

BIG BIBLE

STORIES

BY W. H. BACH

Lilly Dale, N.Y. 1877

VOL. I

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INTRODUCTION.

“Search the scriptures; for in them ye think ye have eternal life: and they are they which testify of me.”
John v, 39.

For some time I have been following the above injunction. In my humble opinion the greatest question before the human race to-day is the question of immortality. What are the few years we spend upon this earth, even if we live our allotted “three score years and ten,” compared to the vast ages of eternity, if it so happens that death does not end all?

We have been told that the great God of the Universe produced a book which is to be unto us inspiration and guide, leading us through the darkness and vicissitudes of this life and onward into another. Such being the case, in its presence each idle tongue should be hushed, each ear strained to catch the slightest sound; each eye opened to its widest extent and all contained therein should be received. Remember it is GOD who speaks.

If this was told to humanity for the first time what hopes would be aroused in our breasts! What wisdom we would expect to receive! But, alas, how great the disappointment! History and Bible do not agree; Genesis and geology are directly in contradiction; scientific astronomy contradicts all.

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But we are told that the Bible was not given for the purpose of teaching man history, geology or astronomy and our hopes rise again; we open the book, our eyes light upon the passage "search the scriptures" and we begin our task.

If the Bible is true, no amount of investigation can harm it. The more a truth is investigated, the brighter it shines. The more error is exposed to the searching light, the more cloudy it becomes. If the Bible is the work of GOD, THE OMNIPOTENT, it will bear all investigation. If it is the work of ignorant men, that fact should be shown to the world.

"God is not a man that he should lie; neither the son of man that he should repent": (Numbers xxiii, 19). That being the case, we can investigate without danger and I have done so. I read the stories in the book; not knowing what might be proven, some calculations were made; the results were surprising. More calculations followed and this work is the result.

I expect to be accused of sacrilege. It is the natural course of events. From time immemorial when arguments were not sufficient, ecclesiastical authorities have always resorted to persecution. But the days of the "holy inquisition" with its racks and thumb screws are past.

No sacrilege is intended. I have as high a conception of the great productive force through which this Universe was brought into existence as any member of any orthodox church. Yes, I have more. I would not accuse Omnipotence of being the author of such statements; I would never accuse it of being guilty of injustice; I would not charge it with exaggeration.

These stories are quoted exactly as stated in the Bible. The reader is requested to refer to the passage and to verify the figures given.

If any errors are found, the author would consider it a personal favor if he was notified of them, as it would enable him to correct them in subsequent editions. The calculations are carried out to the third and fourth decimal point in order that they may be as exact as possible. It has been deemed best to use the Arabic numerals instead of spelling the numbers or using words. While this is not considered exactly proper, they are clearer than the words are, thus making the work more comprehensible.

It is a work of argument, not ridicule. It has been the design of the author to incorporate as little ridicule as possible. Ridicule is not argument. The grandest truth ever discovered can be ridiculed. But ridicule never settled a question. It has been used as a weapon to induce thought—and has frequently produced the desired result—but the thought induced settled the question in the end.

The stories given in this little volume do not exhaust the supply. They are merely a "drop in the bucket," and perhaps at some later date its scope may be extended and it may be made more complete. The labor involved in securing reliable statistics and making the calculations has been enormous compared to the bulk of the volume. Every calculation is mathematically correct and has been worked from the problem to the result, then from the result back to the original problem, thus reducing the possibility of errors to a minimum.

The authorities used have been of the very best. The author acknowledges the assistance of the Britannica and Chambers Encyclopaedias, International Cyclopaedia of Practical Knowledge, Library of Universal Knowledge, the works of Rev. Dr. Sunderland, Professors Denton, Sayce, Driver, Levasseur, Johnson, Proctor, Dr. Brown, U. S. Government statistics, N. Y. World Almanac, Maspero's excellent work on the "Dawn of Civilization," and others too numerous to mention. The relative positions of the cities and their directions from each other and other necessary information has been taken mostly from "Helps to the Study of the Bible," issued by the Oxford Press. Its position as authority cannot be denied by theologians. In fact, nearly all that have been used are the highest Christian authorities.

With this I dedicate this work to the cause of Human Enlightenment and present it to the world for judgment.

W. H. BACH.

Lilly Dale, N. Y., October 1st, 1897.

CHAPTER I.

CREATION.

“In the beginning God created the heaven and the earth.” (Genesis i, 1).

The most wonderful act we are told of in the Bible is the Creation. Its history is found in the first three chapters of Genesis.

Previous to the time the work of creation began, nothing existed! The sun did not shine by day, neither did the moon send forth her welcome light by night; the stars, those twinkling gems set in a universe of blue, were not! Nothing could have been more desolate.

In this condition the God of the Bible existed, without beginning, up to about 6,000 years ago. For some unknown cause this lethargic condition was broken and like the primeval forest, when visited for the first time by the hardy settler whose axe fells the sturdy monarch of the forest, breaking the silence that had hitherto been broken only by the wind as it sighed through the trees, singing a lullaby to the squirrels in their nests and voicing a welcome to the feathered beauties

who sought shelter under their protecting branches, it witnessed the first sign of activity.

The first day's work resulted in the production of the earth and light and the separation of light into two things, light and darkness. What it was previous to this separation it would be hard to imagine. Darkness is merely the absence of light and darkness and light mixed would be a peculiar combination.

"And God saw the light and it was good." Was this the first time he had seen it? Did he dwell in darkness all the countless ages of eternity that preceded creation? If so, no wonder it seemed good. Imagine yourself placed in a dark cell for a year or even a day! Yes, how good the light seems when it first appears in the morning after but a few hours absence. You can imagine the gratification it would cause after living in an eternity of darkness. From Biblical evidence it would appear that darkness was the natural condition of the Bible God as Moses and others visited him in the darkness on several occasions and I Kings, viii, 12, and II Chronicles, vi, 1, tells us: "God said he would dwell in the thick darkness."

During the second day the firmament was made and the "waters that were below the firmament were separated from those above the firmament."

The third day the waters were "gathered together into one place and the dry land appeared." The herbs, grasses, fruit trees and their seeds were also created.

The fourth day the sun, moon and stars were made and "set in the firmament."

The fifth day fish and fowls and the sixth day the beasts of the earth and man were brought into being.

“Thus the heavens and the earth were finished and all the host of them.” Then the seventh day was sanctified and “God rested the seventh day.”

This is according to one account of creation. But when we finish this account, we find another. The first chapter of Genesis gives what has been termed the Elohistic account of creation, from the term Elohim, or Gods; the second and third chapters tell another story of creation, the Jehovistic (Lord God) account.

The first gives us no idea how the world was created further than to say the earth was without form and void. The second is more in detail and we conclude from it that the dust of the earth was made of nothing, and the men and animals were produced from the thing created from nothing. This explains why so many people are so near nothing at the present time.

But man was not to be the highest. After he had been made, the creator learned that it was not best for him to be alone and decided to make a helpmeet for him. Evidently the “void nothing” was entirely exhausted as another plan was adopted for Eve’s production. Adam was hypnotized and while in this sleep, one of his ribs was removed and when he awoke, Eve had been made of it. If the Bible had only included directions for performing this surgical operation successfully, what a vast amount of suffering might have been saved.

A young lady of my acquaintance took up the study of anatomy and while examining some skeletons made the astonishing discovery that a man’s skeleton did not lack one rib. She asked me in the most innocent manner possible: “How is it that a man’s skeleton is not

short one rib?" Not thinking what she referred to I asked her why it should not have the regulation number, and was greatly surprised to hear that she had always supposed that the rib taken from Adam to make Eve had left his successors one rib short.

"And out of the ground the Lord God formed every beast of the field and every fowl of the air; and brought them unto Adam to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof.

"And Adam gave names to all cattle, and to the fowl of the air and to every beast of the field;" (Genesis ii, 19-20).

Few people realize the amount of work Adam did when he gave the animals their names. It is said that figures never lie so we will make some calculations. Adam had just been made and consequently no language had been developed, no pen, pencil or paper, no one to call them to, but they went in procession before him and he gave them names; "and whatsoever Adam called every living creature, that was the name thereof."

What a marvelous memory Adam must have had to remember the form and name of each animal! If he had not done so, what good would have been accomplished by naming them? There are 366,000 species of animals. Some of the species have several names, as, for example, lion—lioness, giraffe—camelpard, cow—ox, hippotamus—river horse and others to numerous to mention. Counting the male and female, Adam would have had 732,000 animals brought before him requiring not less than 500,000 names.

If each pair of animals had been made, brought before Adam and named in one minute—and the reader will agree there could be but little time wasted if this was accomplished—it would have taken 254 days and 4 hours steady work to accomplish the task. If they worked 10 hours a day and rested the seventh day, it would have required 697 days; or, if creation began January 1st, they made the beasts and all living things January 6th and to name them at this rate would have taken 1 year, 11 months, 3 days or all the first year and until December 3rd of the second year. As they were driven out of the garden the same year they were created, this naming must have been done at a more rapid rate.

These events were crowded into a part of two days; but if we consider man to be one of the animals, two full days were devoted to them. To accomplish this result it would be necessary to make 732,000 animals and give them about 500,000 names in 48 hours or at a rate of 15,270 5-6 per hour, 254½ per minute or 4¼ each second of time. Let anyone who thinks he could accomplish this, try to give new names to 100 animals, inventing words that do not exist. By the time half a dozen have been named the job will be “to let.”

In addition to the rest it was necessary to create and name about 120,000 species of plants extending from the delicate petaled beauty to the giant lily of Guiana and from the feathery forest of the delicate moss to the giant “Mother of the Forest” the “Wellingtonia Gigantea” of Calaveras, California. This tree stands 321 feet high, 90 feet in circumference at the base, 69 feet, 20 feet from the base, 43 feet 6 inches, 70

feet from the base, 39 feet 6 inches, 116 feet from the ground; height to first branch, 137 feet.

After the creation all the species would have to be taken to their proper locations. This would be no small job. The Polar Bear must go to the polar regions; the Grizzly to the Rocky Mountains; the Kangaroo to Australia; the Elephant to India; the Tiger and Lion to the jungle; the Boa Constrictor to South America; the Cobra to India; the trees and plants to their respective localities. One hundred and eighteen different kinds of timber are found in this country that are not found anywhere else; these must have been transported at once or seeds would have grown to trees and plants in other places.

The birds may have been set free and instructed to fly to their places, but the doves must be protected from the hawks and the smaller animals from the beasts of prey. All this would add considerable to the work of creation.

Five of the six days of creation were spent in manufacturing, stocking and preparing this earth for the reception of man! One day was spent in manufacturing the sun, moon and stars!

There are many stars within the range of our vision that greatly exceed the size of our sun. They are great suns themselves and are surrounded by attending planets similar to our solar system. These systems extend in every direction as far as space can be penetrated by the most powerful telescope it has been possible to produce, while astronomical photography has shown more than the telescope can teach us of their number.

The number of stars cannot be estimated. There are in the vicinity of 18,000,000 stars in the galaxy of

the Milky Way, while from the disturbances and other celestial phenomena it is estimated that at least 20,000,000 stars exist that have not been observed by any method.

But let us look at our own solar system. That alone will show that the author of Genesis knew absolutely nothing of the extent of creation.

The sun, that giant around which we revolve, is 1,310,000 times the bulk of the earth; it weighs 300,000 times as much; its light at the solar surface is equal to 190,000 candle power; (the ordinary incandescent electric light is 16 candle power); it is 146 times the intensity of the oxy-hydrogen light and $3\frac{1}{2}$ times the intensity of the most brilliant electric arc light that can be produced. The heat of the sun, if employed to boil water, would evaporate 700,000,000,000 cubic miles of ice cold water in one hour; it is equal to the combustion of 16,436,000,000,000,000 tons of hard coal per second. The earth receives 1-2,300,000,000 part of the heat it throws off.

Mercury has about 1-20 the bulk of the earth; Venus, 92-100; Mars, 152-1,000; Jupiter, 1309, Saturn, 721; Uranus, 65 and Neptune 85 times the bulk of the earth. We have 1 moon, Mars has 2, Jupiter 4, Uranus 4, Neptune 1, Saturn 8 or a total of 20 moons. In addition to this we have discovered and listed 423 asteroids and as more are being discovered continually, we have no means of determining the exact number at the present time. All of these are within our solar system and constitute a bulk equal to about 1,500,000 earths the size of our own.

There is no question that at least some of the planets are inhabited. Mars shows characteristics so

similar to our earth that some astronomers claim it highly probable that we might live on it; it is also claimed that lights appear on its surface indicating that its inhabitants are trying to communicate with us. If our planet is inhabited, it is reasonable to suppose others are not floating around without being put to some good use.

Can we then believe this world was so especially under the supervision of the Creator that he spent five whole days upon it while in one day he made the sun, moons, asteroids and planets of our system, about 1,500,000 times the bulk of the earth, to say nothing of the millions upon millions of stars, all in one day? Then it was passed off with the remark: "the stars also"; "he made" not being in the Hebrew text.

"A little 'chaos' left; some refuse from the sky;

From which he made some million stars and hung them up to dry."

How does the Genesiac account of creation agree with Nature's revelations? Light was created the first day; the sun, moon and stars from which we receive our light were not produced until the fourth. A firmament was made the second day that never has existed and could not exist, to separate the waters that were above the firmament from those below the firmament, although there were no such waters. Grasses, herbs, fruit trees and their seeds were created before the sun shone or any moisture had fallen; birds, reptiles and beasts were made far from their real order of being.

The oldest rocks, long ages before the simplest life began, show the marks of rain drops, also sun cracks

and ripple marks. This proves that rain fell and that the rocks were alternately covered with water and exposed to the rays of a burning sun. The lower the rock, the cruder the forms of life found in them; but the Genesiac account mixes them all together.

That the earth was produced in six days, of 24 hours each, is not admitted by anyone who has investigated geology and given it sober thought. It is not possible to divide the geologic strata into six divisions any easier than it is into twelve or fourteen. When we observe the great thickness of the rocks, and learn something of their formation, we cannot place less than millions of years between us and the Azoic and Eozoic ages.

Some harmonizers of Genesis and geology have attempted to make the days of Genesis mean long periods instead of periods of 24 hours. This view is not consistent as the passage reads: "The evening and the morning was the first day," the second day, and so on. If this should be admitted it would leave a very interesting discussion open. If the days of work were millions of years long, how about the period of rest? A 24 hour period of rest would be entirely out of proportion to six periods of work of millions of years each.

But has God ever rested? Has the work of creation ever stopped? Can anyone show a time when the rivers ceased carrying their loads from the mountains to the sea, thus changing the appearance of the world? Do the stars cease to shine, do the plants stop growing, do the requirements of humanity cease on any occasion, so-called holy days or others? The sun shines, the works of Nature go on every moment. Sabbath

days, holy days, common days, it is all alike. GOD, THE OMNIPOTENT, does not rest.

But my orthodox friend tells me that Hugh Miller harmonized Genesis and geology. Before me are "Popular Geology," "Footprints of the Creator" and "Testimony of the Rocks," by Hugh Miller.

The following will show about how he harmonizes them:

Genesis tells us the world was made in six days, the morning and evening constituting each day and from other data given in the Bible, the time was about 6000 years ago. It tells us the earth and light existed three days before the sun, moon and stars were made.

Hugh Miller tells us these periods were millions of years long; that the earth shows sun checks long before life existed; when he is inspired by the rocks he tells us the order of creation was corals, shell fish, crustaceans and fish. Genesis tells us that herbs, grasses and fruit trees were created the third day, while fish and fowls were produced the fifth. But geology tells us that fish existed long ages before fowls and fruit trees, and fowls long anterior to whales. Hugh Miller tells us that even in the carboniferous period the plants were worthless and no herbivorous animal could live on them, yet this period is separated from the Eozoic (dawn of life) period by five geologic periods of millions of years duration.

The sixth day, cattle, creeping things, beasts and man were made. But he, again inspired by the rocks, tells us that creeping things were here long ages before beasts, beasts long before cattle and all of them ages before man. This is peculiar harmonizing.

The things created would have been all right had one species been omitted. Unfortunately the serpent was made with the rest and no sooner had Adam and Eve begun housekeeping than it conceived a plan to upset the entire program.

In the first account man was given dominion over all the creatures of creation and all vegetation; in the second account he was denied the fruit of the "Tree of Knowledge of Good and Evil," "for in the day that thou eatest thereof thou shalt surely die."

The serpent called upon Eve and told her she would not die but her eyes would be opened and she would become as a God. Eve evidently had more faith in the serpent than she had in the Bible God as she ate the fruit, did not die that day or until years after and she fed some of it to Adam and the Bible tells us he lived to be 930 years old. (Genesis v, 5).

The world owes a great deal to that serpent. Before they ate the fruit they were naked but did not know it; neither did they know the difference between good and evil.

Science has demonstrated that the only difference between man and the brute creation is, the faculty of reason is greater in man. The elements that make up the body of man are also used to make the body of the serpent, goose and ox. If eating the fruit endowed us with the superior faculty of reason we should be glad it was done.

But we are told that death entered the world on account of this sin. Again we should be thankful. Nothing could be more undesirable than to live here forever. Death is the greatest boon to humanity and

many are "only waiting" for the summons of the pale boatman to ferry them over the river of death into eternity.

For his part in the matter the serpent was condemned: "on thy belly shalt thou go, and dust shalt thou eat all the days of thy life." Again the author of Genesis shows a complete ignorance of creation. Researches in geology demonstrate that serpents have existed ever since the latter part of the Silurian period and their remains show they traveled exactly as they do to-day. If the "dust shalt thou eat all the days of thy life" was meant to inflict a punishment, it was a most stupendous failure. A serpent will go hungry rather than eat carrion or any animal it does not kill itself and no living creature, with the possible exception of the fish, eats less dust than it does. Our delicate titbit, the spring chicken, eats more dust every day than a serpent does in a life time, if it lives until it dies of old age.

