

In the sixth 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.<sup>10</sup>

The rain was upon the earth forty days and forty nights. No man is able to explain just what the Lord meant by the opening of the "windows of heaven." Was water brought for the occasion from some other place above the earth? We do not know; but the true believer in the scriptures having faith in the word of the Lord, has no doubt that sufficient water was supplied. It is an interesting study nevertheless, considering just the condition that exists with the amount of water in the oceans, lakes and in the atmosphere. We receive the information from government sources, gathered by scientific investigation of the following interesting facts:

The land area of the earth is 57,510,000 square miles.

The water area is 139,440,000 square miles.

Circumference at the equator is 24,902 miles.

The figure given for the height of Mt. Everest is 29,002 feet. To make the problem simple we will say Mt. Everest is six miles high and that the circumference of the earth is 25,000 miles at the equator. This would make Mt. Everest  $6/25,000$  of the earth's surface rising into the air. Charles Babage, the English scientist, said, "The highest ranges of mountains we have are relative to the circumference of the earth's crust infinitely smaller than the puckers on an orange-skin."<sup>11</sup> With nearly two and one half times more water than land, I am sure the Lord with his infinite power could manipulate this immense amount of water to cover the earth. The ocean has an average depth of 13,000 feet and the average height of the land is only about 2,300 feet. The ocean varies in depth from 300 to 400 to about 31,000 feet, so it is about 5.6 times as deep as the average land is high and the ocean area is far more than two times that of the land. Then again, we have learned that the mountains were not

as high in the days of Noah as they now are. There were great changes that came to the surface of the earth during the flood. We know from the dynamic force of water a flood of such proportions could not occur without making great changes in the surface of the earth. This the evolutionist does not take into account. Moreover, other great changes came in the day of Peleg when the earth was divided. (Genesis 10:25.) This was the surface of the earth, not the division in relation to the habitations of the people. One fact easily overlooked in the Lord's instruction to Noah, (see Genesis 6:13,) is as follows:

And God said unto Noah, The end of all flesh is come before me; for the earth is filled with violence through them; and, behold, I will destroy them *with the earth.*

A deluge such as that described in the Bible, it must be admitted, would make great changes in the earth. A small flood can create enormous damage, such as we occasionally have in parts of Utah. Then to think of the terrific force of the flood that would cover the earth we must conclude that the entire face of the earth was ascribed by geologists to a time millions of years ago could have taken place suddenly, and evidently did. We know from the record in the Book of Mormon, that at the changed, so that many of the great geological conditions crucifixion of our Lord, the whole face of the land on the western hemisphere was altered. Mountains arose, others sank, and they were broken into "faults" and crags by the great earthquakes, wherein they were smooth before, and this was not millions of years ago.

\* Another thing should be considered. There is definite evidence that at one time, and I am convinced it was in antediluvian days since the time of Adam, the climate of the earth was just as Elder Parley P. Pratt and President John Taylor have described it. Evidence is found in the Arctic that tropical, or semi-tropical plants, grew there in abundance. The frozen animals spoken of by Sir Henry H. Howorth were frozen at the time of the flood when the climatic conditions of the earth were

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theories of evolution, and if they will do so sincerely I am sure they will be greatly benefited.

One important study of these volumes having a bearing upon the flood, is the evidence that, not only the mammoths of Siberia were buried suddenly having met with violent death, but in all parts of the earth similar evidences are found in relation to other animals. This could not have happened from the freezing of ice, but it came through a sudden and violent flood of water. I quote a few paragraphs:

Not only does the frozen ground preserve the flesh deposited in it, but it is quite clear that no flesh could remain intact in this way unless it were permanently frozen, and it follows inevitably that the bodies of the mammoths, etc., which are now found intact in the Siberian tundras must have been frozen immediately after death, and have remained frozen since they were first entombed. If they had been subject to alternating congelation and melting with the intermittent seasons, they would assuredly have long since decayed. An exposure to one summer's sun, to one season's melting, would have induced putrefaction and dissipation. We are not dealing here with animal substances deposited in bogs, and changed into such organic compounds as adipocere, but of flesh so unchanged that it has all the character of that of animals which have recently died, when examined under the microscope, while it is readily eaten by the wild animals that live on the tundra. The flesh is as fresh as if recently taken out of an Esquimaux cache, or a Yakut subterranean meat safe. There cannot be a moment's doubt that this condition was secured by one cause only, namely, that ever since the bodies were entombed they have been in a state of continuous congelation without a break.

