no geologic or other concrete evidences as to their likelihood. There is one other suggested cause, however, also to be classed among the astronomical hypotheses and involving the greatest of all tidal waves, which does afford rational explanations of a number of other puzzling phenomena noted by geologists. The "Canopy theory" as it is known, was primarily advanced to explain the evolution of the earth from its original chaotic state, and its connection with the Deluge is incidental but does furnish a solution which fits many observed facts that are not explained by most of the other alternatives. First mooted by the German scientist Liebnitz about 1690, endorsed by the French naturalist Lamarck about 1788, and developed more fully by the American Professor Isaac N. Vail in 1874, the thesis has been sustained, not without adverse criticism from some geologists, to the present day.

But the details of this final explanation must form the subject of next month's instalment.

#### 6. Waters above the Firmament

Of all the suggestions which have been put forward to explain the cause of the Flood, the most intriguing is that which has been associated with the system of terrestrial geology known as the "annular hypothesis". Although disputed by some modern geologists, its proponents have assembled so many arguments in its favour that it deserves mention in this connection especially since a number of Biblical allusions become luminous in its light.

The basis of this hypothesis was laid down three centuries ago when geology was in its infancy. Scientists of the day were beginning to understand that the early stages of the earth's formation were characterised by intense heat which melted and vapourised the heaviest rocks and minerals. It was at that time—and until quite recent years—universally believed that the earth commenced its existence as a flaming mass of gas which gradually condensed into the present solid form. For aeons of time the whole of the elements of which it is composed were of such extreme heat that they floated in space in the form of a vast mass of vapour. Slowly that vapour cooled until the heavier materials, such as iron and nickel and granite and gold, solidified into a central core which became the nucleus of the earth we now know. Through the ages, more and more of the surrounding vapours cooled and passed into the liquid state, descending in storms of fiery rain upon the heated planet below, often being valourised again and ascending once more into the skies. But as the tremendous heat of the primitive earth radiated away into space, the central globe began to retain the material which fell upon it from the heavens, and so there emerged the beginnings of the world we know today.

The vast amount of water which forms part of the economy of the earth made it inevitable that long after the heavier metallic and earthy materials had gravitated to the earth's surface, a great deal of water vapour and other light gaseous products remained circling the earth, held there by centrifugal force. Sooner or later these condensed and fell to the earth in a succession of deluges which reached the surface at the poles. where centrifugal force is at the minimum, and swept over the planet towards the Equator.

During this last half-century geologists are increasingly coming round to the idea that the earth did not start as a ball of hot gas; rather, it is thought, it has been "built-up" by the accretion and coming together of masses of small celestial bodies and miscellaneous material from space, welded into one great mass by the force of gravity. Whichever of the alternative theories is correct, there is little difference in the present respect, since it is admitted that such a mass coming together would generate intense heat by reason of its gravitational attraction and the consequent high pressures involved in the interior so that the vapourising and condensing process would go on just the same.

It seems that the German scientist Gottfried Liebnitz (1646-1716) was first to describe this process, in 1690. "When the outer crust of the earth had cooled down sufficiently to allow the vapours to be condensed, they fell, investing the whole globe", he said. He was followed by French naturalist Jean Lamarck (1744-1829), the man who paved the way for Darwin, who said that the older naturalists prior to him were convinced that some great oceanic flood must have invested the earth long after it became the home of living beings. At about the same time the German scholar Immanuel Kant (1724-1804) was asserting (1750) that the Deluge of the Bible was caused by these waters falling to the earth, so bringing in the scientific thought of his day to corroborate the Bible story. The famous French zoologist, Georges Cuvier (1769-1832), commenting upon the early finds of frozen mammoths in Siberia—a much more commonplace matter a century later—drew attention to the biological evidences—nowadays freely admitted—that these great creatures were frozen solid instantaneously and this pointed to the celestial vapours falling as snows, suddenly. Then in 1886 Prof. Isaac N. Vail (1840-1912) an American, followed these eminent scientists with the publication of *"The Earth's Annular System"* in which the entire subject was exhaustively reviewed. Without necessarily accepting all of Vail's conclusions, it may be taken as reasonably likely that such deluges have occurred in pre-historic times and it is at least possible that the Flood of Noah's day was in fact the last of such.

Says Vail "During the Igneous age the oceans went to the skies, along with a measureless fund of mineral and metallic vapours, and if we don-cede these vapours formed into an annular system, and returned during the ages in grand instalments, some of them lingering even down to the age of man, we may explain many things that are dark and perplexing today".

It is a remarkable fact that the Bible seems to know a lot about the existence of terrestrial waters high above earth's atmosphere. Without entering upon any discussion at this moment as to how geologic facts only now coming to light could have been known and written in the time of Moses, or earlier, certain statements, mainly in the Genesis story of creation, can be noted as having a bearing on the subject. Genesis states that God created an atmosphere to divide the waters below the atmosphere from those above it. "God said, let there be a firmament in the midst of the waters, and let it divide the waters from the waters. And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament. And God called the firmament heaven. And the evening and the morning were the second day". (Gen. 1:6-8). This word "firmament" is raqia, which means something expanded or stretched out, and in this connection is an expressive description of the upper atmosphere or the sky. Some modern translators use the term "expanse" which is more fitting. When the Hebrew Old Testament was translated into Latin the Ptolemaic cosmology held sway and the sky was believed to be a solid crystalline sphere encircling the earth, hence the Hebrew raqia was rendered by the Latin word firmamentum, meaning something solid, and this was carried over into the Authorised Version; in 1611 the Ptolemaic cosmology still held good so no reason existed for change. According to Genesis this "expanse" was something in which birds could fly (Gen. 1:17); the point here to consider is the definite statement that there were waters both below and above this expanse or atmosphere.

One or two other allusions are relevant. In Psa. 104:5-9 the Psalmist, speaking of the creation of the earth, says "thou coveredst it with the deep as with a garment; the waters stood above the mountains. At thy rebuke they fled; at the voice of thy thunder they halted away. They go up by the mountains; they go down by the valleys into the place which thou halt founded for them. Thou hart set a bound that they may not pass over, that they turn not again to cover the earth". That passage is very consistent with the Genesis position of waters above the atmosphere which eventually descended to flood the earth and mingle with the oceans. Again, the Lord, speaking to Job, demands "where were you when I laid the foundations of the earth?... who shut in the sea with doors when it burst forth from the womb, when I made clouds its garment, and thick darkness its swaddling band, and prescribed bounds for it, and set bars and doors, and said, Thus far shall you come and no farther, and here shall your proud waves be stayed". (Job. 38:4-11 RSV). It does not take much thought to see in this a vivid impression of the violent ejection of earth's waters from its surface to stupendous heights where they valorised and formed a cloud garment around the earth, remaining there until, as it were at God's command, they descended again as the vehicle of his judgment in the days of Noah. It might also well be that St. Peter made reference to this same thing, when, speaking of the antediluvian world, he said "There were heavens from of old, and an earth compacted out of water and amidst water, by the word of God; by which means the world that then was, being overflowed with water, perished". (2 Pet. 3:5-7 RV). It does seem that the Bible writers did take very literally the Genesis implication that in antediluvian times there was water above the atmosphere, and this constituted the immediate cause of the Flood.

Prof. Vail explains that the molten and valorised substances, including water, ejected to distances of thousands of miles above the primitive earth, developed a rotary motion, keeping

them "in orbit", to use a modern term, for immense periods of time. Eventually, however, gravity brought them back to earth, just as it does with modern satellites. By the time man appeared on the earth, he suggests, the only element that still remained in the upper skies was water. This, due to the absence of appreciable atmospheric pressure, could have been in vapour form or, having regard to the excessively low temperature of outer space, minute ice crystals. Too high up to float on the atmosphere as do normal clouds, it was kept aloft by its rotational speed and centrifugal force. As, in the course of ages, that speed decreased, these vapour clouds commenced to decline towards the earth. Coming in contact with the increasingly dense atmosphere of the earth's environment they would tend more and more to "float" and move towards the poles. Thus the temperate and polar regions acquired a kind of "roof" or canopy of frozen vapour and ice crystals which acted as a greenhouse canopy and created a genial and warm climate right up to the Poles. The climax came when the accumulating masses, having lost their centrifugal force, descended on the polar regions bringing with them the intense cold of outer space. Once the process had started it would be accelerated by the forced passage of Polar air to the tropics, where the displaced tropical air ascended into the skies and impelled the remaining vapour clouds to the Poles until the whole had descended to the earth. Giant tidal waves rushed south and north from the Poles, and the rest of the fallen waters remained as ice-caps like those which today are up to two miles deep.

The advocates of this hypothesis are able to urge as evidence the present existence of a number of physical phenomena, which have long puzzled scientists and which can hardly be explained in any other way. Of these, the most notable is the question of the frozen mammoths and other animals of the Northern Hemisphere—Siberia, Canada, Alaska and the Arctic.

Buried in the permanently frozen soil and ice of Northern Siberia and the islands of the Arctic Ocean lie the bodies of vast numbers of mammoths, woolly rhinoceros, bison, wild horses and other animals in such perfect state of preservation that their flesh, when discovered, has for centuries been used for food by local inhabitants-and many of these species have been extinct for at least five thousand years. A great many scientific expeditions have investigated some of the "finds" during the past two centuries and there is unanimous agreement that Siberia and the Arctic was once a warm and fertile territory in which these beasts lived by the thousand, that a cataclysm of Nature occurred which changed the climate instantaneously to Arctic cold, and that a gigantic flood of water swept over the land, burying everything under many feet of water-borne silt and soil which froze the unfortunate animals to death where they stood. The sudden nature of the catastrophe is evidenced by some animals being found with freshly eaten food—grasses and herbage—still in their mouths. This vegetation has been analysed and found to be of types that will grow only in a temperate and warm climate and in one case to require daily sunlight to grow at all—this from a region where the sun is now below the horizon for several months in the year, and there is a long period of continuous night. (An ice crystal canopy of the kind above described would refract the sun's heat and light as it passed through so that a portion would be diverted from the tropics and a greater amount directed toward the Poles, thus accounting for the more equable and generally genial overall climate; reflection of sunlight from the canopy would lengthen twilight in the tropics and decrease total hours of winter darkness in Polar regions so that something much nearer the normal alternatives of day and night must have been the rule). Again, for the flesh to have been preserved for five thousand years and still be fit for food indicates very rapid freezing; modern food-preserving techniques must effect the process in a few minutes even for the small carcases of poultry. Experts have decided that these edible mammoths were quick-frozen in a few moments at the fantastically low temperature of nearly 200 degrees (Fahrenheit) below freezing-point, a degree of cold which is quite unknown today anywhere on earth, but consistent with the rapid descent of these "canopy waters" from intensely cold outer space.

It is estimated that at least five million mammoths and a hundred million other animals lie thus frozen and buried in continental Siberia, and an unknown number in the fringing Arctic islands to the north, and in Alaska. The remains are not confined only to the animal world. Countless masses of frozen tree trunks, in some cases in piles up to two hundred feet high, line the Arctic coasts. Somewhere to the north of Siberia there must have been a thickly forested Arctic continent which now lies submerged beneath the icy waters.

The Chinese knew of these frozen mammoths five centuries before Christ and sent expeditions to collect the tusks for the sake of the ivory. They are mentioned in the National History of the first Manchu emperor, Kang-Si, about A.D. 670. A Chinese work of the twelfth century spoke of the growing trade and European travellers in the 17th and 18th centuries indicate that exports were reaching London and the supply seemed inexhaustible. An emissary of the Russian Tsar Peter I, in an account of his official mission to an Emperor of China in 1704, said "the Siberian Russians think the mammoth is like an elephant except that the tusks are more curved. They believe that elephants existed in these parts before the Flood, when the atmosphere must have been warmer, and that in the Deluge their drowned carcases were washed under the earth. After the Flood the air became cold instead of warm so that from that time the bodies lay frozen in the ground".

In the late 19th century, Sir Henry Howorth, in "The Mammoth and the Flood" said "A very great cataclysm overwhelmed a large part of the earth's surface. A vast flood buried great numbers of animals under beds of loam and gravel and there was a sudden change in the climate in regions like Siberia and Alaska".

Various indications go to show that this great Flood from the north reached as far south as about Lat. 50N, roughly the latitude of the English Channel, and that in South-western Siberia, due perhaps to the low level of the land, at some points below present sea level, it extended still farther south and created a vast inland sea, some two thousand miles long by a thousand wide, from the Caucasus eastward. Today the Caspian and Aral Seas and Lakes Balkash and Baikal are the only remains of this "Sarmatian Ocean", as it has been called, but much of it was still in existence so late as the seventh century of the Christian era.

Considerable light was thrown on all this by the American geologist G. F. Wright who some seventy years ago carried out protracted on-the-spot investigations into glacial phenomena throughout Northern Europe, Siberia, and Northern China (*"Asiatic Russia"* 1902). Over much of this area he found evidence of a temporary submergence of the land by water, especially in Siberia where, he says, the Arctic Ocean reached to the base of the Tibetan mountains, being between two and three thousand feet deep in places; this he attributed to a rapid sinking of the land due to the weight of the water, and that since the disappearance of this inland sea in modern times the land has returned to its former level.

A similar deluge must have cascaded over the South Pole and spread northward, but in this case the impact was different. Whereas the North Pole is surrounded by the Asiatic and American continents, over one seventh of their area being supposed to have been inundated by the northern Flood, there is nothing but open sea in every direction from the relatively small Antarctic continent. The nearest land, apart from the tip of South America, is more than three thousand miles from the Pole. The waters would have travelled northwards in a series of gigantic tidal waves, their force gradually lessening as they spread over the globe. Signs of such a flood do exist in South Africa and South America but the chief impact of the southern deluge was on the sea.

If the Valian deluge was in fact the true cause of the Flood, the waters of Noah came from the south. From the South Pole to the entrance of the Persian Gulf is about eight thousand miles and there is nothing but sea all the way. The eastern side of Arabia bordering the Gulf nowhere exceeds a few hundred feet above sea level. The speed of a tidal wave varies according to the depth of the sea bed, and the Arabian Sea is shallow compared with the open ocean so that the velocity of the north-bound waters would have been checked but their height correspondingly increased; such a flood could pass over eastern Arabia and the Gulf and finish its onward progress in the mountain-encircled Iraq plain with its force so much reduced that the waiting Ark could be caught up and floated without being damaged. A continuing inrush of water supplied by the still descending canopy far to the south would raise the water level until, with the absence of any outlet to the north, the depth of water could be several thousand feet. Iraq is surrounded north and east by mountain ranges 12,000 feet high and on the west by a desert rising to 3,000 feet. According to the Genesis story the Flood continued to increase for forty days, remained more or less static for five months, and then took another seven months to drain away. The water would have been trapped in this landlocked plain and become virtually a quiet inland sea.

This then may have been the cause of the Flood. It is impossible to be dogmatic. Evidences from ancient times, conclusions to be drawn from ancient remains, from relics found in the earth and so on, are almost always capable of several interpretations. The most that can be said is that this explanation accords perhaps better than any other with Scripture. That there were "waters above the firmament" in ancient times we know from Gen. 1.7, and we also know it from the geological record. The Bible says those waters went up above the firmament in the second creative day and that also is confirmed by the geological record. The Bible states that those same waters were those of the Flood and whilst the geological record cannot confirm this it does at least admit the possibility. There are however two indications of interest. Attempts have been made to date the time when the frozen mammoths of Siberia met their end by means of the modern "carbon-14" test which is widely used, since its invention in 1950, to ascertain the age of ancient remains. There has been difficulty in achieving a definite date since the hair and skin submitted to test has not been altogether suitable, but a tentative figure has been secured of about 3,600 B.C. The close agreement of this figure with the Bible Flood date of around 3,300/3,400 B.C. is at least remarkable. The other point concerns the longevity of the antediluvians. The Bible indicates that they enjoyed immensely longer spans of life than have men at any time since. It is beginning to be thought nowadays that one factor affecting length of life is the incidence of cosmic rays reaching the earth's surface. If the Valian hypothesis is correct then the absorption of cosmic rays by the encircling canopy would have been much greater than is the case today and this would tend to longevity.