What a beautiful animal a serpent is if it were not for the prejudice arising from this ancient fable. Its skin is mottled and marked in colors equal to the most beautiful of our feathered visitants; if my memory serves me right its body is composed of some 20,000 muscles, all of which are brought into play as it moves in graceful curves along the highway; in the water the same muscles enable it to swim with ease; its tensive strength is such that it easily crushes an animal larger than itself; its jaws are set in sockets and held together with elastic ligaments which enables it to swallow an animal larger around than its own body; its ability to climb a tree is almost equal to that of a monkey.

And last, but by no means least, is is absolutely harmless—even the most venomous—unless hungry or imposed upon.

I expect I am a case of total depravity but I never kill a snake unless it is a poisonous one. I have seen but few people, even professed Christians, who do not possess an insane desire to kill the most harmless little snake, notwithstanding the Bible injunction "thou shalt not kill."

We are told that "Adam called his wife's name Eve because she was the mother of all living." (Genesis iii, 20). Up to this time there were no human beings except Adam and Eve. The rest of the living were animals and plants. All of them were created before Eve was produced. Eve was produced of a rib taken from Adam's side; he must therefore have been some kind of a parent to her.

Was Eve the mother of all the birds, beasts, fishes, trees, plants and last, but by no means least, was she Adam's mother? This calls to mind the extraordinary behavior of King Jehoram. He was 32 years old when he began to reign and reigned eight years and died at the age of 40; he was immediately succeeded by his youngest son as the eldest had all been killed in battle. When Jehoram died at the age of 40, Ahaziah, his youngest son, who, according to Josephus, was the youngest of seven brothers, was 42 years of age. (II Chron. xxi, 20 and xxii, 1-2). It takes an exceedingly smart man to be the father of seven bouncing boys two years before he was born and, to the best of my knowledge, these are the only cases on record where such events took place.

If Adam, from his sex, could be considered Eve's father, and it says she was taken from him, she was her father's mother, consequently her own grandmother; as she was her father's wife, and the mother of all living, she was her own mother; this made her the grandmother of her own children and her husband's mother-in-law; being her husband's mother, she was also her own mother-in-law; Adam was his children's brother. As Adam was Eve's father, she was her children's sister and as Adam was brother to Eve's children, she was her husband's sister. But why pursue the relationship any further.

After eating the fruit they were driven out of the garden. The Bible God was afraid they would eat the fruit of the tree and live forever (Gen. iii, 22-23-24), becoming equal to him in every way. To avoid so dire a catastrophe he made them coats of skins and drove them out into the world. Where did he get the skins? There had been no time for the beasts to multiply, and if he killed some of the original stock, the world was robbed of some of its species. This would be improbable after all the trouble in making and naming them. But to prevent their return to the tree of life he put cherubim and a flaming sword which turned in all directions to block the way.

Is it not strange? Less than 6000 years ago man was created perfect—in the perfect image of the power whose potency was such that “he spake and it was done; he commanded, and it stood fast.” (Psalms xxxiii, 9.) When all had been done, “God saw everything that he had made, and, behold it was very good.” (Gen. i, 31.) But scarcely had the words fallen from his lips than

the work of destruction began. Everywhere the Bible God was defeated until the world was drowned, the people destroyed and from the perfect man, created in the image of divinity, he has fallen, fallen, fallen, until to-day he haunts saloons and other places of vice, degrading his manhood and defaming his high origin. As a novel, a story, the account of creation in the Bible is quite interesting and amusing. As a page in the world's history it is a most ignominious failure.

CHAPTER II.

THE MIRACULOUS RAIN OF QUAILS.

“And there went forth a wind from the Lord and brought quails from the sea, and let them fall by the camp, as it were a day’s journey on this side and as it were a day’s journey on the other side, round about camp, and as it were two cubits high on the face of the earth.

“And the people stood up all that day and all that night and all the next day, and they gathered the quails; he that gathered least, gathered ten homers; and they spread them all abroad for themselves round about the camp.

“And while the flesh was yet between their teeth, ere it was chewed, the wrath of the Lord was kindled against the people, and the Lord smote them with a very great plague.” (Numbers xi, 31-32-33).

What a simple little story, on the face of it, but what a monstrous one when we divest it of its sacred character and examine it in the light of present understanding.

In order to explain the matter more fully (as the

ordinary reader does not look up a reference) let it be understood that the Israelites had been wandering in the wilderness for about one year, and had been subsisting on "manna." While it is not known just what this manna was, the word is derived from the Hebrew "Man Hu," meaning "What is it?" It is described as a small round thing, like coriander seed, white and tasting like wafers and honey.

In the Arabian desert near Mount Sinai we find, at the present day, an insect whose English name is manna. It has a proboscis like a mosquito; with this it punctures the rind of the Tamarind tree and the sap, or gum, runs out, hardens and drops to the ground. This must be gathered before sunrise the next morning as it melts with the heat of the sun. The natives of the desert near Mount Sinai believe this to be the veritable manna upon which the Israelites fed, and in emulation, gather and eat quantities of it. Other writers as stoutly maintain that it was a species of mushroom, but this idea is not sustained to any great degree.

In either case it was not very fattening and any gourmand can sympathize with the Israelites when, after one year's experience, they "sighed for the fish, cucumbers, onions, leeks, garlic and flesh pots of Egypt."

Under those conditions the anger of the Lord was kindled against them and they were condemned to eat flesh, which proved to be quails, for thirty days. When we note the failures that have been made in attempting to eat 30 quails in 30 days we can realize the terrible punishment this entailed. After this occurred the rain of quails of which our quotation speaks.

The quantity of quails that fell at this time was

something enormous! Let us throw away all superstitious awe and examine the story as we would was it told by some returned traveler of the present day.

We are told that the quails fell "round about camp, a day's journey on each side:" that is, they covered a circle around the camp having a day's journey as its radius or two day's journey as its diameter, supposing the center of the camp to have been taken as the starting point, and two cubits high on the face of the earth.

The Oxford Bible says a day's journey was 33 miles, 384 feet and that a cubit was 1.824 feet or a little over $21\frac{1}{8}$ inches.

That would give us a circle 66 miles, 768 feet in diameter, covered with quails to a depth of practically 44 inches. Why the people had to gather them when this was the case is a conundrum! Yet we are told they did and "he who gathered least, gathered ten homers." According to the same authority, a homer is 8 bushels; consequently he who gathered least gathered 80 bushels and evidently others gathered more for if they had not it would not say "he who gathered least."

As they had instructions not to gather any more manna than was necessary for their subsistence until it would come again, it is reasonable to suppose that they gathered only enough quails to last them during the 30 days they had been condemned to eat flesh. Are we then to suppose that they ate this enormous quantity in that time? Are we to suppose that each member consumed 80 bushels of quails in 30 days? 2 2-3 bushels a day?

It has been estimated that a bushel of quails contains 25 pounds of solid meat, besides the bones, feathers and

other refuse. Taking this as our basis every person would be obliged to eat an even ton, 2,000 pounds of solid meat, in 30 days, or at the rate of 66 2-3 pounds per day. No wonder it made them sick!

There were 603,550 fighting men in this caravan. Take the minimum quantity each one gathered and they gathered the enormous quantity of 48,284,000 bushels of quails. This would supply the entire caravan with about 13 pounds of solid meat each day. But if the entire caravan gathered them the figures would be as above stated.

There are supposed to have been about 3,000,000 people in this caravan. Imagine them 603,550 fighting men, besides the women and children (of course, the Levites or priests looked on and did not work) wading in quails up to their waists, gathering them and then "spreading them abroad for themselves round about camp." Where did they spread them? The ground was already covered for a distance of 33 miles, 384 feet in every direction, to a depth of 44 inches; and if this was the case, why the necessity of gathering them at all?

But to return to our narrative. Can you conceive of the enormous quantity they gathered? If but the fighting men gathered them, they gathered 48,284,000 bushels. If each one of the 3,000,000 people gathered 80 bushels of quails, and the passage says they did, they gathered the enormous quantity of 240,000,000 bushels. Can you conceive what an enormous quantity that is? Let us reduce it to figures that can be more readily understood. A good big wagon load is 40 bushels. If loaded on wagons at that rate, it would

load 6,000,000 wagons which, stretched out in a straight line, allowing two rods for each wagon, would reach one and one half times around the earth at the equator, or a distance of 37,500 miles.

We are told that "they spread them all abroad for themselves round about camp." The difficulty has already been stated but supposing they cleared a space, one mile square, for this purpose, the quantity they gathered would fill it to a height of 1,071 feet 4 inches.

The amount that fell is simply appalling. Imagine a circle 66 miles 768 feet in diameter, covered with quails to a depth of 44 inches! The human mind cannot begin to conceive the number. Reduced to bushels it is still too large for finite comprehension, for the figures are 280,823,880,045 bushels; load them into wagons, allowing 40 bushels to the wagon and it would load 7,020,597,001; stretch them out in a straight line, as before, and they would reach a distance equal to 1,755 1-7 times around the earth at the equator; load them into freight cars, 600 bushels to the car, and they would load 468,039,800 cars; make them up into trains of 20 cars each and they would make 23,401,990 trains; allowing that 45 feet would be required for each car and engine, they would make a string of trains 4,188,424 miles in length; if these trains were going at the speed of our finest express trains, 60 miles per hour, it would require 7 years 353 days, 15 hours, 4 minutes for them to pass a given point. But if they traveled at the rate of 15 miles an hour, which is the customary speed of freight trains, it would require 31 years, 319 days, 12 hours and 16 minutes to pass a given point. The string of engines necessary to haul these trains would

reach around the earth at the equator 8 times or be 200,000 miles in length.

Put this quantity of quails into perfectly square piles and they would cover two sections of land a mile deep and a third one 1,975 feet 7 inches. In other words, we would have two cubical piles, 5,280 feet in every direction and another with a base 5,280 feet square and 1,975 feet 7 inches high.

Just think of it! Certain classes of people are trying to make us think that unless we believe a whole string of such stories, we are everlastingly damned; yet it is a physical impossibility that such a thing could have been! Take all the quails that have existed since time began and they would fall far short of the required number. Are quails aquatic birds? If not, why did they come from the sea?

CHAPTER III.

THE EXODUS.

Among the remarkable events that took place during the experience of the Israelites in Egypt, and on their way out, The Exodus deserves special attention.

According to the account given in the Book of Exodus, the Israelites, headed by Moses, had decided to leave Egypt. As they knew they could not get the consent of the reigning Pharaoh, they told him a story about wanting to "go out three days' journey into the wilderness to offer sacrifice to their God." Pharaoh, however, suspected something and declined to permit it. After some plagues he gave his consent provisionally and after some more plagues decided he would let them go any way they pleased.

Their host was enormous according to the account. Exodus x, 8-9, reports Pharaoh asking: "But who are they that shall go? And Moses said we will go with our young and with our old, with our sons and with our daughters, with our flocks and with our herds will we go; for we must hold a feast unto the Lord."

Pharaoh objected to all of them going but proposed

that the men go; that, however, was not satisfactory and after a few more plagues they were ordered out and instructed to go at once. They therefore departed, leaving Egypt in one night. This multitude consisted of "600,000 that were men, besides children." (Exodus xii, 37).

Think one moment of a multitude of people consisting of 600,000 fighting men with their wives, children, flocks and herds, getting ready to leave a country and leaving it in one night! Imagine what a procession it would make! Did you ever see a large body of people getting ready to move? It takes hours to form and get them into shape after weeks have been spent in training for the event. But here we have a disorganized mob gathering up all of its belongings and leaving a country in one night!

If there were 600,000 fighting men in the caravan, we cannot estimate the entire caravan at less than 3,000,000 with any degree of justice. With them went up a "mixed multitude" (Exodus xii, 38). But leaving out any following of Bedouin tribes, who may have gone with them and may not, as the Bible does not make this part clear, let us examine this enormous multitude.

Let us suppose they marched army style. That is, shoulder to shoulder, and the ranks were one pace apart or so that an "about face" would leave them in a natural soldier's position, each person would require a space about 30 inches square. Three million people would require 18,750,000 square feet. Supposing this body formed its ranks 100 feet long, the procession would be 100 feet wide and 35 miles, 2,700 feet long,

not counting the herds. Allowing that they had as many cattle as they had people, which would be a fair estimate, they would require at least three times as much space as the people or about 105 miles long and 100 feet wide. We would therefore have a procession about 140 miles long and 100 feet wide.

During the late war, the greatest number of soldiers that were in service at any one time were 1,500,000 or about one-half the number of this caravan. They were marshalled by the best of generals, handled by the government, trains were impressed into service, railroads and telegraphs were the placid servants of the government, yet no such feat was accomplished in that or any other war recorded in history.

“When Napoleon crossed the River Niemen, it took his army of about 230,000 men three days and three nights to cross the river, on three bridges and marching in close file.” This army was not to exceed one-tenth the size of the Israelitish caravan, if we use one of the smallest estimates of their number made by modern critics and contained 70,000 less than one-half as many fighting men. Add to this the care of their cattle and flocks and we will realize how impossible the event is.

The passage of the Persian army across the Hellespont is said to have taken seven days and seven nights, two bridges being used and the army passing on one bridge while the animals and their chariots passed on the other. This army is said to have consisted of 900,000 men.

After they left, Pharaoh and the people became dissatisfied at having let the Israelites go and decided to

follow them. By morning the Israelites had reached the Red Sea and there they saw the Egyptians following them.

Is this possible? Let us see. They started from Rameses and during the night they not only gathered together their flocks and herds and wives and children and all their belongings, even taking their kneading troughs bound up in their clothes on their backs, (Exodus xii, 34), and borrowing from their neighbors all the gold and silver jewels and raiment they could get (Exodus xii, 35), yet, after doing all this, they managed to get this vast multitude to the Red Sea by day-break. What a good natured lot of people these Egyptians must have been to lend their jewels to people who were going away in this manner.

But is this statement within the range of possibilities is the question?

The northern part of the Red Sea, which was its nearest point to Rameses, was 225 miles away; they must have been very husky walkers, as well as gatherers of their own goods and the goods of their neighbors, to cover this distance in the time mentioned. But as Succoth, where we are told they went (Exodus xii, 37), is north of Rameses and the Red Sea is southeast, they either did not go to Succoth or did not go to the Red Sea. The reader can decide this matter for himself. Certainly they did not travel from Rameses to the Red Sea, a distance of 225 miles, in the same night they gathered up their flocks. Yet all through the narrative we are told of the very remarkable DAY in which they were brought out of Egypt. (Exodus xii, 51).

Even in this we find a discrepancy as they were instructed to encamp at Etham and Pi-hahiroth which was still in Egypt and where they were subject to Egyptian power. It was here that Pharaoh found them when he followed them.

While they were encamped in this location, Pharaoh's hosts found them and they were afraid they would be returned to captivity. But again they were miraculously protected. In the morning the sea was divided so they walked through it on dry land. "And the children of Israel went into the midst of the sea on dry ground; and the waters were a wall unto them on their right hand and on their left." (Exodus xiv, 21-22).

Of all the miracles ever produced, this was the greatest. Imagine an army passing through Lake Michigan on the dry bottom of the Lake and the waters piled up in a high wall on each side of them! Suppose some one told such a story to-day! But the Egyptians pushed after them and the sea rushed back and destroyed them all; horses, chariots and men.

But wait a moment: According to the ninth chapter of Exodus, there was a severe murrain that killed all the cattle, sheep, horses and asses. Where did the animals come from that hauled the chariots? This murrain took place the same year as the Exodus and, judging from the record of events of that year, must have been within a few weeks of it.

Think what a host perished that day; As there were 600,000 fighting men among the Israelites, there must have been a still greater number of Egyptians or they would not have been so badly scared when they

saw the Egyptians coming. Now, we want to know two things. First, How did Pharaoh get all these soldiers together in so short a time? We know it could not be done with all the improvements and conveniences of modern times; second, Why does history not record something of the death of such an extensive army in so miraculous a manner. Events of much less importance were inscribed upon the monuments of Egypt and remain to enlighten the present age.

Exodus xv, 22, says: "So Moses brought Israel from the Red Sea, and they went out into the Wilderness of Shur."

It is hard to harmonize this passage with itself and others. First, we have seen that Israel did not go near the Red Sea, but on the contrary went directly from it. Second, Etham and Pi-hahiroth where we are told they did go were not on or near the Red Sea. In fact, according to the maps shown in "Helps to the Study of the Bible" they were about 250 miles away from it. Third, we are told in Exodus xiii, 17-18 that "they were led not by the way of the Philistines, although that was near," but were "led by the way of the wilderness of the Red Sea."

They could not have gone over two days journey into the wilderness of Shur without being right in the midst of the Philistines, which the Philistines never regarded with favor. They could not go down the shores of the Red Sea without coming in contact with the Egyptians who had garrisons throughout the entire Sinaiatic peninsula. They were practically surrounded.

After they had been traveling but a short time they

commenced to murmur among themselves because they had no meat to eat. They were supplied with Manna but that did not satisfy them.

What had become of the flocks and herds? They took them with them. They did not travel very far or very rapidly after their first forced march as it took forty years to pass through this wilderness, which, if it covered the entire Sinaiatic peninsula could not have been over six days journey wide by eight long. They had plenty of time to care for them under such conditions. Why did they not eat them if they were suffering for food? Their entire travels were crowded into two years while thirty-eight years are not touched upon in this account.

Let us make some figures in connection with this multitude: For instance, when they camped at night, they would want room to lie down. As they were active people, living out of doors the greater part of the time and accustomed to violent exercise, they were doubtless of good stature. We will therefore be safe in saying that each one would require a space at least five feet long and two feet wide in which to sleep with any degree of comfort. While some would require more, the children would require less and that ought to be a fair average. This would make it necessary to occupy 30,000,000 square feet of territory for a camping ground.

Suppose that when it was time to camp for the night, they spread out so that each person could have room to lie down and kept the same width of column, there would be a space 100 feet wide and 85 miles, 1,200 feet long covered by them. This would allow for each two

persons a little over two-thirds of the space occupied by a double bed.

Just imagine a section of land 100 feet wide, and 85 miles, 1,200 feet long, upon which there were 3,000,000 people lying down, packed in as closely as they could lie, and the majority fast asleep!

But this is not all. They carried their flocks and herds with them. They could not lie down in less than twice the space occupied by the people so we would have a space 100 feet wide and 255 miles, 3,600 feet long, covered by this caravan each night. If they encamped in a perfectly square body it would require 135,000,000 square feet or a little less than 5 square miles. No wonder they made trumpets to call the people together.