This is assuredly the only possible conclusion. It is one which I have urged at different times before the Geological Society and the British Association, in the pages of *Nature* and the *Geological Magazine*.

and personally to several of my most distinguished scientific friends with a much wider experience of such problems than my own, and on all occasions there has been a consensus of opinion that what is here urged is inevitable, nor is the opinion, so far as I know, contested. . . .:

This view seems incontrovertible, but it involves as a simple necessary corollary a conclusion from which Lyall and his followers have continually shrunk, namely, that this change of climate must have been sudden and must also have been continual. To avoid this conclusion some desperate efforts have been made.<sup>17</sup>

Again, as I have said, the instance of the soft parts of the great pachyderms being preserved are not mere local and sporadic ones, but they form a chain of examples along the whole of Siberia, from the Urals to the land of the Chukchis, so that we have to do here with a condition of things which prevails, and with ~~meteorological~~ conditions that extend over a continent.

When ~~we find~~ such a series ranging so widely preserved in the same perfect way, and all evidencing a sudden change of climate from a comparatively temperate one to one of great rigor, we cannot help concluding that they all bear witness to a common event. We cannot postulate a separate climatic cataclysm for each individual case and each individual locality, but we are forced to the conclusion that the now permanently frozen zone in Asia became frozen at the same time from the same causes.<sup>18</sup>

At the risk of being burdensome I feel it necessary to present other quotations in regard to the sudden and violent deaths seen everywhere on the earth, where myriads of animals and fish perished together. All the evidence points to the fact that death came upon them suddenly.

Again, in the pleistocene beds we are arrested

by the large number of young animals which occur. When Nature puts a term to an animal's life in her normal way, it is exceedingly seldom she does so when the animal is young. Animals do not die naturally in crowds when young, and yet we find remains of quite young animals abounding in all classes from mammoths to mice. How are we to account for this fact, save by summoning an abnormal cause? How, again, can we account for the fact that the mummied animals found in Siberia seem to have been in robust health, stout and strong? Is this, again, consistent with a natural death? Again, if the death was natural, and in an area where we know hyaenas and other carnivorous animals abound, would the corpses be left to the useless duties of decay, as they must have been, since the bones are ungnawed, and (where the flesh is preserved) the flesh is uneaten? One cause, no doubt, of the scarcity of remains of animals which are dying at present where animal life abounds, is the diligence of the scavengers. What were they doing in pleistocene times to pass by those myriads of corpses, and in so many cases not to leave a tooth-mark anywhere, and in fact to leave their own bones with the rest? Surely the point is clearly and unmistakably to the fact that the animals, or the greater part of them died together. If the remains were the silent chronicles of centuries of time and generations of life, we would assuredly have found that some or a large portion of the bones would have been broken and gnawed, but this is not the case, and it points strongly to their death having been more or less simultaneous.

The most obvious cause we can appeal to as occasionally producing mortality in a wide scale among animals is a murrain or pestilence, but what murrain or pestilence is so completely unbiased in its action as to sweep away all forms of terrestrial life, including man as we shall see presently, the fowls of the air and the beasts of the field, elephants and mice, rhinoceroses and frogs, bisons and snakes, tigers

and land-snails, and this is not one corner only, but, so far as we know, over the whole length of two continents, irrespective of latitude or longitude? The problem has only to be stated thus to make it obvious that a murrain or a pestilence is quite incompetent to meet our difficulties. Such a pestilence, again, would not collect herds of incongruous animals in the same places, and kill them all together, and then bury them; and if it did so, we should assuredly have some evidence of its work in the remains themselves, where we find none, but rather that the animals died in full health, with their bodies strong and hearty.

Another cause of wide-spread death sometimes, is the occurrence of unusual drought. A fierce summer may dry up the streams and destroy the means of life, but how can we invoke such a cause operating not only in Siberia, but in the Mediterranean borders, and, as we shall presently see, from one end of America to the other? The same reason precludes our appealing to a wide-spread burning of forests or a sudden succession of cold, etc. In Siberia, as we have seen, the death of the mammoth and its companions was immediately followed by a sudden declension in temperature, which if itself and in the absence of other causes made that area incompatible with the life conditions of the mammoth, but this was a correlative occurrence, and not the immediate cause of the great destruction, since it only operates over a very small portion of the area from which the mammoth and its companions disappeared. Nor, again, is it likely that the cold would have killed the bear, and glutton, the musk-sheep and reindeer, the snowy owl and ptarmigan, which we know were in many instances overwhelmed by the same cause, whatever it was that destroyed the mammoth.