It might well be, therefore, that of all the suggestions that have been made regarding the natural basis behind the story of the Flood, this particular one best explains those two rather mysterious Bible expressions, "the waters above the firmament" and "the fountains of the great deep".

#### 7. The Flood was upon the Earth

After a somewhat lengthy consideration of the theories and hypotheses of men endeavouring to elucidate the natural causes which precipitated the Flood, we come back to Noah and his family, sitting inside the Ark, counting seven slow days from the tenth day of the second month until the seventeenth day, waiting for the fulfilment of God's word and the coming of Divine judgment. It really does not matter to us how the Flood came or what was its actual cause; all the evidence, documentary and geologic, is that it was a colossal invasion of the sea from the south, be the originating phenomenon behind that invasion what it may. We are really concerned with understanding as accurately as we can, from the brief record we have, just what was the experience of Noah and his family during that momentous year and eleven days during which the antediluvian world came to its catastrophic end.

So our thoughts come back to those eight persons of faith, the only ones in all the world

who believed God, shut up inside the only possible haven of refuge from the wrath to come, surrounded by a heedless and scornful world which went on with its daily interests, unbelieving, ignorant. And far to the south of that land with its shining cities, away at the other end of the southern ocean which they had probably never even explored, there rushed towards them the Angel of Vengeance which was to sweep their land with the besom of destruction and leave God's world ready for a fresh start.

It does seem that a number of allusions in the narrative, in addition to the physical evidences, are best explained on the basis that it really was the descent to earth of the "waters of the firmament", previously discussed, that caused the Deluge. This may become more evident as the story unfolds. And if such be the case then the first act in the drama was played, not in the land of Iraq where the Ark waited, but seven thousand miles away in the Antarctic. This presentation is built upon that assumption. If in fact the premise is not justified, and the gigantic tidal wave which undeniably did cause the Deluge owed its origin to other and more mundane causes, then the effect would be much the same but on not so widespread a scale. It is this fact which lends so much support to the Valian canopy theory as the cause of the Deluge; the Bible account can hardly be satisfied by anything of a lesser nature.

Gravitating, over an immense period, closer and closer to the Poles, the masses of suspended water finally broke through the denser atmosphere near the earth and descended to its surface, probably in the form of snow and ice crystals, bringing with them cold of an intensity that had not been known in those hitherto genial regions since man had been on earth. It has already been shown that the effect of the "canopy" was to maintain a reasonably warm and genial climate over the whole planet. That condition was abruptly terminated and the Polar seas subjected to the intrusion of colossal masses of ice-cold water. Geologists claim that at some time in recent geological history the oceans were quite suddenly increased in depth by some 300 feet; if it could be thought that this was in fact due to the waters of the Deluge then the catastrophe involved some eight million cubic miles of water and the relatively sudden addition of this to the Polar seas would have immediate repercussions.

The first would be the creation of a giant "tsunami", or series of tidal waves, spreading out from each Pole over the oceans. Tidal waves are fairly common, often due to submarine earthquakes, and can be as much as 500 feet high and travel across the ocean at 500 miles an hour. Ships hardly notice them because the wave is in the form of a long swell, sometimes a hundred miles or more from front to rear, which lifts the ship almost imperceptibly, and the real damage is when the wave hits the land, it may be five or six thousand miles away. In this instance the waves travelled northward across the Indian Ocean; as they became restricted between the converging coasts of Africa and India, and the sea-bed became more shallow, their speed lessened but their height increased. And the continuing fall of the waters from heaven sent more and more waves in succession. Then came the wind. The forcible displacement of the Antarctic atmosphere by so great a volume of alien water meant that the air had to go somewhere, and go it did, in a roaring tempest of ice-cold wind which increased the impetus of the speeding waters and followed them northward. And as it did so the warmer air of the antediluvians' homeland, laden with water vapour, was in turn displaced by the icy blast and forced upward into the upper skies, there to erupt into storms of thunder and lightning such as man had never seen before; and down came the rain, rain of unimaginable intensity, rain born of the frightful conflict between hot and cold air that was raging in the upper atmosphere, rain that heralded a complete and drastic change in the climatic conditions of the earth.

When a tidal wave reaches the coast its waters bank up to a terrifying height and if the land is low-lying the destruction is immense. What is said to be the highest such wave recorded in modern times hit the coast of Kamchatka, Eastern Siberia, in 1737; that wave was 210 feet high. The wave resulting from the volcanic eruption on the island of Santorin in the

Mediterranean in the fifteenth century before Christ is calculated to have been 100 feet high when it swept over the island of Crete, destroyed ninety thriving cities and virtually all the inhabitants, completely wiping out the Cretan civilisation. The story of the Flood has been repeated, on a lesser scale perhaps, many times in subsequent world history.

The available data is too uncertain to hazard an estimate of the height of the "forward wave" which first struck the doomed cities. Its probable speed can be calculated; leaving the Antarctic at 500 miles an hour it would travel up the Persian Gulf at about sixty miles an hour and burst over Noah's land at that speed. A glance at a large scale map will show that the mountainous coastlines of Arabia and Persia, and the tortuous entrance to the Gulf, would tend to limit the force of the waters before they began to spread over the low-lying lands of Eastern Arabia and Iraq. Nevertheless more and more water came in from the ocean, driven still by the relentless wind and the continuing fall of the "canopy" waters, so that the inundation of the land became, as Genesis says it did, progressively deeper over a span of forty days.

Perhaps the best picture of the position as it actually affected Noah in the Ark is given by the experience of the captain and crew of the U.S.A. battleship *"Wateree"* in 1868.

During the afternoon of 8th August 1868 the seaport town of Arica, Peru, was wrecked by a severe earthquake. The "Wateree", with several other ships, was at anchor in the port. Soon after dark the lookout reported the coming of a tidal wave. Says the eye-witness report "its crest... showed frightful masses of black water below... we could do nothing but watch this monstrous wave approach... we could only hold on to the rails and wait for the catastrophe. With a terrifying din, our ship was engulfed, buried under a half-liquid, half-solid, mass of sand and water. We stayed under for a suffocating eternity; then, groaning in all her timbers, our solid old Wateree pushed her way to the surface, with her gasping crew still hanging onto the rails." The report goes on to say that the ship was then carried along at a very great speed in the darkness and after a time became motionless. The crew concluded they had run aground, and waited for the morning.

When dawn came they found that their vessel was lying on the lower slopes of a mountain *two miles* from the sea. Not far off lay a Peruvian navy ironclad, on her side, and an English three-masted sailing ship. The vessels had been carried over sand dunes, a valley and a railway line; all around was a scene of desolation. From marks on a mountain precipice near by they found that the water had been nearly fifty feet deep before it receded.

In that case the waters receded. In the case of Noah they went on until they filled the entire plain, five hundred miles long by three hundred miles wide, and increased their depth continuously under the pressure of the sustained flow from the south. To the heedless and unbelieving multitudes it must have been a terrifying sight. When tidal waves strike the lands surrounding the Pacific Ocean, Japan, the East Indies, South America, and so on, where they are comparatively frequent, advance warning of their coming is given by an observing station located on Hawaii, and the people flee to the mountainous regions. In the antediluvian world there were no mountainous regions; the land was, and is, flat and little higher than sea level. And they had rejected the advance warning. Maybe no written description can fitly convey the sight that met their incredulous eyes.

Away in the south, across the whole horizon, where normally golden fields met blue sky, appeared a long grey wall, a wall of immeasurable height, seeming almost to touch the sky, a moving wall, a living wall. Even as the spectators watched, it advanced, its upper line swallowing up the heavens, its base submerging the fields, at incredible speed, its whole visible face rippling and moving, glimpsing white streaks and patches of foam, bearing down upon them like an avenging fury. They saw now the foot of the giant wave, a surging torrent of boiling foam stretching out before it, carrying on its brow heaps of debris, and they saw that foam surge over and swallow up the long black vessel which had been the butt of their jokes

for so many years past. They saw the Ark leap up as it were to meet the oncoming Flood and they saw it disappear into the depths of the great wall of water which swept over it as if it had been a matchstick. Then the avenging colossus gathered homes and palaces and temples, trees and shrubs, men and women, into one confused mass, and carried them all away, mingled with the sand and clay and gravel scooped up from the plain by the torrent. All that was left of that godless world lay buried beneath many feet of silt and mud, never again to see the light of day. And as the relentless waters rolled on, speeding to the north, a frightful conflict began in the heavens above. The wind, whipped up to gale force, resolved itself into a tempestuous cyclone and the heavens dropped water, a torrential downpour such as the world had never known since the days of man, a downpour that was to continue unceasingly for forty days and forty nights.

At the first impact of the waters the Ark would have been completely submerged but its triangular shape and wide flat base would offer minimum resistance to the onrush and eliminate danger of capsizing. But it must have been a terrifying experience for the occupants, shrouded in pitch darkness and unable to do anything to help themselves. That phase passed—it probably lasted only a few minutes—and the buoyancy of the vessel brought it to the surface, where it floated, borne along by the current but in no danger.

The events of the months that followed are graphically related in the 7th and 8th chapters of Genesis, in much more detail than in the Babylonian and Assyrian accounts which have survived. There can be no doubt that the Bible account is the oldest; it bears all the signs of being the work of an eye-witness. The other records are legends, copied and re-copied from time to time by Sumerian and Babylonian and Assyrian scribes; although derived at the beginning from the same story that we have in the Bible they have been altered and modified through the centuries and combined, in some degree, with sundry recollections of other lesser river-floods which devastated Iraq in the centuries following the Deluge. Thus Noah is stated to have been king of the city of Shuruppak, which was not founded until at least five hundred years after the Deluge. The legendary narratives however have preserved a vivid impression of the onset of the Flood waters and because they do confirm that the catastrophe was due to an invasion by the sea from the south the relevant part of the account is repeated here. There are many versions—some twenty-six tablets or portions of tablets exist, giving variant details, and the translations which have been made vary greatly in style and phraseology so that it seems best to present a compound rendering which preserves the common testimony of the various tablets as nearly as possible.

"With the coming of early dawn there appeared on the horizon a black cloud. Ramman (*the stormgod*) thundered in the midst of it, and the lord Nabu (*the messenger of the gods*) marched in front, devastating the mountains and the plain. Nergal (*the god of the abyss*) made the storm to burst, and Adar (*the god of war*) advanced, overthrowing all before him. The Annunaki (*the spirits of the earth*) lifted up their flaming torches; with the brightness thereof they lit up the earth (*this refers to lightning*). The inundation swelled up to the sky. The daylight was turned into darkness, and the waters rose on the mountains. The hurricane attacked in fury, and the deluge swept over houses and temples.

"For six days and six nights blew the flood-wind as the south-storm swept the land. The hurricane, the great-sea-waves and the diluvian rain continued in all their strength. Hurricane and flood marched on, subduing the land. The great ship was tossed by the hurricane upon the mighty waters. Then when the seventh day approached the flood-carrying south-storm subsided. The terrible great-sea-waves, which had assailed after the fashion of an earthquake, grew weaker. The sea grew quiet, the tempest was calmed, the flood ceased. I beheld the sea; its voice was silent, and the land was as level as a flat roof.

"I opened the window, and down on my face streamed the sunlight. Into the distance I peered, to the horizon bounding the sea, and there was no land. Then twelve measures away

there appeared an island" (this "measure" was probably the "geshu" of ten Babylonian stades which would make the distance about fifteen miles) and on the mountain of the land of Nisir the ship came to rest.

"For six days Mount Nisir held the ship fast. On the seventh day I sent out a dove, and let her go where she would. The dove flew hither and thither but found no resting-place and she returned. Then I sent out a swallow and she flew hither and thither but found no resting-place and she returned. Then I sent out a raven; she flew away and found the waters sinking. She ate and rested and did not return."

The similarity to the Genesis account is obvious; the only marked difference is that the initial stage of the catastrophe is said to have lasted for six days instead of the Biblical five months. The Bible is however much more explicit in its detailed account of the progress of the Flood. Verses 17 to 20 of Genesis 7 describe its increasing depth as more and more water arrived from the south. From indications near the site of Nineveh it would seem that the Flood reached this point which means that over the south Babylonian plain the water was at least nine hundred feet deep and could have been more. Note the indication in Genesis of the steadily increasing depth over the first forty days "The flood was forty days upon the earth, and the waters increased, and bare up the Ark, and it was lifted up above the earth... and the waters prevailed, and were increased greatly upon the earth, and the ark went upon the face of the waters and the waters prevailed exceedingly upon the earth and all the high hills were covered fifteen cubits upwards did the waters prevail, and the mountains were covered". If the waters attained a depth of nine hundred feet the rate of increase would only be one foot an hour, quite imperceptible to the occupants of the Ark. It would inevitably go with the current and wind towards the north and by the end of the forty days find itself more or less toward the northern end of the Babylonian plain.

"And the waters prevailed upon the earth an hundred and fifty days" (ch. 7 vs. 24). After the first forty days, for the rest of this five months the waters remained more or less stationary, held at their abnormally high level partly by the pressure of further tidal waves coming in from the south and partly by the fierce storm-wind still emanating from the same source. But the end of this condition was at hand. "God made a wind to pass over the earth, and the waters assuaged. The fountains of the deep and the windows of heaven were stopped, and the rain from heaven was restrained. And the waters returned from off the earth *continually*" (ch. 8 vss. 1-3). What this means is that the downrush of waters from above the Poles diminished and stopped, and with that cessation the great tidal waves ceased to flow and the gale force wind from the south died away and was silent. The turbulent skies above the Ark with their almost continuous thunder and lightning became quiet, and the torrential rain ceased to fall. A new phenomenon became apparent to Noah; another wind, not a gale as had raged from the south, but a softer, gentler wind, came from the north-east and began to urge the pent-up waters back to the source from which they had come.

This wind that God had made to pass over the earth whose effect was to assuage (*shakak—to* subside) the waters, is a most intriguing part of the story. It had its origin in natural causes which no later writer could have known about had the Deluge story been a later invention; it is one of the evidences that this account is by an eyewitness. With the disappearance of the aerial waters the sun was shining down upon the flooded plain with unaccustomed brilliance and power—the Babylonian legends all make special mention of the sunlight when the Ark was opened—and the time was April, verging on to summer. Just as the Poles were from now on going to be much colder, so the land Noah knew was destined to be much warmer. A new climate pattern was being initiated, induced by this difference in temperature between the tropical and temperate regions. The air over the Equator is warm and light; colder and heavier air from the temperate regions is continually pouring in and driving the lighter, warmer air upwards. The earth's rotation gives these incoming north and

south winds a twist towards the west so that they appear in the northern hemisphere as northeast and in the southern as south-east winds. These are known as the "Trade Winds" and in the days of sailing-ships were important aids to mariners. As the seasons change the hot region towards which the Trade Winds blow moves north and south with the sun; hence the latitude affected by the Trades moves north and south correspondingly. Hence there is a region in which the Trades blow in summer but not in winter; in the northern hemisphere this lies between Lat 30 and 42 degrees, which is the precise latitude of Iraq, the scene of the Flood.

So it came about that during that year of the Flood the changed climatic conditions produced the Trade Winds for the first time. The wind that God *"caused to pass over the earth"* to assuage the waters was the North-East Trade, blowing down from Southern Europe and Siberia into Iraq, persistently from April to September, just the relevant months in the Biblical narrative. By September the water was virtually gone.

The Flood took five months to drain away. That may seem a long time, but another look at the map shows that the Persian Gulf connects with the ocean by an extremely narrow passage, only thirty miles wide, flanked on both sides by high mountain ranges. All the pentup waters of the Flood had to escape through that narrow passage. The water had taken five months to attain its maximum depth; it now required five months to subside.