Exodus xiii, 18, says: "But God led the people about through the wilderness of the Red Sea: and the children of Israel went up harnessed (margin: 'or by ranks of five') out of the land of Egypt."

This makes the caravan much longer than it was calculated above. Allowing 30 inches for a rank and allowing that only the fighting men marched in ranks, the caravan of fighting men was 56 miles, 4,320 feet long. If the entire caravan marched in this style, the caravan was 284 miles, 480 feet long. If the same ratio of cattle was used as before, the caravan would reach a distance of 852 miles, 1,440 feet. When night came, if they stretched out to enable them to lie down their procession would be in the vicinity of 1,500 miles in length.

There were some large trees in those days. We are told that on one occasion they encamped under 70 Palm

Trees. If it means that the people stood up under those Palm trees, each tree must have covered 267,857 square feet. If it means that they encamped there and we allowed a little over two-thirds the space occupied by a double bed to each two persons, they would cover 45,000,000 square feet, or 642,857 square feet or about 15 acres for each tree. But if people and cattle both encamped under the trees, each tree must have sheltered 1,928,577 square feet of ground.

But they grew big things in those days. Later in the history of the Exodus they sent spies to examine the country ahead of them. The spies reported that they found people with whom their size was "as grass hoppers" when compared. An exceedingly large grasshopper might be an inch high. Probably the average height of fighting men would be not less than 5 feet, 10 inches or 70 times as high as a jumbo grasshopper. These men whom they saw must have been in the neighborhood of 400 feet high—or the spies did not tell the truth.

Why did they require Manna when encamped under these Palm trees? There is no other form of plant life that presents so much to the people as the Palm. What the potato is to us, the Palm tree is to the natives of the countries in which it flourishes. Surely 70 Palm trees of such exceedingly great size would have furnished food for a long time. The same might apply at other times as we are told of the immense number of cattle they had at different times.

What did these people carry with them? Did you ever stop to consider? We are told they traveled in the wilderness 40 years. Think of the amount of cloth-

ing they must have had. An average of one suit of clothes a year would require 120,000,000 suits of clothing. Of course, their clothing was very limited.

When they made the Tabernacle in the wilderness they had for the inner Ark, gold, silver, brass, blue, purple, scarlet, fine linen (or silk), goat's hair, ram's skins dyed red, badger's skins, oil for the lamp, spices for the anointing oil, and oil for the same, and spices for sweet incense, onyx stones and stones for the breast plate.

Of gold, there must be enough to cover the Ark, entire, make candle sticks, lamps, cherubim, mercy seat, rings by which to carry the Ark, and to overlay the handles by which it was supported.

The covering, or outer tabernacle must be made of boards as follows: For the south side 20 boards, for the north side 20 boards, for the sides six boards and for each corner two boards. These boards were to be 10 cubits or a little over 18 feet $2\frac{7}{8}$ inches long and $1\frac{1}{2}$ cubits or a trifle over $32\frac{1}{2}$ inches wide and were to be covered with pure gold. It will be readily seen that 20 boards were required for each of the sides, 6 boards for each of the ends and 2 boards for each corner or a total of 60 boards each containing $49\frac{1}{2}$ feet or a total of 2,970 square feet. This was to be overlaid on each side with pure gold requiring a surface of gold measuring 5,940 square feet. Besides this the tongs must be made of pure gold and the snuff dishes, dishes, covers, spoons and other furnishings, the same, and gold enough must be had to make chains and other ornaments for the officiating priests. Tons would be

required to supply the entire demand. (Exodus xxv, xxvi, xxvii).

This tabernacle must be covered, first: With 10 curtains of twilled linen, each one to be 51 feet long by 7 feet $3\frac{1}{2}$ inches wide. This must be covered with curtains of goat's hair or 11 curtains, each one to be 54 feet, $8\frac{5}{8}$ inches long, by 7 feet, $3\frac{1}{2}$ inches wide; this must be covered with curtains of ram's skins, dyed red, which would require at least one more curtain a trifle larger than the last and this was still to be covered with a curtain of badger's skins. This last curtain would require over 500 yards (as the largest inner curtain contained $487\frac{3}{4}$ yards) and not less than 5000 badger's skins would be necessary for its construction.

This was all to be enclosed in a court (Exodus xxvii) which was to be 100 cubits long by 50 cubits wide and 5 cubits high, which was to be hung with curtains of fine linen. This court would be 182.4 feet long and 91.2 feet wide and 9.12 feet high, and would require a curtain containing $554\frac{1}{2}$ square yards of fine linen. There must also be hangings for the gates which would require at least as much more; but the figures given are too indefinite to make accurate calculations. These curtains and hangings for the Ark, Tabernacle, Court, etc., that are mentioned, would require at least 5,000 yards of material and for the incidentals mentioned, of which no exact estimate can be made, certainly half as much more would be necessary or a total of about 7,500 yards for this one job.

They must have had tools for all this work and they must have carried them with them on their journeyings. These tools must have been quite varied as they

used them to cut stone, make jewelry, beat gold, cut lumber, make tents, kill animals, tan their skins, etc.

For the ephod must be had rubies, topaz, carbuncle, emerald, sapphire, diamond, beryl, onyx, jasper, agate and amethyst. Tools must have been necessary to cut and prepare them for use.

How much gold, silver and brass was used in this work is a question that has been asked a great many times. We will see if we can make a rough estimate of it. We cannot give it exact as all the figures are not given. But we are told what amount was gathered in offerings made by the people. Priestcraft, however, rarely stops at offerings.

Exodus xxxviii and xxxix gives the amounts and in them we find the following definite figures.

29 Talents of gold, value, \$26,280 per talent.

713 Shekels of gold, value \$8.76 per shekel.

100 Talents of silver, value \$1,642.50 per talent.

1,775 Shekels of silver, value \$0.5474 per shekel.

70 Talents of brass.

2,400 Shekels of brass.

301,775 shekels of silver, value \$0.5474 per shekel or 54 cents, 7.4 mills. The last was collected by the offering of $\frac{1}{2}$ shekel by each of the 603,550 fighting men. (Exodus xxxviii, 26).

This silver and gold was to be pure. U. S. coins are made of metal 9 parts pure and 1 part alloy and 25.8 grains of gold and 412.5 grains of silver are made into one dollar. Using this as our basis there was collected
3 tons 211 pounds 6 ounces of gold.

15 tons 551 pounds 1.8 ounces of silver.

Some good authorities claim that the money of the sanctuary, which was called for in this case (Exodus

xxx, 13), was twice the value of the ordinary money. If this is correct, the above amount of gold and silver should be doubled. Even then it would be but a portion of what was used as can be readily seen by reading Exodus xxv to xxxii.

I have been unable to learn the value or weight of the brass talent and shekel and can therefore gain no knowledge of the amount of brass required to build this tabernacle and its contents. But no matter how many tons were used, it did not take as much as it does for a man to stand before a nineteenth century audience and vouch for the truth of this story. In fact, compared with the miscellaneous assortment and quantity of goods carried by this caravan, the ark of Noah set sail comparatively empty.

Some marvelous events occurred during this time. For instance, according to Aaron's story to Moses, he took the gold ornaments off from the people, put them in a fire and melted them. They still had gold after supplying the tons that were used to construct the tabernacle, and its trimmings, as well as for other purposes too numerous to mention. Yet, marvelous to behold, when he melted this gold and permitted it to cool, it came forth a calf. (Exodus xxxii, 23-24). And the people said: "These be thy Gods, O, Israel, which have brought thee out of Egypt." (Exodus xxxii, 8). Even after all the wonderful things had been done for them, the people had more confidence in a calf made by themselves than they had in the Bible God.

But Moses, not to be outdone by Aaron, took the calf, burned it in the fire, ground it to a powder, sprinkled it on the water and made the people drink it. Im-

agine gold being burned, powdered, and floating on water waiting for the people to drink it!

Baron Maunchassen said that he had thrown his hatchet up and it stuck in the moon. If anyone did not believe it, he might go to the moon and see. If anyone does not believe this story, he is given the privilege of going back to the days of Exodus and proving it.

CHAPTER IV.

THE STORY OF SAMSON.

Once upon a time, as the story books say, there was a man by the name of Samson. Before he was born his mother had no son. This was a very serious matter among the Israelites, as they had a tradition that God was to send a messiah among them and he was to be born to some mother; if a woman had no son, there was no possibility of the honor being conferred upon her. Women were of little consequence and daughters were hardly welcomed when born. Women were bought and sold like cattle even by the Biblical people who were "God's chosen ones."

Finally an angel appeared to the woman and told her she would become the mother of a son. He was to be a "Nazarite" all the days of his life. That is, he was not to touch liquor of any description, or grapes, or any of the fruit of the vine, or eat of any unclean thing. He was also denied the use of a razor and his hair and beard must not be touched by a sharp tool. Such people were "Nazarites," "sacred unto the Lord." (Numbers vi). This may explain why so many so-called "cranks" wear long hair and beard.

Samson's first appearance in a public character was when he went to visit Timnath. Previously he had been moved by the "spirit of the Lord" in the camp of Dan, but we are told of no wonderful things he did. He went down to Timnath and there was smitten with the charms of a woman of the Philistines. Shortly after, Samson and his father and mother again visited Timnath. While on his way down "a young lion roared against him." The spirit of the Lord came upon him and "he rent him as he would have rent a kid, and he had nothing in his hand." There is a great difference of opinion concerning this event. Biblical illustrators picture him with one of the lion's jaws in each hand, engaged in tearing them apart. With his jaws a lion can crack a large bone as easily as we can crack a peanut shell; the strength necessary to accomplish this feat can then be imagined. One blow from a lion's paw will kill the strongest man. What was this lion doing with his two front paws while this interesting conflict was going on? As Samson "told not his father or mother what he had done" (Judges xiv, 6) he must have fought this battle without tearing his clothes or flesh or getting any blood on himself. If his clothes had been torn or bloody or he had been wounded, they would naturally have asked the cause. It would be most unreasonable to suppose he could kill a lion with his bare hands without getting a scratch on them! In fact, it would not be reasonable to suppose a man could kill a lion with his bare hands.

After a time he returned and turned aside to look at the carcass of the lion. When he reached the place he found that bees had made a nest in it! What pe-

culiar bees! Men who handle bees claim that a strong odor on their clothes will cause the bees to get angry and sting them. If they sting a person who is not clean, how long would they stay in the putrefying carcass of a lion in a hot climate? I would prefer Samson and his father and mother had the honey from such a bee hive than myself.

Samson then gave a riddle to thirty young men and bet they could not solve it. They bet thirty changes of garments and thirty sheets (or shirts) they could. (Judges xiv, 12). Samson foolishly told his wife the answer to the riddle and she told the young men. "The spirit of the Lord came upon him" again and he went down to Ashkelon and killed thirty men, took their clothes and paid his bet with them. (Judges xiv, 19). Why did the people of Ashkelon permit this? What were the thirty whom he killed doing all the time he was killing them? Did they sit idly by waiting their turn?

"And Samson went and caught three hundred foxes, and took firebrands (margin, torches) and turned tail to tail, and put a firebrand between in the midst between two tails.

"And when he had set the brands on fire, he let them go into the standing corn of the Philistines, and burnt up both the shocks, and also the standing corn, with the vineyards and olives." (Judges xv, 4-5).

What a task! Foxes are the slyest, most cunning animals known. It is almost impossible to catch them as they avoid anything but the most deceitfully laid trap. They have been known to spring traps by schemes that would do credit to a human being.

An old recipe for cooking a hare reads: "First catch your hare." Samson's first job would be to catch 300 foxes and as dead foxes could not run, he must catch them alive. They are very ferocious and bite fiercely; imagine the time he must have had, after catching them, to care for them and tie their tails together. Then to fasten a firebrand between each two tails and after getting the entire lot fastened the difficulty of setting them afire! Remember that all this time he was in an enemy's country; he had to care for the foxes, keep them quiet while he was tying them together and prevent the Philistines learning his object and taking steps to prevent its consummation. The job was almost equal to the conundrum that presented itself to Noah when he attempted to put all the animals into the Ark.

But what would two animals do if fastened together in this way? The person who thinks they would run is very much mistaken. Instead of running they would turn upon each other and fight until they killed each other or loosed themselves. But Samson, or the one who wrote this story, knew but little of the habits of animals.

It has always been a source of wonder as to how these animals were fastened together. The old Scotch preacher decided they had tails 300 feet long. He afterwards reduced it somewhat, but still left them exceedingly long. But seriously, how could these foxes tails be tied together? One man could not accomplish the feat if his life depended upon it; especially in an enemy's country and for such a purpose.

After this occurrence the Philistines investigated the

matter and, in retaliation, burned Samson's wife and father-in-law. This angered him and he "smote them hip and thigh with great slaughter; and he went and dwelt in the top of the rock Etam." Again we ask, why did the Philistines permit him to do these things? They had a great army, held the Children of Judah as a slave nation, yet they permitted one of these slaves to kill, rob, burn and pillage about as he pleased!

Evidently he did not get a scratch in these combats as he was ready to hold off 3,000 men if they did not agree to his terms very soon after "smiting them with a very great slaughter."

When Samson went up into the rock the Philistines followed him with an army. The children of Judah saw them coming and asked the reason. When told what Samson had done, 3,000 men of Judah went up into the rock to get him. Even with this force, Samson was able to dictate terms of surrender before he permitted himself to be bound. Think of 3,000 angry men permitting one man to dictate terms to them!

He finally permitted them to bind him and take him down to the Philistines. And when he reached them "the spirit of the Lord" again came upon him, he broke the bands that bound him and took "the jaw bone of an ass and killed 1,000 men with it!" (Judges xv, 15-16.)

What were these fighting men, who were numerous enough to scare 3,000 men of Judah, doing all the time Samson was killing 1,000 of their number? If he killed one a minute it would have taken him 16 hours, 40 minutes to complete the job. But if he killed one man every five minutes he would have beaten the records of warfare. To kill 1,000 men at this rate would have

taken him 3 days, 11 hours, 20 minutes steady work without allowing one minute for rest, sleep, eating or drinking.

But why did they permit this? He was solitary and alone with a large army against him; he had a very primitive weapon which could not have been over 18 or 20 inches long or weigh over two or three pounds making a most liberal estimate of its size, while those opposed to him were men of war armed with bows and arrows, spears, javelins and other weapons with which they could inflict a death wound long before Samson could get within striking distance. Their country did not extend but a few miles in each direction and in less than the time stated they could have gathered all of their men of war together. Their army was large enough to conquer and hold in subjection ALL the children of Judah including Samson.

Samson's next feat was to carry away the gates to the city of Gaza, gates, posts, bar and all, taking them to the top of a hill "that is before Hebron." As the gates of a city were supposed to be strong enough to prevent the entrance of a foe and wide enough to permit the speedy entrance or exit of their own army and Hebron was about 35 miles away, this was no easy job.

Samson had a great faculty of getting into trouble through women. All of his troubles were occasioned by this failing. But this may be the peculiarity of those who are "sacred unto the Lord" and may palliate the sexual crimes so frequently committed by the clergymen of to-day. But like them, he kept at it until he got into trouble.

Again he loved a woman by the name of Delilah and

took her to be his wife. He was not always particular about marriage as his trouble at Gaza was brought on by his visit to a "harlot." (Judges xvi, 1-3). Delilah attempted to learn the source of his strength, was told three untrue stories about it and each time she attempted to betray him to the Philistines. Not regarding his experiences he finally told her how his strength might be cut off. It all lay in his hair. She was so unfaithful a wife that she cut off his hair, called in the Philistines and they bound him, put him in prison, put out his eyes and finally bound him with fetters of brass.

After a time they held a feast to thank their God, Dagon, for delivering their enemy into their hands. While celebrating, in the exuberance of spirits, they called for Samson to be brought in to make sport for them. He was accordingly brought in and set between two pillars.

On the roof of the house were 3,000 men and women who watched while Samson made sport. Samson asked the "lad who was with him" to lead him to the pillars upon which the roof rested saying he "wanted to lean on them." It was done.

After he had been shaven his hair began to grow and by the time this celebration was held it had grown quite long. His captors evidently did not know enough to keep it short, so his strength returned. As soon as he reached the pillars, he leaned on them with all his strength and they broke and the house came down "and the dead that he slew at his death were more than they which he slew in his life."

What kind of architecture was this house? It was large enough to permit 3,000 people who were on the

roof to see Samson make fun when he was between the two main pillars of the house, yet these pillars were near enough together to enable him to get his hands on them and push or pull them apart.

The pictorial Bible represents them as massive stone and the building the same; it certainly must have been an exceedingly strong one to support so many people. Yet Samson pushed or pulled these pillars so that they broke asunder, the whole building fell to the ground and killed many people. It was a peculiarly constructed building to say the least.

This story shows the spirit of exaggeration rampant during the early ages of intellectual development. Hero worship had peopled the world with beings of wonderful strength, endurance and power. From the Aryan Sun worshippers came poetical fancies which were materialized by the practical, materialistic, Hebrew race until they can scarcely be recognized.

These stories are on a par with the old Indian legend of Paupaukewis, who had the faculty of changing his form to correspond with what he wanted to do. Although frequently killed, he came to life again as soon as the sun went down and the body he inhabited when killed became cold. We can not look at them in any other way.

CHAPTER V.

THE FLOOD.

Probably 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 4,004 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 made man on the face of the earth and it grieved him at his heart.” (Genesis 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 vi, vii, viii and ix 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 17th 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 nut shell, 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 slightly from the north to the south. Their evidence was, the rivers which flowed 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 rapid-

ly 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." Genesis 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 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 960 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 15 cubits or a trifle over 27 feet, 4 inches.

We talk about rains and cloudbursts 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 a 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 "foun-

tains of the great deep were broken up," the Bible says. But we know the windows of Heaven were not opened as they had no existence; we also know that the fountains of the great deep had no existence, as water does not rise above its fountain head. If the air contained all the water it could hold and it was precipitated at one time, it would not be sufficient to cover ordinary hills, to say nothing of high mountains.

