

## The Flood.

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**P**ROBABLY the most remarkable story between the two covers of the bible is the story of the flood. God created the earth and its inhabitants about 4004 B. C., and they became fruitful and multiplied greatly on the face of the earth. Yet, while they were multiplying, they had so far forgotten their wonderful origin that they grew as wicked as they did strong.

"And it repented the Lord that he had made man on the face of the earth, and it grieved him at his heart." (Gen. vi. 6.)

In the next verse he decided to destroy all life on earth, but in the verses following we are told that Noah, a just and good man, found grace in his heart and he agreed to let Noah and his family live. The ark was the means provided for their safety, and into it they took the animals.

To understand the matter fully it would be necessary to read the entire 6th, 7th, 8th and 9th chapters of Genesis, but we will make a few verses answer our purpose. Let us take Genesis vii. 10, 11, 12, 19, 20.

"And it came to pass after seven days, 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 [November 17th], 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.

"And the waters prevailed exceedingly upon the earth, and all the high hills that were under the whole heaven were covered.

"Fifteen cubits upward did the waters prevail and the mountains were covered."

Here, in a nutshell, is the plot for our story of the flood. There is no use going over the old quibble of what the writer meant or what he did not mean. The facts are definitely stated and we must be consistent and follow them. According to my orthodox brother, I must accept it as gospel truth or be condemned.

But nature either blessed or cursed me. The great productive force through which I was brought into being, endowed me with thought and for years, in fact, as far back as I can remember, I wanted to know where that water came from.

The ancients believed the world to be flat, or practically so; it sloped from the north to the south. Their evidence was, the rivers flowing south had a rather swift current. The Nile, the single great exception in their country, flowed north. Its fall is very slight, the current sluggish and their analogy

explained it very readily. Of course, the rivers that flowed south flowed down hill. Water flows down hill very rapidly, but it flows up hill very slowly. Hence the Nile, flowing up hill, had to flow very slowly. Then the earth sloped towards the south.

It was two hundred days' journey from north to south and three hundred days' journey from east to west. It was bounded on all sides by a chain of mountains, which supported a crystal dome, which covered the whole world and above which was the abode of the gods.

Thus it became a very easy matter to "separate the waters that were below the firmament from those which were above the firmament" (Gen. i. 7). It was also easy for the flood to come, as all that was necessary was to "open the windows of heaven" and the waters above the firmament would fall to the earth.

This was an easy matter to handle until the form of the earth was learned. This and the invention of the telescope and researches in astronomy have swept away the abode of the gods, and man began to question the story of the flood.

Let us examine it. We will not enter the ark in this story, but will devote an entire story to that. Even then it is a great question if we can devote sufficient space to justify it.

But there are some facts concerning the world that we know. In the first place we know its size and shape; we know the height of its principal elevations; we know the depth of its principal seas, and we know the amount of moisture the air can hold without precipitation. We are now in a position to begin our investigations.

The rain was upon the earth forty days and forty nights, or 900 hours of steady rain, and during this time enough water fell to fill the whole earth so that the highest mountains were covered to a depth of fifteen cubits, or a trifle over 27 feet 4 inches.

We talk about rains and cloud-bursts in this age, but they are mere sprinkles, the worst of them, compared with this rain of biblical times.

There is some question concerning which is the highest mountain in the world. Captain Lawson claims that he found a mountain, that he called Mount Hercules, that had an altitude of 32,763 feet above sea level. The existence of this mountain is denied by some, among them being members of the Royal Geographical Society of England. As we are giving every possible benefit of the doubt to these stories, we will take the highest peak we know of, the existence of which is unquestioned, and use that in our calculations.

Mount Everest raises its peak 29,002 feet above the sea level.

The water rose to a height of 27 feet, 4 inches above the top of the highest mountains and fell there in 40 days and 40 nights, or in 960 hours.

It is a very severe rain that causes over one inch of water to fall in a single day. A rain fall of 9 inches in one week caused a most disastrous flood in the Mississippi valley, overflowing the lowlands and causing damage to the extent of millions of dollars.