During that five months, and for another two months thereafter, the Ark remained stranded on a mountain. Which particular mountain it was has been the subject of argument for ages—there are at least six contestants for the honour in the Middle East. The Bible says the Ark rested *"on the mountains of Ararat";* this was a land roughly equivalent to modern Kurdistan extending from Lake Van to the south-west of Lake Urmia, about 300 miles north to south. The Assyrian tablets say it was Mount Nisir, which was in southern Kurdistan. But all the details of where the Ark landed and what happened while the Flood was drying up must wait for another chapter.

#### 8. The Mountains of Ararat

## "And the ark rested in the seventh month, on the seventeenth day of the month, upon the mountains of Ararat." (Gen. 8:4.)

It was at the end of the hundred and fifty days, at the time when it is said in verse 3 that the waters began to abate, that the Ark stranded. If Noah had in fact been a dweller in the land near the head of the Persian Gulf as the traditions declare—and it seems reasonable to think that he had—then the Ark came to rest several hundred miles north of its starting point. During those five months it might have drifted aimlessly three or four times that much. Noah found himself in a country that he had probably never seen before. The Ark had evidently got entangled somewhere in the confused mass of mountain ranges which bound the plain of Iraq on the north and east. It is improbable that the vessel grounded at the top of the mountain, despite popular impressions. More likely it was left high and dry by the receding waters on some lower slope, so that although Noah could see the mountain peaks around him there was still a good deal of water to drain away before he could set foot upon land fit for the immediate cultivation which would be necessary.

That five months' aimless drifting must have been a new trial of faith to Noah and his family. As they looked out, day after day, across the limitless sea, they must have wondered how and in what way God would bring them safely to land. They probably had no means of determining the depth of the water, and as week succeeded week and no land appeared on the horizon, no mountain peaks emerging from the surface of the sea, they must have had need of all their faith and trust. The daily routine of attending the wants and needs of their animal cargo would have occupied much of their time, but it must have seemed a long five months.

Local legend to this day supplies many alleged incidents of the voyage. It is said by the Yezidis of Northern Iraq that the Ark, while drifting, bumped on the top of Mount Sinjar in the desert to the west of the Tigris, and sprang a leak. The vessel would have foundered if the serpent (who was to have been excluded from the Ark but who got in by means of a trick) had not crawled through the hole, coiled his body into a ball on each side, and pulled himself tight like a rivet, thus making the hole watertight. He remained thus for the rest of the voyage, and so saved the ship.

It is only fair to add that the Armenians dispute the claim that this incident happened in the Yezidis' land on Mount Sinjar. They assert that it occurred on the top of Mount Sipan in their own country, near Mount Ararat, and that Noah, feeling the bump, ejaculated **"Sipan Allah"** meaning "Praise God", which, they say, accounts for the present name of the mountain.

A further period of seven months and ten days elapsed before the family left the Ark. During the whole of that time they lived inside the now stationary vessel. If the Flood had actually spread over the land from the Indian Ocean in the south, then the slow draining away back into the ocean through the narrow exit from the Persian Gulf would take a long time. Even at the present day the same land is periodically visited by river floods which cover practically the whole of the country to a depth of several feet, and several weeks elapse before the floodwaters find their way into the Gulf and the land is open to view again. The Bible story is therefore perfectly credible and just what should be expected in the circumstances.

The modern Mount Ararat is at the northeastern corner of Lake Van, in Eastern Turkey, but it is most unlikely that this is the mountain referred to in the Genesis story. "Ararat" is the Hebrew equivalent for the country known to the Assyrians in the 9th and 7th centuries B.C. as Urartu. It is so mentioned three times in the O.T., 2 Kin. 19:37, Isa. 37:38, and Jer. 51:27. It was not the name of a mountain but of a country, originally quite a small territory in the vicinity of Rowanduz, east of Mosul, and not until much later did it become a powerful kingdom extending its sway to the area where the celebrated mountain stands. The land of Ararat embraced the whole of the mountainous country on the north and east of the Iraq plain so that so far as the Genesis account is concerned any likely mountain in that area would meet the case. The tradition associating "Mount Ararat", (16,956 feet), with the Ark is of comparatively recent date, first promulgated by the Armenian Christian Church in about the eleventh century but not taken seriously by anyone outside Turkish Armenia until the early eighteenth century; this will be treated in greater detail in a later chapter.

Prior to this time, and back at least to the early centuries of the Christian era, the mountain on which the Ark was believed to have stranded, on the testimony of many writers from Epiphanius in the 4th Century to William Whiston in the 17th Century, was Al Judi, (6,900 feet), a few miles east of the Turkish town of Cizre (formerly Jesiret Ibn Omar) on the River Tigris some distance north of Mosul. This mountain is on the northern border of the Iraq plain and much more likely than "Ararat". To this day the Eastern churches and most peoples of the Middle East look on Al Judi as the true landing place of the Ark.

Writers and historians at the beginning of the Christian era, such as Josephus, and back to Berossus the Babylonian historian of the 3rd Century B.C., say that the Ark grounded on a mountain in the Gordyene range, which bounds the plain for two hundred miles or so across its northern border, Al Judi being at its western end, without naming the mountain.

Prior to Berossus we have the Assyrian Flood tablets, written in the 8th and 7th centuries B.C. These are the ones which name Mount Nisir as the mountain which arrested and held the vessel. This mountain is mentioned in records of the warlike exploits of the Assyrian kings of about the 8th Century B.C., from which it is known that it lay to the east of Nineveh in the mountainous country which now divides Iraq from Persia. Up to some ten years ago it was identified with Algurd, (12,248 feet), the highest mountain of the range, eighty miles east of

Mosul (Nineveh), but later research has given more definite grounds for associating it with a lesser but outstanding peak a hundred miles farther south called Pir-Omar-Gudrun, (8,650 feet). This, has been identified with the "Mount of the East" of the Assyrians and Babylonians, revered as the place from which their ancestors had come after the Flood, the Nisir of the Flood legend.

The writer of these notes thinks, however, that there are grounds for considering an even earlier candidate. The old Babylonian Flood tablets and the Sumerian accounts, going back to the 17th century B.C. also name Nisir but also state that the mountain was in the east and that it rose out of the Flood-sea like an island. The general description better fits the plain of lower Babylonia with isolated mountains on its eastern border than it does the rather confused mountainous region of Assyria where Pir-Omar-Gudrun is situated. There are some reasons for thinking that the mountain of the Ark, and the "mount of the East" of the Sumerians and the early Semites, was a relatively modest but striking mountain now known as Kuh-i-Anaran, just inside the Persian frontier a hundred and forty miles east of Babylon, 5,350 feet high and meeting the admittedly scanty indications in Genesis and the tablets very reasonably.

The first point of enquiry in this connection is the meaning of the word "Ararat" in Gen. 8:4. It is almost universally taken to refer to the land of that name in Assyrian times, but there is a difficulty. As the name of a country the term "Ararat" only appeared about the 9th century B.C. whereas Moses edited Genesis from preexisting records in the 15th century B.C., and could not himself have used the name of a country which did not at that time exist. It is possible, of course, that the ancient Hebrew text did have a earlier name for the territory indicated which was changed by later copyists in the 9th or later centuries to the name current in their day, but not very likely. The earlier geographical names in Gen. 2 remain as they were in 2300 B.C. and when, in Abraham's day, the narrative in Gen. 14 used ancient place names the then current equivalent was added by way of explanation. If, in fact, "Ararat" did appear in Moses' edition of Genesis it must have denoted other than the much later country of that name. Gesenius says that the Hebrew word comes from a Sanscrit root, aryawarta, meaning "holy ground". Prof. Young gives the meaning of Ararat as "holy land". It is not difficult to surmise that the first few generations of men after the Flood viewed the landing-place of the Ark as a sacred district in view of the great event with which it was associated, and this is confirmed by the fact that the mountain, wherever it was, became venerated by those and future generations as the dwelling place of the gods and the holiest place on earth.

This sacred mountain was known as the "Mount of the East". The Sumerian east was our north-east; this has been demonstrated by inscribed tablets defining the points of the compass as viewed by the Sumerians. The point of reference was obviously Babylon, the site of the earliest settlements and the Tower of Babel, and both Kuh-i-Anaran and Pir-Omar-Gudrun are roughly north-east from Babylon.

Genesis supplies another clue which is not apparent in the A.V. In the expression "mountains of Ararat" in ch. 8:4 the word "mountains" is not a true plural; it is the Hebrew dual, applied only to two of a pair. The literal meaning is "double-mountain" or "twin-mountain". Strangely enough, the "mount of the East" was also viewed by the Babylonians as having twin peaks. A Babylonian psalm of praise speaks of the "mountain of Bel in the east, whose double head reaches into the skies; which is like to a mighty buffalo at rest, whose double horn sparkles as a sunbeam, as a star". Benjamin of Tudela (12th century A.D.) speaking of his visit to Al Judi, says that "Omar ben al Khataab took the Ark from the Two mountains" which seems to perpetuate what is apparently a long-standing tradition of a double peaked mountain on which the Ark rested.

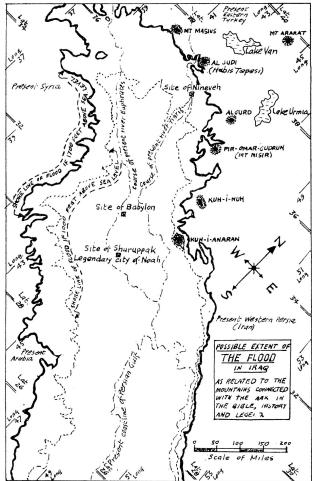
Of all the mountains under consideration Anaran is the only one which has two peaks, two miles apart, rising some two thousand feet above the main mass which is a little over three thousand feet high. Standing a few miles away from the twelve mile length of the mountain the impression as viewed from the plain below could well meet the Babylonian poetic likeness to a mighty buffalo at rest, recumbent, with his two horns standing upright.

There are several other indications that Kuh-i-Anaran was very possibly the actual mountain upon which the Ark landed but these belong to the realm of archaeological deduction and are best considered in another place. Standing as it does, an isolated mass on the very edge of the lower Babylonian plain, it is physically and geographically in the most likely position.

There are thus these four candidates for the honour of having been host to Noah's vessel when the Flood began to subside, and these claims, with the testimony of ancient and modern historians and explorers, will be considered more fully in later chapters. There are other claimants—Mount Demavend, in Persia, south of the Caspian Sea, and Mount Argeus, in western Turkey, are sponsored by early A.D. writers, but need not be taken seriously. Mount Masius, near Nisibin in Southern Turkey, was favoured by some medieval writers but they were probably thinking of Al Judi near by. There is a mountain in Western Persia called Kuh-i-Nuh, which is said to be the Persian for "mountain of Noah", but no legends regarding this peak seem to have survived and it may be that the name is relatively modern and conferred by local inhabitants. In any case this mountain is too hemmed in by adjacent ranges to be a serious contestant. The true mountain must have been one of the many which extend for seven hundred miles in a great curve bordering the northern and eastern sides of the Iraq plain.

The accompanying map, for those who appreciate such things, illustrates the relation of all these mountains to one another and shows how the floodwaters could have submerged the whole of Eastern Arabia and Iraq up to their flanks-except in the case of Ararat, which is separated from the plain by two hundred miles of mountainous terrain where the level is nowhere less than 5,000 feet. The "shore line" of the Flood is shown on the assumption that the water level stood at 1,700 feet above sea level at this level it would have reached each of the other three "possibles" and incidentally converted Anaran into an island just as is stated in the Old Babylonian versions. Had the level attained only 1,000 feet Anaran is the only mountain on which the Ark could have stranded and had it been any lower the vessel could not have reached any mountain at all. The map may therefore give a tolerably reasonable impression of the true extent of the Flood.

Somewhere on the lower slopes of one of the mountains skirting the plain,



therefore, the Ark rested, immovable. It was still surrounded by water, since, drawing twentyone feet in which to float, it must wait for the level to fall that much before land appeared around it. It could not have stranded very high up, for within a little while the dove was to return with an olive leaf in its mouth, and olives do not grow at elevations above 4,000 to 5,000 feet and this particular olive tree must have been unaffected by the Flood; no leaf could survive ten months immersion in water. But for the present there was nothing to see and nothing to do. Noah, looking out of the Ark, surveyed an unbroken sea; from his position some twenty-five feet above the surface of the water the horizon would be only six miles away and not until the level had fallen considerably, leaving the Ark where it was, could his vision have extended any farther.

So he waited for seventy-four days, more than two months, conducting the daily routine of caring for his burden of animal and bird life, noting perhaps that the water level was slowly but steadily falling, until at the end of that time, says chap. 8:5, *"the tops of the mountains were seen"*.

This could mean that the Ark was grounded at a level higher than that of the surrounding mountains, although this would imply a colossal and unlikely depth for the flood waters. The word for "mountains" here has a wide latitude though; it is used in the O.T. on occasion for quite modest peaks and hills, as in the case of the Mount of Olives, which is only two hundred feet high above Jerusalem. On the other hand it is very possible that it was only now that the mists and fogs resulting from the abnormal climatic conditions induced by the Deluge, creating an unprecedented evaporation from the flooded land in that tropical climate, began to clear so that distant mountains formerly shrouded in heavy mist now began to appear, and that this is the meaning of the assertion.

It is evident that there was still no appreciable land visible, for Noah waited another forty days before making his next move. This was to despatch a raven to explore the vicinity. (This forty days of ch. 8:6 must not be confused with the forty days' rain of ch. 7:12) as is sometimes done. There is no definite article, "the", in this verse as would then properly be the case; this forty days to the sending of the raven must count from the time when the tops of the mountains were seen.) The Hebrew expression regarding the raven indicates that it flew over the flooded earth continually, returning to the Ark regularly for rest and food, during the remaining period of waiting.

Seven days later (this has to be inferred from verse 10) the patriarch sent forth a dove in similar fashion. It is evident that land was not yet visible except perhaps in the immediate vicinity of the stranded Ark. Obviously Noah could not consider releasing his charges when the only solid ground available was a perhaps somewhat precipitous and rocky mountain-side. He must be sure that a suitable expanse of cultivable flat ground was available somewhere near by. By this time the level of the waters would have fallen to about the half-way mark; even if the Flood had attained a full depth of 1,700 feet, as estimated on the map, Noah trom his position eight hundred feet above water level would be able to see a distance of 35 miles to the horizon and still had to say, as he does in verse 9, that the waters were on the face of the whole earth. So he waited another seven days and sent out the dove again; this time she returned with the famous olive leaf in her mouth. So Noah knew that somewhere within flying distance there was ground capable of cultivation and fruit trees perhaps already bearing fruit. It was now August and the time of ripened olives, grapes and figs. He waited another seven days and sent out the dove another seven days and sent out the dove on its third mission; this time she did not return at all.

Strangely, Noah waited another month. Had this story been fiction or a late composition based on legend or folk-lore this surely would have been the point at which he came out of the Ark. That is how it is in the Babylonian accounts. Little touches like this confirm that this story in Genesis is the work of an eye-witness, someone who was there at the time. At the end of that month, he looked again (vs. 13) and, *"behold, the face of the ground was dry."* Even this was not enough; he waited another two months, and only then, says the narrative (vs. 14) *"was the earth dried"*. Not until then did he receive the Divine command to leave the Ark.

There must be a difference between the implications of these two expressions, divided as they are by the final two months. In vs. 13, as in vs. 8, "ground" is *adamah*, which means primarily the cultivable surface of the land, fit for agriculture or pasturage. "Earth" in vs. 14, as in vs. 7, is *erets*, which has the general significance of the entire countryside, mountains and valleys, deserts and forests, as distinct from the sea. One can picture Noah in vs. 13, looking out from his vantage point on the mountainside and perceiving that the receding waters had now left a wide stretch of land—perhaps quite a few miles of it—relatively free of water, but away in the distance he could perceive the wider world still flooded. Only after the two months indicated in vs. 14 did he perceive that the distant plains were completely free of water and that he could safely emerge—and then the Lord gave the word.