The fact that great bones occurring in great caches or deposits, in which various species are mixed pell-mell, is very important. If animals die occasionally from natural causes when they become

toothless and old, different species do not come together to do so, nor does the lion come to take his last sleep with the lamb. The fact of finding masses of animal remains of mixed species, all showing the same state of preservation, not only points to a more or less contemporary death, but is quite fatal to the theory that they ended their days peaceably by purely normal causes.

Bones, again wither and decay very fast, if exposed to the air. And consequently when we find bones, with their fine and delicate angles and muscular attachments preserved intact, in many cases lying together as when articulated, over the wide area of a whole continent, and for the most part, so far as we can judge, in the same mineral condition and state of decay, we must conclude that these facts are only consistent with the animals having died together, and been together protected from decay. . . .

We must next inquire what the nature of this catastrophe was. Let us, then, focus the necessary conditions. We want a cause that should kill the animals, and yet not break to pieces their bodies, or even mutilate them, a cause which would in some cases disintegrate the skeletons without weathering the bones. We want a cause that would not merely do this as a wide-spread murrain or plague might, but one which would bury the bodies as well as kill the animals, which could take up gravel and clay and lay them down again, and which could sweep together animals of different sizes and species, and mix them with trees and other debris of vegetation. What cause competent to do this is known to us, except rushing water on a great scale? Water would drown the animals, and yet would not mutilate the bodies. It would kill them all with complete impartiality, irrespective of their length, age, or size. It would take up clay and earth, and cover the bodies with it. This is the very work it is doing daily on a small scale. Not only could it do this, but it is the only cause known to me capable of doing the work

on a scale commensurate with the effects we see in Siberia. What direct evidence, then, have we that it was in fact a great flood of water?

The first piece of evidence I would quote is of a singularly direct kind, and we owe it to the experienced skill of Professor Brandt. Speaking of the famous rhinoceros found on the Wilui by Pallas, he says, "On a careful examination of the head of the *Rhinoceros Tichorinus* from the Wilui, it was further remarkable that the blood-vessels and even the fine capillaries were seen to be filled with brown coagulated blood, which, in many places still preserved its red color." This is exactly the kind of evidence we look for when we want to know whether an animal has been drowned or suffocated. Asphyxia is always accompanied by the gorging of the capillaries with blood, and the facts justify at all events a probable inference that this particular rhinoceros was the victim of drowning.

Brandt goes on to tell us how, in conjunction with Hedenstrom, he made a careful microscopic examination of the earth which was attached to these rhinoceros remains, and found it to consist of two kinds, the most important being mould containing vegetable fragments, and which he took for remains of fresh-water plants, and the soil from a fresh-water deposit. . . .

To continue: The occurrence of immense caches in which the remains of many species of wild animals are incongruously mixed together pell-mell, often on high ground, seems unaccountable, save on the theory that they were driven to take shelter together on some point of vantage, in view of an advancing flood of water, a position which is paralleled by the great floods which occur occasionally in the tropics, where we find the tiger and its victims all collecting together on some dry place, and reduced to a common condition of timidity and helplessness by a flood which has overwhelmed the

flat country. . . . In the present case all were overtaken by the water, tossed and tumbled together in a common destruction, and then covered quickly with a mantle of clay or gravel,—a mantle, be it remembered, spread over immense areas, without a break external or internal, and in which we can find no traces of local disturbance, such as would be caused by any process of subsequent burying, and showing the bones and covering were laid down together.<sup>19</sup>

Sir Henry H. Howorth continues his story and gives indisputable evidence that these evidences of the universal flood are in many parts of the world. It was not confined to Siberia, but evidence shows it prevailed in America and in the caves all over the world. He also continues his study and shows by positive evidence, "That man was a contemporary of the extinct animals."<sup>20</sup> Not Neanderthal or any other kind of manufactured man, but real human beings. Near the close of the book, *The Mammoth and the Flood*, the author gives evidence that the tradition of the flood is found in countries in all parts of the globe, and of this he says (pages 412-413), "But a few words remain to be said about another class of evidence than that which I have hitherto adduced, and which supports the same conclusion; namely, the evidence of human tradition. It is in itself not improbable that if such a catastrophe really occurred it would leave such an impression on the survivors that it would be recorded in their traditions, and if such tradition occurred in various isolated localities it would no doubt strengthen its force. In many places such a reminiscence would die out as the traditions of the direst disasters are apt to die out, but the fact of its existence in several localities would, as I have said, be an element of singular cogency in the general argument."

He then records the traditions of people in many lands from Egypt, Israel, Chaldea, Syria, Phrygia, India, Persia, Greece, China, Mexico, Peru, Brazil, Tahiti, and Polynesian islands, Fuegian, Philippine and other lands.