Sir John Leslie says: "Supposing the vast canopy of air, by some sudden change of internal constitution, at once to discharge its whole watery store, this precipitate would form a sheet scarcely five inches thick over the surface of the globe."

The greatest rainfall that was ever known was in southwestern Assam, in 1861, when it reached the enormous amount of 905 inches for the year. This is the wettest place on the globe as its average annual rainfall is 610 inches. The largest rainfall reported in the United States is at Tatoosh Island, Washington, 92.4 inches, while the smallest is from Yuma, Arizona, 3.1 inches. Understand these figures are for the rainfall for an entire year.

After the flood had appeared on earth, it was necessary to have it disappear. Again we ask, where did the water go to? Did it evaporate? We have already shown that the atmosphere could not hold it in solution. It would have to fall again.

If the earth had been covered for a period of 40 days, it would have absorbed all it was capable of. In fact, it would have penetrated into the very bowels of the earth and either extinguished the subterranean fires or, by the excessive generation of steam, caused an ex-

plasion that would have blown the earth into small pieces.

Genesis viii, 1-2, says: “* * * and 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.” According to this, there is, or was, a supply of water in heaven. The wind or a spirit (the same word is translated both wind and spirit) passed over the earth and the waters assuaged. At the end of 150 days “the waters were abated” and the Ark rested “upon the mountains of Ararat.”

The location of this mountain (or mountains) is not definitely known but it is supposed to be in Armenia. If such is the case, the mountain called Ararat is but 16,960 feet high. It rained 40 days of the 150. The assuaging of the waters could not have begun until the end of the 40 days, or until it stopped raining, and between that time and the end of the 150 days, or in 110 days, the waters must have evaporated or dried up or disappeared in some way to a sufficient degree to enable the ark to rest on Mount Ararat. This mountain is but 16,960 feet high while Mount Everest is 29,002 feet high; what become of the water that was above Mount Ararat? There was 12,069 feet of it. Did it dry up at the rate of almost 110 feet a day? If Mount Hercules is a reality it would be necessary to dispose of 15,803 feet of water in 110 days in order that the peak of Mount Ararat might be exposed for the ark to rest on. This would be at the rate of nearly 144 feet per day, or about 6 feet each hour. Even then

there was still 16,960 feet of water between Noah and the sea level which had to be disposed of.

Noah entered the ark on the 17th day of the 2nd month and the ark rested on the 17th day of the 7th month. The waters continued to abate and on the first day of the 10th month the tops of the mountains were seen and on the 27th day of the 2nd month the earth was dried.

From this it will be seen that in 30 days less than one year the water which was of sufficient quantity to cover the highest mountains, or about 6 miles deep, was all dried up. Was there ever such an evaporation before or since? Of course, the story is laid aside as an ancient fable by the more intelligent people. Even Christian scholars do not accept it in its literal sense at the present time.

After Noah left the ark he took of every clean animal and made a sacrifice of it; the Lord smelled a sweet savor and was so well pleased with it that he agreed then and there never to repeat the experiment of drowning the world. As a sign of this he placed the rainbow in the sky.

What a beautiful story if we would only take it in its primitive poetic nature and not try to materialize it into a theological dogma. Many tales were told of the rainbow, ranging from this one to the idea that it pointed to a pot of gold that lay below the lower end of the bow.

But to-day we know the cause of the rainbow. In fact, we can make them ourselves. This proves that we have the right idea of them. There never was a time since water, sunlight and an eye existed that a

rainbow could not be seen when the conditions were right for them. The law of refraction and reflection of light is no different to-day than it was at the time the flood is supposed to have taken place. When the sun is at a person's back, a cloud or rain storm low enough down on the horizon will produce a rainbow. It is not necessary to go into the laws of the refraction of light and its separation into its primary colors. It is a matter of every day occurrence and every school boy has had his time playing with a prism and making rainbows on the wall.

This, like many other stories, is accepted by many because it is found in the Bible and woe be unto him who is rash enough to question them. But intelligence is coming, anathemas have lost their power and the world is seeking light even on religion.

CHAPTER VI.

NOAH AND THE ARK.

Noah and the Ark has been a source of discomfort to the strictly orthodox for a long time. Nearly as much so as Jonah and the Whale.

The world had become so wicked that it was deemed necessary to destroy all life. But just before the sentence was carried into effect, "Noah found grace in the eyes of the Lord." Genesis vi, 8.

"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.

Make thee an ark of gopher wood; rooms (margin, nests) shalt thou make in the ark, and shalt pitch it within and without with pitch.

And this is the fashion which thou shalt make it of: The length of the ark shall be three hundred cubits, the breadth of it fifty cubits, and the height of it thirty cubits.

A window shalt thou make to the ark, and in a cubit shalt thou finish it above; and the door of the ark shalt thou set in the side thereof; with lower, second and third stories shalt thou make it." Genesis vi, 13-16.

To make the matter clear it would be necessary to quote the vi, vii and viii chapters of Genesis entire; but the curious reader can read them in the Bible. The above will give an idea of the construction of the ark.

Using the figures given in the "Helps to the Study of the Bible," which are the largest estimates made by modern critics, the outside measurements of the ark were: Length 547.2 feet, breadth, 91.2 feet, height, 54.72 feet. There is no information regarding its particular shape.

The waters must have been very turbulent as the rain fell at the rate of 819 feet 9 inches per day, if Mt. Hercules is a reality, or 725 feet, 9 inches per day if Mt. Everest is the highest mountain in the world. Think what a commotion there would be if that much water was falling and the high hills were pouring their surplus down to the lower levels! It would require quite a seaworthy boat to stand it. When the wind passed over the earth to dry the waters, think what a heavy sea must have raised! Now we have land to break the force of the waves; when the flood was at its height, there was nothing but a vast expanse of water, over which the wind blew, with nothing to hinder it and waves would gather mountain high. The ark must have been very secure to stand the wind and waves and carry its load safely to the haven of Ararat.

But there will be more room in the ark if we consider it in the form of a great scow. So we will presume that it was made in the form of a gigantic dry goods box. Such a boat would have to be very strong and its frame could not have been less than 15 inch timber, covered with 3 inch plank.

Allowing for the frame, its inside measurements were,

length, 544, breadth, 88, and height, 51 feet. Allowing the space occupied by the two floors, say 16 inch joist and 2 inch flooring, it would leave 48 feet high in the clear.

“Rooms shalt thou make in the ark.” No idea is given of the number, but they must have been quite numerous and the partitions very strong to restrain the animals, as we are not informed that their natures changed any. Let us suppose each floor was divided into 10 rooms and the partitions averaged 8 inches in thickness—which would be but two inches thicker than the partitions of an ordinary house—there would be 30 rooms, with a floor space of 4,726 feet, 11 inches each or a total floor space or standing room of 141,807 feet, 6 inches. The cubical contents of the ark would be 84,034 cubic yards, 2 cubic feet.

The frame work of this enormous box must have been very strong. The timbers could not have been less than 12 by 15 inches and not over 4 feet apart from center to center. The sides, bottom and top would require at least 3 inch plank. Using this for our basis, not less than 2,000,000 feet of lumber would be required to complete it or lumber enough to stock 10 or 12 lumber yards such as are found in towns ranging from 2,000 to 5,000 population. As there is nothing to lead us to believe they had saw mills in those days, no wonder it took Noah 100 years to build it!

Finally the ark was completed “and the Lord said unto Noah, come thou and all thy house into the ark; for thee have I seen righteous before me in this generation. Of every clean beast thou shalt take to thee by sevens, (margin, seven seven) 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 the female; to keep seed alive upon the face of all the earth.

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.

Of clean beasts, and of beasts that are not clean, and of fowls, and of everything that creepeth upon the earth.

And every living substance was destroyed which was upon the face of the ground, both man, and cattle, and the creeping things, and the fowl of the heaven; and they were destroyed from the earth; and Noah only remained alive, and they that were with him in the ark." Genesis, vii, 1-3, 7-8, 23.

After quoting the above there is no doubt regarding what Noah had with him in the ark or as to the extent of the flood. He had 2 of all creatures, except fowls and clean beasts, and he had 14 of each of them. As nothing was left alive that was on the face of the earth that was not in the ark, he must have included plants and fishes.

According to the "Zoological Record" the number of existing species, the identity of which is established, is as follows: Mammals, 2,500; reptiles and batrachians, 4,400; tunicata, 900; brachiopods, 150; crustaceans, 20,000; myriapods, 3,000; echinoderms, 3,000; coelenterata, 2,000; protozoans, 6,100; birds, 12,500; fishes, 12,000; mollusks, 50,000; bryozoans, 1,800; arachnids, 10,000; insects, 230,000; vermes, 6,150; sponges, 1,500; total, 366,000 distinct species of living creatures.

Dr. Theodore Gill, a member of the National Academy of Science, and one of the greatest of living naturalists, says: "Of all animals, including mammals, reptiles,

birds, fishes, insects, etc., 375,000 species are already classified more or less accurately. It is believed that the number of species existing does not fall far short of 2,500,000. It is believed by the best authorities that there are not less than 2,000,000 species of bugs in the world."

The learned Dr. Gill says there are a greater number of animals than we have used in our calculations; but as we are giving these stories every possible benefit of the doubt, we will use the number of species that are below the estimate of a world famed naturalist and we will use the largest measurements for the ark that are given by modern critics. We do not want our orthodox friends to say we are exaggerating the account. It is big enough without any exaggeration.

What was to go into the ark? 2 of each species of unclean animals, 14 of each species of clean animals and birds, 8 human beings and food for them while they were in the ark. (Genesis vi, 21, vii, 1-10.) Trees and plants, or at least, seeds and sprouts must have been included and also the fishes.

Fish that are fitted to live in salt water, with a few exceptions, would die if any considerable quantity of fresh water was added, while the fresh water fish would die from the effects of salt water. Noah must therefore have had immense tanks of water for the fish and means of aerating it when the air was exhausted.

Clean animals are "whatsoever parteth the hoof and is cloven footed, and cheweth the cud, among the beasts, that shall ye eat." Leviticus, xi, 3. They are the Ruminantia and are divided into 7 families, consisting of not less than 250 species, not counting the camel which was not a clean animal according to the Bible. They

range in size from the smallest antelope, about 8 or 9 inches high to the ox, buffalo, reindeer and elk ranging as high as 6 feet to the shoulders and some carrying horns 4 feet long on their heads. There were fourteen of each of them or 3,500 individuals.

There are 12,500 species of birds, from the humming birds, over 300 species of little flying jewels, to the condor of the mountains and the ostrich of the desert. 14 of each makes a total of 175,000 birds, or, as they are called, "fowl of the air." Leaving out the clean beasts and birds, 12,750 species, there would still be 353,250 species of animals that went in by twos or a total of 3,500 clean animals, 175,000 birds and 706,500 not clean or a total of 885,000 beasts, birds, reptiles, insects, etc., some of which would be exceedingly unpleasant companions.

There are 4,400 species of reptiles and batracians, from the anaconda and boa constrictor to the "hair snake"—that so many people believe to be produced from a horse hair placed in water—and from the polywog to the crocodile and tortoise. Rattlesnakes, cobras, blow snakes, puff adders, copperheads, horned vipers, spotted adders, lizards, iguanas, gila monsters, alligators, crocodiles, snapping turtles, etc., would require very careful handling.

How much space would the 885,000 animals occupy? There would be over 56 for every square yard of standing room in the ark and over $10\frac{1}{2}$ to every cubic yard it contained.

How much space would some of the great mammals occupy? There would be 4 if not 6 elephants, counting the living species besides 10 fossil species, one skeleton

now on exhibition being 16 feet 4 inches long, from front of skull to where the tail joins the body; 9 feet 4 inches from the ground to top of dorsal spines; length of tusks, 9 feet 6 inches each. "Baldy," an elephant now with the Barnum and Bailey circus stands 10 feet 10 inches high, 8 feet broad and weighs 18,000 pounds.

As there is a question whether the elephant of Sumatra is a separate species or not, we will count 4 elephants, 6 species of rhinoceros, 12 members, 12 feet long and about 4 broad, 3 species of the hippopotamus, fully as large as the rhinoceros, 6 members, over 100 species of antelope, over 20 species of oxen, all of which would occupy no small amount of space.

65 species of cetacea, ranging in size from 4 to 105 feet in length with tails ranging up as high as 25 feet broad and 5 feet thick, with a body as large as 15 feet in diameter would be hard to get into and stow away in the ark! If tanks of water were provided for them and the necessary supply of food taken, they would crowd the capacity of the ark with nothing else for a load.

175,000 birds would be an average of 11 for each square yard of standing room in the ark and over 2 for each cubic yard of space it contained. The birds, with their food for 382 days, would pack the ark as closely as sardines are packed in a box.

How long were they in the ark? They entered it seven days before the flood and it began in the six hundredth year of Noah's life, the second month and seventeenth day. (Genesis vii, 4-11.) The ark rested on Mount Ararat the seventh month and seventeenth day. (Genesis, viii, 4.) The ark was opened in the six hundred and first year of Noah's life, the second month and

twenty-seventh day of the month, and the people and animals went forth. (Genesis, viii, 14-19.) This makes their stay one year and seventeen days, or 382 days.

How much food would they require? No estimate can be given that would even approximate the amount without a complete knowledge of the nature and amount of food taken by each. Certainly they would eat 10 times their own weight in the 382 days they were in the ark. Rene Bache in the *New York Journal* says: "Taking an average, an animal will consume in that length of time (150 days) four times its own weight of food." This would be about 10 times their own weight in 382 days.

A few examples will serve to illustrate the point. The heron eats an average of 50 small fish in a day. 14 common heron would require 2,674,000 during the time they were in the ark. This, remember, is for but one species! As the family includes the bitterns, night-herons, spoonbills, boatbills, storks, adjutants, ibises, etc., and the above would be a fair average amount of food for each, how much room would be left in the ark after the heron tribe and their food was cared for? As they will not eat dead fish, large tanks of water would have been a necessity, with a process of aerating it and food for the fish until they were eaten.

The 22 pachydermata would have required an average of 200 pounds of vegetable food per day. Hay would be most readily obtained although if no vegetables or grain was fed, a greater quantity would be used. At this rate they would eat over 840 tons of hay in 382 days. 3,500 clean beasts such as oxen, deer, antelope, sheep, goats, buffalo, reindeer—and the horse,

zebra, camels, and numerous other animals not included in the clean list—would require not less than an average of 2 tons each. Farmers say it should be 3 tons each but 2 tons will make about 8,000 tons which is large enough for our purpose. Add to this 160 tons for the use of rodents, marsupials, insects and other animals that require food of this nature and we have a total of 9,000 tons. This would occupy 162,000 cubic yards or nearly twice the entire capacity of the ark. Baled hay is a late invention. But if the hay was baled it would require nearly one half of the entire capacity of the ark and with the animals that live on hay would pack it solid.

How many thousand bushels of grain would be required for 175,000 birds and the rodents, marsupials and other animals that require grain for at least a portion of their food? How much fruit for 900 monkeys besides fruit pigeons, and other birds, insects, etc., that live exclusively on fruit? Fresh fruit would be a necessity with most of them.

How about ants for the ant eaters? They will not eat dead ones and hundreds of bushels of living ants would be required. How about bees for the 37 species of birds that live upon them? 518 would consume quite an apiary. 1,918 birds would have to be fed entirely on flies! They will not eat dead ones either. Think what a gigantic fly trap the ark must have been to supply them! Not less than 1,000,000 flies per day would be required to feed the creatures that live on them.

The ark has been filled many times over but along comes a buzzing throng applying for admission. It consists of 230,000 species of insects. 460,000 of them, some so small that a microscope is necessary to distinguish

the species; but Noah selects them, male and female, and passes them in. 50,000 species of mollusks now appear. Noah again selects them, male and female, 100,000 of them, and he is ready for more.

They soon put in an appearance. 8,800 reptiles and batrachians, crawling, hopping, wiggling, rolling, hissing, croaking, all in a wriggling mass; Noah examines them, selects them, male and female, and in they go. But why pursue this matter any further.

Many of the last would require living animals for food. Serpents will not eat animals they do not kill themselves. Their food would have to be kept alive for them. The carnivora would require hundreds of tons of fresh meat. It would take about 5 tons to feed the two lions for 382 days; the tigers would not be far behind them in quantity, while in numbers they would exceed the lions, and the cougars, panthers, pumas, hyenas, wolves, jaguars and many others would be on hand as regularly as meal time came. Denton estimated that there were 3,000 animals that fed on flesh and allowed 2 pounds each per day and calculated that not less than 2,250,000 pounds of flesh would be required. At this rate the exact figures would be 1,146 tons. This would be equal to about 5,000 dressed cattle. As there was no way of preserving their meat and the animals would not eat it dried or salted, the food animals would have to go into the ark alive. This would add considerably to the load of the already much overloaded craft.

In addition to the food mentioned above, it would be necessary to lay in a supply of honey, fresh bark and leaves, growing nettles and other plants, ant's eggs,

worms, gravel for the birds—but the list already includes enough to load a dozen arks.

How did the animals get to the ark? Did Noah send for them, or did they come of their own accord? If he sent for them it would have taken an army of men 100 years to gather them, and what evidence had he that none were missed? Did Adam leave a record of the names of all living creatures and had none of them become extinct at that time? If so, we must add an innumerable throng to our list. The 10 species of fossil elephants, the immense batrachians of the carboniferous period, mollusks several feet across, snails one to two feet in diameter, which would pack the ark a dozen times where the modern animals would once.

But if they were not named and listed, how would he know when he got them all? As a matter of fact, it would be impossible at the present day with 10,000 men and the expenditure of a billion dollars to get a pair of every living species congregated at one place and keep them alive for any length of time.

Two explanations are given by theologians. First: there were not so many species of animals at that time. Second: Noah did not have to send for the animals. They came of their own accord.

If there were not so many species at any time during the history of the world as there are now, if a single species has come into existence since creation stopped, God did not create it or the Bible does not give us a true account. If the animals came of their own accord, they could not have gotten into the ark if they reached it. But how did they get there?