They had been in the Ark for one year and seventeen days. It must have been with very mixed feelings that they set foot upon *terra firma*.

# Supplementary note on the foregoing:

The last two installments have dealt with the physical effects of the Deluge particularly as they affected Iraq, the scene of the story. From the geological point of view it is agreed that if the pre-disposing cause of the catastrophe was, as suggested, a series of gigantic tidal waves from the Antarctic, much the same effect must have been felt in other low-lying parts of the Southern hemisphere. Particularly would the Indus and Ganges valleys in India, the western Sahara in Africa, the Amazon valley in South America, and parts of Australasia, been similarly affected. From the Bible viewpoint the Deluge concerned only the territory but in fact its effects were probably widely felt over the world.

## 9. The Case for Mount Judi

Claims for the continued existence of the Ark on one or another of the possible mountains have abounded in the Middle East for at least two thousand years past and probably for considerably longer than that. The story was always the same; pilgrims ascended the mountain to view the famous vessel and came back with pieces of the bitumen with which it had been covered, for use as magic charms protecting against diseases and disasters. (Since the tradition moved to Mount Ararat in Turkey during the late Middle Ages this refinement has been dropped; the difficulties of the ascent have precluded pilgrimages and the enquirer has to be content with a view of what is asserted to be the Ark through a telescope in the cathedral at Echmiadzan thirty miles away—but of that more anon.) But the consistency of the tradition points to a basis of truth hidden in the mists of archaic history. One thing is certain; wherever the Ark did come to rest, it must have survived for many years after being vacated by its occupants. Too big to move, it was perhaps slowly dismantled by successive generations of men as and when use was found for the materials of which it was composed. That at any rate is one hypothesis; another and probably more likely one is that the first settlements of the Ark's survivors were an appreciable distance away from the mountains, in the plain where food could be grown quickly, so that the Ark was left to its own devices. In such case, bitumen covered, it could endure in the dry climate of Iraq for a long time, perhaps centuries, and the tradition of pilgrimages by later generations to the "Mount of the East" and its remarkable vessel could be solidly founded on fact.

The first written record to have survived is that of Berossus the Babylonian priesthistorian about 280 B.C., in his history of Babylonia. Recounting the story of the Flood as it is given on the Assyrian and Sumerian tablets, he says "...the vessel being thus stranded in Armenia, some part of it remains in the Gordyene mountains in Armenia, and the people scrape off the bitumen, and carry it away, and make use of it by way of a disease repellent and amulet." Berossus wrote in Greek, hence his use of the terms Armenia and Gordyene, Greek equivalents for the Assyrian Urartu and Kardu. According to Strabo, the First Century Greek geographer, and other writers of the period, Gordyene was the name of the range of mountains bounding the plain of Iraq on the north, now known as the Hakkiari. Hence Berossus could have intended any mountain between Al Judi on the Tigris to "Mount Nisir" at the eastern end; since he took his information from the ancient tablets he probably meant the latter.

The next definite reference is in the "Book of Jubileas", written by some pious Jewish priest about 150 B.C. In this book the Ark is said to have "rested upon the top of Lubar, one of the mountains of Ararat". According to Jub. 10:19 the land of Ararat lay to the east of Babylon, which would point to somewhere on the Persian frontier. Josephus quotes the historian Nicolaus of Damascus as saying "There is a great mountain in Armenia beyond Minni, called Al Baris, upon which it is reported that many who fled at the time of the Deluge were saved, and that one who was carried in an ark came on shore upon the top of it, and that the remains of the timber were a great while preserved". (Ant. 1.3.6). Nicolaus wrote in Greek; "Jubilees" was widely extant in Greek at the time, and "Baris" is Greek for a certain type of ship or boat. This points to the "mountain of the ship" or ark. Minni was the area around Nisibin; either Al Judi, or more likely, Pir-Omar-Gudrun, the Nisir of Assyrian legend and the Armenian mountain of Berossus, is indicated.

Josephus himself, writing in the 1st century A.D., states (Ant. 20.2.2.) that in his own time, in the country of Carrhae, (district of Nisibin), "there are also in it the remains of that ark, wherein it is related that Noah escaped the deluge, and where they are still shown lo such as are desirous to see them." Again, (Ant. 1.3.5) relating the history of early times, he says "After this the Ark rested on the top of a certain mountain in Armenia... the ark being saved in that place, its remains are shown there by the inhabitants to this day". In Ant. 20.3.3 he explains that Nisibin and its vicinity was part of Armenia; this would include Mount Al Judi. These statements are corroborated by other Jewish sources. The Targums of Onkelos and of Jonathan (Aramaic paraphrases of the Old Testament first written down about the 1st century A.D.) both render Gen. 8:4 "the mountains of Kardu" (Gordyene) instead of Ararat.

All this demonstrates that by the time of Christ, among the Jews at any rate, the older idea of the Ark resting at the Mount of the East" in eastern Kurdistan was giving place to a belief that it stranded on Al Judi and was still there for anyone to see. One wonders if the fact that Al Judi was in the middle of the land of Gozan in which many of the Ten Tribe captives were settled by the Assyrians had anything to do with it (2 Kin. 17:6; 18:11; 19:12). Mount Nisir was at the other end of the Kardu mountains two hundred miles away, and it was the sacred mountain of their hated conquerors. It would he only natural for the captive Israelites to change the location of the great event to a site nearer home which would then become their own sacred mountain. The tradition that the Ark was still in existence and could be visited would be likewise easily transferred from the older sites and this would account for the statements of Josephus and others to that effect. That tradition endured for several centuries more; this is rather strange when one considers that Al Judi is by no means difficult of access—only 5,000 feet above the plain; the story should be very easily capable of verification, unlike Ararat in Turkey which is 17,000 feet high and much more difficult.

Epiphanius, Bishop of Salamis (A.D. 310-403), noted theologian, put on record the assertion that "the relics of Noah's Ark are shown in the country of Gordyene even at this day". Rather more definite is the claim that the Eastern Roman emperor Heraclius (A.D. 575-641) did actually ascend Al Judi in A.D. 620 and view the remains of the Ark. The Arab historian Elmacinus in his "History of the Saracens" says of Heraclius that he "ascended up into the mountain. Al Judi and there saw the place of Noah's Ark" which admits of a little doubt as to whether the venerable vessel was actually there. Then Isidore of Seville (A.D. 560-636) says

"Pieces of the timber of the Ark are still shown on Mount Ararath". Isidore wrote five centuries before the claims of modern Mount Ararat began to be advanced and in any case the Armenian church have always stoutly denied that anyone ever has or ever could ascend their mountain, by Divine interdict; in Isidore's day "Ararat" referred to the territory along the Taurus and Gordyene ranges, as witness St. Jerome's commentary on Genesis, A.D. 383 "Ararat is the plain of middle Araxes which lies at the foot Of the mountain Taurus". This river Araxes (modern Khabour) flows from Mount Masius to join the Euphrates, and Masius marks the connecting point between the Taurus range in the west and the Gordyene in the east, as defined by the Greek geographer Stabo in the 1st century (Strabo's "Geography", 20.12.8).

An interesting remark in the *"World History"* of Jordanus of Ravenna (A.D. 500-570) describing Al Judi, tells of Noah building a house on the slope of the mountain upon leaving the Ark, *"and there too is said to be that original vine which Noah planted and whereby he got drunk"*. The reputed vineyard is still there near Al Judi; see Wigram's account hereafter in this chapter.

Ibn Haukal (10th century) Arab geographer and traveller, in his "Book of Ways and Provinces", says "Judi is a mountain near Nisibin. It is said that the ark of Noah (to whom be peace) rested on this mountain. At its foot is a town called Temanin, and they say that the companions of Noah descended here from the Ark and built this town". Another Arab traveller and historian, Masudi of Baghdad (10th century) famous for his care and accuracy, confirms the words of Haukal and names the same town. Temanin, (sometimes spelt Thamanin) is the Arabic word for eighty, the number saved in the Ark according to Moslem tradition, and is the original Arabic name of the town now known as Cizre, a few miles on the western side of Al Judi. (Cizre was formerly Geziret-ibn-Omar, and in classical times Bezabde.)

After about A.D. 500 the Nestorian Christian church became very strong in this part of Asia, and strongly supported belief in Al Judi as the mountain of the Ark. Loss than two centuries later came the rise of Mahomet the prophet of Islam and before long the Moslem faith was predominant in the district. The legend of Mount Judi was taken over by the Mohammedans as it stood; in the Koran account of the Flood it is said (Koran chap. 11) *"The water abated, and the decree was fulfilled, and the Ark rested on the mountain Al-Judi"*. At some time in the 6th Century a monastery, known as the "Monastery of the Ark," was built on the lower slopes of the mountain; this remained until A.D. 776 when it was destroyed by lightning. At a somewhat later date the mountain also boasted a Jewish synagogue and a Moslem mosque, this latter being called the "Mosque of the Ark"; it would seem that the three faiths vied with each other in doing honour to the patriarch Noah and his ancient vessel. All these buildings have long since disappeared, but the tradition remains.

Evidence of this continuing belief next appears in the work of Benjamin of Tudela, a Spanish Jew who travelled extensively in the east during the Twelfth Century and was in the vicinity of Al Judi about A.D. 1160. Benjamin wrote a voluminous account of his travels. (English translation, *"The Itinerary of Benjamin of Tudela"*, M. N. Adler, 1907) saying of the district in question "... *Thence* (from Nisibin) *it is two days to Geziret Ibn Omar* (now the town of Cizre) which is surrounded by the River Hiddekel (Tigris) at the foot of the mountains of Ararat. It is a distance of four miles to the place where Noah's Ark rested, but Omar ben at Khutaab took the Ark from the two mountains and made it into a mosque for the Mohammedans. Near the Ark is the Synagogue of Ezra to this day, and on the ninth of Ab the Jews come hither from the city to pray. In Me city of Geziret Omar are four thousand Jews… Thence it is Two days to Mosul…" It looks as though the Moslem Caliph made short work of the famous relic to the benefit of his building schemes—unless, of course, the locals offered this story to the inquiring Benjamin to account for their inability to show him the Ark on site. It will be noted from this extract that in Benjamin's day, the Twelfth Century, the term "mountains of Ararat" still denoted the district in which Mount Judi is situated, and not the present Mount Ararat in eastern Turkey. (This was still the case so late as the 18th century, as witness Prof. William Whiston's "New Theory of the Earth", 5th edition 1736, in which he says "The Ark rested on one of the Gordyean mountains, which separate Armenia from Mesopotamia and Assyria. This is the commonly received opinion, from which at present I see no reason to recede.")

Benjamin of Tudela was followed about twenty years later by another Jewish traveller, Rabbi Pethakiah, who also visited Al Judi and endorsed the tradition. He added a detail to the effect that upon stranding, the Ark became fixed between the peaks of the mountain and could not get free.

So, for more than two thousand years at least, the firm conviction of the Jews, the Christians, and the Moslems of the Eastern world, with the sole exception of the Armenian church in Eastern Turkey, is that the Ark came to rest on this mountain, almost on the frontier between Turkey and Iraq just where the River Tigris crosses from the one country to the other. That makes this tradition more than a thousand years older than the more well-known one of Mount Ararat. Had the peoples of Kurdistan been as publicity minded as have been the Christians of Armenia it might be that the later mountain would never have entered the competition.

Evidence that. Mount Judi is to this day looked on by the people of the land as the true resting place of the Ark is afforded by a British Anglican clergyman, Rev. W. A. Wigram, who spent many years in Kurdistan as official Anglican representative during the early part of the present century. In his book *"The Cradle of Mankind"* he says:—

"Of all survivals from early ages in this land, none is more remarkable than the "Sacrifice of Noah". It must be understood that no people here, save the Armenians, look on the great cone which we call Ararat, but which is locally known as Aghri Dagh, as the spot where the Ark rested. The Biblical term is "mountains of Ararat" or Urartu, and the term includes the whole of the Hakkiari range. A relatively insignificant ridge, known as Judi Dagh, is regarded as the authentic spot by all the folk in this land: and it must be owned that the identification has something to say for itself. It is one of the first ranges that rise over the level of the great plain; and if all Mesopotamia (which to its inhabitants was the world) were submerged by some great cataclysm, it is just the spot where a drifting vessel might strand.

"Whatever the facts, the tradition goes back to the year A.D. 300 at least. That date is, of course, a thing of yesterday in this country, but the tale was of unknown antiquity then, and is firmly rooted in the social consciousness now. In consequence, Noah's sacrifice is still commemorated year by year on the spot where tradition says the Ark rested—a *ziaret* which is not the actual summit of the mountain but a spot on its ridge. On that day all faiths and all nations come together, letting all feuds sleep, to commemorate an event which is older than any of their divisions.

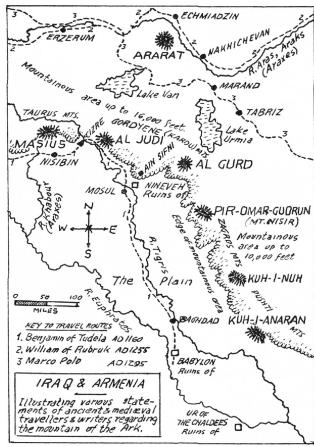
"Christians of all nations and confessions, Mussulmans of both Shiah and Sunni type, Sabeans, Jews, and even the furtive timid Yezidis are there, each group bringing a sheep or kid for sacrifice, and for one day there is a "truce of God", even in turbulent Kurdistan, and the smoke of a hundred offerings goes up once more on the ancient altar. Lower down on the hillside, and hard by the Nestorian village of Hasana, men still point out Noah's tomb and Noah's vineyard, though this last, strange to say, produces no wine now". The locals still claim that the Ark was built at the village of Ain Sifni, seventy miles from Al Judi, and point to the meaning of the name of the village—The Well of the Ship—as evidence. Many such legends exist all over Kurdistan and Armenia.

But the old traditions die hard. In 1949 some Turkish journalists headed an expedition to Mount Judi to search for the remains of the Ark. Undeterred by the fact that Dr. Aaron Smith's American expedition was at the same time searching Mount Ararat two hundred miles away with the same object, and another Turkish expedition on Mount Argeus in Anatolia ditto, they came back to say they had found the Ark, five hundred feet long by fifty high by eighty wide, together with Noah's tomb, a village whose name means "Noah's Ark" in Kurdish, and some remains of sea creatures left behind after the Flood. At least these details are what the British and French Press made of the explorers' report. Later on the story was modified to claim only that evidence of the remains of the Ark had been found; the details of its construction had been taken from "old records". So, we are still left guessing!

The enthusiasts on Mount Argeus also claimed to have found the Ark, half buried but well preserved with something resembling tar. Despite the momentous nature of their discovery, nothing more has been heard of it.

Dr. Smith was the unlucky one. He found nothing, and decided the Ark must have been buried by earthquakes, volcanic lava, or ice; of his efforts, more later.

So, excluding for the moment Mount Ararat itself, there remains a wide quarter circle of mountains extending from the vicinity of Nisibin and Cizre in southern Turkey, surrounding the plain of Iraq nearly down to the Persian Gulf, over which there has floated persistently through the centuries stories of the presence of the Ark and pilgrimages to inspect its remains. No one can be sure that it does not still exist for no one really knows where it ought to be. One archaeologist (Parrot) has remarked that as time went on there was a tendency to put the mountain of the Ark ever farther to the north where the highest mountains exist, and so the same traditions are repeated from mountain to mountain. This is how it seems to be. From Kuh-i-Anaran in Sumerian times to Nisir (Pir-Omar-Gudrun) in Assyrian times, to Judi in early Christian centuries, to Ararat in more recent times, the story has moved northwards. The truth of the matter probably lies in the far south where Note: nobody has thought of looking.



*lote*: Data on above map relating to Mount Ararat will be alluded to in the next chapter of this series.