The average annual rainfall of the entire world, as reported by the weather bureaus of the United States and foreign countries, is 36 inches. That is, if all the rain that falls on earth during a single year was to remain on the surface and there was no loss from evaporation, or other causes, it would cover the ground to a depth of but 36 inches.

If Mount Hercules is what Captain Lawson reported it to be, 32,763 feet high, and it was covered to a depth of 27 feet, 4 inches, it would have been necessary for it to rain enough to cover the earth to a depth of 819 feet, 9 inches, each 24 hours, in order that the depth of 32,790 feet of water might fall in 40 days and nights. The entire flow of Niagara would be but a drop compared with this amount.

But, as we have said, there seems to be a question regarding Mt. Hercules, and we will also use Mt. Everest in our calculations. It is 29,002 feet high, to which add the 27 feet, 4 inches of water which covered it, and we have a total depth of water of 29,029 feet, 4 inches. This would have to fall at the rate of 725 feet, 9 inches per day; a little less than 30 feet, 3 inches per hour; a little over 6 inches per minute or the amount of an ordinary rainfall each second of time.

For all practical purposes the earth is 8,000 miles in diameter; the highest mountains are 6 miles high. The cubical contents of the earth, using these figures, amount to 268,083,200,000 cubic miles. If we covered it with water to a depth of 6 miles, its cubical contents would be 269,291,384,866 1-3 cubic miles. By subtracting the first amount from the second we find that it would require 1,208,184,866 1-3 cubic miles of water to cover the earth to the necessary depth. But the earth is not exactly round, although the highest mountains are no more in comparison to its surface than a grain of sand is to an ordinary globe, 16 inches in diameter, used in school rooms.

Three-fourths of the earth's surface is covered with water, of which less than one-third is above sea level. The following will show the best estimates on the subject:

	Square Miles.
Total area of the earth's surface.....	196,971,984
The great oceans are estimated as follows:	
Atlantic.....	24,536,000
Pacific.....	50,309,000
Indian.....	17,084,000
Arctic.....	4,781,000
Southern.....	30,592,000
or a total area of.....	127,302,000

This will show that about two-thirds of the earth's surface is sea and the rest of it, with a few exceptions, such as the Dead Sea and the Desert of Sahara, is more or less above sea level.

Taking this for our guide and allowing that  $\frac{1}{2}$  of the space above sea level is occupied by the mountains, etc., we will be obliged to deduct 1-6 from the total amount of water that fell, which will leave us the enormous amount of 1,006,820,722 cubic miles.

This amount of water would have to fall, to do as the Bible says was done. Then remember that it does not allow for one single drop being lost by any process whatever. It supposes that every drop stayed on the surface of the earth. Everyone knows this would be impossible and that millions of cubic miles would soak into the earth. It would be impossible to even approximate the amount of water that would be absorbed by the 4,180,000 square miles of desert we have on the earth's surface. If you wish to try it, take a pail of sand. Pound it down as hard as you can get it, then see if it does not take up nearly its own bulk of water.

Where did this water come from? The atmosphere at the level of the sea will hold but one per cent. of moisture without precipitation. The highest clouds, the cirrus, or "mackerel sky," are about 6 miles high and the rain clouds are but about one mile high. The water reached as high as these clouds and higher than the rain clouds.

At the sea level one cubic inch of water produces 1,700 cubic inches of vapor. If this water existed in the form of vapor, it would have filled a space of 1,701,595,227,400 cubic miles, provided the atmosphere continued the same density and capacity for holding moisture. But we know that as we go up, the atmosphere becomes less dense and its capacity to hold moisture is decreased in proportion.

At an altitude of 10,000 feet, the atmosphere is so rare that many people suffer greatly. At points one mile above sea level it is difficult to walk up hill, and at points from 10,000 to 12,000 feet high it is difficult, if not impossible, to boil potatoes, beans or even eggs. The water boils, or changes into a vapor, at so low a temperature that sufficient heat is not generated to cook them.

It is therefore impossible to estimate the amount of space this water would occupy when changed into a vapor, but it would make a solid cloud reaching above the limits of the atmosphere a distance of many thousands of miles. No light could possibly penetrate it.

The "windows of Heaven were opened" and the "fountains of the great deep were broken up," the Bible says. But we know the win-