The grizzly bear must have left his home in the Rocky

Mountains, and with a great retinue from the western hemisphere, started for Asia. The sloth and ant eater could not travel over a mile a day; they would have died of old age on the way. Snails could not have accomplished the journey in a thousand years as a few feet a day is the extent of their ability to travel. The ostrich, emu, rheas, polar bears, musk ox and numerous other animals must have traveled to the straits, waited until they were frozen over, crossed on the ice and continued their journey of 8,000 to 12,000 miles.

How about the species peculiar to Australia? A number of species are found there that are found nowhere else on the globe. Did they swim across the ocean? How about the 118 kinds of timber found in this country that is found nowhere else? Did the trees travel to the ark? When the flood was over the same journey had to be repeated.

When the animals were turned out of the ark they required careful watching or many would have been destroyed. There were as many cats as mice; as many hawks as pigeons; as many of every species of carnivora as of herbivorous animals. How were they protected until a crop was produced to feed the carnivora?

How did the ruminants and other herbivorous animals live until grass was produced to feed them? If the earth had been covered 1 year and 10 days they would be dead, decayed and unfit for food. Noah must have planted the earth all over with seeds, sprouts and plants that he carried with him. The objection that it was not necessary for Noah to take fishes and plants in the ark, is met by the fact that we are told all life died that was not in the ark. There is no way out of it. 120,000

plants, seeds or sprouts added no little amount to the already overloaded ark.

Prof. Osgood, of the Rochester Theological Seminary, makes calculations to show that all the animals could have been accommodated comfortably on one floor of the ark with room to spare.

In his calculations he counts 10 species of clean animals! Is it possible that he does not know there are over 100 species of antelope, and as they "divide the hoof and chew the cud" they are clean animals according to the Bible? Does he not know that the other clean animals bring the number to 250 species and that 14 of each were taken making a total of 3,500 instead of 70 or 50 times as many as he calculates?

He also figures the size of all land mammals to be that of the common house cat. This we might allow if we figured the average size of the entire number in existence; but if we take one of each species he will find the average weight to be about 40 to 45 pounds which would be a good sized house cat. All of the calculations are made on about the same basis. This is taken from the illustrated account that went the rounds of the principal papers in the spring of 1897. Prof. Gill takes an extremely opposite view and opposes the D. D. on every point.

There were but two openings in the ark. A door in the side and a window in the roof. The window, from the account, appears to have been but 22 inches square. As the "Lord shut him in," (Genesis, vii, 16) it is doubtful if the door could be opened from the inside; and as the ark was "pitched within and without with pitch," no air could come in through the sides. While the deluge of waters were falling they could not open the window in

the roof without being flooded by the rainfall of about 30 feet per hour. Did the 885,000 animals and 8 human beings get a full supply of air through a window 22 inches square with the water falling at the rate of 6 inches per minute? They could not force enough air through so small an opening with a wind blast.

There were but 8 human beings in the ark. Noah, Shem, Ham and Japhet, and their wives. How were the animals cared for, supposing it was possible to get them into the ark? 885,000 animals would be an average of 110,625 each. It would have been necessary to feed and water them all at least once a day, while the more tender among them would require more frequent attention. The lions, tigers, hyenas, wolves, etc., would require constant watching. The hawks and falcons would have killed each other and the rest of the birds if not confined to separate cages.

Then came the job of renovating the ark! 885,000 animals with over 1,000,000 different smells! From the overpowering odor of the musk ox, to the gentle zephyr of the skunk wafted through the scent laden air! Think of the combination of smells! Think of the combination of noises! In the night, when all was quiet and the weary occupants of the ark were seeking to woo the gentle goddess of slumber, some of the cats would climb upon a cross beam and begin a concert. Instantly all is confusion and a combination of noises result that is simply terrific. Possibly Noah appears on the scene with a torch in one hand, a boot jack in the other, straining his eyes to pierce the scent laden air and throw his weapon at the offending feline, then slowly retracing his steps, watching each time he puts his foot down that he does

not set it on a rattlesnake or some other equally unpleasant guest.

Sleep is no longer to be thought of and the tired family toss upon their beds until the first streaks of dawn come lazily through the cloud laden sky. With its first appearance a new concert begins! The roosters try to out-crow each other and one after another the animals join the chorus. The sweet notes of the canary are rudely broken by the grunting of the hog, the howl of the wolf, the roar of the lion and the unearthly laugh of the hyena. Like the hardshell preacher, "we wonder how their women stood it." But "scripture is silent on that point."

But seriously, how were the cages and floors of the ark cleaned? Think of the refuse from all of these animals! It would all have to be carried to the third story and thrown out of the window! Could 8 people with nothing else to do clean out after such a crowd? It is not within the range of possibilities. After the ark had been shut up for one day the odors would sicken the strongest constitution among them. As for cleaning! Well, the Augean stables, the cleaning of which was one of the tasks of Hercules, were purity personified compared with the condition of the ark at the end of one week.

This is a sketch of the story of Noah and the Ark. Nothing could be more impossible than that it is a literal fact. This theologians realize and attempt to explain it in many ways. "Stick to the text" and there is but one explanation.

If "all the high hills that are under the whole heaven were covered" and "nothing was left alive except

what was with Noah in the ark" it was not a partial deluge. If it was, we want to know how the ark happened to rest on a mountain 16,960 feet above the sea level?

But let us take another view of the matter. What had the animals done that they should all be killed? Had they sinned against God? One of Noah's first acts after leaving the ark was to plant a vineyard and as soon as he could get grapes to do so, made wine, got beastly drunk, made a spectacle of himself and because his son happened to see his nakedness, cursed him. Did any of the animals that were killed do anything worse than that?

Fables have lived and died. Local cataclysms have taken place, the accounts of which have been handed down from father to son, grown larger with each transmission and finally recorded by some transcriber. Many of them have been incorporated in the Bible and we are asked to believe they are the word of God. But the **GOD OF THE UNIVERSE** stores his revelations in the rocks and in places where ecclesiastic votes cannot change them. Such records are true. Written records require careful consideration.

NOTE.—Since the matter for this book was given to the printer, Barnum & Bailev's circus has embarked for Europe. The Atlantic Line steamer *Massachusetts*, 469 feet long, was chartered and the interior of the ship was entirely remodeled for the purpose.

The following has been gleaned from the press reports: "The cost of arranging for the trip to Europe was nearly \$1,000,000. The cost for transportation alone was about \$150,000. The caravanary consists of 224 workmen, 50 heads of departments, clerks and book-keepers, 420 horses, 26 elephants, 15 camels, 32 ponies, 31 cages of animals, 25 general wagons, 6 wardrobe wagons, and a score or more of yaks, zebus, llamas, sacred cattle and other 'led stock.'

"To feed this caravan of animals for 11 days and nights that they will be afloat they carry 4,500 pounds of fresh beef, 120 tons of hay, 10 tons of bran, 10 barrels of potatoes, 5 barrels of onions, 5 barrels of beets, 3 tons of carrots, 1,400 pounds of bread and 2,000 pounds of fish."

Compare their size and number with the animals Noah is supposed to have had in the ark, the difference between the amount of food that would be required to feed them 11 days and 382 days. Then remember that this limited cargo occupied every available inch of the *Massachusetts*, not leaving space for the larger animals to lie down.

This ship load is a complete refutation of Prof. Osgood's claims.

CHAPTER VII.

JOSHUA COMMANDS THE SUN TO STAND STILL

Some of the greatest things done in the interest of "Peace on Earth, good will towards men" have been in the form of bloody and cruel wars. Some of the greatest feats of the Bible God have been in the interest of wars of conquest and extermination and the greatest miracle of the entire number listed in the book, the staying of the sun and moon, was one of them.

Joshua had taken several cities, killed their people, hanged their rulers and finally had made peace with Gibeon, one of the greatest cities. The five kings, not liking the consummation of so strong an alliance, formed a compact and went against the Gibeonites. They, in fear, sent to Joshua for help. He at once responded and, after a battle, defeated the allied kings; not having time to destroy his enemies by day light, he ordered the sun and moon to stand still. This tremendous miracle was done in order that more slaughter might take place.

"* * Sun, stand thou still upon Gibeon; and thou, moon, in the valley of Ajalon.

And the sun stood still, and the moon stayed, until

the people had avenged themselves upon their enemies.
* * So the sun stood still in the midst of the heaven, and hasted not to go down about a whole day." Joshua x, 12-13.

The Israelites had a very limited idea of the universe. According to the story of Genesis, the world was its principal part; they had no idea of its size and the sun, moon and stars were simply attendants of a minor consideration. Even as late as the fourth century, A. D., these ideas prevailed and the religious leaders of that day taught them as is evidenced by the following from "Father Ambrose." "We must recollect that the light of of day is one thing; the light of the sun, moon and stars, another—the sun by his rays appearing to add lustre to the daylight. For before sunrise the day dawns, but is not in full refulgence; for the mid-day sun adds still further to its splendor." These ideas followed and governed for many centuries and when a matter was under discussion it was decided by referring to the writings of such people as father Ambrose and St. Jerome and not by investigating the facts of the case. No wonder the race grovels in darkness when such customs prevail. Even in this enlightened age, there are many who settle all disputes by reference to the Bible, where we find dozens of stories such as are quoted in this volume. As well might we refer to the Arabian Nights. The stories told therein are no more unreasonable than the ones we have been enumerating.

We have learned that matter possesses certain natural qualities. Among them we find what is termed inertia. That is, a body at rest cannot be set in motion without some exciting cause and when in motion cannot stop

without something opposes it. Stopping a body very suddenly generates heat and friction of particles of matter also generates heat.

From time immemorial the world has sailed around the universe maintaining its relation to the heavenly bodies. The relative sizes, distances and motions have been necessary to keep them in their relative positions. If one planet, sun, moon or star was stopped, it would disturb the equilibrium of the entire universe.

But what was there to stop the sun and moon? They could not stop of their own accord; there must be some exciting cause. A God who was obliged to make a personal visit to learn what his people were doing could hardly possess sufficient power to cause so marvelous a violation of Nature's laws. Another thing, if the sun, moon and stars stopped it would not change night and day from the fact that it is caused by the rotation of the earth on its own axis. The earth was the one to stand still, in order that the sun might not "go down for about the space of a whole day."

But if the earth stood still it would be necessary for the sun, moon and every heavenly body to stand still.

Our orthodox friends say there is nothing in the Bible to warrant such a statement. We agree with them. But we have unearthed monuments that bear inscriptions of the stars, showing their positions. By calculating backwards we find that about 3,800 years B. C. they actually occupied the positions. If part of them had been stopped and the rest went on there would be a discrepancy in the positions. This, and other inscriptions on the Egyptian and Assyrian monuments prove the statement. We have therefore to contend with the fact

that **ALL** the heavenly bodies were stopped on that occasion if the earth, sun or moon stopped.

The earth contains 259,944,035,515 cubic miles of matter. The sun is 1,310,000 times the bulk of the earth and weighs 300,000 times as much. The earth has three motions; it revolves on its own axis once in 24 hours and as its equatorial circumference is about 25,000 miles, this motion is at the rate of 1,041 2-3 miles per hour, or 1,515.36 feet per second. This speed is faster than the bullet of a Springfield rifle as its initial muzzle velocity is but 1,315 feet per second.

But this is not all. It travels around the sun in the ecliptic at the rate of 68,000 miles per hour or about 18 miles per second. To be exact, its fastest pace is 18½ miles, its slowest about one mile less.

We do not realize these motions as we are moving with them. But we have all experienced the sensation of having a train stop suddenly while the momentum of our bodies did not stop. Every horseback rider has had the experience of being thrown on the horse's neck and sometimes clear over its head by a sudden stop, while a "header" from a bicycle is one of the most common occurrences of the present day.

These motions are nothing compared with the speed of the earth. If the earth was stopped suddenly, everything moveable on its surface would be thrown into space at a speed that would send it to the fixed stars.

But that is not all. Tyndall estimated that if the earth was stopped suddenly, enough heat would be generated to raise the temperature of a globe of solid lead, the size of this earth, to 384,000° Centigrade. A Centigrade thermometer puts zero at the freezing point and

the boiling point of water at 100 degrees. Such a degree of heat cannot even be imagined. It is like Rev. Miles Grant's description of the infernal regions: "If a person stayed there for a time and was taken out and put into a caldron of boiling potash, he would freeze to death."

But, says an objector, the earth was not instructed to stand still. Very true, but they supposed the sun moved and the earth stood still.

Astronomers agree that the solar system is revolving around another central point at an inconceivable velocity and as the sun is 1,310,000 times the bulk of the earth and weighs 300,000 times as much, the sun's temperature would be raised to such a degree that we would be burned up "root and branch with a fervent heat." We receive but 1-2,300,000,000 part of the heat thrown off by the sun.

But the sun would have to stop if the earth did. Jupiter, 1,309 times the bulk of the earth, Saturn, 721 times as large, Neptune, 85 and Uranus 65 times our size, to say nothing of the smaller planets, 423 asteroids (now listed) and 20 moons, all within the limits of our solar system, not to mention the disturbances among the stars, all in order that two armies of barbarians might have light to see to kill each other! My God is engaged in better business than changing the operations of the universe for such a purpose.

The planets would all have to be started when the fighting was done. That would create the same havoc as their stoppage occasioned. It takes as much force to create the momentum of a body as it does to stop its action.

The Bible gives two accounts of the earth, sun, moon or something stopping. Both of them were on account of trivial matters. As a sign to Ahaz the shadow on the sun-dial of Ahaz was turned back 10 degrees.

“Behold I will bring again the shadow of the degrees, which is gone down in the sun dial of Ahaz, ten degrees backward. So the Sun returned ten degrees, by which degrees it was gone down.” Isaiah, xxxviii, 8.

To accomplish this it would be necessary for the earth to stop, take a retrograde motion and travel ten degrees, stop again, start forward, and either travel faster to make up lost time or throw the entire Universe out of balance.

We must look for something besides literal explanations for such stories. Literally they are absurd. Traced to their poetic origin their meaning is plain but altogether different.

CHAPTER VIII.

JONAH AND THE WHALE.

The Book of Jonah tells a wonderful story. The Lord had commanded Jonah, the hero of the narrative, to go to Ninevah and warn it of impending destruction. Jonah, however, evidently not liking the job or being doubtful of the nature of his reception, went to Joppa in order that he might take a ship to Tarshish, escape from the Lord and thus avoid his mission. But he "reckoned without his host" as the Lord was not so easily gotten rid of and after he had taken ship to Tarshish there arose a great storm. As this storm did not show signs of abatement, the superstitious sailors cast lots to determine who the guilty person was on whose account the Lord had sent the storm. Jonah proved to be the one, according to this method of determination, and was cast overboard. "Now the Lord had prepared a great fish to swallow up Jonah. And Jonah was in the belly (margin, bowels) of the fish three days and three nights." Jonah, i, 17.

Joppa was on the Mediterranean Sea; the site of Tarshish is slightly doubtful and the species of fish, exceed-

ingly so. Early writers with unanimity called it a whale. But when modern science began its investigations of the family of cetaceans, they soon learned that the largest whale could not swallow a man's fist, to say nothing of his whole body. What an ox could readily swallow would choke this immense animal.

The next theory was that it was a shark. This was soon discarded as sharks have large teeth and Jonah would have been more fitted for sausage meat than for a prophet of God when the fish got through with him.

Another writer concluded that he was not really swallowed, but lay in a fold in the lips; this could not be received as the passage and marginal notes both agree that it was lower down. The words meaning the "bowels" or "belly" the quotation reading: "and Jonah was in the belly of the fish three days and three nights." Even could this have been the case, it would present difficulties equally as great as the other. It is the custom of whales to open the mouth and rush through the water at great speed to gather food. This would have been a very unpleasant proceeding, as far as Jonah was concerned, had he been hiding somewhere in the lips of the fish. Air, also, would not have been easily obtained under those circumstances.

But supposing a fish suitable for the purpose had existed, how long could Jonah have existed inside its body? Man cannot live without oxygen for his lungs and carbon for his stomach. Jonah would have been where there was no oxygen and his body could not have stood the action of the gastric juices nor his lungs the carbonic acid gas of the stomach.

If you wish to see the effect of these forces on flesh,

take a bottle of common pop and put a piece of raw beef in it, corking it carefully afterwards. You will see the meat slowly disintegrate as the chemicals operate on it. After witnessing this experiment, you will be able to imagine what Jonah looked like after being in such quarters three days and three nights and will not wonder that the king of Ninevah put on sack-cloth and sat in ashes when he appeared. On the contrary, you will wonder why he did not order out the Royal Scavenger and after applying disinfectants, anchor Jonah in the middle of the Tigris River. Finally "the fish vomited Jonah out upon the dry land."

Where he was when this (to him) very pleasant event took place, we are not told but we have some measurements that will astonish those who have never examined the story.

As near as can be determined Ninevah was on the Tigris River about 700 miles from the Persian Gulf, 600 miles from Joppa in a straight line, and 425 miles from the nearest point on the Mediterranean Sea. In Jonah, iii, 3 we are told: "Now Ninevah was an exceedingly great city of three days journey." In all these calculations the Oxford Bible is taken as authority, and it says a day's journey was 33 miles, 384 feet. The ruins and descriptions of ancient cities show them to have been built square. Even the Hebrew conception of Heaven was a walled city, perfectly square stretching out 12,000 furlongs in every direction, length, breadth and height. Revelations, xxi, 16.

Using these well known plans as our basis, we would have a city much greater in extent than any city we know of in either ancient or modern times. Chicago

would be a city of but a little over one day's journey, as it stretches along the shore of Lake Michigan a distance of about 40 miles. If Ninevah was a city of three days journey, built according to the custom of those days, it would have been a city 99 miles, 1,152 feet in each direction or cover a surface of 9,944.21 square miles.

According to the report of the Chicago Board of Trade for 1893, that city covered 186.2 square miles of territory and had a population of 1,700,000. If Ninevah had the same proportion of population to her area, she would have a population of 90,780,000 or about 17,000,000 more than the entire United States in 1897. If internal improvements were proportionate, it would have had 131,737.8 miles of streets.