It may be that the accompanying map illustrates better than words how the reputed resting-place of the Ark has travelled from south to north through the ages. The earliest cuneiform tablets (17th cent. B.C.) give the name "Nisir" to the land rather than the mountain and say that the mountain rose like an island out of the sea. The only mountain which is sufficiently isolated from others to stand out like an island is Kuh-iAnaran in the far south and this may well have been the original Nisir. By the 9th century B.C., with Assyria the dominant power, the name, and the legend, appears attached to a mountain much nearer Nineveh, Pir-Omar-Gudrun. By about the 2nd cent. B.C. when Assyria was no more, it had been moved again to Al Judi, a centre of predominantly Israelite influence, and here, fostered by Jew, Christian and Moslem alike, it remained unchallenged for more than a thousand years. Finally, from the early Middle Ages, the Armenian church began to advance the claims of its own mountain, and so vigorously that its Armenian name, Massis, has become superseded in

the minds of Europeans by the more familiar term "Ararat" although in fact that has never been the real name of the mountain. From the eighteenth century the two have maintained their respective claims—Judi for Asiatic Christians, Jews and. Moslems, Ararat for Armenians and European Christians. There, at present, the matter rests.

Is it incredible to think that after five thousand years the Ark has survived somewhere? Unlikely, but possible! So recently as 1955 the ceremonial wooden ship of Pharaoh Khufu was discovered buried in the sand alongside the Great Pyramid in a good state of preservation; that ship is 4,500 years old, only 800 less than the Ark. Wooden chariot wheels perfectly preserved, just as old, were found by Woolley in the soil of Iraq forty years ago. If left undisturbed in a dry climate such as that of southern Iraq the Ark could conceivably have remained. But it would be like looking for the proverbial needle in the haystack. Unless, of course, contrary to all the geologic and archeological and documentary evidence of past times, it really is buried in a glacier near the top of Mount Ararat and the glacier has most obligingly but unaccountably stood still for five thousand years so that its treasure may be revealed to one of the many expeditions which have scaled that mountain during the past hundred years. The explorations which have been conducted on that mountain warrant an account of what has and has not been achieved, and so the story of Mount Ararat must come next.

# **10. The Case for Mount Aarat**

Towns and travel routes mentioned herein connected with Mount Ararat are shown on the map appearing in the previous instalment.

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Following the journeys of the two Jews, Benjamin of Tudela and Rabbi Pethakiah, late in the twelfth century, and their description of Mount Judi, in the south of Armenia, as the place of the Ark's landing, less than a century elapsed before the next travellers added their testimony. They, however, introduced a new and hitherto unknown mountain—Massis, in the north-east corner of Armenia and within a few miles of the governing centre of the very influential Armenian church. The western world calls it Mount Ararat, but that is not its real name. The local peoples still call it by its ancient name of Massis. Its official Turkish name—for it is now in the modern sovereign State of Turkey—is Aghri Dagh, by which name it is also known to the Persians and Kurds whose lands adjoin. It is sometimes stated that the Persian name is Kuh-i-Nuh, meaning "mountain of Noah" in that language, but this assertion, first made by the traveller Jean Chardin in 1673, is probably due to confusion with the Iranian mountain range of that name in Lat. 34N, Long. 46, near Kermanshaw and some 350 miles from Ararat. "Nuh" is the English spelling of the Arabic name for Noah, and medieval Arabic influence in Iran (Persia) may account for the name of this mountain range and could suggest some ancient connection between the mountain and the story of the Flood, but no relevant legends appear to have survived.

The western world, however, knows Aghri Dagh only as Mount Ararat and connects it automatically with the "mountains of Ararat" of Gen. 8:4. When Dr. Friedrich Parrot was in the district in 1829 no one understood him when he mentioned Mount Ararat; only when he referred to the great pile as Aghri Dagh did they realise what he was talking about.

The medieval traveller who first acquainted the western world with the claims of the Armenian church for Mount Ararat was William of Rubruk, a Franciscan friar attached to the court of Louis IX of France, who in 1253 was despatched on a mission to the Mongolian potentates, Sartuk and Mangu Khan. After travelling through Russia and Siberia to the Mongol court at Karakorum he returned by way of the Caspian Sea and Armenia on his journey home. In 1255 he was the guest of the Armenian ecclesiastical authorities and although he did not get nearer than twenty-four miles from Mount Ararat he was given full

details of a legend which hitherto was more or less unknown outside Armenia. So it came to pass that in his book of travels—all travellers in those days wrote voluminous records of their journeys with little chance of any deviation from the truth being found out—he recounted what had been told him.

Says the worthy friar "Baachu had me taken to a certain city called Naxua which used to be the capital of a great kingdom and was a large and beautiful city; but the Tartars have reduced it to nearly a desert. There used to be in it eighty Armenian churches but there are only two small ones now for the Saracens have destroyed them... Near this city are mountains in which they say Noah's Ark rests; and there are two mountains, the one greater than the other; and the Araxes flows at their base; and there is a town there called Cemanum, which interpreted means "eight", and they say that it was thus called from the eight persons who came out of the Ark, and who built it on the greater mountain. Many have tried to climb it but none has been able to. This bishop told me that there had been a monk who was most desirous of climbing it, but that an angel appeared to him bearing a piece of wood of the ark, and told him to try no more. They had this piece of wood in their church, he told me. This mountain did not seem to me so very high, that man could not ascend it… On the feast of the Purification I was in a town called Aini… there are in it a thousand churches of Armenians and two synagogues (mosques) of Saracens" (Moslems).

Naxua is modern Nakhishevan in Soviet Russia, seventy-two miles from Ararat. Aini was a famous city sixty miles north-west, at one time the capital of Armenia, destroyed by an earthquake in 1319. No mediaeval city corresponding to Cemanum is known, but in 1403 the Spanish diplomat Ruy de Gonzalez Clavijo, on a mission to the Mongolian ruler Tamerlane, passed within ten miles of Ararat, staying one day at the important city of Sulmari (Saint Mary) which he called Calmarin, forty miles west of Ararat, being told there that this was the first town built by Noah. Two days later he saw a ruined city on the western flanks of the mountain which also, he was informed, was the first town built by Noah, and it is possible that these ruins represent the elusive Cemanum. But let Clavijo tell his own story.

"We shall now describe the city of Sulmari which as we learnt was the first township to be built after the Flood. This is a very large city and at a distance of about six leagues was to be descried the great mountain of Ararat on which the Ark of Noah had rested when the Flood abated... Now this city of Sulmari was in truth, as said, the first township to be built on dry ground after the Flood, and those who built it were the sons of Noah... The castle" (of Igdir) "stands at the foot of the great mountain, called Ararat, where the Ark of Noah came to rest. This mountain, like all the other heights that we had passed over since leaving Trebizond, was entirely bare, having no forest even on the foothills... The next day we departed from Igdir and our way led us along the flank of that great mountain where the Ark of Noah had rested. The mountain is indeed extremely high and its summit is ever covered with snow... On the hill slopes we saw extensive ruins of a township that had evidently not been inhabited for ages past, and for a space of a league these remains were to be noticed on all hands. The people told us that these were the ruins of that first city which was founded in the days after the Flood by Noah and his sons... Adjoining the main peak is the lesser mountain peak of Little Ararat, which is equally steep, and between the two stretches a long saddle, and here it was, as they said, that the Ark came to ground."

Within a year or so of Friar William's journey there appeared the comprehensive "*History* of the world" of Vincent of Beauvais, a scholar who does not appear to have travelled but possessed the knack of acquiring information from all sources. He states that near the city of Aini in Armenia is Mount Arach, where rests Noah's Ark, and at the foot of this mountain is the first of all cities, which Noah built and called Laudamie, and round it flows the river Arathosi. This version of the story is distorted and bears all the signs of having passed through several intermediaries before being subjected to the pen of the industrious Vincent, but his

"Laudamie" round which flows the river "Arathosi" looks very much like Sulmari which was bounded on two sides by the Aras (Araxes).

Forty years after Rubruk the renowned Venetian traveller, Marco Polo, having spent seventeen years at the court of the Great Khan in China, found himself in 1295 making his way northward through Persia and across Armenia. His route lay from Tabriz in Persia to Arzizi (modern Ercis) on Lake Van, thence to Erzerum and Trebizond, so that he passed sixtyfive miles from Mount Ararat. Nevertheless he collected the same story as had William of Rubruk forty years previously. "I will tell you, too" he says "that in the centre of Greater Armenia there is a very great and high cup-shaped mountain on which it is said that Noah's Ark rested; for which reason it is called the mountain of Noah's Ark. It is so broad and vast that one cannot go round it in two days; and the summit is so everlastingly covered with so much snow that no one can climb it. But on account of the water that flows from this snow, the mountain is so rich in grass on its lower slopes that from all the neighbouring districts cattle are brought to graze there in summer."

The district around Lake Van through which he travelled is, and was then, the home of nomadic Kurds who to this day take their herds and possessions to Mount Ararat at certain times of the year for this purpose and it was probably from these Kurds that he received the story. (Navarro *in "The Forbidden Mountain"*, 1955, tells how his party enjoyed the hospitality of such Kurds on the slopes of Ararat at the 13,000 feet level.) Marco Polo himself did not claim that he personally saw everything about which he wrote; in his preface he says *"some things there will be, in truth that he did not see, but only heard tell of by men worthy of credit.* And we will set down the things seen as seen, and heard as heard, that our book may be come&r avid truthful, without any falsehood."

For some time after Polo the political situation tended to discourage further visits of Europeans to Armenia. This gap was filled, however, and Mount Ararat received an unexpected advocate, in the person of no less a celebrity than the famous Sir John Maundeville.

*"The voyages and Travels of Sir John Maundeville"* was published round about the middle of the 14th century. The noble lord had travelled in every part of the known and unknown world and had seen many places and things which no other man had seen at that time, and quite a few which have never been seen at all, then or since. The book made a profound impression and is still regarded as one of the finest pieces of literature the Middle Ages produced. It has also, however, earned the generally agreed description of the "most wonderful literary forgery in the world". In short, the entire work was a fake. "Sir John Maundeville" never existed. Up to some years ago the author of the "*Travels*" was held to have been a French naturalist and physician named Jean d'Outremeuse who conducted all his travels in an armchair at his Liege home with the aid of a large library of books. In recent years this has been disputed on the grounds of evidence that the real writer was an Englishman from St. Albans and that his work was plagiarised by d'Outremeuse. In either case the basic fact remains, and it is well established that many of the famous legends of the Middle Ages owe their origin to "Sir John Maundeville's" mythical adventures.

Naturally, so renowned a traveller must perforce have something to say about so famous a spot as the landing place of the Ark, and therefore with his copious stock of legends and hazy ideas about geography to assist him, he evolved the following on the subject.

"From Trebizond men go to Armenia the great unto a city that is called Erzerum, that was wont to be a good city and a plenteous, but the Turks have greatly wasted it. From Erzerum men go to a hill that is called Sabiscolle, and there beside it is another hill that men call Ararat, but the Jews call it Tanis, (or Thom), where Noah's ship rested. And it is upon that mountain; and men may see it afar off in clear weather; and that mountain is above seven miles high. And some men say that they have seen and touched the ship, and put their fingers in the place where the Fiend went out when Noah said "Benedicite". But they that say such words say of their own will, for a man may not go up the mountain for great plenty of snow that is always on that mountain, neither summer nor winter, since the time of Noah, save a monk that by the grace of God brought one of the planks down that is in the monastery at the foot of the mountain. And upon this mountain to go up that monk had great desire, and so upon a day he went up and when he was upward the third part of the mountain he was so weary that he might go no further. And so he rested him and went to sleep. And when he awoke he found himself lying at the foot of the mountain. And then he prayed devoutly to God that he would vouchsafe to suffer him to go up. And an angel came to him and said that he should go up, and so he did. And since that time never one. Wherefore men should not believe such words".

The story of the monk who tried, unsuccessfully, to climb the mountain, and was given a piece of the wood of the Ark by an angel by way of consolation, is known as the "legend of St. Jacob". It appears to be no older than about the ninth century, the earliest trace of it being in the quoted writings of Faustus of Byzantium, whose date is in dispute anyway. It seems to have been related to most travellers of the time of William of Rubruk in the 13th century, although the good monk had been dead for nine hundred years by then.

Briefly, St. Jacob was a monk who became the patriarch, (Armenian bishop), of Nisibin about the year 320. He was a relative of the famous St. Gregory, the founder of the Armenian church and its chief prelate between A.D. 302 and 331. The legend is to the effect that the worthy St. Jacob, being greatly desirous of beholding the Ark with his own eyes, essayed to climb the mountain several times. Each time he fell into a mysterious sleep when half-way up, and awoke to find himself at the bottom again. At last an angel appeared to tell him that no mortal man might ever ascend the mountain to see the Ark, but as reward for his piety the angel had brought him a piece of wood from the Ark, which precious relic was deposited in a monastery built by the pious monk at the foot of the mountain, named after himself. At some later date the sacred object appeared in the treasury of the Monastery of Echmiadzin, thirty miles north of Ararat, the governing cathedral of the Armenian church, where it still remains. This, of course, proves the truth of the story; at least, it might be thought to do so if the same treasury did not also exhibit a comprehensive selection of other relics, including the Roman spear used at the Crucifixion; a panel carved with the crucified Christ, the handiwork of the Apostle John; part of one of St. Paul's fingers (mummified); the hand and arm of St. Gregory, also mummified and mounted in a silver case, (an honour not extended to the Apostle Paul); and the hand of St. Jacob, to which the piece of Ark was attached. (At any rate that is how Parrot saw it in 1829 but when it was shown to Lynch in 1893 St. Jacob had been demoted and the piece of Ark bore a resplendent jewelled cross. It is described as being a small, square, dark coloured piece of wood.) The Armenian church insists as an article of faith that the cathedral was built on the express orders of Jesus Christ who personally descended from heaven in the year A.D. 300 for that purpose; this may or may not explain the rather bizarre collection of relics but it does serve to justify an element of reserve in accepting claims made and stories told.

St. Jacob lived, and died, early in the 4th century. The Monastery of St. Jacob in the Great Chasm of Ararat at the 6,000 feet level was founded certainly not earlier than the 11th century. While Parrot was there in 1829 the monks showed him an inscription in the wall giving the date 737 in the Armenian calendar which corresponds to A.D. 1288 and this could well be the actual date of its building. There was a church in the village of Arghuri two miles lower down the chasm which reputedly was built upon the site of Noah's altar but this dates from no earlier than the 8th century so that St. Jacob himself could have had nothing to do with either. (Village, church and monastery all were destroyed and buried by the great Ararat earthquake of 1840.)

There is a host of legends respecting various towns in the vicinity of Ararat which are claimed to have some connection with Noah and the Flood. Many of them are obviously repeats of similar legends connected with Mount Judi. Perhaps the most frequently quoted is the one which states that Noah built a city/town/village at the spot where he and his family disembarked from the Ark, and that this is the present Russian city of Nakhishevan, this name, it is claimed, having the Armenian meaning "The place of descent". Nakhishevan, however, is seventy-two miles from Ararat so that Noah must have had a long gangplank; moreover it was not founded until the 16th B.C. century so that he must also have waited nearly two thousand years before starting to build. The alleged fact that the name means "the place of descent" is, according to Bryce ("Transcaucasia and Ararat") refuted by competent Armenian scholars. The legend obviously stems from the older legend related by so many 6th and 10th century travellers concerning the town of Thamanin (now Cizre), at the foot of Al Judi, alleged to have been founded by Noah when he emerged from the Ark. The origin of both sets of legends lies in the words of Josephus (Ant. 1.3.5) to the effect that the mountain upon which the Ark rested was called *Apobaterion*, which in Greek (the language in which Josephus wrote) does mean a place or act of dismounting or descending from a ship in port; but Josephus says nothing about a city of that name.