Rev. A. H. Sayce in "Higher Criticism and the Monuments," says: "Ninevah is said to have been 'an exceedingly great city of three days journey' and to have contained 120,000 children who could not discern between their right hand and their left.' These statements are in strict accordance with facts if we include within the circuit of Ninevah not only Ninevah but Calah on the south and Dur Sargon on the north. The circumference of the whole distance is about 90 miles, which may be roughly described as a three days journey. Dur Sargon, however, was not built until the reign of Sargon, a hundred years later than the time when Jonah of Gath Hepar delivered his prophecies in the kingdom of Samaria."

The latter part of this quotation invalidates the entire claim as it professes to include a city which had no existence until 100 years after the event took place. What would Prof. Sayce say,—or any other theologian, who is

using such arguments to prove the Bible to be in strict harmony with history—if I made the statement that Chicago had a population of 10,000,000 and when they took me to task for the mis-statement I said: “Oh! I included the people who will move and be born there for the next 100 years. Then it will have that population.”

No cities of the size necessary to fill these requirements have existed since historical records were kept and we must therefore conclude that the writer meant that Ninevah was a great city three days journey from the point at which Jonah was when he escaped from the fish.

But we have already seen that Ninevah was 425 miles from the nearest point on the Mediterranean Sea, while three days journey was 99 miles, 1,152 feet. Jonah must have been a marvelous “sprinter” to cover so much ground in so short a time. The nearest point on the sea coast (and we have never heard it mentioned that the fish took him inland any distance, although so remarkable a fish would be likely to do most anything) was 425 miles, while from Joppa to Ninevah was 600 miles in a straight line. From the nearest point on the sea coast had he been able to travel in a perfectly straight line and not go out of his way to dodge mountains, rivers, lakes or the savage inhabitants of the country, he would have had to travel at the rate of 141 2-3 miles each 24 hours in order to accomplish his journey in three days. If the fish left him at Joppa, he would have had to travel 600 miles or at the rate of 200 miles each 24 hours.

It is not to be considered that a man could travel without rest. If he walked (or ran) half of the time and rested the other, he would have had to travel 11.8 miles.

per hour from the nearest point on the sea coast and 16 2-3 miles per hour if from Joppa. This always allowing that he traveled in a perfectly straight line which is not possible.

In these days of fast express trains and electric cars we do not think this very fast traveling; but when we remember that the fastest method employed by the Israelites was walking or with slow animals, we can appreciate it. We have had some fast walkers of late years but not one who could keep in sight of Jonah for one hour.

But, says another, why could not the whale carry him near or quite to his destination? This view does not better the matter any.

Joppa was on the Mediterranean Sea and as the Suez canal was not constructed at that time, it would have been necessary for the fish to have traveled the entire length of the Mediterranean, out of the strait of Gibraltar, round the coast of Africa to the Cape of Good Hope, and after rounding it, to go up the east coast of Africa, through the Mozambique Channel, around the coast of Arabia up through the Persian Gulf to the mouth of the Euphrates River, a distance of not less than 15,500 to 16,000 miles, after which he would still be a distance of not less than 650 to 700 miles from Ninevah.

If the Fish ventured up the Euphrates and Tigris rivers to Ninevah it would have to travel over 16,200 miles in the three days or at the rate of 5,400 miles per day; 225 miles per hour, $3\frac{3}{4}$ miles per minute and 330 feet each second of time. If it spent half the time resting and feeding, the speed would have to reach the enormous rate of 660 feet per second. Such a speed would

be sufficient to throw all the water in the river out of the banks, leaving dry land behind him. Some idea of the speed can be obtained by comparing it with a railroad train. Few trains travel at a speed exceeding 40 miles per hour. This is at the rate of 58 1-3 feet per second. The speed necessary for the fish to travel to accomplish his journey would be 11 1-3 times that of the ordinary passenger train.

We are told that Jonah finally reached the city and began his story of death and destruction. Today we would put him in the insane asylum; but then we are informed that the people believed him. This is quite as unlikely as the rest of the story.

The people of Ninevah were Assyrians and believed in their own God, Asshur. They had no more regard for Jehovah than the people of the United States have for Mohammed or Allah. Imagine a prophet or a preacher of the Mohammedan faith coming with such a message to this country and you have the same comparison that would be presented to the inhabitants of Ninevah at Jonah's appearance.

Of this, the Encyclopaedia Britannica says: "From a pure literary standpoint 'the marks of a story are as patent in the Book of Jonah as in any of the tales of the one thousand and one nights.' The greatest of the improbabilities is a moral one; can we conceive of a heathen city being converted by an obscure foreign prophet? To judge of the degree of this improbability, it is enough to read any inscription you please of an Assyrian king. Fancy Sargon or Sennacherib in the presence of Jonah.
* * How could the Ninevites give credence to one who was not a servant of Asshur?"

In a foot note it also says: "It is worthy of note that the fish of Jonah is found in the Roman Catacombs assigned to the first centuries and is distinctly a dragon."

When Jonah learned that Ninevah was not to be destroyed, he went outside of the city and built him a booth, and sat under it in the shadow. But when the night came, behold a gourd came up out of the ground and grew sufficiently large to shelter him. What a growth! Such things were done in the dark for some unknown cause and, as plants do not thrive very well at other seasons it was doubtless summer. Therefore the work must have been accomplished between darkness and daylight. A plant to act as a shade for a man would have to be at least 8 to 10 feet high, with a corresponding growth of branches and it must have grown at the rate of at least one foot an hour. Yet, after all this trouble, when the Sun came up, "God prepared a worm * * and it smote the gourd that it withered." But what did Jonah want this gourd for? He already had a booth for shelter; the gourd was superfluous.

This was a great gourd, a little worm but a monstrous big story and if it had been told in anything but the Christian Bible, would have been properly placed with the stories of "Jack the Giant Killer."

An old retired sailor was asked if, in his travels, he had ever seen anything to prove the truth of the story of "Jonah and the Whale." He replied: "I never believed that story until we had an experience on one of my voyages. We started around 'the Horn' and had with us, besides our crew, an old gentleman and his grandson. They were much attached to each other and just as we reached the straits the old gentleman died.

The boy was inconsolable, but we made preparations for a burial at sea. Not having any shot, we tied to the feet a grindstone, some scraps of iron pipes and barrel hoops and cast the body overboard. Hardly had it struck the water, when the boy leaped into the sea. As it was storming badly we could do nothing but go on leaving him to his fate.

A few days later, when in the Pacific Ocean we saw a shark playing around the ship. We rigged a tackle, caught it, and hauled it on deck. When we cut it open, we found the old man and the boy inside of it. They had taken the grindstone, mounted it on the gas pipe and were sharpening the barrel hoops so they could cut their way out. Ever since that time, I have believed the story of Jonah and the whale."

It is also related that early in the history of Christian missions among the Indians, a priest started to tell them the story of Jonah. They sat quietly, listening attentively to the narrative until they heard that Jonah had been swallowed by a fish and after remaining there three days had been vomited out and still lived, when the leading man of the tribe got up, shook himself and said: "Heap d—— lie" and walked off followed by his people.

Whether both of these stories are true or not, will be left to the reader to judge; but many people have the Indian's opinion of the story.

CHAPTER IX.

WONDERFUL INCREASE OF THE ISRAELITES IN EGYPT.

“And the sons of Joseph, which were borne him in Egypt, were two souls: all the souls of the house of Jacob, which came into Egypt, were three score and ten.” Genesis, xlvi, 27.

“Thy fathers went down into Egypt with three score and ten persons; and now the Lord thy God hath made thee as the stars of heaven for multitude.” Deuteronomy, x, 22.

“And the children of Israel journeyed from Rameses to Succoth, about 600,000 on foot that were men, besides children.” Exodus, xii, 37.

According to the account, in the year 1706 B. C. there was a famine in their own country and Jacob and his family went down into Egypt where his son, Joseph, had gained great power by interpreting a dream for Pharaoh. They remained there until 1491 B. C., or 215 years, and after a series of exciting circumstances, the Exodus occurred. At the time of the Exodus, the children of Jacob, whose name had been changed to Israel, had increased until they numbered 600,000 fighting men.

At the present time we estimate one able bodied man to every five population. Of course, they could not stop to number their people while making preparations to leave in such a hurry and carry their wives, children, flocks and herds with them, so an approximate number is given. But in 1490 or between one and two years after they went out of Egypt, they took time to number their population and found that, without counting the Levites, (priests) they had 603,550 fighting men. Using the commonly accepted ratio, their population would have been 3,017,750 people which would have been produced from an original population of 70 in 216 years.

In 1790 the population of the United States was 3,929,214. In 1890 it had increased to 62,622,250 or an increase of 15.9376 fold in 100 years. Had the original 70 people who went down into Egypt increased at this rate, they would have numbered but 45,340 at the expiration of 216 years which elapsed between the times at which definite figures are given. Where did the other 2,972,410 people come from, not to mention the priests who were not enumerated in the census?

But even this is not a fair comparison. They were described as the "children of Israel" and consequently could be added to the family only through the one channel of birth, while the U. S. has had a number of factors to assist its increase of population.

In 1790 the U. S. comprised the original colonies covering but a small section compared with the present extent of our country. Ohio, Louisiana, Mississippi, Texas and California were well populated when added to this country and besides all these, we have received from foreign shores the enormous number of 15,567,000 immi-

grants. According to the census of 1890, 33.02 per cent of the population of the country are of foreign parentage.

These factors reduce the real increase in population to a great extent. Had we been obliged to depend upon the natural increase in population through the one channel of birth, without immigration, our population would have been but 9,027,192 in 1890.

Estimates of the increase of population in 25 different countries, including the U. S. show an annual increase of 947 thousandths of 1 per cent, or a little less than one to every 100 inhabitants. Leaving out the U. S. the European countries show an increase of 91-100 of 1 per cent annually. That is, the excess of births over deaths is less than one in 100.

Allowing that the increase would be 1 per cent annually without emigration, which would be a liberal estimate, if 70 people were taken in families and this ratio was carried out for 216 years they would number but 599. As no writer, either Christian or Infidel, places this caravan at less than 2,000,000 people, where did the rest come from.

The mortality statistics of the following European countries show the average death rate at the ages stated: Italy, France, England, Prussia, Bavaria, Austria, Switzerland, Spain, Russia in Europe. Ages 0 to 1, 28.9; 1 to 5, 15.98; 5 to 10, 3.73; 10 to 15 years, 1.78.

By adding these figures together we find that of 100 births, 50.39 die before reaching the age of 15 years or marriage age. The total death rate of these countries is 2.86 for each 100 people which would cause the entire population to change in a trifle less than once in 35 years.

If one-half of the deaths are of children under the marriage age, twice as many children must be born as are necessary to double the population in a given time. As few girls marry before reaching the age of 18 to 20 years, this percentage would have to be greater, but we are allowing these stories every possible benefit of the doubt.

We have found the excess of births over deaths to be a little less than 1 in 100 and have used the ratio of 1 to 100 as our basis. This will double the population in 70 years. But in order to increase the population from 70 to 3,017,750 it would be necessary for the population to double 15 1-3 times in 216 years or once in every 14 years. To do this it would be necessary for the population to double 5 times as fast as at the present time making it necessary that an average of 30 children should be born to each woman.

The "International Cyclopaedia of Practical Knowledge" says: "One woman in 20 and one man in 30 is barren, about 4 per cent. It is found that one marriage in 20 is barren—about 5 per cent. Among the nobility of Great Britain, 21 per cent have no children, owing partly to the inter-marriage of cousins, no less than 4½ per cent being married to cousins."

This being the case, there will be 6 barren women and 4 barren men to every 120 population, or 1 barren person to every 12 marriages. But in some cases the barren persons will marry each other, so we will take the figures given, "one barren marriage in 20" which will make it necessary for bearing women to give birth to a greater number of children. If 5 per cent of the marriages are barren, the remaining 95 per cent would have to produce an average of 31.6 children each, making it necessary

for some to bear 31 and others 32 children. Mothers, how would you like the prospect?

But there is still another side to the matter. The above figures suppose that every girl who reached the age of 15 years would live long enough to become the mother of all these children. This would be out of the question as everyone knows and would increase the number of children it was necessary for bearing women to bring into existence.

Some would die before giving birth to any. Others would give birth to two or three. In order to carry the proportion out it would be necessary for some women to become the mothers of over 60 children. As the Bible tells us of barren women, it is useless to say they all bore children in those days.

A writer in a New York paper took Col. Ingersoll to task for disputing this increase by saying: "Can we rely on the historical parts of the Bible? 70 souls went down into Egypt and in 215 years increased to 3,000,000. They could not have doubled more than 4 times a century, say 9 times in 215 years. This makes 35,840 instead of 3,000,000."

In commenting on it the writer of the criticism said: "The error was in assuming that the population could not have doubled more than 4 times a century." He then put forth a claim that the people could increase 5 fold every 25 years. That is, "A crop of 10 children in 25 years, for each couple, was not only probable, but within the reasonable limit." He figured that the parents would die but would leave 10 children to take their vacant places; allowing the first 15 years for the children to

mature, he increased them 5 fold each 25 years and claimed they would reach 27,343,750.

But he, like most people who calculate such matters, did not take all the factors into consideration. He assumes that all the children would live to be married 25 years. On the contrary half of them would die before reaching marriage age and using his own calculations, which are way above the natural limit, they could multiply but $2\frac{1}{2}$ times each 25 years or increase to but 106,812.

Had the original population of the U. S. increased in the proportion of $2\frac{1}{2}$ fold every 25 years we would now have a population of 153,484,925. Increase the 15,567,000 immigrants and the population we have absorbed in the additional territory annexed and we would have a population of over 500,000,000 from this "very liberal and conservative estimate," instead of about 74,000,000.

Prof. Levasseur of Paris recently published some very interesting statistics regarding the population of the earth. Among them are the following:

Population of the earth.....	1,472,229,000
Births per year.....	36,792,000
Deaths per year.....	32,230,000
Births per day.....	100,800
Deaths per day.....	98,840
Births per minute..	70
Deaths per minute.....	67

Per cent of increase of population per year, 31-100 of 1 per cent.

There is also another side to the question. Egypt was not a large country and its ability to support a popula-

tion was limited. Rawlinson's Ancient History gives it a cultivable area of 11,400 square miles, while the Britannica says it contained not to exceed 5,500 square miles of cultivable ground and as much more that was not productive, or a total area of 7,040,000 acres. This would make it a trifle smaller than our own state of Maryland and 600 square miles larger extent of cultivable area than the state of Connecticut.

The Britannica is considered authority by the world and using the figures contained therein, the population of Egypt must have been enormous compared to its area.

3,000,000 slaves could not be held in subjection by less than one-half that number of free people. In addition to this, Egypt was continually reaching out into other countries to defend herself from their encroachments. The entire Sinaiatic peninsula was garrisoned by her troops and she was obliged to defend herself against encroachments both on the south and west. As she usually gained a victory, she must have had immense armies in the field. Yet to keep a slave population consisting of 600,000 fighting men and their families, she must have had a large standing army at home.

Certainly to do all this she could not have had a population of less than three times the slave population and they had to be supported on a tract of land comprising about 3,500,000 acres of productive soil and about the same amount of unproductive soil, most of which was as completely so as the Desert of Sahara. This would give a population of about three to the acre of productive soil and over one to the entire territory.

The most thickly populated country of the present day

is Belgium. It has a population of 451 to the square mile. Egypt would have had twice as many to the square mile of all her territory and over three times as many, calculating only her cultivable area.

But the conditions of life vary greatly. Belgium manufactures goods and buys her bread stuffs and food supplies while Egypt had to depend upon agriculture and grazing. Much more territory is required for the latter purpose.

That Egypt possessed no such population is evidenced by the following from Prof. Sayce, a Christian Scholar and Archaeologist. In the "Higher Criticism and the Monuments," page 246, he says: "A force of 200,000 men was accordingly dispatched to Avaris, and the invasion of Egypt decided upon. Amenophis" (the pharaoh who is supposed to have been the ruler at the time of the Exodus) "retired before the invaders. * *" Would a nation having so large a population and so many fighting men be defeated and driven out of their own country for 13 years by a force of 200,000 fighting men, when they held in subjection a nation comprising 600,000 fighting men?

On page 248 he says: "Surprise has sometimes been expressed that no allusion to the Israelites has been found on the Egyptian Monuments. The fact is, however, by no means strange. In the eyes of their Egyptian contemporaries, the Israelites were but one of many Shasu or Bedouin tribes who had settled in the pasture lands of the eastern delta. Their numbers were comparatively insignificant, their social standing obscure. They were doubtless as much despised and avoided by the Egyptians of their day as similar Bedouin tribes are

by the Egyptians of the present day. They lived apart from the natives of the country, and the occupation they pursued was regarded as fit only for the outcasts of mankind. Such political influence as they had, they possessed only in so far as they were confounded with the other Semitic foreigners who were settled in Egypt. It was these—the “mixed multitude” of Exodus xii, 38—who seemed dangerous to the Egyptian politicians; the Israelites by themselves were as harmless and insignificant as the Bedouin whose tents are seen by the modern traveler among the gardens of Ramleh.”

It will be observed that he does not commit himself to any number, simply reiterating that “their numbers were comparatively insignificant.” This could not have been the case if they numbered 600,000 fighting men. He also says they possessed no influence and their occupation was considered fit only for the outcasts of humanity, yet we are told they were able to borrow jewels of gold and silver and raiment from the Egyptians and they were God’s chosen people. Our orthodox brothers say that infidel stories do not harmonize. We would like to know how these statements are harmonized.

Sunderland says, in “The Bible, its Origin, Growth and Character,” page 236: “A little reflection shows us that the numbers mentioned in connection with the Exodus must be enormous exaggerations. We are told that among those who left Egypt were 600,000 men. Adding anything like the usual proportion for women and children would give us a company of from 2,000,000 to 3,000,000 persons. Imagine such a multitude—equal to the population of a great state—crossing the Red Sea, marching, encamping, dwelling in tents, wandering in

the desert, and keeping together as one company for forty years. Dropping out of the account the whole enormous matter of subsistence, think what the mere organization and moving of such a host means. We read of their getting ready for their journey in a single night, and crossing the Sea in a single night. But neither event is within the range of possibility." He is also a Christian writer.