The town of Marand (north of Lake Urmia in Iran) is claimed to be named after Noah's wife and that both her and her husband are buried there. Chardin brought this story back from his travels in 1673 and it has been repeated many times, being referred to as a town/village "near" Ararat. It is in fact 120 miles distant. Exactly the same story is told of the Kurdish village of Hasana near Al Judi.

Perhaps the most prolific stories cluster round the (former) village of Arghuri inside the Great Chasm of Ararat about six miles from the peak. This village, by an alternative set of legends, was the place where Noah first descended, built his first dwelling place, and planted his vineyard. Hence, say the Armenians, the name of the village, which means "he planted the vine." It is however stated (Lynch and Brosset) that the original and true name of the village was Acourhi and later Armenian writers changed the spelling to produce the special meaning now alleged. Be all this as it may, the village of Hasana on the slopes of Al Judi, mentioned above, carries exactly the same legend—and still shows the vineyard!

The position therefore appears to be that the legends and assertions respecting Mount Ararat made their appearance at some time between the 11th and 13th centuries and are replicas of similar legends and assertions regarding Mount Judi current from the beginning of the Christian era and still told to visitors to that district up to the end of the 12th century at least. From Epiphanius in the 4th century to Rabbi Pethakiah in the 12th there is a constant stream of witnesses to Mount Judi; Mount Ararat is never mentioned. From the 13th century onward the claims of Mount Ararat are advanced and so far as Christians are concerned by the 18th century Mount Judi is heard of no more, although still, and to this day, held by the Moslem world at least to be the true mountain of the Ark. Perhaps the most reasonable conclusion is that with the destruction of the Monastery of the Ark on Mount Judi in A.D. 776 Christian interest veered away from an area which had by then become predominantly Moslem, and settled in one which possessed an active and aggressive church having the advantage of the highest and most imposing mountain in Western Asia only thirty miles from its principal cathedral. So, it would seem, the Monastery of St. Jacob was built on Ararat to replace the defunct Monastery of the Ark on Judi and the associated legends and stories transferred to the new location.

After Clavijo in 1403 European interest seems to have lapsed until the visit of Jean Tavernier, noted traveller, in 1701. Next came the Chevalier Jean Chardin (Sir John Chardin in later life) who visited Ararat in 1673 whilst on his travels. Neither attempted an ascent. Chardin's *"Journal of Travels"* records several local legends, not always accurately, which have

been repeated in many publications since. The first attempted ascent was by the French botanist Joseph de Tournefort in 1701. His interest was purely botanical and he only got twothirds of the way up. Robert Ker Porter in 1813 contented himself with the view from a distance and in 1819 the Turkish governor of Bayazid (Dogubayazit) nineteen miles south of Ararat, organised a massive expedition to reach the top, which failed.

But a new and absorbing chapter in the history of this famous mountain was about to open. On 27 September 1829, Friedrich Parrot, a German professor in the service of Russia, and five companions, became the first men to stand on the summit of Mount Ararat. Their achievement was the signal to resurrect all the old stories of the continued existence of the Ark and start a search which has continued, by fits and starts, for a century and a half and is still being prosecuted. The account of Parrot's ascent, and of what followed it ie next in order.

# 11. 19th Century Ararat Exploration

#### "And as they talked of this and that, The Ark it bumped on Ararat."

So runs the old jingle; despite all that has been argued as to the probability that the Ark actually landed at a spot much farther south, the general impression, buttressed all the way from nursery rhyme to serious scientific treatise, remains firm that this famous Turkish mountain is the place. So much is this so that since the beginning of the Nineteenth Century the forbidding pile has hardly ever been free from the questing feet of some doughty adventurer seeking to find out for himself whether "there really is anything up there".

The local Armenians have no doubts. For generations past they have asserted that the Ark is hidden on the top of the mountain, Divinely protected, and no man can possibly reach the summit to look upon it. Although the summit was reached by Europeans at least nine times during the 19th century the locals steadfastly refused to admit as much. Their present-day successors have had to modify the traditional attitude now that exploration on the mountain is proceeding practically continuously.

The first successful ascent of the peak was by Dr. Friedrich Parrot, Professor of Natural History at Dorpat University, Russia, a German. Dr. Parrot was on an official state meteorological mission involving scientific researches on the mountain, but being a convinced Christian and believing that the Ark landed on Ararat, he included a search for the possible remains of the vessel in his work. His book (*"Journey to Ararat"*, Longmans, 1845) contains the only extant description of the village of Arghuri, and the Monastery of St. Jacob, which were destroyed and buried in the 1840 earthquake. After two unsuccessful attempts he and five companions reached the summit on 27th September 1829, and this date marks the commencement of an unremitting search for the Ark which has continued to the present. Parrot erected a ten foot cross bearing a lead plate recording his achievement, a thousand feet below the summit, and a smaller oak cross on the summit itself; but he found no sign of the Ark.

That of itself is not surprising. It would have required—and still requires—prolonged exploration definitely to prove that the Ark is not there. This mighty extinct volcano which is Mount Ararat spreads its long range of peaks and rocks over a territory something like seventeen miles long by twelve wide. Within that area are two distinct mountains seven miles apart, Little Ararat, thirteen thousand feet high, and the reputed mountain of the Ark, Great Ararat, seventeen thousand feet, a confused mass of volcanic rock, of precipitous cliffs and sheer pinnacles, of deep ravines and fearful canyons, and a vast chasm on its northern face which leads straight down to the plain below. Known as the "Chasm of St. Jacob" or the "Great Chasm", this tremendous cleft, which can be discerned many miles away, has its upper reaches filled by a glacier fed by the perpetual snows of the summit, giving birth to a stream which eventually finds its way into the river Aras and so to the Caspian Sea.

Parrot's first attempt at an ascent was by way of the Great Chasm, which leads into the heart of the mountain. Leaving the village of Arghuri at the entrance to the Chasm, he reached the Monastery of St. Jacob some distance inside, this becoming his headquarters for the rest of his expedition. From here he climbed the ravine to the little stone shrine known as the Chapel of St. Gregory, and its adjacent holy spring, the Well of St. Jacob, at an altitude of 7,500 feet. (The legend is that St. Jacob was on his way up to view the Ark when, becoming thirsty, he tapped the ground and the well sprung forth miraculously to satiate his thirst and that of his companions; he called to them "Agri; Agri" which meant "Come, come" and this, they say, accounts for the name of the mountain, "Agrhi Dagh". In Turkish it really means "Great Mountain".) Up to this point there were trees—walnuts, willows, poplars, birches, and low shrubs in profusion. Veering eastwards, he encountered grassy slopes with a wealth of flowers, until he passed the 13,000 feet level, and then at 14,000 feet he encountered the lower edge of the ice cap. By the end of the following day he and his party had managed only another thousand feet and they gave up and returned to their base.

The second essay involved a circuitous climb round the northern and western flanks of the mountain, by which means they eventually emerged on the 11,500 feet level grassy plain known as Kip-Ghioll which has since been the scene of many 20th century explorations. They got within a thousand feet of the summit and erected the large cross, which was intended to be visible from Erivan thirty miles away, and then again had to return.

The third attempt, by roughly the same route, was successful, and they reached the top, a more or less level platform several hundred yards across with two small peaks of rock rising above the surface. Here they erected their second cross, in such a position as to be visible, against the white snow background, from the village of Arghuri eight miles away in the plain far below.

Five years later, in 1834, (following two abortive attempts by Hamilton and Rawlinson) a Russian astronomer, K. Spassky Aftonomoff, also on a scientific mission, explored the mountain and reached the summit. He was not primarily looking for the Ark and he did not come across it. Then in 1840 occurred the great Ararat earthquake. Masses of ice and rock were precipitated down the mountain into the Great Chasm and the village of Arghuri was wiped out with all its 1,600 inhabitants. The Monastery of St. Jacob, two miles farther into the Chasm, which had stood for five hundred years, was destroyed and buried, and never rebuilt. Three years later a German geologist, Dr. Moriz Wagner, spent a considerable time on the mountain on an investigation into matters connected with the earthquake, followed two years afterward by another geologist, a Russian this time, Dr. Hermann Abich, on the same quest. Abich made four attempts before reaching the summit and explored much of the mountain. The next year, 1846, an Englishman, Henry D. Seymour, with several companions, reached the top and, like his predecessors, found nothing. Then in 1850 a party of Russian scientists led by General Chodzko, and his assistant N. V. Khanikoff, with sixty Cossacks and their officers, spent two months on the mountain, including five days on its summit, in connection with the surveying and mapping of Southern Caucasia. Although these men were on an official mission and not directly interested in finding the Ark, it is noteworthy that their extensive stay on the mountain yielded nothing of interest in this direction. They erected a cross on the summit next to Parrot's to commemorate their work. 1856 saw a British exploring party headed by R. Stuart notable in that they attacked the mountain from the south for the first time, but otherwise having nothing new to report. In 1869 another British party led by Douglas W. Freshfield failed to do any better, and then in 1876 came the memorable ascent of Lord James Bryce.

Viscount Bryce was one of that famous breed of Victorian Britishers who would go anywhere and dare anything for the sake of the pure achievement. His book "Transcaucasia

*and Ararat*" (Macmillan 1877 4th edition 1896) is renowned as a classic. Having embarked on a hazardous journey through southern Russia and the Caucasus he decided to visit Mount Ararat while in the district and see for himself whether any trace of the Ark remained. Making his way first to the 7,000 feet "saddle" between Great and Little Ararats, he established his headquarters at the then frontier post village of Sardarbulakh. With one Russian and one Kurd he reached the summit in fourteen hours, starting at midnight, and was back in Sardarbulakh by dawn of the next day. He did not discover the Ark, but he did find a piece of wood that had been fashioned by some tool and was more than half inclined to believe that this fragment was a relic of the ancient vessel. Let him tell this part of the story in his own words.

"Mounting steadily along the same ridge, I saw at a height of over 13,000 feet, lying on the loose blocks, a piece of wood about four feet long and five inches thick, evidently cut by some tool, and so far above the limit of trees that it could by no possibility be a natural fragment of one. Darting on it with a glee that astonished the Cossack and the Kurd, I held it up to them, made them look at it, and repeated several times the word 'Noah'. The Cossack grinned, but he was such a cheery, genial fellow that I think he would have grinned whatever I had said, and I cannot be sure that he took in my meaning, and recognised the wood as a fragment of the true Ark. Whether it was really gopher, of which material the Ark was built, I will not undertake to say, but am willing to submit to the inspection of the curious the bit which I cut off with my ice-axe and brought away. Anyhow, it will be hard to prove that it is not gopher wood. And if there be any remains of the Ark on Ararat at all—a point as to which the natives are perfectly clear—here rather than the top is the place where one might expect to find them, since in the course of ages they would get carried down by the onward movement of the snowbeds along the declivities. This wood, therefore, suits all the requirements of the case. In fact the argument is, for the case of a relic, exceptionally strong."

His claim, however, was rejected with scorn by the Royal Geographical Society of England.

Two more ineffectual ascents followed, in 1878 and 1882 (Baker and Sivoloboff) and then in 1883 came startling news. The Ark had been found, or so it was claimed.

The story started in the Turkish Press, was re-published in London newspapers, and finally appeared in America, with the usual degree of embellishment. It was said that a Turkish party of technicians investigating avalanches on the mountain came suddenly upon an enormous wooden structure protruding from a glacier. Local villagers declared they had seen it for the preceding six years. Upon forcing an entrance into the structure, the technicians found the interior divided into rooms fifteen feet high. Most of the interior was filled with ice; they could penetrate into only three of the rooms. The final story contained a delightful bit of journalese: "there was an Englishman among them who had presumably read his Bible, and he saw it was made of the ancient gopher wood of Scripture, which, as every one knows, grows only on the plains of the Euphrates." The Authorised Version does state that the Ark was made of gopher wood, but no one either in 1883 or since has discovered what particular species of wood that was. Only in recent years has the puzzle been solved. "Gopher" is not the name of a timber species at all; it is the Hebrew transliteration of the Sumerian "gipar" and Akkadian "gipparu" which means trees of the forest generally. Noah was told to build his Ark of forest timber. As to everyone knowing that gopher grows only on the plains of the Euphrates, the fact is that the Iraq plain through which that river flows is completely treeless with the solitary exception of the date palm in the south. The difficulty with a story like this is that the reporters love to imagine a few extra details to heighten the interest without paying much regard to accuracy, so that although there is probably a basis of truth in the story, and the Turks did find something very unexpected up there on the mountain, the journalists' embellishments must be taken with a certain amount of reserve. It is noteworthy that if any further action was taken by the Turkish authorities to verify and investigate the find they did not consider the results worthy of further publication; although Turkey is a Moslem nation the story of Noah and the Ark is just as much a part of their religious heritage as it is of the Christian.

Four years later, in 1887, the mountain was ascended, according to his own account, by a Nestorian church dignitary from India, John Nonni, who claimed to have reached the summit and found the Ark in a ravine. He announced his discovery some five years afterwards when in America as a delegate to the 1893 Chicago "Parliament of Religions". During 1892 he lectured in various cities on the subject and a very full account of his expedition appeared in certain successive issues of the "San Francisco Examiner" during that year. "The bow and the stern" he said "were clearly in view, but the centre was buried in snow and one end of it had fallen off and decayed. It stood more than one hundred feet high and was over three hundred yards long. The wood was peculiar, dark reddish in colour, almost iron coloured in fact..." The site was inaccessible so that he and his companions were unable actually to reach the Ark or whatever it was that they saw. A party of prominent Californian citizens organised an expedition to return to Ararat with Rev. Nouri to verify the find but in the upshot this expedition never set out. A sidelight on the story comes from a book by a Kurdistan missionary, Frederick Coan, published in 1939 ("Yesterdays in Persia and Kurdistan") in which he described a visit from this same John Nouri about 1896, when the story was recounted to him, although in not quite the same form as before. This time Nouri asserted that he got inside and made "careful measurements" which "coincided exactly with the account given in the sixth chapter of Genesis." Since the precise length of the ancient cubit has always been a matter of uncertainty and even today is still not agreed, this latter constituted quite an achievement. As with the former story, minor discrepancies in the alternative published accounts might well justify the conclusion that whilst the worthy Nestorian might very well have seen something-perhaps the same object as that reported by the Turkish technicians five years previously-much of the descriptive details with which the stories are adorned were illusory, illusions quite honestly held by the narrator, but illusions nevertheless.

The next few years saw quite a bunch of explorers; Dr. E. Markoff 1888, Semenoff 1888, Raphalovich 1889, Leclerq 1890, Allen and Sachtleben 1891 and Postukhoff 1893. None of these except Markoff reached the summit and none of them found any signs of the Ark. Markoff left an inscribed metal plate near the summit and Postukhoff an inscription on a rock, both of which were found by Lynch shortly afterwards.

The century closed, appropriately enough, with another of the "bulldog breed". H. F. B. Lynch, a British traveller of the calibre of Lord James Bryce, and a party of companions, traversed the Caucasus, Persia and Armenia during 1893 and of course had to do what by now was quite definitely expected of every traveller worth his salt—climb Ararat to see if the Ark was still there. Lynch's book, "Armenia; Travels and Studies" in two massive volumes (Longmans Green 1901) ranks with those of Parrot and Bryce as first-class descriptive accounts of the mountain. Lynch reached the summit by the same route from the south-east taken by Bryce seventeen years earlier and Nouri six years earlier. He found a stout wooden stake set in a pyramid of stones, a relic doubtless of some earlier mountaineer, but no Ark. Like others, he believed that the Ark came to rest on the summit.

Undeterred, he investigated the terrifying recesses of the Great Chasm, which leads directly into the heart of the mountain and is terminated by a sheer precipice many thousands of feet high and partly filled with a glacier descending from the ice cap above. He notes the persistent local legend that the buried village of Arghuri was the first dwelling place of Noah and the site of his ill-destined vineyard. He was shown the ancient willow tree which was supposed to have grown from one of the planks of the Ark, and told of the village church which had been built on the site of Noah's altar. Then he climbed the ravine, past the buried Monastery of St. Jacob, to the place where the Chapel of St. Gregory stood before the 1840 disaster, and St. Jacob's Well still gave its clear water. This was still a holy place to the local people and pilgrimages to this rocky spot on the mountainside were frequent. Wild roses grew in profusion all around, and one famous rose bush was adorned with pieces of cloth tied on by pilgrims, each piece representing a petition to one of the saints.