Is it possible that the increase continued through their wanderings? If so, when they had been on the road 14 years they would have had 6,035,500 people; at the end of 28 years, 12,071,000 and at the end of their wanderings, when they reached the land of Canaan, where they ate of the old corn of the land, (Joshua, v. 12) their numbers would have been 23,427,572.

By the way, how much "old corn" would it have taken to feed them? Army rations are about $2\frac{1}{2}$ pounds of food per day. Let us calculate 2 pounds per day. This is lower than the regulation but it would require 836,699 bushels to feed the caravan one day, using that figure. If they happened along when the supply was not up to the standard, they would have gone hungry before a new crop could have been raised. In fact, Palestine could not have raised enough corn to support them, as it would have required over 300,000,000 of bushels each year. In its best days Palestine could not support to exceed 2,000,000 to 3,000,000 people.

What can we think of this story in the light thus thrown upon it and in the face of such attacks by its

“should be friends”? Light should surely be thrown upon it. Not the dim candle light of the half hearted searcher but the greatest search light the world can bring to bear.

NOTE.—In the figures given for the U. S. the census of 1890 is used unless otherwise stated. In this the population of Alaska and the Indian Territory is not included as they do not belong to the calculations as made.

CHAPTER X.

THE TOWER OF BABEL.

101 years after the flood had subsided, the people were living in a plain in the land of Shinar. While there, they decided to build a tower "whose top should reach to heaven."

"And they said one to another, Go to, let us make brick, and burn them thoroughly. And they had brick for stone, and slime had they for mortar.

"And they said, Go to, let us build us a city, and a tower, whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth.

"And the Lord came down to see the city and the tower, which the children of men builded.

"And the Lord said, Behold, the people is one, and they have all one language; and this they begin to do; and now nothing will be restrained from them, which they have imagined to do.

"Go to, let us go down, and there confound their language, that they may not understand one another's speech.

“So the Lord scattered them abroad from thence upon the face of all the earth: and they left off to build the city.

“Therefore is the name of it called Babel; because the Lord did there confound the language of all the earth: and from thence did the Lord scatter them abroad upon the face of all the earth.” Genesis, xi, 3-9.

In the story of “The Flood” will be found a description of the world as the ancients supposed it to be. It was a three story affair. The people lived on the flat surface of the earth; below was the place ruled over by the Goddess, Hel or Heli. It was hades, the place of darkness or the grave. Above was the firmament which separated the earth from the abode of the Gods—of whom there were many thousands—and from which the stars were suspended. The sun traveled on the celestial river, which flowed around the mountains; the mountains were supposed to mark the confines of the earth and support the firmament. It was supposed to be but a short distance to the firmament and, to them, it was easily within the range of possibilities to build a tower that would reach to heaven.

The Israelitish conception of deity was exceedingly limited. Their Gods—for they had many, of whom Jehovah was supposed to be chief—were fashioned after their kings. Wicked, angry, revengeful, placated by presents and pleased with children’s trifles.

Jehovah was neither omniscient, omnipotent or omnipresent. When he wished to know anything he had to go to the place where the information could be gained and learn it as any one else would. When he heard a rumor to the effect that the people of earth were build-

ing a tower, he immediately "came down to see the city and the tower that the children of men builded." I would consider it a personal favor if some of my orthodox brethren would tell me the difference between this tale and many, of a similar nature, found in the Egyptian, Aryan, Greek and Roman "Mythologies."

When he saw what they were doing, his remarks show that he was seriously alarmed! Was he really so ignorant of the construction of the Universe he is supposed to have made as not to know they would fail in their attempt? But he immediately confounded their language, which stopped their work and scattered them abroad all over the earth.

This is a very peculiar statement and is worthy its source. Their plans were all laid, they understood the object of the work and it would have been the easiest thing in the world to go ahead and finish. Talking was not necessary.

But the writers of the books observed that we had different languages and there must be some reason for the fact. God created all people; then he drowned all but one family; of course, they all spoke the same language; as there were many languages in existence, God must have confounded them! It was all as clear as mud!

Where is, or was, the Hebrew heaven located? According to Revelations, xxi, it was a walled city stretching out 1,658 miles, 960 feet in every direction. "And the city lieth four square, and the length is as large as the breadth; and he measured the city with a reed, twelve thousand furlongs." (The Biblical furlong is 729.6 feet.) "The length and the breadth and the height of it are equal." Revelations, xxi, 16. It was a place

where there was an immense quantity of pearls, precious stones and building material.

There is no place on this earth where such a city could possibly exist without the people knowing it. So material a city could not exist in the sky; if it had an existence, a more material location must have been found for it. The only place it could exist, would be on one of the heavenly bodies that surround us.

The nearest neighbor we have is the moon, whose average distance from us is 238,855 miles. Some of the stars are so far away that their light, traveling at the rate of 186,300 miles per second, has been many thousands of years reaching us. The God of the Israelites did not know this! He thought they could build a tower that would reach above them and up into heaven which was above the firmament and the firmament was above the stars! If not, why did he take steps to prevent it?

But supposing they had started to build such a tower. How far could they have gone with it?

The highest monument in the U. S., that people can ascend, is the Washington Monument in the city of Washington. It is 555 feet 5 1-8 inches high, 55 feet, 1½ inches square at the base; walls at the base are 15 feet, ¼ inch thick, while at the top they taper to 18 inches. The monument tapers ¼ inch to the foot in height. It rests on a foundation which is 38 feet deep, and 126 feet, 6 inches square at the base. The monument has 898 steps and 50 landings; its entire weight is 81,120 tons. Mean pressure to the square foot 5 tons. Cost of entire monument \$1,300,000. It is furnished with an elevator which takes 9 minutes to ascend, 8 minutes to descend.

Using this monument as our basis, if the people began a tower that would reach to the moon, and that would be the nearest place where there were any accommodations for such a city as the Bible tells us heaven is, the first problem would be to find something for its base to rest upon. The base would be 23,705 miles, 4,382 feet, 5 inches square, or 9 earths the size of our own would have to be placed side by side for its base to rest upon. The walls would have to be 6,459 miles, 2,772 feet thick at the base. Leaving out the odd feet in the calculations and taking only the miles, it would require 26,600,901,570,550 cubic miles of material to build it, or a bulk equal to 102 1-3 worlds the size of our own.

101 years before this event, 8 people landed from the ark. Had they increased at the rate the Israelites in Egypt are said to have increased, they would have numbered 1,244. Had all of them gone to work at it, worked day and night, not stopped to eat, rest or sleep, and continued to the present time, the tower would not yet have reached the height of 12 inches.

Had they begun it on a much smaller scale, there is not enough loose material on earth to have built it above the known limits of our atmosphere. Yet their God was so afraid they would succeed, he confounded their language and stopped the construction.

Suppose they had succeeded in building this tower; what harm could it have done? If heaven had been there when they reached the moon, it would not have amounted to anything, even if God had built the tower for them. No one could have reached it alive! If they had traveled up stairs at the rate of 10 miles per day,—which would have been pretty rapid traveling,—and

rested the seventh day, as they were instructed to do at all times, 76 years would be required to make the trip. It would be impossible to carry food and water for such a trip and no one could make it.

This story shows the limited idea the Israelites had of the Universe and its ruler, if there be a ruler. It shows the mythological origin of their gods as clearly as the myths of the east show the origin of the different deities they worship. If one is heathen—all are. Their origin is the same. All point to the same birth place. All have practically the same birth stories; nearly all were born of virgins on the 25th day of December; ALL refer to phenomena of the heavens; not to individuals.

CHAPTER XI.

FEEDING THE MULTITUDE.

There are two accounts in the New Testament of miraculously feeding a vast multitude of people with an exceedingly small amount of food. The first we find in Matthew, xiv, 15-21, Mark, vi, 35-44, Luke, ix, 12-17, John, vi, 5-13. The second will be found in Matthew, xv, 32-39 and Mark, viii, 1-10.

Jesus went across the Sea of Galilee to a desert place where he was followed by a vast multitude. He healed their sick and in the evening the disciples came to him and entreated him to send the multitude away in order that they might go and get food. But Jesus said they need not depart and instructed the disciples to feed them.

The disciples told him that all the food they had was five loaves and two small fishes. They were told to bring them to him and he commanded the multitude to sit down; they sat down in ranks of 50 and 100. He then took the five loaves and two fishes, "broke" them and gave them to the disciples who passed them around among the people. The multitude ate all they wanted

and the disciples gathered up twelve baskets full of fragments. "And they that had eaten were about 5,000 men, beside women and children." Matt. xiv, 21. This is the substance of the four reports of the first feeding.

Wheat flour was a luxury in Palestine and their bread consisted of little cakes made of barley meal. It was mixed in a kind of trough, was not leavened and 5 of these cakes was a very limited supply for 5 men without women and children. Yet this was all the food there was among this vast multitude.

If there were 5,000 men, besides women and children, it is reasonable to estimate their entire number as not less than 10,000. How strange that so many people should go to a desert place, many miles from home, not knowing where they were going, how long they would be gone and, last but not least, without taking anything to eat with them.

The people had been there all day, and it was then late in the evening, and would have been quite hungry from their long journey and out door exercise. Yet they were all fed by the disciples from the five loaves and two small fishes. If they had done this, it would have required not less than 5 tons of food—10,000 pounds—as an average of one pound each would be little enough for hungry people.

The twelve disciples would have had to serve an average of 833 1/3 persons each. If they waited upon one each minute it would have taken over 14 hours steady work and in that time Jesus would have been obliged to "break" 5 tons of food. Then they must have passed around where the people sat and gathered up the frag-

ments that were not eaten, of which there was 12 baskets full.

These baskets were small ones that were carried on the arm and held probably about a peck. As the original supply of food would not have filled one of the baskets half full, they fed 5,000 men and doubtless as many women and children, giving them all they wanted to eat, and had about 25 times as much when they got through as they had when they started.

But how did the people get there? The Bible says they knew where Jesus was going and when they saw Him "take ship" they ran along and got ahead of Him. The Sea of Galilee was about 8 miles wide by 15 long, and from all accounts there was a trip half way around it for the people to make on foot, then up through the mountains to the vicinity of Bethsaida (Julius), a good day's walk for the best of them and more than that for nearly all.

It takes considerable calculation on the part of Electric Railroad managers to handle an extra crowd of 10,000 people. They have cars in plenty, men who are trained to their work, and come and go like clock work; but frequently, when an extra crowd of 10,000 people are to be handled, the patience of the crowd and good nature of the managers has a severe strain to endure. How, then, did such a multitude, without previous arrangements being made, congregate at a place from one to three days walk from their homes and how could they have been so improvident as to go into the desert without food or any knowledge of how it was to be obtained?

The most unreasonable part of the story is that the people congregated in that desert place without food or

any idea how they were to get it. Then that 5 loaves and 2 small fishes supplied them with all the food they wanted to eat and left 25 times as much as there was in the first place, is a little too much for the plain matter of fact thinker of the 19th century to accept without more proof than has thus far been produced.

But this is not all. Scarcely had the echoes of the first deed passed away when we read another. This time there were but 4,000 men, besides women and children, to be fed.

The location of this feat was supposed to be Genesareth. This is a good place to say that everything is "supposed to be" in Biblical history. The books are "supposed to have been written" by some one and "at about such a time." Nothing definite about it. There is no manuscript or part of a manuscript of the New Testament that was written during the first three centuries as is admitted by all Christian Scholars. Indeed, it is doubtful if there is a single word of the New Testament in existence that was written previous to the twelfth century A. D. There is no evidence that either Matthew, Mark, Luke or John wrote a word of either of the gospels that bear their names. Even "Helps to the Study of the Bible" says, "this was supposed to have been written by — and probably about —." It is not claimed that a single word of the New Testament was written until from 20 to 300 years after the events are said to have taken place and then no one knows who wrote it.

The Old Testament is in much the same condition. The internal evidence shows that Moses had nothing to do with writing the Pentateuch; Joshua did not write

the book that bears his name; Judges was written 500 years after the Judges had mouldered into dust. In fact, the scholars of the "higher criticism" claim that the oldest book was written not earlier than 600 B. C. In addition to this, in most cases even the compilers of the books are unknown.

- It will not seem strange then if I repeat, its location was supposed to have been Genessareth. It was about 20 to 30 miles from the scene of the first feeding. In this case we are told that Jesus had compassion on the people because they had continued with him three days and had nothing to eat. They were again instructed to sit down and the disciples hunted up "7 loaves and a few small fishes" and they were fed. They also ate all they wanted, the disciples gathered up the fragments and it made 7 baskets full. They were large packing baskets; not the small reticules used in the first case.

A person who had been without food for three days and then ate all he wanted would eat not less than two pounds of food. That would make 16,000 pounds—8 tons—of food to feed the multitude. All made out of 7 loaves and a few small fishes.

It would have been quite a strain on the disciples to have served an average of 1,333 1-3 pounds of food each to the multitude as they had to feed an average of 666 2-3 people each. One a minute would make 11 hours steady work, serving at the rate of over 120 pounds of food per hour. Anyone who has acted as a waiter can appreciate the job.

Again, we have the conundrum of how the people got there and got away again. It must not be confounded with our own country as they had no steam or electric

cars, nothing but to travel on foot and by slow animals. In this section Palestine is a mass of mountains, hills and desert places; it would be as great a miracle to get the people there and away again as it was to feed them.

Again we are carried back to the hero worship. Again we find ourselves face to face with the people who ascribed such remarkable powers to their leaders. In the Apocryphal New Testament are a number of wonderful stories of Jesus. According to one of them, he was playing with a lot of children who were making clay images of birds and animals. He made some and they walked and flew off. Of course the Apocryphal New Testament is not considered canonical, but as the canon was decided by a lot of Bishops (who could not agree among themselves) by a majority vote, one is as likely to be the true one as the other. Luther and others claimed books were accepted that had no right in the canon. If they put books in that have no right there, who knows but they left out some that should have gone in?

Like some of the other stories, it illustrates the natural inclination of man towards the mysterious; not only in past ages, but up to and including the present time.

CHAPTER XII.

HEAVEN AND ITS INHABITANTS.

The greatest question that has agitated the minds of the people during the past few centuries has been, "How can we reach heaven, and how can we avoid hell." Few, if any of them, have the slightest idea what or where heaven is or what kind of people they will find when they reach it. Most of them hope their own friends will be there, and like the poem:

"It's a narrow gospel by which I pray,
But the chosen expect to find a way
Of coaxing, or fooling, or bribing you
So that their relation can amble through."

But there is no reason why an uncertainty should exist regarding the matter. Our orthodox friends tell us that the Great Creator of all Things has given us the information in a certain book. We will go to the book, learn what kind of a place it is, what its inhabitants are and see if we want to go there.

According to the Bible, heaven is a walled city, stretching out 12,000 furlongs in every direction. "And I

John saw the holy city, new Jerusalem, coming down from God out of heaven, prepared as a bride adorned for her husband."

"And the city lieth four square, and the length is as large as the breadth: and he (the angel) measured the city with a reed, 12,000 furlongs. The length and the breadth and the height of it are equal." Rev. xxi, 2 and 16.

In order that the people might know something of heaven, John, the revelator, had a vision on the isle of Patmos. He claimed to have seen heaven and his description is found in the Book of Revelations.

It would be necessary to quote the whole book to tell just what and whom the inhabitants of heaven were; but as we cannot do that we will make as many extracts as possible in the space that can be spared for them.

Heaven was quite a place! It contained a city 1,658 miles, 960 feet in every direction. Length, breadth and height. This was a great city. It had a wall around it 144 cubits or 262 feet, $7\frac{7}{8}$ inches (in height evidently as it was much longer than that). The wall was built of jasper; the city was built of pure gold "like unto clear glass; the foundations of the city were "garnished with all manner of precious stones."

There were twelve foundations and twelve gates, each one guarded by an angel. "The first foundation was jasper; the second, sapphire; third, chalcedony; fourth, an emerald; fifth, sardonyx; sixth, sardius; seventh, chrysolite; eighth, beryl; ninth, a topaz; tenth, a chrysoprasus; eleventh, a jacinth; twelfth, an amethyst. And the twelve gates were twelve pearls; every several gate was

of one pearl and the streets of the city were of pure gold as it were transparent glass." Rev. xxi, 18-21.

Just think of that for a moment! Pearls growing large enough so that one pearl made a gate for a wall 262 feet, $7\frac{1}{8}$ inches high and the other precious stones large enough so that one single stone made a foundation for such a wall! Then think what kind of "pure gold" it was that was as "transparent glass"!

Some have said this heaven was not large enough to accommodate all the people who would go there. That is not correct. It would be large enough to accommodate all the people who would go there for many ages to come.

But if the unbelievers have erred, so have the believers. The figures that have been published in many of the leading religious journals are not correct. In the first place, they figure 12,000 furlongs as 1,500 miles. That is not correct as the Biblical furlong was 729.6 feet instead of 660, making the city 1,658 miles 960 feet square. But in order to get the results obtained by the believing calculator, it is necessary to divide 30 by 297 and get a quotient of 100. Such results are only obtained in ecclesiastical calculations; they never can be accomplished in every day mathematics. As this error only increased the size of the city 1,000 times, it may seem like a small matter to mention it. But we must be very careful with figures; some one is likely to review them.

John saw the inhabitants of that city and from his description we can learn just what they were.

But 144,000 human beings had reached heaven at the time John had the revelation. They were all men "who

were not defiled of women." In other words they were "the virgins." The church is supported and held together by women. Even in the closing decade of the Nineteenth century, women are not allowed a voice in the general conference of the church. They have always raised the money to pay the preacher's salary, and probably will continue to do so as long as it is paid, yet here is scriptural authority that during the first 4,100 years not a woman reached heaven and not a man "which had been defiled of women." These were the first fruits of redemption. Rev. xiv, 3-4.

When John's eyes were first opened he saw seven golden candle sticks and in the midst of them one looked like the "son of man." This is what he looked like: "His head and his hairs were white like wool, as white as snow; and his eyes were as a flame of fire; and his feet like unto fine brass, as if they burned in a furnace; and his voice as the sound of many waters. And he had in his right hand seven stars; and out of his mouth went a sharp two edged sword; and his countenance was as the sun shineth in his strength." Rev. i, 12-16.

Just think what this personage must have looked like. Hair like wool, eyes like a flame of fire, feet like brass, seven stars in his right hand and a sharp two edged sword coming out of his mouth! A person who gave such a description of God, or the son of God, to-day, would be arrested for blasphemy.

After this John looked again and saw other inhabitants of heaven. He saw a throne and the one who sat upon it "was to look upon like a jasper and a sardine stone; and there was a rainbow round about the throne,

in sight like unto an emerald." Just imagine a green rainbow!

Around the throne were 24 seats and 24 elders upon the seats. They had on white clothes and crowns of gold. Out of the throne came thunder and lightning and voices and around the throne were seven lamps burning, "which are the seven spirits of God."

Before the throne there was a "sea of glass like unto crystal * * * and around the throne were four beasts full of eyes before and behind." The first beast was like a lion; the second like a calf; the third had a face like a man; the fourth beast was like a flying eagle. Each of the beasts had 6 wings that were full of eyes and they continued, without rest, day and night to say: "Holy, holy, holy, Lord God Almighty, which was, and is, and is to come." And every time the beasts did this, the 24 elders fell down before the throne and cast their crowns before him who sat upon it. Rev. iv.

When John looked again he saw a book and "no man in heaven, nor in earth, neither under the earth, was able to open the book, neither to look thereon." Finally a "lamb with seven horns and seven eyes" came forward and the beasts accepted him and he opened the book. Rev. v, 1-6.

When the lamb opened the first seal, he saw a white horse and he who sat upon it had a bow; when the second seal was opened he saw a red horse, and he who sat upon it was given a sword; the third produced a black horse, and he who sat on him had a pair of balances; when the fourth seal was broken, a pale horse, which was death; when the fifth seal was opened, there appeared the souls of those who were slain "for the word of

God"; when the sixth seal was broken, there was an earthquake, the sun became black and the moon became as blood, the stars fell to earth and the "heaven departed as a scroll when it is rolled together" and every mountain and island was moved from its place. Rev. vi.

When the seventh seal was opened there was silence for about half an hour. Then seven angels appeared. Another angel appeared and was given a censer and when he lighted it there were voices, thunders, and earthquakes. The first angel sounded its trumpet and there followed hail and fire mingled with blood. This was cast upon the earth and a third part of the trees burned up. Then the second angel sounded and as it were a great mountain of fire was cast into the sea, and a third part of it was turned to blood; and a third part of the creatures that had life in the sea died, a third part of the ships were destroyed.

Then the third angel sounded and a great star fell upon the third part of the rivers and fountains of waters and they were turned to wormwood. When the fourth angel sounded the third part of the moon and the third part of the sun and the third part of the stars were smitten so that the third part of them was darkened and "the day shone not for a third part of it and the night likewise." Rev. viii.

When the fifth angel sounded a star fell from heaven unto earth and "he" was given the key to the bottomless pit. And he opened the pit and the smoke came out of it and darkened the face of the sun and the air was darkened. Out of the smoke came "locusts shaped like horses prepared for battle." They had on crowns like gold and their faces were like the faces of men; their

hair was like the hair of women and their teeth like the teeth of lions; they had on breastplates of iron and the sound of their wings was like the sound of many chariots of many horses running to battle; they had tails like scorpions and stings on their tails with power to hurt men 5 months. How were they for locusts?

Then the sixth angel sounded and a voice came out of the four horns of the altar; they loosed four angels who were prepared for "an hour or a day or a month or a year to slay the third part of men." Their army consisted of "two hundred thousand thousand (200,000,000) horsemen." Those who sat on the horses had breastplates of fire, jacinth and brimstone. The heads of the horses were as the heads of lions and out of their mouths issued fire, smoke and brimstone. Their power to kill was in their mouths and tails "for their tails were like unto serpents and had heads and with them they do hurt." Rev. ix.

Then another angel appeared. It was clothed with a cloud, had a rainbow on its head, its face shone like the sun, its feet were like pillars of fire. "He cried with a loud voice as when a lion roareth and when he had cried, seven thunders uttered their voices." Rev. x. 1-2-3.

After the seventh angel sounded there appeared a great wonder in heaven. (Rev. xii, 1.) It was a woman clothed with the sun, with the moon under her feet and a crown of twelve stars. And there was also another wonder: A great red dragon with seven heads and ten horns and seven crowns on his heads and his tail drew the third part of the stars of heaven and cast them to the earth. And there was war in heaven! Michael and his angels fought the dragon and his angels.

The woman was to be "delivered of a male child" and a dragon stood before her ready to eat the child as soon as it should be born; the woman was therefore "given two wings of a great eagle" in order that she might fly away and thus enable her child to escape the dragon. When the dragon found he was to be beaten, he cast a flood of water out of his mouth to drown the woman; but the ground opened and swallowed the water and she escaped. Then the dragon went out and made war on the remnant of the human race. Rev. xii.

Again John stood by the sands of the sea and saw a beast rise out of the sea. There is no such beast on earth, so it must have taken place in heaven. This beast had seven heads, ten horns, ten crowns on his horns, was like unto a leopard, with feet of a bear and the mouth of a lion. Rev. xiii, 1-2. "And he opened his mouth in blasphemy against God, to blaspheme his name, and his tabernacle, and them that dwell in heaven." Rev. xiii, 6.

I had always supposed that we would get rid of the most disgusting habit of swearing if we got to heaven but it seems not. We will still listen to it from the mouths of such beasts as this one. Of all disgusting habits, that of profanity is the worst. It is indulged in everywhere and is absolutely useless. A man steals for the benefit he expects to receive; he lies for the same purpose; he commits crimes of all kinds for some real or fancied benefit he expects to receive from them. But he swears for no purpose whatever, degrades his manhood, loses the respect of his fellow creatures, lowers his own moral standard and gets not the slightest bene-

fit from it. I do not like to hear it here! I do not want to go to heaven and listen to it there!

Then John saw a white cloud and one sat on it who looked like the son of man, having on his head a golden crown and a sharp sickle in his hand. He thrust his sickle on the earth and it was reaped. Rev. xiv, 14-16.

“And the winepress was trodden without the city, and blood came out of the wine press, even unto the horse bridles, by the space of a thousand and six hundred furlongs.” Rev. xiv, 20.

How much blood was this? We have no very definite figures given, but a furlong in Biblical times was 400 cubits or 729.6 feet. 1,600 furlongs would be 221 miles, 480 feet. Horse bridles would be not less than 4 feet above the ground. Was this blood 221 miles, 480 feet long, 4 feet deep and an indefinite width? Or was it 1,600 square furlongs in extent? If so, it would have been 55 miles, 1,440 feet square and cover a territory of $3,055\frac{1}{2}$ square miles with blood 4 feet deep. That would be quite a lake of blood as it would be about one half the size of Lake Ontario.

Everyone has had occasion to notice the great damage done by hail storms but few know where they come from. We learn in the Bible that they come from heaven. (Joshua x, 11—Rev. xvi, 21.)

“And there fell upon men a great hail out of heaven, every stone about the weight of a talent”: That settles it. I will never tell another hail story. It was my lot to witness a very severe hail storm in South Dakota in 1883. I have never exaggerated that story and I never told it when people did not take off their hats, bow low, or tell me in plain English that I was a pretty good liar.

But here is a story that beats them all! A talent was 102 pounds, 13 ounces, 11.428 drams! Further comment is unnecessary.

“And I saw heaven opened, and behold a white horse; and he that sat upon him was called Faithful and True, and in righteousness he doth judge and make war. His eyes were as a flame of fire, and on his head were many crowns and he had a name written, that no man knew, but he himself. And he was clothed with a vesture dipped in blood; and his name is called The Word of God. And the armies which were in heaven followed him upon white horses, clothed in fine linen, white and clean. And out of his mouth goeth a sharp sword, that with it he could smite the nations; and he shall rule them with a rod of iron. And he treadeth the winepress of the fierceness and wrath of Almighty God. And he hath on his vesture and on his thigh a name written, KING OF KINGS, AND LORD OF LORDS.” Rev. xix, 11-16.

Then the angel called together all the fowls that fly in the midst of heaven and invited them to the supper of the great God. At it they were to eat of the flesh of the people, both great and small, and of the horses. The one who sat on the horse then proceeded to kill the remnant with the sword that went out of his mouth and all the fowls were filled with flesh. Rev. xix; 17-21.

What would our orthodox friends say if we gave such a description of the “Lord of Lords” and told of such carryings on in heaven? But this is a Bible description of the “KING OF KINGS AND LORD OF LORDS.”

So much for the people, images, beasts and proceed-

ings of heaven, according to the great and good prophet, John, who saw and spake on the Isle of Patmos.

But whom would we naturally expect to see in heaven? Surely it would be God's chosen ones. None would be **more** acceptable than those whom he chose, among millions, to do **his work** and whom the Bible says "did all that was right in the eyes of the Lord."

Who were they?

Adam was the first man. Outside of his partiality for fruit, he did nothing that would prevent his appearance in the best of society. Cain was doubtless debarred from heaven as he was marked so no one would kill him. Lamech was a polygamist. No data is given concerning the personal character of the other patriarchs between Adam and the flood so we pass them by. But they finally became so bad that it was deemed necessary to kill them all.

About this time there appeared to the Lord one Noah. He was a just and good man and he was permitted to build an ark and take his sons and their wives into it. He and his family were therefore saved. As soon as they got out of the ark, Noah planted a vineyard and as soon as he could get grapes to do so, made wine, got drunk and made an indecent exposure of his person. Because one of his sons happened to "see his nakedness," Noah cursed him and sent him off into the wilderness. (Gen. ix, 20-25.)

Abraham married his sister, then tried to buy favor with Pharaoh by "selling" her to him. Pharaoh learned the deception and although a "heathen" refused to be a party to the crime. (Gen. xii, 11-20.) He made a second attempt with Abimelech, but he also learned the truth of

the matter and Abraham was again foiled. Abimelech then made presents to Abraham and Abraham prayed the Lord to forgive Abimelech for the injury he (Abraham) had done Abimelech. The Lord was gracious and did it. What would we say of a man who would prostitute his wife for personal gain? Yet this is what Abraham tried to do and that he was not successful was because two "heathens" refused to be a party to the offense.

In each of these cases the Bible God punished the people Abraham was injuring, but there was not a word of censure to Abraham. Abraham kept a mistress and turned her and their son out into the wilderness to starve, become the prey of wild beasts or, being more than fortunate, manage to escape.

Jacob deceived his father and secured the blessing that belonged to his older brother. Then, when Esau was on the verge of starvation, he secured his birthright before he would give him any food. (Gen. xxv, xxvi, xxvii.)

Jacob then married two wives, took two mistresses, raised quite a family and decided to leave his father-in-law. Laban did not want him to go, so they made a bargain and he stayed. By this bargain and his cunning he managed to secure the greater proportion of Laban's flocks. Then he took his wives and all the property,—they even stole Laban's "household Gods"—and left. (Gen. xxx, xxxi, xxxii.)

Judah's actions can not be mentioned here but the curious can learn of them by reading Genesis, xxxviii, 13-27.

Moses first appears as a murderer. "And he looked

this way and that way and when he saw that there was no man, he slew the Egyptian, and hid him in the sand." (Exodus ii, 12.)

Lot, who was the only just man in Sodom at the time of its destruction, offered his two daughters to the lust of a mob (Gen. xix, 8) and finally got drunk and raised children by the same two daughters. (Gen. xix, 30-38.)

Solomon had 700 wives and 300 mistresses; concubines as they were called. He lived with them without going through the formality of a marriage ceremony, or in plain English, he lived with them in adultery. (I Kings, xi, 3.)

David was a man after God's own heart and did that which was right in the eyes of the Lord with the single exception of the matter of Uriah. He had killed so many people that 50 years before his death they sang "Saul hath slain his thousands, and David his ten thousands." (I Sam. xviii, 7.) He had robbed, murdered, tortured, annihilated whole nations and violated the persons of women and children, his last act being one that we would hang a man for today, (I Kings, i, 1-4) yet the Bible says he was "a man after God's own heart" and he is doubtless in heaven. He committed a crime, and when faced with his guilt, chose that the people should suffer instead of himself although they were innocent of any crime and he was wholly the guilty party. He permitted 70,000 of them to be killed for his offense while he went "scot free." II Sam. xxiv.

At the present time anyone who attempted to do as these chosen ones are reported as having done would be dealt with by the indignant populace under the authority of "Judge Lynch." Yet they were the Bible

God's favorites and he approved of their actions. For proof of this the reader is referred to the Bible itself.

We might go on and enumerate a great many more: Jehu, who got the worshippers of Baal into a temple making a sacrifice, then treacherously killed them all and God approved of the murder. II Kings, x, 30. Elisha, who cursed the children and two she bears came out of the woods and "tare" forty-two of them because they called him a "bald head." II Kings, ii, 23-24. Saul, afterwards Paul, who admitted himself to be as bad as the average criminal now in the penitentiary. Even Jesus and the disciples chose "publicans and sinners" as their companions and were ministered to by Mary Magdalene and others of the same class. Luke viii, 1-2; Matt. ix, 11; xi, 19, and numerous other places. In this age of the world, we judge people by the company they keep. We would not permit a clergyman to occupy a prominent pulpit whose habitual companions were gamblers, thieves and prostitutes.

Even today, it is only necessary to read the daily papers and the statistics of our penal institutions to prove that, in proportion to their number, there are more criminal clergymen than of any other calling in life. Some of them have told me they were sure of going to heaven and one informed me that he was sorry he would not meet me there.

But who were these favorites? According to the Bible they were polygamists, adulterers, murderers, they violated the persons of women and children, lied, stole, cheated, and went through the whole category of crimes. If the preachers can be believed, even to-day every murderer goes straight from the gallows into heaven. I do

not associate with such people on earth and I do not want to associate with them in heaven. But as they are the Bible God's favorites, they must be in heaven.

From John's description, what is heaven? It is a city full of the most abominable beasts, dragons, human and deific monstrosities, horses, thunders, lightning, hail stones, and the scum of the earth. The description is more like Dante's pictures of the inferno than of a heaven of happiness, where humanity would be pleased to go. If a person claimed to have such visions of heaven to-day, a commission to inquire into his sanity would be immediately convened.

But if a vision of heaven was to be given at the present day what would it be? Not a place of monsters, either human or deific. But in the place of the beasts, thunders and lightnings there would be beautiful parks, ponds of pure water, crystal rivers, soft green lawns and the happy smiles of the people as they met their friends of earth life; their merry laughs would sound through the hills, re-echo through the vales, joining again the merry sound and greeting new arrivals. All this would be presided over by a deity of love, knowing neither anger, jealousy nor hate and all united in one happy family. That is my idea of heaven.

CONCLUSION.

We have now considered all of the stories that were selected for the first edition of "BIG BIBLE STORIES." Is the reader surprised at the result of our investigations? If so, we will add that there are many more that could be handled in the same way and show results equal to these.

"Are you trying to take our Bible and our religion away from us?" asked one who learned the book was soon to be issued. It is not the desire of the author to rob the world of true religion. It is his desire to elevate the world above superstition and give the people a higher conception of religion and deity than can be gleaned by the acceptance of such extravagant accounts. Whatever is true and good in the Bible will not suffer. That part which is contrary to reason and fact should be shown to be such and it will open the door to a higher religion.

The author has never met an Atheist; i. e., one who denies the existence of an overruling principle. But he has many Deists among his acquaintances who have a much higher conception of deity than they could get from Biblical accounts that picture the Ruler of the Universe as angry, jealous, full of vengeance, punishing children for their parents' disobedience, etc.

Again he thinks man's education should be towards the higher instead of the lower. As a boy he was an attendant at church and Sunday school. As a man he has studied the internal and external evidence and history of the Bible.

As a boy he thought that taking part in war and bloodshed was not compatible with the character of a just God. His parents did not permit him to read the "blood and thunder" stories so common to boys. But when he read the lessons and references in the Bible, he wondered what the difference was between "Six Fingered Pete; The Dead Shot" and "Red Ike; the Terror of the Plains" and the Bible God's agents who went and slaughtered thousands of men, women and children whose only offense was that they were in peaceable possession of a tract of land the said agents wanted. He is yet wondering.

If the stories we have been enumerating were found in any of the other sacred books of the world, Christian scholars would never tire of calling attention to them as evidence of the diabolism that lurked in them. Does it alter the case any because they are found in our own sacred book?

He is neither a prophet nor the son of a prophet but ventures to prophecy that before the death of many who read the first edition of this book, a new and expurgated edition of the Bible will be given to humanity. It will be a book that can be taken into a family and read entire.

That is not possible at the present time. There are dozens of passages in the Bible that no parent would read in the presence of his growing sons and daughters;

there are dozens of passages no priest dares to use as a text for a sermon.

The world has been blind to the inconsistencies of the Bible. The reason has been that people have not dared to study it. Priestcraft has stood by hurling anathemas against any one who used the same reason regarding it that they would in the case of any other book; when people read that Jehoram was the father of several boys two years before he was born, they took it as a matter of course.

To-day the Bible is being studied. The ultimate salvation of my family is as much to me as the salvation of any man's family can be to him. I wanted to know. Therefore I "searched the scriptures" internally and externally. Not from infidel writings but from Christian. I found that the concordance called attention to passages that were favorable to the church. The opposite were not listed. The Commentators explained all about the things that were favorable to Christian doctrines; but other passages were ignored or passed off with some remark that neither explained or meant anything.

I believe in religion. Not a religion that makes me believe inhumanities and absurdities and pictures the Creator of the Universe as a monster degraded below humanity of to-day, but in a religion of love. The advent of that religion has been delayed and nearly driven from humanity by the pretensions of so-called advocates of revealed religions. They have stultified the brains of a large proportion of humanity, acted as a bar to progress, opposed improvements in machinery and intellectual development, brought on the "dark ages" and even at the

present day indict men for heresy for the exercise of reason. All under the holy name of religion.

Let us hope and work for a day when we can lay aside the present "golden rule," "Even as ye would that others should do unto you, do ye likewise unto all mankind" which is an embodiment of selfishness and replace it with the true golden rule "DO ALL FOR OTHERS." - *One for all and All for one.*

THE END.