But he found no sign of the Ark.

One more fruitless ascent about which not much is known, by a Swiss named Oswald, 1897, ended the story of 19th century Ararat exploration and served to precede the intense burst of activity which characterises the 20th. There had been at least twenty-four ascents during the century, of which nine or more are recorded as. having attained the summit, practically every part of the mountain having been visited by one or another. Only two claimed to have found anything; the Turkish technicians in 1883 who reported the discovery of a giant wooden structure and the Nestorian archbishop Nouri in 1887 who insisted that what he found was in fact the Ark and he had been inside it. Neither of these stories was ever confirmed but in the light of the last few years' discovery of massive timber beams in the ice at the 13,000 feet level on the northwest side it is very possible that some such structure did exist at that time and was seen by these men. Nearly all the other ascents-apart from Parrot's—were made from the south-east and south so that it may not be surprising that no one else in that century saw these remains. There is a 20th century story of an Armenian who as a boy in the 1850's accompanied three "atheist" scientists on an ascent and discovered the Ark; the Armenian is long since dead and the story has passed through several intermediaries but if there is anything at all in it this same timber structure may be what they also found. The timber is still there; the question "what is it?" remains unsolved.

# 12. 20th Century Search for the Ark.

The story of Ararat investigation during this present century has two aspects. For the first two decades there was no systematic exploration but there is a crop of stories concerning individuals—mostly local natives—who claim to have seen the remains of the Ark, such as the Armenian emigrant to U.S.A. who claimed that as a boy in 1904 he was taken to a remote part of the mountain where he saw the Ark on the edge of a steep cliff; the story however only came to light in 1970. There is another Armenian who on his deathbed in 1917 declared that as a youth seventy years earlier he had helped guide three European scientists who wanted to disprove stories of the Ark's existence and were extremely discomfited to find it instead; this story appeared in 1952. These and other similar stories have been thoroughly investigated but from the very nature of the case no concrete evidence has or could emerge. In 1929 the Noah's Ark Exploration Association of Chicago made plans to explore the mountain, the leader, James Strong, claiming that they had the position of the Ark "approximately located", but this expedition never got started. In the 1930's a New Zealander, F. Hardwick Knight, explored the mountain and found a half-buried timber structure the significance of which he did not realise until Navarra's similar discoveries twenty-five years later. But the day of the great travellers was over and the present era of specific and scientific Christian interest had not yet dawned.

That interest was triggered by the "Roskovitsky story" of 1941. In that year, and for a number of years thereafter, there appeared in various Christian periodicals, who appeared in the main to have copied from one another, an account by one Vladimir Roskovitsky who claimed that as a Russian aeronaut during the first World War he flew over Ararat and saw the Ark lying half submerged in a lake. His discovery having been verified by his superior officer, a report was sent to the Czar who ordered an investigation. An exploring party entered the Ark and found hundreds of rooms, some with rows of cages fitted with wrought-iron bars. Unfortunately, a few days after the relevant documentary evidence was sent to the Czar,

"godless Bolshevism took over" and all the evidence disappeared. The story was well written up and attracted considerable attention in Christian circles but when examined was found too full of anachronisms to be taken seriously. It was eventually discovered that the original editor who published the story had "dressed up" a much more obscure account, received at third or fourth or fifth hand, of how an aeronaut had seen a wooden structure on the slopes of Ararat and, Russia being at war with Turkey at that time and Ararat being on the frontier, troops had been sent up to investigate. The truth of even this shred of detail was not established at the time and thereafter several of the journals which had featured the story published recantations.

This stage had hardly been reached, however, when in 1948 the Turkish Press published a statement by a Kurdish farmer named Reshit living near the mountain that he had discovered the Ark and that hundreds of local villagers had been up to see it. This, added to the Roskovitsky story, fired the imagination of a good many interested parties and before long plans were on foot for two expeditions, a British one under the leadership of Egerton Sykes, a retired Foreign Office official, and an American one under Dr. Aaron Smith. The immediate reaction from Russia was that these moves were cover for American spying activities on the mountain, which overlooks the Russian frontier, and this attitude was not helped by somewhat ill-informed items in the British Press to the effect that America was setting up a listening post on Ararat. Permission for the projected exploration was therefore refused by the Turkish Government. Perhaps they could hardly be blamed. They may have remembered that during the first World War that famous British agent, Lawrence of Arabia, was working with the archaeologist C. L. Woolley in the desert of Sinai, reputedly helping with his investigations into ancient remains, but actually, and secretly, reporting on Turkish army movements in the area. Eventually, however, they gave way and in 1949 Dr. Smith's party was busy on the mountain.

Sadly, they found nothing. Their search seems to have been confined mainly to the higher reaches on the assumption that the Ark landed on the peak. Some years later Dr. Smith was planning a helicopter search but this does not seem to have matured. He was followed in 1952 by the French business man Fernand Navarra who on his first visit met with no success. The Kurdish farmer Reshit who seems to have started all this could not be located—and despite many endeavours has never been found, nor yet any of the hundreds of villagers who supposedly saw the Ark with him in 1948!

After this things began to warm up. In 1954, an American, John Libi, made the first of six or seven ascents and searched the summit twice without finding anything. At about the same time Navarra was back and found a black shadow the shape of a ship under the ice, at 13,800 feet elevation. He paced out its length and found it to be three hundred cubits as in Genesis (without telling us which of the several cubits of antiquity he adopted.) The shape, he says, was "unmistakably that of a ship's hull". On a third visit, in 1955, he did make a concrete discovery—the first one of which tangible evidence has been brought away. He found quantities of large timber beams bearing evidence of hand-tooling, buried in the ice.

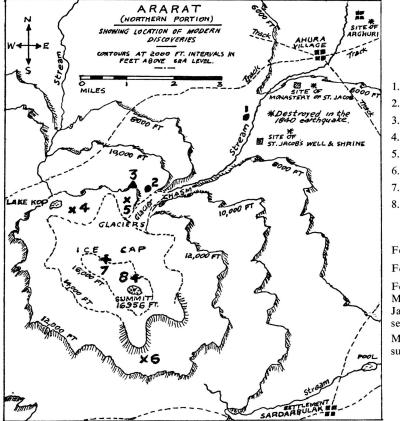
Lord James Bryce brought such a piece of hand-tooled timber home in 1876 and was laughed at for his pains, but Navarra had a tool that was not available in 1876. He submitted his piece of wood to the Carbon 14 test.

The Carbon 14 test is a means of determining the age of organic materials by measuring how much of a certain form of radio-active carbon, which is constantly diminishing since the death of the sample, still remains. The method was invented in 1958 and was hailed as infallible, although it is now known not to be so. At the time, however, it came just right for Navarra and the test showed that the wood was (he said), *"exactly* 4489 *years old"*, which comfortably matches the date of the Flood according to Usher's chronology as given in English Bibles. That chronology is, however, woefully out-of-date; it is established that the Massoretic Hebrew text on which it is based was manipulated in early A.D. centuries; the Bible time periods and the demands of archaeological findings demand a date at least about 5300 years ago for the Flood. Subsequent tests by a number of research bodies, however, have given revised figures for the age of this timber ranging from B.C. 3000 to A.D. 560, so that one may be excused for attaching little importance to its alleged age. The validity of the Carbon 14 test depends upon the assumption that the intensity of cosmic rays reaching the earth has been constant throughout history and there is now considerable doubt whether this is so. The proximity of the timber to water, ice, and the sulphur compounds which are abundant on volcanic Ararat also affects the results so that the age of the sample is in considerable doubt.

Notwithstanding all this, the established fact of the presence of this buried timber above the Ararat snow-line does pose a problem. Someone has said "If it is not the Ark, what is it?". Navarra at first estimated there were fifty tons of timber lying beneath the ice; at a later visit he advanced this to ninety. In 1974 Tom Crotser, leader of another series of expeditions, is reported as stating "there's 70,000 tons of gopher wood up there". If correctly reported, this is the kind of statement which does harm to the cause. 70,000 tons of timber would build at least ten Arks. The Navarra investigators have said that one of the beams is a hundred and fifty feet long. This, again if the statement is correct, should be a decided argument on the "pro" side of the case. A timber beam that length would have to be something like two feet square to allow reasonable handling without breakage and would then weigh something in the region of twelve tons. Such an object would be difficult enough to transport on level ground and the task of getting it up a 13,000 foot mountainside in one piece would seem about unsurmountable. The only practicable method of doing it would be to float it there, and M. Navarra would probably be the first to say that that is how it did get there. Trees capable of yielding such a single piece of timber are rare today; in the different climatic conditions obtaining before the Flood, they would have been much more common, and if the dimensions of this alleged super-beam could be reliably authenticated the explorers would have a definite point.

By 1969 Navarra, in conjunction with the American Ararat organisation known as Search Foundation Inc., had uncovered more timber and there were plans to melt many tons of glacial ice in order to reveal what really does lie below. (At a meeting of Turkish Government officials called to discuss this proposal, one remarked that if the Ark should actually be found to be there it would make Ararat the biggest tourist attraction in the world, at which a senior official shook his head and said "I'm worried it will lead to a spate of offences against the forestry laws. Once the locals start up their souvenir shops we won't have a tree left standing!) Up to the present this rather ambitious project has failed to mature but it has been established that the ship-like shadow below the ice which Navarra took to be the Ark is actually an area of black rock. But the buried timber remains an undisputed and unexplained fact.

John Libi, who made his first ascent in 1954, was still exploring in 1969 without finding anything spectacular. By then there were a baker's dozen of expeditions and explorers, almost exclusively American, and since the 1950's the mountain has hardly ever been free from climbing parties. From time to time the Turkish Government clamps down on operations for short periods for political reasons, but always the searchers return and take up the task with undiminished enthusiasm. At least five research organisations have been set up, working more or less independently of each other, each with a substantial staff of experts, in addition to quite a few individuals working more or less on their own account. At times there have been as many as three distinct teams exploring the mountain, probably much to the satisfaction of the local Kurdish population who are called upon to supply guides, porters, beasts of burden and so on. Of the many names associated with all these efforts there can only be mentioned here those of Dr. Ralph Crawford, minister; Dr. Clifford Burdick, geologist; Dr. L. Hewitt, botanist; Nicolas Van Arkle, climatologist; and Eryl Cummings, archeologist. The latter has devoted more than thirty years to this investigation. This serves to show the wide range of technical endeavour that has been brought to bear on the search. The records of all these largely unconnected efforts are in no cohesive form, published in various books, periodicals and occasional notices in the world's Press so that it is virtually impossible to present a complete and connected picture of what is going on, but it would appear that in the quarter century since 1949 there have been at least thirty or forty distinct searches and possibly more.



**KEY TO SITES** 

Lynch's boat-shaped area

- " "
- 3. The "Rock Ark"
- 4. Navarra's timber find 1955
- 5. Knight's timber find c. 1930
- 6. Bryce's timber find 1876
- 7. Parrot's large cross
- B. Parrot's small cross

For 1, 2, 6, 7, 8 see Sept./Oct. issue. For 3, 4, 5 see this issue.

For reference to Arghuri village, Monastery of St. Jacob, and St. Jacob's well, all destroyed 1840, see Sept./Oct. issue. Modern Ahura village built subsequent to 1840 earthquake.

Towards the end of the 1960's a few more examples of the perhaps apocryphal stories came to light. An American newspaper published an account respecting a certain Russian major during World War 2, whose men flew over Ararat and re-discovered the ship reputedly found by Roskovitsky thirty years earlier. A few variant legends ascribe a similar discovery to U.S.A. pilots at much the same time. Still other narratives relate to alleged photos of the Ark taken at the time of the war and shown afterwards by, variously, Australians in England and Russians in Germany. Serious attempts have been made to trace these stories to their origins and ascertain what basis of truth, if any, lies behind them. Their net effect at present is to give fresh impetus to the search parties and ideas on where to look and for what to look.

During the 1970's the search has continued with unremitting vigour. It seems as if every nook and cranny of the huge waste of ice and volcanic rock is to be scrutinised for clues. The hardships of the task are immense; the devotion of so many to their ideal is only to be commended and the criticism that a great deal of money is being spent on this project which otherwise might be devoted to other very worthy Christian causes can quite reasonably be met with the reflection that a proved successful outcome would be a tremendous stimulant against current waning belief in the integrity of the Bible. Such an outcome might not and almost assuredly would not make much difference to modern irreligiousness; it is still true that "if they believe not Moses and the prophets, neither will they believe though one rose from the dead". And really to convince society at large it would be necessary to recover the Ark virtually intact and this after five thousand years is recognised by most of the search parties to be unlikely. No useful purpose would be served at this juncture by more than a very brief survey of what has been established by these explorations. The work continues and no one can foretell what turn it will take in the future. Schliemann was ridiculed by all the world for his dogged belief that the legendary city of Troy had really existed and was not merely a Greek myth, but when after years of work he uncovered and revealed the ancient city as Homer had described it the ridicule suddenly ceased. There are many such instances in archaeological research. But it has to be admitted that so far the Ark, has not been found.

Some of the alleged "sightings" have been shown to be due to natural features on the mountain. What appears to be the outline of a huge ship's hull has been seen from the air and photographed. As it appeared in the "Daily Telegraph" for 15th September, 1965, the "object", straddling the mountain side adjacent to a glacier-filled ravine, might very well have given rise to the various aeronauts' stories which have appeared during this century. It would appear that British geologists, upon critical examination of the photograph, have concluded that it is a freak of Nature produced on the rock surface by the abrasive action of ice. It is worthy of note in this connection that when Lynch explored the Great Chasm of Ararat in 1893 he found two similar areas, which he described as elliptical side valleys, measuring 350 by 200 yards, perfectly level, having a surface of sand and pebbles, lying parallel with the main ravine; he commented that they were evidently made by the erosive action of ice. This photograph might be one of them.

There is what has been called the "Rock Ark". From time immemorial it has been claimed that during fair weather the Ark could be seen at the top of the mountain and in past times the monks maintained a telescope in the plain below through which could be seen what appeared to be the bow of a ship projecting from the rocks. Present explorations have established that this object is in reality an outcrop of rock shaped, when seen from certain angles, very much like a ship. Without much doubt this piece of Nature's work has played its part in the local people's belief that the Ark survives at the top of the mountain.

The timber found by Bryce, Knight and Navarra is, however, real enough. The fact that these great beams are buried in the glacier means that they are old, but just how old is impossible to say with certainty. There are those who scoff at the idea that they could be as old as the Flood, but such scoffing is unwise. There is a submerged forest of ancient tree stumps in the shallow waters of Cardigan Bay, Wales, sometimes exposed at low water; it is calculated that these trees were living in 4000 B.C. nearly a thousand years before the Flood. But there could have been many much more recent activities on Ararat which could account for the presence of this timber. The descriptions given by the mountaineers who in 1883 and 1887, and early in this century, claimed to have seen and entered a great structure partially embedded in the glacier on Ararat, would be well satisfied by some kind of wooden building, and when one considers that this land has for centuries past been the scene of many wars and much fighting the idea of some kind of long deserted and forgotten fortress or lookout post cannot be ruled out.

But whether the Ark actually grounded on Ararat, Judi or Pir-Omar-Gudrun, or at some other place quite unsuspected and unknown, is of no real consequence. What does matter is the fact that the name "Mount Ararat" means something. It stands as a symbol of God's unshakable determination to preserve all which is good in the time when He rises up to destroy evil, and to bring that goodness forth into a new world where it may flourish and blossom and fruit. That is the lesson of the story of the Flood. The Divine Covenant with man, with the beasts and birds, with the earth itself, is a *"covenant between me and you and every living creature that is with you, for perpetual generations."* God has promised that the world shall not again be so devastated as to destroy all flesh, and that promise is our confidence in this modern day of apprehension and terror.

## 13. Into the New World.

"While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night, shall not cease." (Gen. 8:22).

At long last the waters retreated and the eight survivors stepped out into a new world. It is difficult to gauge their feelings. The world they had known, with all its violence and horror, the malevolent tyranny of the *Nephilim* and the crass wickedness of their fellows, was gone, gone for ever. They themselves were the only ones left and there was nothing more to fear. Now they had the opportunity to build a new world wherein would dwell righteousness. They could train their children up in the nurture and the reverence of the Most High God and evil would no more defile their fair domain. That must have been the thought in their minds as they surveyed the desolated lands and began to plan the re-establishment of their daily work.

It could not have been an easy task. The terse, matter-of-fact statement that "in the second month, in the seven and twentieth day of the month, was the earth dried... and Noah went forth, and his sons, and every beast, every creeping thing, went forth out of the ark" gives the impression at first sight that things were now all right and they could find a place to live and pick up life where they had left it a year earlier. Nothing could be farther from the truth. The land on which they now stood had been covered with deep sea water for twelve months; the soil would be impregnated with salt and require a long period of "leaching" by rain before the salt was eliminated and crops could grow. For the first year at least they must have existed upon what they could harvest from pockets of soil in the mountains above the level to which the flood water had reached. It is probable that for many years they lived in the mountains, gradually establishing a system of agriculture and stockbreeding suitable to the conditions, perhaps using the stranded Ark as a kind of headquarters and storage depot. Eventually they, or their descendants, would find that the more fertile soil of the Iraq plain had become salt-free and they could move down and find living conditions considerably eased, but that would have been years or even decades later.

They were not many, at first. Three able-bodied men, one old man, and four women. That is the picture presented in Genesis. They must needs wait a few years before their flocks and herds were of sufficient size to provide a regular food supply; they would certainly have stored plenty of seed in the Ark but even so they must dig and sow and await their first harvest, twelve months away perhaps, before they began to be self-sufficient. It is likely that they sought, and found, wild grain and other food plants in the high mountain valleys untouched by the Flood. To this day travellers have remarked on the abundant vegetation and wild life of those same valleys. It is an interesting fact, well established by competent authorities in recent years, that this is the territory where originated the original wild wheat and barley from which all cultivated wheat and barley is derived. Noah is usually renowned, on the authority of Genesis, for having planted the first post-diluvian vineyard. It may be he also deserves the credit for producing the first strains of cultivated grain from the parent wild stock.

The community grew slowly. On the basis of the rather scanty data given in Genesis, they could only have numbered between thirty and sixty a century after leaving the Ark. It was a long time before there was any appreciable population on those wild plains which later on were to see the world's first great civilisation, the Sumerian, sons of Ham. The sons and grandsons of Noah probably lived their lives in tolerable peace and harmony, and in reverence and thanksgiving to God for their great deliverance.

The first act of Noah upon emerging from the Ark was to bring an offering to God. How much the antediluvians knew of offerings and sacrifice, and to what extent they worshipped, if they worshipped at all, we have no idea. It is very probable that there were no "false gods" and no mythologies before the Flood. All the evidence we have from pagan and idolatrous religions points to their origin on this side of the Flood, quite a few centuries after that event. The only references to worship in antediluvian times are in connection with Cain and Abel, Enos, Enoch, Lamech and Noah, all acknowledging God. Noah's offering might well be regarded as marking the continuance of an age-old tradition whereby men recognised God's overlordship of their lives and their dependence upon him. It might also, or perhaps entirely, have been a thank offering to God for the deliverance just effected and their emergence into safety. It might have been a pledge of continued and utter loyalty to God on the part of the entire family. God had set him down in this new world, as it were, unharmed and with all that he needed in the way of possessions to start life anew and so he rendered to God a share of all in token of his allegiance.

The offering was a "burnt offering". Noah "took of every clean beast and of every clean fowl" (bird); this statement has been seized upon by critics as evidence that the story is of much later date than its claimed period on the assumption that the distinction between clean and unclean beasts originated with Moses. This assumption is unwarranted; the distinction, although not stated, is evident in the account of Abraham's covenant-sacrifice in Gen. 15, and it is saying very little for the intelligence of Noah's generation if they had not discerned the difference between animals which are and are not good for food, which is the basic idea behind the separation into clean and unclean. Deut. 14 lists ten species as "clean" for purposes of the Mosaic Law and Noah's offering probably consisted of a similar variety. Divine acceptance of the burnt offering would be demonstrated by the coming of fire from heaven to consume the sacrifice, as in the parallel instances of Elijah on Mount Carmel (1 Kin. 18:38), Gideon and the angel (Jud. 6:21), the consecration of Aaron as High Priest (Lev. 9:24), and the dedication of Solomon's Temple (2 Chron. 7:1).

This sacrifice is noteworthy in that it validated the first covenant between God and man recorded in the Scripture. The Noachic covenant was an unconditional one in that it enshrined the expression of God's fixed intention towards the earth and its inhabitants irrespective of what man might or might not do in the future. Theologically, a covenant *(berith)* in the O.T. is a statement of the relationship instituted and existing between God and man against the background of an avowed purpose. It can be conditional, in that its terms may be violated by man, in which case it comes to an end, or unconditional in that it avows a settled purpose of God which is not annulled or disturbed by anything that man does. The covenant with Noah was of this latter kind. God told him before the Flood occurred that He would establish such a covenant with him (Gen. 6:18) and now the time had come to fulfil his word.

First, the admonition, a repetition of the commission given to the first human pair at the beginning; "be fruitful, and multiply, and replenish the earth". The whole world which Noah had known had been devastated of its inhabitants; that was the world which the sons of Noah were to replenish. "Every moving thing that liveth shall be food for you... but flesh with the life thereof, the blood thereof, shall ye not eat" (ch. 9:3-4). This injunction raises the question as to whether men had been flesh eaters before the Deluge or was this the Divine permission to institute a new practice. The original provision for human food at man's creation as given in Gen. 1:29 implied a vegetarian and fruitarian diet with no mention of flesh; this might very well have been the state of things at the beginning but does not demand that men maintained the practice right up to the Flood. According to Gen. 4:20 cattle-rearing commenced in the eighth generation from Adam, and this can hardly have been for any other purpose than food. In Jewish legend an element in the universal corruption of the antediluvians was the indiscriminate partaking of flesh, both animal and human. The Book of Jubilees, which is considered to be based on a Hebrew text differing from that from which our Authorised Version is derived, says in this connection "and lawlessness increased on the earth and all flesh corrupted its way, alike men and cattle and beasts and birds and everything that walketh on the earth; all of them corrupted their ways and their orders, and they began to devour each other, and

lawlessness increased on the earth and every imagination of the thoughts of all men was thus evil continually" (Jub. 5:2). In like manner the Book of Enoch accuses the progeny of the fallen angels of the same sin; "(they) consumed all the acquisitions of men. And when men could no longer sustain them, the giants turned against them and devoured mankind. And they began to sin against birds, and beasts, and reptiles, and fish, and to devour one another's flesh, and drink the blood". (1 Enoch 7:3-5). These books in their present form only date from a few centuries before Christ, although they do manifestly incorporate fragments of much older material; nevertheless these traditions may well rest on a basis of fact, handed down by oral tradition from earliest times. And if something like this was indeed the situation in those decadent days before the Flood then the Lord's words to Noah in this chapter might well be understood as regularising and limiting a practice which was not unknown to the patriarch already. The Jubilees rendering of the instruction is a little more illuminating than the A.V.; "behold, I have given unto you all beasts, and all winged things, and everything that moveth on the earth, and the fish in the waters, and all things for food; as the green herbs, I have given you all things to eat. But flesh, with the life thereof, with the blood, ye shall not eat; for the life of all flesh is in the blood, lest your blood of your lives be required". (Jub. 6:6-7). This prohibition of eating flesh with the blood might well be a warning against repeating the corrupt practices referred to in "*Jubilees*" and "Enoch"; men were free to use the flesh of suitable animals for food but not to drink the blood, or possibly, not partake of it raw with the blood. Behind this lay the idea that the life of a terrestrial creature resides in the blood and the life comes from God and must go back to God; man can appropriate the material carcase to his own use but may not appropriate the life, which belongs to God. The same idea was incorporated in the Mosaic Law many centuries later. This, perhaps, is the significance of vss. 5-6 in Gen. 9. God will require the blood of every beast and every man in the sense that He takes back the life He has given (Eccl. 12:7. Psa. 104:29-30). The oft-debated pronouncement "whosoever sheddeth man's blood, by man shall his blood be shed, for in the image of God made he man" (ch. 9:6) is also connected with all this. God alone has authority to take away life, and because all men are made in his image and possess life by his decree, the man who wilfully sheds the blood of another must himself forfeit his own privilege of sentient life. Whether this is a mandate for the exercise of judicial "capital punishment" or an anticipatory statement of Jesus' own declaration "they that take the sword shall perish by the sword" may be open to debate, but there can be little doubt that the injunction was given to Noah in reaction to the terrible lawlessness of the pre-Flood days. Henceforth mankind must govern themselves in an orderly fashion by the rule of law and this must involve disciplinary and preventive measures against lawbreakers.

Finally God announced the covenant, the agreement which assured Noah of a stable future for himself and his descendants, and defined their relationship to God. This covenant was to be "with you, and with your seed after you, and with every living creature that is with you, of the fowl, of the cattle, and of every beast of the earth with you; from all that go out of the ark, to every beast of the earth" (ch. 9:9-10). This is the only occasion in Bible theology where God is said to make a covenant, enter into an agreement, not merely with man, but also with the animal creation. The gist of the agreement is that both man and the brute creation can proceed to multiply and inhabit the earth in full confidence that never again will it be devastated as it had been by the Flood. Whatever changes of administration were yet to be made, whatever the depth of corruption to which man might conceivably sink and whatever the nature of the changes God must introduce in consequence, the orderly processes of Nature, seedtime and harvest, summer and winter, day and night, shall continue uninterrupted. The medieval theological idea of the destruction of the earth at the Last Day in a great conflagration cannot be sustained in the light of this promise and covenant. Even the great transition from the kingdoms of this world to the Kingdom of God when the Lord Christ at his return assumes his power and commences his Messianic reign is subject to the terms of this Covenant; the earth itself will pass from the one Age to the other unscathed.

An interesting point revealed by vs. 10 is that, despite the popular impression and the works of many artists, there were no predatory (carnivorous) animals in the Ark; lions, tigers, bears, wolves and so on were conspicuous by their absence. In the Old Testament the predatory animals are always described by the appellations "beast of the earth", "beast of the forest", "beast of the field" or "wild beast". The herbivorous creatures are denominated by several words which are translated "cattle" "beast" or "creeping thing". Nowhere in the entire narrative is there any reference to predatory animals being in the Ark. But now that Noah has emerged from the Ark and is having the terms of the Covenant recited to him, God says that it is to include all living creatures besides man; "From all that go out of the Ark, To every beast of the earth"—predators. In other words, the covenant is to include the entire animal creation, from all those who were in the Ark to all those who never were in it. The implication of all this is, of course, that the territory inundated by the Flood was cleared of all its carnivorous animals, which was just as well in the interests of the admittedly scanty number of beasts Noah had with which to repopulate his new realm. Wild animals would have survived in the mountainous districts unaffected by the Flood but it would be many years before they or their progeny penetrated the plains where men had re-established themselves, by which time their flocks and herds, and the herbivorous wild creatures, would have multiplied adequately to ensure survival.

The visible token of the covenant was the rainbow. Henceforth whenever there shall be rain on the earth and the rainbow appears in the cloud, said God, "I will look upon it, that I may remember the everlasting covenant between God and every living creature of all flesh that is upon the earth" (ch. 9:16). The rainbow became the symbol of God's faithfulness; more than that, it was a visible manifestation of the glory of God reflected to earth, assuring man that God is in control of all things and is always working for the ultimate well-being of man. The rainbow is mentioned in Scriptures only three other times and always with the same association. When Ezekiel stood and beheld the vision of God on his throne advancing to earth for the combined purposes of burning out, by his judgments, the evil that was in his people, and setting in motion the forces which ultimately would bring them the blessings He had promised, the rainbow surrounded his throne (Ezek. 1:28). When John saw a similar vision of the Lord in heaven about to initiate exactly the same processes among both the apostates and the faithful in this present Christian Age, the rainbow was there again (Rev. 4:3). Above all, when to the Revelator was vouchsafed the vision of the returning Christ armed with all power to establish upon earth his kingdom of everlasting righteousness, He was crowned with the rainbow (Rev. 10:1). Each of the four great ages of post-Flood history, the Patriarchs, the Jewish, the Christian or Gospel, and the Millennial, ages are hallowed by the appearance of the rainbow, indicative of God's faithfulness in the implementation of his eternal purpose for the sons of men and of his never-failing beneficent control of all earth's affairs, that men, despite their shortcomings and failures, might eventually attain their destined place in his eternal creation.

So, after judgment comes blessing. That is one of the Divine principles which men have been so slow to learn. God does not chastise for the sake of chastisement, but that men might turn from their evil ways, and live. *"The Lord hath chastened me sore"* said the Psalmist *"but he hath not given me over to death"*. In that lies our hope and assurance for the future of mankind. None will be eternally lost save those who are quite irreclaimable. None will be denied an opportunity for repentance and we shall find in the last analysis that the only men who do escape from the loving hands of God are those who have destroyed within themselves their own capacity for repentance, who have so steeled themselves against every influence for good that they have nothing left on which the Spirit of God can work. The antediluvians were not like that; their corruption was largely the result of ignorance and they suffered under a demonic tyranny from which they could not escape. Degenerate as they were, it might well be that God in his mercy took them away before they became irrevocably depraved, that in a yet far future day, freed from the evil tyranny of the past, and brought to a full knowledge of the saving grace of God in Christ, they may have a full opportunity to listen, and repent, and convert, and be healed.

Things were different after the Flood. True, it was still a world of sin and death, "this present evil world". It was still a world where evil flourished and went apparently unpunished. But there was a difference. From Noah's day onward the light was increasing instead of decreasing. Slowly but surely men entered more and more into the knowledge of God and his purpose. Never again, declared God in his infinite wisdom, need the human race be virtually blotted out because of almost total degeneracy. There was always to be a remnant, witnesses to God in every generation and age. From Noah to Abraham a hope for the future was preserved. During those long centuries when the peoples of Sumer, Egypt, Babylon, Assyria and lands farther afield built their splendid but pagan civilisations, times concerning which the Old Testament is virtually silent, there must have been many godly men in the earth. Reverential hands preserved and recorded the story of God's dealings with man from the very beginning of man's existence upon earth for the enlightenment of generations to come. Despite many shortcomings and failures, Israel preserved the truth of God, and the written oracles, and remained his witness in the world, for fifteen hundred years until Christ came. So it was with full confidence that these things would be so that God gave the promise "I will not again curse the ground any more for man's sake, though the imagination of man's heart is evil from his youth, neither will I again smite any more every thing living, as I have done". (ch. 8:21).

In the strength of that promise Noah embarked on the rebuilding of the world. The first to be brought into covenant relationship with God, he and his sons had the Divine blessing and they had the visible sign, the rainbow, always to remind them of God's faithfulness and God's abiding presence. He and his had lived through an experience such as no other men have been called upon to undergo. He had believed God, and translated his belief into action, and reaped the reward of faith. For a short time the whole of the Divine purpose depended upon him and his integrity. If Noah had failed, the whole of the Divine purpose, centred in the Person of One who was to trace lineal descent through Noah from Mother Eve, would, from the human point of view, been disrupted. There would have been no Seed of the Woman. But God chooses his men aright. Noah did not fail, and the earth was replenished anew.

The End.

# THE FLOOD YEAR & THE DAYS OF NOAH

Genesis 7-8

